

NEW

# ADVANCED PHOTOSHOP® PREMIUM COLLECTION

Volume 11



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- 3D & Photoshop
- Digital painting
- Photo editing
- Graphics and type



Master the art of Adobe® Photoshop®







# Welcome to **ADVANCED** **PHOTOSHOP®** PREMIUM COLLECTION

In its landmark 25th year, Photoshop celebrates a quarter century of industry-shaping innovation and technology. Thanks to its array of intuitive tools, it is the go-to software for digital artists looking realise their creative vision. With that in mind, this collection of in-depth features and tutorials exposes the tricks of the trade from professionals who spend countless hours navigating the interface and honing their skills. Benefit from their expert guidance in several areas, including photomanipulation, 3D and Photoshop, digital painting, photo editing, and graphics and type, then put them into practice by recreating their artwork. You can even continue your development after turning the very last page by logging into FileSilo, where you will discover a vault of free resources such as premium fonts, brushes and actions. So get started and see your skills soar!





# ADVANCED PHOTOSHOP® PREMIUM COLLECTION

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# 25 QUICK FIXES FOR PRO DESIGNERS

TIPS, TOOLS AND TECHNIQUES TO HELP YOU IMPROVE YOUR SPEED AND WORKFLOW  
IN PHOTOSHOP, WITH ADVICE FROM PROFESSIONAL DESIGNERS AND ARTISTS

## 01. RELIGHT SCENE ELEMENTS QUICKLY WITH QUICK MASK

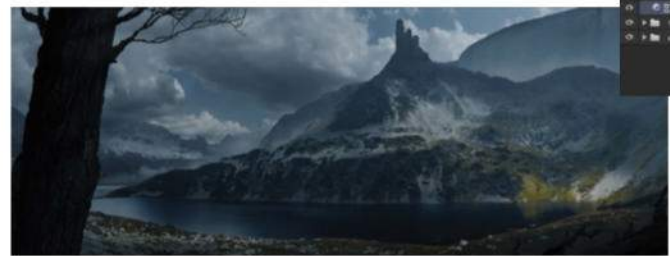
MATTE PAINTER AND CONCEPT ARTIST JACEK PILARSKI ([WWW.JACEKPILARSKI.COM](http://WWW.JACEKPILARSKI.COM)) EXPLAINS HOW HE USES PHOTOSHOP'S QUICK MASK FUNCTION IN HIS ENVIRONMENT DESIGNS



© Jacek Pilarski

### 01 | SELECT ELEMENTS TO RELIGHT

The first step in relighting elements is to select the [layers] we will work with. You can also put a black layer in the bottom for better separation from other elements. We use the keyboard shortcut of Cmd/Ctrl+Opt/Alt+Shift+E, which creates a new layer out of all the visible layers.



### 02 | CREATE THE SELECTION

Next, use Cmd/Ctrl+Shift+U to convert it into B&W mode. Play with Curves (Cmd/Ctrl+M) and try to manipulate the sliders to get the desired black-and-white mask. When you're finished, use Cmd/Ctrl+A to select and Cmd/Ctrl+C to copy our layer. Hit Q to go into Quick Mask mode and use Cmd/Ctrl+V to paste the layer. Press Q to quit Quick Mask mode.

### 03 | USE THE SELECTION AS A MASK

While your selection is still visible, create an adjustment layer and the mask will be created along with it automatically. To keep a non-destructive workflow put this adjustment layer into a folder and create a mask on top. Hide it by inverting the mask and use a brush to reveal the elements you want to change in your work.

## 02. DEVELOP FASTER PAINTING TRICKS

FREELANCE GRAPHIC DESIGNER WENDY STEPHENS ([WWW.DARKIRISDESIGN.CO.UK](http://WWW.DARKIRISDESIGN.CO.UK)) TALKS US THROUGH HER WORKFLOW PROCESS, BUILDING UP DIGITAL PAINTINGS QUICKLY AND EFFECTIVELY



**Start in greyscale:** "The biggest time saver for me was discovering painting in greyscale before adding colour. I paint using just one rough-edged brush, adjusting the Opacity and Size as I work. I organise my brushes by using Window>Brush Presets>Preset Manager and then drag and drop them into the order I want"



**Flat colour:** "Once I am happy with the overall contrast of the piece I add a flat colour layer (R253, G71, B156 for example) and change the layer blending mode to Lighten at 100% Opacity"



**Layer mask:** "I then add a layer mask and start reducing the overall pinkness by painting black. I use a soft-edged brush and set the Opacity to 5% so I really have gentle control over how much of the original greyscale layer shows through"



**Separate layers:** "When I'm finally happy, I start work on the hair on a separate layer. I've already drawn each major section (hair, face, t-shirt, ice cream) on a separate layer using the Pen tool to keep the edges sharp and to make selections quicker"

**Duplicate:** "My final tip is to duplicate the original greyscale shading layer and set it to Soft Light to add more contrast. This way of working shaved literally hours off my digital painting"

© Wendy Stephens



© Adam Spizak

### 03. USE SAVED SELECTIONS

Illustrator and designer Adam Spizak ([www.spizak.com](http://www.spizak.com)) saves time in his work by making the most of the Save Selection and Load Selection commands within Photoshop, which enable you to create complex selections and save them for use in the future. He explains: "When working with layers it's often very helpful to use selections for more precision. One of the ways to be more efficient with selections is [to use] the functionality to quickly load and save selections in Photoshop. Stored in the Channels palette, saved selections are very powerful yet often overlooked by many users."

After creating a selection you can save it from the main menu – click on Select and choose Save Selection. Make sure the Radio button is clicked on New Selection, then click OK. You can name your selection and even store selections in a separate PSD file for various projects. You can quickly load a selection by navigating once again to the Select menu and choosing Load Selection.

This is an extremely efficient method [especially if you assign] a shortcut via the Edit menu and select Keyboard Shortcuts (Shift+Opt/Alt+Cmd/Ctrl+K). You can also see a list of selections from within the Channels palette and load a selection by Cmd/Ctrl-clicking on the Channels palette icon. Smart management of your selections and channels will save you hours of repeating the same mundane tasks of selecting layers."



### 04. USE NON-DESTRUCTIVE CROPPING

The Crop tool has been overhauled in the last couple of years and one of the most useful features, is the fact that you can crop your image non-destructively, although this is not the default setting. When you crop your photo, by default the pixels that you get rid of are permanently deleted, which isn't ideal if you want to restore some of the image in the future. However, with the Crop tool

selected, look in the main Tool Options bar at the top of your window. Untick the Delete Cropped Pixels checkbox and the next time that you crop, then removed pixels are saved. If you want to recover your image at any point, then you can go back to the Crop tool and click on your image; you will see the original photo in the crop box so that you can choose how much to bring back.

### 05. FOUR WAYS TO IMPROVE WORKFLOW WITH PHOTOSHOP'S TOOLS

DESIGNER AND ILLUSTRATOR NICOLAS MONIN-BAROILLE ([WWW.BEHANCE.NET/UNKNOWNBEING](http://WWW.BEHANCE.NET/UNKNOWNBEING)) SHARES HIS INSIDE SECRETS FOR HAVING AN EFFECTIVE WORKFLOW



#### COLOUR YOUR LAYERS

"[It] sounds banal, but colouring Groups and Layers can really help in keeping an organised file. In the long run it also makes sense naming essential layers to find them easily. Colouring Groups helps as you can differentiate between adjustments and additional Details, for example, as with any other element you use in your work. Giving them specific colours – for me adjustments are red and titled as ADJ – in the Layers panel [makes everything easy to locate]."



#### SHORTCUTS AND CONTEXT MENUS

"It should be [a given for a designer], but I know my shortcuts by heart because I have used them for so long. It cuts an extreme amount of time not having to use the menus. Also make use of the context menus and the buttons in your Layers panel to add things like adjustment layers quickly, without having to go into the main menu."



#### SAVE PRESETS

"Brushes and actions help a lot, but [in particular] a preset for Adobe's Camera Raw filter is useful. When you're at the end and adding finishing touches, you choose specific options that sometimes take up to ten minutes to do. Then you realise a terrible error in your work and fix it, having to do everything again... Saving a preset in Camera Raw can save that time doing it again and again. Whether it's a simple Sharpness change or Lights/Shadows, Camera Raw offers a lot of things."



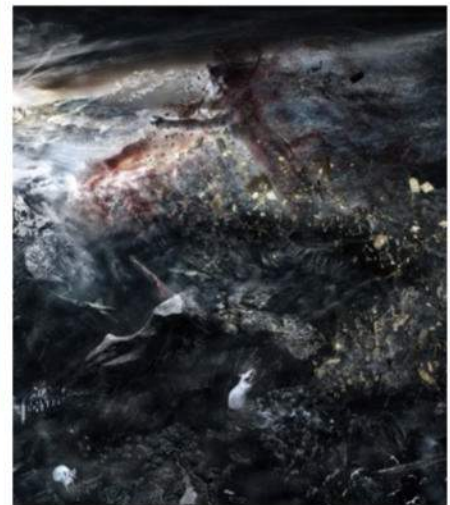
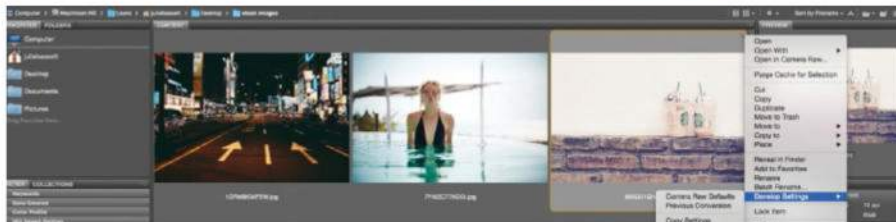
#### THIRD-PARTY APPS

"Try using an app to make screenshot versions of your artwork. I just recently discovered that using an app like Lightshot (<https://app.prntscr.com>) to make previews and fast images for web presentation purposes (1,000px+ but less than 1,700px), takes less time than doing numerous saves in Photoshop and sizing down your work from a big scale. This is the best recent workflow improvement I've experienced."

© Nicolas Monin-Baroille

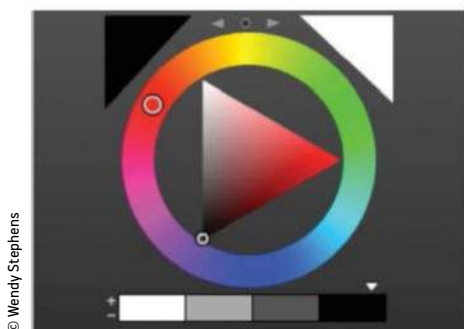


© Harry Lee 2015

[illegible]

you have your next batch of images, you might want to make the exact same edits in ACR as you did with a previous image. Luckily, you can copy and apply the ACR settings to save time. Ctrl/ right-click on the original image and choose Develop Settings>Copy Settings. Select your new image (or even multiple new images) and do the same, but choose Paste Settings instead.

"For example, compare the sketch/concept version versus the final artwork that I did for Fotolia. In just a few hours I had put together a quick and rough version to see what works best. I played with the general mood and tone, tried many different compositions and thought about basic stuff like perspective and lightning. It's important to distill down your ideas and then bring in elements that help you tell your story. I kept it all rough and dirty in the beginning, so I could easily jump around with ideas and things I wanted to explore."



© Wendy Stephens

### 10. INCREASE SPEED WITH PLUG-INS

Freelance graphic designer Wendy Stephens ([www.darkirisdesign.co.uk](http://www.darkirisdesign.co.uk)) swears by the Painters Wheel plug-in by Len White (<http://lenwhite.com/PaintersWheel/>) to considerably improve her digital painting speed: "I tend to paint in greyscale first and add colour adjustment layers later, so I know the underlying contrast is right. Picking greys using the traditional colour picker in Photoshop can be a bit clumsy."

"In Painters Wheel, the greyscale rectangle at the bottom currently shows four shades. If you click the

little + sign on the left you get five, then click again for six and so on. I also find the Painters Wheel itself invaluable when choosing colour palettes. It just feels more intuitive to me when selecting colours that work well together. Drag the little circle on the outer wheel to change the colour. Then drag the little circle in the centre triangle to change the tone. As you drag, it keeps the original colour in the top left hand triangle, showing the new colour next to it. Brilliant for refining colour choices."

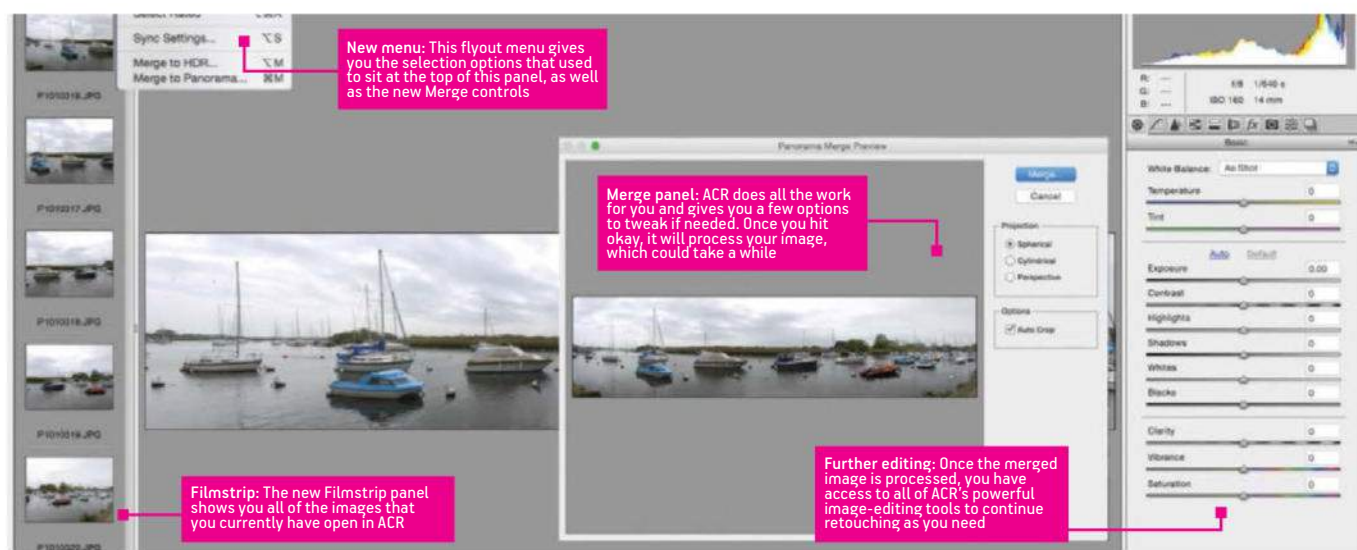
### 11. DO MORE IN CAMERA RAW

The Camera Raw plug-in in Photoshop CC can often get overlooked, but it is a powerful program in its own right. Rather quietly, it got updated to version nine in April 2015, which doesn't usually happen, as updates come with Photoshop releases. Camera Raw 9 introduces two major new features, which could save you time if you work a lot with photography and it even takes on some of the burden that you usually use Photoshop to manage.

If you open multiple images in Adobe Camera Raw (ACR) 9 (which you can do by selecting the images in Bridge, Ctrl/right-clicking and selecting Open in Camera Raw), then you will see a new Filmstrip view down the left of the screen. There is a little flyout menu at the top, which has the new features: Merge to HDR and Merge to Panorama. Both of these tasks can be done via Photomerge in Photoshop and certainly Photoshop offers more options, but if you need a quick

merge and wish to continue tweaking in ACR, then this is a really powerful addition.

The process is simple; select all the photos that you want to include in the Filmstrip and pick your merge options – ACR does the rest. There are a few customisation options, but they are minimal. However, once the merge is done, you have the full range of ACR tools to tweak the new merged image to suit your needs, before opening in Photoshop.



New menu: This flyout menu gives you the selection options that used to sit at the top of this panel, as well as the new Merge controls

Merge panel: ACR does all the work for you and gives you a few options to tweak if needed. Once you hit okay, it will process your image, which could take a while

Filmstrip: The new Filmstrip panel shows you all of the images that you currently have open in ACR

Further editing: Once the merged image is processed, you have access to all of ACR's powerful image-editing tools to continue retouching as you need



© Alexander Weaver

### 12. KEEP COLOURS IN ORDER WITH THE SWATCHES PALETTE

"Whether you're designing for print or web, having your colour swatches and palettes well organised can help speed up your process. Finishing a project can be difficult if you're constantly using your Eyedropper tool or plugging in RGB values," says graphic designer Alexander Weaver ([www.behance.net/atweaverdesign](http://www.behance.net/atweaverdesign)). Alexander suggests opening your Swatches palette and viewing all the default swatches. You can delete any swatch by right-clicking on it and choosing Delete Swatch from the pop-out menu, or by dragging a swatch to the trash. Clearing the whole palette means you can start to build up the colours that you need for your projects rather than seeing all of the default colours.

Alexander Weaver goes on to say, "Graphic designers don't have to start from scratch with colour schemes and play around for a length of time with no clear goal. Colour schemes can be created from something as simple as a photograph with a whole range of hues. Often Dribbble, Pinterest, Behance and Greyscalegorilla are a great source of colour palette inspiration for your design."

"Now that you've taken the time to organise your Swatch library and clear your Default palette, maintain the progress that has been made. Organise and name your palettes as you're adding colour swatches. Save your palettes and swatches to your libraries for repeated use in the future."



## 13. ADJUST A SINGLE COLOUR

MARTIN GROHS ([WWW.MARTINGROHS.DE](http://WWW.MARTINGROHS.DE)) USES THE HUE/SATURATION ADJUSTMENT LAYER TO TARGET INDIVIDUAL COLOURS FOR EDITING



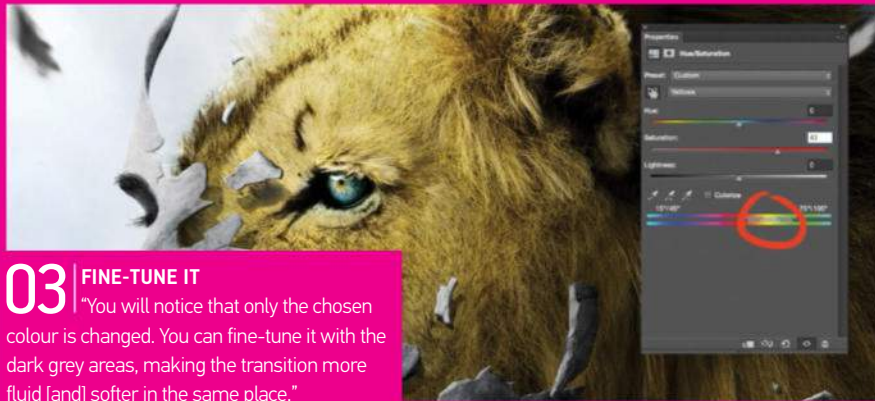
### 01 | ADD AN ADJUSTMENT LAYER

"Here I show you how to change the saturation of one colour in an image. I often use this at the beginning of a painting, but I also use this after the work is done for fine tuning. Create a New Adjustment Layer>Hue/Saturation."



### 02 | TARGETED ADJUSTMENT

"Select the small Hand tool icon. Click with the mouse over the colour you want to change/adjust. You can see [the cursor change to a] pipette now for you to choose the colour. Click and drag the mouse – while holding down the mouse button – to the left or right to adjust the saturation of this target colour."



### 03 | FINE-TUNE IT

"You will notice that only the chosen colour is changed. You can fine-tune it with the dark grey areas, making the transition more fluid [and] softer in the same place."



© Martin Grohs



## 14. MAKE USE OF QUICK VIEW OPTIONS

Not all of us have the luxury of a dual-screen setup, so it can be frustrating when you want to quickly change what you can see in your Photoshop window. Luckily, there are a few tricks that you can use to help you to navigate around your image quickly and simply. Our top

tip is to use the H key. If you are zoomed in on one part of your image, then you hold down H and click with your mouse, the image will fly back out to view the whole image in the window. A box will appear and you can use this to navigate to any other part of the image, where it

will zoom in so you can check the detail here. When you release the H key, you will go back to your original view without having changed position at all – perfect if you need to see a quick element in another part of the image but want to continue working as you were.





### 15. CREATE MOCKUPS FOR CLIENTS

Sometimes you have to spend a little time going the extra distance to reap the rewards in your future workflow. Brad Marsh is the creative director at South Coast Designs ([www.southcoastdesign.co.uk](http://www.southcoastdesign.co.uk)), and he says that a mock up can really help a client understand how a project will look, rather than a flat design: "When you're producing a work of art for a client, simply sending them a high resolution JPEG or PDF simply won't cut it these days. To inspire and catch the attention of the

people paying your wages and putting food on your table (if you're a freelancer like myself) you need to take extra time when putting together your artwork into an organised and well-presented mockup so your clients can get a better understanding as to what their product or design is going to look like as a finished item.

"Take business cards, for example. If you have produced an amazing business card for a client, send them your final designs set up to look like a

stack of business cards on their desk at work. Show them what their business cards will look like when they physically have them in their hands and what their business contacts are going to see when they're handed out at networking events. I have gotten far more referrals and have seen a bigger increase in accepted designs after taking the time to put my designs into an attractive mockup. It also means they make great portfolio pieces too."



### 16. EDIT 3D FASTER

John Cathcart ([www.whitebeardesign.co.uk](http://www.whitebeardesign.co.uk)) creates vibrant and interesting 3D designs, and Photoshop is an important part of his day-to-day workflow and speeds up his common tasks. He talks us through its uses here: "Photoshop has always been a huge player in my digital toolkit. I utilise Photoshop heavily in my current 3D work, using Color and Levels adjustment layers to tweak imported art from Maxon's Cinema 4D. I use a lot of custom-made brushes to add depth and light effects in post-production and always finish my pieces by adding a High Pass filter along with the Overlay blending mode to sharpen the image up.

"I have been working primarily in 3D for the last five years, but could not produce the work that I do without the powerhouse abilities that Photoshop offers. If I'm

working on an extremely detailed render, I will export the UV maps directly to Photoshop where I can get down to detailing every element of my textures, whether it be using the stock brushes and effects provided out-of-the-box or by scanning and photographing my own.

"One of the most crucial tips that I can offer when working in Photoshop is to build your resource library. Get out on the street and take photos, scan textures or even pull them off the web (keeping in mind copyright laws). Also, don't be afraid to experiment with your blending modes, placing multiple layers on top of the other and playing around with blending options, which can produce some very exciting results, adding depth to otherwise two-dimensional work."



### 17. DON'T WRITE OFF THE MAGIC WAND

Some tools in Photoshop are often consigned to never being used because they have a bad reputation for being unprofessional. However, no tool in Photoshop should be completely disregarded, as they are often designed to complete simple tasks in super-fast time, which can help your workflow when used appropriately. Polly Playford ([www.pollyplayford.com](http://www.pollyplayford.com)) is a freelance graphic designer offering branding, web design, graphic design and more. She uses the Magic Wand tool to make quick selections when needed: "The Magic Wand tool saves time when selecting coloured areas. You must make sure that you adjust the Tolerance in the top menu bar, as that makes a big difference to how useful that tool is. Another handy tip: once you've selected a colour, choose Select>Similar to select the same colour across the whole document."





## 18. CREATE, MODIFY AND RE-USE SMART OBJECTS

Some tools in Photoshop are there to simply make your life easier, so it pays to know how to use them in your workflow. One of these is Smart Objects, which can be a real timesaver. Graphic designer Michael Wood ([www.mwcreativdesign.co.uk](http://www.mwcreativdesign.co.uk)) explains how to get the best out of Smart Objects: “Smart Objects are a great way to create content that is re-usable for future projects. Using masks with Smart Objects can allow you to hide parts of

the editable area, without losing control of the Smart Object functionality. This is a really effective way of showing your work on a portfolio, or pitching to clients.

Ctrl/right-click the layer you want to edit and select Convert to Smart Object. With this layer selected, go to Layer>Layer Mask>Reveal All, then with the Brush tool selected you can paint out parts of your layer with black and bring parts back with white. After all the hard work is done, you can double-click the Smart Object

layer and replace it with whatever you want! Save and return to original file to see the updated results.

“You can also get nice effects if you duplicate the Smart Object layer and add layer effects such as blur, then mask that layer to edit out the areas you want blurred. Because you have used the same Smart Object layer again, it will update both the original and duplicate when you make edits inside the smart layer! Magic.”



## 19. SAVE EVERYTHING!

If your computer can hack it, then don't be afraid to save all your work, even if you don't think you'll need a particular layer – you never know when you might change your mind. Designer and Illustrator Nicolas Monin-Baroille ([www.behance.net/unknownbeing](http://www.behance.net/unknownbeing)) is a fan of this method: “This requires a lot of space and makes files insanely large sometimes, so be aware this is not recommended for a low-end computer. As I tend to change around a lot of things

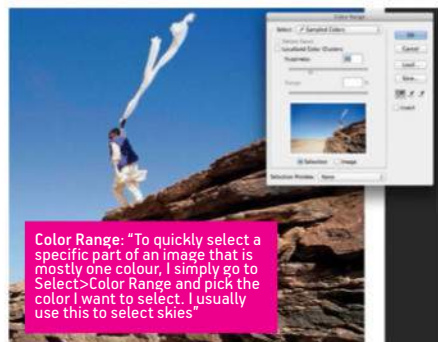
or even go back to something I made 20-30 minutes ago, I do not delete a lot of layers. Especially for lightweight work, like my *Fabrics* series, I am left with files in between 100-400MB. It's pretty simple: I put [unnecessary] layers into a Group, even multiple Groups inside other Groups. That way I have copies of nearly every stage of development of the work and can revert or pick out important layers that I may have lost.”

© Nicolas Monin-Baroille

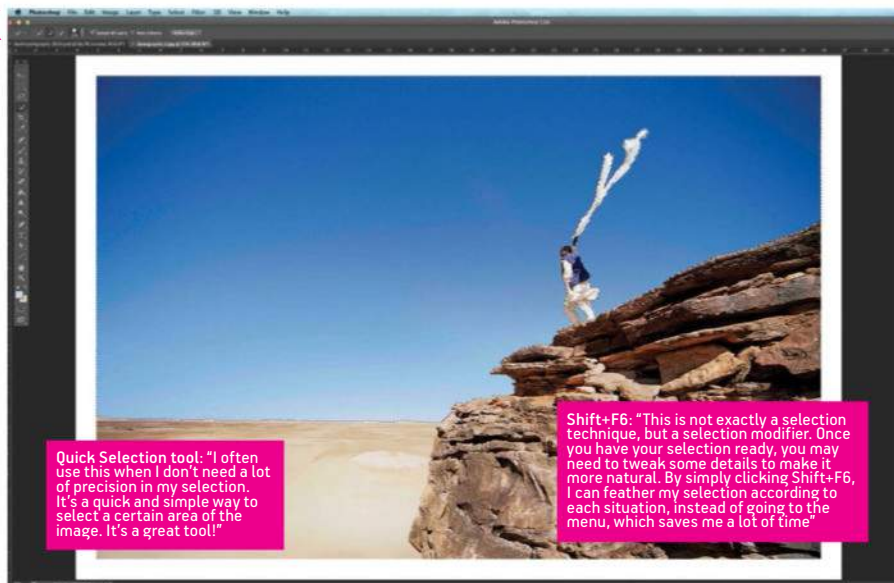


## 20. USE THE RIGHT QUICK SELECTION METHODS

José Paulo Reis ([www.zepaulocreation.blogspot.co.uk](http://www.zepaulocreation.blogspot.co.uk)) says that the best way to speed up a typical photomanipulation or photo editing workflow, is to know which selection technique is right in each situation. He uses mainly three tools in his work:



**Color Range:** "To quickly select a specific part of an image that is mostly one colour, I simply go to Select>Color Range and pick the color I want to select. I usually use this to select skies"



**Quick Selection tool:** "I often use this when I don't need a lot of precision in my selection. It's a quick and simple way to select a certain area of the image. It's a great tool!"

**Shift+F6:** "This is not exactly a selection technique, but a selection modifier. Once you have your selection ready, you may need to tweak some details to make it more natural. By simply clicking Shift+F6, I can feather my selection according to each situation, instead of going to the menu, which saves me a lot of time"

© José Paulo Reis

## 21. QUICKLY MODIFY ARTWORK WITH TRANSFORM, LIQUIFY AND WARP TOOLS

FREELANCE ARTIST RYAHDC CASSIEM ([www.riyahdc.wix.com/riyahd](http://www.riyahdc.wix.com/riyahd)) SHOWS US HOW HE MODIFIES CHARACTER POSES AND PROPORTIONS IN HIS WORKFLOW



### THE CONCEPT

"This concept design is part of a personal project exploring mecha design through the female form. I used a combination of photo compositing and digital painting techniques to create the design. Here I will go through some tips for modifying character pose and proportions using the various Transform tools and filters. My main focus is to capture a readable pose to the character design."



### LIQUIFY TOOL

"I press Cmd/Ctrl+Shift+X as a shortcut to activate the Liquify filter. I then tweak the proportions of the character with the Move brush, modifying the shapes of the design. I also use the Twirl Liquify with a large brush size placed at the centre of the joints to tweak some angles to the pose."



### THE WARP TOOL

"I use the Liquify, Transform, Warp and Puppet Warp tools to modify the pose and proportions of my character design. The combination of these tools helps to speed up workflow by spending less time re-creating certain elements. To transform a layer I press Cmd/Ctrl+T to activate the layer's Transform mode. I [then] Ctrl/right-click on the layer, then select the Warp option in the drop-down menu. I warp the image by moving sections and the borders of the image around to accommodate the pose."



### PUPPET WARP TOOL

"I use the Puppet Warp tool for more control when modifying the pose of the character. I create a selection with a Lasso tool to isolate a part of the design. I then select the Puppet Warp function in the Edit menu to create a temporary mesh from the selection. I place pins to allocate joint orientations, to help when posing a specific part of the design. Then start to pose the character by moving the pins into place accordingly."



## 22. USE ADVANCED COLOR RANGE SETTINGS FOR SKINTONE SELECTIONS

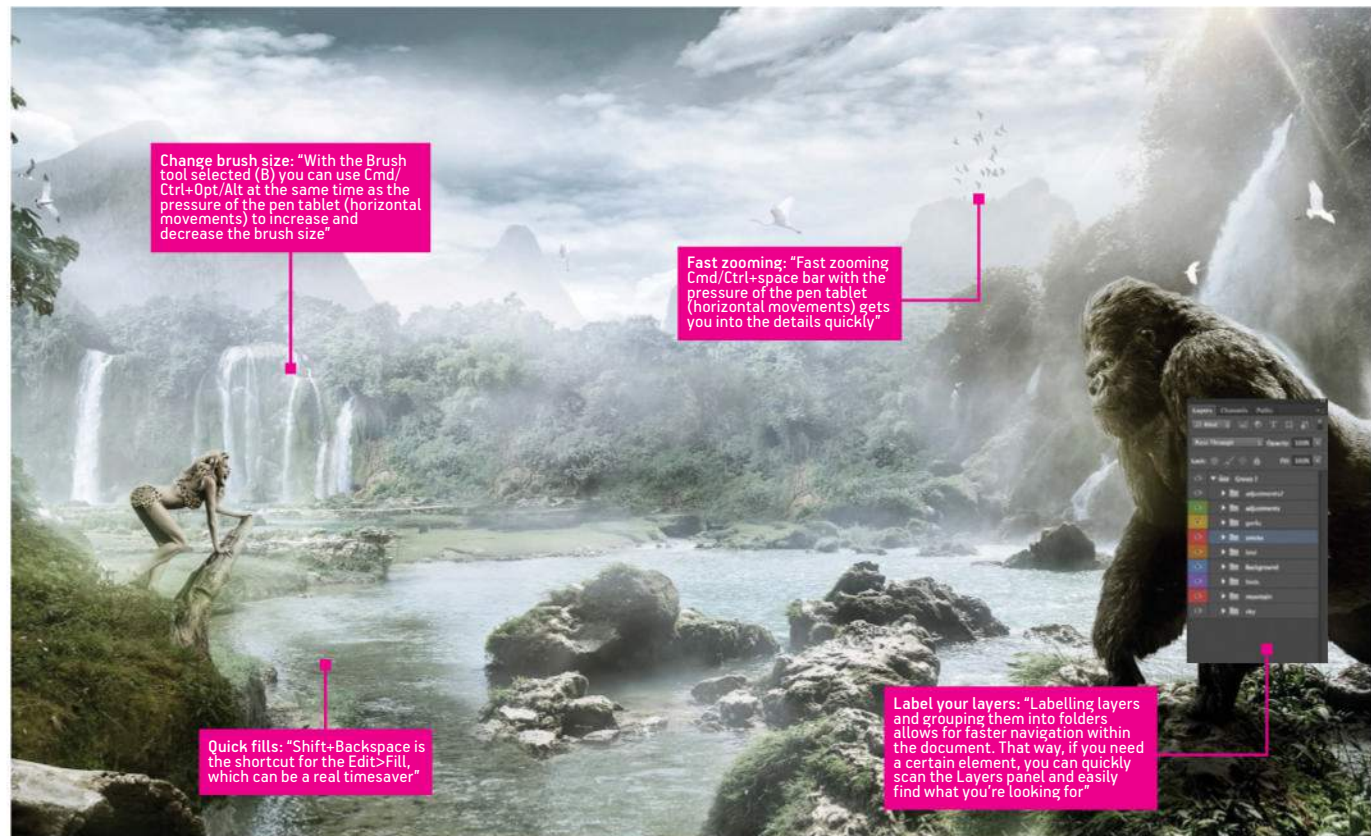
If you work a lot at retouching portrait or beauty images, then it is likely that you will need to make adjustments to the model's skin – whether giving it a subtle glow or smoothing it. It is quicker if you can treat all of the skin at the same time, but selecting the skin in the first place can be more time consuming. The Color Range tool is the perfect tool for this job, as it is designed to recognise skintones and help you make an accurate selection. Open your image in Photoshop and then go to Select>Color Range. From the Select drop-down window, choose Skin Tones. This will now give you the option to Detect Faces if you wish. The tool should have already picked up skin tones in the image, but you can tweak them with the Fuzziness slider. You can use the Selection Preview option to view your selection on your main document for a better view, and you can also use Save to save your preset for future use.

© RYAHDC Cassiem

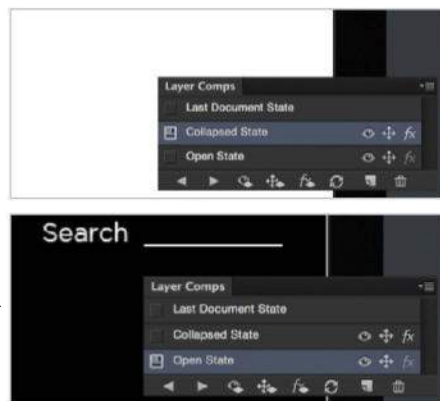


## 23. SPEEDY SHORTCUTS

BEING ORGANISED AND USING SHORTCUTS ARE THE BEST WAYS YOU CAN IMPROVE YOUR WORKFLOW. JOSÉ PAULO REIS ([WWW.ZEPAULOCREATION.BLOGSPOT.CO.UK](http://WWW.ZEPAULOCREATION.BLOGSPOT.CO.UK)) TALKS US THROUGH HIS KEY POINTS



© José Paulo Reis



© Edmond Yang

## 24. USE LAYER COMPS

Visual designer Edmond Yang ([www.edmondyang.com](http://www.edmondyang.com)) swears by the Layer Comps panel to speed up his workflow for his interaction designs: "Instead of creating different layer groups, or even different PSD files for different versions of your interaction designs, you can set multiple states within one single file using the Layer Comps panel. I basically tell Photoshop which layers I want to be visible or not and this tool can be very powerful and save you a lot of time."

"Let's say that in your design you have two states, one with a collapsed menu and one with an opened

menu. Now, hide all your collapsed-related items and create an opened menu state. Find your Layer Comps palette from the Window menu, hit the Create New Layer Comp button at the bottom and name this 'Open state'. Next, create your collapsed state by hiding your opened items, bring up your Layer Comps palette and hit the same button again, naming it 'Collapsed state'. Now you have two states you can switch between by using the icon to the left of your layer comps. Remember to hit the Update Layer Comp icon if you are moving or changing anything within a layer composition."

## 25. CUSTOMISE YOUR WORKFLOW WITH PREFERENCES AND ACTIONS

It's not very exciting, but by spending some admin time in Photoshop, setting everything up in a way that works for you, you will significantly cut your workflow time, so you can concentrate on being creative instead. For a start, don't be afraid to play with your Preferences. By default, Photoshop is set to use 60 per cent of your computer's RAM (Photoshop>Preferences>Performance). You can try upping the Memory Usage to help Photoshop run faster – start with small increments

and see how it affects your work. Next, set up custom shortcuts (Edit>Keyboard Shortcuts) for the tools that you use the most, as this will save you time hunting things down. Build your own Workspaces and save them (Window>Workspaces) so that you have a setup for every main task that you undertake. Create actions for common tasks and turn them into Droplets for easy access. There are plenty more ways you can customise your Photoshop experience, so start experimenting!



# Photomanipulation

Discover the world of photomanipulation, learn from Photoshop experts and get started with advanced image transformation

## 20 20 professional tips for photobashing

Combine multiple disciplines as you use photography to develop stunning concept art at high speed

## 30 Create a displacement effect

Deconstruct and re-configure a portrait using colourful shapes, layers and distortion effects

## 36 Forge a sci-fi composite from photos

Create a futuristic cityscape taking inspiration from modern skyscraper stock imagery

## 42 Master Render Flame

Add fire, sparks and flame elements to your art straight from your imagination

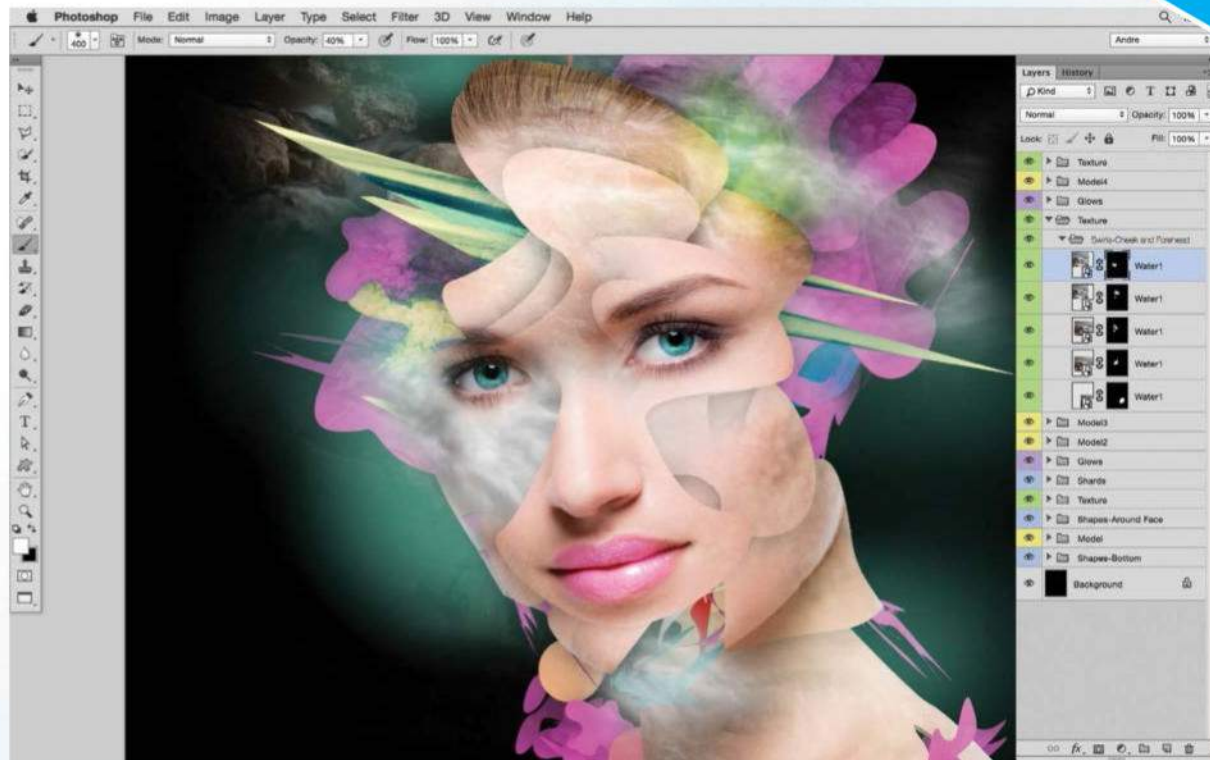
## 48 Grasp advanced blend mode techniques

Design a futuristic scene using Photoshop's blend modes for seamless multi-layered effects

## 54 Use warp and selection techniques

Combine and edit stock photos to create a surreal and creative juxtaposition of elements

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“Photomanipulation is a great way to show other worlds, illustrate ideas and detach your audience from reality”



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# 20 PROFESSIONAL TIPS FOR PHOTOBASHING

PHOTOBASHING COMBINES PHOTO EDITING AND MANIPULATION, COMPOSITING, DIGITAL PAINTING AND POST-PRODUCTION TECHNIQUES TO CREATE INCREDIBLE IMAGES AT HIGH SPEED. DISCOVER THE SECRETS FROM THE INDUSTRY EXPERTS



## 01. THE CONTROVERSY OF PHOTOBASHING

While photobashing is a recognised legitimate technique, especially when it comes to creating quick concept art, there are plenty of critics of the style, some going as far as to call it cheating. A lot of this stems down to the classification of the

style as digital painting and the overuse of photography, essentially creating a photomontage, as well as the potential copyright pitfalls. Here are our top tips for creating a good photobash, without falling foul of online critics:

### START WITH A SKETCH

Just as if you were doing a pure digital painting, come up with a concept and composition for the base of your artwork.

### USE MINIMAL PHOTOGRAPHY

The idea is to add in details and textures that you can't, or would take a long time to, paint.

### BE WARY OF COPYRIGHT

Where possible, use your own photography or stick to legitimate stock sources.

### DO PLENTY OF PAINTING

This isn't a photo collage, it's a digital painting with a little photo help. Overpaint your photos, blend them together and make heavy use of brushes.

© Jakub Skop





JR

© Jorry Rosman 2015

## 02. WHY USE THE PHOTOBASH TECHNIQUE?

There are lots of purposes for using photobashing, though it does have its controversies. For many, like freelance concept artist Jorry Rosman ([www.artstation.com/artist/jorry](http://www.artstation.com/artist/jorry)), it is a way of saving time when creating complex concepts: "I use the photobashing technique to save time. Using photos provides me with shapes, colours and textures that I might be able to paint myself, but would take me

way longer than using a photo. And speed and clarity (in material and shape) is important to me as a concept artist.

"I also don't consider concept art as fine art, or something that's made to be framed and put on a wall (even though concept art can be beautiful), so I'm not too concerned with how the image is made. It's all a means to an end. Only the end result counts.

"I do, however, make sure to never use artistic photography pictures or work from other artists. The pictures I do use are either from my own collection or have changed so much that they are unrecognisable. There have been some heated debates on the internet lately [about whether] using photos is cheating, and I think it is. But, especially in concept art, cheating is good! Just be mindful about it."



## 03. USE PHOTOBASHING FOR SCI-FI CREATIONS

Photobashing can be used for many different genres, but one in which it is used heavily is sci-fi scenes, Sebastien Hue ([www.shue-digital.com](http://www.shue-digital.com)) explains: "The photobashing technique is very useful when you need to quickly brainstorm and create a concept from scratch, particularly when science-fiction and technologies are at stake. When you don't have the mental capacity to get a clear concept image in your brain, even though

you know that you want – let's say a robot concept, a mecha or even a cityscape – by photobashing bits and pieces of stocks you help yourself in getting a solid base to work on. [This helps to] develop [the concept] more efficiently and more quickly, because you are visualising the evolution immediately. On top of that, you can achieve a photorealistic result and not just a sketchy concept."

Tutorial in French on Tuto.com by Sebastien Hue (<http://fr.tuto.com/photoshop/faire-un-concept-art-de-robot-en-photo-bashing-photoshop-49228.html>)



## 04. USE STOCK PHOTOGRAPHY

FREELANCE CONCEPT ARTIST SEBASTIEN HUE BREAKS DOWN ONE OF HIS PHOTOBASH CREATIONS, WHERE STOCK IMAGERY IS MANIPULATED INTO ARTWORK



### 01 | USE YOUR IMAGINATION

"Imagination is very important in photobashing, because you need to see beyond just pieces of stock. In this case, I just took a photo of a car motor as a start for the head of my robot concept. Then I developed the rest of the face with other elements that would help the design of the character."



### 02 | BLEND AND BE ACCURATE

"In greyscale, I tried to blend the elements together through colour corrections or [digital] painting to create something coherent and consistent. I tried to have a head that looks like a head and so anatomical notions are key points as well when tackling characters, even for robots."



### 03 | BUILD THE CONCEPT

"Here I developed the concept further by texturing the materials of the robot through metal and rust textures. The light source is very important when selecting your stocks, so I fleshed out my concept keeping that in mind, paying attention to which stocks I picked to avoid incoherent reflections and heavy corrections."



© SHUE-DIGITAL



## 05. PICK THE PERFECT PHOTOS

Finding the right images for your photobash work is really important, as Tony Andreas Rudolph explains: "I select the images [based on the] perspective and light direction that I need for my concept. When I want to print the final result, or when it will be used for a more detailed view, sharpness and noise inside the images are very important. Colours are not so important... However, as well as finding the right images, you also

need to be careful where you are sourcing the images from and how they will be used. "I am always looking for my resources really carefully, as well as using my own images. I mostly look for images in the DeviantArt Stock Image section and on Flickr with the Advanced Search set to find only images where it is allowed to use them for commercial work and where I am able to edit them."



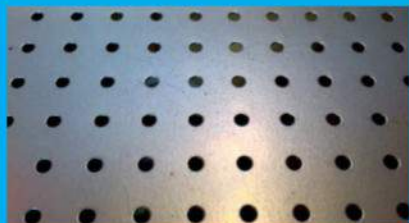
Before



After



## 06. FIND LEGITIMATE FREE STOCK SOURCES



**Personal photography:** The easiest way to get stock imagery for your photobash projects is to take your own pictures. You don't need to be an expert photographer for this, as you will be painting over your photos anyway. Similarly, you don't need a DSLR; your phone camera will suffice. Get used to snapping anything and everything, as you never know where you might find a use for that leaf, engine part or wall pattern.



Courtesy of gratisography.com

**High-quality free stock:** Recently there has been a spate of websites that offer completely free high-resolution imagery for use in any way you like – even commercial imagery. This is a great solution, as you are assured quality over other free sites and you won't fall foul of copyright issues. Check the terms and conditions, though, as you may have to leave a credit with your artwork when displayed. Subject matters are limited though. Websites to check out: [unsplash.com](http://unsplash.com), [picjumbo.com](http://picjumbo.com) and [www.gratisography.com](http://www.gratisography.com).



© CCGTextures.com

**Texture resources:** Photo textures should not be overlooked, as they are important for adding minute detail to painted elements, such as rock or wood. They can help to build up the photorealism of a piece, without taking away from the painterly overall feel. There are plenty of free stock sites that offer textures for you to exploit, but the best ones to look out for and explore include the likes of [cgtextures.com](http://cgtextures.com) and [www.texturepalace.com](http://www.texturepalace.com).

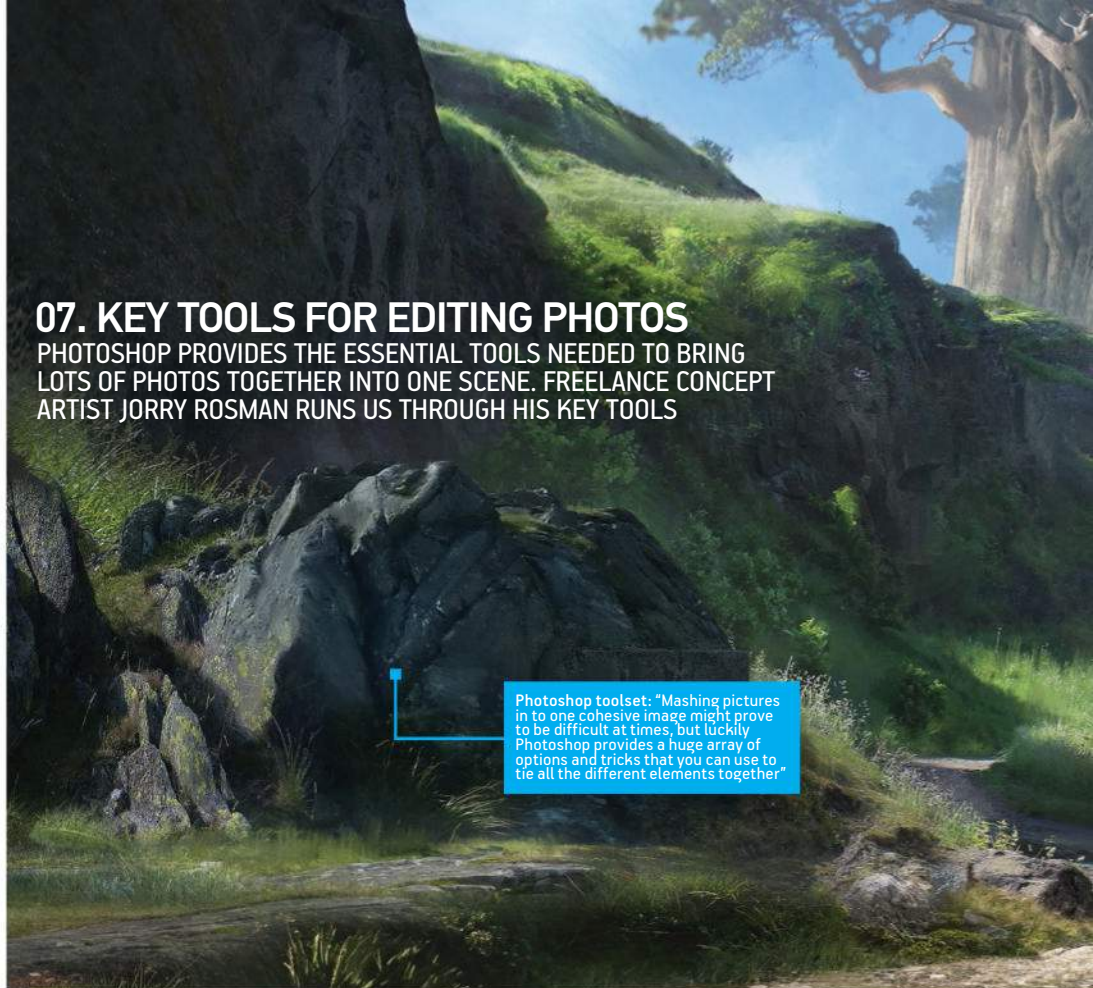


Courtesy of masyon.deviantart.com

**DeviantArt:** A popular place to display photobash artwork is on DeviantArt ([www.deviantart.com](http://www.deviantart.com)). It is also a common source for finding stock photography. Go to Browse>Resources and Stock Images to start looking. A number of photographers and artists have kindly put their work up to be used by other digital artists, but it is very important that you are aware that not every artist has the same rules – some are for personal use only, some need attribution and others let you do anything you like.

## 07. KEY TOOLS FOR EDITING PHOTOS

PHOTOSHOP PROVIDES THE ESSENTIAL TOOLS NEEDED TO BRING LOTS OF PHOTOS TOGETHER INTO ONE SCENE. FREELANCE CONCEPT ARTIST JORRY ROSMAN RUNS US THROUGH HIS KEY TOOLS



Photoshop toolset: "Mashing pictures in to one cohesive image might prove to be difficult at times, but luckily Photoshop provides a huge array of options and tricks that you can use to tie all the different elements together"



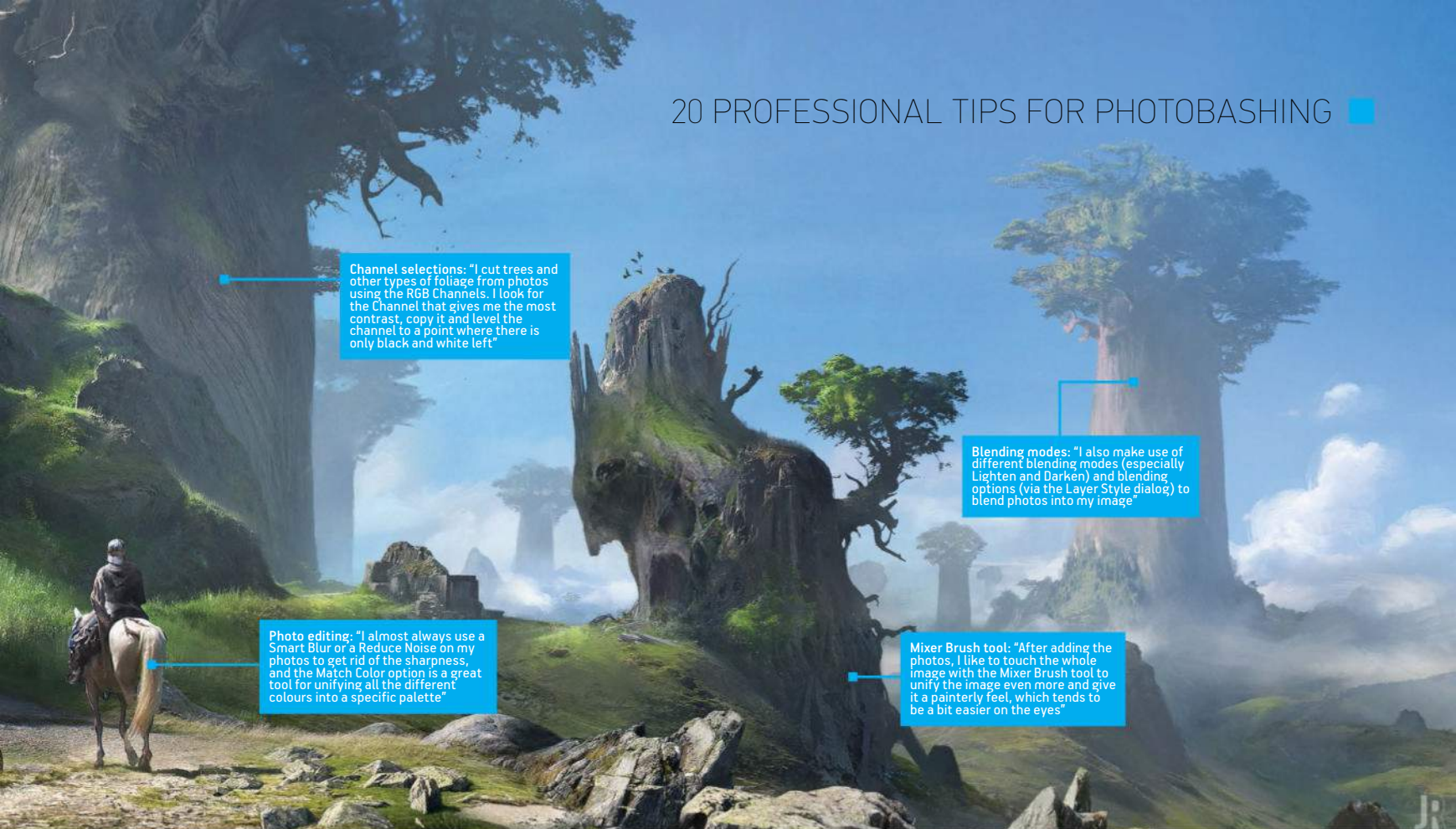
© Ricardo Guimaraes

## 08. PHOTOBASH FOR CLIENT WORK

Photobashing is often used when an artist is required to create concept art for clients who need quick turnarounds of ideas. "Many companies today require realistic works from the artists and the deadlines are always short, so it became a sort of a standard in the industry to use some photobash techniques in order to reach the desired level of finish," says environment concept artist Ricardo Guimaraes ([www.rgconceptdesign.com](http://www.rgconceptdesign.com)). "Using photobashing is all about speeding up the process of creating concepts and finished images with a realism otherwise impossible within the

same timeframe. Sometimes, painting everything, up to the smallest detail, incorporating lighting information correctly, is a very tiresome and painstaking process taking a long time. When you get the photo properly integrated with your painting, not only does the photo already provide you with the information needed, but also serves as a basis to some adjustments on the painting itself. Combine the photobashing technique with the use of custom brushes and also some good (indispensable) knowledge of drawing and painting, and you have the most powerful arsenal [any] one artist may have."





**Channel selections:** "I cut trees and other types of foliage from photos using the RGB Channels. I look for the Channel that gives me the most contrast, copy it and level the channel to a point where there is only black and white left"

**Photo editing:** "I almost always use a Smart Blur or a Reduce Noise on my photos to get rid of the sharpness, and the Match Color option is a great tool for unifying all the different colours into a specific palette"

**Blending modes:** "I also make use of different blending modes (especially Lighten and Darken) and blending options (via the Layer Style dialog) to blend photos into my image"

**Mixer Brush tool:** "After adding the photos, I like to touch the whole image with the Mixer Brush tool to unify the image even more and give it a painterly feel, which tends to be a bit easier on the eyes"

© Travis Wright 2015



## 09. UNDERSTAND THE FUNDAMENTALS

"Don't even start photobashing until you have a decent grasp of your basic art fundamentals such as perspective, colour and lighting, composition and anatomy," insists freelance concept artist and illustrator Travis Wright ([apneicmonkey.deviantart.com](http://apneicmonkey.deviantart.com)). "I've seen a lot of people try to jump right into photobashing and wonder why it's not working for them. It's a misconception that because you are using photo elements, the hard work is already done and piecing them together should guarantee amazing results. Photobashing is so much more than just adding some motorcycle parts to a cool photo of a soldier."

Wright applies his own advice to his projects, by starting with a sketch and choosing the right photos

to work with: "I'll start my photobashes just like I would any illustration or painting: with sketches to work out the composition, colour and mood."

"It's important that you treat photobashing as seriously as you would any other art discipline. It can save you time and look great only after you have a good grasp of your basics."

Wright goes on to say, "I would also recommend to anyone that they work on having their own easily accessible stock of photos. This works in your favour both for legal reasons, as you already own the copyright to any photos you use and also, sometimes, the internet doesn't have what you want and you don't want to use up any of that time you're now saving by going on extensive image searches."

## 10. DON'T BE TOO LITERAL PICKING STOCK

Getting the right stock for your photobash creations is key, but you need to think outside of the box when it comes to finding the right photos to use, says Jorri Rosman: "The trick is to slap a couple of pictures on top of each other and play with the different blending modes. I like to go crazy with scaling and rotating pictures and see if I can find some cool shapes. This works best when all the pictures are in greyscale. Don't be too literal in picking your photos, but try to think outside of the box. A close-up of the inside of your computer could make for a great spaceship. And the carrot patch in your neighbour's front yard could make for an amazing alien forest."

## 11. BUILD A STRONG PHOTO LIBRARY

If you are planning on doing a lot of photobashing work, then it pays to build your own asset library. You need to ensure that they are free to use in the way that you want and also that you collect a variety of different shots. "Get a good library of photographs to use in your photobashing," agrees freelance illustrator Martin Nebelong ([www.martinity.com](http://www.martinity.com)). "Try to find high-resolution material; it'll make it much easier for you to select areas of a photo to use, to make automatic selections and it'll make your photobash look much more consistent if you avoid pixelated areas... You also need to make sure that you have photographs with lots of different lighting setups to choose from, so you have the right image for every project." If you find the perfect picture, with the wrong lighting, use your Photoshop skills to fix it.

© Jorri Rosman



## 12. MATCH COLOUR FOR CONSISTENCY

The Match Color command (found in Image > Adjustments) is cited as a great tool for quickly bringing together different photos and giving them a consistent colour to form the basis of your painting. “This tool is very helpful to do a very fast rough colour correction of your images to match them. In the end, this is all you need because you will overpaint them anyway. This key tool helps me to create a solid and fast basis for my painting,” says Tony Andreas Rudolph.

Jakub Skop ([www.artstation.com/artist/jakubskop](http://www.artstation.com/artist/jakubskop)) is also a big fan of the Match Color command in his photobash projects: “The most important step is choosing pictures with a similar texture and fitting them together in terms of colours. All discrepancy between the colours can be managed by using the Match Color option. Curves and Color Balance come in handy as well. One of my favourite elements are all kind of fogs and smoke, which adds a lot to the overall atmosphere and mystery, but most of all it adds a lot of depth and helps to divide the picture into a fore-, mid- and background. I put a lot of effort into creating a proper atmosphere in my works through colour choices. Proper colour balance and lighting makes the image look like one whole.”

“Changes in Hue, Saturation and Contrast all come into play in order to integrate the different photo elements within the painting”



© Tony Andreas Rudolph







### 13. MAINTAIN A PAINTERLY FEEL

"[You] should always bear in mind that [photobashing] is a painting technique. The end result, whatever the level of realism aimed for, should ideally have a painted feel and not just that of a photomashing or pasted on. It is the means to an end, not the end itself," says Ricardo Guimaraes. He suggests starting with a composition that doesn't use photos, before moving on to adding stock. "Resorting to photos too early in the process will stiffen the whole painting and usually the end result will be way too much towards the photo-collage feel."

"Changes in Hue, Saturation and Contrast all come into play in order to perfectly integrate the different photos with the painting. Besides extensively using several different layer blending modes, among the most used tools are the adjustment layers, Channels, masks and filters, as well as clipping layers to layers below."



### 14. PHOTOGRAPH AND PAINT

Martin Nebelong ([www.martinty.com](http://www.martinty.com)) shares his advice to bring together photography and painting skills to create a photobash composition. "It's important that you have a clear idea about where you're going before you bring in any photos. If you don't, the photos will end up dictating the direction you're going in and you'll end up limiting your creativity. I always start by setting up the scene either as line art or as a speed-paint to make sure that I stick to my original idea."

"[You need] to have the photos match the form and perspective of the source painting. I use Free Transform and drag the handles of the transform box using a combination of Cmd/Ctrl, Alt/Option and Shift for perspective distortion, rotation and scaling. If that doesn't get me where I need to be, I use the Warp tool, which enables you to warp the photo more freely. This

is especially useful for textures and effects such as smoke or fire.

"Once you're happy with the result, it's time to blend the photo into the painting. This is done using layer styles, blending modes, masks or brushes. Adjustment layers such as Levels and Hue/Saturation are great for matching tone and colour between photos and painting. Again, consistency is key, so try to make sure there's no sudden tone, hue or saturation jumps between painting and photo elements."

"Remember not to go nuts with photo materials. Have calm areas in your painting, areas for the eye to rest upon. Break up the pacing of the painting and make sure not all areas are equal in terms of detail and contrast."



### 15. USE THE TRANSFORM TOOLSET

The Transform set of tools is essential for making the photos used work with the composition that has been created. Sebastien Hue says: "Cmd/Ctrl+T for the Transform tool is for sure the most used Photoshop tool, as far as I'm concerned, to transform my selections by resizing, extending, squashing and duplicating the cut elements."

"This transformation process is genius and so much fun. While you are playing with the toolset you can achieve very nice results by just squashing a motor, or warping a design into another. This is a very creative tool for me, not just a way to change scale or forms. For instance, the buildings in the Frozen Gold image (pictured) have been photobashed with some motor pieces that I squashed. It really gives the sci-fi look to those towers."

"Sometimes I just don't know where to go in terms of inspiration and so I just randomly take some stocks and transform them into other forms, I combine, duplicate and so on. This is a good remedy to avoid the blank page... It can nourish your creativity even more."



## 16. USE PHOTOSHOP'S BRUSH SELECTION

When it comes to building up a photobash image, the brushes in Photoshop are essential to help blend the photos into the painting and build up the painterly feel that we're looking to achieve. Freelance artist Jakub Skop starts with a quick sketch and adds the photos to it. "The next step involves using many different brushes, thanks to which the pictures gain a sense of originality. It's the most time consuming and interesting part of a new project, adding and creating details gives a lot of satisfaction. It's always a good idea to spend some time on the sky. The whole colour scheme of the artwork is dependent on that. It is responsible for the whole atmosphere and is a significant part when it comes to catching attention. For this, I mostly use normal brushes, Mixer brushes and also the Smudge tool."



© Jakub Skop

## 17. BUILD UP THE PAINTING

RICARDO GUIMARAES SHOWS US HOW HE OVERPAINTS HIS PHOTO COMPOSITIONS IN PHOTOSHOP



### 01 ADD IMAGES TO THE BASE PLATE

"This is the base plate. On it I lay in several photos that will be the base for the painting and already establish some of the atmosphere. No part of the base plate remains untouched in the end, as I paint over practically everything."



### 02 DO SOME BRUSHWORK

"Here you can see how I adjusted the main rock formation, elongating and tilting it a bit. I also did some heavy brushwork on the foreground rock, ground, main rock, background, sky and planet. Light was also addressed, always striving to keep the overall mood I planned beforehand."



### 03 FINISH THE IMAGE

"I thought adding more planets would make a more compelling image. I kept painting over everything to achieve a painterly look, yet still having the details the photos provided. I did more work on the sky and added a small astronaut on the foreground rock for better scale."

© Ricardo Guimaraes



© Travis Wright 2015



## 18. MASTER ADJUSTMENT LAYERS

Thanks to their non-destructive application, many of our artists cite the adjustment layers in Photoshop as essential for photobash work, used to blend photography and digital painting into one final image. "It's tricky to narrow it down to just one tool in Photoshop that I would consider my key tool for photobashing, but I feel that the adjustment layer options comes pretty close," says Travis Wright. "A good artist can use almost any photo in a photobash by using the adjustment layers to change the lighting on certain elements, add shadows or match the colours to the surrounding environment. This is where having a decent grasp of basic art fundamentals comes into play a lot with photobashing. You still need to consider your light sources and overall colour mood that you want to capture with the image. Adjustment layers are an invaluable tool for bringing a piece together from what may originally seem like a bunch of unrelated photos."



© Martin Nebelong

## 19. COMPLETE YOUR PIECE

Martin Nebelong ([www.martinity.com](http://www.martinity.com)) talks us through the final stages of his photobash work: "When I'm nearing the end of a photobash, I often review the piece on my mobile using Pixl Preview. It mirrors what you're seeing in Photoshop. Seeing your painting in small size, and on a different screen, can often give you a clue about whether or not the values of your painting are working. The most successful photobashes can be read, even at thumbnail size."

"I also often make a new layer and merge all layers into it (Cmd/Ctrl+Alt/Opt+Shift+E). Then, I run the image through the Filter>Camera Raw Filter, which lets you tweak all different sorts of parameters that will help your finished painting look more consistent... If I need to draw extra attention to a certain part of the image, I use the Blur Gallery to give a depth-of-field effect. Sometimes I apply a very slight amount of noise to the image, which can also help bring the elements together."

Apply masks: "Work with masks when you start adding your images to your concept. Don't use the Eraser tool to delete the stuff you don't like. This helps [if you want to] reuse your photos"

## 20. RELIGHT SCENE ELEMENTS FAST WITH QUICK MASK

CONCEPT ARTIST TONY ANDREAS RUDOLPH ([WWW.ZULUSPLITTER.DE](http://WWW.ZULUSPLITTER.DE)) TAKES US THROUGH THE BASIC PROCESS OF A PHOTOBASH, FROM CONCEPT TO COMPLETION

© Tony Andreas Rudolph

Look for photos: "Look for images that match your sketches or ideas. Don't be too picky. Randomness can sometimes be helpful to add ideas to your image"

Overpaint the photos: "Start painting your photobashed elements to customise them, fixing parts and integrating them into your concept. Just sticking images together doesn't make a cool result"

Have an idea: "First, you need to [decide] what kind of concept or image you want to create. Make a 3D sketch or black-and-white sketch to figure out perspective, light direction and the elements you want to have in your final image"

Transform images: "Transform the images by clicking Cmd/Ctrl+T and hold the Cmd button for the Free Transform tool. Don't stretch the image too heavily [so you] don't destroy your source image"

Blend images together: "Integrate the images with colour-grading techniques by using the Color Match tool or Curves. Make sure that you don't lose the material's effects in your colour-grading process"





# CREATE A DISPLACEMENT EFFECT

BREAK DOWN AND RE-CONFIGURE A PORTRAIT USING SHAPE LAYERS, MASKS AND LAYER STYLES

The artwork for Adobe Creative Suite 6 features stunning portraits flavoured with the technology and culture behind the associated program. Illustrator shows a woman festooned with beautiful vector doodles. The artwork for Photoshop, by Alberto Seveso, portrays a face broken down and re-imagined using organic shapes, elements and texture. It's a prime example of how Photoshop can help you produce complex visuals with a layered approach.

Let's try creating something in the vein of this image. We'll start by using the Pen tool to lay out

shape layers and adorn them with layer styles. After compiling a decent array of shapes, we'll extract our model and begin piecing together the base forms using clipping masks. We'll continue to add the shapes to build up the detail. Shape layers are extremely flexible and can be reshaped with the Direct Selection tool. They incur no degradation or blurriness when transformed, making them perfect building blocks. For textural interest, we'll mask and blend in some shots of foamy water and broccoli. We'll then use a series of adjustment layers and blend modes to perfect the look.

## READY THE BUILDING BLOCKS CREATE SHAPE LAYERS AND PREPARE THE MODEL

### 01 CREATE SHAPES

Open Shapes.psd from FileSilo. There are a few example shapes. We'll make some more. Create a new layer. Select the Pen tool. In the options bar, set to Shape and choose a Fill colour. Click and drag on-canvas to create your shape. Create more shapes. Don't spend too much time refining the shapes though, as we can do that later.



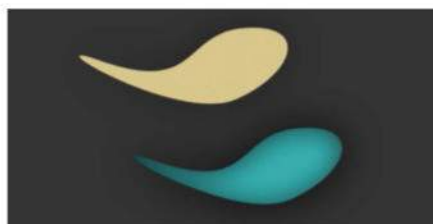
### 02 USE GRADIENT OVERLAY

Layer styles, accessible from the Layers palette's fx button, can add some quick dimension and interest to our flat shapes. Apply a Gradient Overlay with the Black and White preset for versatile dimension. You can use a darken blend mode like Multiply, a lighten mode like Screen, or a contrast mode like Soft Light. Adjust opacity and angle as needed.



### 03 ADD MORE STYLES

Inner Shadow can help bestow a bit more heft. Use sparingly with low opacity, choke and size. Drop Shadow is key to building up the depth in the piece. Be moderate with opacity and size, and increase when needed. As you stack and overlap shapes, the shadowy interplay will create some nice complexity throughout.



#### OUR EXPERT

**ANDRE VILLANUEVA**  
000-000-0000.com

Andre fell in love with Photoshop while studying web design in college. He taught for several years in the media arts department. He's now an art director in Birmingham, USA.

#### SOURCE FILES

FileSilo contains the source files needed to complete the tutorial: blurs, shapes, foamy water shots and broccoli! Feel free to supplement with your own textures and/or swap out the model shot, which can be downloaded from [www.dreamstime.com](http://www.dreamstime.com) (image number 51969906).

## WORK IN PROGRESS BUILD IT UP AND REFINE



Progress 1: Layer the model forms



Progress 2: Add shapes and more elements



Progress 3: Apply adjustments





## 04 GROUP THE SHAPES

After creating a series of shapes, you can start combining them to create new forms. You can lower opacity and/or play with blend modes. Use Free Transform (Cmd/Ctrl+T) to Scale, Rotate, and Distort the shapes as needed. To help stay organised, put the layers associated with these new forms in groups in the Layers palette by selecting the layers and pressing Cmd/Ctrl+G. Now you can move all the layers by simply selecting the group. You can also Free Transform the whole bunch at once.



## 05 FREESTYLE IT

To create some sketchily dynamic forms and streaks, grab the Freeform Pen tool and go freestyle. Now, instead of plotting anchor points, just click and drag to draw the shape. You can use your digital tablet if you wish, or you can just stick with the mouse. You're bound to get some jagged and unrefined areas in the shape. Don't worry, these can be a nice change of pace from the smooth and regimented shapes you may already have in stock.

### QUICK TIP

In PSDs with many layers, it's imperative you organise things lest you succumb under the sheer weight of a hundred or more nameless rogue layers. Corral similar layers in groups. Add descriptive names. Colour-code a group or layer by Cmd/right-clicking on its icon and choosing a colour.



## 07 MASK THE MODEL

Turn off visibility of all the layers below the merged layer. Select the Pen tool, and set to Path in the Options bar. Plot anchor points to trace a path around the model until you return to the origin. Next, refine the path. Wielding the Direct Selection tool, zoom in around the path and smooth out any problem areas. When complete, press Cmd/Ctrl+Return to convert the path to a selection, then press the Add Layer Mask button at the bottom of the Layers palette. Now click Save.



## 06 PREPARE THE MODEL

Open the model photo then click the Create New Fill or Adjustment Layer button at the bottom of the Layers palette, choose Solid Color. Pick #e47fea. Set to Overlay blend mode. Click the mask, press invert with Cmd/Ctrl+I.

Select the Brush tool. With a soft round brush at medium opacity paint white to enhance the lips. Repeat with two Color Fill layers (#2ecc2a, #1476d1) and blend them for the eyes. Now, select the topmost layer and merge with Cmd/Ctrl+Opt/Alt+Shift+E.



## 08 BUILD UP MODEL FORMS

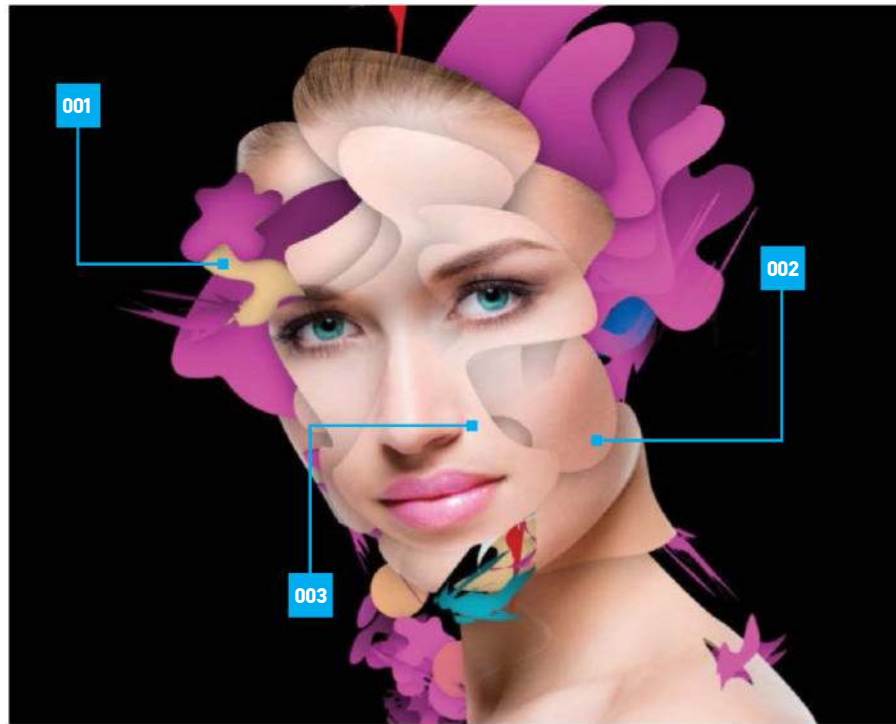
Open Start.psd. Go to File>Place (Place Linked in CC), choose the model. Drag in a shape you created and move it below the model. Create a clipping mask by Alt/Opt+clicking between the two layers. Then Free Transform the shape to fit. Make a duplicate of the model, drag another shape below it, and create another clipping mask and repeat. You can move the shapes independently. To move the model, first click one instance, Cmd/Ctrl+click the other model layers, then press Link Layers at the bottom of the Layers palette. You can now move all instances at once.

## ■ BUILD IT UP

### ADD AND ARRANGE SHAPES AND ELEMENTS

#### 09 BUILD UP THE PIECES

After completing the base model forms, which serve as the foundation for the piece, we'll supplement them with a multitude of coloured shapes adorned with gradient overlays, inner shadows, and drop shadows. Building these up provides depth and detail.



**001 | MODEL SHAPES**  
The base model pieces are built up by using different shape layers to contain the model photo via clipping masks.

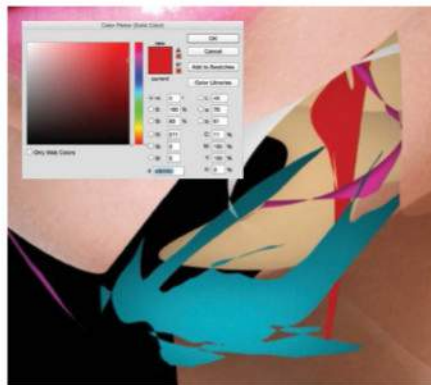
**002 | COLOUR SHAPES**  
The many coloured shape layers, dressed with layer styles like Drop Shadow, are overlapped to provide complexity to the piece.

**003 | STAY ORGANISED**  
When working with many layers, use groups to corral similar layers. Further organise by nesting groups within a parent group.



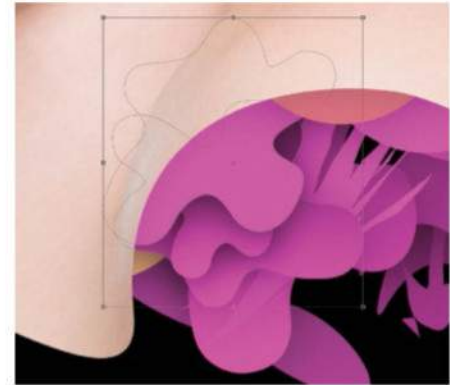
#### 11 ADJUST THE STYLES

You may also need to adjust layer styles as you go along. By continuing to cluster shape layers with shadowy layer styles, you may start to get areas that are a bit too murky. You may also have areas where a bit more shading would be nice. To edit a layer's style, double-click on the adjustment. For Drop Shadow and Inner Shadow, adjust the opacity and size up or down. For Gradient Overlay, you can adjust opacity or even edit the gradient itself.



#### 12 CHANGE COLOURS

As you continue to build up the pieces, you may find that you need to change some of the colour. With shape layers, it's a breeze to play with colour possibilities. Simply double-click on the Color Fill layer thumbnail and the Color Picker pops up. Choose a new colour and click OK. In CS6+, you can make sweeping colour changes. Cmd/Ctrl+click each shape you want to change, select a Shape tool, then use Fill in the options bar to change the colour.



#### 10 REFINE THE SHAPES

Continue to move and adjust the pieces with the Move tool. To assist you in finding particular layers, you can tick Auto-Select in the options bar and set to Layer. You will probably need to manage the configuration of pieces throughout the majority of the tutorial, since adding new elements may necessitate you to move, adjust, or remove existing elements. Free Transform as needed to Scale up or down, Rotate or Distort. To transform multiple shapes at once, Cmd/Ctrl+click each layer, then transform.

“Shape layers incur no degradation or blurriness when transformed, making them the perfect building blocks”



#### 13 CREATE SHARDS

Let's create some shards. Go to File>Place (Place Embedded in CC) and grab Mat.jpg then click OK to confirm. Apply a layer mask by pressing the Add Layer Mask button at the bottom of the Layers palette. Click the mask then press Cmd/Ctrl+I to invert it. With the Polygonal Lasso tool, plot out the corners of the shard until you reach the origin. Fill the selection with white then deselect (Cmd/Ctrl+D). Unlinking the mask allows you to move and transform the image or mask independently. Repeat the process to add a few more shards.



## ■ COMPLETE THE BASE COMPOSITION

### ADD TEXTURE AND FINALISE ARRANGEMENT

#### 14 | ADD GLOW

We'll save the majority of our colour adjustments and glows for the end phase, but we'll take a moment here to pause from our shape building to add a bit of colour. Click the Create New Fill or adjustment layer button at the bottom of the layers palette then choose Solid Color – pick #479784. Set the layer's blend mode to Screen. Then move it up or down the layers' stacking order until you find a suitable position. Invert the mask (Cmd/Ctrl+I), then paint it back with white and a large soft round brush.



#### ■ QUICK TIP

We've given new meaning to the term organic food. To help lend an organic feel to the various surfaces, we blended and masked some broccoli. Be sure to keep a well-stocked and varied image library within easy reach. You never know what type of subject or textural qualities you'll need!



#### ■ WORKING WITH SHAPE LAYERS

Shape layers can be created by using one of the Shape tools or by plotting a custom shape with the Pen tool (be sure to tick Shape in the options bar). Whether you start with a geometric or custom shape, you can edit the vector path by using the Direct Selection tool. Click and drag on the anchor points to adjust. You can use the Add and Delete Anchor Point tools to add/delete points on the path. These tools allow you to start with stock shapes and make them your own. To save a shape, go to Edit>Define Custom Shape.

#### 15 | ADD ORGANIC TEXTURE

We'll use some broccoli to add a touch of texture. Place (Embedded) Broccoli.jpg above a specific area, or simply place at the top of all the current layers. Set to Soft Light blend mode. Add a layer mask and then invert it. Paint back with white to selectively apply the texture. If you need to peek at the texture, you can Shift+click the mask to disable (Shift+click again to enable). Place more broccoli in other areas. To get a deeper blend, try a darken mode like Color Burn.



#### 17 | FINALISE SHAPES

Add or create any last shapes to complete the base composition. Layer some shapes at the top to push the dimension. Paint some black in a layer below to add shadows if needed. Also, go through and see if any shapes and areas need to be moved or altered. Don't be afraid to remove elements that don't add value to your piece. If you're afraid to delete, turn off the visibility until you can make a definite decision. Zoom in and out, and use the Rotate Canvas tool to help with your judgment.



#### 18 | MERGE AND BLUR

With the top layer selected, press Cmd/Ctrl+Option/Alt+Shift+E to merge the visible layers then right-click on the layer and choose Convert to Smart Object. This will allow us to apply Smart Filters to the merged layer. Go to

#### 16 | ADD WATER SWIRLS

Now we'll borrow some foamy ocean water shots to add some interesting swirls to the mix. Place (Embedded) Water1.jpg and position it in an area where you want to add the swirl effect. Add a layer mask, invert, then paint back with white to apply. To better blend the swirls, you can drop the opacity or try changing the blend mode (we used Screen and Overlay). To add more swirls, duplicate it, re-position, and adjust the mask. For some variety, you can also use Water2.jpg.



Filter>Blur>Gaussian Blur. Set the Radius to 2.2 pixels and click OK. Restore some clarity in key areas by painting black in the Smart Filter mask, reducing the blur. If you want to adjust the blur, double click on the Smart Filter, adjust the Radius, and click OK again.



## 19 SHARPEN IT UP

Press Cmd/Ctrl+J to duplicate the merged layer. Drag the Smart Filter to the trash. Go to Filter>Other>High Pass and set the Radius to two pixels, then click OK. Set the layer to Overlay. Add a layer mask, then paint black in areas to reduce the sharpening. You might be wondering why we didn't use the Smart Filter mask like the last step. By using the layer mask, you can remove the sharpening and provide a window to the underlying layer.

### ■ QUICK TIP

Are you getting tired of swapping back and forth between the Add and Delete Anchor Point tools when adjusting shape layers? Just use the Pen tool and tick Auto Add/Delete in the options bar. Now simply click to add a point, or click on an existing point to remove it.

## 22 ADD COLOURS

Now we'll fine-tune the colouring throughout via a series of Color Fill layers. For each colour you want to use, add a Color Fill layer, choose the colour, then click OK. Invert the mask, then paint back with white to add. Set the blend mode to Overlay (if too intense, try Soft Light). You can also lower the opacity to tone it down. Here we added some greens (#6ed728, #56972a) and cool colours (#11fcf9, #1434f4), as well as a dark flesh colour (#7e4c4c).

## 23 APPLY MORE ADJUSTMENTS

We'll continue with a few more adjustment layers that will refine the look. Click the Add New Fill or Adjustment Layer button in the Layers palette, then choose Gradient Map. Load the Photographic Toning presets and choose Cobalt-Iron 2. Set the layer to Soft Light, and reduce the Opacity to 40%. Now add another Color Lookup layer, choose Foggy Night. Set the layer to Multiply and drop Opacity to 50%. Paint black in the mask to reduce further.



## 20 OVERLAY BLUR

We'll now begin the final stage where we really nail the look and atmosphere we desire. It's advisable to create a group at the top to contain these. You can turn the group's visibility on and off to see how things are looking. We'll use a series of adjustment and fill layers, but first let's kick things off by overlaying a blur shot. Place (Embedded) Blur.jpg. Set to Overlay blend mode. Add a layer mask, then paint black in areas to reduce.



## 21 USE COLOR LOOKUP AND VIBRANCE

Click the Add New Fill or Adjustment Layer button in the Layers palette, choose Color Lookup. Pick the Candlelight preset then paint black in the mask to reduce in areas such as the main facial features and the water swirl textures. Add another adjustment layer, this time choose Vibrance. Max out the vibrance, which increases the vibrancy while protecting skin tones. For an extra bit of kick, you can pump up the Saturation to +10 (or more). If increasing, you can paint black in the mask to tone down in areas.



## 24 USE LEVELS

Let's brighten things up a bit. Click the Add New Fill or Adjustment Layer button in the Layers palette and choose Levels. You can use the sliders under the histogram to adjust the intensity levels of Shadows, Midtones and Highlights in the image. Here we nudged the Midtones leftward, making a gamma adjustment that lightens the overall image. At the bottom, we moved the dark output level slider slightly inward to limit how dark things can get. Fiddle with the sliders until you're happy.







# FORGE A SCI-FI COMPOSITE FROM PHOTOS

EDIT AND COMBINE ORDINARY STOCK PHOTOS TO CREATE A COMPOSITE ILLUSTRATION THAT'S OUT OF THIS WORLD

Sci-fi cityscapes are often towering metropolises packed with futuristic architecture, and you may wonder how to even get started with illustrating one. This tutorial demonstrates how photos of everyday buildings, environments and structures can be used to create a futuristic city in Photoshop.

Start by assembling a portfolio of images. We've linked to images from iStock throughout this tutorial, but there are lots of free stock sites

like Pixabay, Free Images and Unsplash that are perfect for sourcing cityscape photos. Try to make sure that all of the photos you choose are lit from the same direction, or choose photos that you can flip, rotate or warp to make sure that the light's in the right place. Lighting is what makes or breaks a composite.

Once you've assembled the requisite pieces, use masking, adjustment layers and other tricks to unify them into one futuristic cityscape image.

## SET THE BASIS FOR THE SCENE CREATE THE BACKDROP AND SKY THEN START BUILDING THE CITY



### 01 SET UP THE SCENE

Create a new document, with a background colour of #7bc7ee. At full size this illustration is 235mm x 302mm and 300dpi – on some machines you may prefer to work smaller. This will help with processing, and also enable you to use medium resolution comp images. You can download from sites like iStock and use these non-commercially.

### 02 INSERT THE SKY

Find a picture of a blue but brooding sky (iStock 10830462) for the top of the image. With the Gradient tool, mask up this time, then give the mask a more curved look by airbrushing out with black, and back in with white. This is best achieved with a Soft Round brush, with Shape Dynamics switched off, and Hardness at 0%. Keep Flow low, at around 1%, and certainly no more than 10.



### 03 ADD THE DESERT BACKGROUND

Find a picture of a desert for the background (iStock 11662814). Scale (Edit> Transform>Scale) and place the horizon just below the centre of the page, so that the viewer will have a slightly elevated position – above the streets but below the towers. This will also help the viewer read across the action. Go to Layer>Layer Mask> Reveal All. Press D on your keyboard to select the colour black, and use the Gradient tool to fade the top of the photo to the blue of the canvas.



#### OUR EXPERT

**JOE ROBERTS**  
JoeRoberts.co.uk  
@Joe\_R\_Roberts

Joe Roberts is a digital artist based in London, with 20 years experience, specialising in book covers and game art.

## WORK IN PROGRESS FROM PHOTO BASE TO SCI-FI CITY



Progress 1: Prepare the backdrop for the cityscape



Progress 2: Start to add buildings



Progress 3: Make adjustments



## 04 PREPARE FOR THE CITYSCAPE

For the foreground, something desert-like and craterous should do the trick (iStock 60036860). Mask the top. To give the illusion of a landscape large enough to accommodate a city, you'll also need to de-focus it slightly. With the layer selected, go to Filter>Blur, and apply a Gaussian Blur with a radius of around 0.5 pixels. You can add a back wall to the crater using a similar photo.

### QUICK TIP

Remember that you can flip and rotate the photos (or parts of photos) that you're using so that the light comes from a consistent direction – this looks more convincing than painting in new light over photos with different light sources.

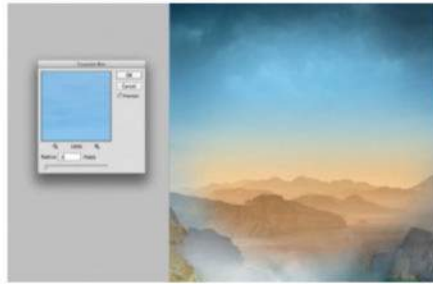
## 05 MAKE THE CITY'S BASE

The city is going to be built inside a dome, so it needs to be sitting on an appropriate base. Observatories provide the right kind of structure (iStock 37792604). Using the Pen tool create a path around the base, then in the Paths palette make a selection of 0.3 pixels and copy-paste it in. To remove any stray edges, go to Layer>Matting>Defringe, then using the Blur tool, with a soft brush of around 5px, quickly work around the edge of the base. This scene will be lit from the upper left, so consider that when choosing photos. Now add a Levels layer, clipped to the base, to deepen the shadows and raise the highlights.



## 07 START TO ADD BUILDINGS

You now need a good selection of buildings. It's important that the photos you choose are shot from angles that are compatible with the spectator's view – looking down on structures nearer the base, but up towards the higher towers that penetrate the dome.



## 06 CREATE THE SPHERE

For the dome you need to start with a sphere. You can render one in Photoshop using 3D tools, or use a stock image (iStock 30625584). Scale and Place the sphere approximately where you'd like the dome to sit (above the Base layer but below Foreground), then add a Gaussian Blur of about 0.7 pixels. To make it look glassy, reduce its Opacity to 95% and change the mode from Normal to Soft Light. So that the sphere can bulge a little at the bottom, go to Edit>Transform>Scale, then in Warp Mode pull on the points and handles to achieve the desired amount of flex. Finally add a layer mask, and paint away the lower parts of the dome that are not needed.



## 08 FINESSE THE EDGES

Create a clipping path around a building (iStock 2876631). Make a selection of 0.2 pixels, and, beneath the Dome layer, copy and paste it into the scene you've set up.

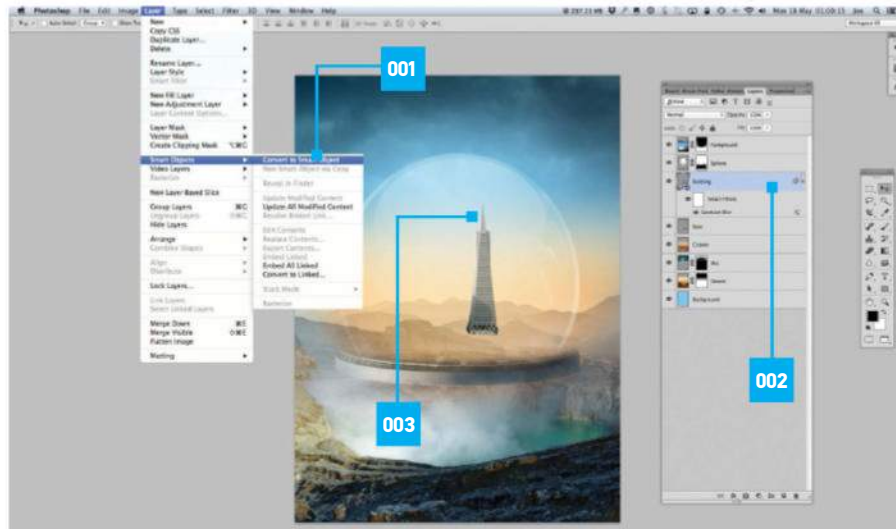
For best results, go to Layer>Matting>Defringe, then use Blur tool for the edges. Remember that the main light source is from the top left, so, if necessary, flip the layer horizontally by going to Edit>Transform>Flip Horizontally.

## ADD THE BUILDINGS

### USE STOCK PHOTOS AND PHOTOSHOP TOOLS TO POPULATE THE CITY

#### 09 | PRESERVE DATA WITH SMART OBJECTS

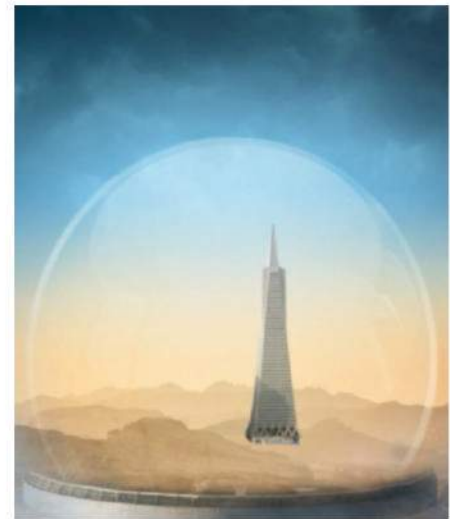
The city itself will be quite complex and you may want to go back and re-edit many elements, many times, so to preserve the original data convert the Building layer into a Smart Object (Layer>Smart Objects>Convert to Smart Object) then add a Gaussian Blur of between 0.2 and 0.6 pixels. You can now change the amount of blur at any time by clicking the little arrow at the right of the layer title and double clicking on Gaussian Blur.



**001 | SMART OBJECTS**  
Convert all of the cityscape elements to Smart Objects so that you have full control over them and can rearrange them if necessary

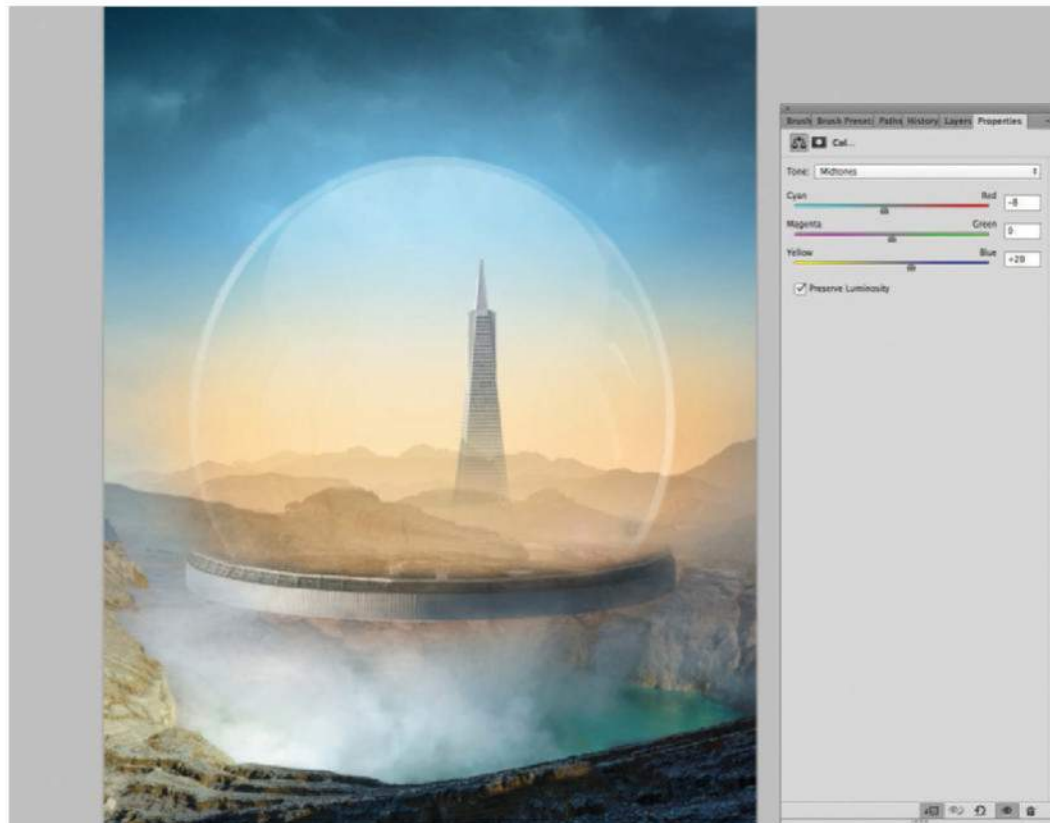
**002 | SMART FILTERS**  
Once you've made a Smart Object and applied a filter, use the icon on the layer palette to change the filter strength at any time

**003 | CONSISTENT LIGHT**  
Flip or rotate some of your image elements so that all the light is coming from the same direction. If light isn't consistent the image won't work



#### 10 | REDUCE OPACITY

Reduce the Opacity of the Building layer to around 90%. This will add an additional sense of depth and distance and lend the layer some of the colour and tone of its environment. With all that metal and glass in the scene, it will also create an illusion of reflections. Now add a layer mask and pull a gradient up and over the base of the structure. Ghosting this out helps further with depth, and as the city comes together and it allows the buildings to be moved around the composition freely without tearing out their foundations.



“You may want to go back and re-edit many elements many times, so as to preserve the original data, convert the Building layer into a Smart Object”

#### 11 | INCREASE CONTRAST

If the building is looking a little faint now, you need to up the contrast. Clip on a Levels adjustment layer, with the black set at around 26 and the white at 245. It also needs to look a little bluer, to reflect its environment, so clip on a Color Balance layer and in Midtones set Cyan/Red to -8 and Yellow/Blue to +20.



## ■ QUICK TIP

When using adjustment layers, you will achieve better results by stacking subtle effects, rather than using a single adjustment at full strength. Build up several adjustment layers to achieve the exact effect you want – even of that means you have ten Levels adjustments all at low opacity!

## 12 | ADD MORE BUILDINGS

Repeat this process with more buildings and structures. Play with Levels, Color Balance, and Blur as you go, keeping each element within a certain range but varied enough to appeal in an illustrative sense. If a structure is looking too colourful, add a Hue/Saturation adjustment layer and pull the Saturation slider to the left as you see fit.



## 13 | SEPARATE THE BUILDINGS

Sometimes, in an illustration like this, elements can get a bit lost among those surrounding them. If that happens to any of the buildings, apply a bit of misting behind its layer, to separate it slightly. Select a brush like the one used earlier and paint a subtle dusting behind the building. With the Brush tool selected, pick a light colour from the background, by holding down Opt/Alt and clicking on a colour you like. Again you can keep the flow at around 1%.

## ■ ADD THE FINAL FLOURISHES USE ADJUSTMENTS AND CREATIVE EFFECTS TO BRING IT ALL TOGETHER



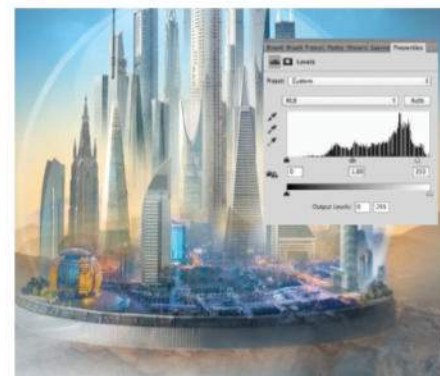
## 14 | ORGANISE LAYERS

If you haven't already, now would be a good time to start organising your layers into folders – things are about to get busy. Select all five layers associated with Building 2, then click the Folder icon at the bottom of the palette. Name the resultant folder, 'Building 2 Folder'. The reason you should call a folder 'folder' is so that you can easily distinguish it from its contents when right-clicking the image, as sometimes you will have many layers and folders, and folders within folders. Organise the rest of the layers accordingly, including a Buildings folder for all your individual Buildings folders.



## 15 | CREATE HEIGHT

Keep adding buildings and structures until the city looks suitably dense. Once you are happy with the composition you can start working at street level. The same principles apply here but you will probably find Transforming in Warp Mode useful to establish a layout that fits within the curvature of the base. Add a layer mask to your Buildings folder, then very subtly mask away some of the tops of the tallest buildings – just enough to give them a look of misty heights.



## 16 | MAKE ADJUSTMENTS

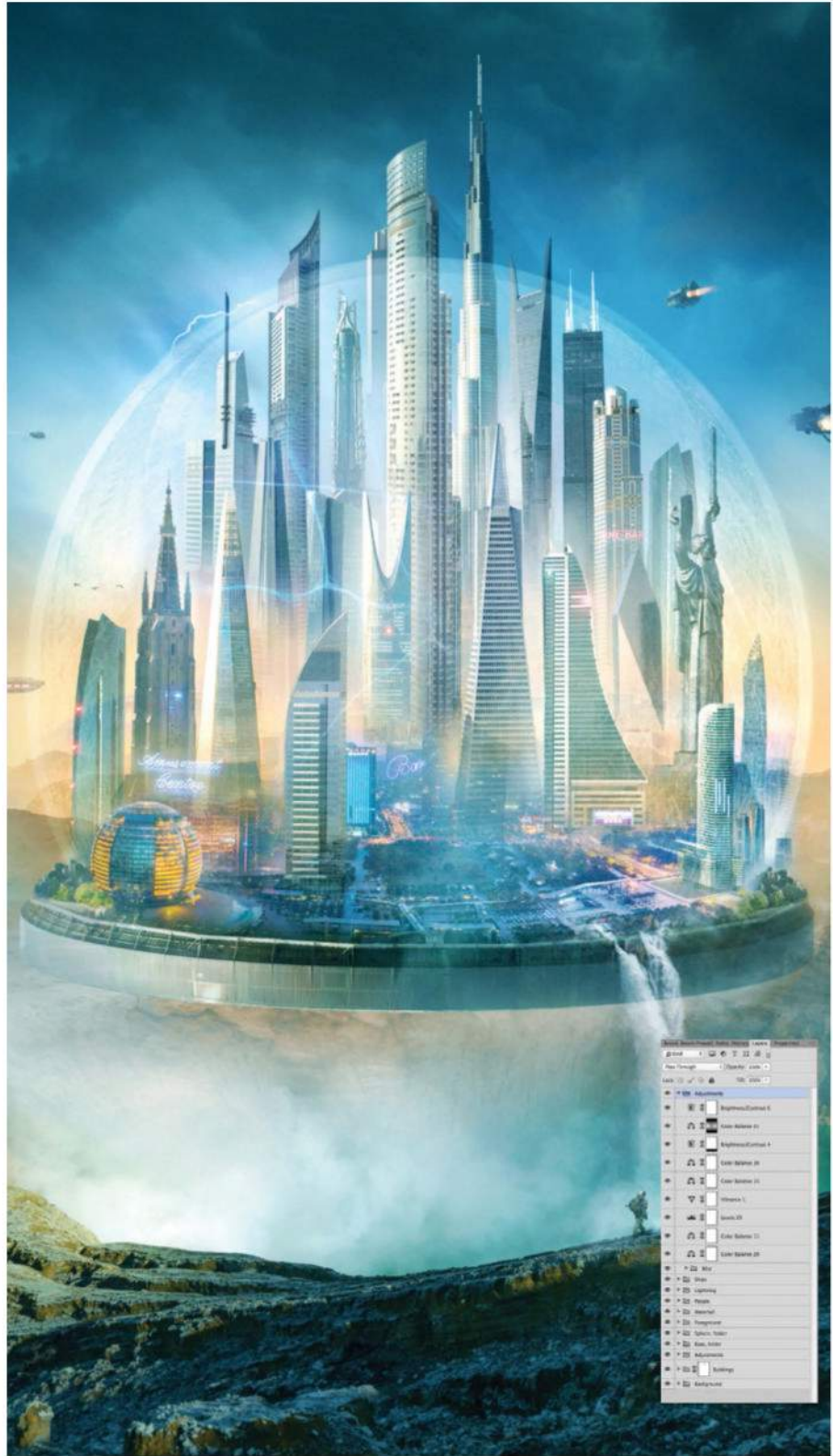
Create a new folder above Buildings, and call it Adjustments. Create a Levels adjustment layer, softly masked around the city, and use it to increase the contrast slightly. Create a second Levels layer and use it to increase the light levels, then mask it so that it only applies to in and around the top right of the dome.

**17** ADD THE WATERFALL

For the waterfall, find a suitable image with light water against a darker background. Change the opacity mode to Screen, and you'll notice that the darker areas start to disappear. Clipping on a Levels adjustment and deepening the blacks while nudging up the whites will take this even further. Then it's just a case of masking away what's left, while keeping any rocks etc that you might want, for a cleanly isolated flow.

**TIE COLOURS TOGETHER**

When you're adding in high contrast stock photos to a sci-fi cityscape, set them to Screen and the darker areas will disappear. This trick using Screen mode is really useful and is used here not just on the waterfall but with many other elements of the piece. Working with dark stock images, the blacker the better, the lights in the city, the neon signs, the afterburners and contrails of the vehicles, are all created using the same technique. Even the mist and shards of light in sky are achieved this way.

**18** FINISHING TOUCHES

Finally, create another Adjustments folder. This one will sit right at the top. Add a Color Balance layer, select Shadows then pull the slider -15 towards Cyan. The next Color Balance layer will be used for

the Midtones. Increase these slightly, particularly the Green as this will help with some of the organic elements without contradicting the desert. Play with Levels, Vibrance, Brightness and Contrast, until you find a look you are happy with.







# MASTER RENDER FLAME

LEARN HOW TO USE THIS NEW FILTER TOOL WITH YOUR OWN FIRE AND FLAME ELEMENTS ALONG THE PATHS YOU CREATE

**W**hat if Photoshop had the potential to deliver composite elements at the touch of a button? What if you didn't have to spend extra time shooting elements like fire and sparks, or scouring the Internet for stock images?

Not only has Photoshop given us the ability render our own trees in past editions, but now in Photoshop CC 2014 we are able to use the new Render Flame filter to create our own fire elements

from scratch. In this tutorial we will show you how easy it is to create your own flames, sparks and other fire elements straight from your imagination. To get the most from this tutorial, an average to advanced understanding of layers, blending modes, and the Pen tool will definitely prove to be beneficial.

Discover how to take it one step further by not only using the Render Flame technique, but also combining the render technique with real fire element photographs.



## OUR EXPERT

**BRANDON CAWOOD**  
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Brandon Cawood is a commercial and advertising photographer from Georgia, USA. He specialises in high-energy composites and does his own retouching and Photoshop work.

## SOURCE FILES

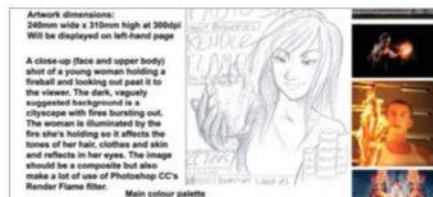
Check out FileSilo for an alternative background, fire, clouds and spark images for personal use images. Use them to assist and enhance your own Render Flame images.

## SKETCH, PLAN AND PROCESS

BE SURE TO CONSIDER LIGHTING WHEN SHOOTING YOUR IMAGES

### 01 BEGIN WITH A SKETCH

When trying to pull off any composite, proper planning is essential, but even more so when a client has a specific idea in mind. Having a sketch will allow you to explain your vision to your talent or client, or in this case allow the client to explain their vision.



### 03 PROCESS YOUR SUBJECT BEFORE YOU BEGIN MASKING

It's always good to process your model image before you do your masking. There are many different methods or presets that aid in processing but they sometimes leave the edges of your subjects with haloing or hard lines. To avoid having lines or haloing in your final image, process first. This way you can make sure your masks are tight enough that any haloing or hard lines get eliminated.

### 02 LIGHT THE PHOTOSHOOT

Whenever you plan to have a lighting source, such as fire, close to your subject's body in your final image, it's very beneficial to create a stand-in light during the actual photoshoot itself. By placing CTO gel inside of a globe modifier you are not only able to get the global light you need, but also the orange colour cast as well.

## WORK IN PROGRESS

FROM CONCEPTION TO CREATION



Progress 1: Concept and sketch



Progress 2: Starting to capture effects on camera



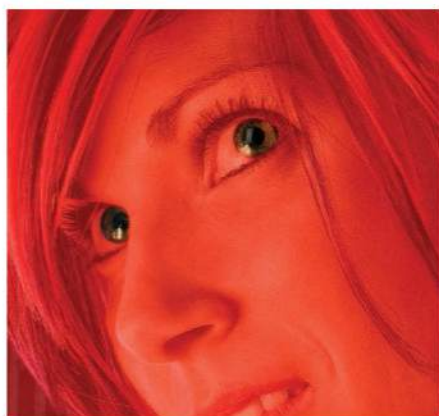
Progress 3: Mastering Render Flame





## 04 | MASK THE BODY

The key to any great composite is having very clean masks. Focus on the body and clothing first. Always add a layer mask so you can use black to remove and white to add back. A pen tablet comes in handy. Take your time. Zoom in to 500% and with a black Hard brush, set at 8 pixels, follow the outline of what you want to extract. If you make a mistake, just switch your brush to white and paint it back. To make sure you are masking out everything that needs to be transparent, press the \ key and your mask will turn red. Press it again to turn it off.



## 07 | MAKE THE EYES POP

Making the eyes of your subject pop can really add emotion into the image. The key is to keep it subtle but effective. Create a Curves adjustment layer on top of all the other layers. When you do this it will have its own mask already filled with white. You want to fill the mask with black and grab a white brush. Paint in the mask only over the pupils and iris. Now you want to make an S shape on your Curves layers. On your graph add a point about a quarter of the way up, one in the middle, and one about three-quarters of the way up. Leave the one in the middle and bring the top one up slightly and the bottom one down. You can now adjust the opacity of this layer if the effect is over the top.

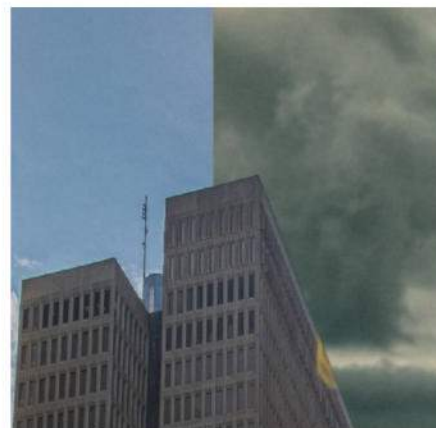


## 05 | MASK THE HAIR

When you have contrast between the hair and background, extracting the hair is much easier. Duplicate your subject and add a Hue adjustment layer and a Levels adjustment layer. Bring the Saturation all the way down on the Hue layer. With the Levels layer move the left and right sliders towards the middle. The idea is to make the background as white as possible and the hair as dark as possible without distorting it. Use the Quick Selection tool to select the face and all the hair. Then you want to use Refine Edge to refine and apply your mask.

### ■ QUICK TIP

It's not uncommon to come to a crossroads when creating an image. Sometimes you see two very different end results in your mind. Try them both! Save your PSD under two different names and try out both ideas. Compare them and decide what one you like better. You may even decide to use them both for different things.



## 06 | PREPARE THE BACKGROUND

The main problem with the background image is it was taken during the day instead of in darkness. This is a simple fix. First you want to follow the same procedures from Steps 3 and 4 and extract the buildings by masking the sky. After that you want to drop an image of some dark storm clouds behind the city image. Use a Curves adjustment clipped to the background or the clouds to get the exposures about the same. Group the two images and clip a Hue/Saturation adjustment layer to the group and bring the Saturation down to about 50%. Colours aren't as vibrant when it's dark and cloudy.



## 08 | COLOUR MATCH THE SUBJECT AND BACKGROUND

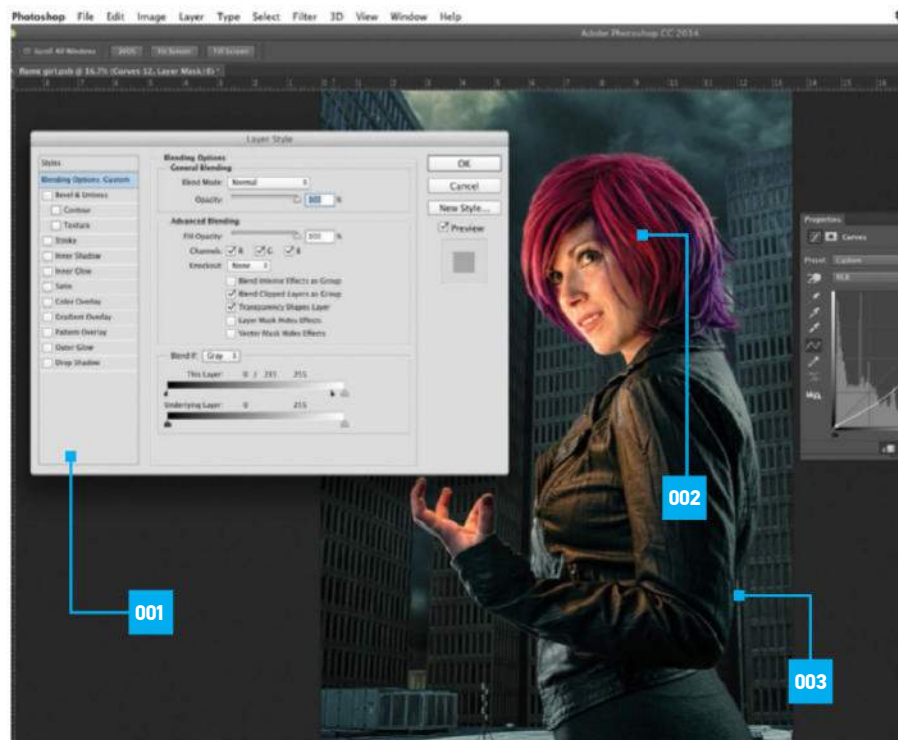
Use an individual Curves adjustment layer on top of the background layer. Make sure it is clipped to only the background layer by selecting Layer>Create Clipping Mask. Use the RGB channel to adjust the exposure so that it matches the model. Next use Channels to match the temperature of the model. You may want to repeat this process on the model. You will end up blending the two images even more when you get to colour grading.

## USE THE RENDER FLAME FILTER

### COMBINE THE RENDER FLAME FILTER WITH A REAL FIRE IMAGE AND SPARKS

#### 09 ADJUST SHADOWS AND HIGHLIGHTS

If you feel that your highlights are too bright or not bright enough you can adjust them without affecting your shadows. Add a new Curves adjustment layer above all other layers. Adjust the RGB channel accordingly. This is just like Step 8 but we are using the RGB channel instead of the blue channel. With your Curves adjustment layer selected go to Layer>Layer Style>Blending Options. At the bottom of the window you will see two sliders under Underlying Layer. Hold down Alt/Option then click and drag the right corner of the black slider all the way to the right. This will cause the Curves to only affect the highlights in the image. Do the opposite for shadow adjustments.



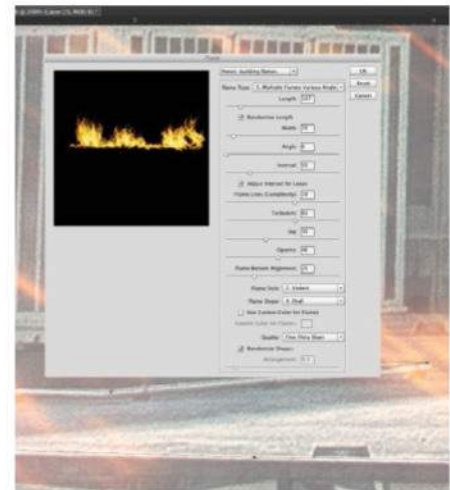
**001 | BE PREPARED**  
Having a vision is crucial in executing a well-balanced image. Having a plan will keep you organised and on track to creating something special

**002 | MATCHING COLOUR IS KEY**  
Making sure the colour temperature and exposure match between your subject and background image is crucial to creating a believable image

**003 | ATTENTION TO DETAIL**  
Pay attention to even the smallest of details. Even if no-one else notices, you will sleep better knowing you put everything you had into your work!

#### 11 RENDER FLAME ON THE HAND

For this image you want flames to look like they are riding up the fingers of the subject. This is where Render Flame can be more effective and beneficial than using real photos of fire. You are going to want to focus on one finger at a time. Follow the same procedure as Step 10 but make sure to put each flame on its own layer so you can Transform and Warp it if you need to. Since we are going to use a photo of fire for the main fireball, make sure that your finger flames go past the fingertips and flare out so they blend with the real fire elements.



#### 10 USE RENDER FLAME ON THE BACKGROUND

The Render Flame filter is a great way to create custom flames quickly and effectively and it's relatively easy! For this composite we want to put some flames on the buildings in the background. Create a new blank layer above your background. Grab the Pen tool and create a path where you would like the fire to go. Next go to Filter>Render>Flame. A dialog box will open up. You can adjust the type of flame you want, the direction, the width and much more. Choose the quality you want the flame to be rendered at. Once you get your flames the way you want them, click OK. Deselect your path and you will have a custom flame on its own layer. Turn the blending mode to Screen.

“The Render Flame filter is a great way to create custom flames quickly and effectively and it's relatively easy!”



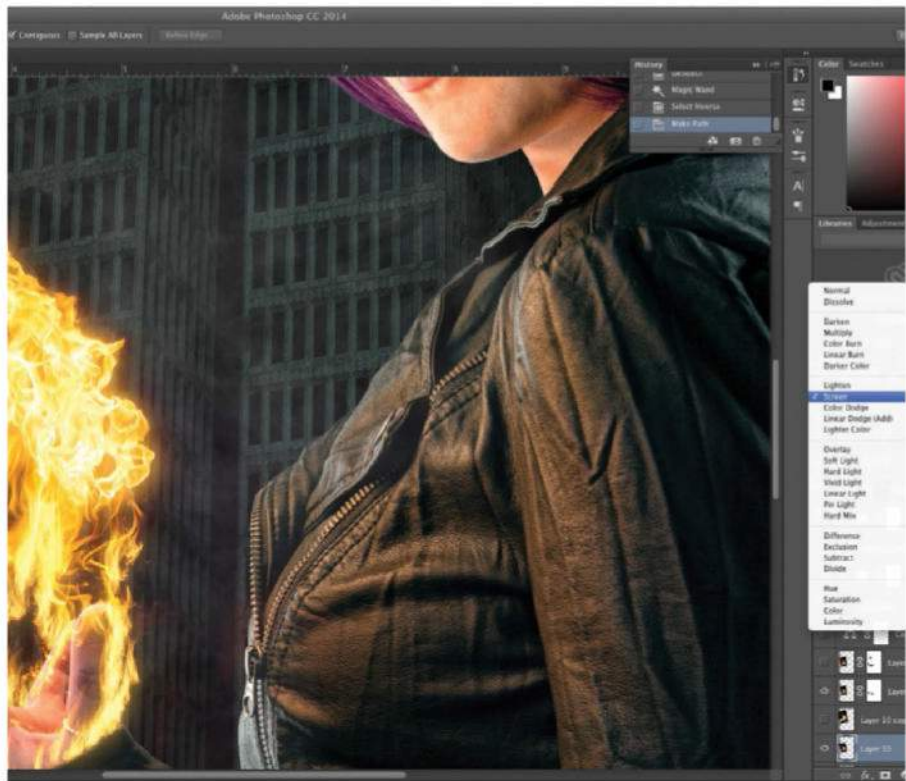


## 12 CREATE SPARKS

To create sparks you will reverse the process a little. Create a new layer and grab a Hard Round brush set at 8 pixels. Start drawing very small dots and dashes about the size of sparks. Use the Magic Wand tool to select the negative space of the layer then inverse the selection. Next go to your Paths panel then click the Make Work Path from Selection icon. Follow the procedure from Step 10 and make sure to change your blending mode to Screen. Add a Motion Blur to give the sparks some motion.

### QUICK TIP

An easy way to enhance your fire elements even further is to duplicate the layer. After that add a Gaussian Blur with a radius of about 30 to give your fire elements a nice soft glow. Use this on flames as well as sparks.



## 13 ADD REAL FIRE ELEMENTS AND SMOKE

Although you are using Render Flame to create custom fire elements, it's hard to beat the real thing. For the main fireball, use a real photo of fire on a black background. Put the fire on top of the layer you want it to be over and turn the blending mode to Screen. On your keyboard hold down Cmd/Ctrl+T. This will allow you to transform and size your flame. Follow the same steps to add fog and smoke. A great smoke and fog package can be bought at [www.phlearn.com](http://www.phlearn.com). Use a Levels adjustment layer to adjust the amount of fog or smoke.

## ENHANCE IT AND ADD THE FINISHING TOUCHES

### MAKE YOUR IMAGE MORE REALISTIC WITH SOME FINAL TWEAKS



## 14 ENHANCE THE FLAME'S GLOW ON THE BODY

Add a blank layer above your subject. Grab a Soft brush, change the Opacity to around 20% and make it orange. Take your brush and paint over your subject where the light from the fire should be hitting them. Clip the layer to your model layer so it only affects that. Turn your blending mode to Color. Use the procedure from Step 9 to make it only affect the highlights. Add a layer mask and mask out any areas that shouldn't have the glow from the fire.



## 15 FINAL COLOUR GRADING

First add a Channel Mixer adjustment layer. Choose the Black and White With Green preset. You will notice this turns your image black and white. You want to use this adjustment for some desaturation so bring the Opacity down to 15%. Next add a Color Balance adjustment layer. The Color Balance adjustments will vary from image to image so play around with them to get the look you want. For this image the Shadows and Midtones were pushed towards the cyan and blue tones, while the Highlights were pushed towards the red and yellow tones.



## 17 ADD GRAIN

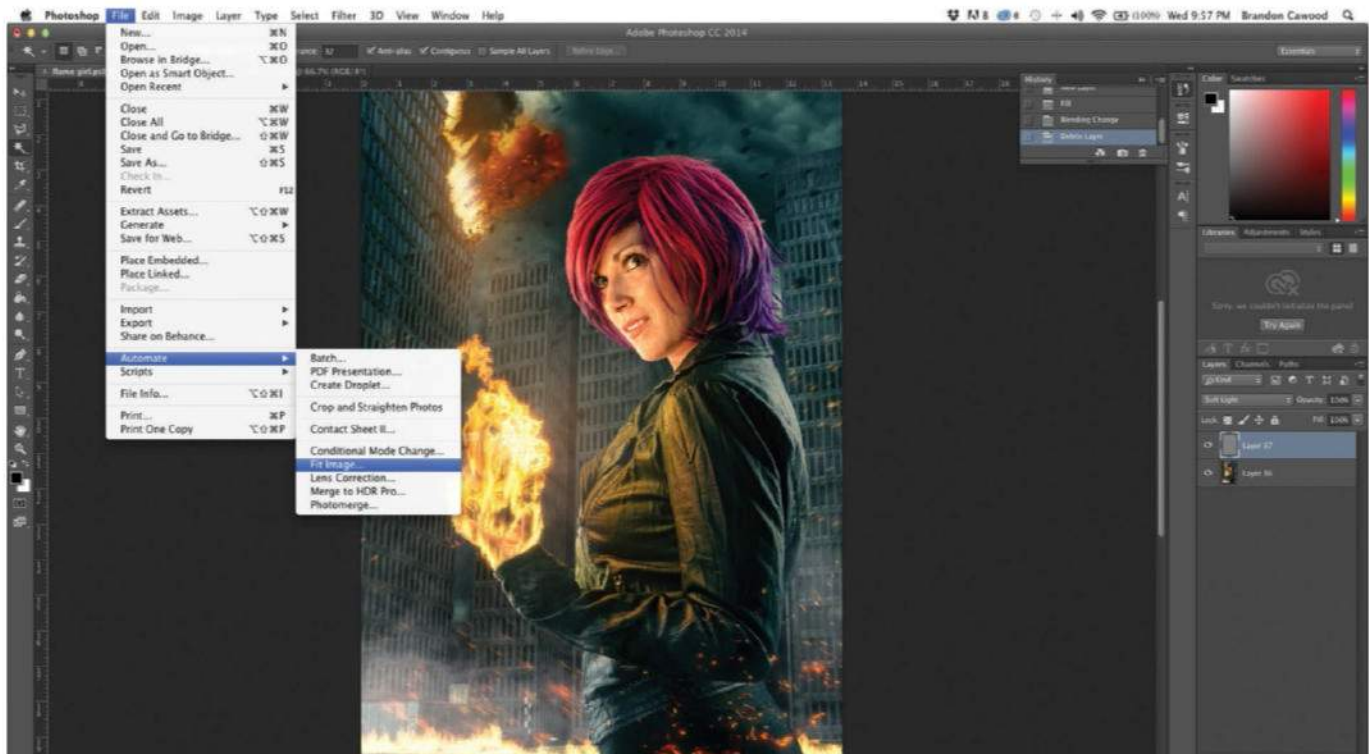
Lastly add grain. Create a new layer above your sharpened image. Hold down Shift and click Delete. Choose Fill with 50% Gray. Change the blending mode of this layer to Soft Light. Next select Filter>Noise>Add Noise. The size of your image will determine the amount you use. Choose Uniform and leave Monochromatic unselected. Once you apply, hold down Cmd/Ctrl+U. Then pull down the Saturation to -85%. Leaving a little colour in the grain will make it look more natural. Make sure to do this step at full zoom. You can adjust the opacity if it feels like it's too much. Save your PSD with all layers intact.

## 16 SHARPEN

Save your PSD. Once you have saved it select Layer>Flatten Image. Make a duplicate copy of the flattened image by pressing Cmd/Ctrl+J. Select your top layer. Next select Filter>Sharpen> Unsharp Mask. Adjust the sliders as needed based on file size. While still on the top layer, select Layer>Layer Mask>Reveal All. You can then use a Soft brush set to black to remove the sharpening from any areas you don't want it. You can also use the opacity to pull down the sharpening over the entire image.

### ■ VISUAL HELP

Sometimes techniques like Render Flame are hard to grasp in written form. A video or visual explanation can sometimes help. Brendon Cawood has created a video tutorial to go along with the Render Flame portion of this tutorial. You can find it by going to his website [www.brendoncawood.com](http://www.brendoncawood.com) and clicking on the video tutorials page. You will find videos that go into further depth explaining how to incorporate the fire elements as well as colour grading.



## 18 SAVE IT

You can save the image several different ways depending on its use. If you are going to use a good quality printing lab you can leave the image in Adobe RGB and select File>Save As. Save the file as a JPEG or TIFF. If you are planning on using a low-end printer or saving for online use you want to convert to sRGB.

Select Edit>Convert to Profile. Choose Working RGB. Save it the same way as before. For online use it's good to scale it down before saving. Select File>Automate>Fit Image. Do a width of 2048 pixels and a height of 2048 pixels. Save it as a JPEG, and put it in a separate folder so you know it's for online use.







# GRASP ADVANCED BLEND MODE TECHNIQUES

LEARN HOW TO CREATE A SCI-FI SCENE USING PHOTOSHOP'S BLEND MODES

In this tutorial you will learn how to create a sci-fi scene with a cinematic feel using blend modes. You will also learn the techniques of photomanipulation and the importance of values to make your image pop out and look like it's from a movie. We will go through some digital painting for the character's hair, so make sure to use a pen tablet instead of the mouse as this will make your workflow much easier.

Since our theme is sci-fi we will also go through creating a futuristic suit for our model using parts of superbikes as our stock, which is a technique that many well known artists use for mech design. We will also add a touch of abstraction to our photomanipulation by blending geometrical shapes and make key post-production edits using adjustment layers, Lens Correction and Smart Sharpen to finish the job.



## OUR EXPERT

**SOUFIANE IDRASSI**  
[www.artstation.com/artist/cgsoufiane](http://www.artstation.com/artist/cgsoufiane)  
 @idrassisoufiane

Soufiane Idrassi is a self-taught freelance concept artist and Illustrator based in Meknes, Morocco with five years of experience in digital art.

## SOURCE FILES

Get the PNG files used to develop the character's suit, plus take a look at the layered PSD on FileSilo.

## ■ SET UP YOUR STOCK PLACE AND ENHANCE THE BASIC BUILDING BLOCKS OF THE IMAGE

### 01 SET UP THE MODEL

First of all we need to set up our model into our canvas, so let's grab the model image from Dreamstime, code: 22992223, then by selecting the Pen tool (P), click and drag on the edges of the model, then Cmd/right-click, select Make Selection, and press Cmd/Ctrl+J to isolate the model on a new layer, and finally place the model into our new canvas.



### 02 MODIFY THE CONTRAST

Our model looks a little bit flat. What we need is to add some depth, so now we will add contrast by going to Image>Adjustments>Curves and making the Curves an S shape. Don't drag the points deeper as that will ruin the contrast. Next we will grab a Soft Round brush, with the blend mode of the brush (not the layer) set to Overlay. Turn down the opacity and start brushing dark parts of the model. Doing this will give you more control instead of doing a regular Brightness and Contrast filter.



### 03 CREATE THE BACKGROUND

Now it's time to create our background, so grab some bokeh textures from [CGTextures.com](http://CGTextures.com), place them behind the model layer and change their blend mode to Linear Dodge (Add). Also you can create a new layer, change the blend mode to Screen, then with a Soft Round brush, add some light around the model to make her pop out. Keep in mind that composition is really important, and our bokeh textures should not cover some parts of the canvas because we will place other elements and textures there later. Our background is composed of three bokeh textures so we need to blend them into one texture, to do that create a layer mask and with a Soft Round brush, hide parts of the textures that are not needed.



## ■ WORK IN PROGRESS FROM IDEA TO THE FINAL FINISH



Progress 1: Setting up the model



Progress 2: Creating the suit



Progress 3: Final effects





## 04 | ADD SMOKE EFFECTS

We said earlier that composition is important and the bokeh should not cover the entire scene because we still need to add more elements. Next, we'll add smoke effects to add more texture to the background, so grab some smoke textures, and repeat Step 3, but this time change the blend mode to Color Dodge instead of Linear Dodge (Add), that way the smoke will not ruin the bokeh shapes and it will show clearly on the empty areas that we left earlier. Now we need to blend the model with the background; this is really simple, we just place a smoke texture layer in front of the model layer, place it as shown in the image and turn the blend mode to Linear Dodge (Add).



## 05 | SKETCH THE FUTURISTIC SUIT

Now it's time to add futuristic elements to the scene, but first, before we start designing our suit, we need to have a clear idea about what we will be designing. So create a new layer and, using a pen tablet and a Round brush around 40px, start sketching the shapes on the model that we want to the suit to look like. Here we followed the anatomy of the human body, so that the suit will look functional and practical, and will not hold our girl down. You can still do this step if you don't have a tablet by holding the Shift key and pointing with the mouse to create a straight line.



## 06 | CREATE THE SUIT

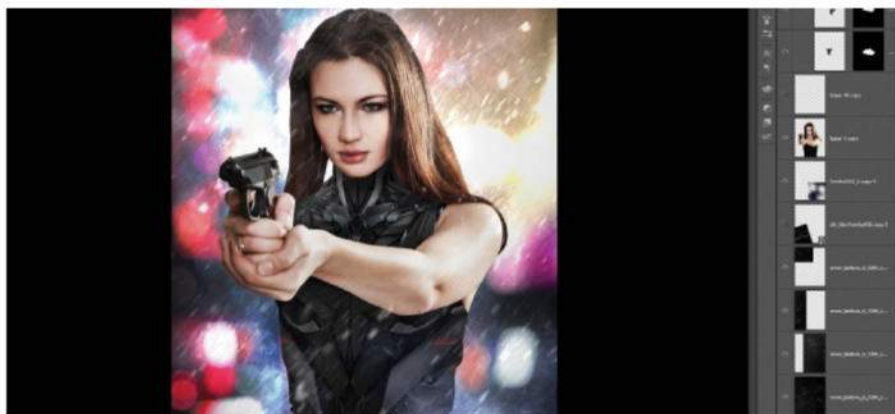
The sketch is done, and now it's time to make the actual suit. Superbike parts are the best stock to create a futuristic suits or robots or anything from the future thanks to their slick designs. Grab our PNG files with the bike parts already cut out. On this part you can be as creative as you can but keep in mind that the suit needs to be practical. Our model's hand is in the foreground, so we need to create a mask so that the suit will appear to be behind the hand. To do that, we will select the Pen tool and repeat Step 1. When the selection is on, select the bike part that will be behind the hand and click the Mask button below on the Layers palette, then you can duplicate the mask by holding Shift and dragging the mask to another layer.



## 07 | ADD SHADOWS

For now, the suit looks too flat, so add some shadows for some depth and realism in the scene. Grab our Soft Round brush again. If you have a pen tablet you can create the shadows using the brush pressure feature, but if you don't have a tablet, you can play with the brush opacity to get more control over it. Now create a new layer below the part where you want to paint the shadow, for example, on areas like the neck and under her arms.

■ **QUICK TIP**  
When designing something you always need to have an idea or sketch; don't come up with something on the spot unless you're really confident about your designing skills. Also, when designing a suit with superbike parts, make sure to study the shapes very well. Combining two or three parts can be very useful.



## 08 | ADD RAIN EFFECTS

It's time to add some motion to bring more dynamism to our piece. This part is very similar to Step 4. Create rain by using snow textures. Take the snow texture by Moosplauze on [deviantart.com](http://deviantart.com), place it below the model layer and above the bokeh and smoke layers, go to Image>Adjustments>Curves, create a point in the middle and drag it down to make the snow particles sharper, then change the blend mode to Color Dodge, and go to Filter>Blur>Motion Blur and set the angle to 32, and Distance to 31 and click OK. Then we need to blend the model, so duplicate the rain layer and place it above the model layer, and change the blend mode to Linear Dodge (Add) and mask areas like the face. Also take a snow texture without Motion Blur, create a mask, invert it, Cmd/Ctrl+I and paint back areas on the head and shoulder to make an interaction effect.

## ENHANCE AND ADJUST

### TWEAK COLOURS AND IMAGE ELEMENTS TO GET THE REQUIRED EFFECT

#### 09 MODIFY HAIR

It's time to modify the model's hair to make it more unique. Create a mask so as not to go over the borders, select the model layer, hold Cmd/Ctrl and click on the layer, it will give you a selection. Next create a new layer above and click on the Mask button below in the Layers palette. Now change the layer's blend mode to Overlay, and with a Round brush and a red colour, paint over the hair. Her original hair colour is brown, so the red shouldn't look artificial.

Next we need to add details, so select the Brush tool (it is necessary for this step to have a pen tablet) with a small Round brush, hold Alt to select the Eye Dropper, select the colour you want and draw the hair as shown on the image.

And finally create another layer, drag the hair colour mask to it, change the blend mode to Linear Dodge (Add) and by using a light red and Soft brush, paint the edges to create an effect of SSS (sub surface scattering).



**001 | COLOUR**  
For a successful change of colour, your original hair should always be light; if dark, the Overlay filter will not work

**002 | DIGITAL PAINTING**  
Adding a touch of digital painting to photomanipulations is always a plus

**003 | REALISM**  
The SSS effect in hair gives more realism, but use it only according to your light source

#### 11 LIGHT EFFECTS

It's time to add light effects. It's important to add some abstract lighting effects to your scene to give it more life, so grab the cosmic lights PNG pack textures from [psdbox.com](https://psdbox.com). Take '16 neutron collision', place it as shown on the image and press Cmd/Ctrl+U and change the Hue Slider to make it blue, then change the blend mode to Screen. Next, we will add a lens flare effect, also from the [psdbox.com](https://psdbox.com) optical flares pack. Take any lens flare type you like and place it on the brightest spot of the background and change the blend mode to Screen and turn down Opacity to 60%.



#### 10 ADJUST VALUES

Now we need to adjust the values. Since our background is bright and is our light source, our model should be dark because the light can't reach her. Only bounce light is illuminating her, so grab a selection of our model by holding Cmd/Ctrl and click on the layer, then create a new one above and fill it with black using the Paint Bucket tool. Use Cmd/Ctrl+D to release the selection. Turn down layer opacity to 15% and create a mask and paint areas like the face and hands to make them more visible, then duplicate the layer. Right-click on the layer, select Duplicate Layer, delete the mask, change Opacity to 24% and blend mode to Overlay.

“Since our background is bright and is our light source, our model should be dark because the light can't reach her, only bounce light is illuminating her”



### 12 MORE EFFECTS

Now add some more effects on the suit. This step is pretty easy, so let's create a new layer, grab a small Hard brush with light blue and change the blend mode to Linear Dodge (Add), and draw some lines as shown. Then click on the FX button next to the Mask button and select Outer Glow and make these modifications: Blend mode, Linear Dodge (Add); Opacity: 75; Noise: 0; Colour: 71b7e8; Technique: SSofter; Size: 38.

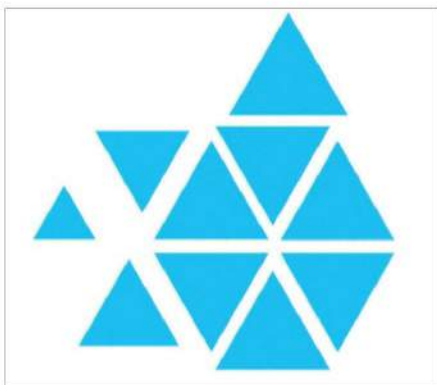


### 13 ABSTRACT SHAPES

Add surrealism to a piece to make it more artistic and eye-catching, instead of just creating a scene from a movie. So make a new layer and with the Polygonal Lasso tool, create triangular shapes around the model. When creating a shape, it will automatically be selected. With a soft brush, press Alt to select a colour with the Eye Dropper and paint the triangle. Repeat this process until you get an effect that works with the composition.

## STORYLINE ELEMENTS

### ADD ENERGY SHIELDS AND OTHER STORYLINE SIGNIFIERS



### 14 CREATE THE ENERGY SHIELD

Create a new document, make it around 2000 pixels, then select the Polygon tool, set the sides to three, choose a blue colour for the Fill, and no Stroke, then hold Shift and click and drag to create a triangle shape. Now duplicate and flip the triangle by hitting Cmd/Ctrl+T, right-click and choose Flip Vertical, then arrange the triangles for a good composition. Repeat this step again but this time without Fill and the Stroke set to 5px.



### 15 PLACE THE ENERGY SHIELD

Now that the shield is done, it's time to apply the element to our canvas. To do this all you have to do is select all the triangle layers, right-click and select the Merge Layers option. Then you can hit Cmd/Ctrl+C and, on the canvas, hit Cmd/Ctrl+V. Next hit Cmd/Ctrl+T and, by holding down the Shift key, you can distort the triangles to make them look like they are in perspective. Now turn the Opacity down to 60% and duplicate the layer. In the new layer, hit Cmd/Ctrl+U and play with the sliders until you get a darker blue, then change the blend mode to Linear Dodge (Add). And finally duplicate again, hit Cmd/Ctrl+U and make the blue lighter, change the blend Mode to Hard Light and move it over a little bit, and finally go to Filters>Blur>Motion Blur, Angle: 20 and Distance: 30.

## 16 | STORY ELEMENTS

Our photomanipulation is nearly done, so finish it by adding some story elements. Here we added tears, and smoke coming out of the gun, as if she has just killed someone she cared about who betrayed her. So for this step we will use smoke brushes and watercolour brushes – you can find free brushes like this on deviantART or any resource site on the internet. Select a watercolour brush, choose a black colour and apply it on the eyes as shown, then erase any unwanted parts. Next select a smoke brush, choose a white colour and apply it on the tip of the gun.



## 17 | COLOUR CORRECTION

Our illustration is basically finished, all that's left are the finishing touches. Let's add some adjustment layers first to bring some cool tones to our piece. In the Layers palette next to the Mask button, click on the Adjustment Layer button and select Gradient Map. Set the Color Pickers to: Left picker: 1f0c03 Right picker: acdfff. Set the adjustment layer to Hard Light and turn down the Opacity to 20%. Next select Colour Correction and set it to the following: Midtones: 1st slider: -17, 2nd slider: -3, 3rd slider: +28, Shadows: 1st slider: 0, 2nd slider: -28, 3rd slider: +20, highlights: 1st slider: -10, 2nd slider: 0, 3rd slider: +20. Next add another Gradient Map: set the blend mode to Lighten and left picker colour: 220545 and right picker to black. And finally select Exposure and set the middle slider to: 0.0165.



### ■ PHOTOMANIPULATION

In order to do great photomanipulations, you need to have a great photo library. Here are some great sites to gather the best stock photos and resources: [deviantart.com](http://deviantart.com), [cgtextures.com](http://cgtextures.com), [psdbox.com](http://psdbox.com), [mediamilitia.com](http://mediamilitia.com). It is a great thing to have good photomanipulation skills because it's not only used to create illustration for books or music, but it is a great tool to use in concept art for the film industry, because it needs to look as realistic as possible.



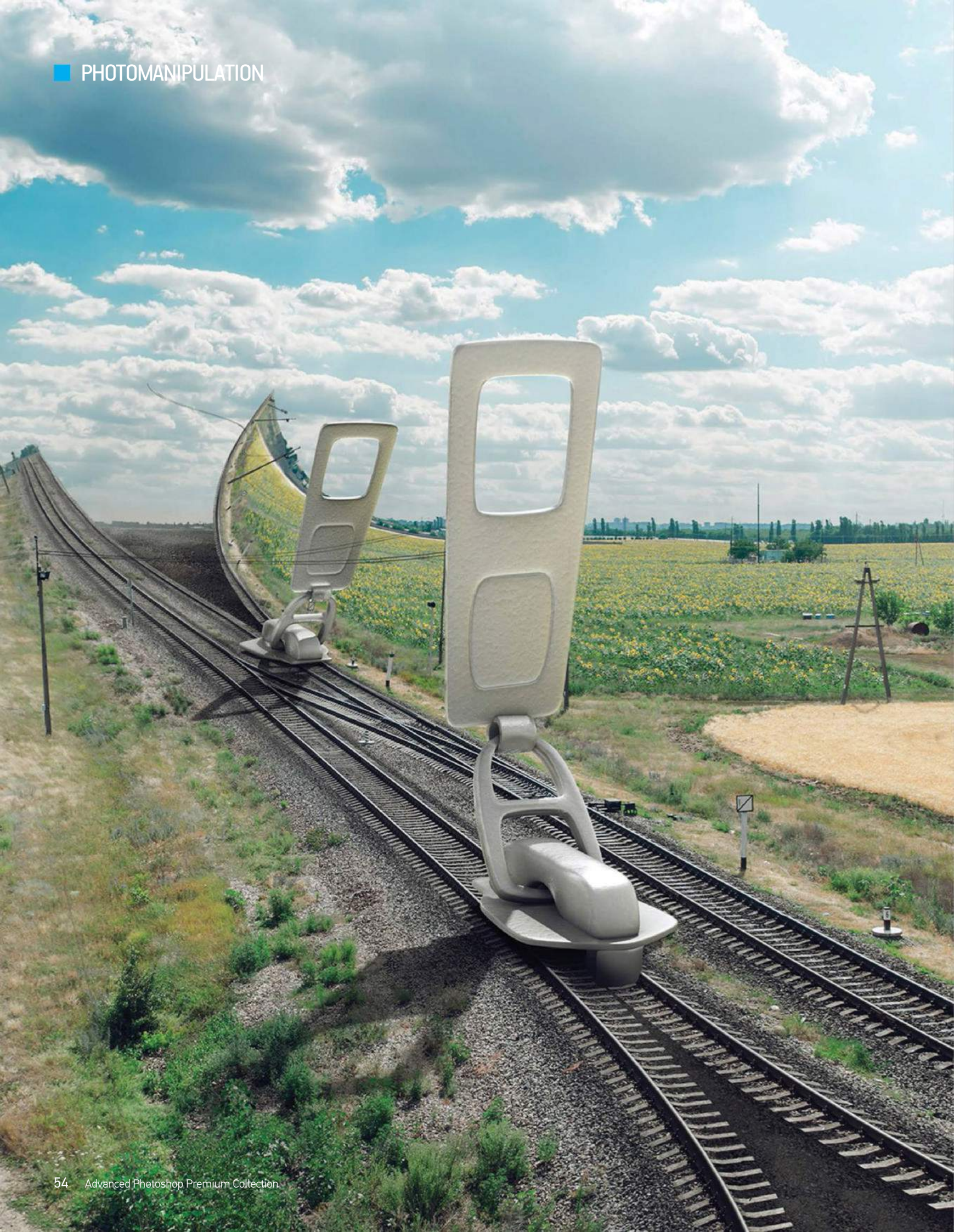
## 18 | FINAL EFFECTS

Make sure all your elements are in place and everything is set out properly, then right-click on any layer and hit Flatten Image, this will merge all layers into one. For the final effects apply Smart Sharpen, Lens Correction and Noise. Start with Smart Sharpen, go to Filter>Sharpen>Smart Sharpen, set the amount to 150 and Radius to 1.0px. Next go to Filter>Lens Correction. In the Custom panel on the Chromatic Aberration slider, set the 1st slider to +50.00, 2nd slider to -30.16 and 3rd slider to -75.40. Finally, finish the tutorial by going to Filter>Noise>Add Noise, set the amount to 2.45, Distribution: Uniform and check Monochromatic. Your composite is complete and thanks to blend modes, packs some awesome effects!

### ■ QUICK TIP

For a piece of artwork to be truly great, it is important that you are telling the viewer a story. Artwork with a story is always far better than an emotionless piece of work.







# USE WARP AND SELECTION TOOLS

EDIT AND COMBINE STOCK PHOTOS TO DESIGN A SURREAL SCENE

**P**hotomanipulation is a great way to show other worlds, illustrate ideas and detach your audience from reality.

In this tutorial we will show you how to create a completely new reality and try to help you learn how to see the world in different and unique ways.

You can buy the base image from Shutterstock (117621226) or you can use another picture instead if you like. On FileSilo we have provided the 3D file (.obj) to make a new render based on your own photos, or

you can drop it into Photoshop (CS6 Extended or CC only) and use the .obj directly in the software. The zipper render was made by Martín De Pasquale, but you could use a stock image of a zipper instead.

The important thing is always to know how to solve, and not stagnate, and use new ways and solutions for each problem. In this case, it is important that the material always follows the same direction of light, intensity and perspective, in order to make the best and most accurate composite.

## ESTABLISH THE BASICS CREATE THE ZIPPER EFFECT ON THE TRACKS

### 01 SET UP THE SCENE

Create a new document. File>New. The size is 200mm x 200mm at 300 dpi. Position the railroad as a background image. You can buy the base image from Shutterstock (117621226), but you can use an image that you already have if you like. The image is a little too tall, so we've removed some of the sky from the top.



### 02 SPLIT THE TRACK

Make a selection with the Polygonal Lasso tool (L) from the bottom-centre of the track to the left, and copy to a new layer (Cmd/Ctrl+C>Cmd/Ctrl+V). Now you have the left part of the rail and terrain. Do the same with the right side. Both sides have two new layers, with each side of the track, divided exactly in the centre. Now we need to create the distorting effect with the Warp tool.



### 03 WORK WITH THE WARP TOOL

Cmd/Ctrl+T on the layer, and the option to Transform will appear. At the top, there is a button to switch from Free mode to Warp. A grid now distorts the image and gives the form we need, using the white squares around the selection.



#### OUR EXPERT

**MARTÍN DE PASQUALE**  
[www.martindepasquale.com](http://www.martindepasquale.com)

Martin De Pasquale is 26 years old and comes from Buenos Aires, Argentina. Working as a photographer, art director and designer, he has his own studio in the city. He says, "I always try to find new ideas, new ways of working to achieve interesting results."

#### SOURCE FILES

Head to [www.filesilo.co.uk/](http://www.filesilo.co.uk/) BKS-744 to access Zipper Render (JPG), textures, and a .obj file to make new renders for the composition.

## WORK IN PROGRESS FROM SKETCH TO FINISHED ARTWORK



Progress 1: Base image



Progress 2: Making the zipper effect



Progress 3: Adding details



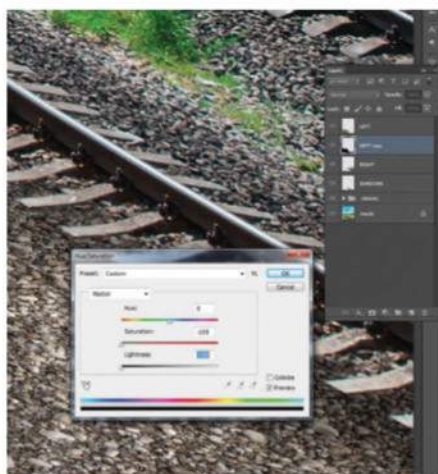


## 04 | ADD GRAVEL UNDER THE RAIL

Add gravel.jpg into the composition. Click Cmd/Ctrl+T to transform and skew the texture in order to make it follow the same perspective as the background. Then press Cmd/Ctrl+J to duplicate and complete the area.

### ■ QUICK TIP: SMOOTH SELECTIONS

In large files (300dpi), when you make a selection we recommend smoothing a little bit before cutting (Select>Modify>Feather, set to 1 pixel). With this little trick, you'll avoid the aliased effect in the edges when it is deleted.



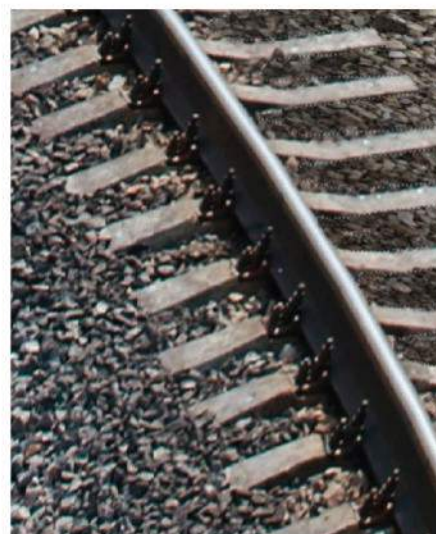
## 07 | RE-DEFINE THE SHADOWS

Duplicate the left rail layer (Cmd/Ctrl+J) and move under the original. Now move the content under, as a shadow. Open Hue/Saturation (Cmd/Ctrl+U) and set to: Saturation -100, Lightness -100 to make it black. Add a slight blur (Cmd/Ctrl+F). In this case, we chose an 8px radius and set the layer to Multiply. Adjust the opacity of the layer as you need.



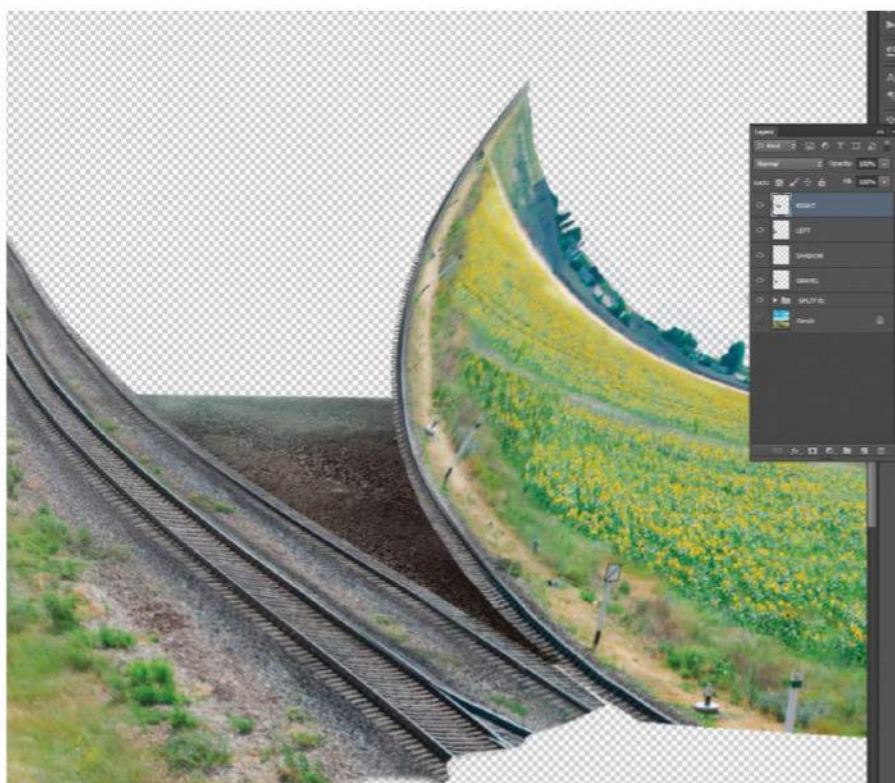
## 05 | INSERT SOME SHADOWS

Select the gravel layers and press Cmd/Ctrl+G to group layers. Then move under the initial cut rail layers. In between, create a new layer (Ctrl+Shift+N). Then, you can use the method you prefer. In this case, with the Brush tool, we painted with 50% grey colour and multiplied the layer.



## 06 | ADD MORE DETAILS

With this step, you can add more details. For example, select the gravel between the rails, and delete. With this, you will make the texture look better. There are many ways to select, but for this process, the Polygonal Lasso tool works great. Once you have made the selection, just delete.



## 08 | DUPLICATE THE EFFECT

Now we need to make the same effect at the back. Again, make the selection of each side of the trail, duplicate and make the gravel texture, and shadows. If you want, you can add buildings or mountains in the background. If you

have a train to erase just copy a part of the railway that is empty, then duplicate in a new layer, and use it as a patch to remove the train. Press Cmd/Ctrl+T to transform this patch and fit it in place.

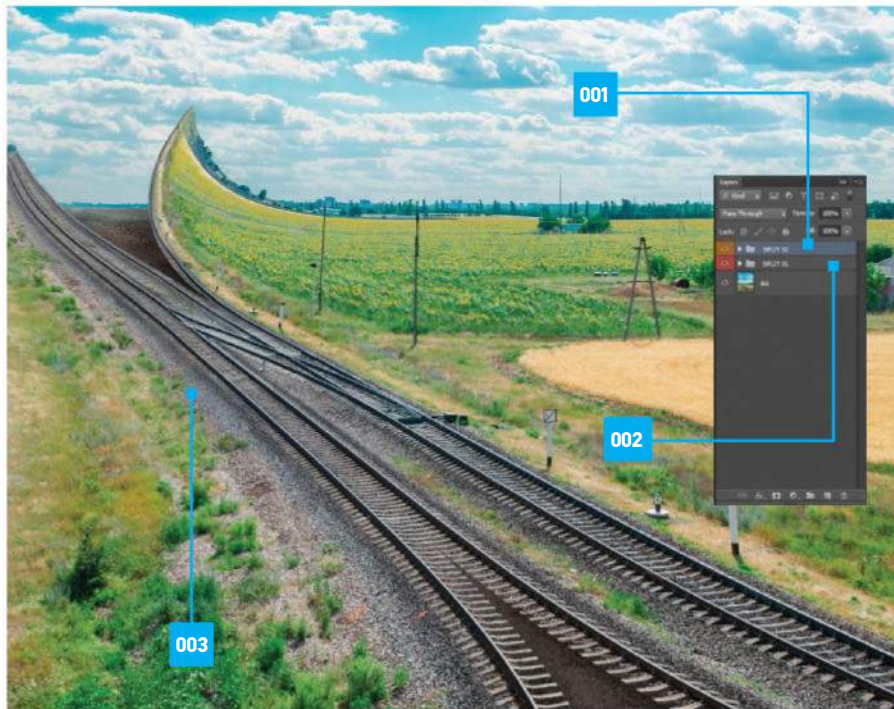


## ■ ADD THE ZIPPER

USE THE RENDERED IMAGES, OR ADD THE .OBJ DIRECTLY IN PHOTOSHOP

### 09 ORGANISE AND GROUP LAYERS

Keeping order is very important during the work process, and more so in Photoshop. At this point we need to arrange the composition. It works best to group layers, and give them names and colours to identify them easily later on. Since Photoshop CS6, a search engine for layers has been provided. Therefore, it is very important that they have a name and the colour to identify them quickly. You never know when you will want to make adjustments or need to modify some of the work you have done or if another person will need to use your file. By having the whole process completely organised and in order, you'll save a lot of time.



#### 001 COLOUR CODING

As you can see, the colours are very useful to quickly identify the material in the composition

#### 002 GROUP EVERYTHING

Creating groups is a good way to keep layers (preventing you from dropping them into a single layer)

#### 003 ORGANISE YOUR SCREEN

It is important to organise the software labels too. Avoid having too many tools open, and check the entire piece regularly



### 10 ADD THE ZIPPER IMAGE

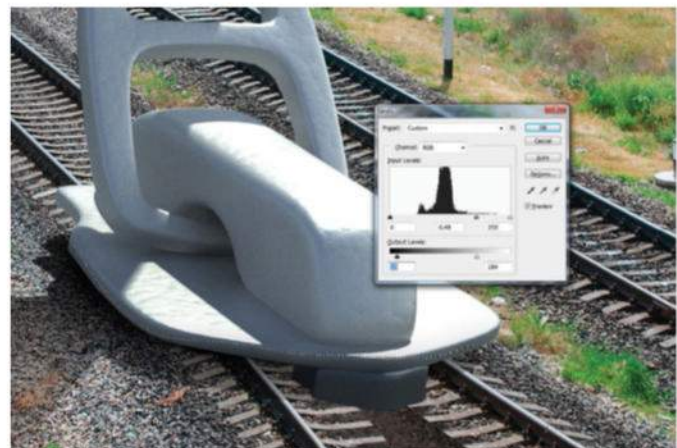
Add the zipper image to the composition (zipper.png on FileSilo) and rotate or scale to locate it in the right place. Once located, press Enter to confirm and convert to a Smart Object automatically. You can rasterize the layer, because it remains unchanged, or leave as a Smart Object.

“You never know when you will want to make adjustments or need to modify some of the work you have done”



### 11 ADD THE SHADOWS

Add the zipper shadow using the zipper\_shadow.jpg image on FileSilo. Set to the Multiply blend mode, it will remove the white, so that only shadows remain. Now we have the base of the zipper ready for work in detail. It is always necessary to scale, rotate and adjust to match the shadows. We recommend that you separate the two shadows in the file, to work on them separately.



### 12 DARKEN AREAS

To balance the image of the zipper with the original picture, we need to slightly obscure the bottom. To do that, press Q to make a Quick Mask, and, using a blurred brush, paint the parts that we want to make darker. When you are satisfied, press Q to turn it into a selection, then press Cmd/Ctrl+I to invert the selection, and Cmd/Ctrl+L to adjust the Levels.





## ■ USE PHOTOSHOP'S 3D OPTIONS

Photoshop has included 3D functionality in the Extended version of CS6 and in CC. It gives us the possibility to bring a model directly into Photoshop and render without leaving the program. In this case, if you want to use a different angle on the zipper, one that works best with your start photo, you can drag zipper.obj (on FileSilo) into the composition, and work on it. You can even adjust the lighting to suit your composition.

## 13 GENERAL ADJUSTMENTS

The colour and contrast on the zipper are fine, but when added to the scene, halftones are very dark in the higher area. To adjust, go to the zipper layer, press Cmd/Ctrl+L, and adjust the sliders to clarify and adjust the contrast. There are other ways to adjust it depending on the way you work. Another option would be to use Curves (Cmd/Ctrl+M), adjusting the middle of the Curve so the contrast changes.



## 14 ADD UTILITY POLES

The distortion of the railway affects everything around it, including utility poles. These posts should be straight, but are now curved. To recover them, look for new elements on free resource websites, or take them from the original image. In this case, we recovered the larger utility poles in front, and duplicated them around the railway, rotating or scaling if necessary. You can also make a Smart Object (Cmd/right-click on layer and choose Convert to Smart Object) so you don't lose quality when the image is scaled.



## 15 ADD CABLES

Create a new group called 'Cable'. On a new layer inside, draw a few lines between the posts using a mouse or graphics tablet. At this stage, add all kinds of details that will help us reach as much realism as possible. In this case that could be damaged wires on background poles, dust, particles, and similar details.



## ADD FINAL TOUCHES

COMPLETE THE IMAGE WITH EXTRA DETAILS AND COLOUR ADJUSTMENTS



### 16 ADD UTILITY POLE SHADOWS

To make the shadows of utility poles, create a new layer inside the group. Again, with the Brush tool, draw a shadow and set the layer to Multiply. You must respect the same direction, intensity and colour of the other shadows. For that, analyse the entire composition, and search for references in the same picture. The part of the shadow that is farthest from the object is usually lighter than the one close to the object, so check if you have made the shadow properly and if you need to make it slightly lighter and less intense. It's important to make shadows look realistic.

#### ■ QUICK TIP: ANALYSE FROM AFAR

Do not just work with the composition close up. Sit back and analyse it from afar, study it from all sides in order to observe what happens with the composition throughout the whole work process. It will help you to identify and correct any problems.

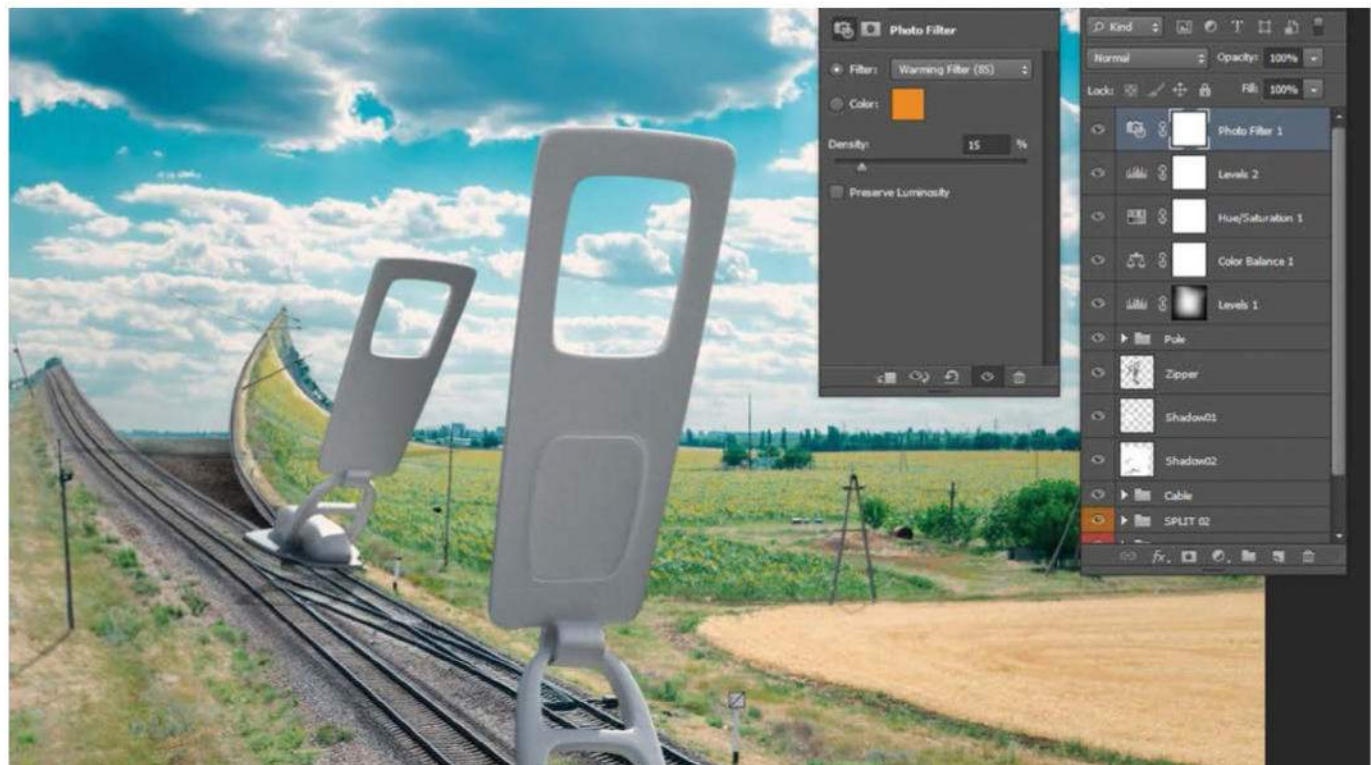


### 17 MAKE COLOUR ADJUSTMENTS

Create a tonal difference in the centre of the image. Make a Levels adjustment layer on the top and apply a soft mask around the zipper and the rails. Use it to slightly increase the contrast. Create another Levels adjustment layer and use it to increase the light levels. All these adjustments should be minimal.

### 18 FINISHING TOUCHES

Finally, create an adjustments group. Keep it right at the top. Add a Color Balance layer, select Shadows then pull the slider to -7 Cyan / +6 Blue. Create a Hue/Saturation layer and decrease the Saturation slightly (-20). Now, create a Photo Filter layer, with Warming Light and Density at 15%. Play with Levels, Vibrance, Brightness and Contrast, until you find a look you are happy with.





# 3D and Photoshop

Discover what Photoshop Creative Cloud can offer in terms of 3D tools, and have a go at creating some cool composites

## **62** Complete guide to 3D & Photoshop

Grasp the full potential of Photoshop for rendering your vision in 3D, including the best tools for bringing your work to life

## **70** Design a low-poly planet

Master low-poly graphics and modelling in Blender by practising with this worldly imagery

## **76** Paint concept art for arch-vis

Sketch out an angular, futuristic cityscape that's ready for 3D rendering with these digital painting techniques

## **82** Combine 3D & Photoshop

Use your photomanipulation skills to design interesting and dynamic 3D compositions

## **88** Master 3D post-production

Generate an industrial and robotic look using 3D layering effects and digital painting skills



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“The vast variety of tools, techniques and shortcuts in Photoshop speed up the process of creating art





# COMPLETE GUIDE TO 3D & PHOTOSHOP

PHOTOSHOP NOW PACKS IN MORE 3D TOOLS THAN EVER BEFORE AND PROFESSIONAL 3D ARTISTS ARE USING THE PROGRAM WITH INCREASING FREQUENCY. WE GET THEM TO SHARE THEIR TOP TIPS AND EXPERT ADVICE

© Matt Kohr

**O**bviously, there are some artists for whom 3D and a dedicated 3D package is a must. Most likely, you can't work in movies or games without those skills. But there is an increasing band of artists for whom 3D is one arrow in their bow, one way they can provide the imagery their client – or heart – desires. And for these merry travellers, the fact that Photoshop can now open 3D files and has its own 3D workspace to edit these files in is a dream come true.

"Everything I do in 3D is to get the best possible base for the image by providing photorealistic materials and lighting, but Photoshop is where the magic happens, accentuating colours, contrast, point of attention for the viewer's eye and expressing an overall mood in the image," says Frédéric Müller ([www.fredericmueller.ch](http://www.fredericmueller.ch)), who works in Maya, Mudbox, HDR Lightstudio and Photoshop.

Cristian Koch ([www.cristiankoch.de](http://www.cristiankoch.de)) is another artist who uses 3D almost all the time, due to the creative freedom it gives him. There's the "option of playing with the camera, this gives me new framing or light options which in traditional 2D would mean, take the photo again

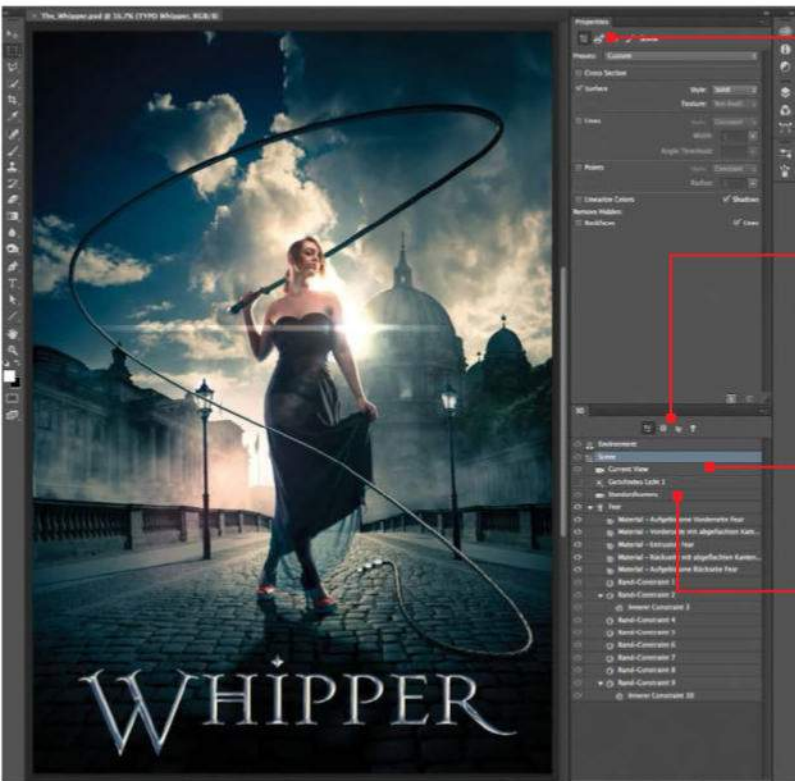


© Andrei Lacatusu

or make another drawing, which I cannot find convenient in terms of production." In addition, he finds the "blend of art and engineering" that 3D offers exciting. "What made me go down the road of 3D was my lack of drawing skills," he admits, "and that I realised, that I have a good spatial ability... But what pushed me more was my passion for creating images and being able to sometimes 'bend the reality', and 3D opened that door."

So what 3D reality-bending can Photoshop accomplish? The first thing people tend to mention is its ability to extrude 3D type, but having a 3D workspace within the image editor does allow for more than that. You can create your own basic 3D shapes, you can edit ones you created elsewhere or models you've bought, and you can prep for 3D printing. This is why Koch says Photoshop's 3D workspace is "extremely useful, as it allows me to quickly draft without

## PHOTOSHOP'S 3D INTERFACE



3D print from here: Staiger is a designer rather than a producer, but he has experimented with 3D printing. "I loaded a 3D elephant into Photoshop and prepared it for the 3D print, which was done in less than five minutes. It worked perfectly!"

A bird's eye view: Toggle here to display Scene, Meshes, Materials or Lights. Remember that the 3D panels works in exactly the same way as the Layers panel. Toggle the eye on and off to see elements in the mix.

Type right: Staiger says "Photoshop's 3D tools make it fairly easy to create metallic typo which you can use for any kind of cover or poster. Pick a classic typo, such as Dark 11 or any roundhand font. Create a 3D Object of it."

How you see it: "Use the front camera in Orthographic mode. Give the front mesh a round extrusion. Pick a shiny, highly reflective material for the front and replace the standard IBL by a detailed photograph with a high dynamic," adds Staiger. Orthographic Cameras maintain parallel lines without convergence, and display the model in accurate scale view without perspective distortion.

much technical hassle, reducing everything to just purely creative process, I can play with basic 3D models or import models created in other 3D software, I can paint textures and create my basic layout without wasting time on technical hassles." He uses 3ds Max, ZBrush, After Effects and Fusion, as well as Photoshop, and says "What I find really interesting about this is that Photoshop relates very well with all of them, making my job easier, allowing me also, to effectively separate the creative process from the technical."

Michael Fawke, founder of architecture and interior design visualisation studio Plusform ([www.plusform.co](http://www.plusform.co)), adds that "Establishing a correct perspective and being able to add objects with reasonable shadow and light quality is a great feature for those that do not have a dedicated 3D application. For designers not looking to integrate 3D into their



workflow, just having that option built into Photoshop is a real plus." But while Photoshop's 3D offering may not be enough for artists like Fawke yet, one day it might be.

Juri Jablovkov ([www.dekus.carbonmade.com](http://www.dekus.carbonmade.com)), who recently finished his university thesis about Photoshop's 3D capabilities, says "Technology and software evolve and more efficient ways of getting results are developed. These days, with Photoshop, it is possible to texture your object directly on the surface in the 3D viewport, as opposed to traditional texture painting in 2D UV view... In Photoshop CC there is also a Live Painting feature that



allows you to have both the 3D and 2D view and both will update in real time as you paint or edit the texture." He wonders whether Photoshop will split in future, with one version with enhanced 3D capabilities, and one without.

Koch notes that with the increase of these constantly progressing and "emerging technologies such as OTOY (with the Octane render plug-in) that soon will allow Photoshop to make photorealistic renderings directly without leaving the application, this will open new possibilities for 3D illustrators to accomplish things that previously required to move to another software for rendering."





# ENHANCE 3D IN PHOTOSHOP

So, while Photoshop isn't replacing the dedicated 3D application – at least, not yet – it is bringing 3D more into an achievable world. And isn't that what matters most, when the goal of most good 3D work is to make itself seamless, realistic, even invisible.

"The best compliment a 3D artist can receive is the following question: 'Is this a photo?'" says Andrei Lacatusu ([www.andreilacatusu.tumblr.com](http://www.andreilacatusu.tumblr.com)). "Most of us try to achieve realism, but that is no easy job. I did bad 3D as well but I hope I developed enough skill and experience to have passed that stage. From my experience, I think that the element that adds the biggest value in a 3D generated image is represented by shading. Without the proper material properties and textures, one cannot achieve the slightest degree of realism. After that, the light counts a lot, just as in photography, in order to enhance the image."

Matt Kohr ([www.mattkohr.com](http://www.mattkohr.com) and [www.ctrlpaint.com](http://www.ctrlpaint.com)) says that "achieving unity" is his central goal in 3D artwork. Sometimes he finds he's happy with a composition at the colour block-in phase of painting 3D models he's imported, but "adding photos is always dangerous thing. Avoiding a noisy, gritty, mess is crucial so the last phase is where I balance the various elements ensuring my initial colour vision remains intact. Generally I'll use a combination of blurring, colour correction and airbrushing in order to balance my image. There's no one-size-fits-all solution for this balancing phase, as every painting offers different challenges".

Mark Mayers ([www.markmayers.co.uk](http://www.markmayers.co.uk)) says he generally uses Photoshop for "postwork techniques to



© Mier Lee

## ESSENTIAL LIGHTING RULES

### MIER LEE REVEALS HIS APPROACH TO REALISTIC 3D LIGHTING

"I think the most important thing in 3D space is light," says Lee, "and we should know how the light works. Models would be looking completely different depending on where the light sources are, and what the colours are. In portrait painting for example, the first thing to do is to separate the light and dark in value, and warm and cool in colour. This works exactly the same in 3D software. I usually set up at least two different light sources. The first one is the key light (or main light), which is the first and usually the most important light that a photographer and cinematographer use in a lighting setup. This key

light controls the mood of your work. The other one is fill light. This is a secondary light source that may be used to reduce the contrast of a scene, or to change the colour of the shadow.

Photoshop is the most powerful tool that can control these two light sources. When using Photoshop, I always use adjustment layers such as Level, Curve, Gradient Map, Hue/Saturation and Color Balance. But my favorite one is Gradient Map. It allows you to easily change the colours of the light and shadow at the same time. And then I set it up as Overlay mode and put some transparency on it."



© Uti Staiger

“The best compliment a 3D artist can receive is the following question: 'Is this a photo?' Most of us try to achieve realism, but that is no easy job”

ANDREI LACATUSU /  
[WWW.ANDREILACATUSU.TUMBLR.COM/](http://WWW.ANDREILACATUSU.TUMBLR.COM/)

incorporate additional textures such as distress effects to 3D objects. I use various blending modes to make the object look as realistic as possible. I also use a non-destructive Dodge and Burn technique, which is a 50% grey layer in Soft Light mode. This is painted at 20% Opacity with black and white to correct lighting. 'Sweet.tif' is a good example of this texturing/lighting method. 3d apps can also create multi-pass renders such as ambient light, Z Depth as well as compositing Alpha Channels for added realism."

For Kohr, making 3D look real, or "grounded" is "mainly a matter of correctly integrating it into the painting. Level of detail, film grain, lighting – all of these things will ruin the illusion if you simply add a photo without working it into the painting. Implied detail tends to work best in areas of the painting that are not



© Andrei Lacatusu



## 3D FILE TYPES COMPATIBLE WITH PHOTOSHOP

PHOTOSHOP CC OPENS MORE FILE TYPES THAN EVER BEFORE, THE LIST NOW INCLUDES THESE HANDY 3D OPTIONS

### 1. .3DS

Software: 3DS Max  
Used for: Modelling

Having been around for donkey's years, .3ds has become the de facto file format when it comes to transferring or storing models. At the moment, Photoshop can import it, but not export.

### 2. .DAE

Software: Many, including Blender, Poser, SketchUp  
Used for: Being an intermediate

A file format designed to allow people to transmit 3D data between programs, most applications can use COLLADA's open standard XML schema.

### 3. .OBJ

Software: Many, including Cinema 4D, Blender, Maya  
Used for: 3D geometry

There's also a companion file format in .mtl that describes the material properties of the objects with an .obj file.

### 4. .JPS

Software: XnView, NVIDIA 3D Vision Photo Viewer  
Used for: Stereoscopic images

The stereoscopic JPEG format can be used to create 3D effects from two 2D photos, or created by cameras that have two lenses.

### 5. .MPO

Software: MPO Explorer, Stereo Master  
Used for: Stereoscopic images

The Multi Picture Object file is another format for storing and sharing stereoscopic images. Many programs can open them, but sometimes can only see one of the images.

### 6. .U3D

Software: Adobe Acrobat  
Used for: Vertex-based geometry, lighting, textures

Universal 3D is a compressed file format designed to be compatible across a variety of applications, and to create 3D images for PDFs.

## HOW TO ACHIEVE REALISM IN 3D

CRIS KOCH EXPLAINS HOW MAPPING AND LIGHTING CAN BRING YOUR IMAGE TOGETHER IN PHOTOSHOP



### 01 | A WORKFLOW OF YOUR OWN

Koch built this character in 3ds Max, and when he comes to import it into Photoshop, he has a checklist: "A) Make sure the uvw mapping is correct. B) Make sure the model is in the position 0 in the world (this will make your life easier later. C) Do a quick check in the normals of the model that are all facing outside."



### 02 | SET YOUR SCENE

"Import the 3D file going to 3D>New 3D layer from file, then you can line up the perspective of the 3D model to the background, once everything is lined up, double-clicking in the 3D layer will reveal all properties for the 3D scene, where we can adjust our textures, lights, cameras."



### 03 | ADD SOME REALISM

Now it's time for realism. "Once I am happy with the match of lights, depth of field and perspective," says Koch, "I render both layers and start retouching areas, and approaching the whole potential of Photoshop in compositing. As I come from a 3D background, I created reflection pass, occlusion pass, beauty pass to have more control over the whole image."

the focus." As you can see if you check out Kohr's tutorial, on FileSilo, about painting over his 3D car model, you'll see how he "draws the attention away from the shadowy undercarriage. The viewer probably won't scrutinise this area of the painting, so it's a great place to use implied detail. Implied detail tends to work better when seen from the corner of your eye. The focal point must be given much more attention."

Uli Staiger ([www.dielichtgestalten.de](http://www.dielichtgestalten.de)) too is a fan of Photoshop overpainting to avoid his 3D looking "too clean". For a recent composition of a long waterslide, he used "a stack of several patterns in a psd file and apply that carefully with a fuzzy, multi-jittered brush along the edges of the slide. Also, I use Photoshop's layer options, so that the painted dirt gets a 3D feeling. I enjoy Photoshop overpaintings very much and it is a lot more intuitive than a pure CGI production."

For Jablovok, it's the different 3D and 2D views that makes Photoshop so good to use. "For example," he says, "you have an organic model like an alien gun or a character and you want to have a straight line on it. Maybe it's a tech line on the gun or war paint on the characters face. But your UVs are flattened so that there's minimal stretch and it can be difficult to judge where you need to make that specific line so that it



© Cris Koch

© Ifthikhar abdul nasser

appears as a completely straight one in the model. Photoshop's 3D tool comes to the rescue here.

"You can work on your 2D flat texture just like any other day and when needed, pop up your 3D model and paint a bright red line where you want your detail to be. Then, continue in the 2D view to render it out precisely."



# TEXTURING AND MAPPING

A fairly typical workflow might to start with a sketch, go into a 3D app and then do the post work in Photoshop. Ifthikhar Abdul Nasser ([www.ifthikhar.com](http://www.ifthikhar.com)) certainly does something along these lines, noting, "I then use textures as overlays and also to create specific environments in Photoshop to suit the mood/idea complimenting the main render, transforming it into the way I intended to create in the first place. Other editing tasks like colour corrections, lighting, shadow/highlight, toning etc are also involved."

Mier Lee's ([www.miershine.com](http://www.miershine.com)) main 3D tool is Cinema 4D. He uses it to model "objects as basic structures for my work. If there is any texture that I need to put on, I edit it with Photoshop or Illustrator, and then I save it onto Cinema. Therefore, I always go back and forth during this process. Even though Cinema 4D renders models, lights, textures and colours for you, there are still a lot of things to be finished up with Photoshop after you render out all your frames. When I design style frames, I always use Photoshop to retouch colours, to edit textures and values, to exaggerate highlights and shadows, and to mix with 2D images and 3D renders to make them look more realistic."

Staiger often starts by building a background composition with Photoshop: "This will be used as a scene that carries the 3D content. It could be a carefully composed aerial shot from several photographs of clouds and landscapes. Then I place the already rendered 3D object onto that scene." He uses Cinema 4D to create his 3D, and Photoshop is used in various ways: "I take psd files as 3D textures. The good thing is that Cinema 4D supports the full range of Photoshop psd, even typo, patterns and correction layers. I can choose which layer I want to assign to which texture channel. Later in the process, I render in multipass mode. When I open the

## THE POWER OF LIGHTING

JURI JABLOKOV SHOWS HOW ENVIRONMENT MAPPING POWERS UP LIGHTING



Juri Jablovkov worked on the sculpt of this fantasy axe in 3D-Coat to create the basic shape and detailing of the weapon



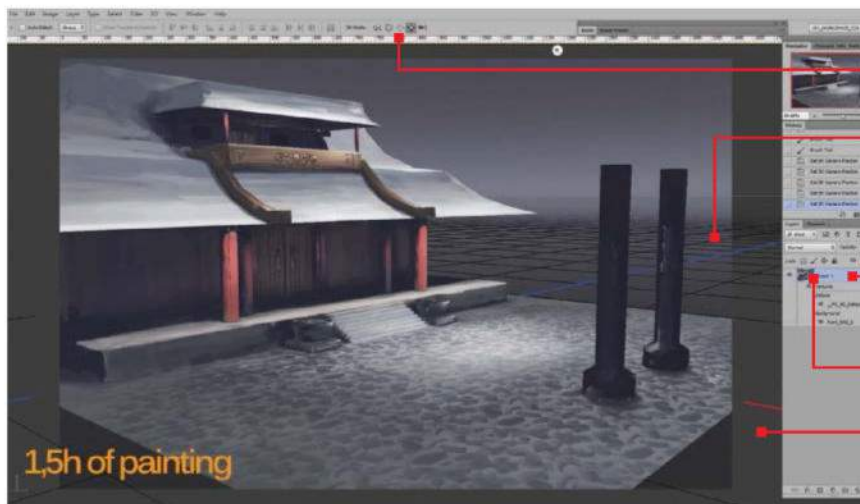
Then he brought it into Photoshop to map (maps used include Diffuse, Normal, Ambient Occlusion, Specular), texture and light



© Frédéric Müller

rendered file in Photoshop, all the lights, reflections, speculars and shadows are on separate layers and, very cool, all alpha channels are there already. Also, I use Photoshop for building a general overall look." Texturing and mapping are where Photoshop can

really shine. Müller explains the different techniques depending on the object: "I might have to map an existing texture onto the flat UVs (for example leather, wood, scratched metal images, etc) in Photoshop. In this stage, Photoshop is a very important tool since it



© Juri Jablovkov

1.5h of painting

Move in 3D: Want to Rotate, Roll, Pan or Slide your shapes? Those controls are accessible here

Line it up: Bringing your model into Photoshop and set the Surface Style to Line (from the 3D Scene menu) so you can line it up with the grid however you want, is the method that Juri Jablovkov recommends

Paint it: Now you can paint. "Switch between 3D and 2D views in difficult areas and remember to make new layers according to your needs," says Jablovkov

Texture time: All your textures appear in the Layers panel, and – just like working in 2D mode – you can apply them in different ways

Make a matte: Later on you can fill this part of the image with a background painting. It's probably best not to do this straightaway, because you might decide to change your camera angle





© Michael Fawke



© Mier Lee

## HOW TO ADD A TEXTURE

JURI JABLOKOV EXPLAINS HOW TO ADD AND FIX TEXTURES IN PHOTOSHOP



### 01 | OPEN THE 3D RENDER

First, open up your 3D render. Then "bring a photograph into a new layer above the 3D layer and merge it down to project using Ctrl-E key combination. This projects the photo onto the 3D model taking in account the maximum projection angle that you have set in the 3D menu."



### 02 | USE LAYER MASKS

It won't fit perfectly, so zoom in close and see how the texture is applying. To fix any problem areas, simply use Layer Masks. "Always be sure of what layer you are painting on," warns Jablovkov. "You cannot see the layer name if you have only the 3D window open."



### 03 | ADD BACKGROUND AND TEXTURE

Jablovkov's workflow often involves putting a "gradient background into the Environment menu's background slot and set it to panorama mode so I would have some background to relate the colours to." This is a Photoshop render, but sometimes he exports back to Blender and renders from there. Finally, add background texture.

© Juri Jablovkov

helps me to extract several map types out of the textures I use for the diffuse colour. I can easily manipulate them with Curves to get a reflectivity map, or extract the very fine detail by applying a High Pass filter in order to get a detailed bump map." Using Photoshop's 3D tools Koch paints textures using and says "I find the distortion tools great for adjusting textures accurately to the model UVWS, creating all the necessary texture channels (Diffuse, Specular, Bump, etc.) and grouping them into folders gives me a non-destructive workflow that allows me to make

quick and clean corrections. The save to layers script is great to be able to export my layers without collapsing them, giving me the option to come back to Photoshop for fixes."

But it isn't just what Photoshop can do that makes it vital to the 3D artist's workflow. Koch says he uses Photoshop "also as an excuse to be able to exit the Operator mode and be able to see in a more critical point of view, add comments, make some fast retouches with Photoshop using other pictures, allowing me to see my composition as a whole."

## WHERE TO FIND FREE 3D ASSETS TO USE IN PHOTOSHOP

SKIP HOURS OF MODELLING AND DOWNLOAD SOME OF THE MANY FREE 3D MODELS THE INTERNET HAS TO OFFER (JUST MAKE SURE YOU OPT TO DOWNLOAD A PHOTOSHOP-FRIENDLY FORMAT TO WORK WITH)



### 1. TURBOSQUID

[www.turbosquid.com](http://www.turbosquid.com)

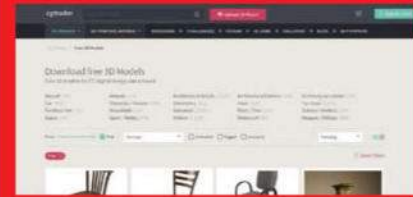
TurboSquid is probably the most famous collection of 3D models on the internet, and they're used in games, illustration, visual effects and much more. Many of the models are for sale, but there are lots of free treats to browse through too.



### 2. TF3DM

[www.tf3dm.com](http://www.tf3dm.com)

A source of textures and tutorials as well as models, TF3DM is updated regularly, meaning that there's always something new to have a look at. Again, it also has models that can be purchased.



### 3. CG TRADER

[www.cgtrader.com](http://www.cgtrader.com)

With categories like cars and food, there's a good chance you can find what you need for free on this website. There's also a forum, a blog and a gallery to keep you sticking around.



### 4. ARTIST-3D.COM

[www.artist-3d.com](http://www.artist-3d.com)

It's .obj and .3ds files that dominate this 3D model site, and it's got plenty of categories. For example, you can filter by such categories as people, vehicles and military items.



# 3D TECHNIQUES IN PHOTOSHOP CC

## 3D PRINTING SERVICES VIA PHOTOSHOP CC

NO 3D PRINTER? GET YOUR 3D DESIGNS PRINTED VIA THE CLOUD



### 1. SHAPEWAYS

[www.shapeways.com](http://www.shapeways.com)

One of the first players in the 3D printing game, Shapeways also has a marketplace so you can sell the jewellery, toys or art that you have designed. You can pick from plastics, metals and ceramics to print with.



### 2. SCULPTEO

[www.sculpteo.com/en/](http://www.sculpteo.com/en/)

Sculpteo too has a marketplace where you can sell your 3D printed products. There are different design guidelines, depending on what material you want to print with, but the site has plenty of information to make sure your models pass muster.



### 3. IMATERIALIZE

[www.imaterialize.com](http://www.imaterialize.com)

An online 3D printing service for anyone with an eye for design. You can turn your ideas into 3D printed reality. Then share it with the online community.



### 4. MAKERBOT

[www.makerbot.com](http://www.makerbot.com)

The MakerBot 3D Printed Products service allows you to order from as few as 50 units of your design, or, alternatively, you could splash out on a MakerBot Replicator and print as many or as need as you need.

Not everyone has the time, money, or inclination to master 3D modelling. And if you want to be able to import 3D models into your own work but also be able to manipulate them sufficiently so they feel like they're yours, well, Photoshop CC can do that. Mayers thinks this is a great way of working: "It's a bit like using stock photos because someone else has already done all the hard work in creating the model. I used this method of importing several models in my piece Future City. The imported models were used in a way not originally intended to create the buildings. Many 3D models come supplied with Photoshop textures or bump maps; if not you can use an app called UVMapper, which enables you to create texture maps based on the object's UV coordinates. Photoshop also allows you to modify or update your textures on 3D models in real-time, which is a great feature."

According to Koch, another "interesting trick is to use basic 3D objects for retouching complex photos, aligning objects in perspective and using them to generate depth maps to give depth of field effects or volumetric depth fog, these layers will be rasterized

and then deformed to fit precisely with the picture. This trick is extremely interesting for texturing photos too! giving some dirt on walls or even a adding details like dirt, mud, rust to a car for example, it could have many more applications, it is just a matter of experimenting with it, I find this technique super interesting to give final details for the finishing process."

Because no matter how good a model you've built, or how expensive a model you've bought, the finished result can still look lifeless if you can't wrangle Photoshop properly. Fawke notes: "It is your job as an artist to be creative in bringing the image to life. Photoshop has a wealth of adjustment control to help transform your 3D renders (produced in or out of Photoshop). Try new things, experiment with adjustment layers, add colour, change blending modes, use your masks. Emphasise your lights and shadows. The biggest tip I can offer is to always look at reference material. Materials and light react differently than you may think. Look at the contours of edges, study reflections, then tweak settings, play around and try to replicate what you see."



© Cris Koch



© Mark Mayers



© Mark Mayers





© Matt Kohr



© Michael Fawke

“ It is your job as an artist to be creative in bringing the image to life. Photoshop has a wealth of adjustment control to help transform your 3D renders (produced in or out of Photoshop) ”

MICHAEL FAWKE [WWW.PLUSFORM.CO](http://WWW.PLUSFORM.CO)



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# DESIGN A LOW-POLY PLANET

LEARN THE BASICS OF 3D MODELLING IN BLENDER AND HOW TO CREATE A LOW-POLY ILLUSTRATION

**G**raphics are becoming much more complicated by the day. Ten years ago a model of an object with a few thousand polygons was considered technically advanced. Nowadays we can see billions of polygons, unbelievable light and shadow, technologies on the edge of possibilities.

In the time of super-powered graphic cards, low-poly graphics are born. This genre uses as few polygons as possible to make artwork look classic – a bit old-fashioned but still fresh and awesome. It looks simple, but low-poly art requires a huge

amount of work. It's somewhat similar to jewellery making, because every polygon needs to be in the correct place to really make the artwork shine.

In this tutorial we will learn how to create a low-poly illustration using Blender and Photoshop – from the basics of 3D modelling, to the final polishing of the image. Blender is absolutely free to use software and you can download the latest version for your system here [www.Blender.org](http://www.Blender.org).

Once you have installed it, you are ready to start this tutorial and create your first 3D low-poly illustration by following our step-by-step guide.



## OUR EXPERT

**ALEKSEI PUSHILIN**  
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 @plann\_it

Aleksei Pushilin is a 25-year-old graphic designer from Chelyabinsk, Russia. Now working in the biggest bank in the region during the day, and freelancing during the night, his true passion is to make low-poly 3D models for games, UI, maps and navigation.

## SOURCE FILES

On FileSilo you will find a pack of small environment models, ready to use in your scene.

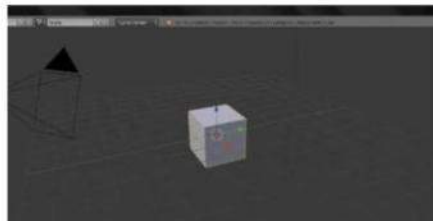


## LEARN THE BASICS

### SET UP THE SCENE AND CREATE THE MODEL

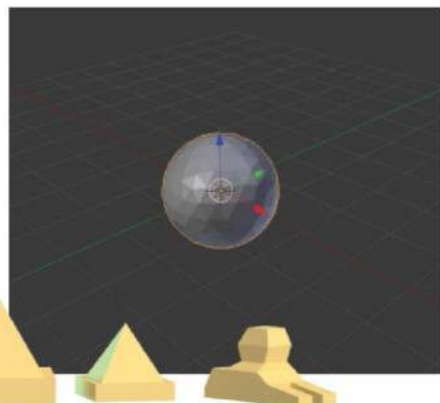
#### 01 SET UP THE SCENE

Launch Blender and adjust the render parameters: change the render type to Cycles at the top of the screen, then change the render resolution on the right to 1200x1500 pixels. Don't forget to set to 100% in the window below. To reduce the noise, go to Sampling inset below, and make at least 500 samples.



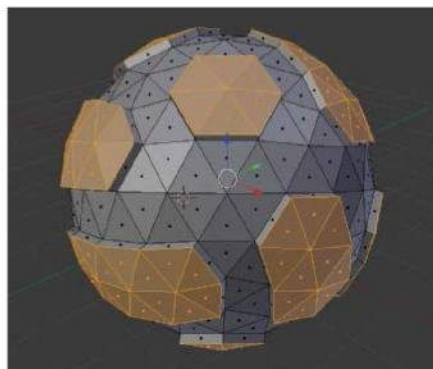
#### 02 CREATE THE BASE MESH

Now we are ready to create the planet. First, delete the cube from the scene: right-click and press Delete. Then press Shift+A>Mesh>Ico Sphere, and immediately change its subdivisions to three, at the left bottom of the screen. You will see a faceted sphere – this is going to be the base mesh for the planet. Go to View> Camera, to change the point of view.



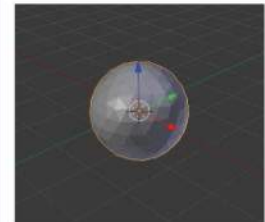
#### 03 FORM THE LANDSCAPE

The buttons you will need are: G for Grab, S for Scale, and R for Rotate. Use them to position the sphere. After this, press TAB to switch to the Edit mode. Change selection type to Face select below, and then holding Shift select all the polygons you want to make land or mountains by right-clicking. Press E to extrude polygons, and press the left mouse button. Use Scale to adjust the height.



## WORK IN PROGRESS

### FROM SPHERE TO YOUR OWN TINY WORLD



Progress 1: Create the basic mesh



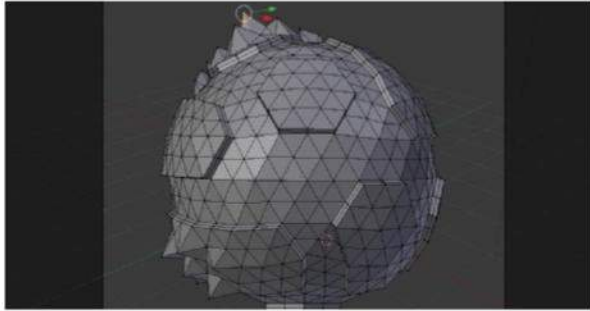
Progress 2: Add materials



Progress 3: Post-process

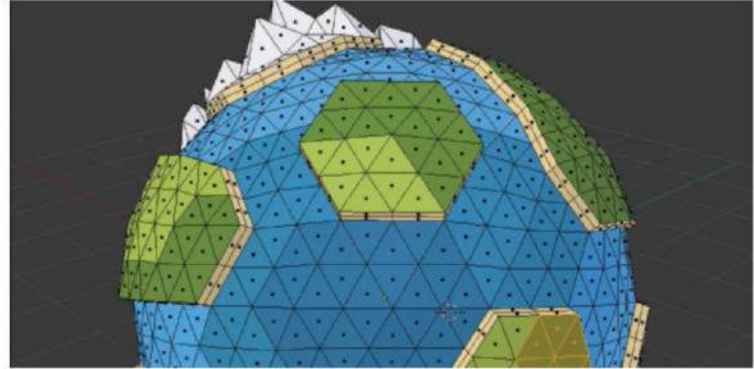






## 04 MAKE THE MOUNTAINS

Now, when we have a basic landscape, let's make it more interesting by adding mountains or hills. In Edit mode, select all the polygons of the model manually, or by pressing A. Then hit W>Subdivide, this will increase the number of polygons by two. Change selection type to Vertex, select below and, using Grab and Scale, deform the landscape to make mountains or any other landscape marks you want. Don't forget to change selection type, if needed. Don't go too crazy with it – it's good when low-poly illustrations have straight and logical form.



## 05 ADD SOME COLOUR

Change the Display Mode below, from Solid to Material – so you can see the changes you make. Go to Material>New. You can change it to any colour by clicking the colour box. First, make a blue one and name it 'Water'. Then click + at the top – this will enable you to create another material. Make it green for the grass, select the polygons of the land, and click Assign. You can create as many materials as you want and paint the whole model. Don't forget to use bright and natural colours.

### ■ QUICK TIP

The Sun and the Moon are contrasting colours. The Sun is warm and yellow, and the Moon is cold and blue. This is a great way to make low-poly art seem even more faceted and sharp – when the light sources are separated on two channels from opposite sides of the model. You can improve this feature adding a few more light sources.

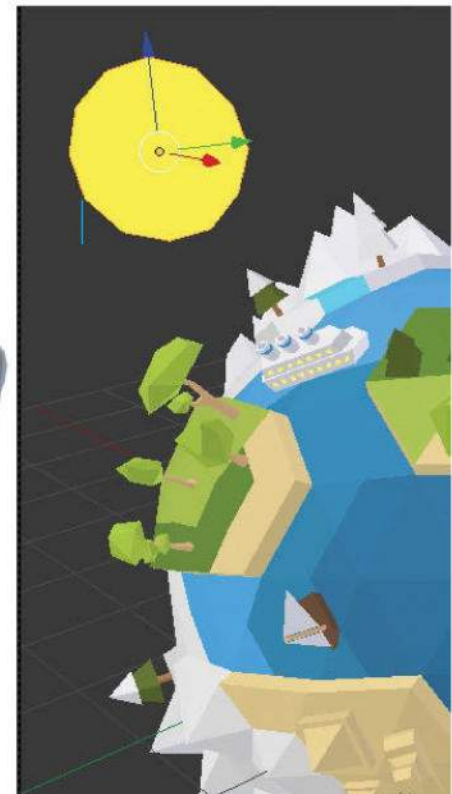
## 06 PLACE THE ENVIRONMENT MODELS

Now we are going to add details to the planet view. Open the file from elements.blend in another Blender window. You will see a pack of models, ready to use in your scene. Copy and Paste all of them in your main Blender window. Now adjust the Snap tool – this will help a lot.

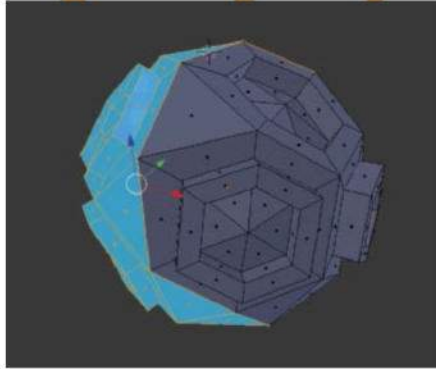
Activate the Magnet button below, select a Face Snap, Active Snap target and enable rotation with the snapping target. Now the magic begins! Use Grab to place any model onto the planet – it's so easy to do. You can Copy and Paste any model to use it twice or more.

## 07 CREATE THE SUN

You already know how to create an Ico sphere, so let's make one for the Sun. Create an Ico sphere with two subdivisions (look at Step 2 if you get lost). Using Grab and Scale place it to the top left side of the planet, and don't forget to turn off the Snapping tool from the previous step. Now create a new material for it, but this time we will use another surface. Choose the yellow colour, and then open a surface inset above, choose emission, and change Strength to three. Now the Sun will really radiate the light.







## 08 | CONSTRUCT THE MOON

Repeat the steps above, and create an Ico sphere for the Moon, and place it on the bottom right side. To make it look interesting, make craters on the surface. Switch to Edit mode with Tab, select the faces of the sphere in the shape of a hexahedron, and then use E to extrude the polygons, and S to scale them, forming the craters. Three to four craters should be enough to make the Moon look nice. Then create material similar to the Sun, but blue, and paint the side polygons of the model, so they form a sickle.

“The goal of low-poly artwork is to emphasise the faceted, polygonal look”



## 10 | RENDER THE MODEL

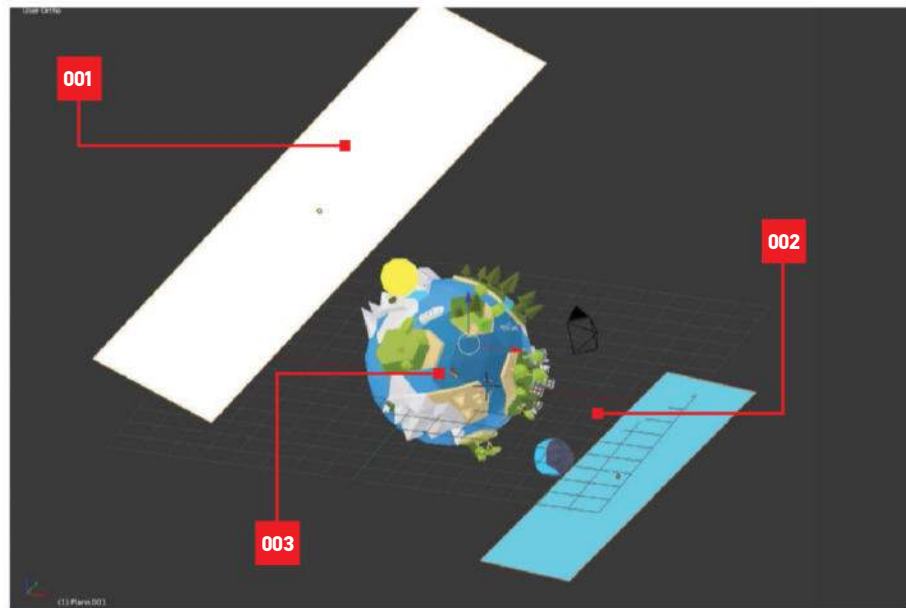
First go to Render>Film and check Transparent – now when you render the model, there should be a transparent background. Go to the Render>Render Image at the top left of the screen. You will see how your model is rendered in real time. This will take a while depending on your computer. If the render looks too noisy, increase the samples parameter. You can press Esc to abort the render, if you want to change something in the scene. After you are done, press Image>Save As Image at the bottom left of the screen to save your render.

## ■ LET THERE BE LIGHT

CREATE LIGHT SOURCES FOR THE SCENE AND RENDER THE IMAGE

## 09 | LIGHT THE MODEL

Create two big planes, by pressing Shift+A>Mesh>Plane. To make them radiate light, adjust new materials to them – blue for one, and yellow for another. Use the Emission surface, as on the Sun and Moon, but change the strength to five, which will make them brighter. Using Rotate, Scale and Grab place the planes perpendicular to the planet, yellow on the top-left side, blue on the bottom-right side.



### 001 | THE SIZE

When creating the planes, make sure they are much bigger than the model – at least twice the size. This will make the light much smoother

### 002 | THE POSITION

The best way to use planes as light sources, is to place them perpendicular to the model, but parallel to the point of view. This way the light scheme is optimal

### 003 | THE CAMERA

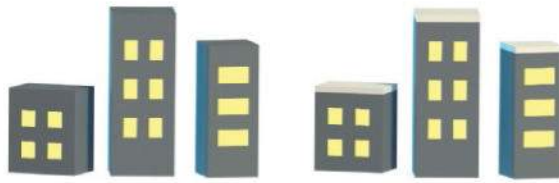
Switch to the Camera View, and check that there are no light planes in the camera field of view. You don't want to see the light planes in your final render



## 11 | CREATE THE BACKGROUND

You are now finished with Blender, launch Photoshop and open the render you have saved from the previous step. If you have done everything right you will see a planet on a transparent background. Now create a new layer, take a Gradient tool with #144e96 and #192841 colours, and drag it from the bottom right corner, to the top left – so the darkest part of the gradient should be under the Moon, and the brightest under the Sun. Don't forget to check the Dithering to make the gradient look smoother.

### FINAL STEPS PAINT OVER THE RENDER



#### 12 ADJUST THE COLOUR

It's much faster to correct and adjust the lightness and the colour of the render in Photoshop. The render result greatly depends on the colour you have chosen and how you placed the light sources. To get the best result, use Levels and Saturation to make your render bright enough to see what happens on the Moon side, and dark enough to feel the night and day border – the balance is what you're looking for. Adjust the colours so they are not too bright and keep the natural look.



#### 13 APPLY A FILTER

The goal of low-poly artwork is to emphasise the faceted, polygonal look. After you make a render, you can improve the faceted look by applying the Smart Sharpen filter. Go to Filter> Sharpen>Smart Sharpen. Be very accurate with this tool, you should catch the edge between polygons, but shouldn't make the whole model look noisy. A one to two pixel radius and 50% effect should be enough, but this depends mostly on what you want to get as the result.



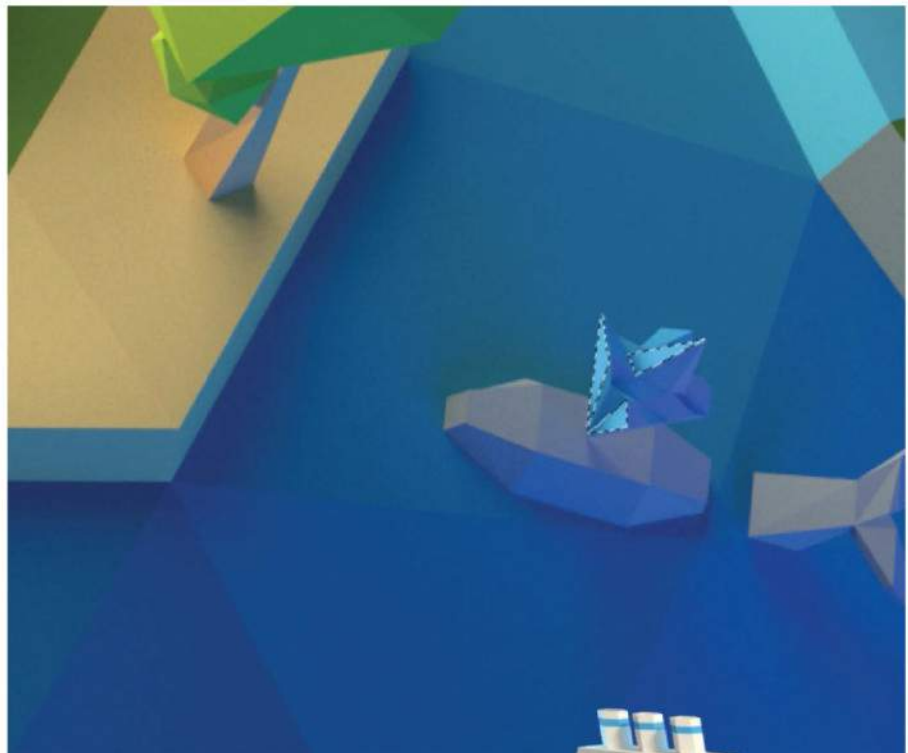
#### 14 ADD MORE CONTRAST

To make the model look even better, you can manually paint the polygons. This is a great way to add contrast and adjust the faceted look, because the real render is sometimes not as expressive as it should be. Create a new layer, select the Pen tool, and select polygons on the border between light and dark, or polygons on small models, to attract more attention to them. There are two rules: first, make the light polygons lighter and the dark darker, so the contrast increases. And second, use smooth big brushes. The best results are when the painted polygons are not distinguishable from the non-painted ones.



#### ■ SIMULATE 3D LOW POLY IN 2D

As the low-poly genre becomes more and more popular, more people are trying it out, but not everyone knows how to do it properly. To learn the basics of Blender, you should probably spend few days learning, but it could take an eternity to learn every aspect of it. The same could be said about any other 3D software. However, there is an alternative way – you can simulate low-poly 3D style using any 2D redactor you like, vectors in Illustrator, or the Pen in Photoshop. The pros of this method are you will not waste your time on theory of 3D modelling, and waiting hours for your model to render. But the cons are you will never get the right lighting and shading in a flat illustration.





**15** | INTRODUCE SOME GLOW

All the effects like glow, halo, flares and lighting are almost always made in post processing, not in a 3D redactor, because it's much easier and faster. Let's make a little diffuse glow around the emission polygons, to make it look shiny. Select the Magic Wand tool, and click on every yellow light polygon, except the sun. Then make the selection of a new layer by pressing Cmd/Ctrl+J or go to Layer>New>Create on a new layer. Then go to Filter>Blur>Gaussian Blur, and use it with five to six pixels. After this, change the blend mode to Screen.

**■ QUICK TIP**

If you find a mistake that cannot be fixed in Photoshop, you can render it again. You can either delete objects you don't need, so you don't have to wait for the whole scene to render, or, if you see the part you need appear before the render finishes, press Esc and save the image. Paste it on the top of the first layer and erase everything that you don't need.

**16** | MAKE THE STARS

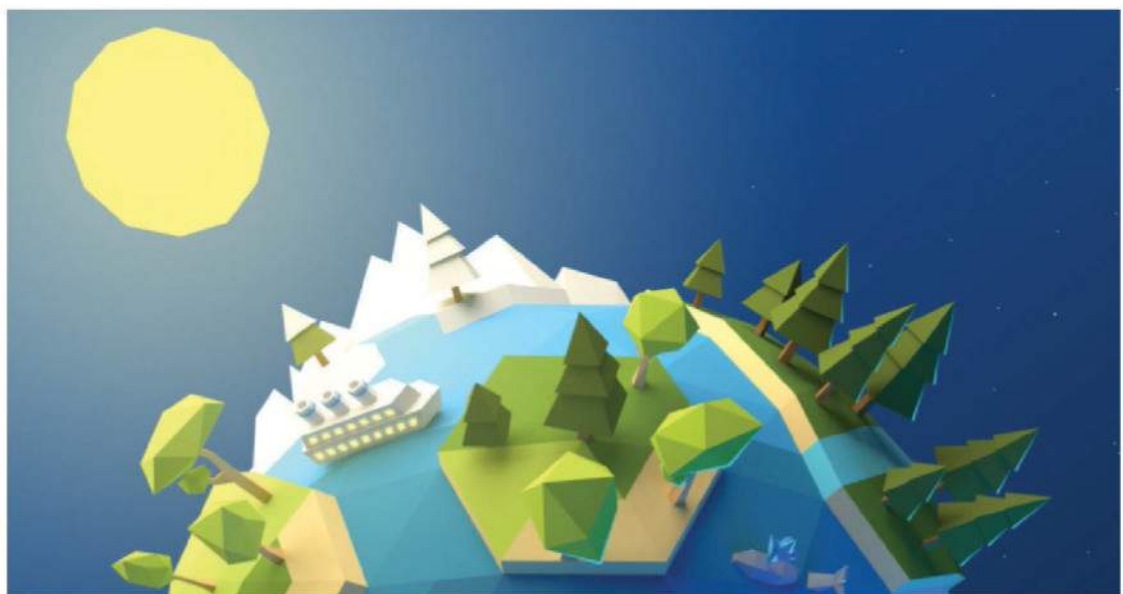
To make the space more beautiful and realistic you should add some stars. Usually such things are made with Soft brushes, but in low-poly art a pencil will do a much better job. So create a new layer, take the Pencil tool with a two to three pixel radius to make big stars, then make one-pixel-radius small stars. You can use white and blue colours for them, and you should only put them on the dark side of the space. Don't make too many as they might take too much attention away from the main model.

**17** | REFLECT THE LIGHT

To make the two colour light scheme look even better, you should manually create patches of reflected light on the borders of the model. It's a very tricky thing, so be careful. Create a new layer, using the Pen tool, select sharp and thin borders that are addressed to the Moon, and paint them with a bright blue colour like #00e1ff. These patches should be solid with no gradient. This will add a depth to the scene, but don't make too many of them.

**18** | FINALLY LIGHT UP THE SUN

Now last, but not the least, you can create a filling light from the Sun. Start by creating a new layer, pick a really bright yellow colour like #ffff87 and then select the Gradient tool. Now drag a Radiant Gradient from the Sun, forming the big spot of light. After this, go to the Blend modes of the layer and change it to Screen option. Now adjust the Transparency of the new layer by 50-60%, or even more, if you'd like a much mor brighter light in your final scene.





# PAINT CONCEPT ART FOR ARCH-VIS

FOLLOW THESE DIGITAL SKETCHING AND PAINTING TECHNIQUES TO CREATE AN ARCHITECTURAL PIECE READY FOR 3D RENDERING

**L**earn how to use Photoshop to create a complex architectural piece from scratch with this tutorial. You will see how a simple sketch is established, followed by detailed shading and texturing steps and eventually final touches that will help present your design in the best way possible.

Photoshop is perfect for working on architectural sketches and paintings. There are a vast variety of tools, techniques and shortcuts built in to the software that makes it easy for both beginners to jump in and professionals to speed up their process of creating artwork. The time it takes a skilled artist to complete

something is a huge factor in production, therefore quite often a conceptual artwork like the one shown in this tutorial is only one version of many you may provide to your art director. Being fast and efficient is the key to surviving as a successful Photoshop artist.

With this tutorial you will learn shortcuts and alternative techniques that will enhance your skillset.

This piece is created as concept art that will later be rendered into full 3D arch-vis for an advertising campaign. You can see the completed renders and video here at

[www.tinyurl.com/qxye8fm](http://www.tinyurl.com/qxye8fm).





**OUR EXPERT**

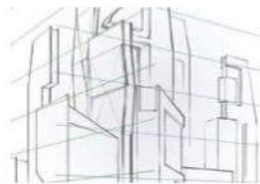
**RAMÓN VOIGT**

[www.behance.net/rammon](http://www.behance.net/rammon)

Ramón is a concept artist in the film, television and advertising industry creating interior, architecture and environment artwork. For several years he has worked at LIGA 01 Computerfilm for clients like Audi, Base, Mercedes-Benz, BMW, ARD and Commerz-Bank.



## WORK IN PROGRESS FROM SKETCH TO FINISHED ARTWORK



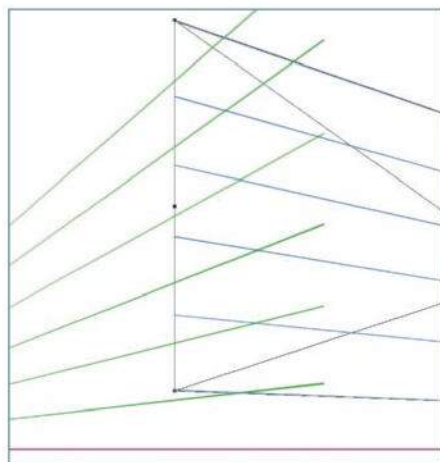
**Progress 1:** Create an architectural sketch



**Progress 2:** Add a light source, textures and detail

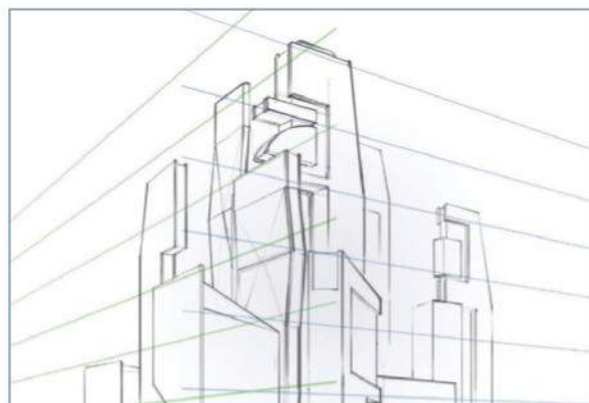


**Progress 3:** Presentation is everything



## 01 | SETTING UP THE PERSPECTIVE

Open a new document sized at least 3840x2160 (double HD 1920x1080). Make your mind up on how you want your architecture to be presented. Put your horizon line in the lower part of the picture and vanishing points slightly out of frame. Create a new layer and paint a straight line for the horizon. On a new layer create several parallel horizontal lines. Right-click and Convert to Smart Object. This enables you to make changes easily later. Now go to Edit>Transform>Perspective and adjust the lines so they vanish towards the horizon. Repeat this for a second vanishing point. This should ensure a solid basic two-point-perspective for a skyscraper design.



## 02 | SKETCH THE BUILDING

Create a new layer and start sketching your complex. Focus on proportion, style and scale. A big help while sketching technical objects or architecture in Photoshop is the Shift button, because it enables you to make straight lines horizontally and vertically. You can also make diagonal lines by making a dot with your brush, then holding down the Shift button and making a dot again somewhere else. Or just rotate your canvas with the hotkey R and make a horizontal or vertical line as described before.

“As a concept artist or digital painter in general it's always useful to create your own library of textures and reference images”



## 03 | ESTABLISH THE LIGHT

For now you don't need the perspective guidelines any more. You can simply hide the layers or layer group. Before going into shading and detailing the architecture, let's define the light source in the scene. Everything will follow that definition. Use big Soft brushes or the Gradient tool to establish a dramatic saturated sky. Put the sun out of frame and brighten the horizon line a tiny bit. Also make sure the tones of the sky vary from cyan tones to darker indigo blue. This will make it more realistic.

### QUICK TIP

Before going into shading and detailing the architecture, let's define the light source in the scene. Everything will follow that definition.



## 04 | CREATE THE SILHOUETTE

Now let's create a silhouette layer for your building. You don't have to make a new layer yet. This comes later and saves you some clicks for now. Just pick the Polygonal Lasso and start making a selection of the outline of your complex, then go to Layer>New Fill Layer>Solid Color. This will create a new adjustment layer with your selection already in the layer mask. Make sure the layer is located right underneath your sketch. Now double-click on the colour icon of the adjustment layer to open the Color Picker. Choose white as your base silhouette to make your buildings pop out in front of the sky.



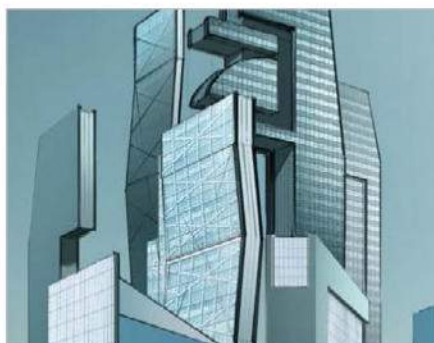
## 05 | ADD TEXTURES

Now we want to put some textures in place to have a base to paint on. As a concept artist or digital painter in general it's always useful to create your own library of textures and reference images. Choose one texture of a glass facade, ideally undistorted and photographed from the front. Drag the images onto your canvas. This usually creates a Smart Object of the image. Now match the texture's lines to the picture's perspective. When you are done, hit Enter to end the transformation. If you are not sure about the position of the vanishing points, unhide the guidelines from Step 1. When you are satisfied with the texture, you don't need the Smart Object any more, right-click on the layer and select Rasterize Layer. Next, mask overlapping parts of the texture by painting with black on the layer mask. Repeat this step on a few more surfaces.



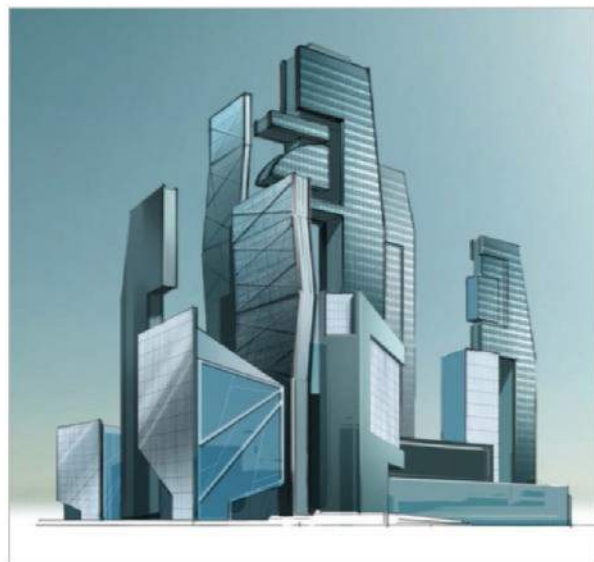
## 06 | START SHADING

Let's start filling in some parts the texture is not covering up. Always use selection in combination with big, soft brushes. It is a great way to create sharp edges in contrast to smooth, wide surfaces. Also try to combine multiple selection methods to achieve the selection you want. When you have completed one selection simply hold down Shift to add another selection to the existing or hold alt to reduce some parts. When you start shading several areas, always have in mind where the light is coming from and where shadows are being cast.



## 07 | REFINE SHADOWS AND EDGES

Continue working on the overall shading. Ask yourself where objects or buildings are standing very close to each other and creating deep shadow areas. Select a small brush to highlight edges that directly face towards the light source. This will make your objects more brilliant. Always create a new layer from time to time, when you start working on different areas or buildings. This will later make it easier to reflect and make changes if necessary. It also helps a lot in production when your client or art director wants you to remove elements. Then you can simply hide the layer without over-painting those elements.



### ■ QUICK TIP

Real reflections behave in different ways and the best ones for your purposes when painting architecture are diffuse reflections. These don't reflect accurate details, they reflect softer light and shade, so they add instant realism without needing accuracy.

## 08 | ADD REFLECTIONS

Some parts are still looking very dull and not reflective at all. We are going to change that now. Select a big brush with Pressure Sensitivity set to Opacity. Pick the colour of the surface and shift its brightness a few per cent. Now paint big straight shapes onto the surface to imitate reflection. Erase parts that don't fit by selecting them and hit Backspace or just use the Eraser tool. In such cases it is always helpful to look at real reflections and references to train yourself and learn.



## 09 | ADD LIGHT AND SHADOW

In this step we continue making our building complex sculpturally with light and shadow. You can achieve that by pushing some shapes further inside the form by selecting an area and paint in a darker value. Also pick white and paint some big overall glares on a new layer to strengthen the light side of the buildings.



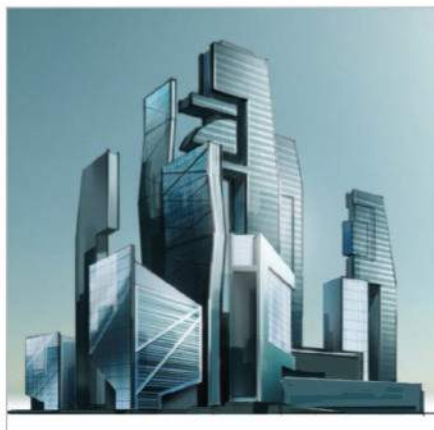
**10 THE DETAILS** Now go ahead and continue refining edges and make certain details pop out. The whole process of adding detail can be very long. You need to figure out by yourself how much effort you want to put in or how much time you have been given by the client.

## ■ QUICK TIP

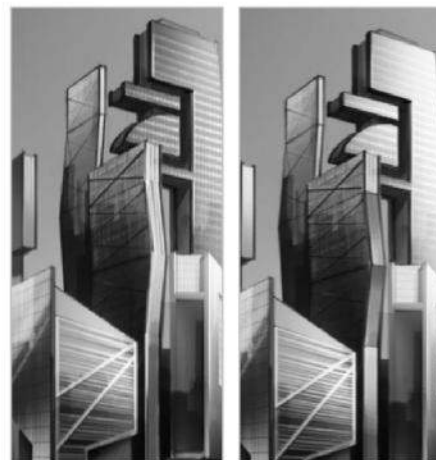
There is one more technique to check your values. Simply create a black layer on the very top of your layer stack and set its blend mode to Color. Now your image turns black-and-white and you can clearly analyse your values.



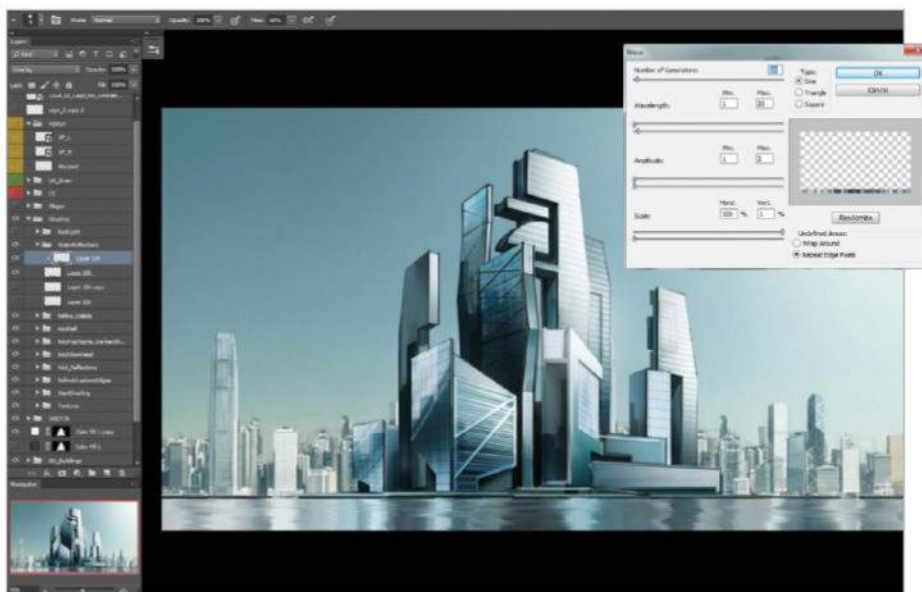
**13 CREATE DEPTH** To create more dimension in the scene let's put a skyline in the background to make this complex integrated in a huge city environment. Look for images that fit our perspective and pay attention to resolution. We are creating a mid-size artwork and do not want pixelated elements in between. Drag the skyline onto the canvas and Rasterize it. Move the image beside our main complex and scale it down. Select all the buildings and shore elements you want to keep. Click on the layer mask icon to mask the skyline. Copy the layer by pressing Cmd/Ctrl+J and move it to the other side. Try to use different parts of the skyline to avoid repetition.



**11 INSERT OVERALL REFLECTIONS** Let's add more reflections to the buildings and the surroundings. Create a new layer and paint dark shapes inside the facades. Don't be afraid of adding too much. You are working with layers. Everything is separate. When you are done, create a layer mask and reduce and refine those painted reflections. Now go to the blend mode drop-down menu and select Overlay. This will not only darken some areas but push the saturation. In cases like this Overlay is a fun and powerful effect.



**12 REFINE DETAILS AND CHECK VALUES** In this phase we are reconsidering the overall brightness of the buildings one more time. At this stage the main tower in the middle is kind of blurring into the blue sky. A common technique to check your composition is simply to zoom out very far. Then you see the silhouette is not clearly readable. So we are going to make our main focal point pop up once more. Again create a new layer, select the area to brighten and paint with a big soft brush until the tower sticks out.



**14 COMPLETE THE SCENE** There is still one blank part of the image left in the lower area. It would be really nice to add a water surface here, just to reflect some highlights and parts of our buildings. Create a new blank layer and place a rectangular selection in the area where you want to illustrate the water. Now select various shades and colours of the main and background buildings located just above with the Eyedropper tool (Shortcut I) and paint soft vertical reflections (Alternatively: hold Alt to switch your cursor to the Color Picker, while using the Brush tool). Now go to Filter>Distort>Wave and put in the following settings: Number of Generators: 20, Wavelength Min. 1, Max. 25, Amplitude Min. 1, Max. 2 and Scale Horiz. 100% and Vert. 1%, Undefined Areas: Repeat Edge Pixels. Now you have a good basis to refine the water. Do so by playing around with the Wave filter, by adding tiny horizontal brush strokes with white and distorting the surface a bit more with the Smudge tool.



**15 | ADD COLOUR**

In this step we are going to add some detail in the form of colour to the centre of the complex. Let's just pretend in between those buildings is a huge atrium and the company who owns this facility is hosting a big event right there. Of course they are going to have very powerful and amazing light-shows going on. We are going to use that story to make our picture more interesting. Pick a red tone, which is a complementary colour to the overall blue of the image, and paint in details, where the light would hit the facades.

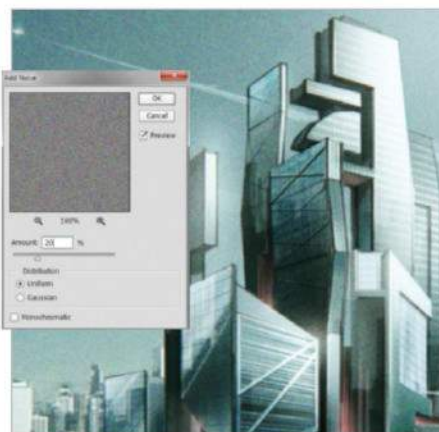
**16 | ADD DETAIL FOR SCALE**

We are now adding an aeroplane and some jet trails to intensify the metropolitan feel of the scene and illustrate the big scale of the complex. Paint a tiny white shape of a plane in the top left corner of the image. Add a soft glare to it to make it pop out. Now on a separate layer, paint two long, soft, diagonal and white strokes, where one should obviously connect with the plane. Now again use the Smudge tool to make them more organic and cloud-like.

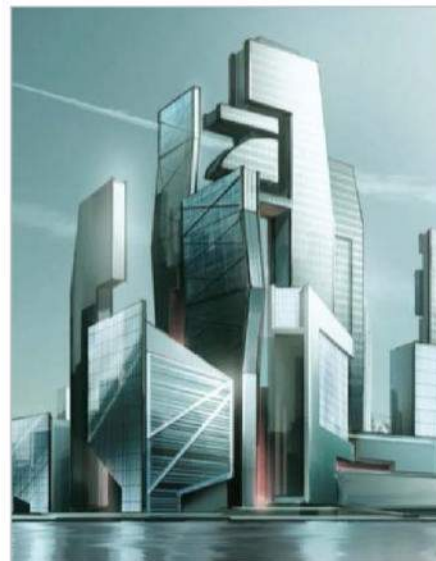
“Smart Objects and adjustment layers provide the flexibility necessary to give you a truly non-destructive workflow”

**18 | ADD CHROMATIC ABERRATION**

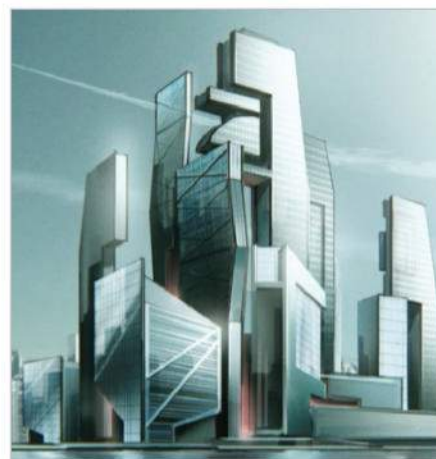
To push the image ahead of its pure, digital feel, we are going to add chromatic aberration and grain. Click on the top layer in your layer stack, now create a new merge layer of everything visible on the canvas, by pressing Shift+Alt+Cmd/Ctrl+E. Select this layer and go to Filter>Lens Correction. Open the second tab, Custom, and adjust the Fix Red/Cyan Fringe to +100 and the Fix Blue/Yellow Fringe to -100. Hit OK. When you zoom in you will notice some slight colour shifting around the edges.

**19 | FINAL OVERALL TEXTURE**

Let's put some film grain on top of the picture. We do so by creating a new empty layer at the very top of the picture. Fill this layer with a 50% grey (RGB 128/128/128 or HSB 0/0/50) by selecting the Paint Bucket tool and clicking on the canvas. Now go to Filter>Noise>Add Noise. Set the amount to 10% and make sure Uniform is selected and Monochromatic is Off. Now go to Filter>Noise>Median and set the Radius to one pixel. The last thing is setting your layer's blend mode to Overlay.

**17 | COLOUR CORRECTION**

At first add a new layer, pick a soft brush with the Opacity set to 20% and paint in some more glares. Now go to the adjustment layer panel and select Color Balance and push the colours to a slightly warmer look. Cyan/Red +1, Magenta/Green +15 and Yellow/Blue -10. Create a Hue/Saturation adjustment layer and lower the Saturation by -30. Yes, that looks better. Create one more layer, add some more blues for the sky, brighten the insolation from the right and push down the value of the top left corner. Group all these layers by selecting them and hit Cmd/Ctrl+G.

**20 | GOOD PRACTICE**

Last but not least it's important to label your artwork with the project name, subject or task, creation date and your name. In bigger productions whether commercial, game or feature, where several artists are constantly creating output, it is very useful to put this information into the picture so supervisors, producers and directors can refer to certain artwork at a glance. With your artwork finalised, it's time for it to be passed on for rendering.







# COMBINE 3D AND PHOTOSHOP

LEARN HOW TO CREATE INTERESTING ILLUSTRATIONS THAT COMBINE BASIC 3D RENDERS AND STOCK PHOTOS

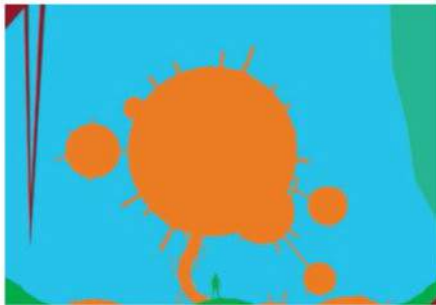
**Y**ou don't have to be a master of 3D graphics to be able to use 3D to your advantage while creating 2D illustrations in Photoshop. In this tutorial we will look closely at the process of mixing different digital techniques in order to create a stunning, atmospheric sci-fi illustration. Along with different Photoshop tips and tricks, we are going to focus on what is most important in any kind of creative work; composition, lighting and the different parts of art theory that help us to come up with images that are full of atmosphere and are well-balanced

in terms of visual content. Custom brushes and plug-ins are not the only thing you will need to create really professional visual creations, it's always helpful to look back at classic art theories and mechanisms that have been used for centuries too. There's a lot of software around us, with Photoshop being the main program for creating visual content. Let's take a look at how to incorporate other software and techniques in Photoshop to create even more complex artworks – from the first sketch through to building your way from a basic 3D render to a final visual full of details.

## ■ COME UP WITH A BALANCED COMPOSITION THINK ABOUT YOUR CREATION AND SKETCH BEFORE STARTING WORK

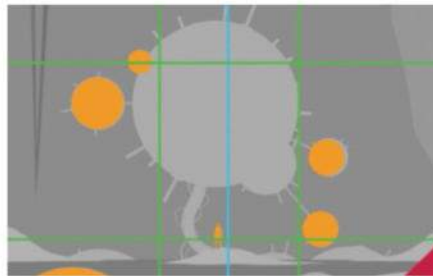
### 01 | START WITH COMPOSITION

This illustration will have a central composition, which was picked purposefully because it's harder to work with. It's challenging to balance the composition and avoid making it look boring and static. There was an additional challenge of possibly incorporating the magazine title into the composition while maintaining a nice flow and balance in the illustration itself.



### 02 | EVERY PART HAS ITS PLACE

On this image you can better see the main elements and their placement, which breaks up the central composition. Additional spherical parts and other details of the bomb are placed in the 'golden points' near the horizontal and vertical thirds of the image, pushing the viewer's focus away from the centre. Foreground parts are added in at an angle, which also helps to break the composition apart and make it more dynamic.



### 03 | LET THE LIGHT BUILD THE IMAGE

Another important part of the composition is the flow of light and colours between background and foreground. As you can see in this particular scene, there is an amount of light decreasing towards the foreground and on top of that there is a mist created by the background waterfall – here objects are disappearing with increasing distance from the camera. This also enhances the fluid composition and adds depth into the scene.



#### OUR EXPERT

**TOMÁŠ MÜLLER**  
www.tomasmuller.com  
@Tomas\_Muller

Tomáš Müller is a well known CGI artist, matte painter and retoucher, working for a wide variety of clients and studios from different corners of the creative industry, such as advertising agencies, photographers, game developers and many more.



#### SOURCE FILES

Explore the layered PSD file and learn how the 3D and photo elements were created and textured.

## ■ WORK IN PROGRESS FROM SKETCH TO FINISHED ILLUSTRATION



Progress 1: Digitally painted sketch



Progress 2: Raw 3D elements

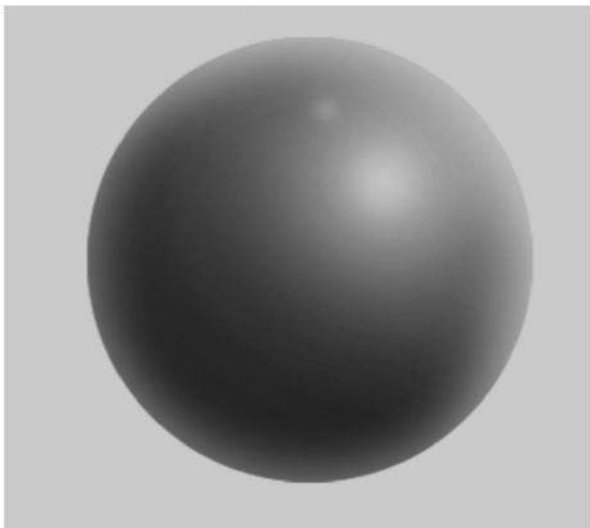


Progress 3: Final illustration



### 04 | SKETCH, SKETCH AND SKETCH AGAIN

Sketching is a crucial part of image development, so don't be afraid to spend time sketching and figuring out all parts of the illustration; composition, the design of each element and the colour scheme. In this case, the final image has changed a lot compared to the concept sketch. There is no need to follow every tiny part of your sketch, it is mainly to give you ideas about what you want and don't want from the final image.



### 06 | START WITH SIMPLE SHAPES

This bomb shape started with just a grey circle. Shadows and highlights were painted on top of it with a default Soft Round brush. This might seem simple but it's hard to create complex shapes without the knowledge of how to paint basic objects. Once you know how to paint basic geometrical objects it's a lot easier. It's similar to when animators are practicing by trying to put life into a ball bouncing. Simple often does not mean easy!



### 05 | MASTER PAINTING WITH DEFAULT BRUSHES

Photoshop has a lot to offer and a lot you can add to it. But try to master default brushes and functions rather than relying on plug-ins and customised brush sets. After all, sketching is about your ability to draw. That, unfortunately, can't be substituted by any filter or automated function. Custom functions may increase your abilities once you know how to draw things by hand, but your sketches are not going to look any better just because you use texture-based brushes. This first draft sketch was created using only default Photoshop brushes.

#### ■ QUICK TIP

While sketching, keep everything simple. Once you have a sketch you like, then you can try to enhance your sketch with a few textures or photos. This will give you a clearer idea about the final look and amount of detail you'll include.



### 07 | MASTER THE DETAILS

Now we will look at using photos to add detail to an image. As you can see on the image, there is texture and a few added details. In this case we are using a stock photo of a naval mine. To re-create this effect just put the desired photo on top of your painted object, then switch the photo layer to Soft Light or Overlay. Then select Filter>Other>High Pass, on the layer with the photo. The amount of Radius on the High Pass equals the amount of detail that becomes visible. Use the slider inside the filter to find the desired amount of detail and apply.





## 08 | ADD COLOUR TO YOUR SKETCHES

Keep your sketches defined in terms of colours. It will help you to avoid unnecessary changes that could appear in the final stages of work, as a result of not having clear ideas about colours from the very beginning. As the image shows, even one Selective Color adjustment layer and one layer set to Overlay with a few soft green brushstrokes can give you at least a rough idea about your chosen colour scheme.

“Always think about what the scene you are creating would include in real life”



## 10 | RUST IT UP

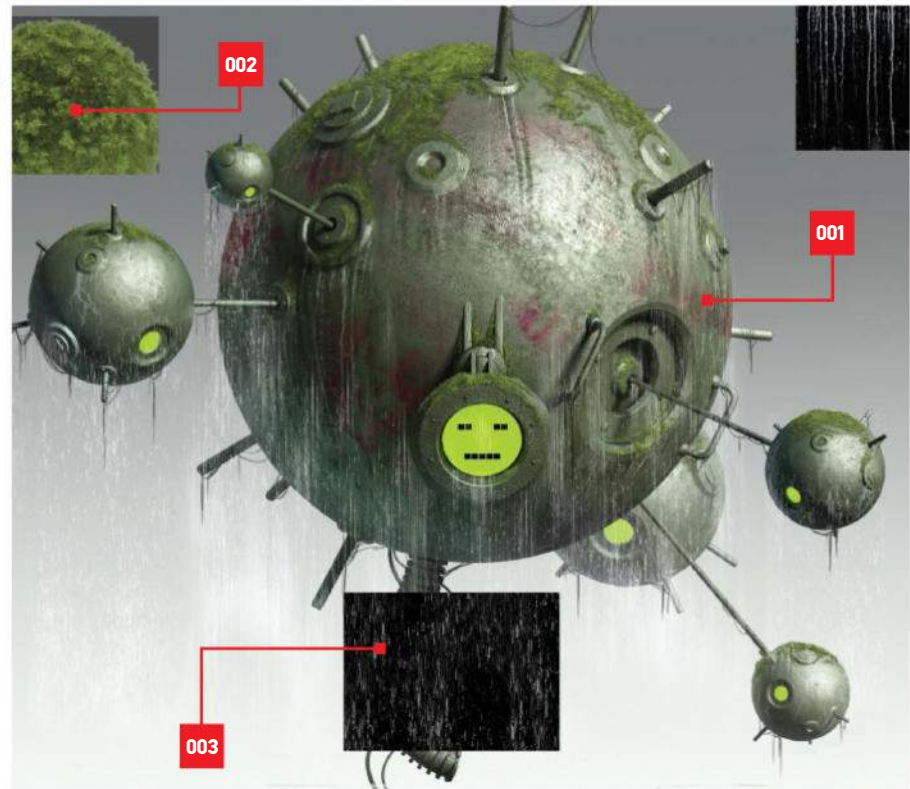
Rust and leaking dirt is added to the image using stock photos and textures of real leaking and rusting metal. Adding textures is simple, just use different blend modes like Screen, Multiply and Soft Light. Depending on the brightness of the additional textures, bright textures are best set to Screen and dark stains to Multiply. Always check the shape of the object that you apply texture on, and make sure that the texture is following the shape of the object correctly. Use the Warp tool to make the texture follow shapes and edges.

## ■ TEXTURE THE 3D PARTS

ADD DETAILS AND ADDITIONAL TEXTURES TO YOUR RENDERED PARTS

## 09 | ADD SOME REALITY TO YOUR DESIGN

Now we can take a look at how to enhance our 3D elements with additional details such as moss, dripping water, rust textures, leaking water and foliage hanging below the main objects. Always think about what the scene you are creating would include in real life. What kind of weather does the scene have and how it would affect objects in the scene?



**001 | ADDING RUST**  
The scene is full of water and humidity, so all metal parts should be rusty and dirty

**002 | GRASS AND MOSS**  
In forests near water there is always some amount of moss present, so it should be added on 3D parts as well

**003 | DRIPPING WATER**  
Water should be also dripping from the objects, because water condenses on the surface and pours down



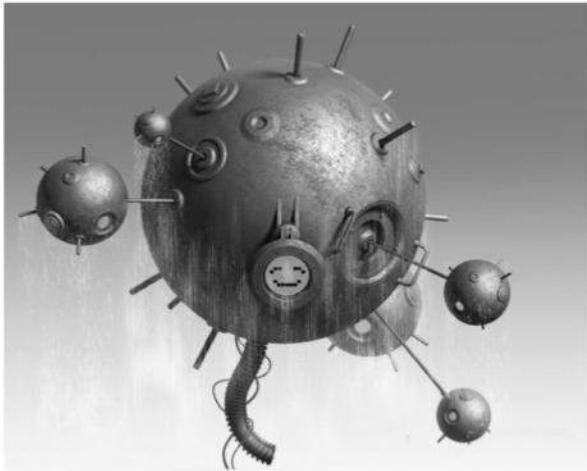
## 11 | LET IT GROW

The next additional detail is moss on top of objects and grass below them. Grass is painted by hand with a 2-4px brush (the thickness of the brush depends on the resolution of the image you are creating). Moss is painted using the Clone Stamp with a default round brush. A stock photo of spherical moss is used to make sure that it follows the shape of the bomb spheres. From that point all the moss is hand painted with the Clone Stamp set to 50% Opacity and 50% Flow.

### FINISH THE SCENE BUILD YOUR WAY UP TO THE FINAL IMAGE

#### 12 ADD THE DOWNPOUR

Another nice detail to add is dripping water. In real life, water mist would condense on cold metal and pour down in the form of droplets and small streams. In order to create this effect you can either paint droplets and streams by hand or use photos of dripping water on a black background like we did in this case. White water, black background – with this setting you can just switch the water layer to Screen and paint the water itself by using the Clone Stamp wherever you need it to be.



#### 13 PLAY WITH THE TINY DETAILS

Even the tiniest details matter, even those that are not visible at first sight. There is no need to overdo your image or fill it with thousands of objects, but some small additions here and there can increase the look of the whole image or add small hints of backstory or the functionality of objects. There are small illegible texts and textures added in this step to make the viewer wonder what could happen next or what the story of the scene is about.



#### 14 THINK AHEAD AND BUILD UP

It's always a good idea to proceed systematically with building up your layered scene. Try to find a good starting point which gives you the advantage of seeing what you need to do to add to or improve the image. After some time spent looking at the image you start to lose the ability to perceive the image from a distance and see things that need or don't need to be done. So think ahead before you start compositing. In this case, we are building our image from background to foreground.



#### PERFECT THE IMPERFECTIONS

As mentioned in Step 17, lens flares and effects like these are all products of the imperfections in manufactured optics. Our minds are so used to seeing these artefacts in images that our brains perceive them as reality. Photographers try to get rid of these effects to make their photos more perfect, while CGI artists add them to make their works more realistic. One of the effects worth mentioning is grain. Don't be afraid to use grain and other imperfections on top of your images to make them feel more rough and genuine.



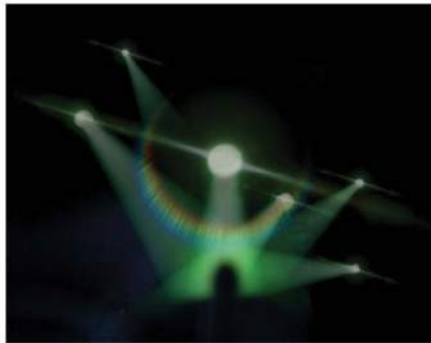


**15 | CREATE AN ATMOSPHERE**

Having created the background at the beginning will help you see if other parts in front of it fit with the scene conditions, such as lighting, atmosphere and colours. Every environment is affected by surrounding light from the sky and sun, as well as light bounced back to the scene from different surfaces or additional artificial light sources. When you have the main mood and background set, focus on ensuring everything else corresponds with it. Try to achieve a fluid blend of elements while avoiding obvious cut-outs.

**17 | PLAY WITH THE LIGHTING AND EFFECTS**

To increase the realism of light sources in the scene, add all sorts of effects produced by light and camera lenses in real life, such as spot light, glow, lens flare, chromatic aberrations and glare. As you can see on this image, the montage is switched for solid black colour so you can see clearly how all the light effects are composited. It's very simple to add them in, for instance a lens flare that is generated on a black background can be added simply by switching its layer to Screen and adjusting for the desired opacity.

**18 | FINAL COLOURING AND ADJUSTMENTS**

Here you can see the image with final colour grading. Grading was done selectively one small step at a time. Don't be afraid to use many adjustments layers and masks to deliver the exact colour and feeling you need. There is no need to do all of the colouring in at once, so take your time, adjust all objects and colour tones one by one, look away for a moment to gain visual distance and then look back at the illustration again. This allows you to see more clearly if the image needs more adjustments or not.

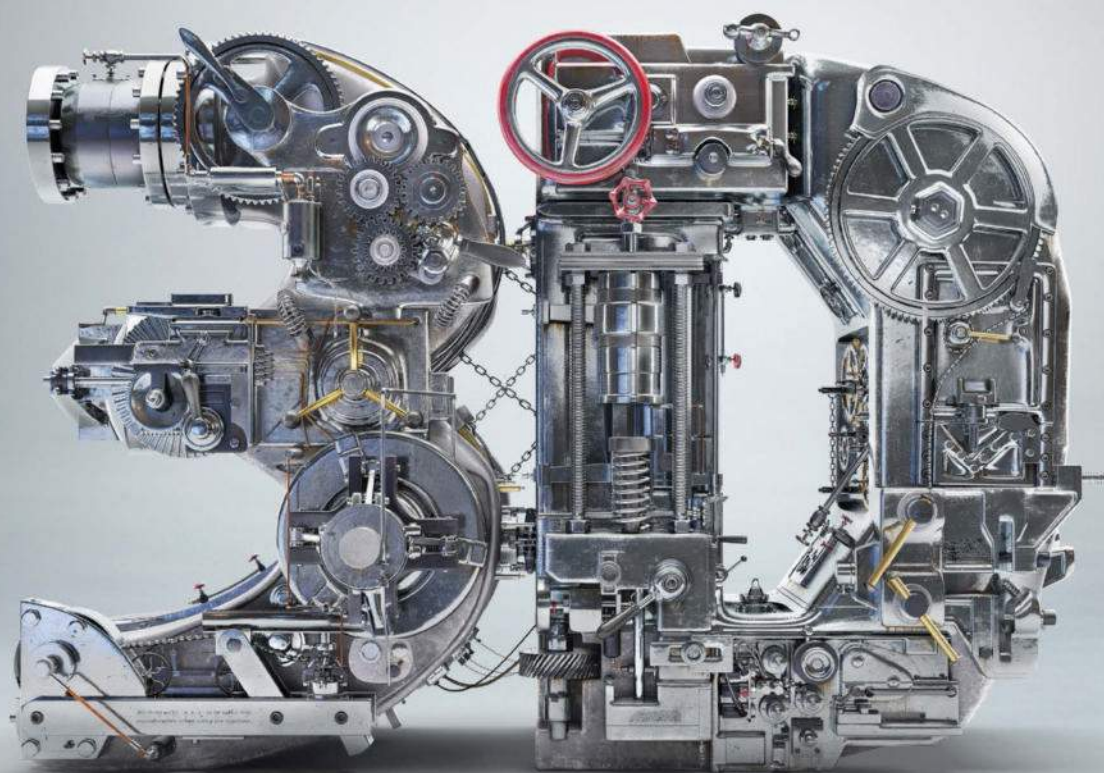
**■ QUICK TIP**

The High Pass filter, Filter>Other>High Pass, is a great way to sharpen all sorts of images or even just parts of them. Duplicate the layer or object you want to sharpen, switch the blend mode of the layer to Soft Light and apply the filter. The size of the Radius affects the amount of sharpening. A general rule is to keep it low, unless you're looking for a heavily over-sharpened look.

**16 | FINISH THE SCENE**

Now, when we have all the main parts present and building up the scene itself is finished, we can focus on colour grading and the final steps of postproduction. As you can see, the finished composite already has a good atmosphere; the base flow of colours and light works already. Systematic build-up paid off! But the colour scheme is a bit monochromatic and it is apparent that it could be pushed terms of colour variety and mood. Let's see how far we can push the image.





# MASTER 3D POST-PRODUCTION

CRAFT A ROBOTIC LOOK USING ONE PHOTOGRAPH, DIGITAL PAINTING AND 3D LAYERING TECHNIQUES

In this tutorial you'll learn how to utilise brushes in Photoshop CS5, using digital painting techniques and 3D assets to create cyborg special effects. It's recommended you have some experience of controlling Photoshop brushes with a graphics tablet to follow the tutorial more effectively, but we'll also use standard brushes.

To save you time switching between brush modes, it's encouraged to install the tool presets from the 'AJ-tools.tpl' file supplied, as they include the brushes directly in Color Dodge (CD) mode. You can also access them from the 'Fantasio Brushes.abr' brush set if you want to apply your own settings. There's an OBJ format 3D model texture and an alternative non-Photoshop

## ■ BEGIN COMPOSITING AND POST-PRODUCTION READY YOUR FILES TO START ENHANCING YOUR 3D RENDER

### 01 PLAN THE WORKFLOW

Having completed the render, it is now time for compositing and post-production. It is always essential to know how much you can get directly from 3D and how much can you add later, and in this case, the plan is to change the background and enhance the image with the render passes, and add some more detail by using textures in Photoshop.



### ■ WORK IN PROGRESS FROM RAW RENDER TO FINISH



Progress 1: Have all your files ready



Progress 2: Create advanced masks



Progress 3: Add texture detail



### OUR EXPERT

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Andrei Lacatusu is a self-taught graphic artist, living in Bucharest, Romania. He specialises in 3D graphics and currently works as lead CGI artist at Carioca Studio, in Bucharest.

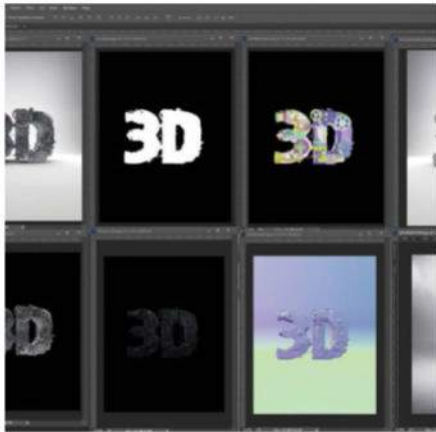
### SOURCE FILES

All the files used in this tutorial are available on FileSilo, including the 32-bit raw render, the render passes and the background photo. The textures can be downloaded free from [CGTextures.com](http://CGTextures.com) (DecalLeakingRusty0002\_1\_M and MetalScratches0079\_4\_L).



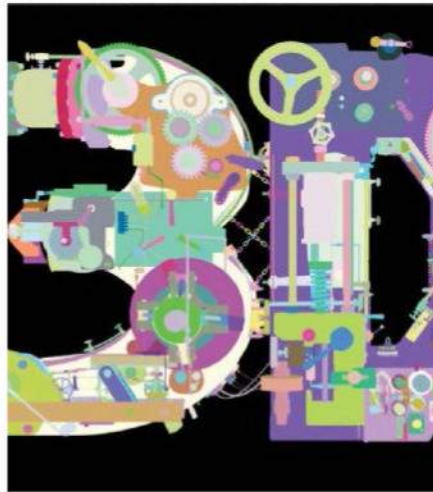
## 02 | OVERVIEW THE FILES

This render was completed in Autodesk's 3ds Max using the V-Ray render engine, but almost all 3D software offers you the possibility to render several passes, or render elements as they are called in V-Ray, in order to help during your post-production process. In this case, the documents consist of the main render, Alpha channel, Reflection, Specular, Raw Total Lighting, Wire Color and Normals.



## 03 | USE THE WIRE COLOR

The Wire Color pass is extremely useful, because it has all the separate objects that were rendered, coloured differently. This makes it very easy to make selections that otherwise would be time-consuming and tricky to achieve. This method of selecting objects will be used intensively while post-producing this image, in the next stages.



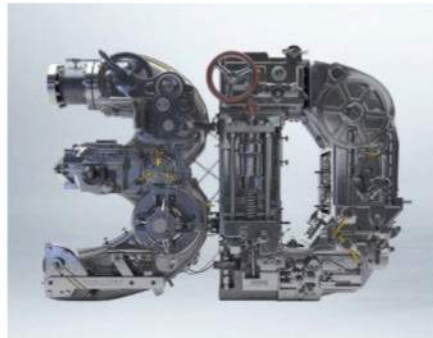
## 04 | USE THE ALPHA CHANNEL

The Alpha Channel is a black-and-white render pass, which allows us to create precise masking for our main object. Add the 3D raw render layer to a group, in this case called 3D. Then load the Alpha Channel in the document above all layers, go to the Channels tab and Cmd/Ctrl+left-click on the RGB Channel in order to make a selection. Go to the group layer and click on Add Layer Mask. It is better to have the main image in a masked group, because all the following layers that will affect the 3D render will automatically be masked.



## 05 | ADD A NEW BACKGROUND

To have more detail on the background, it is better to replace it with a real photo. The difference won't be striking, but the eye will perceive it as being realistic. Place the background image as a bottom layer, and tweak the layer by adding a Curves adjustment layer, in order to integrate it with the 3D mechanical type. The image seems to be a little bit desaturated all over, so add a new layer between the background and the Curves adjustment, filled with a light blue and set at low opacity and with Color as the blending mode.



### ■ QUICK TIP

You should always know what your limits are and how to achieve the best result in the most efficient way. In this project, a lot of time was saved by adding detail and illumination in Photoshop instead of trying to do it in 3D software.

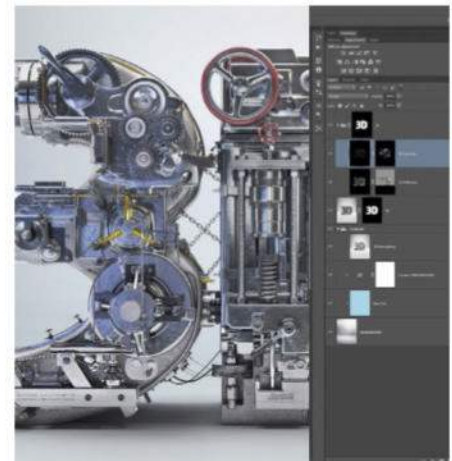
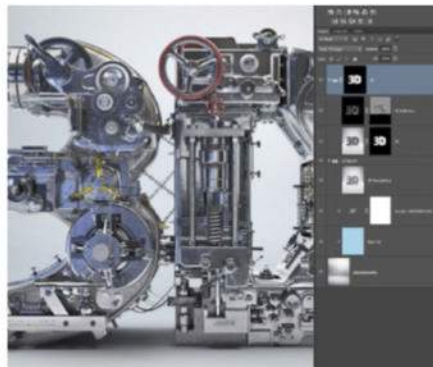
## 06 | ADD SHADOWS

The mask is also covering the shadows underneath the main object. 3D software allows you to render passes that contain just the shadows, but in this case the best choice is the Raw Total Lighting image. Add this to the document, above the background and under the 3D group, and choose the Multiply blending mode.



## 07 | USE THE REFLECTION PASS

The Reflection pass is widely used in post-production, and it can make your image really pop out. Add the Reflection image to your document in the 3D group, and choose Color Dodge as the blending mode. Screen mode is often used for this stage, but Color Dodge brought more contrast. The image now is overly bright, so you have to mask the Reflection layer and fill the mask with 50% Gray. Select the mask and go to Edit>Fill and choose 50% Gray. Now you can paint the mask with black where you think you need less reflection and with white where you think it's better to intensify it.



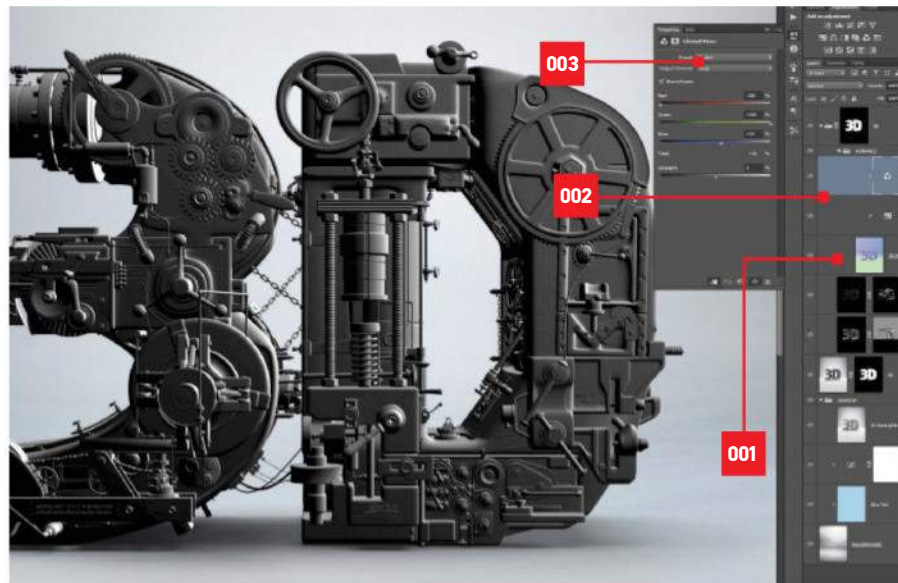
## 08 | ADD THE SPECULAR PASS

The Specular pass is a representation of specular highlights on the rendered surfaces. Similar to the Reflection pass, you can use it to bring out more some highlights of your rendered object. You need to blend this layer by using the Screen mode, which is most suitable in this case. But on other projects be sure to check more blending modes from the Lighten category, some might work better than others.

## EASILY CREATE ILLUMINATION MASKS BRIGHTEN AND DARKEN PARTS OF YOUR IMAGE BY USING THE NORMALS PASS

### 09 | USE THE NORMALS PASS

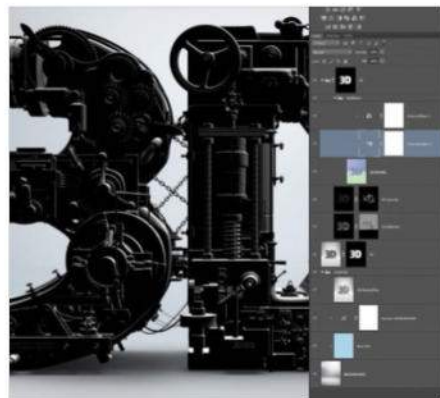
This render element is a 2D representation of the 3D objects, based on the normal angle of the camera. The image is made up of tones of red, blue and green, which represent the axes of the tri-dimensional space (x,y and z). Although often ignored, it can be used to easily create masks, being based on RGB values.



**001 | Place the Normals pass**  
Place it as the top layer in the 3D group. We will make masks with it, so it is better to sit at the top so it is easy to access throughout the rest of the process

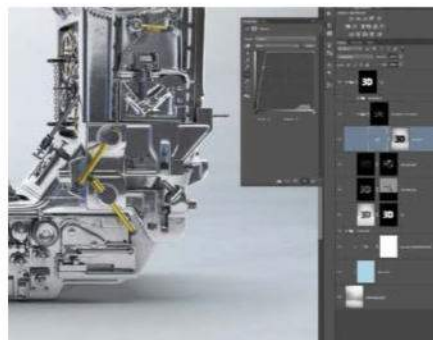
**002 | Add Adjustment Layers**  
Link a Hue/Saturation adjustment layer to the Normals pass, and also add and link a Channel Mixer adjustment layer above it

**003 | Adjust the Channel Mixer**  
Set the Channel Mixer on Monochromatic and reduce the Red value to the minimum, and then raise the Green value to the maximum setting



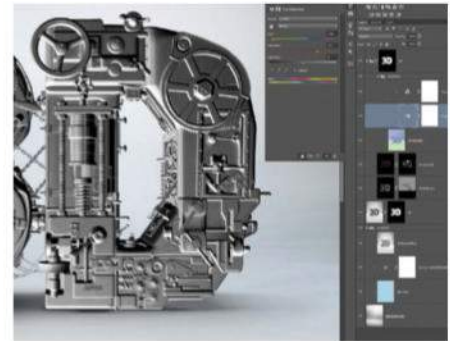
### 11 | OBTAIN THE DESIRED MASK

The image needs more light coming from above, and instead of going back to the 3D scene, making tests, rendering again and losing several hours, you can use this technique, and have an undestructive and controllable tool at your disposal. In order to obtain the desired mask, play with the Hue/Saturation options – the values that work best are +30 for Hue, +100 for Saturation and -30 for Lightness. You can see how the surfaces that face up are all covered in white, while the rest of the image is black, which means we can use this result to illuminate from above.



### 12 | PUT THE MASK TO GOOD USE

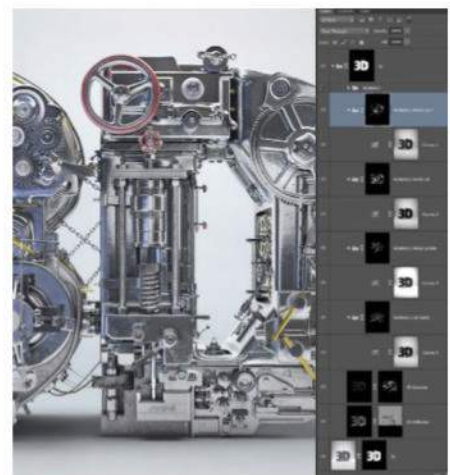
Go to the Channels tab, and click while you hold Cmd/Ctrl pressed on the RGB Channel to select the white parts of the image. Go back to the layers, deactivate the Normals layer, and add a Curves adjustment layer while you still have the selection active. Pull the curve up to the maximum, and you can see how the object gets brightened just as it was intended. The image looks overexposed in some areas, and also some regions might be better off without the Curves adjustment. Therefore, group the Curves adjustment layer and add a layer mask to the group. Invert the mask and paint with the brush only where you want the adjustment to affect the image.



### 10 | CREATE MASKS WITH THE NORMALS PASS

The Channel Mixer already offers a greyscale mask, but in order to have full control of this technique, you have to use the Hue/Saturation adjustment layer. As you move the Hue slider, the image changes, just like if there is a light source that moves around the object. Also, both the Saturation and the Lightness sliders can be used in order to play with the contrast of the mask. This technique is extremely efficient, because you can rapidly create masks to act from whichever direction upon the rendered object.

“Always group your adjustment layer and add a layer mask to the group to paint over it, so that you can have maximum control over your work”



### 13 | REPEAT THE PROCESS

You can always reactivate the Normals layer and tweak the Hue/Saturation settings until you get other useful masks. You can direct your curves to affect surfaces from every side you wish, and you can also darken areas, not only brighten them. Always group your adjustment layer, and add a layer mask to the group to paint over it, so that you can have maximum control over your work.



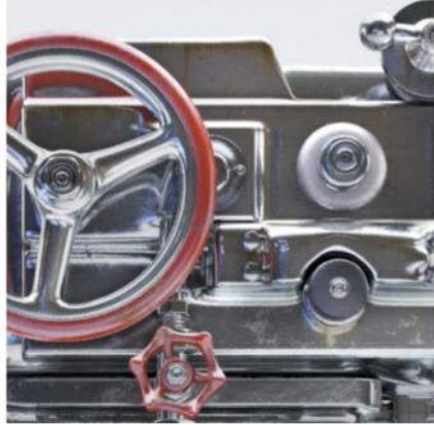
## ■ ADD DETAILS WITH TEXTURES

### BLEND TEXTURES OF RUST, GRUNGE AND SCRATCHES TO BRING REALISM



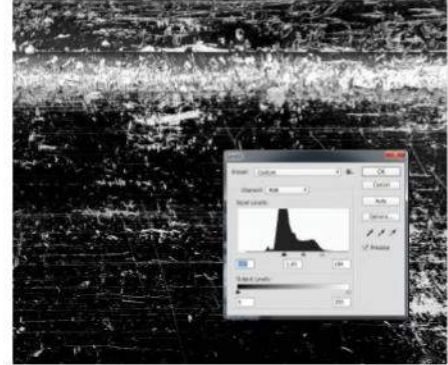
#### 14 FIND THE SUITABLE TEXTURES

The image has some detail of extensively used and grungy metal, but it lacks some logic in its wear. To achieve that feeling, the best way is to add some rust leaks, some edge wear and scratches. To do this directly from 3D would consume a lot of time. Besides that, adding this sort of detail in Photoshop has the advantage that it is not destructive and it is easy to control. A great source for textures is CGTextures.com, a website that offers a wide array of images, which can be accessed for free. We downloaded a PNG decal of rust leaking, which has enough variation and information to be used all over the image.



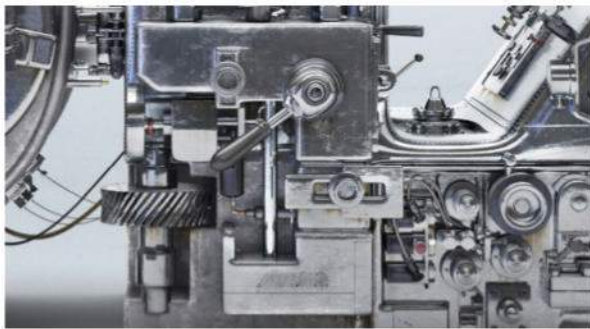
#### 15 ADD RUST LEAKS

Before starting to add the leaks, you should identify the best spots to add them: under objects, at joints between objects, at the top part of some objects. After placing the texture, you should use the Wire Color pass, and select with the Magic Wand the object you wish the texture to be applied to. Mask the texture with this selection and paint with black on the mask covering parts of the rust leaks. Repeat this process until you cover all the places you think there should be leaks.



#### 16 PREPARE THE TEXTURE

For this process, I downloaded another texture from CGTextures.com. This image is suitable because it contains both a grungy worn edge and also some scratches. Now the image is coloured and cannot be blended, so you should desaturate the texture and add contrast to it. In order to do this fast, while you have the texture layer selected, press Cmd/Ctrl+Shift+U to desaturate the image, and then Cmd/Ctrl+L to bring up the Levels adjustment. Now pull the white and black Input Levels sliders closer to the centre, until you have quite a contrasted texture to use.



#### 17 ADD EDGE WEAR AND SCRATCHES

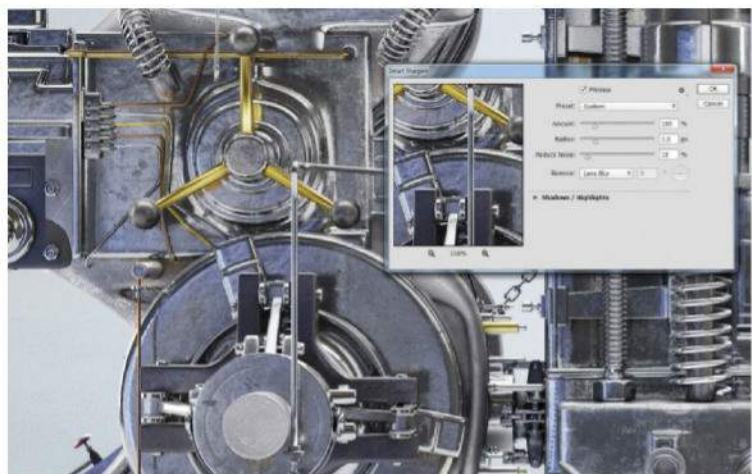
The texture is ready to be blended, but you should first make a plan and think where this effect should appear: on the edges, at some joints, and the scratched part on some plain surfaces that lack detail. Place the texture where you think it suits best, and choose Multiply as blending mode. Make a selection by using the Magic Wand and the Wire, and add a layer mask to the texture layer. Now you can paint with black on the mask and keep only what you think is necessary to look good. Repeat the process and apply the texture wherever it suits the purpose.

#### ■ RENDER PASSES

This tutorial explains some techniques and the use of some render passes in order to enhance your rendered image. These techniques, though, might not work in the same way on every project and could need some more tweaking. There are also some more render passes that can help you in post-production, to add depth of field, fog and other effects, that can also enhance your images.

#### ■ QUICK TIP

Keep a balanced eye and don't over-edit your image. Especially in CGI post-production where you have all these helpful rendered layers, you might be inclined to add and blend layers too much. Always play with opacity, mask your layers and keep things as natural-looking as possible.



#### 18 SHARPEN AND SAVE

The image is almost finished, and it looks much better than the raw render. Before saving, it is better to sharpen the image a bit, especially if the image is made for print. Flatten the image, by going to Layers>Flatten Image, and then go to Filter>Sharpen>Smart Sharpen and choose some small but effective values, like 100% for the Amount and 1.5 for the Radius. Now the image is ready, so you only have to save your image and enjoy your finished work!

# Digital painting

Compose stunning portraits and lavish fantasy landscapes with just a swipe of your digital brush

## 94 25 matte painting tips

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“Be sure to work with  
colours that aren't  
too contrasted and  
work well with your  
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# 25 MATTE PAINTING TIPS

FROM THE BROADEST CANVASES TO THE TINIEST DETAILS, THE HISTORICALLY ACCURATE PAST TO THE MOST IMAGINATIVE FUTURE, THE PHOTOREAL TO THE FANTASTICAL – BEING A MATTE PAINTER IS A VARIED AND CHALLENGING CAREER

## 01. BE INSPIRED AND FIND YOUR NICHE

TOMÁŠ MÜLLER REVEALS WHAT HE'S BEEN INSPIRED BY, AND HOW HE PUSHED HIMSELF TO BE A BETTER PAINTER



**Keep it simple:** Müller says he still finds the pre-computer era most interesting even today because “old matte painters had to be real masters in classical artistic techniques, drawing photorealistic painting.” And this means he doesn’t like to rely on filters or plug-ins: “I’m always trying to keep my workflow as simple and effective as I can. Even for painting I avoid customised brushes. What I am using a lot are my 3D skills. I’ve been working in 3Ds MAX with V-ray render for many years.”



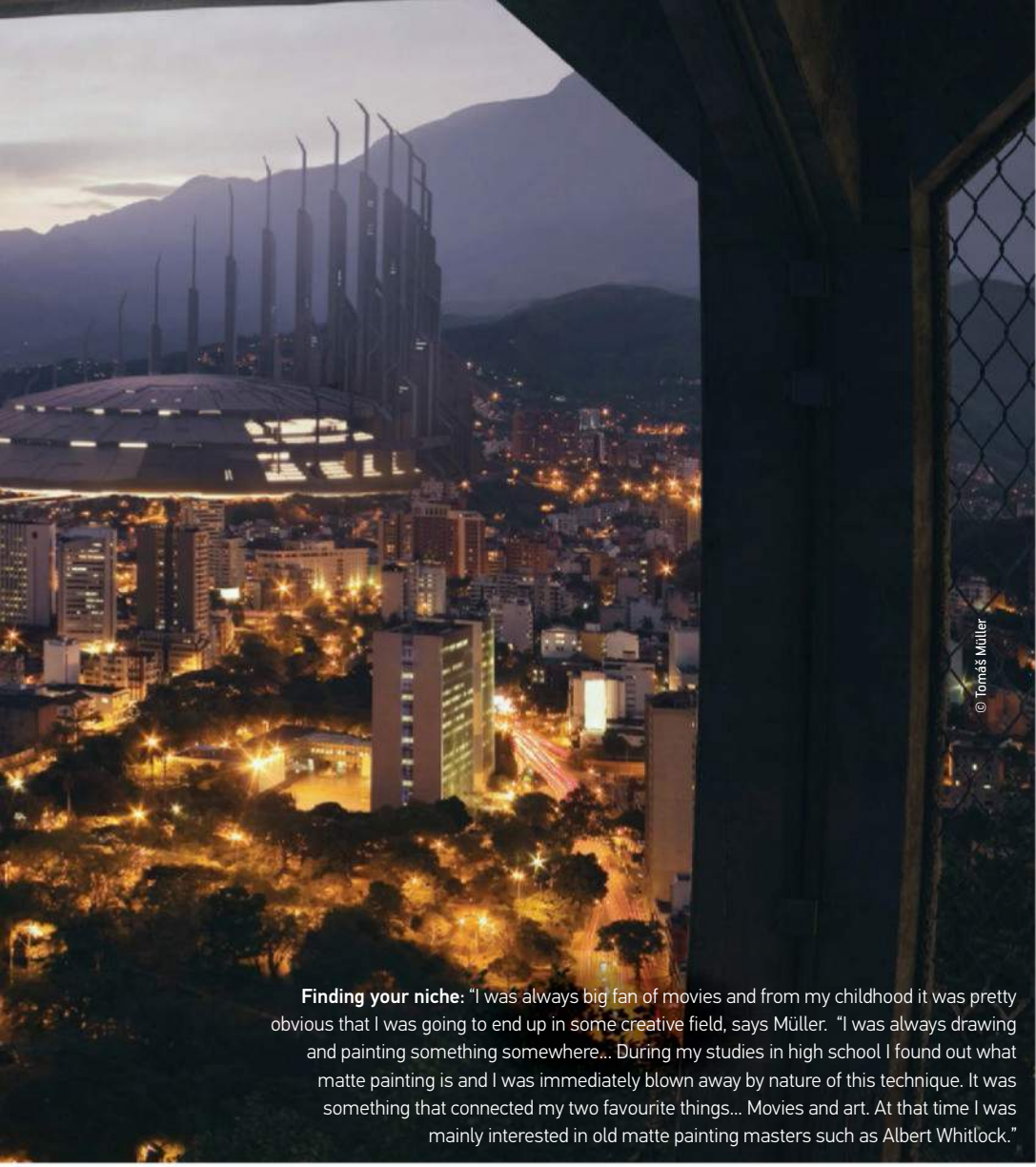
**Matte painting for MANGO:** Science fiction environments are Müller’s favourite to paint. “Once I saw *Star Wars* for the first time as a kid I was totally lost. So it’s a real joy for me when some sci-fi related project finds its way to my table. I also like to work [on] historic movies, because it is more specific, you need to be accurate and follow real historic designs, architecture, events, shapes. So you need to study a lot... which I enjoy because it’s not only about work, you also learn something interesting in the process.”



## 02. PUT YOURSELF IN THE RIGHT LIGHT

When big productions are hiring matte painters, they're looking for great artists certainly, but they're also looking for team players. "A good matte painter would be able to see where things are off," says Christian Kugler ([www.matteartist.com](http://www.matteartist.com)). "[They should also know] how long it would take to fix things, and know how to navigate their way around situations that really push limits. In terms of technical and artistic foundations I look for someone who knows whatever software they use to the best of their ability. They should know shortcuts or hotkeys, how to find the horizon and set up perspective, know their black levels, work as non-destructively as possible, know how to set up their computer for the best workflow possible, know how to find good useable reference and source images for their work, and have a good attitude to go along with it all."

"Being open to critique and knowing how to navigate through difficult shots certainly helps, as well as having a really good sense of knowing when things look right. It is also super important to know when to ask for help, as well as to pick up on other techniques and ideas that can help further you along. Observation is super important as well, seeing how light interacts with each surface and knowing how to balance your work out to really make the right first impression. An individual only has a few seconds for something to register so if the shot does not work right off the bat, then chances are there is something off. Learning how to create super awesome masks is essential as well."

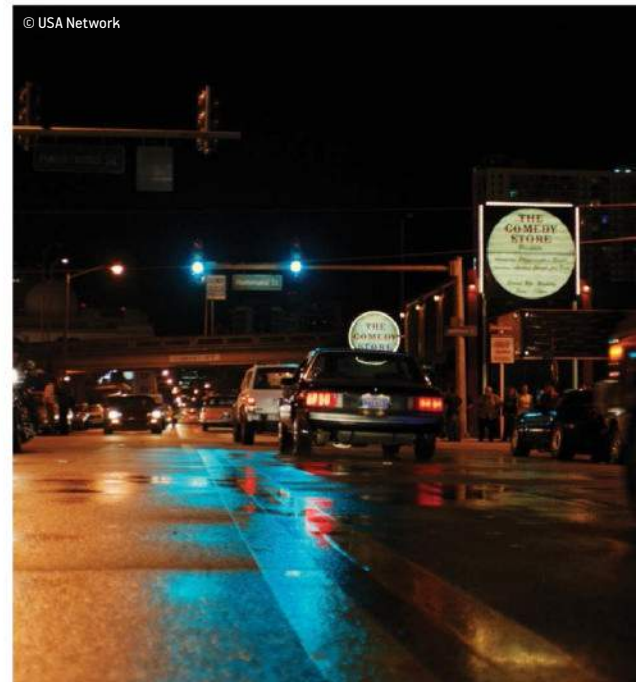


**Finding your niche:** "I was always big fan of movies and from my childhood it was pretty obvious that I was going to end up in some creative field, says Müller. "I was always drawing and painting something somewhere... During my studies in high school I found out what matte painting is and I was immediately blown away by nature of this technique. It was something that connected my two favourite things... Movies and art. At that time I was mainly interested in old matte painting masters such as Albert Whitlock."

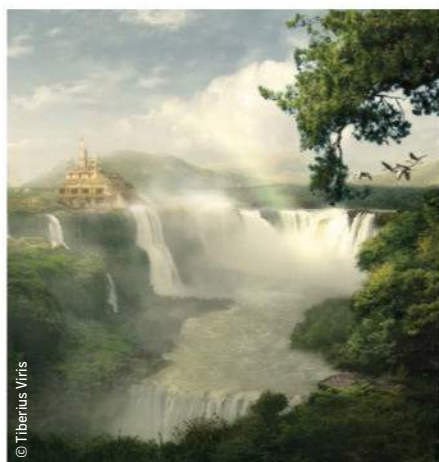


**Push yourself:** For Müller, every project is challenging in one way or another. "I love challenges," he says, "Everyone wants to grow and learn to become better [and] faster... Without challenges that is not possible. The most significant parts of my career were always connected to projects I was afraid to take because I was not sure if I was capable of them. But I never regretted taking projects that were too big or too complex. It always pushes me beyond my current limits."

© USA Network







### 03. REVEL IN RESTRICTION

"When working for movies (or even TV shows)," says Tiberius Viris ([www.tiberius-viris.com](http://www.tiberius-viris.com)), "The colour, perspective, mood and so on are often already decided in pre-production and you need to follow specific concept art and layouts. Sorry to burst your bubble guys, but in reality more than 80 per cent of the work you will do as a matte painter will involve bringing those concepts and layouts to a realistic level. That means you have little creative freedom and your success will rely solely on your photorealistic eye and knowing how to bring a concept to life."

But it's by working within those guidelines that the matte painter can really shine. "You usually follow a concept art or layout pre-viz that already sets your overall composition, perspective, colour palette," adds Viris, "and you also have access to sequence footage or even precomps that give you a good idea on how everything will work together. [It] might seem restrictive, but working in a team is a lot of fun!"



### 04. IT'S ALL IN THE DETAIL

TOMÁŠ MÜLLER'S WORK PERFECTLY DEMONSTRATES THE COMBINATION OF SCOPE AND DETAIL THAT GOOD MATTE PAINTING MUST HAVE



#### 01 BUILDING BLOCKS

Tomáš Müller ([www.tomasnuller.com](http://www.tomasnuller.com)) was inspired to create this painting, called *The Building Blocks of the Universe*, by a speech in sci-fi smash *Battlestar Galactica*. His workflow always starts in the same way, with sketching and figuring out perspective and composition.



#### 02 RESEARCH AND 3D

Once he has a sketch that represents the final alignment of objects in the scene, he starts researching. "With matte work you need not only the painting itself but also lots of photo references and in a lot of cases you need to create some 3D. So first of all I decide which parts of image are going to be produced in 3D, what calls more for digital paint and where I'm going to need photos."



#### 03 GROUND YOUR IMAGINATION

"Then I'll prepare all the photos, textures and other resources and sort them out," says Müller. "After that I can create 3D parts first, if there are any. Once I have 3D parts rendered I can finally focus on painting and assembling all parts of scene together." In this image, see how the crunchy detail in the foreground anchors the rest of the piece.

© Tomáš Müller

### 05. DO YOUR RESEARCH

Finding reference material can be tough: "There are not a lot of image banks that suit the need of a matte painter," explains Christian Kugler. "But usually for feature and commercial work, a lot of reference will be shot, and depending on the circumstances and the quality those really can prove helpful. If you are basing your work off a plate then your best reference is to always match the plate. That is super important for each project. If you are creating from scratch then if it is part of a sequence use lighting as a point of reference to help guide you along. When I first approach a shot and I am asked to do a concept or put something quick together I try to keep it as loose as possible without sacrificing quality. These days there is not enough time for revisions so it is best to have the closest representation to sell the shot as quickly as possible."





© Max Dennison

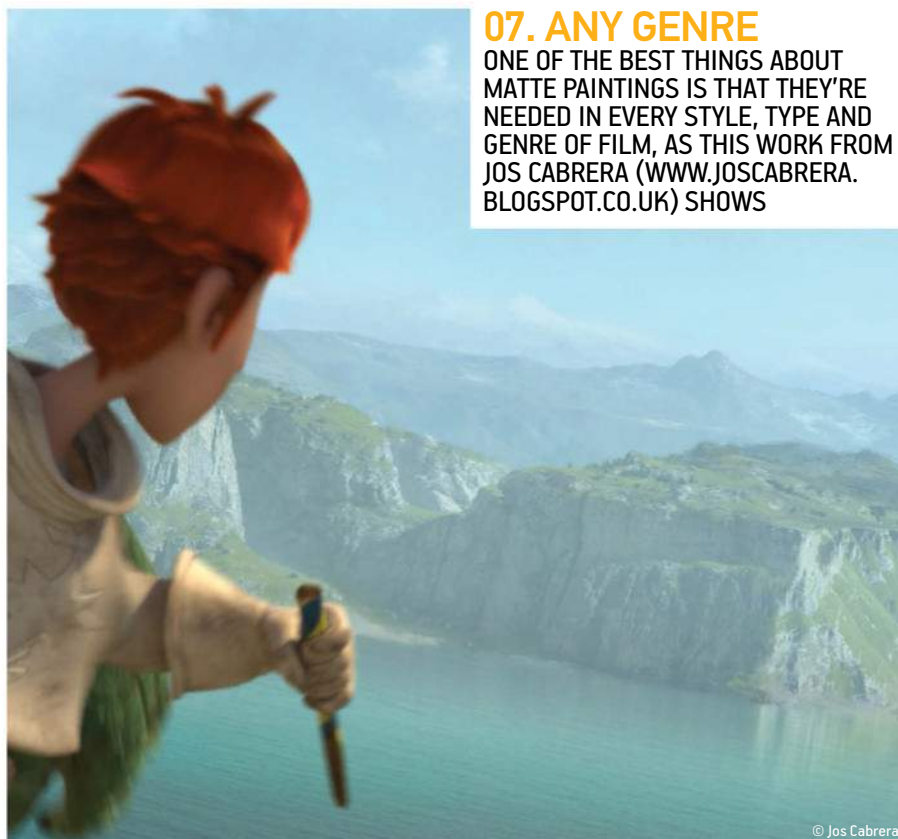
## 06. LEARN FROM THE BEST

Matte painting veteran Max Dennison ([www.maxdennison.com](http://www.maxdennison.com)) first came across what would become his career when he was at college and read *Industrial Light and Magic: The Art of Special Effects*. Years later he started work at The Magic Camera Company at Shepperton. He explains, "Doug Ferris was the resident glass painter at the time along with Roger Gibbon who had just started painting digitally. I used to sit

with Doug and John Grant every day learning all that I could and watching them work."

"Matte painting is the art of creating the invisible," he continues. "I used to watch Doug paint photoreal scenes merely using light, tone, texture and composing shots with extraordinary visual acuity. The Matte Painters over at ILM (two of whom are still there) Paul Huston, Yusei Uesugi, and formerly Michael Pangrazio for

example, would work in a similar manner and their work exemplifies the level to which a matte painter should aspire to. A matte painter should first and foremost be an artist. Instinctively they must be able to draw, they must understand colour, depth, light, composition, perspective and the visual language of film. In other words, they should be able to manipulate the screen to best effect, not just fill the canvas with detail."



© Jos Cabrera

## 07. ANY GENRE

ONE OF THE BEST THINGS ABOUT MATTE PAINTINGS IS THAT THEY'RE NEEDED IN EVERY STYLE, TYPE AND GENRE OF FILM, AS THIS WORK FROM JOS CABRERA ([www.joscabrera.blogspot.co.uk](http://www.joscabrera.blogspot.co.uk)) SHOWS

**Get started:** To the young artist, interested in getting into matte painting, Cabrera has a simple piece of advice: "I would tell them to pay more attention to reality over photos or other artists' paintings."

**Understanding:** Judging when an image is done and when it has enough detail is a judgement call. "I think it's done when all is understandable," says Cabrera. Painting used to take him anything between three and ten days, but these days he is much faster.

**Knights of Valour:** This was Cabrera's first step into matte painting for the 3D animated movie *Justin and the Knights of Valour*, for Kador Studios. He credits Jose Maria Guadalupe and David Muñoz Velazquez for allowing him to hit the ground running.

**Realism and narrative:** If he had to describe his style, Cabrera would say it was "realistic, having a special focus in the descriptive and narrative/storytelling, not so much in light and visual impression."

**Photoshop fix:** Cabrera is advocate of the Layer Style menu and the Transparency Blending Slider in that menu: "That's a really powerful tool for all kinds of mood and atmosphere work. Through that tool you can add unexpected or kind of random effects that will hopefully open new paths in the creative process."

**Establishing history:** When building a career, it can be beneficial to have a speciality. "I've made a career out of historical paintings, mainly ancient and medieval," says Cabrera, "but in no way is that my favourite thing to paint."



© Tiberius Viris

## 08. FOOL YOUR FRIENDS

Tiberius Viris says that anyone who wants to be a matte painter should work to understand photography. Then, when you start practising, "don't go for complex fantasy or sci-fi environments and instead focus on set extension with real world plates. For example, take a photo of an existing city and see if you can add or remove buildings while keeping it realistic. Then see if you can change the time of day – day to night or morning to evening. [The] best way to check it is to show it to your friends and see if they think it's a photo or not!"

"I personally think detail should be the last weapon in your arsenal, unless it is actually required. As matte painters we are creating the illusion of reality by trying to trick the brain into believing that what it sees is real. And when it comes to tricking the brain, detail is only a subtle, secondary accent, whereas light, perspective, scale and proper levels are the ones that make or break your illusion."

© Tomáš Müller



## 09. WHAT MAKES A GOOD MATTE PAINTER?

It's a hard question to answer, just as it's hard to sum up what makes a good artist of any kind. But as Tomáš Müller explains, there are certain things that a matte painter does need to be able to do. "We all have our own way of how we perceive things, how we imagine and create," he says. "In [the] most general sense it's always imagination that is most important, but for matte painting there are also other things that matter a lot, like the ability to look at your work and see if it is really

finished or if it needs changes or improvements, especially in the case of projects that are supposed to feel photorealistic. Every project is different sometimes you need to use different types of stylisation, sometimes you have more freedom other times you are bounded by a strict brief. So versatility and ability to emulate different moods and styles is handy as well.

"When I do my personal works I have my own approach and ideas I like to visualise," he adds.

"With commercial jobs it's completely different, because you need to follow someone else's direction. So in my personal work I'm trying to keep it in line with my personal taste and style. In commercial work I'm trying to keep my personal approach but also offer the client exactly what they requested and need. I'm always happy when a client is open to discussion and when I can be part of [the] creative process behind overall style of shots and visuals that I am producing."

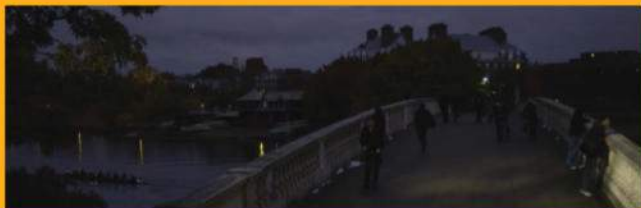
## 10. WORKING WITH PLATES



Christian Kugler, who worked on *The Social Network*, says "Each project has a unique set of challenges, whether it is time, money, reference, plate quality, difficult perspective, or human error. For each one my approach is a bit different but they all require patience and perseverance."



Kugler explains, "Compositing is really important, so having a good working relationship with the compositor of your shot is key in working towards a finished version... It is essential to know that the layers are being updated and fixes implemented."



Movies are a group endeavour, "Most of us work on set extensions, patches, fixes, or being part of a sequence where the hero shot is done by a senior artist. When you get to that level then you are able to have more of a say about lighting and other decisions."



You must keep your artistic skills sharp. "Study the work of accomplished matte painters and concept artists. Keep your work fresh and mix things up. Study anatomy, colour and design, 3D, architecture and anything else that can help give you solid foundations."

©Christian Kugler





© Tiberius Viris

## 11. GET IT RIGHT, GET IT REAL

"Even though, over the past years, our role shifted more and more towards 3D, I still think that the most essential trait for a matte painter is a keen photorealistic eye," says Tiberius Viris, who has *Cloud Atlas* and *Arrow* on his CV. "Understanding depth of field, atmospheric perspective and how light works and interacts with the environment, are all part of what makes a good matte painter. I use to joke that matte painters are the human counterpart of a render engine with the added feat of creativity!"

According to Viris, there are classic mistakes that people make that spoil the realism of otherwise beautiful work: "I think the most important aspects that contribute to the illusion of realism are perspective, scale, light direction and black levels. If any of them are wrong, compared to other elements around them, the brain will immediately know the image is fake. For example, placing a house that is lit from the top at noon in a town that is lit from a low angle in the evening.



© Max Dennison

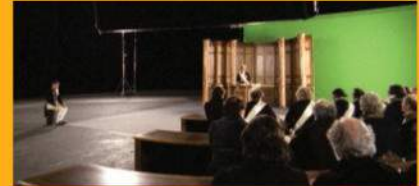
## 12. OPEN YOUR EYES

"A matte painter needs to be acutely aware of the world around them," explains Max Dennison. "I asked my students (those who smoke) whether they would be able to convincingly paint the flame from a lighter or match seeing as it is only two inches from their face any number of times during the day. This has yet to be achieved... Nevertheless, matte painting, is about gently telling the audience a story for three or four seconds. If you can't, then the painting has not worked. I always say to people who ask, that I haven't done my job properly if

the audience notices it." You have to be acutely aware of the realities of digital painting too, especially the length of time it takes to complete it properly. "As I've got older," Dennison adds, "I've become quicker as I know the tricks to get from A to B by the shortest means. That said, the longest time I've ever spent on a painting was five and a half months, which was painful to say the least. Nevertheless, although speed is a significant factor in modern day VFX production, it is entirely relative. What is important is that the final painting works."

## 13. THE OBSTACLES

TOMÁŠ MÜLLER WORKED ON THE HISTORICAL TV MOVIE *CHATEAUBRIAND*. HE EXPLAINS SOME OF THE KEY CHALLENGES



### 01 | BE CLEAR WHAT'S NEEDED

Your matte painting is only one part of the puzzle. Müller says he "always needs as much information as possible... All the technical information about camera, optics, settings, events happening in a scene, movement, mood and light. There is usually a lot of information."



### 02 | DISCOVER HOW MUCH DETAIL

Müller enjoys learning when working on historical projects, and obviously *Chateaubriand* required a lot of research into the period. He says: "Generally matte painting needs a lot of details, especially if it supposed to feel real. For movies I'm always preparing matte paintings 2x bigger than the actual size which is used in movie. That way I can make sure that I'm able to paint and tweak even [the] tiniest details without losing sharpness and definition of shapes."



### 03 | PLAN YOUR TIME

"Usually the amount of details and other information is discussed with the client before start of work," says Müller. "Production time is very dependant on techniques used, resolution, nature of the shot and many other things and it can vary from a couple of hours to days, and in some cases even weeks."

© Tomáš Müller

## 14. PROJECT FROM THE BEST POSSIBLE FRAME

Christian Kugler says, "I start by seeing if any concept or reference is to be used as a framework. After going over that with the supervisor or lead and production, I will come up with something that presents my vision of what I can bring to the table along the lines of what has been discussed. If it is a 2.5D shot where there is parallax involved then camera tracking is needed and projections need to be set up. It is super important to set up your projections before you start painting so you can go forward with confidence in knowing what you are

doing is right. Projections can either be super complicated, or very easy. It all depends on the camera movement. Whether the camera is locked or moving, you pick a frame, or several if it is a moving shot, and build your shot from the best possible frame. If it is a projection then you build your shot around the best possible frame[s] to project onto. After you bring that into Photoshop you set up your perspective and come up with a basic concept, or utilise something that has already been built. Much of the time you could

just be helping out with a sequence and the shots have already been done. In that case it is wisest to just use as much as possible from the other shots as a starting point, or at the least a guide to point you in the right direction. Once you have a solid direction with lighting and perspective established, it just becomes a matter of finding good reference or shooting it yourself. There are many advantages of both. Time, location, resources, and the type of shot will dictate how I go about it."



## 15. POLISH YOUR PORTFOLIO

If you want to be hired as a matte painter, you need to build a solid portfolio of work. "It doesn't have to be official production work," says Max Dennison, "but it must be matte painting, and it must not exhibit a slavish use of photographs." He adds that the best piece of advice he can offer to any aspiring matte artist is "to practice and paint as much as possible." But think about what you choose to paint too. He explains that he prefers to see "a simple painting exhibiting a thorough understand of painting. Invisibly removing a building from an image, replacing it with something completely different, rather than a city in the sky or a supersized extraterrestrial cavern or landscape. The former is 'matte painting', the latter is concept art."







© Tomáš Müller

## 16. KEEP IT CLASSICAL

No matter how outlandish the subject of your images is, like this personal work, *Tincan Showdown* by Tomáš Müller, the basic rules of composition and perspective still apply. In fact, they might be more important, and Müller says, “I am kind of strict about these things.” He explains: “Composition along with light and mood are [the] most important things for me in any work. At the beginning of each project I spend a lot of time sketching compositions and

different points of view until I am 100 per cent sure that what I have will work perfectly. I had a classic artistic education and that is something I use a lot in my work. Composition rules have worked the same for centuries and there are good reasons why it is that way, so it’s very helpful to take time and study all of it before you start to do anything. Once you learn how to use these rules without really thinking about them then you gain incredible freedom in your work.”

If he had to offer some advice, he’d say simply, “Draw, paint, study, study and study again. There’s a lot of information and skills in the world that you will need to use sooner or later. For the commercial part of this line of work I have only one piece of advice: know the price of your time but don’t do creative work only for money. You need to enjoy it in the first place, but that doesn’t mean you have to do anything for free.”



© Heather Abels

“When it comes to matte painting professionally, you don’t really have a style of your own,” explains Abels. “Matte painters are executing someone else’s vision to the best of your ability, but in a way that marries with the rest of the film, and the other matte painters you are working with.”

“While I did paint the entire background for these shots,” says Abels, “I had to paint knowing that there would be a lot of lighting and effects laying on top of my painting affecting the shot and ultimately making it look like we were under water.”

The matte paintings created for *Big Miracle* were used in conjunction with lighting and effects to produce these underwater shots.

“I had to paint the ice shelf with more contrast and no atmosphere to compensate for that integration, and then there was a period of back and forth where we all worked together to tweak our elements so the final image would appear as you see it in the film,” explains Abels.

## 17. WORK OUT HOW TO INTEGRATE

The path that led Heather Abels to matte painting began when she saw *Toy Story*. “I had no idea about any of the different roles that go into creating movies, but I knew I wanted to be a part of the process,” she says. “Sometime after that I caught an episode of *Cinema Secrets* hosted by the late Stan Winston. That’s when I realised that movie magic was a viable career, one I was eager to pursue. The first time I became aware of wanting

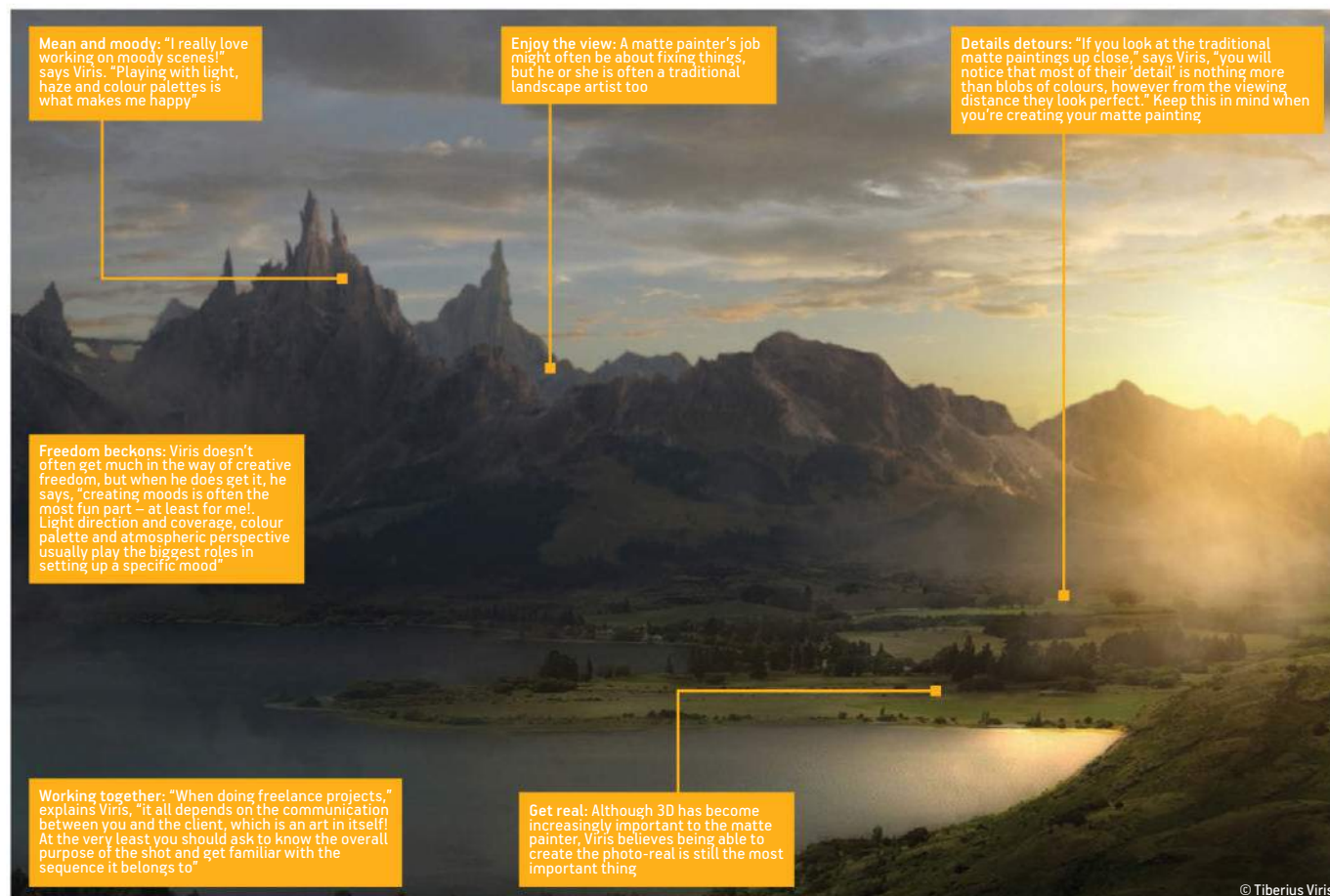
to be a matte painter was after picking up my first copy of *Cinefex* magazine. There was a story about the effects in *The Truman Show*, and the work that Matte World Digital did extending sets and creating amazing backgrounds. Even after working there, I’m still impressed by all the work they’ve done.”

As well as being matte painting department supervisor at Rhythm & Hues in California, Abels now also teaches for [www.cgsociety.org](http://www.cgsociety.org), so she

is accustomed to explaining how matte painting works. She says, “Feature film matte painting can be incredibly complex, and the integration of all the elements can be an intricately layered puzzle. Not only do you need to know what’s going to be in the shot, but you and the entire team working on that shot need to have a plan of attack on how all these elements will work together. The shots I did from *Big Miracle* are the perfect example of that.”

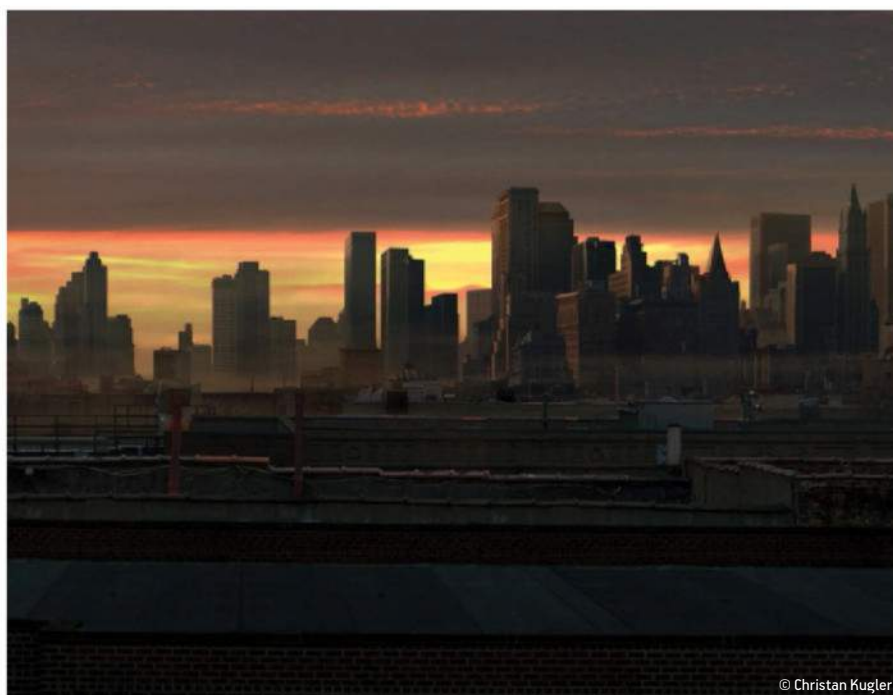
## 18. ATMOSPHERIC PRESSURE

ALTHOUGH BEING A MATTE PAINTER MEANS WORKING TO SET SPECIFICATIONS, A TALENTED ARTIST CAN STILL MAKE IT ALL COME ALIVE, AS TIBERIUS VIRIS REVEALS



## 19. KNOW PHOTOSHOP INSIDE OUT

"Photoshop is amazing," says Christian Kugler. "With recent enhancements several people could theoretically work on the same shot. I love the customisation of the brushes, and I am just starting to use the Brush app on my iPad. The Vanishing point filter is great for setting up perspective, and actions can really help speed your work along. I set up all of my repetitive tasks such as flipping the canvas, adding a new layer, defringing, resizing the image, and other helpful tasks as actions triggered by function keys. For my brushes I delete all of the ones that are not essential, as it can add a lot of time to sort through them all." Your hardware is just as important. Kugler advises that you "always use a tablet, even when working in 3D, compositing, or just surfing the web. There is a saying that the pen is mightier than the sword, but in this case I just go with saying the pen is much faster than the mouse. If you aren't used to working that way give it a few days or a week and you will see your speed greatly improve."





## 20. FOLDERS AND FLATTENING

"I don't know what I'd do without folders," says Heather Abels. "Keeping my painting organised in a folder structure helps me quickly and easily save out my painting for projection and rendering in 3D. I also really love using proofing LUTs to turn on and off ICC profiles to quickly evaluate my colour when working in other colour spaces."

She notes that when she's working on a matte painting, "I need to be able to quickly flatten a folder, save out my file and set off a render to see how it's working. This means that you can't always use modes like Overlay, Screen, or Multiply inside a Normal mode folder, because they won't flatten properly. A student of mine just

showed me that you can attach those layers with a clipping mask to an adjustment layer, like a curve with no changes, and then it will flatten properly. This has been an incredible time saver and opened up new opportunities for me to paint light in ways I wouldn't have attempted before!"



## 21. USE PHOTOSHOP, BUT ADD EXTRAS

"The biggest change I have made to my own workflow over the last five years or so is to paint exclusive in 32bit float," says Max Dennison. "Photoshop has the singular ability to allow users to do this without any appreciable loss of functionality, and the processes are perfectly suited and designed to work with 'film' in mind. It seems logical on many levels that Photoshop can do this especially as it is designed for wide gamut, multiformat image processing. Additionally, I employ many third party plug-ins, which are exceptionally powerful, for instance ProEXR, a multi layered OpenEXR file format from fnord software allowing direct and easy transfer of layers in 32bit float files to Nuke and other cross platform software. This is especially useful where importing multilayered PSD file formats may prove too difficult. Neat Image is a brilliant noise removal tool and Filter Forge, although with certain limitations, is very useful for bespoke texture production."



## 22. INTO THE THIRD DIMENSION

"A good matte painter now is more than just a painter," explains Heather Abels ([www.heatherabels.com](http://www.heatherabels.com)). "It's no longer enough to simply create beautiful paintings in Photoshop these days. Matte paintings have to translate into three dimensions, in stereo, with parallax, and in some cases into high dynamic range. Matte painters have to be decent environment generalists to capitalise on the great technology and software out there to be as efficient as possible. A good matte painter should be able to

produce great paintings, that are organised, but it also helps to be able to model light, texture, and set up digital worlds as well as creating your own digital projections."

Abels continues that all the matte paintings she's worked on lately have had to work in a 3D stereo environment. "Before I start painting I take the time to make sure all my projections and cameras are in place to meet the technical requirements of the shot. This includes deciding how many layers I'm going to need to project and organising my Photoshop file

into folders that represent those layers. I generally try to come up with a plan with the lighters or composers so that we are all working toward a common goal. If there are any foreground CG elements, I'll mask them out in my Photoshop file so we aren't distracted by any unfinished elements. I make sure to organise my file in a folder structure that matches what I need to project on, and do a test render just to make sure I have the coverage I need. Then it's time to paint. I try to get feedback as quickly as possible before polishing the details."

© Disney



## 23. FROM BIG TO SMALL

"Like most matte painters," says Heather Abels, "I enjoy big establishing shots, or the giant landscapes. Any time I get a shot that gives me nervous butterflies, I know I'm going to have a good time. I love working on architecture, and I really enjoy researching and painting on period pieces. Beyond that, I really enjoy adding the final details to shots, painting lighting in, creating shadows and tiny glints and reflections." Knowing how much time to devote to the tiny glints and reflections is key. "Matte paintings are as varied as films and can range from simple projected patches to entire 3D environments that need to work for an entire sequence," says Abels. "This means that a painting could take a couple [of] hours, or many weeks depending on the complexity and technical requirements of the shot. The best way to know if you are on schedule is to ask the producer, or your boss."

© Heather Abels







## 24. PUT THE DEVIL IN THE DETAILS

Colour, perspective and detail are all key when it comes to professional matte painting. "Colour and perspective are derived from reality," explains Max Dennison. "Perspective is either right or wrong and the audiences' eye will very quickly pick that up. Colour comes from nature. If you research your theme well, you'll be able to put the right colour in the right place at the right time." But how much

detail to put into an image often stumps even talented artists. "This needs to be done with good judgement, experience and an awareness of screen space," Dennison explains. "Often, students of matte painting will labour for days or even weeks filling the screen with unnecessary detail. However, the eye is extraordinarily intuitive. A good matte painter can lead the eye around the screen

and keep it in one position for the entire length of the shot. That means that you only put detail into those areas where the eye travels. Everything else is superfluous. I once watched Doug [Ferris] and John [Grant] at Magic Camera 'muddy' up a colleague's painting after he had left for the night because it was too crisp with detail which ultimately wouldn't photograph correctly."

## 25. PITCH A PAINTING

**MAX DENNISON WAS THE HEAD OF MATTE PAINTING FOR WETA ON THE LORD OF THE RINGS TRILOGY. HE EXPLAINS HIS APPROACH TO A NEW MATTE PAINTING**

**A vision to follow:** Dennison explains that "Nine times out of ten, we will have a live plate – the live action component which has been shot by the production. Additionally, we might receive some concepts or layouts from production or editorial which are loosely put together with the director's approval"

**Rough it up:** This loose rough version, created "with a thick brush in Photoshop gets me efficiently onto the right track," says Dennison, "but it also allows the client to approve something and buy into an idea before too much effort has been employed. Design is a collaborative process and client involvement at this stage is very important"

**Invisible objects:** "I've painted a lot of things in my time," says Dennison, "planets, cities, castles, skies, clouds and so on. But I guess I prefer to paint things that are natural and invisible. The greatest enjoyment is to know that I've fooled the audience and kept them suspended within the story"



**In your mind's eye:** "Some clients are very happy with a first pass," says Dennison, "but others like to explore a range of options first. However, my process is to describe a concept as 'shot on film'. What I mean is that the concept should strictly adhere to the same rules as the final painting. Perspective, colour, composition, lens and photographic constraints, and most importantly exposure are vital at this stage"

**Holistic approach:** "I'm not sure I have a style," says Dennison, "but I expect that others might say that I do considering that I can tell other painter's work a mile off. What I try to achieve is a holistic approach to my work. Design is my starting point. I mock up very quickly a rough [version] of my matte painting," he explains of his work

**Freedom to create:** "Other times," he continues, "we will get nothing except a loose description of the shot: '...A mountain, with some snow at the top and a lush jungle at the bottom'. The latter method, for me, is probably the best as it allows the matte painter to express their own unique creativity. With an artist's instincts and foreknowledge of what will work in such a situation, the matte painter can conjure up something far more visceral and believable..."







# TURN PHOTOS INTO PAINTINGS

LEARN HOW TO TURN STOCK PHOTOS INTO COLOURFUL AND VIVID WATERCOLOUR STYLE PAINTINGS

In this tutorial, you will learn how to take separate photo images and turn them into a colourful, watercolour style painting. A combination of layer effects, filters, layer masking and general creativity will bring the art to life. A graphics tablet with pen pressure capabilities will be needed as a majority of the tutorial will require brush strokes and opacity that a mouse cannot easily achieve. Stock photos will be used as an integral part of the artwork, but both premium and free stock is readily available to find and use online. The main image can be purchased from **Dreamstime.com** (code 37368747); the flowers can all be downloaded for

free from **www.freeimages.com** (search petals, poppies and wildflowers), and the background paper texture can be downloaded for free from **www.**

**CGTextures.com** (filename PaperDecorative0026\_3\_L).

Inspiration for this tutorial stems from the look of traditional watercolour on textured paper, combining it with the myriad colours and techniques available for digital mediums. Photoshop simplifies the process of prepping photo files, while supplying the tools and methods needed to create manually. This tutorial requires only a certain styled brush that can be used for more watercolour projects in the future.



## OUR EXPERT

**GENEVA BENTON**  
GenevaB.com

Geneva Benton is a self-taught American artist who creates for a living and as a way of self expression. She prefers to use bright bold colours and organic shapes.

## SOURCE FILES

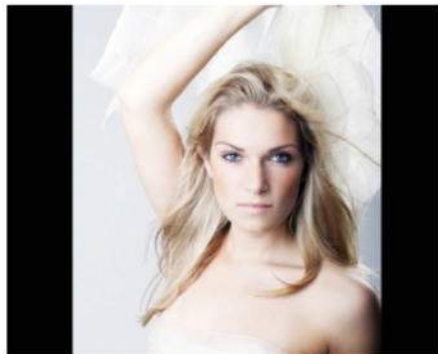
On FileSilo is a single brush .ABR file that can be used for the majority of the tutorial steps. The brush can be edited to the user's needs.

## GET STARTED WITH STOCK

USE STOCK PHOTOS TO LAY DOWN YOUR FOUNDATION

### 01 SET UP THE FILE AND BASE

The aim is to turn photos into a watercolour illustration. First, create a new document (File>New), at least 1500 pixels high and wide, at 300DPI. Fill it with a paper-like pattern or image. You can create your own, use a pre-made stock, or use a pattern. In this tutorial, a stock paper texture is being used.



### 02 ADD THE WOMAN

The next step is to bring in your stock image. The subject of this art is a woman with flowers decorating her hair and clothing. On a new layer (Layer>New>New Layer) bring in your stock photo of a woman and fill the entire document with it (Edit>Transform>Scale). We will mask her for the background in a few more steps.

### 03 ADD THE FLOWER SNAPS

Next is to bring in your flower stock photos. On a new set of layers, cut out or mask out the flowers (Layer>Layer Mask>Reveal All) and separate petals from your stock photos and layer them over the top of her hair, bandeau, and cloth. To create variance and volume, you can continuously copy and paste flower bits and petals.

## WORK IN PROGRESS

FROM STOCK TO FINISHED ARTWORK



Progress 1: Set up stock photos



Progress 2: Colour over stock photos



Progress 3: Finishing touches



**04 RECOLOUR THE FLOWERS**  
Continue to layer your flowers and petals. Do not fill the intended areas completely with stock, as it will be filled with simpler brushed petals in future steps. Mask off or erase any areas of the flowers that are not completely clean, and group the flower layers together (Layer>New>Group). Merge the group together. Next, desaturate your merged group (Image>Adjustments>Desaturate), then recolour it to an aesthetically pleasing matching red colour (Image>Adjustments>Hue/Saturation).



**07 SET UP TO COLOUR IN**  
Once your new linework is cleaned up, set the layer settings of both layers to Multiply. You should be able to see the flowers and woman underneath. Next, duplicate the woman layer again underneath the original, and fill it (Edit>Fill) with a neutral colour matching the background. This will be the base when masking inside the main layers. The next several steps will be focused on detailing the woman. Create a new group for the woman layer only and attach a blank white mask onto this group.

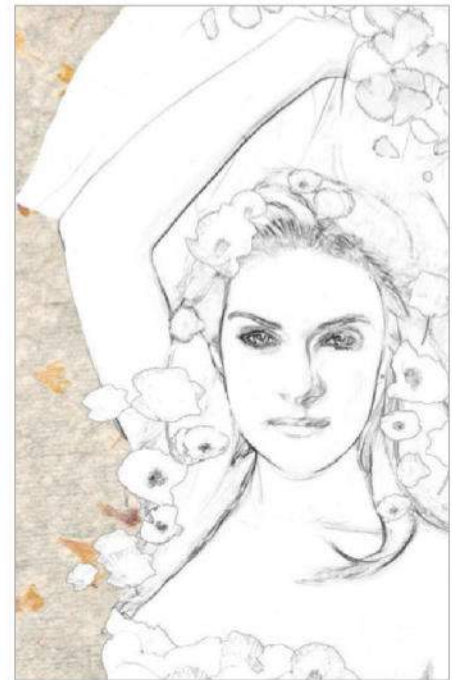


**05 MASK FOR THE BACKGROUND**  
Next, time to clean up and mask your female stock photo. To get a crisp, accurate mask, use the Pen tool (P). For smaller, more detailed areas, use a small Hard Round brush (B) in combination with a tablet. The goal is to show the earlier paper texture base underneath, so mask off any open space areas that aren't explicitly the subject matter or the flowers. Make sure to keep the mask enabled as it will also be needed for future steps.

**QUICK TIP**

Importing brushes into Photoshop is quick and easy. Simply double-click on the brush to import it or import manually by clicking the drop down menu on the Brush Presets Panel (Window>Brush Presets) and selecting Load Brushes. You can also save your own pre-made brushes by going to Edit>Preset Manager.

**08 MASK OUT HIGHLIGHTS**  
This step requires masking with the Brush tool, preferably with a tablet. On FileSilo there is a simple watercolour-style brush called Spongy Brush. Import this brush into Photoshop. It can be easily adjusted for different areas by changing the Spacing and Shape. On the woman group mask, mask out the lighter, highlighted areas, showing the neutral colour underneath. Use variety in the size and shape of the brush for more creative masking. Afterwards, use Color balance (Image>Adjustments>Color balance) to add a reddish tint to the image.



**06 CREATE THE LINE ART**  
Now it is time to find the edges of our image. Duplicate the woman layer and the flower layers separately. Next for each layer go to, Filter>Stylize>Find Edges, which will turn the layers into coloured lines with a white background. Desaturate these layers as well, and use Levels to clean up excess lines (Image>Adjustments>Levels). To get cleaner lines, bring the White, Grey and Black sliders together in the Levels panel. You can also clean up lines by using the Brush tool.



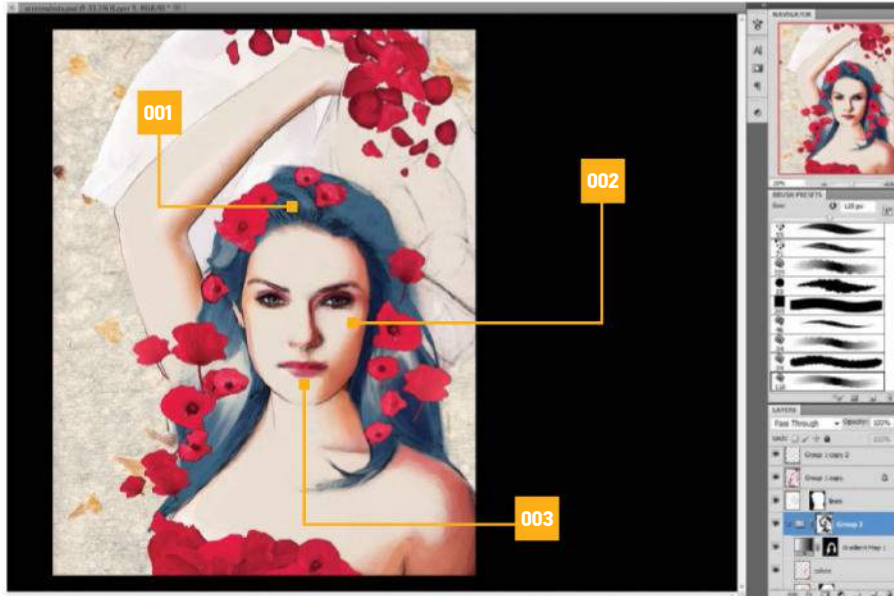


## ■ GET INTO DETAIL

### LAY COLOUR AND BRUSH STROKES TO CREATE A PAINTED FEEL

#### 09 | START TO COLOUR IN

Time to start colouring in our image. Create a new layer over the woman layer but underneath the line art layer. Using the new reddish colours as a base, brush over the details of her face using the same brush listed earlier. Keep within the lines with her face and skin, but use artistic licence when colouring her hair.



**001 | KEEP IT LOOSE**  
Since the idea is for a watercolour look, keep the brush strokes a bit loose with a textured feel

**002 | USE REFERENCES**  
This is a good time to use references of how light and shadow affect a person's face for accurate detail

**003 | ADD COLOURS**  
Start with a single colour for shading, and continuously pull in different colours for shading via Eyedropper (I) or Color Picker



#### 10 | ADD IN INTEREST

Refine your colouring further. The colouring should ease in well with the image and not look too smooth or jagged. If you are finding it's becoming muddy, try Color Balancing your brush strokes, or try setting your brush setting to Multiply or Overlay. Colouring her hair a few different shades of blue has added more interest to the image. Be sure to keep the strokes relatively loose and layered. Afterwards, mask off the colour layer and creatively mask areas of interest, like where her hair and the flowers intersect.

“The colouring should ease in well with the image and not look too smooth or jagged”



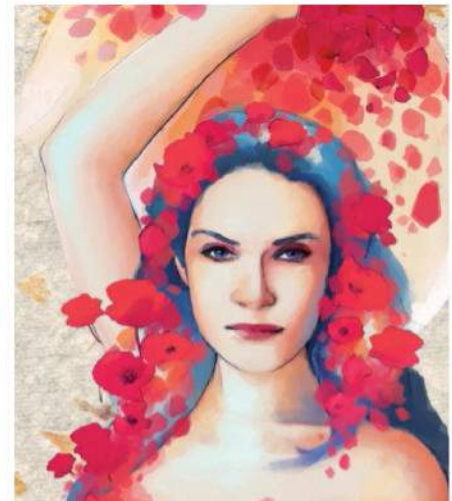
#### 11 | ADD EVEN MORE INTEREST

To add further interest, pull in some additional colours. Be sure to have colours that aren't too contrasted and work well with your current palette. In this image the woman has been given a different look compared to the original stock art, mostly by using liberal strokes and flatter shades of colour. Colours from her hair and flowers were also used on her skin to harmonise these elements. When satisfied with your colouring, mask off some of the line art that is no longer needed.



#### 12 | START ON THE FLOWERS

Now that the base details for the woman are done, group the related layers into one group. On the flower line art layer, make sure the lines are cleaned up using masks, filters, or erasing. Lock the transparent pixels of the flower layer (located under the Layer Settings in the Layer panel), and brush in a secondary colour. A brighter orange was used to make the flowers pop. Underneath the flowers layer, add a new petals layer. With lower Flow and Transparency settings, create lighter scattered petals.

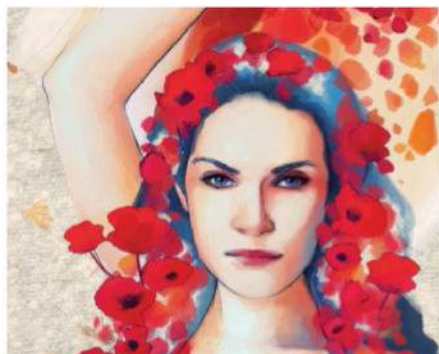


#### 13 | ADD CASCADING PETALS

Continue adding in your petals in various shapes and sizes and create a cascading effect from the foreground flowers. The goal is a loose feel of the petals, but make sure to keep them relatively petal shaped. Make sure they are blending seamlessly with the foreground flowers. To help achieve this, further mask some of the original flower line art and add in the same pop colour. To help with the cascading effect, more loose hair was added to the woman's colour layer.

## USE ARTISTIC LICENSE

### ADD DETAIL AND KEEP IT LIGHT WHILE ADDING YOUR OWN FLAIR



**14 RECOLOUR THE FLOWERS**  
When turning a photo into an artistic style, it's important to keep each layer separate and make sure they are easily editable. Doing so makes changing entire formats and colour schemes easier to get the desired effect. To demonstrate, the flowers and petals have been switched to a stronger red. Brush in darker pits to the existing flowers and give the background petals more life by masking out their transparency around their edges. Lock the transparent pixels, and use a Gradient to give whole sections of petals an orange hue.



**15 ADD DEPTH**  
Mask off the petals and brush strokes that intersect undesirably, like on her arms and some areas of her hair. Duplicate the background petals layer underneath itself and set it to Multiply, giving the petals more depth. Play with the opacity. Next add a new layer below the precedent layer and set it to Multiply also. Brush in smaller, lesser petals, mostly focusing on her hair. Add a new Multiply layer above the flowers layer and repeat, but focusing on the cloth in her hand.



**16 ADD IN HIGHLIGHTS**  
Create a new layer over the flower line art layer, and pick a light, relatively neutral colour that fits in with the art. With the watercolour brush, add in small highlights to the petals. Brush the highlights on random petals and keep them sharp, but keep in mind the light sources of the art so the highlights don't conflict. Using a small, splotchy brush, add splashes of red to the sides of some flowers. Add some splashes to her hair also.



**STOCK IMAGES AND TEXTURE**  
The stock surface texture used in this tutorial is a soft grunge papery texture from [www.lostandtaken.com](http://www.lostandtaken.com), a royalty free stock website. There are an innumerable amount of places to find stock images that can suit almost any need. However, make sure when using your stock that you abide by the stock creator's usage requirements and copyrights. Some places offer royalty free, commercial free stock that is free to use anywhere, but some require payment or notation that the stock is being used. Others also require a timed usage licence. Also make sure the stock is a good enough quality and size for easier editing.

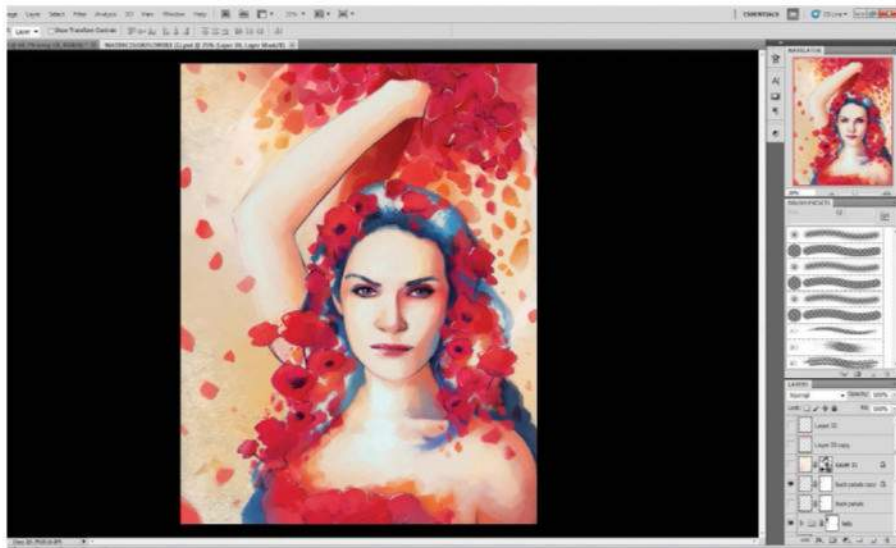
**QUICK TIP**  
Masking is an effective way to delete elements in an image, while still keeping the deleted data just in case. Masks work in black and white; black being what is being erased and white is what is visible. Filters and brush effects can be applied to masks, an advantage over erasing.

**17 ADDING FINER DETAILS**  
Now that the flowers have been completed, group all of the layers involved. Keep these layers separate for any future editing. Looking back, some sections of the woman can be adjusted to match the flowers. Remove or add some of the line art to your liking and use Color Balance if necessary. A clear contrast needs to be made between the woman and flowers, but at the same time it must look harmonious. Add in small details such as highlights to her eyes, hair and lips.



**18 SIMPLIFY THE BACKGROUND**  
Next is to simplify the background. It needs to match the feel of the art. First, sort the woman and flowers into a single group and attach a blank mask. Very lightly mask the edges of the ground to blend with the background. On a layer above the background, use the Soft Round brush with Transfer on and pick a matching neutral colour. Lightly colour around the woman and flowers. Keep the edges textured. With the watercolour brush, pick a red from the flowers and loosely colour around them.





## 19 ADD ADDITIONAL PETALS

With the Soft Round brush, mask any extra brush strokes that cover too much of the textured background. Make sure the added colour feels neither too smooth or too jagged. The left side of the art feels too open and plain, so add in some petals

### ■ QUICK TIP

Three tools that come in handy when recolouring are the Color Balance, Hue/Saturation and the Replace Color (Image>Adjustments>Replace Color) tools. With Color Balance and Hue/Saturation, you can recolour an entire image. With the Replace Color tool, you can select and recolour a single or multiple shades in an image.

for decoration. Make a new layer above all of your pre-existing layers, and brush in some smaller petals on both sides of the woman. Make them spaced out and very few, as the focus must remain on the woman and original flower petals.

## 21 ADD A SURFACE TEXTURE

At this point of the tutorial, a paper texture is needed to tie the whole image together. Create or find a stock paper texture that has varying shades, but isn't too dirty or repetitive. Bring in your texture over every pre-existing layer. Desaturate it and use Levels to make it mostly white with soft grey shades. Next, use the Gradient tool and set its settings to Overlay. Overlay a limited number of previous colours from the art at randomised places.



## 20 REFINE ADDITIONAL PETALS

The newly added petals should help box in and bring focus to the woman's face. Use the Lasso tool (L) if needed to rearrange each petal. Using previous methods of masking and brush strokes, soften the edges of these petals and bring in aesthetic colours such as a bright orange and deep red to match the art. Keep these petals less defined and softer than the original petals. Make sure they do not cover too much of the background or original art details.



## 22 COLOUR THE SURFACE TEXTURE

On this texture layer, attach a blank mask. Using the watercolour brush, mask out areas of the texture, revealing the art underneath. Focus on masking around her face and flower petals and start with multiple light strokes. Try not to keep the strokes too uniform; the texture needs to look diverse. Set the texture layer to Multiply and Opacity at 80%. Once applied, the texture should blend with the art, and give it a slightly darker tint. Apply the Sharpen filter (Filter>Sharpen).



## 23 ADD AMBIANCE WITH COLOUR

Next, add some overall ambiance to the art. Create a new layer. Again using the Gradient tool, select a greyish-red colour and make a Linear Gradient from the bottom to a quarter up the image. Set this gradient to Multiply. If needed, resize the gradient to be further up or lower on the art (Edit>Transform>Scale). Duplicate the gradient, flip it vertically (Edit>Transform>Flip Vertical) and place it at the top of the art.



## 24 FINISHING TOUCHES

On another layer, place different coloured Radial Gradients on different parts of the art, such as near the edges and around the flower petals. Check your work for any details that have been missed or need to be added. Next, select the entire document (Select>All), copy it (Edit>Copy Merged) and paste it as a new layer. The art should all be on this one layer with the original layers underneath. Apply another Sharpen filter and use Color Balance to bring in a bit of blue tint.







# DESIGN A CARTOON CREATURE

LEARN THE STEPS, TRICKS AND TIPS FOR CREATING A CARTOON-LIKE CHARACTER ILLUSTRATION

**T**he drawing and creation of mythological creatures provides endless ideas creative possibilities. Every civilisation has myths and old tales about such creatures, from warlocks and dragons to the Loch Ness monster, and studying their origin will have you delving into the culture in question. The Hydra in our illustration is definitely not an accurate historical depiction, but rather a cartoon incarnation of the Greek myth.

Cartoons can be silly and vibrant, and Photoshop's toolset is immeasurably useful for the job of an illustrator. Photoshop will help you bring out the best colours in an image and is particularly useful in the

creation of the utterly fantastical. Its clean, well-organised and easy to understand interface is ideal for both large and small scale projects.

In this tutorial, we'll go through the steps needed to bring a monstrosity to life. Going through the process of an illustration from a chicken-scratch compositional sketch to end-result, we will cover areas such as masking layers, Photoshop filters, tools, and plenty of painting tips.

Before we start, Google mythological creatures to inspire yourself and come back when you have thought of something fun to design. And don't forget to compile a page of photo references for yourself!

## THE HYDRA'S BASE

LET'S LAY DOWN THE WOODWORK FOR THE PAINTING

### 01 CREATE A ROUGH SKETCH

To start off, let's boot up Photoshop and create a new canvas. Go to Layer>New Layer to start a first rough draft. Keep in mind that this stage isn't about the details, it's about getting a sense of the composition and personality of our characters across. It's important to commit to the idea at this stage!

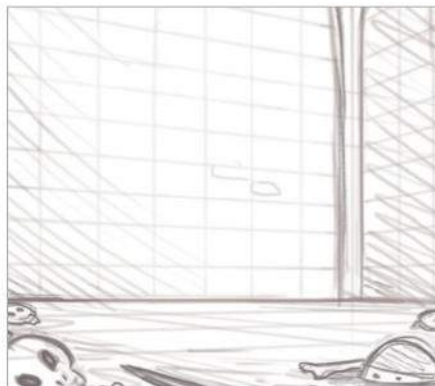


### 03 START TO REFINE THE LINES

Now we have the rough draft sorted, we can tackle getting crisper, more final lines. Once again, go to Layer>Opacity and lower the opacity on both the dungeon and Hydra draft layers. Now create a brand-new layer for our good lines and take a hard round brush. Carefully trace over your original draft, making clean lines. Add more detail!

### 02 FIND A PERSPECTIVE

Now before we jump into refining our Hydra's sketch, let's get a sense of our dungeon's perspective. On the draft, go to Layer>Opacity and turn it down a notch so that we can see what we're doing. This stage is important because we do not want our dragon floating about at a wonky angle.



### OUR EXPERT

**PIPER THIBODEAU**  
www.piperthibodeau.com  
@Piper\_Thibodeau

Piper Thibodeau is a 22-year-old character designer from Canada. She currently works as a freelancer for companies such as DreamWorks TV, Nickelodeon and Penguin Books/Random House.

### WORK IN PROGRESS

FROM SKETCH TO FINAL PIECE



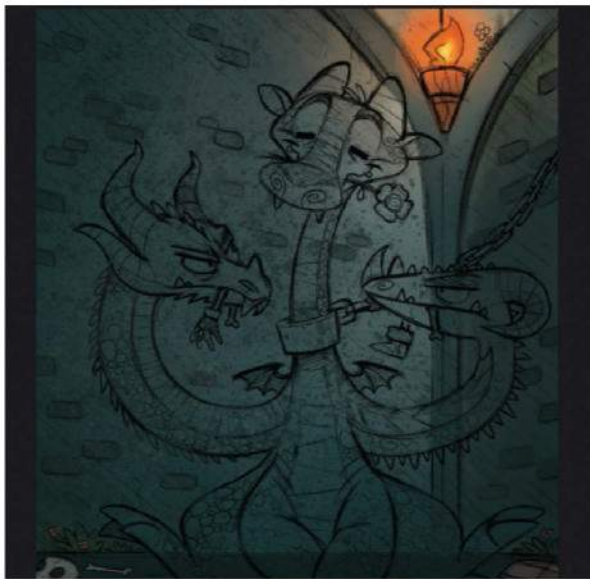
Progress 1: Start rough



Progress 2: Refine shadows



Progress 3: Colouring the beast



## 04 COLOUR THE DUNGEON

Let's add in some colour. Though it may be tempting to colour the Hydra first, we should figure out the overall colour of the dungeon because it will decide the palette and tone in this painting. Go to Layer>New Layer and drag your new layer under the good lines. Now we can finally begin colouring. Let's be sure that the objects here, like the skull and swords, are influenced by the blue hue of the dungeon, but stay within the range of the palette.

### QUICK TIP

It's very helpful to create a reference sheet at the beginning of your illustration. For inspiration purposes only, not to copy! It means that you don't have to make frequent trips to Google Images during your creation process. This helps even more if you have two monitors to organise the material.



## 06 CREATE A MASK

There are multiple ways to go about shading a character, but using masks in Photoshop will enable us much more flexibility than manually shading the character. This step will save us time and if we change our mind on the shading, we can always return to the layer to fix it later. First duplicate the Hydra's locked in layer from Step 5, right-click on the layer and Duplicate Layer. Now unlock the layer and select the mask button on the bottom of the layer interface.



## 05 CHOOSE HYDRA COLOURS

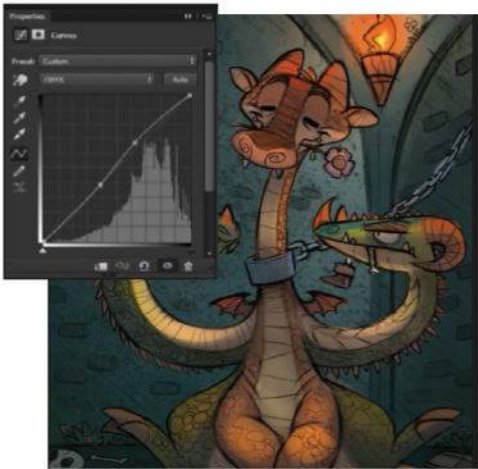
With our dungeon's tone sorted out, let's tackle the Hydra. The Hydra is a big focal point in the image, we're going to use a trick to ensure that its tones are easier to edit. First, select a hard round brush and begin filling out all the areas within the lines of the dragon – pay careful attention to stay within the lines! Now, click the checkerboard icon in the layer box to lock the colours in.



## 07 ERASE THE MASK

Now, select our mask. When using this technique we will use the brush tool and alternate between absolute black and absolute white. Using black will erase our dragon's shading as though it's being erased with the Erase tool, but white will re-create the shadows at any given point. Back to our illustration: we need to consider that the lantern is going to drop light onto our dragons from behind, so we should erase the shading according to that light source.





## 08 HARMONISE THE COLOURS

With the pillars of our illustration formed, we're going to use a quick shortcut to better bring together the different values here. Select the Curves tool by clicking the circle icon on the bottom of the layer interface, this will prompt us with a graph and two points. Let's try to play around with them until we find a good harmony with the colours. Alternatively, we could select Photo Filter, but keep it to a low opacity, as it can muddy up the colours easily.

“We don't want to leave any traces of outline lying about, it takes away from the rendering and makes it look unfinished”



## 10 REFINE THE DETAILS

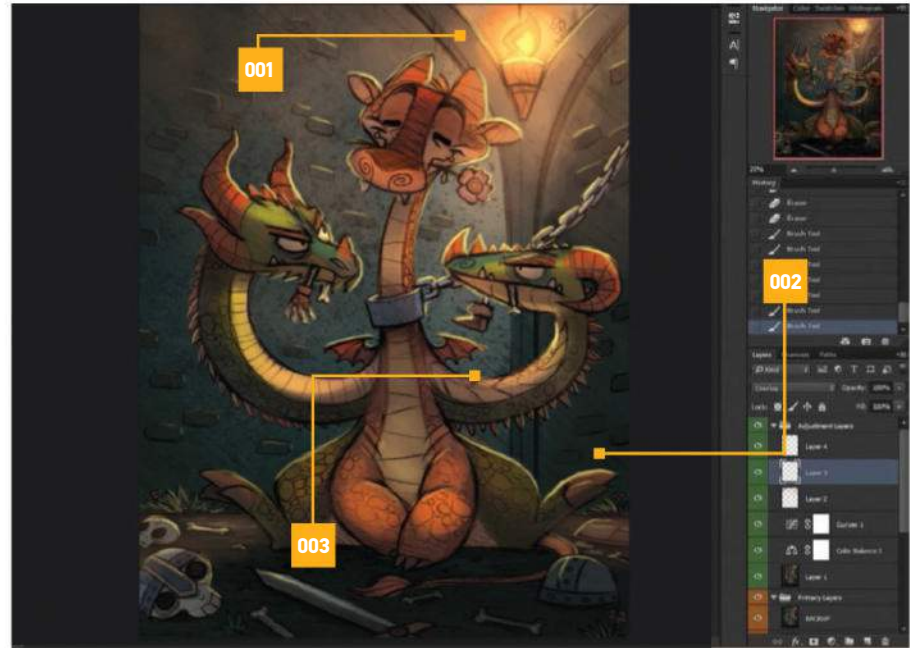
We want to solidify the forms to make sure we don't get anything unintentionally funky going on. Treat painting this as you would a simple sphere, even if the Hydra is more complex than that. Make sure that we're painting on the good lines, and don't hide that layer! They're our guidelines and we're going to paint by them accurately. We don't want to leave any traces of outline lying about, it takes away from the rendering and makes it look unfinished.

## ADD SOME HIGHLIGHTS AND DETAILS

FIGURE OUT HOW LIGHTS AND SHADOWS WILL WORK IN OUR PAINTING

## 09 ADD HIGHLIGHTS

The major colours are solved: now we can get to the juicy rendering parts. Taking a soft Airbrush tool, we're going to imply where the lantern light is highlighting the dragon and debris below him. Be sure to light up the spaces behind him so that he pops out more and the ground isn't just a big dark blob!



### 001 | LIGHT SOURCE 2.0

We create a new light source to shine some warm values onto the Hydra that will allow it to pop out more

### 002 | LIGHT VALUES

Flesh out the areas where the Hydra will have lighter values on its body, heads, horns and tail

### 003 | CONTRASTING COLOURS

We deliberately select contrasting colours (oranges, greens and turquoises) to counter the overall bluish-grey tones



## 11 ADD SOME SCALES

For some supplementary, but important details, we're moving onto the Hydra's scales. While there are multiple ways of going about dragon scales, we're going to go for more of a cartoon-like approach here. Selecting a Soft Airbrush on a new layer, we're going to imply circles of all shapes and sizes around the dragon's body. It's fine to cluster them here and there, but try to make sure that some connect so it gives the illusion of there being many while only drawing few. We'll also darken a few of them.

## IT'S ALIVE!

WITH OUR BASES DOWN, LET'S RENDER THIS OUT TO COMPLETION

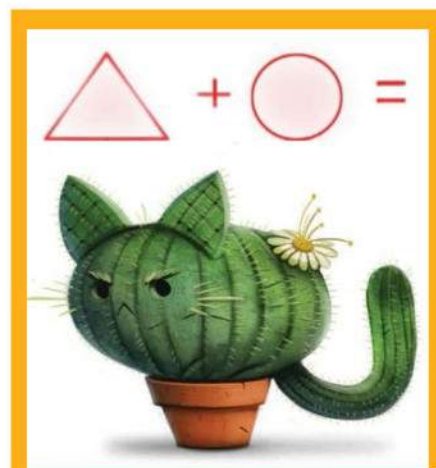
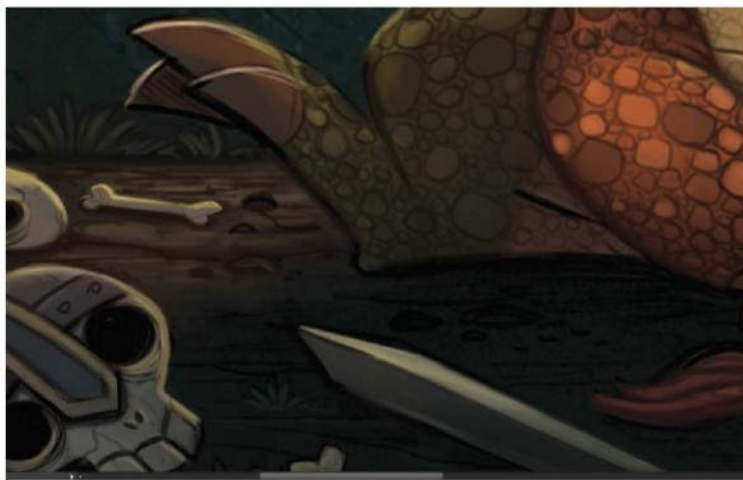
### 12 PAINT THE BACKGROUND

For the dungeon floor, walls, and materials we're going to paint according to our lantern's light source again. There isn't much sense in creating a mask for all these elements, as we did with the Hydra, because they're not very large or prominent. Instead just use a Soft Airbrush to reflect the dungeon's tones and hues onto the subjects and the wall's bricks. Be sure to treat metallic surfaces differently than skulls and vice versa, they each will reflect light in a different way.



### 13 HIGHLIGHT THE HORNS

Horns are a focal point of any dragon, so we must pay careful attention to them. As humans, we're naturally programmed to seek out the pointy dangerous bits in the world around us so that we may protect ourselves, and likewise, our eyes will be drawn to the horns of this creature before anything else. Using a very small light brush, we're going to imply the highlights from the lantern and how they enter the creases on the dragon's horns. To give it more depth, we're going to take a large, softer Airbrush and Eyedropper to select a colour from the dungeon's interior to reflect onto the bottom of the horns.



#### ■ SHAPE LANGUAGE

Though it's a rather extensive topic of its own, it's good practice to convey a character's personality from the shapes assigned to it. Square-like characters are sturdy and reliable, circular characters are round and cute. Triangles, with their pointy ends that we don't want to prick our finger on, are often depicted as villainous characters. The list of reasons for each shape is pretty varied and there are plenty of blends and exceptions to the rule, but we should try to be conscious of the forms we're using and how they describe our character without the crutch of words. Let the drawing speak for itself.

### 14 ADD THE SMALLER DETAILS

This dungeon is very old and worn out. We want to bring out the wear factor in the walls by creating thunder-like streaks of cracks along the surfaces – be careful not to distract from the dragon! Lightly imply, don't overpower. We'll be able to fill in these creases later with some light to help them pop more. Using a finer brush, we will make work of the small nicks and scratches on the swords, chains and skulls – remember that this isn't a glamorous environment, make it reflect that – add some dirt and grime while you're at it.





**15** **ADD MOSS AND FLOWERS**  
It would be pretty odd if the mid-

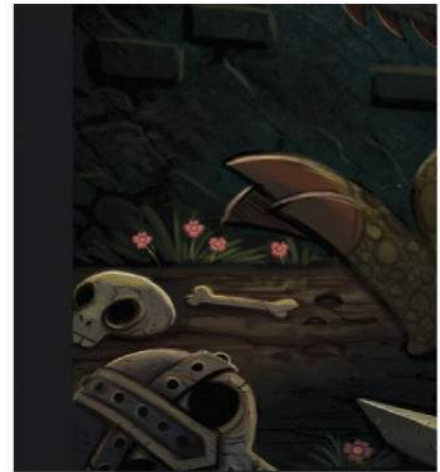
**15** It would be pretty odd if the middle dragon got that flower out of nowhere, wouldn't it? We're going to amplify the worn-out atmosphere of this dungeon and make a big mossy mess. For creating moss on the walls, use a very light medium sized Airbrush to imply the green here and there, don't make it too prominent. We will be using a smaller and finer brush to paint some grass strokes and the pink flowers. Let's ensure that the pink pops so the viewer will connect the flower in the Hydra's mouth to that on the dungeon floor.



**QUICK TIP**

## 16 ADD BLUE HIGHLIGHTS

**O** And here's a fun part to tackle – the overall tone's light sources. Like we did a bit with the horns before, we're going to select a blue similar to that used in the dungeon (preferably lighter and more contrasted) and apply it as a highlight coming from the dungeon floor and working its way up the character and surroundings – creating a stark contrast against the light of the lantern coming from the top. Very lightly, with a low-opacity brush, apply the blue hues onto the dragon's scales and highlight the edge of its limbs with a sheen.



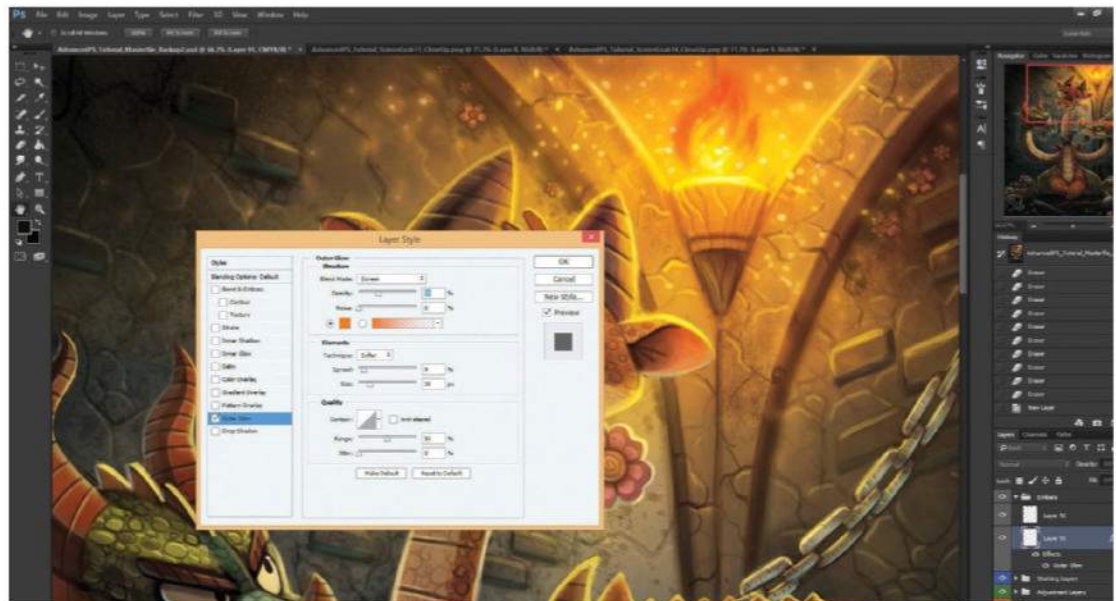
## 17 CREATE EMBERS

For some cool flashy fire effects, let's be sure to create a new layer and go to Layer>Layer Style>Outer Glow. Now, create a bunch of sparks coming off of the fire and dancing around the scenery. We should make a variation of sparks, varying their size and opacity. We can also toy around with this by increasing the spread and size under Elements and making the outer layer's colour more orange than the default white.



## 18 ADD THE FINISHING TOUCHES

And now we can really toy around with the Curves and photo filters. To aid us in these final touches, let's start by creating a new layer: then select the painting and then Copy and Paste. Now we have a dummy layer for edits. If we feel like there's a minor colour that we dislike, we can try to alter it a bit using the Overlay tool, select the layer and change it from Normal to Overlay or Soft Light. We can also use the Dodge tool to bring out highlights in the painting.









# PERFECT MATTE PAINTING FROM PHOTOS

LEARN HOW TO WORK WITH FRAGMENTS OF PHOTOS TO CREATE A FANTASY SCENE

**L**earn how to use Photoshop to create a fantasy scene with this tutorial. We'll start with a sketch. Try to experiment with different ideas and choose the most interesting option. It's important to think through all the details before you start work. We will combine fragments of photos to create a background and unique objects to create a fantasy environment. Creating scenes isn't easy when you're working with different source photos. You will need to use colour correction elements and effects so that the image

becomes attractive and convincing. You will also learn how to manually create sunlight and shadows, as well as achieve uniformity across all elements.

We will be using different tools, such as selection tools, layer masks and adjustment layers, colour corrections (Curves, Color Balance, Selective Color and more) and brushes. Use a pen tablet if possible – using a mouse will make the process longer and more difficult. This tutorial has been completed with Photoshop CS6, but you can use most other versions.



## OUR EXPERT

**NADEGDA MIHAILOVA**  
[www.nm-art.weebly.com/](http://www.nm-art.weebly.com/)

Nadeжда Mihailova is a digital artist and creative retoucher from Russia, specialising in environment illustrations. Mihailova is currently working as a freelance digital artist.

## SOURCE FILES

All the photos used in this image can be downloaded free via FileSilo



## PREPARE THE BACKGROUND

USE MULTIPLE IMAGES TO CREATE A BACKGROUND

### 01 CREATE THE SKETCH

The first step is to create a new document: File>New, set document size to 2,950x4,200px. Then create a sketch. At this stage it is important to make a decision on composition and the location of all objects in the scene. Think through all the details before you start work; you will need to decide on the overall colour of the image and light sources.

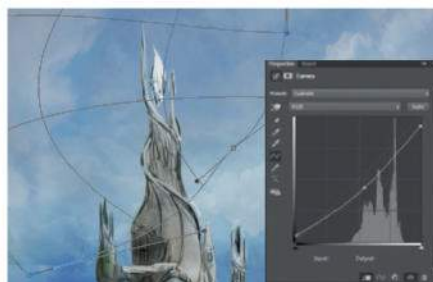


### 03 ADD THE SKY

Use images IMG\_03-1.jpg - IMG\_03-5.jpg to create the sky. Cut out sky fragments and add them to your scene. Then select Edit>Transform>Warp and change their shapes as needed. Now make the sky more consistent by selecting Curves and adjust the brightness, contrast, and colour for each element. Use the Eraser tool with soft edges and Clone Stamp tool to eliminate seams. Merge these layers and slightly darken the upper portion of the image.

### 02 MAKE THE BACKGROUND

Open the image 'IMG\_02-1.jpg' and cut the mountains with a Lasso tool, and then move them onto your scene and scale accordingly. Duplicate this layer and modify the shape, remove borders around it with soft Eraser tool, and merge into the scene. Then select Image>Adjustments>Curves, lower the contrast and add more blues and lower the saturation using Hue/Saturation. Note that the further away the object is, the less details you should see.



## WORK IN PROGRESS

FROM IDEA TO FINAL



Progress 1: Sketch the scene



Progress 2: Add basic objects



Progress 3: Final touches



## 04 THE LANDSCAPE

Insert the mountains from IMG\_04-1, IMG\_04-2 and IMG\_04-3.jpg to your scene. Add more blues using Color Balance and lower the contrast. Create a new layer then draw some fog in the right of your scene using a light-blue Brush tool with soft edges, on 10% Opacity. Paint the mountain edges and peaks with the same brush. This should add more consistency to the entire scene. Add the forest (IMG\_04-5.jpg), the bridge (IMG\_04-4.jpg), and the grass (IMG\_04-6.JPG) in front of the mountains. Adjust brightness, contrast, and colour for each element by using Curves, Color Balance, and Hue/Saturation for the desired result.

### QUICK TIP

■ Use adjustment layers as clipping masks for editing elements. This means you will have the opportunity to go back and edit part of your image – you can weaken or strengthen the impact if necessary.



## 06 ADD DETAILS

Cut out elements from IMG\_06-1.jpg (1) and place balconies around the tower. Make the left and right sides darker and the central part of the balcony lighter. Then repeat to create the second balcony. Place the window from IMG\_06-2.jpg (2) in the center of the tower. To add smaller windows use IMG\_06-3.jpg (3), adjust Color Balance and Curves to make the windows' colour and brightness consistent with the stone texture. Make the window sides' upper and lower parts darker. Decorate the tower facade with elements from IMG\_06-4.jpg (4). Reduce the brightness by adding reds and yellows using Color Balance.



## 05 FORM THE TOWER

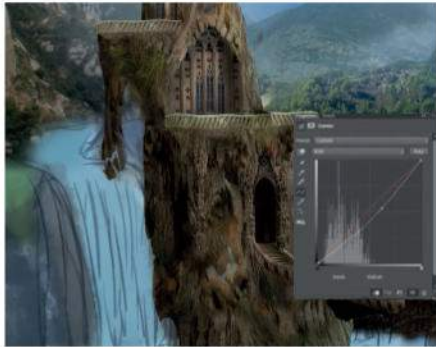
Create the tower shape out of stone textures by cutting stone texture fragments from images IMG\_05-1 to IMG\_05-4.jpg. Use Transform and Warp to change shapes and sizes. Make brightness and colour consistent among all the fragments, then draw a spiral on top of the tower. Merge the layers and "heal" the seams with Clone Stamp tool. Select the Brush with soft edges, change the blending mode to Multiply, set Opacity to 10-25% and darken the bottom and left parts of the tower. Add the riverbank from IMG\_05-1.jpg to the right side, then select Hue/Saturation and reduce saturation and lightness.



## 07 TOP OF THE TOWER

Create a new layer and draw ridges (1). Take a colour sample from the stones. Place the pattern from IMG\_07-1.jpg under the ridges (2). Then select Transform>Warp to change the shape as needed. Adjust brightness, saturation and colour for all added elements. Add shadows on the left and under the ridges using a brown soft brush in Multiply mode with 10-20% Opacity. Copy the small windows from the previous step and place them on the tower (3) then add decorative stone elements (IMG\_06-4.jpg) to the tower facade.





## 08 | BOTTOM OF THE TOWER

Use elements from IMG\_08-1.jpg to create columns and add them to the facade. Select Image> Adjustments>Hue/Saturation to decrease saturation and lightness. Use IMG\_08-3.JPG to create the gates and place them under the layer with columns. Use Curves to decrease the brightness then add yellows and reds. Copy the balcony and place it between the columns, reduce its brightness. Place the stone elements (IMG\_08-2.jpg, IMG\_06-4.jpg) and windows (IMG\_08-4.jpg) on the tower. Add the bridge (IMG\_08-5.jpg) and draw stairs on the right side of the bridge. Adjust brightness, contrast, and colour for these new elements.

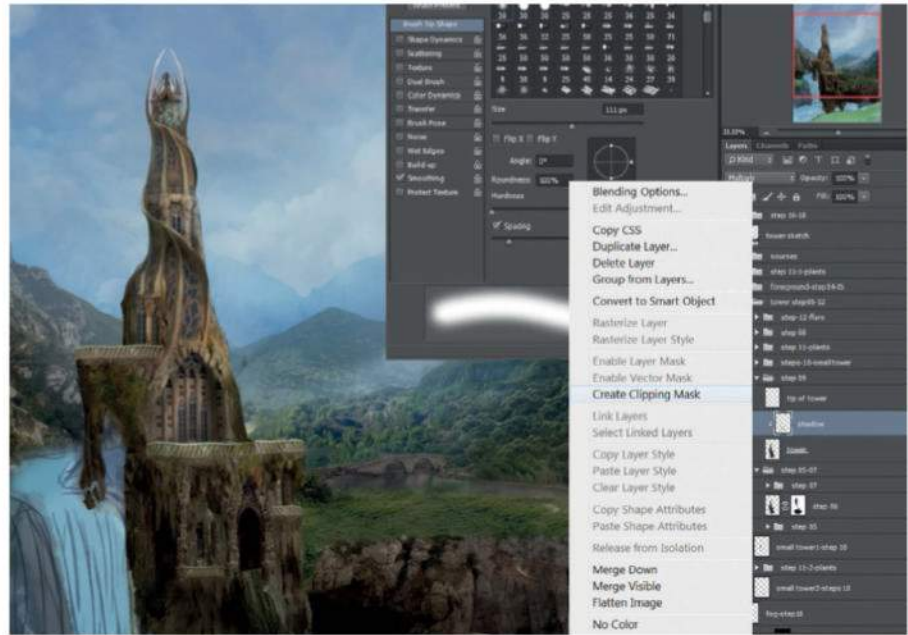
“Do not forget to adjust brightness and colour for all the elements you add”

## 09 | ADD MORE ELEMENTS

CREATE THE TOWER AND OTHER ELEMENTS FROM FRAGMENTS OF PHOTOS

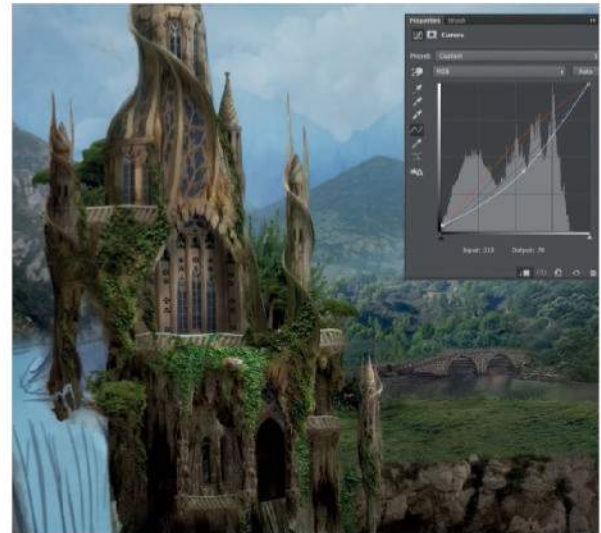
### 09 | ADD MORE VOLUME

Select the layers that relate to the tower and merge them. To add more volume, create a new layer, change this layer's blending mode to Multiply and set Opacity to 30-40%. Use clipping masks, so that you can apply effects to only this object. Right-click on the layer and select Create Clipping Mask. Use a soft brown brush to darken the bottom and left parts of the tower as well as areas under the spiral. Increase shadows on the windows and brighten the central part of the tower using a Curves adjustment layer.



## 10 | CREATE SMALL TOWERS

Create small towers in a similar way. Copy the stone texture from the main tower and change its shape as needed using Warp and Transform. Draw the spiral and tower peaks. Then add building fragments from IMG\_10-1.jpg, reduce brightness, and add yellows and reds using Curves. Insert the tower top, IMG\_10-1.jpg then adjust colour. As in step 09, adjust light and shadows for more visible volume. Merge the layers related to the small tower, duplicate the layer and place it above the left balcony. Make it darker and erase the bottom part. Use images IMG\_10-3.JPG, IMG\_10-4.jpg to create the remaining small towers.



## 11 | ADD PLANTS

Add plants IMG\_11-4.JPG, IMG\_11-5.JPG behind the tower then reduce brightness, contrast, and saturation. Place the plants from IMG\_11-1.jpg, IMG\_11-2.jpg, IMG\_11-3.jpg on the tower surface, adjust their brightness and colour balance. Create a new layer, change its blending mode to Soft Light and set Opacity to 30-50%. Create a clipping mask on the layer with plants. Go over the plant edges with brown soft brush. Then create a new layer under the plants, set blending mode to Multiply and Opacity to 20-30%. Paint shadows under the plants.

## FINAL EDITING FOREGROUND AND THE FINISHING TOUCHES

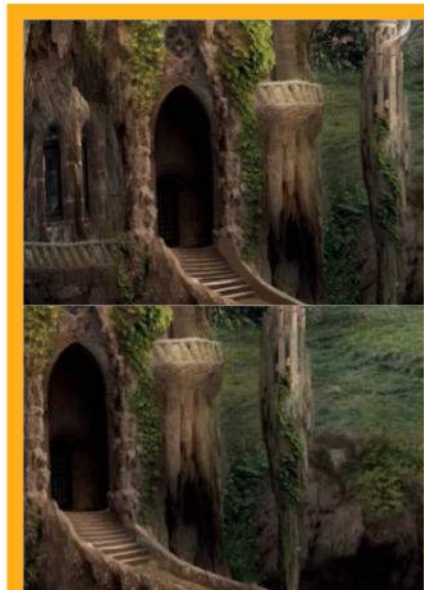
### 12 LIGHTS ON THE TOWER

Create new layer and fill it with black. Select Filter>Render>Lens Flare from the menu, set Lens Type to 50-300mm zoom and apply the filter. Change the layer blending mode to Screen. Transform the layer by scaling it down and squeezing it a little. Place a flare onto the tower top then add flares to smaller towers in a similar way. To enhance the glow create new layer, set blending mode to Overlay, Opacity to 50-70% and add stamps around the flares on the towers with a big light-yellow soft brush.



### 13 BUILD THE ROCK

Copy the gates from the main tower and paste them onto the rock and reduce contrast. Now cut out part of the stone texture to create the bridge. Use Warp Transform to change the shape as needed – erase any unnecessary areas. Then make the right and bottom parts of the bridge darker. Add columns from IMG\_13-3.jpg (1), reduce their brightness, add reds and yellows using Color Balance and make the bottom part darker. Insert windows from IMG\_13-1.jpg (2) into the rock. Use IMG\_13-2.jpg (3) to create the top of the building. Adjust the brightness and colour of these elements to make them consistent with the rock.

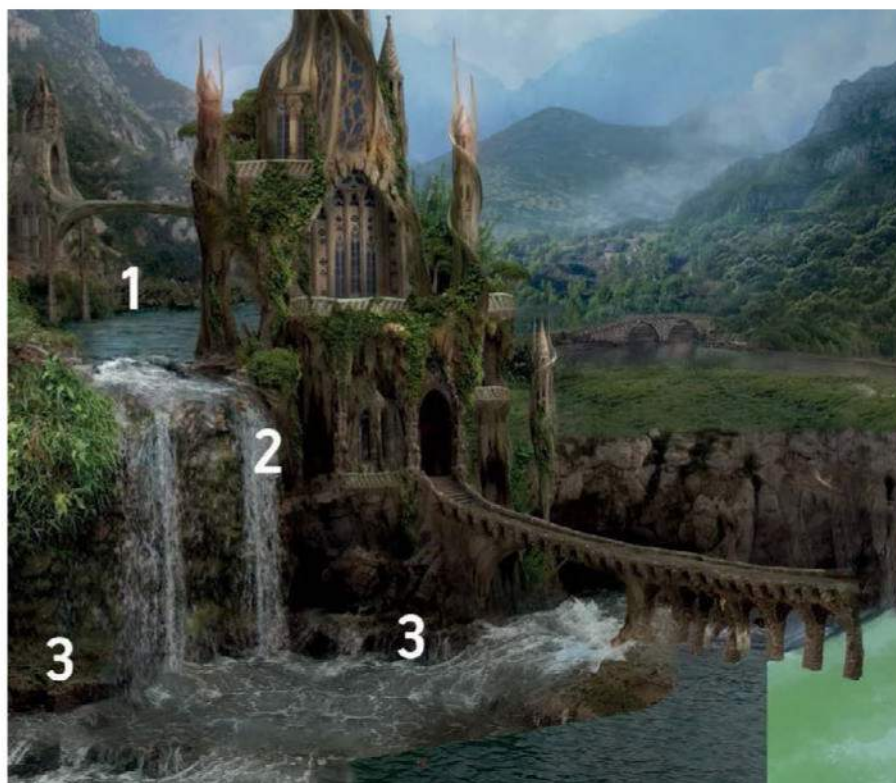


### HIDE THE DRAWN ELEMENTS

When you draw the small details, it is important that they do not stand out among photorealistic elements. To disguise them create a new layer filled with 50% grey and set the blending mode to Overlay. Create a clipping mask then go to Filter>Noise>Add Noise, and set Amount between 1-7%. Go to Filter>Blur>Gaussian Blur and set radius to 1-2 pixels. Or place a suitable texture instead of noise, reduce saturation, set the layer mode to Overlay or Soft Light then adjust Opacity.

### 14 WATERFALL AND RIVER

Use IMG\_14-1.jpg to create the riverbank under the rock (1). Reduce brightness and add blues using Curves. Cut out water texture and paste it in the river. Select Hue/Saturation to decrease saturation of yellows then add blues using Color Balance. Add the waterfall from IMG\_14-2.jpg (2) and adjust its brightness and colour. Now use IMG\_14-3.jpg and IMG\_14-3.jpg (3) to form the lower part of the riverbank. Change the rocks' shape as needed using Warp. Use Hue/Saturation to reduce saturation of reds and yellows.





## 15 CREATE THE FOREGROUND

Place the rocks from IMG\_15-1.jpg in the foreground. Create the lower part of the rocks from the fragments of IMG\_15-2.JPG and use the Clone Stamp tool to remove seams then merge these layers. Draw the entrance in the upper part and extend the bridge so it reaches the gates. Then duplicate the bridge to create the second one, place it to the right and reduce the brightness. Add the ladder from IMG\_15-3.JPG and add plants on the right side of the riverbank with IMG\_11-3.JPG. Do not forget to adjust brightness and colour for all the elements you add. They should be consistent with other the elements in the scene.



### ■ QUICK TIP

Use layer groups to optimise your work. When you have too many layers, working with them can become difficult. It can be convenient to group layers that relate to each other. Select the layers and press Cmd/Ctrl+G to group them. You can also apply adjustment layers to the group.

## 16 ADD MORE SHADOW

Now add more volume and depth as well as focus the viewer's attention on the tower. First, add more shadows. Remember that the light source is coming from the top right. Create a new layer and change its blending mode from Normal to Multiply; set Opacity to 50-70%. Use a dark coloured brush, not black, and add more shadows to the left side of the tower, lower part of the riverbank, the areas behind the tower and to some of the foreground. Add shadows to the small elements and plants.



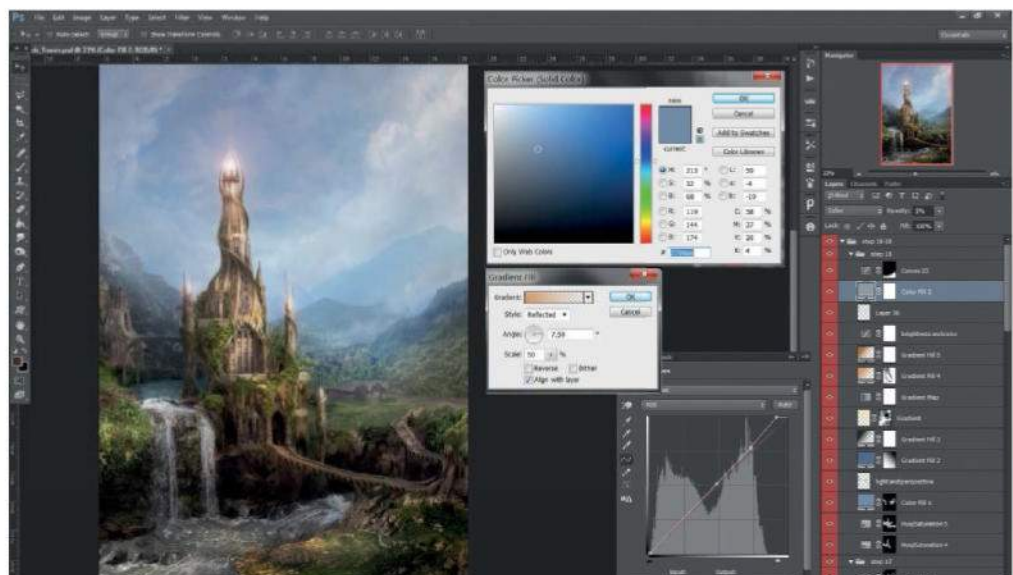
## 17 HIGHLIGHTS

Create a Brightness/Contrast adjustment layer, set Brightness +60 and Contrast +20. Invert the layer mask using Cmd/Ctrl+I and paint darker areas inside it with a soft brush using white. Add flares to the central parts of the tower, tower tops, bridge, waterfall, landscape on the right, and to the foreground. You can lower the adjustment layer Opacity to 80-90% to make it weaker. Add a new layer with blending mode set to Soft Light and Opacity to 50-70%. Select a light-orange colour and add coloured flares using a brush.



## 18 THE FINAL CORRECTION

To add more depth to the image, reduce the contrast of the background. Create a new layer and using a light blue soft round brush, Opacity 10%, paint over the background and behind the tower several times. This will add more depth and separate the tower from the background. Now you will need to add more consistency to all the elements. Try to experiment with adjustment layers for Solid Color, Gradient Fill, Gradient Map and various blending modes and Opacity. I selected a blue Solid Color and set blending mode to Soft Light and Opacity to 15-30%. Then select Gradient Fill, set colour to orange and set blending mode to Overlay in order to enhance the sunlight coming from the right. To finish, add more contrast using Curves.





# Photo editing

Improve ordinary photos with a variety of Photoshop techniques, from retouching to colour adjustments and compositing

## **126** 20 tips for flawless photo edits

Gather expertise on the professionals' techniques for implementing seamless and realistic edits

## **136** Retouch with more realism

Refine portraits and beauty shots with subtle retouching techniques that retain realistic flaws

## **142** Generate movie poster-style artwork

Design a superhero character with amazing composite skills and moody lighting effects



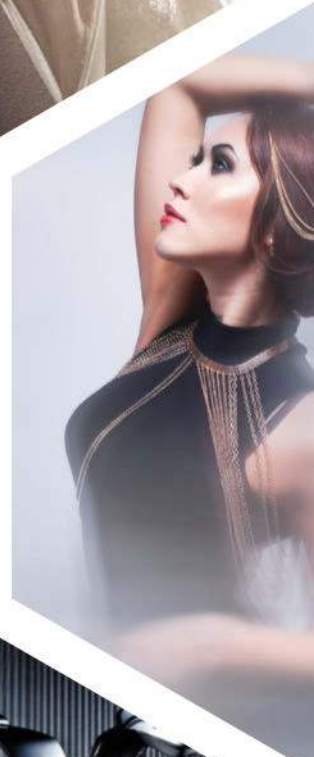




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“Always direct the  
viewers' attention  
to the most  
important aspects  
of your image



# 20 TIPS FOR FLAWLESS PHOTO EDITS

PHOTOSHOP EXPERTS REVEAL PROFESSIONAL TIPS TO HELP YOU ENHANCE PHOTO-BASED ARTWORK

## 01. KEEP EDITS REALISTIC

LEWIS MOORHEAD ([WWW.FLEWDESIGNS.COM](http://WWW.FLEWDESIGNS.COM)) IS A CREATIVE RETOUCHER. HE EXPLAINS HOW HE EDITED THIS IMAGE TO SHOW A SURREAL SCENE WHILE REMAINING REALISTIC

**Smart Object:** "I converted the image into a Smart Object just in case I wanted to amend it later and used the Puppet Warp tool to bend the tree as much as I wanted. I also increased the Expansion to keep the tree's features sharp"

**Effective mud:** "To create the look of effective mud, I put mud on a white background, then placed the image over the wheel, changing the blending mode to Multiply. I also bent it using the Warp tool to make it bend around the wheel"

**Hue/Saturation:** "The original colour of the grass was a rich green. To change this I used a Hue/Saturation layer focusing on the green, but also selectively added in more greens to get a bigger range. To do this I adjusted the white bars"



**Correct perspective:** "To place text or symbols in the correct perspective on any feature, whether it is a phone or a building, I use the Vanishing Point filter on a new layer and draw the area in the correct perspective. I then copy and pasted the banana into the filter and inside the box, which placed it in the correct perspective"

**Sharpening:** "To sharpen the image I used a High Pass filter. I duplicated the flattened image changing the blending mode to Soft Light/Overlay. I converted to black and white, then used Filter>Other>High Pass. This way you can see in real time how sharp you are making it"



© Tom Anders

## 02. USE COLOR BALANCE TO YOUR ADVANTAGE

Getting colour right in photo editing is extremely important, but Photoshop has plenty of built-in tools to help you achieve great effects every time. Freelance creative and student Tom Anders Watkins ([www.tomanders.com](http://www.tomanders.com)) has high praises for the Color Balance tool – a simple yet effective solution to achieving great colour. "You can significantly change the mood and feel of any image with a couple of slight tweaks. Granted that the image is exposed correctly, Color Balance, if used correctly, will help add an extra dynamic to most photographs."

"This is a photograph I shot in Finland of my little brother throwing rocks into a frozen lake. I wanted to accentuate the cold (blues) and give the photograph more of a dusky, evening feel (purples and reds), [which was] done by playing with the sliders. To add a little more advanced colour correction, I often use the Selective Color tool to get the right tone for more specific colours."

"It's easy to overdo colour sometimes – with great power comes great responsibility so to speak – and there's a fine line [between] making a photograph looking too Photoshopped. A natural, realistic look is what will make your audience feel like they are there. If I'm not sure, what I'll sometimes do if the image is particularly tricky, is make a couple of different versions, then flick through them. Through comparison I can often tell which version feels right."



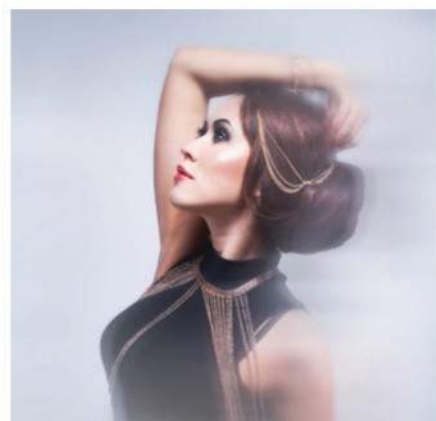
### 03. TOP TIPS FOR PERFECT FASHION EDITING



© Photographer – Vitalij Sidorovic  
Model – Kristina Lipinskaite  
MUA – Make Up Artist Ernesta  
Assistant – Monika Alijauskaite

**Retouch with care:** “Retouching is a powerful tool, and good retouching can create a completely new look for a picture. I usually have a good look at the photo before any editing. Even before the photoshoot, I usually know what I want to

achieve. It is always good to see if you can get something more out of the photo with editing. Most importantly, do not overdo it; great retouching is when people cannot see it was retouched.”



© Photographers: Vitalij Sidorovic & Monika Alijauskaite  
Make up and Style: Make Up Artist Ernesta  
Hairstyle: Irmante Petrilyonyte

**Develop a style:** “I always have the same sets and even same tools when editing my pictures. It makes the process quicker, as well as [allowing me to] keep the same style and quality throughout the work. If a picture still does not look right, try adding something else, but make sure it is still within your style. Maintaining the same look will help you to create a [recognisable] personal style.”



© Photographer: Vitalij Sidorovic  
Model: Cecelia Morgan  
Make-Up Artist: Anechka Golubova

**Avoid the plastic look:** “Frequency separation is great, but use it too much and you are in danger of getting that plastic look. A lot of people that I have met think of this as a quick and easy way to clean up the skin, but at the same time they always go over the top. Stay with the classic Dodge and Burn tools, which takes a while sometimes, but in the end result the model will still look like a model.”



© Photographer: Vitalij Sidorovic  
Models: Ūliviya Plekavičiute & Lewis

**Selective Color:** “The Selective Color tool is usually [the next task] for me after dodging and burning. This tool allows me to control the colours in the pictures, either bringing them up or saturating unwanted colours if they are too

much of a distraction. [The same as] with the frequency separation technique, you need to be careful with it and not overuse it, or your image will look like [it's been treated] with an Instagram filter.”

### 04. EDIT WITH CURVES

The Curves tool in Photoshop is incredibly powerful when used correctly in the hands of a professional, as retoucher Vitalij Sidorovic ([www.behance.net/vitalijsidorovic](http://www.behance.net/vitalijsidorovic)) explains: “Almost every one of my photos goes through Curves adjustments, which is [essentially] dodging and burning. [I used to] underestimate the power of the Curves tool, as I usually used it just for colour improvement. But as I grew and developed, this is the tool that I always use in my retouching now. It is great for cleaning up skin and getting rid of unwanted hairs. Before I start editing I usually look through the photo to see where I want to go with it, then I mark areas that might need more editing time and get myself prepared.

“I start off creating a Black & White adjustment layer on top of my original document and then I add two Curves adjustment layers: one which has boosted exposure and another one that is darkened. Both layers are masked out so that when using a soft brush,



with a very low Flow of 1-7%, I start painting over the areas that need fixing and smoothing out.

“When I finish with dodging and burning [in this way], sometimes the colours on the skin need fixing, which is when the Saturation tool comes in very handy. This technique allows me to create smooth-looking skin while still maintaining a natural look.”



© Creative Director: Adeera Borg  
Photographer: Vitalij Sidorovic  
Hair Stylist: Vimal Chavda  
Co Hair Stylist: Teffany Stoby  
Makeup Artist: Michelle Court  
Model: Jordan Bolessa



## 05. COMBINE IMAGE ELEMENTS

CREATIVE RETOUCHER AND VISUAL COMMUNICATOR AMAR KAKAD ([WWW.BEHANCE.NET/AMARKAKAD](http://WWW.BEHANCE.NET/AMARKAKAD)) SHOWS US HOW TO EDIT DIFFERENT PHOTOS TOGETHER SEAMLESSLY



### 01 | BASIC COMPOSITE

"First, when there are multiple images, you do your cutouts and composite them into your background. Decide what requires scaling and distorting. Next, we use

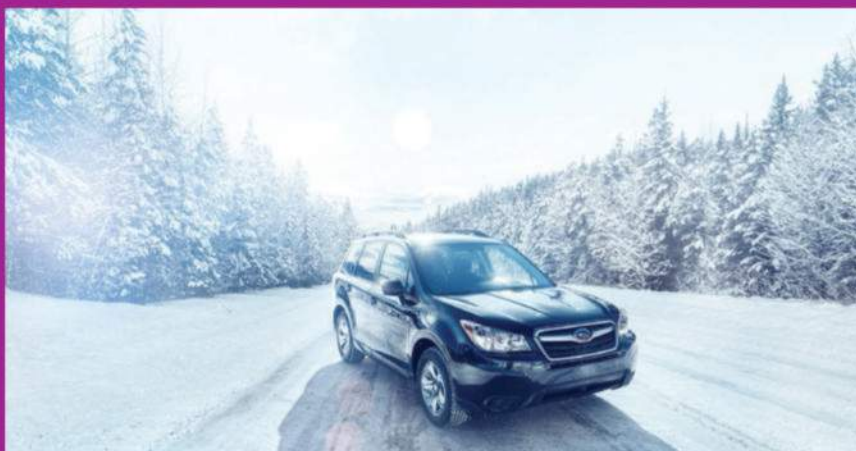
the Lens Correction filter. This can be found under Filter>Lens Correction. It facilitates in the process of correcting lens distortions and corrects the Horizontal and Vertical perspective."



### 02 | RETOUCHING AND ADJUSTMENTS

"Here we do some basic clean-ups, remove any artefacts or unnecessary reflections from objects, create shape and form. You can use the Patch tool or the Clone

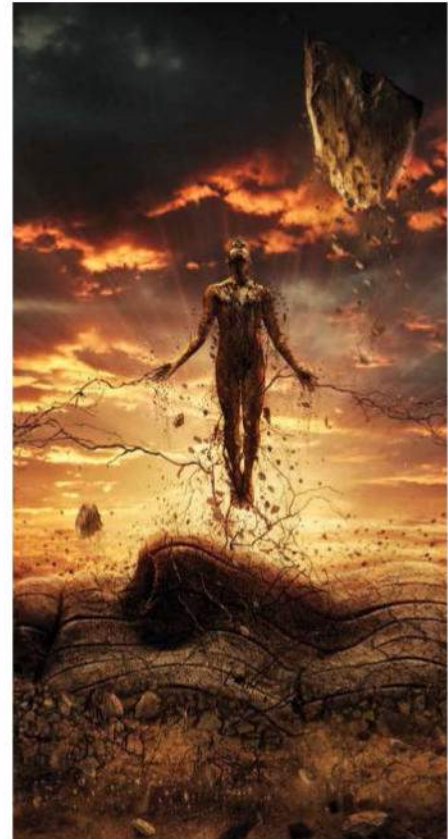
Stamp tool to achieve this. To set the mood, I used the Gradient Map, Black & White, Color Balance, Selective Color and Photo Filter adjustments."



### 03 | DRAMA AND TEXTURE

"In this stage we add further drama and texture to the image. We are going towards a cold look and feel. I added a blue flare painted with a solid

colour on a blending mode, and also incorporated some haze, bokeh effects and with some snow falling to give it more authenticity."



© flewdesigns.com

## 06. CONTROL LIGHT, SHADOWS AND PERSPECTIVE

Great compositing means bringing together multiple images and editing them so that they work together seamlessly in one scene. Lewis Moorhead ([WWW.flewedesigns.com](http://WWW.flewedesigns.com)) explains how he creates his hyper-realistic composites: "To make multiple images work together and look seamless is not an easy task, but there are some steps to make sure you do this every time. I call it PSL (Perspective, Shadows and Lighting). Each image you use must have the same perspective to work together seamlessly, or you must be able to change the perspective, such as using the Perspective Warp tool or Transform tools. If the perspective is off, your whole image will look faked. The shadows must react with the lighting to be accurate. If the light source is in the left-hand side of the image, then you are going to get shadows on the far right of the object. I use a Round brush with 15% Opacity and 10% Flow. This way I can use a mouse as effectively as using a tablet for creating accurate shadows. For the lights I use a clipping mask on each object, either using a Color Dodge layer with Soft Round brush for harsh lights on a black background, or just a plain Overlay or Soft Light layer using a suitable colour similar to the light source. To bring all the images together to make them look like they belong, I sharpen the image and then use the Noise filter adding around one or two per cent."





© Derek Johnston Photography

## 07. PLAN WITH YOUR CLIENT

A good photo-editing project involves good planning to be able to execute your, and your client's idea, perfectly. Photographer Derek Johnston ([www.derek-johnston.co.uk](http://www.derek-johnston.co.uk)) explains: "When a client comes to me with an idea, I'll first work out how realistic it would be to execute. For the image of Elisa, she came to me with the idea that she was creating her glass-like magic between her hands. I'll usually draw up a rough sketch that I will take to the client. The clearer you can be and get your ideas across, then the smoother your work will be. I'll create lighting diagrams for the client too, so they know what's going to be around them, then I'll explain each step of the shoot. As I mainly do composite work it can be a tad strange for them to know why I'm shooting certain things certain ways, especially if they've got no photographic knowledge. Communication is key. I want them to understand every bit of the shoot so it goes smoothly for me and makes a great experience for them."

## 08. IMPROVE PHOTO COLOURS

TOM ANDERS WATKINS ([www.tomanders.com](http://www.tomanders.com)) TALKS US THROUGH THE EDITING ON THIS IMAGE TO IMPROVE COLOURS AND GIVE A VINTAGE FEEL



**Noise:** "I wanted the Iceland image series to have a somewhat personal feel, so adding noise emulating a vintage camera gives all the images a unity, like they were taken from the same camera"

**Reduce shake:** "I took this shot wearing crampons standing on a glacier. I wasn't the sturdiest (putting it mildly), resulting in this image being slightly shaken. But using Photoshop's Shake Reduction filter made it barely noticeable"

**Color Balance:** "Too much playing with the Color Balance can run other parts of the image, such as the red on this guy's coat. With the Selective Color tool it's easy to re-correct any over-altered hues"

**Raw photo:** "Raw images capture a surprising amount of data, so pushing the Cyan value in the Color Balance tool really allows these parts of the image to come out and feel all icy"

**Levels:** "I like to give my photographs more of a matte feel, so pulling in the white and black Levels nodes slightly will help blend some of the darker details, and take away any stark white bits"

## 09. TRY ADVANCED SHARPENING TECHNIQUES

The final step of any photo-editing project is often to apply a degree of sharpening (it shouldn't be done before other image-editing tasks are completed, as it can introduce a level of noise). If you have multiple layers, then use Cmd/Ctrl+Opt/Alt+Shift+E, which will create a new merged layer at the top of your Layers stack. Photoshop CC's Smart Sharpen filter (Filter>Sharpen>Smart Sharpen) has evolved a great deal over the last releases and what was once hidden away in an advanced mode is now instantly available. You can accurately target the shadows and highlights individually, as well as make global adjustments. First, increase the Amount of sharpening globally, and then increase the Radius so that it is as high as possible



without introducing halos. Reduce Noise helps to sharpen the image, but without too much noise added. Then you can work on the Shadows and Highlights, reducing or increasing the global sharpening in these areas and fading them as needed into the image.

© Tom Anders





© Derek Johnston Photography

## 10. GET A CLASSIC LOOK WITH TRADITIONAL DODGE AND BURN TECHNIQUES

For a photographer and retoucher, the Dodge and Burn tools are hugely important for creating lights and shadows in an image. They help replicate old darkroom techniques for a traditional feel.

Photographer Derek Johnston ([www.derek-johnston.co.uk](http://www.derek-johnston.co.uk)) says that they are key to his work: "I'd have to say the Dodge and Burn tools [are the most important tools in Photoshop for photo-

editing projects]. For me, they're such an important part of the final outcome of my work and style. It helps shape and mould contours and contrast, and can really add that extra factor. I'll typically have a 50% grey layer set to Soft Light and use the Burn tool set to Midtones around 15% Exposure and work on the dark areas, making sure I have a soft edge on the brush too. I'll switch to the Dodge tool

on the fly by holding down Opt/Alt when I need to work on the highlights. It speeds things up. It's amazing what you can do to your images just by burning and dodging all the dark and light parts. On a portrait I'll get right in on the eyes and lips and get all those details out, dodging and burning all the dark/light parts of the iris and the cracks and lines of the lips."

## 11. DODGE AND BURN ON AN ADJUSTMENT LAYER

In order to achieve a stylised effect in his retouching, Clinton Lofthouse ([www.clintonlofthousephotography.com](http://www.clintonlofthousephotography.com)) utilises the Dodge and Burn tools in Photoshop: "Many photographers dodge and burn in one way, with one technique. I dodge and burn my images three ways with three different techniques, which I think helps me create the stylised worlds I imagine. First off I will dodge and burn with a brush using a Curves adjustment layer, set to a Luminosity blending mode. With this I give form to the body, more of a global dodge and burn. For example, I darken the outside of the arms and lighten the centre.

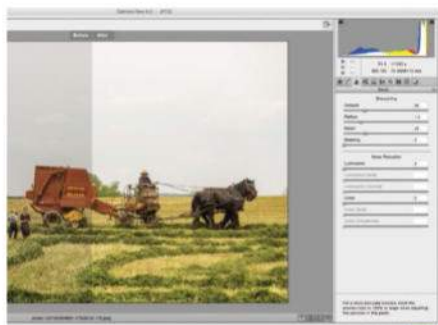
"Next I will dodge and burn on two grey layers, one set to Soft Light and one set to Overlay. With these layers I use the actual Dodge and Burn tools, with them set to Midtones. I concentrate on the details with this, zooming in close and getting the wrinkles, lines and small details. Taking my time to go over everything, as this part is where the stylised feel really comes into play.



© Clinton Lofthouse Photography 2015

"Finally, near the end of an image, I will dodge and burn for a third time using a black or white brush on a new layer on a Soft Light blending mode. Round three is usually to add more

contrast to specific areas I want to stand out more and a global tone of the whole image. Using these three dodge and burn methods together creates the hyper-real look I get in my images."



## 12. PRE-EDIT IN CAMERA RAW

Photoshop has a lot of great features for photo editing, but Camera Raw 9 offers almost as much power as Lightroom, which is dedicated solely to photo editing and retouching – it pays to make the most of ACR, especially with pure photography. You can open any image in Camera Raw from Bridge or through Photoshop itself (Filter>Camera Raw Filter) to access the tools. You can make basic adjustments to the image, such as Hue/Saturation and colour correction, sharpening, noise reduction,

Curves adjustment and so on. There are also options to add filters, emulating the look of lens filters to give vignette and other similar effects. Bear in mind that your final output affects how much you want to do in ACR. If it is a straightforward retouch, then you can do a lot of your workload in ACR, however, if you are going to be performing a lot of photomanipulation work, avoid anything like sharpening, which might introduce unwanted halos.

## 13. PERFECT COMMERCIAL RETOUCHING

PSD INNOVATIVE IS A FULL-SERVICE AGENCY OFFERING RETOUCHING, DESIGN, ADVERTISING AND PHOTOGRAPHY. HERE THEY SHARE THE PROCESS BEHIND ONE OF THEIR STUNNING TRANSFORMATIONS



### 01 | PHOTOGRAPH THE PRODUCT

Richard Parsons, creative photographer, photographed the SLS with multiple exposers to get the lighting correct on each of the panels and changed the position of the lighting to achieve this. Usually we will shoot a back plate without the car, then the car will be moved into frame.



### 02 | MAKE COMPLEX CUTOUTS

With the car cut out and the background separate, each panel of the car is then cut out with the Pen tool and matched up to the original image on the base layer. We adjust any of the panels for colour matching and make sure that they fit correctly. The panels are then masked and brushed smooth.

### 03 | CORRECT AND RETOUCH

The final stage is to correct the overall look of the final shot. The headlight beams and a new floor were added. At this point we will use many different adjustment layers and blending modes to achieve a stylised look. Because the entire process is non-destructive, we can adjust until we are happy with the final product.



© PSD Innovative 2015





## 14. RETOUCH LIKE A PRO

Photographer and retoucher Clinton Lofthouse ([clintonlofthousephotography.com](http://clintonlofthousephotography.com)) shares some of the secrets of how to retouch any image perfectly: "My most common tasks when it comes to retouching would be the cleaning of any blemishes, not just on the skin of a model, but also on the background. My go-to tool for this is the Healing Brush tool or the Clone tool. The Healing Brush tool just makes the tidying up of messy images so very easy. With the Clone tool you can create whole new sections of your image seamlessly without any distractions, and no one would ever know that you just cloned out a whole car!"

"Another common task, on every image for me would be the adding a little colour to the darks – I do this on practically all my images. My favourite method is to use a Selective Color adjustment layer, switch to Blacks and add some blue into the darks. It gives the images a painterly feel, kind of like the great painters who created their blacks from various dark paints mixed together. "The Pen tool is another common tool in my retouching workflow. I create a lot of composites, and nothing gives you a better cutout than the Pen tool; the Quick Selection tool and similar tools are okay, but nowhere near as accurate."

My last commonly used tool would be a Linear Dodge blending mode. I paint on this layer with a bright colour to manipulate the light of an image. I love creating stylised images and adding lighting effects adds greatly to this effect."

## 15. USE BRUSHES FOR MORE THAN PAINTING

For each project, Photoshop offers tools that are right for the job at hand. Andy McIntosh, director at PSD Innovative ([www.psdinnovative.com](http://www.psdinnovative.com)) says that the final image that he is creating and for what purpose determines the tools that he selects. However, for him, the humble Brush tool is one that proves immensely useful across a range of projects: "My go-to tool would have to be the Brush tool, as it is so diverse. I always use a Wacom 24HD and find that the Brush tool offers me huge flexibility for fast accurate work. As there are almost infinite ways to set up brushes, I can be sure that I can get the look, feel and texture that I need for any given project. I have many favourite brushes and many custom brushes that I use on nearly every project. Because I started as a traditional airbrush artist, it feels very natural to me to be using brushes and a Wacom."





## 16. MAKE AND USE ACTIONS FOR REPETITIVE PROCESSES

Tom Anders Watkins ([tomanders.com](http://tomanders.com)) has created a range of photo-editing Actions for Photoshop, which are sold in bundles in his Creative Market store ([www.creativemarket.com/tomanders](http://www.creativemarket.com/tomanders)). His Actions have been one of the top-selling products for two years running, so he's well placed to explain why you should use Actions: "Actions are brilliant; they're like the professional version of Instagram filters for your photography. Whenever I'm editing photos, I will spend time creating a specific look for one of the images, recording the process so it becomes a Photoshop

Action, which I can replicate super quickly for all my images without having to re-create them one by one.

"If you find yourself repeating the same process multiple times inside Photoshop... Look at creating an Action; whether it's as simple as cropping multiple images and saving them, to complex effects or photographic looks, they will save time. Alternatively, if you struggle getting the look you want, like a genuine HDR look or vintage feel, search for an Action that replicates it. You can see another one of my photos edited here with my Iceland Action.

## 18. USE GRADIENT MAPS

"There are quite a number of tools in Photoshop that are important," says Amar Kakad ([www.behance.net/amarkakad](http://www.behance.net/amarkakad)). "But, of late, I have been using the Gradient Map tool (Image>Adjustments>Gradient Map) a lot in my line of work. It is quite a powerful tool and used in the process of applying contrast to colours. Essentially the Gradient Map tool converts the image into Grayscale. I then change the blending mode to Soft Light, which restores the colour values. It effectively applies contrast in the black, grey and white tones. You are offered various presets – give it a try and you will see some interesting results. You can use this either with two colours or even multiple colours. It is entirely up to you. Play with sliders, this will allow you more control over how much contrast you want to apply."



## 17. APPLY PHOTO SKILLS TO 3D

Many photo-editing skills can be applied to 3D images, and 3D retouching skills translate to 2D as well, as 3D artist Loretta Foth ([www.lorettfoth.com](http://www.lorettfoth.com)) explains: "The importance of lighting does not just apply to 3D, but also to a 3D photomontage or any other non-3D retouching job. Either the lighting in the background of the image will need to be adjusted to your element, or the lighting of the object will need to be matched to your background. This can be achieved by paying close attention to the type of light sources that illuminate the image, and in which direction the light follows. Another thing to consider and match is the light colour. An image will not look quite right if an object is illuminated by warm light and the rest of the image has cold light. I think it's good practice to look at how photographers set up lighting, to get a better understanding and to be able to guess how an image is lit without seeing the light sources."



© Photography and retouching by Sabine Metz



## 19. CUSTOMISE PHOTOSHOP FOR THE TASK

Fashion photographer and retoucher Sabine Metz ([www.sabinemetz.com](http://www.sabinemetz.com)) has found that learning how to customise your Photoshop workspace and tools makes it much easier to be fast and efficient in projects: "I've been really keen on improving my workflow efficiency. Not only by making the retouching process from import to export as streamlined as possible, but also by making my workspaces more suitable for what I want to achieve. A lot of people do use shortcuts, like B for Brush tool and J for Healing Brush tool. Because I always use a Wacom when

retouching, I have my right hand on my Wacom, and my left hand on my keyboard. All the shortcuts I use are by default scattered all over my keyboard, which makes having a Wacom to prevent strain on my right arm redundant if my left hand is still reaching everywhere. By using Edit-Keyboard Shortcuts I set my shortcuts so that I have everything I use daily on the left-hand side of my keyboard. Also, I've set the interface colour back to good old CS5 grey. I find that having the darker colour scheme around my image clouds my judgment on contrast too much."



## 20. MAKE SURE YOUR WORKFLOW IS NON-DESTRUCTIVE

A good workflow is key for photo editing, especially in a professional studio environment, as Andy McIntosh from PSD Innovative ([www.psdinnovative.com](http://www.psdinnovative.com)) explains: "A fully non-destructive workflow is essential for what we do. Everything we do is done in layers, which of course means very large files and huge amounts of RAM and storage space. A client may come back for a project that we have done six months or so ago, and ask for something to be changed or

added or just an element of that design to be used in a new project. Without a non-destructive workflow that could be problematic and time consuming. Colour accuracy workflows are vital too; we calibrate everything from our cameras (input devices) to our Wacoms and Eizo monitors, and use the same workflows for colour accuracy through all our software. We use Prepress ISOs to ensure that we don't get any nasty surprises from printers!"

© PSD Innovative 2015





Before



# RETOUCH WITH MORE REALISM

LEARN HOW TO RETOUCH A NATURAL AND FRESH-LOOKING BEAUTY PIECE

**B**eauty retouching gets a bad reputation because all too often the changes are extreme and the image loses all sense of what is realistic. When you know how to work the subtle magic of Photoshop, you can bring out the beauty in any given piece – flaws and all.

When you think about the purpose of beauty retouching, you would most likely want to create the perfect image. However, the truth of retouching lies in the flaws that you leave behind. The real trick of it is to know which details to correct, and which imperfections to leave behind. Retouching

every single detail can be overkill, and subtle is always best. Whenever you leave behind a stray hair, a birthmark or a simple patch of a model's naturally gifted freckles, you keep a photo looking fresh and real at the same time.

Remember, once you are done retouching your photo, your viewer should not be able to notice that anything changed at all, except that the photo looks amazing. Leave a few imperfections to de-emphasise the overall perfection you are striving for. After all, true beauty doesn't need to call for attention, so why should your retouching?



## OUR EXPERT

**JOHN ROSS**  
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@ArtOfRetouching

John educates photographers and retouchers by helping them expand their creativity through Photoshop from his website, and the classes he teaches from New Haven, Connecticut.

## SOURCE FILES

You may purchase the main image from <http://bit.ly/1Ti4NHU> and you can find supporting images for the hair and skin on [www.filesilo.co.uk/advancedphotoshop](http://www.filesilo.co.uk/advancedphotoshop).

## GENERAL CORRECTIONS

DO SOME HOUSEKEEPING, THEN DIRECT THE EYE TO WHERE IT SHOULD BE

### 01 HAVE CLEAR OBJECTIVES

Compile a list of items that will need to be addressed. Is the overall image too bright, too flat, or even too green? Take note of the following: clumpy eyelashes, flyaway hairs, skin discolourations, tilted frame, etc. Armed with the most obvious changes that are needed, you can envision what needs to be worked on first, and what can wait until last.



### 02 START WITH GEOMETRIC ISSUES

Geometry should often come first. Ask yourself if your photo is tilted, or if the perspective is off. Drag a guide out from the rulers to the centre of the subject's face. Double-click on the Background layer, then click OK so that it becomes editable. Then rotate it with Edit>Free Transform so that the face is square in the frame.



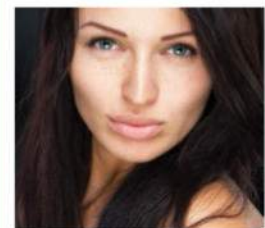
### 03 USE LIQUIFY TO RESHAPE

In order to refine the misaligned areas in an image, use Filter>Liquify to reduce the nose and drop down the hairline. Be sure to click Advanced Mode, and lower the Pressure to 15. You can also centre the lips and reshape them. Remember to go subtly and you should do just fine.



## WORK IN PROGRESS

THE SUBTLE TRANSFORMATION OF BEAUTY



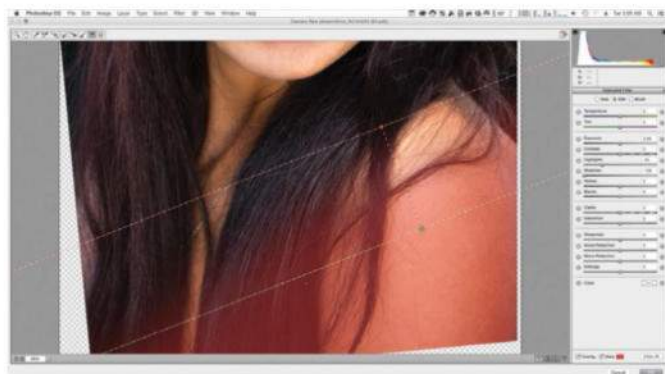
Progress 1: General changes



Progress 2: Detailed work



Progress 3: Refinements



## 04 | CORRECT THE TONE AND COLOUR

The next issues that you should concern yourself with are your basic colour and tonal corrections. This kind of adjustment cannot always be efficiently done inside Photoshop itself. What you need instead is to make your corrections with Filter> Camera Raw. Camera Raw helps you balance your image with just a few slider adjustments. General changes can be within the Basic panel, but more targeted changes can be done with the Adjustment brush. You can mask different areas and experiment with colour and tone to see which adjustments can enhance the image.

## 06 | CHECK YOUR TONE

When you're nose-deep in a project, it's easy to get lost in the details and forget the overall tone of your image. Sometimes, you need to step back and check how you're doing. Simply remove the colour in your photo and view the image in black and white. This will help you to understand how the tones affect the image. At this early stage, the tonal balance doesn't need to be perfect. What's crucial is that you're able to establish how the viewer's eye should navigate the image.



### ■ QUICK TIP: MANAGE LIGHTS AND DARKS

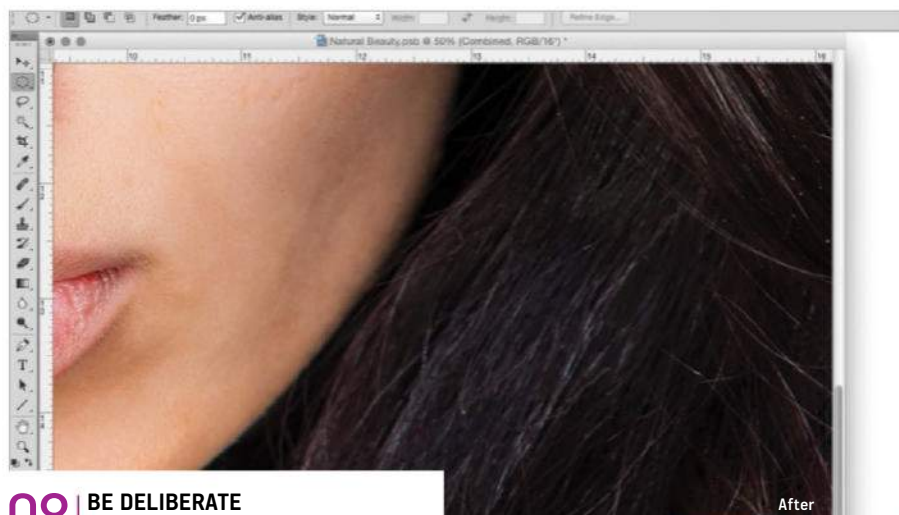
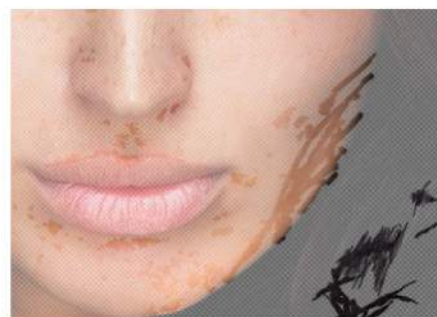
The play of lights and darks creates much-needed depth on flat paper. Make sure that the face is the brightest area of the photo, i.e. the eyes, nose and mouth. Be careful not to make the whites of the eyes and teeth too bright, though. They are curves, so there should be some lights and shadows as the objects contour around.

## 05 | GUIDE YOUR VIEWER'S EYE

The most important areas of this portrait are the eyes, nose and lips. Eyes and teeth are not necessarily the brightest parts, because they will look out of place. However, the centre area of the face would generally be the brightest and possibly the most colourful. To do this, you should darken the lower areas of your photo with a Gradient inside Camera Raw. This not only adds depth to your image, but it also subtly forces your eye back up to the lighter areas of your model's face.

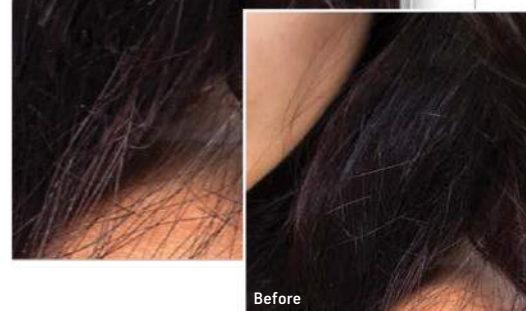
## 07 | CLEAN UP YOUR IMAGE

Now that you've got the core issues fixed, it's time to start cleaning up your image. Use the Healing brush to remove the stray hairs, the discoloured skin, and the other blemishes. To start, create a new blank layer and name it Cloning (always make a habit of naming your layers properly to avoid confusion in the future). Move fairly quickly through the entire image. Get rid of the worst and most obvious imperfections. Don't worry about the finer details; just do a general clean-up.



## 08 | BE DELIBERATE

When cloning and healing, especially in a beauty piece, be sure to follow along the contours of the textures. Don't just randomly cover over the hairs and blemishes if you don't want your image to end up looking like you went crazy with the Cloning brush. Try to be as deliberate as you can with each click. Remember that every stroke needs to have a purpose, especially since you want your adjustments to look as subtle as possible.



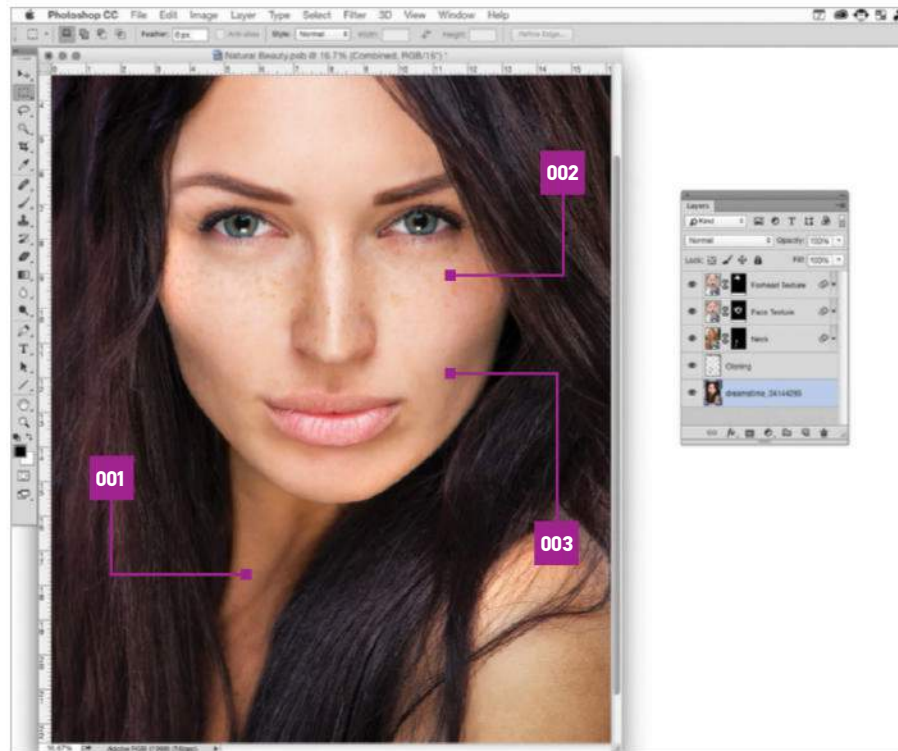


## ■ ALL ABOUT GRAFTING

COMPOSITING FROM ALTERNATIVE IMAGES HELPS YOU PERFECT IMPERFECTIONS

### 09 | DO SOME SKIN GRAFTING

Sometimes the image might not have all the detail you need. Missing pores and other textures are common problems. When that happens, turn to skin grafting. This is when you take parts from another similar image, and composite them together. By matching the colour and tone, you can blend the similar areas from the two images together.



**001 | NECK GRAFTING**  
There are too many loose hairs, so replace the neck with a similar image. Match the colour and blend in the sides

**002 | FACE GRAFTING**  
Other problem areas include the forehead, cheeks and chin. You will need to take a similar image and graft as well

**003 | PAINTING DETAILS BACK**  
Sections of skin have detail while others have little. Place the alternate image and use a layer mask to paint details back in



### 10 | ACCENTUATE THE LIPS

To make the lips of the model look irresistible, soften the lips with the Healing brush. Remove the worst looking cracks, and then replace the lips with a similarly shaped, but nicely lit shine. Resize with Edit>Free Transform and mix layers with the Blend Mode>Lighter Color. This will emphasise the lustrous shine on the lips. Afterwards, colourise the lips with Layer>Adjustment Layers>Black and White, and enable a Tint. Doing it this way will allow you to better mix and blend using the various sliders.

“When cloning and healing in a beauty piece, be sure to follow along the contours of the textures”

### 11 | REFINE AROUND THE EYE AREA

At first glance, the eyebrows of the model are just too clean and perfect. Bear in mind that sometimes, the most perfect details are the ones that look the most unnatural. To remedy this, replace the eyebrows from another model. Correct the colour to match the hairs as well. Then, use Filter>Liquify to touch up and adjust the eyebrow shape a little more. You can also paint in eyelashes with a very small brush. Use two layers, one for dark lashes and one for light lashes. Then you can adjust the layer's opacity as desired.





## 12 | BE CONSISTENT WITH YOUR COLOURS

Parts of the hair are reflecting a warm brown colour, and other areas are a cooler blue colour. Use a Hue/Saturation adjustment layer set to 0-15-0, with Colorize checked. Select the layer mask and use Edit>Fill Color>Black. Then paint with a white brush, to bring back the warmer brown colour over the top of the cooler areas. This is to make it more consistent. To make the hair on the shoulder more full, add some hair extensions from another model. Find similar hair, and then use Filter>Liquify to better match the natural contours.



## 13 | CLONE ON THE HAIR

Sometimes areas are too complex and require the Spot Healing Brush set to Content Aware. This tool has come a long way since its introduction and no longer needs to be avoided. This will allow you to remove the thin hair and let Photoshop automatically match the surrounding areas. Continue to remove stray strands by cloning in the areas where hair generally goes in one direction and random ones go the other way. Many, but not all of them, need to be removed.

### ■ QUICK TIP: KEEP IT SUBTLE

Remember: always apply your adjustments and effects with control. The only time your audience should be able to see what you've truly done is when you show them the before and the after photos – that is when they will see the small, but significant, changes you've made.



## 14 | DODGE AND BURN

The eyes are the windows to the soul, so pay as much attention to them as you can, especially in a beauty piece. To truly make those eyes pop, add highlights and shadows to them with a dodge and burn technique. If you'll notice, the eyes from the original image were flat and lacked any real punch. By adding lights and shadows, you can add more contour and curvature to otherwise dull features in your beauty model.



## 15 | USE CURVES TO DODGE AND BURN

One way to Dodge and Burn is to use Curves. Create two Curves adjustment layers and fill the masks with Edit>Fill>Black to create a black mask instead of a white mask. One Curve should be pulled up for lightening, while the other Curve pulled down should be for darkening. Now, you can use a white paint brush set to 10% or 20% on the layer mask to start brushing in areas that you want to make lighter or darker, depending on which layer mask you paint on.



## 16 | ADD SHADOWS TO THE FACE

While you are doing all of these general adjustments in tone, don't forget to do the same for the face of your model as well. Go ahead and add some lights and shadows to the face. You may be able to use the same Curves layer that was used for the eyes if you want. For more control, create a new set of light and dark Curves just like before. A bonus tip is that you can create a Window>Actions>New Action to automatically create and name these Curves layers for you.



## OVERALL LOOK AND FEEL

DETERMINE THE TONE OF YOUR BEAUTY PIECE BY PLAYING WITH LIGHT AND SHADOWS

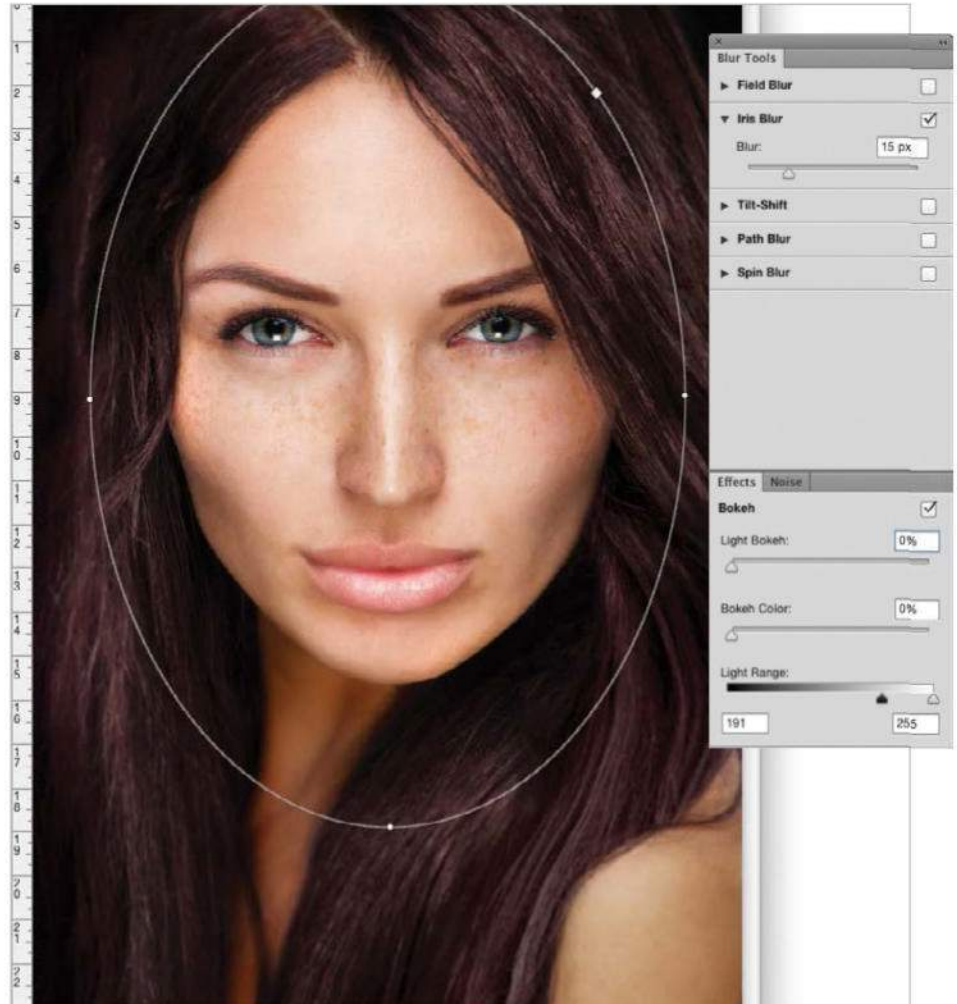
### 17 USE IRIS BLUR

When you have finished all the retouching and want to call this image complete, do one last thing to really help it sing. Select the top layer and hit Cmd/Ctrl+Alt/Option+Shift+E. Photoshop will merge a copy of all visible layers onto a new layer right on top. Use Filter>Blur Gallery>Iris Blur and adjust the default oval to better match the face shape. Leave the blur at 15px, and click OK to add Depth of Field.



#### WORK SMART IN PHOTOSHOP

Retouching a beauty piece cannot be done in one go. There will likely be misplaced layers, incorrect cloning and frustrating do-overs. As you work on a variety of images, knowing how to use all the sliders and buttons in Photoshop is important. But even more so, you need to create a workflow that will give fast, consistent and repeatable results. For example, create a list of changes to use as a guide so you don't miss anything. Use Smart Objects and adjustment layers for non-destructive editing. Finally, learn and rely on techniques that prove themselves invaluable time and again.



### 18 MIND THE OVERALL COLOUR PALETTE

Notice how the colour palette of this image mixes yellows, reds and browns. Did you find it odd that the overall palette is a very monotonous colour scheme? That, too, is deliberate. The only deviation is the eye colour. While it still has some brown in it, it is the only area in the entire image that uses green. With the face being the brightest part of the image, it naturally draws the viewer's eye in. It's this shift in colour that further refines the important area of the portrait.







# GENERATE MOVIE POSTER-STYLE ARTWORK

LEARN HOW TO CREATE A MOVIE POSTER EFFECT WITH MOODY TONES AND SUPERHERO EFFECTS

**T**here's something about a costumed superhero that brings hope no matter how bleak real life gets, but you don't just have to look to the skies, or to the movies, to become inspired. When it comes to powers and superhuman abilities, it's easy to get lost in the theatrics of it all.

Creating your own superhero-themed masterpiece is easy as long as you ground your work in reality. Remember, there's a fine line between dramatic and melodramatic – don't cross it. Use colour and light to your advantage. Warm colours

come forward, while cool colours go backward. Bright areas attract your eyes first and dark areas are easily overlooked. Use lines and points of interest to keep the attention circling around your image. Doing this will keep the viewer's eye focused on the key elements, not wandering all over the page.

Always direct their attention to the most important aspects of your image. Falling rain and other effects can be distracting, so stay subtle and keep it balanced. Sometimes adding too many effects can break up clean lines that otherwise gave an organic flow to the image.

## ■ FIRST THINGS FIRST ISOLATE THE MODEL AND WORK ON YOUR COSTUME

**01 | KNOW WHAT YOU NEED TO DO**  
Before you begin with anything, always have your end goal in mind. What kind of effect do you want to achieve? Go through existing movie posters for inspiration and sketch a few designs. Look for existing posters that catch your eye. Don't be afraid to get inspiration from what's already out there; anything that's dynamic is open for consideration.



**02 | KEEP YOUR CLIENT'S SPECS IN MIND**  
Once you have a solid idea of how you want your image to look, apply your client's specifications to your design. How can your ideas fit into what the client wants from you? Did your client provide you with any starting images or specific directions? Go with your creative instincts, but always keep your client happy.



**03 | ISOLATE THE MODEL**  
Begin by removing the model from the existing background. Hopefully, the model was shot against a solid background. While green is often used for video, a solid white is much better for compositing images because less work is required. If not, manual masking will need to be done. First, silhouette the entire model by using Filter>Color Range.



### OUR EXPERT

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@ArtOfRetouching

John educates photographers and retouchers by helping them expand their creativity through Photoshop from his website, and the classes he teaches from New Haven, Connecticut.

### SOURCE FILES

On FileSilo there are two cityscapes to help you perfect the background to your movie poster. You can download the model photo from [www.dreamstime.com](http://www.dreamstime.com), image number 36725883

## ■ WORK IN PROGRESS FROM INITIAL IDEA TO FINAL FINISH



Progress 1: General changes



Progress 2: Detailed work



Progress 3: Refinements

## 04 | USE THE REFINE MASK

Apply this selection to a layer mask and use Select>Refine Mask to brush the fine hair details back. If you have a strangely coloured background like green, then the Decontaminate Colors option can help. Finally, use a small brush with 80% Hardness on the layer mask to paint away any areas that Color Range could not get. For silhouettes, you need to come close and be accurate. Cut into the subject one or two pixels to avoid the background colour. No one will ever miss these few pixels.



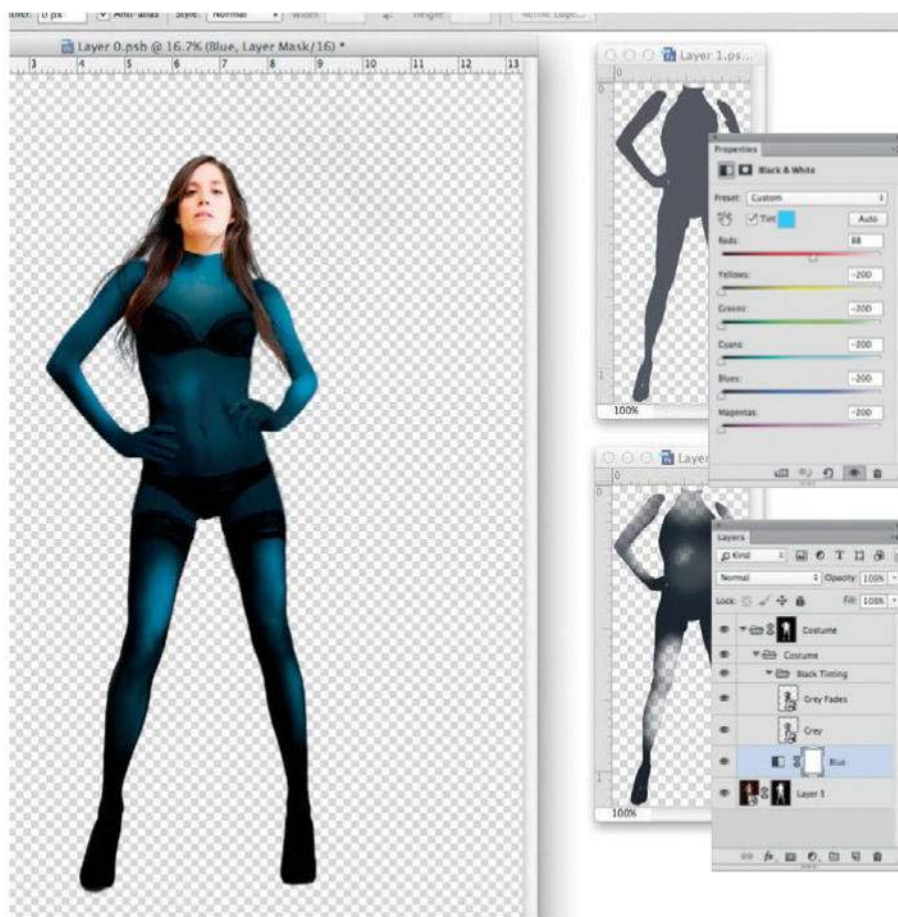
## 06 | CREATE A GLOWING EFFECT

A trademark superhero usually comes with some trademark superpowers. Keep your hero superhuman by adding creative elements in the costume and around your model. Here, you can simulate a superhero glow with a white brush on a new layer. For cleaner lines, use the Pen tool instead, and stroke the paths you created. With white colour for either tool, create a glowing effect using a Layer>Layer Style>Outer Glow with the following properties: Screen blend mode, 43% Opacity, RGB values of 150R 219G 255B, 8% Spread, and a Size of 46%.



## 05 | WORK ON YOUR COSTUME

Reselect your layer mask with Cmd/Ctrl and click the layer mask you just created, it will reselect. Darken the skin by applying the selection to a new layer and filling the selected area with black. Remove the skin areas with a black brush on the



layer mask. Bring back the details of your selected area by setting the layer's blend mode to Multiply and adjust the opacity. Use Layer>Adjustment Layer>Black and White. Tint with 0R 198G 255B and pull down all the colours to -200 except Red 88 for enhanced contrast.

## 07 | THE INKED COMIC LOOK

While it's very popular to ground superheroes as close to reality as possible these days, it's still good to remember that they came from the KAPOW-filled panels of your favourite comics. Stay true to your superhero's comic book origin story by keeping the inked effect intact. To achieve a more contrasted and gritty comic look, go to Layer>Adjustment Layer>Curve with two points: Input 91, Output 3 and Input 197 Output 214. This will help make your image look more reminiscent of your favourite graphic novel.

### QUICK TIP

You should always try to make things easier for yourself from the get-go. Simplify your image by addressing the basics first, such as isolating the model. Then create your costume and other dynamic elements like glowing effects, all while keeping your end goal and your client's specifications in mind.





## THE OVERALL FEEL

ADD DYNAMIC ELEMENTS LIKE CITY AND SKY LAYERS, LENS FLARES AND TEXTURES

### 09 WORK ON YOUR BACKGROUND

You can either achieve a subtle yet effective impact with your cityscape, or you can run the risk of going overboard. It's important to find the right balance, as you don't want your dynamic elements to overshadow your superhero. So be sure to keep the background sharp, but subdued. This can be achieved by using a slightly lighter black to show distance.



#### 001 | SELECT YOUR BACKGROUND IMAGE

Place city.tif behind the model layer, removing the blue sky with the Magic Wand. Scale this layer to fit correctly, making the buildings look realistic

#### 002 | SELECT YOUR MOODY SKY

For added effect, place a moody sky photo behind the cityscape. You can use HDR software like Photomatix from [www.hdrsoft.com](http://www.hdrsoft.com) to bring out the detail

#### 003 | MATCH THE COLOR AND TONES

As you keep adding layers from different sources, it's important to keep them all balanced and use the same tones and colours



### 08 REMOVE GARMENTS UNDER THE COSTUME

A secret identity is best kept as it is – a secret. Remove the undergarments of the original model beneath the costume you have just created once the basic look you're gunning for is achieved. Create a new blank layer right above the model layer. Because of the previous Curve, you will no longer need to be accurate. Still, you should try to match the general skin tone with a paintbrush and cover over the fabric areas. With some tone sculpting, you can adequately remove those old clothes under the costume.



### 10 ADD SOME BRICK

Place brick.tif (on FileSilo) below the city image. Use Edit>Free Transform to scale it to fit, and rotate it -4.70 degrees. Use Layer>New>Layer and paint in with a black brush at 20% Opacity to add some depth, with a shadow under the pool rim, under the model's feet and above the edge of the image. You can add some extra detail with Filter>Filter Gallery>Film Grain with values of Grain 4, Highlight 0, and Intensity 0.



### 11 MAKE COLOURS POP

As your image comes to life, you can make selected colours pop by using Layer>Adjustment Layer>Vibrance. Take a moment to further understand these two sliders. Vibrance will first affect the cool colours like blues, while Saturation is quicker to affect the warm colours like reds. For this image, you can easily adjust the model's hair and face with subtle adjustments to the Saturation slider. When you're satisfied with your results for the warm hues, compensate with Vibrance as needed. Brighten overall with Levels or Curves and touch up with a cloned layer.





**12 | CREATE VISUAL INTEREST** You can make the most out of the various visual elements in the photo, so don't be afraid to experiment with the different warm and cool colours. Add some soft details in the hair by using a new blank layer, and a very small brush set to 10 or 20% Opacity. All these are good ways to adjust colours as the light bounces around. Select hues that are already in the image by using the Eyedropper tool. You can also paint in highlights and shadows depending on your taste.

**13 | BALANCE TONE AND COLOUR** The face needs to be bright because it is so important. Just be careful to have it match the overall scene. Place a temporary Layer>Adjustment Layer>Black and White over the top, and you can check your tones. Tone trumps colour. This means that as long as the image looks nice and balanced in greyscale, it will usually look great in colour. Make a selection around the hair and face, then use Layers>Adjustment Layers>Exposure with values +1.89 Exposure, -0.1313 Offset, and 1.03 Gamma.



## ■ ALIGNING WITH YOUR END GOAL

### ADDING FINISHING TOUCHES TO CREATE THE PERFECT MOVIE POSTER



**14 | LOOK AT THE BIG PICTURE** Because you are working on a superhero piece, there is a tendency to add too many effects and too many adjustments. But creating a heroic piece does not mean you should use every effect that Photoshop has to offer. To avoid getting your nose too deep into the details, detach yourself, take a step back and look at the big picture. Zoom out, inspect your image and make sure everything is still well balanced. It's easy to add too much detail with the effects.



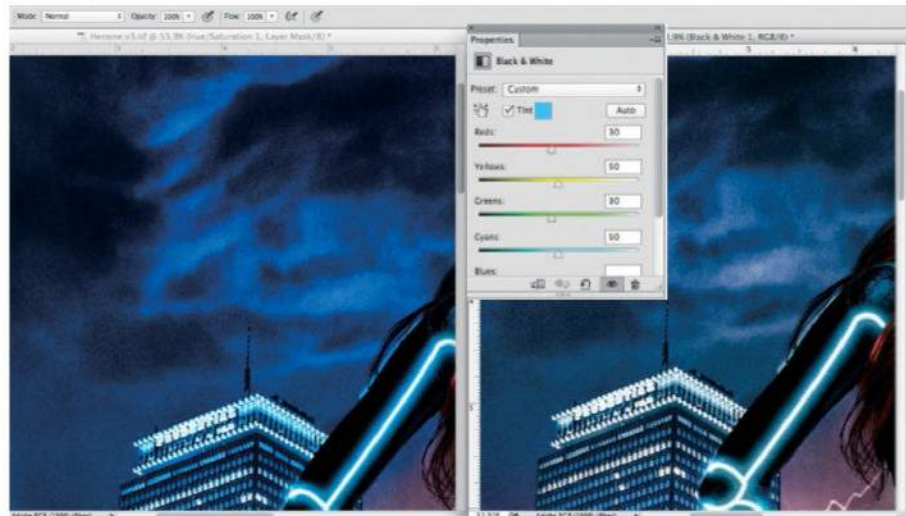
**15 | KEEP THE VIEWER FOCUSED** Movie posters always keep the viewer's eye focused on the central image. In this case, you want your viewer to hone in on your superhero model right away; even with all the fancy glow effects and smoke layers in the background. To ensure that you can effectively direct your viewer's attention, remember that the brightest areas keep eyes focused. Despite all the textures and swirls pulling your eye around, it is always brought back to the centre, which is where your superhero should be.





## 16 | USE COLOUR PALETTES SPARINGLY

Notice that the current movie posters out in cinemas today often use limited colour palettes. When you want a particular element of your image to stand out, then using a new colour will help. Whenever a different colour is introduced, it is used as a way to draw attention to it. This is a powerful tool to control what you want your viewer to notice. Here, it is the face, hair and sky that have the only red, yellow and orange colours. Ultimately, the only warm elements.



## 17 | OUT OF GAMUT

Colour settings are completely different for online images, when compared with printed images. In prints, you may find that the final image has Out of Gamut issues while working in RGB (Red, Green and Blue). That means the colours are so bright and pure that the magazine's printing process will lose details because it cannot reproduce the colours accurately. By carefully reducing the Saturation, the colours can be brought closer to the CMYK (Cyan, Magenta, Yellow and Black) colour model that magazines use.



## 18 | LET IT RAIN

You can add some extra texture by adding the storm's rain to the picture. Creating rain is easier than you may think. Simply create a blank layer with Layer>New>Layer and fill it with black. Use Filter>Noise>Add Noise with a value

of 50, uniform and Monochromatic. Then apply Filter>Blue>Gaussian Blur with Radius of 0.50. Lastly, use Filter>Blue>Motion Blur with Angle 60 and Distance 50. By doing this, you will enhance the mood of the storm by getting everything wet.

### ■ QUICK TIP

Superhero movie posters may have unrealistic elements set in a realistic world and it's up to you to find the right mix of making something fantastic yet believable. Just be sure to keep the focus on your main hero and not on everything else going on around them.



### ■ MASKING, ADJUSTMENTS AND NON-DESTRUCTIVE WORKFLOW

Masking is one of the most important and basic skills you need to have when doing any retouching work, especially when you're working on a composite piece like this one. Because the elements around the model are dynamic and changing, working non-destructively is now more crucial than ever to allow you to go back and forth between your adjustments in case you change your mind at any point while working. For more on masking and how to work non-destructively, go to [www.TheArtOfRetouching.com](http://www.TheArtOfRetouching.com) for more in-depth tutorials on everything you need to know to become a master retoucher.



# Graphics and type

Add impact to your work with dynamic graphics and create eye-catching typefaces with help from Photoshop

## 150 20 tips for better graphics & illustrations

Learn from this collection of expert advice on developing graphics and illustrations

## 158 Add hand-drawn effects to fonts

Create beautiful weather-beaten painted lettering to enhance your digital artwork and posters

## 164 Use Clipping Masks creatively

Work imaginatively with clipping masks to create stunning graphics that are highly editable

## 170 Produce ice-effect type

Master a photorealistic type effect by combining ice and fire in this meeting of elements

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“Using Photoshop to its fullest is a great way to expand your skillset and get your artwork to a higher level”

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# 20 TIPS FOR BETTER GRAPHICS & ILLUSTRATIONS

PRO DIGITAL ARTISTS AND ILLUSTRATORS SHARE ESSENTIAL ADVICE FOR IMPROVING ILLUSTRATION TECHNIQUES AND GETTING THE MOST OUT OF KEY PHOTOSHOP TOOLS

## 01. ADJUST COLOR DYNAMICS AND TEXTURE

GRAPHIC DESIGNER AND ILLUSTRATOR SHAIVALINI KUMAR ([WWW.BEHANCE.NET/SHAIVALINI](http://WWW.BEHANCE.NET/SHAIVALINI)) EXPLAINS THE KEY TOOLS USED IN THIS FANTASTIC IMAGE



## 02. USE GRADIENT MAPS

A designer and illustrator based in Vancouver, DC, Aaron Campbell ([WWW.aaroncampbell.ca](http://WWW.aaroncampbell.ca)) says: "I like leaving my sketches a bit on the vague side so that there's lots of room for experimenting in Photoshop. Quickly brushing in some black and white for values will establish your lighting early on in the piece, so there's no confusion when you're painting the final. I draw out a perspective grid and start Pen-tooling in the largest blocks of colour, then begin adding in the lighting, starting with the largest areas and the main focal point. I also add some Gradient Maps over the top to add harmony to the colour palette. I like mixing it up between multiple Gradient Maps on different blending modes and opacities to give some very unexpected results."



## 03. TAKE CONTROL OF PATHS WITH THE PEN TOOL

Aaron Campbell ([WWW.aaroncampbell.ca](http://WWW.aaroncampbell.ca)) explains how to get the most out of this essential Photoshop tool: "I use the Pen tool in Path mode instead of Shape mode, therefore for my shapes and lines I use Fill Path or Stroke Path instead of having separate shape layers. This makes it easier to edit the shape in almost any way and paint over the top of them or use

the Pen tool's Make Selection function to minus off any part of the shape. I often do my illustrations as paintings and having rasterised blocks of colour makes it easy to paint other colours into the shape, erase parts and merge other shapes together. I could create a full piece with just the Pen tool since it offers so much variety in just one tool."





#### 04. DRAW SHAPES WITH THE PEN TOOL

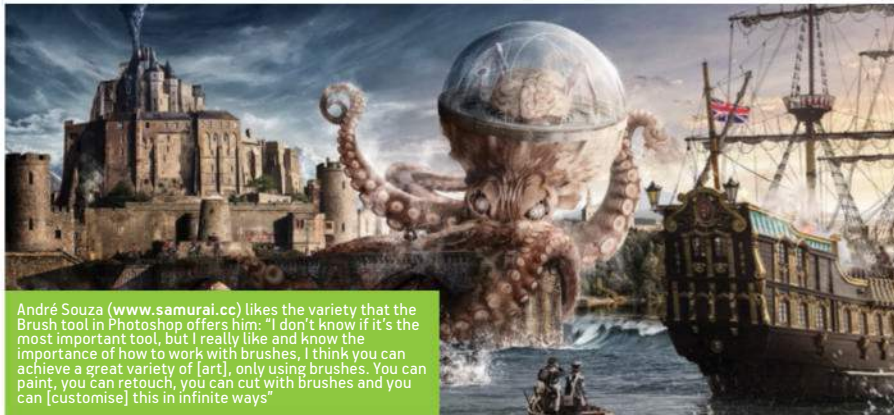
Giulio Rossi ([www.behance.net/giuliorossi](http://www.behance.net/giuliorossi)) is a self-taught illustrator. His designs are clean and sharp, often introducing quirky characters with lots of expression. For him, the Photoshop Pen tool is essential to his workflow. In fact, it is one of the key tools that he uses in designing his stylised work, mainly for creating vector shapes within his illustrations. "I use the Pen tool to create the basic shapes of my illustrations. Starting from the initial sketch, I trace the edges of the elements I want to keep separated from the rest so I can work directly on them with the brushes. It helps me be more clean and precise, which is something I really enjoy when I include geometric shapes into my portraits."

© Giulio Rossi



## 05. CREATE AND CUSTOMISE PHOTOSHOP BRUSHES

© André Souza



André Souza ([www.samurai.cc](http://www.samurai.cc)) likes the variety that the Brush tool in Photoshop offers him: "I don't know if it's the most important tool, but I really like and know the importance of how to work with brushes. I think you can achieve a great variety of [art], only using brushes. You can paint, you can retouch, you can cut with brushes and you can [customise] this in infinite ways"

© Eric Proctor



Eric Proctor ([tsaoshin.deviantart.com](http://tsaoshin.deviantart.com)) is also a fan of the brushes in Photoshop, especially custom tips: "Being able to set and adjust various brush parameters such as scatter, opacity and linking actions to tablet pressure gives me the control I need to create a brush set that emulates traditional methods. My library for brushes includes custom brush tip sets to help me automate tedious tasks like creating blades of grass, texture on rocks and strands of hair."

© Fredy Santiago



Fredy Santiago ([www.imsugarcoated.com](http://www.imsugarcoated.com)) uses Photoshop's brushes to add texture to his art: "The way I use the paintbrush is mostly to control textures that I want in certain areas; it gives me the opportunity to display contrast within the image. The Brush tool has also allowed me to use different tricks with it, like experimenting with opacity, Flow, brush assets and [variable] options. From time to time I create my own brushes; I am a big fan of graphite-like texture brushes and watercolour ones."



© Van Orton Design

Marco and Stefano of Van Orton Design ([www.vanortondesign.com](http://www.vanortondesign.com)) also rave about the importance of brushes when it comes to delivering their electric designs: "Perhaps the answer will be trivial, but for us the most important tool is just the brush and a good tablet – absolutely essential for the success of some phases of our work. Also a good use of black marks and appropriate selections complete the work in the right way."

## 06. USE PHOTOSHOP WITH OTHER SOFTWARE

Many illustrators use other programs, such as Adobe Illustrator, 3D software and painting programs, but Photoshop has a key role to play in these workflows. For Shaivalini Kumar ([www.behance.net/shaivalini](http://www.behance.net/shaivalini)), Photoshop is an essential component in getting the illustrations to completion: "Being a graphic designer, I use Adobe Illustrator a lot. But for all my illustration work, I use Photoshop, as it gives me more control over my rendering. I often create my base shapes in vector format in Illustrator, and then texture them and give them highlights in Photoshop. A lot of my illustrations require the use of the Airbrush, Dry brushes, Watercolour brushes, etc, therefore my final compositing for my illustrations is done in Photoshop."

"What Photoshop also allows me to do is use pressure sensitivity while drawing, therefore giving me maximum control over my strokes. I am also heavily into typography and editorial design. Photoshop, therefore, is the best place for me to create hyper-realistic mockups. It helps me in presenting my work in the best manner. The action-coded layers in Photoshop mockups make it very easy to use them. For me, Photoshop is a complete package [and in] using [it] I can create my artwork and deliver it in the best way possible too."



© Shaivalini Kumar



## 07. A DIGITAL ARTIST'S TOP TOOLS

DIGITAL ARTIST FREDY SANTIAGO SHARES THE TOP FOUR TOOLS AND TECHNIQUES THAT MAKE UP HIS IMAGES



**Texture:** I often use the Brush tool with texture and apply it into surfaces to make things a little more lively



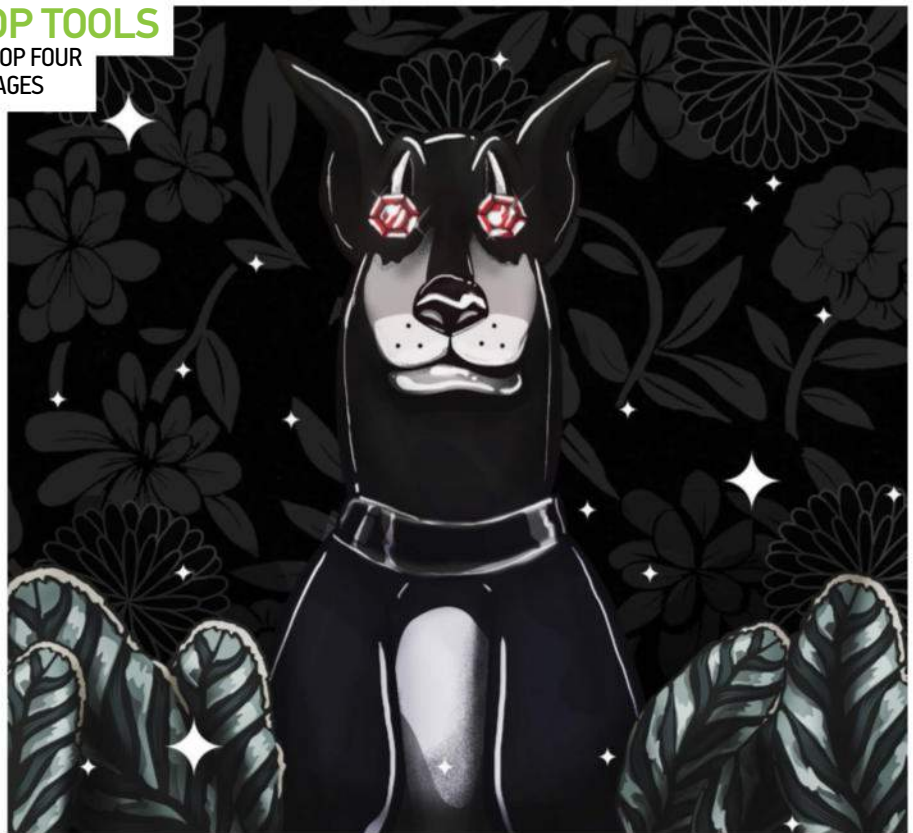
**Gradients:** The Gradient tool helps me bring depth and interesting colour shifts in areas that I select



**Paintbrush:** The Paintbrush is a master tool when it comes to adding highlights in illustrations



**Burn tool:** The Burn tool gives the final touches when giving objects more volume



© Sugar Coated



© Van Orton Design

## 08. BRING IN ELECTRIC COLOURS

Van Orton ([www.vanortondesign.com](http://www.vanortondesign.com)) is comprised of twins Marco and Stefano from Italy, working as illustrators and designers. Their work is distinctive thanks to their use of electric, popping colours, which are retro but utterly modern at the same time. How can you add a touch of the electric to your own illustrations? You have to go back to the Eighties, say the duo. "We are very inspired by the graphics and illustrations of the Eighties and Nineties. In those years, these electric colours were used everywhere. For our work we really like to start from two or three main colours and add more and fill the palette evenly. Also, the use of pattern and texture in pop-art style is critical to finish the work."



© Emi Haze

## 09. COLOUR CONTROL AND SELECTIONS

Emi Haze ([www.emihaze.com](http://www.emihaze.com)) explains how Photoshop's staple tools are essential to good illustrations: "I use blending modes – Multiply, Overlay, Soft Light – to obtain peculiar effects in the combination of different layers and textures, for instance the double exposures. The blending allows me to combine different elements, colours and images in a single work, creating shape and colour compositions beyond imagination."

"Colour is an element of primary importance for the final perception of the artwork. Thanks to the

application of colour adjustments to every single layer – like Curves, Levels, Hue/Saturation, Selective Color – I have complete control over the colour throughout every phase of my work.

"Finally, I can't forget the Selection tools. There are a multitude of techniques to obtain a good selection: from a bitmap or vector mask, the Color Range tool, selecting with colour channels or, especially when working with a [graphics tablet], the fastest way to be precise is using the Lasso and Pen tool."

## 10. USE REFERENCES FOR EVERYTHING

André Souza ([www.samurai.cc](http://www.samurai.cc)) is the partner and director for Samurai.cc, a creative content company. He suggests that up-and-coming illustrators looking for a way to better their work and break into the industry simply take the time to look at the world around them and find inspiration: "What I would like to say to them is: always look. Always observe the world

around you: the people, the nature and the animals, the way they move, talk and act. You will always find wonderful references in this. Listen to good music, keep the habit of watching movies, reading books and comics, play a lot of videogames – never underestimate the power of pop culture. And draw, if you like it, a lot. [In conclusion], be a good observer."



© André Souza

## 11. WORK WITH TONAL VALUES

ANNA WARDLE TALKS US THROUGH THE CREATION OF HER GEISHA CREATION, WHICH DEVELOPS FROM MONOCHROME VALUES TO FULL-COLOUR MASTERPIECE



### 01 | MONOCHROME VALUES

"I normally start off in black and white. This helps with contrasts in lighting, especially if you tend to get distracted by colour. I make a dark silhouette to set a great base to build on. I always use a reference, as this is really important."



### 02 | TONES AND LIGHTING

"Next, I [start to] build in my tones and lighting roughly with a mixture of textured brushes, trying to keep loose. Then bit by bit it all comes together and you start to see the image forming."



### 03 | COLOUR AND DETAIL

"A Color layer helps to add colour without losing any of the painting foundations already laid down by working in black-and-white. I slowly work on top using a Normal layer, adding more colour and details to make the piece stand out as much as I can."

© Anna Wardle

## 12. KEEP AN INSPIRATION FOLDER

Anna Lisa Wardle's ([www.annailustrations.wordpress.com](http://www.annailustrations.wordpress.com)) work often encompasses fashion illustration, which requires finding inspiration and influence to create designs. She explains how to find this in everyday life: "Inspiration for any creative individual is everywhere. It's in cultures, fashion and people. You just have to indulge yourself. As an artist, I try and keep many influences and dedicate as much time into staying amazed by the arts as I can. This only makes me want to work more. I have folders full of artists' work on my computer and plaster their work on walls surrounding my desk as a constant inspiration. I have always loved manga and oriental styles; they have always been my main inspirations. However, I also find Renaissance paintings, photography and fashion to be key influences too. There are countless artists I love to spend hours researching: Lois Van Baarle, Audrey Kawasaki, Amy Sol and Soeymilky to name a few! My advice would be not to give up on your work if you feel like you've hit a wall with your image. It's a horrible feeling, so searching the web, magazines or various art books for new artists always helps to spark my interest [again]."



© Anna Wardle





© Giulio Rossi

## 13. COMBINE REAL MEDIA AND DIGITAL DRAWING

Illustrator and graphic designer Giulio Rossi ([www.behance.net/giuliorossi](http://www.behance.net/giuliorossi)) came from a traditional painting background and shares how he made the change to digital: "Since I bought my first graphics tablet, I [have] discovered a whole new way to express my creativity! I always thought that traditional and digital methods were so different from each other, so when I started creating things with my computer I didn't try to replicate what I used to do before. I preferred to test my ability to draw, working with the great potential that a digital environment could offer. Of course, all the practice I've had with traditional art techniques was pretty valuable, and even if I draw with my computer most of the time, I [have] never quit doing it the old-fashioned way. Digital painting has a different approach to drawing and it's all about the fact that you can work with several layers for just one illustration, which is an advantage over traditional art."

## 14. 8 STEPS TO AMAZING ILLUSTRATIONS

TIM HASTINGS WALKS US THROUGH THE PROCESS OF DESIGNING AN AMAZING ILLUSTRATION IN PHOTOSHOP

**Composition:** "You are ready to begin sketching. During the composition-sketching phase, keep your sketching loose and try to create as many different variations as possible of your concept. Allowing yourself many options will increase your chances of creating something better than if you were to fixate on one single idea."

**Flip your view:** "When sketching your compositions, always flip your canvas (Image>Mode>Image Rotation>Flip Canvas Horizontally) to see proportional errors, and other things you might have missed by viewing the piece in only one direction. If you are sketching non-digitially, the same technique can be applied by simply turning the paper upside down and viewing it from that angle."

**Creating inking brush settings:** "I get asked a lot about the Photoshop brush settings I use. In truth, the settings I use are very basic in comparison to what Photoshop can really do. My brush settings mimic that of an ink and brush technique, or a pen drawing style. I use the Default Circle brush with 1px Spacing and 100% Hardness along with only the Shape Dynamics checked and set to Pen Pressure."

**Explore different colour palettes:** "After your final art is complete, you should always explore other colour options. One easy way to do this is to Image>Duplicate>Merge, then Cmd/Ctrl+U to bring up the Hue/Saturation menu. Sliding the Hue slider will allow you to see almost every other colour set within the same Hue family. Sliding the Saturation slider will also allow for more colour variation, along with the Brightness slider."

**Conceptual planning:** "The prequel to the sketch, conceptual planning is a definite must for creating better illustrations no matter what skill level you are at. This means figuring out what you want your piece to say. Combining a concept or message with your art will not only improve the outcome, but in general, allow your audience to connect to it."

**Create colour sets:** "Create a Photoshop document with vast colour sets ranging from two to eight or more colours. Creating premade, limited-palette colour sets on a separate PSD will give you the ability to drag full colour sets into your current work seamlessly, saving you time. Always update your colour palettes PSD and mix and match your previous colour sets to create new ones to allow colour diversity in your art."

**Colour is everything:** "Along with conceptual planning, colour is key in what you want your piece to say. Every colour has its own meaning and can change the mood of the illustration instantly. Limiting your colour palette creates dramatic emphasis and will allow the illustration to become more sophisticated. A good formula to use is a neutral colour and two complementary colours within the same hue."

**Set up for screenprinting:** "90 per cent of my work is set up for screenprinting. The best and most effective way to set a design up is to prepare before you start. Every colour must be on a separate layer and stacked accordingly. The linework is always my first layer, but in the end this layer will end up being the T-shirt colour so it must be at the top to Select>Load Selection>Example Layer, then Edit>Clear from each colour layer that is underneath the linework layer. The last layer in your layer menu is a fill of what colour you will be using for your shirt. You must also do the same thing for each colour layer that is over the top of another colour layer to ensure zero overlap when printing."

© Tim Hastings



## 15. BLENDING MODES, TEXTURES AND MASKS

Emi Haze ([www.emihaze.com](http://www.emihaze.com)) is a freelance digital artist and illustrator, whose work retains a traditional, handmade feel thanks to the blending of many media elements, including photography and custom textures. He draws on his experience in traditional media to give his digital work this tangible feeling, as he explains: "Before working in digital art and illustration, I [started out in] drawing, painting and later graphics. I always loved the gesture and the warmth of creating a sketch, in the stroke of acrylic or oil colour, in the splashes of watercolour or ink. So [nowadays], when I start developing an image I try to include my manual skill in the design and in the use of colour, digitally importing it into my artwork. [In a single image] I combine hundreds of Photoshop layers with many and many graphic elements and textures. All of the blending modes, layer masks and adjustment layers I use, make the starting image less digital and more similar to a painting or drawing."

"This phase of manual elaboration is then merged with a strictly digital phase. Selecting parts of different photo images, I try to blend, using the double exposure technique, the human body with nature and its four elements: fire, air, water and earth. The result is the vision of an imaginative world hanging between reality and fantasy, dream and utopia, and in which colour and sensitivity have the predominant role."



© Emi Haze



© Eric Proctor

## 16. MASTER PHOTOSHOP'S ADJUSTMENT TOOLS

Digital artist Eric Proctor ([www.tsaoshin.deviantart.com](http://www.tsaoshin.deviantart.com)) says that his top tip for better illustrations is to master colour control using Photoshop's tools: "Learn to use the colour-adjusting tools such as Curves, Levels and Color Balance. These tools are some of Photoshop's strongest assets and can help you see imbalances in your work as you compose. I often fuss with the colour in my paintings through

these tools. They help me to create broader colour palettes or correct lighting problems, especially early on in the painting when I'm laying down the initial palette. I find that working with the Curves tool and Color Balance, I can shift a painting away from looking murky or cloudy to something more vibrant and saturated. Before I finalise any painting, I tend to do a final run of colour adjustments to add the last bit of pop."



© Giulio Rossi

## 17. CUSTOMISE PHOTOSHOP FOR YOUR TABLET

Giulio Rossi ([www.behance.net/giuliorossi](http://www.behance.net/giuliorossi)) creates his striking character designs using a graphics tablet, which is an important tool for many digital artists and illustrators. However, how you use it is key if you want to improve the quality of your illustrations. Rossi doesn't change a lot from the default settings of his tablet, but he does "assign specific keyboard shortcuts for each software [that he uses], but it really depends on the graphic tablets model you're working with." His general advice is to customise your Photoshop workspace to make working with the tablet easier: "I suggest everyone customises the Photoshop user interface and creates different ones according to the type of work you have to do. I have my own working space for

digital painting (which is very minimal with only the tools and panels I actually use to create an illustration: Layers, Brush Presets, Color, Swatches) and another one I use when I have to work for different projects. So more complex than the other one, with more icons of the tools I need, for instance, to organise, align [and] modify the elements inside the page such as text, shapes."

Finally, if you are using a tablet a lot, then the kit needs to be right for you: "An ergonomic comfortable stylus with a pressure-sensitive tablet is crucial to get your best potential in drawing in the most natural way possible, but you can also improve it by changing the Opacity and the Flow of the brushes so you can work easily at your own pace."



## 18. FOLLOW A LAYER-BASED WORKFLOW



Graphic designer and illustrator Tim Hastings ([www.mindkillerink.com](http://www.mindkillerink.com)) explains how he builds up his designs: "My typical workflow process begins with at least a day's worth of working on another project that is already in progress, while having the next project in the back of my mind, conceptually planning it out in my head and visualising what direction to go with. After sufficient mental planning, I will begin digital composition sketches, usually around three for client-commissioned work. After composition sketches are complete, I generally let the client view them, then we review and see which has the best direction. When a final sketch is decided upon, the process is always the same. I begin the linework phase; this generally is 60 per cent of the final

illustration, combining the darkest shadows and linework into a single layer, while the sketch is on another layer at low opacity and locked to ensure I stay on the correct layer at all times. Upon the completion of the linework, I again get feedback from the client, and once all is approved I move to colour. Colour is generally predetermined by the composition sketch phase and then it's a process of stepping each colour layer by layer until the final illustration is complete. Finally, I explore other colour options, see what set works the best and send it off to the client, and then usually set it up for printing. This whole process can take anywhere from eight to 20 [plus] hours, depending on the complexity of the concept being illustrated."



## 19. WORK WITH THE EYEDROPPER TOOL

Anna Lisa Wardle ([www.annailustrations.wordpress.com](http://www.annailustrations.wordpress.com)) is a UK-based freelance illustrator who creates work focused on pattern, design and colour, with a distinct style and a portfolio stacked with engaging portraits. Her key Photoshop trick lies in a less-used tool: the Eyedropper. "Having a favourite tool is relative to your style. For me, it would be the Eyedropper tool. It is perfect for blending. I use Eyedropper tool constantly, literally every second when painting. It is amazing for picking colour samples from any image you find and applying it to your work. This really broadens your mind when thinking about colour. Blending becomes easier when you use the shortcut (Opt/Alt) to access it rather than pressing it separately on the toolbar. If you have a graphics tablet you can hotkey it, which saves time enormously."

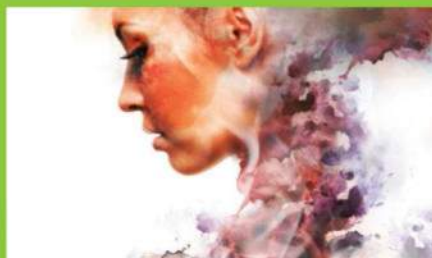
## 20. USE PHOTOS AS A BASE

EMI HAZE EXPLAINS HOW HIS ILLUSTRATIONS START FROM A PHOTO AND ARE BUILT UP WITH TEXTURES AND HANDMADE ELEMENTS



### 01 PHOTO RETOUCHING

"The artwork starts from a photo and the first step is its retouching. I cut out the subject from the background with a selection usually using Pen and Lasso tools, working with a tablet, and create a bitmap mask. Then I remove part of the image to prepare it for the next step."



### 02 HANDMADE ELEMENTS

"I do various handmade elements, such as scratches, ink marks, acrylic or watercolour stains, which I digitally import in the work. I merge all these elements with the subject, using blending modes, adjustment layers, various bitmap/vector masks and selection tools."



### 03 IMAGE PROCESSING AND COLOUR CORRECTION

"I select from other photos different natural elements and I import them on separate layers, trying to melt them to the subject with the double exposure technique. In the end, after numerous retouchings to finish the work, I proceed with the final colour correction of the image using adjustments layers."







# ADD HAND-DRAWN EFFECTS TO FONTS

LEARN HOW TO CREATE BEAUTIFULLY WEATHER-BEATEN PAINTED LETTERING WITHOUT EVER TOUCHING A PAINTBRUSH

There is something very nostalgic and whimsical about old-fashioned painted fairground signs. The way that these signs manage to draw power from the world that they depict makes them so attractive and intriguing. They somehow capture the electric velocity of the attractions and offer the viewer a glimpse into them experience they're about to embark on.

Unlike modern typography, which seems to be either self-consciously quirky or painfully utilitarian, fairground typography is unapologetic in its relentless desire to provoke an emotional response from the viewer. Perhaps it is because of their ability

to entice and beguile that has meant that painted fairground signs have changed very little since their inception and even the recent renaissance of fairground typography has produced little more than mere pastiches of the original.

In this tutorial, we are going to create a weather-beaten painted sign for the digital age – one that requires no paintbrushes and no paint. Drawing colour inspiration from the effervescent lights of the fairground and incorporating the jubilant flourishes of its rides, the aim is to capture the excitement of the fair by any means possible. So come and run away to the circus with us and let's get started!



## OUR EXPERT

**ANDY HAU**  
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@andykwhau

Andy Hau is a London-based architect, designer and the owner of A.H.A Design. For him, "design is an escape from the futility of modern life, not an endorsement of it."

## START WITH THE BASICS

### SETTING UP THE FOUNDATIONS FOR YOUR LETTERING

**01 CHOOSE YOUR COLOUR PALETTE**  
To create an ombré effect reminiscent of fairground signs for the lettering, choose colours that naturally blend well together. I've chosen orange (d85a29) and magenta (a8118b). To make the lettering really come to life, choose a contrasting colour for the shadow: I'm using turquoise (00d5c0). For the lettering outlines, choose a metallic, gold colour (c3996c).



**02 PICK A TYPEFACE**  
For the text, you can either hand-draw the lettering from scratch or you can cheat and take an existing cursive typeface and adapt it. Choose a typeface that has many ligatures and alternates to make the text seem natural and hand-written. There are plenty of good, open-source typefaces that are free to download, such as Lobster and Pacifico.



## 03 ARRANGE YOUR LETTERING

Start by sketching loosely on-screen how you want your text arranged. The lines of text should look balanced and there should be a flow that leads the eye from the beginning of the text to the end. Don't worry too much about the large gaps that are naturally formed – these will be filled with embellishments later on.

## WORK IN PROGRESS

### PAINTED LETTERING WITHOUT THE MESS



Progress 1: Choose the typeface



Progress 2: Bring the lettering to life



Progress 3: Add the background





**04 | TYPE ON A PATH** For the first line of text, start by drawing a diagonal path using the Pen tool (P). Make sure that Path is selected in the selection box in the Toolbar. Once this is done, select the Type tool (T) and click on the path. The text will now follow the alignment of the path. Type in your text and change the size, style and tracking of the text where necessary through the Characters palette. Create new paths and repeat the process for each line of text.

■ QUICK TIP

While this type of lettering can be created from scratch in Photoshop, you can make your life easier by creating all the text outlines in Illustrator, which offers a lot more control over the editing of objects. Once you're done, simply drag your objects from Illustrator into your Photoshop canvas.



**07 | PLAY WITH OVERLAPPING** Create breaks in between areas that overlap to bring some depth to the image. This gives the impression that the letters and the embellishments are going above and under each other. Use the Polygonal Lasso tool (L) to create boundaries and delete the areas just before and after an overlap, making sure that each break is approximately the same size for a convincing effect. Be sparing with these overlaps and leave the majority of the letters alone so that you don't affect the legibility of the text.



**05 | CLEAN IT UP** As with all cursive fonts, there may be letters that don't join up properly. Additionally, with the Pacifico font, the strokes of many of the letters end abruptly. These will need to be cleaned up to appear more natural and handwritten. Right-click on the text layers and select Rasterize Type. Use the Polygonal Lasso tool (L) to either delete unnecessary areas or to create additional fill areas so that the text appears clean and flowing. You can also take this opportunity to refine the placement of some of the letters.



**06 | ADD SOME EMBELLISHMENTS** Embellishments not only help to add drama to the image but also help to encourage the flow of reading. Use the Pen tool (P) to add embellishments and swirls to some of the letters. To create curves, click and hold down the left Mouse Button and manipulate the handles to get the curve that you want. To edit the anchor points afterwards, select the Pen tool (V) again, hold down Cmd/Ctrl and click on the anchor point that you want to edit.



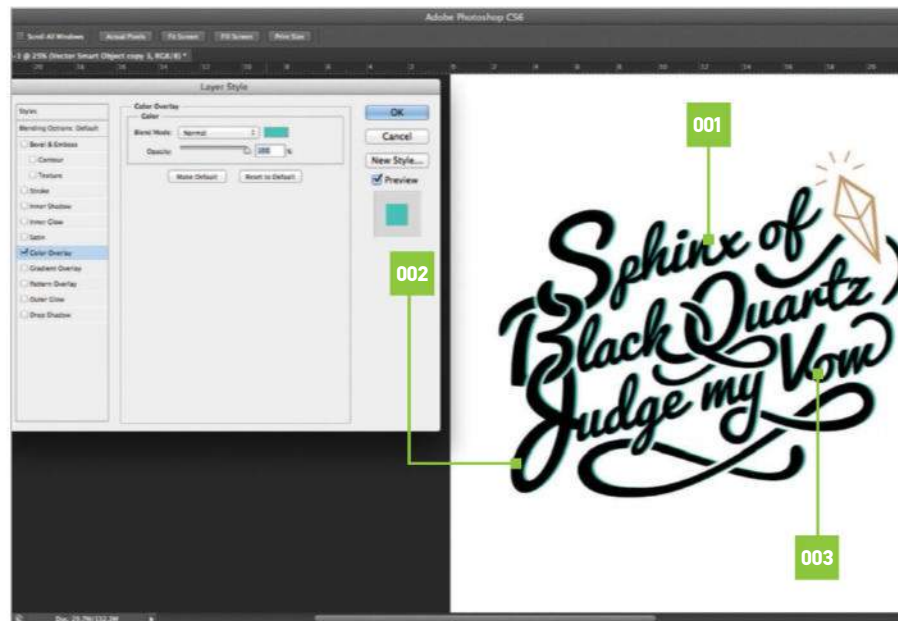
**08 | ADD SOME ILLUSTRATIONS** To introduce an element of fun and some unpredictability, incorporate illustrations into the lettering. Make sure that these illustrations relate to the meaning of the words and that they are stripped back and simplified so that they don't compete with the letters. To highlight the word Quartz, we are going to add a crystalline symbol. Draw this by using the Pen tool (P) – make sure that Shape is selected in the selection box in the Toolbar. Select No Colour for the Fill setting and gold for the Stroke setting.



## NOW TO WORK IN TECHNICOLOR INTRODUCE COLOUR TO YOUR LETTERING

### 09 CREATE SOME SHADOWS

Select the layers with the lettering elements and make a copy of them. Merge these copied layers together. Place the new layer behind the existing lettering layers and move it slightly to the right to create a shadow. Double-click on the new layer and select Color Overlay. Set the colour of the overlay to the turquoise.



#### 001 ARRANGE THE LETTERING

A cursive font was chosen and the text was laid out. Anomalies in the lettering were cleaned up manually.

#### 002 ADD SOME EMBELLISHMENTS

The lettering was embellished to create a more flowing look. Breaks were introduced in areas that overlap to add depth.

#### 003 PICK THE RIGHT COLOUR

A jewel-bright gradient fill and gold coloured outline will be added to the lettering to bring it to life.



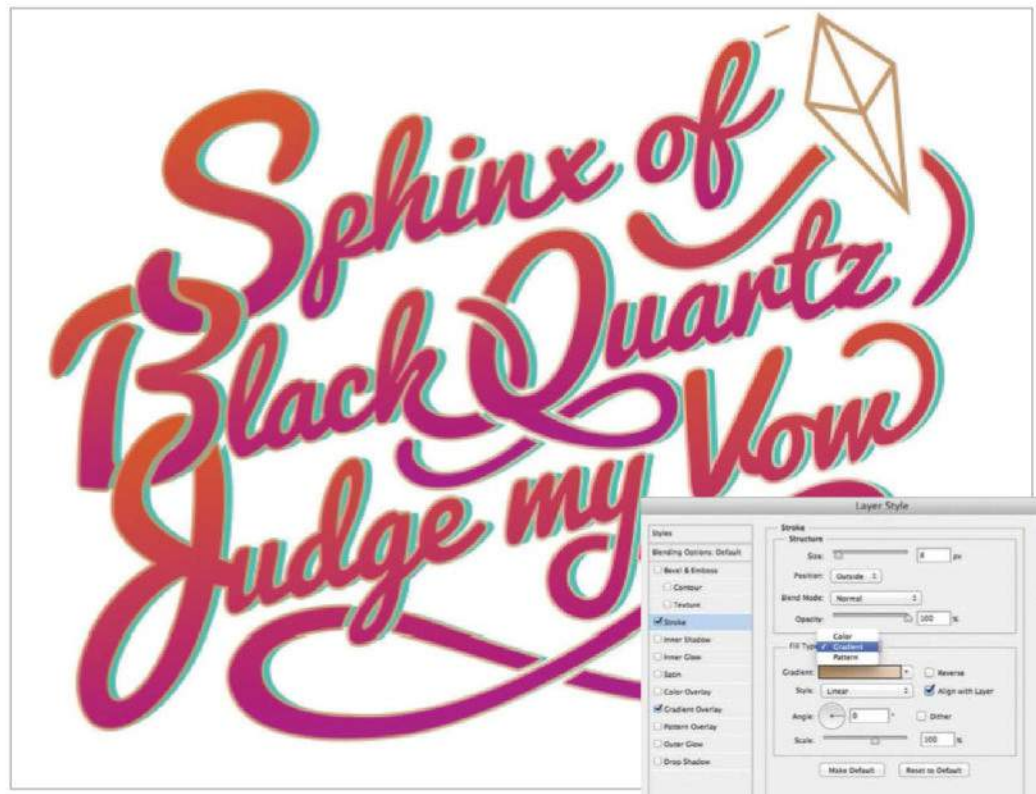
### 10 SELECT GRADIENT OVERLAY

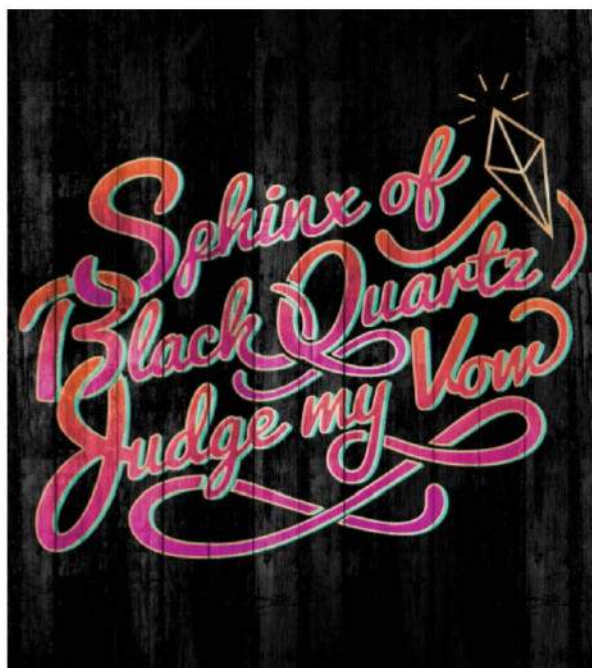
Double-click on the layer with the first line of lettering and select Gradient Overlay. Click on the Gradient box and change the colour of the gradient to the orange and magenta colours we chose in Step 1 by double-clicking on the Black and White boxes in the Gradient Editor. Change the angle of the gradient so that the orange colour aligns with the top of the text and the magenta colour aligns with the bottom of the text. Repeat this step for every line of text.

### 11 TWEAK THE LETTERING OUTLINES

Double-click on the layer with the first line of lettering again and this time select Stroke. Adjust the Stroke size accordingly (approximately 8px in this case) and change the Fill colour to the gold colour we chose in Step 1. If you want to add an extra sparkle to your outlines, choose the Gradient option instead of the Color option in the Fill Type selection box and blend the gold colour with a lighter gold colour. Repeat this step for every line of text.

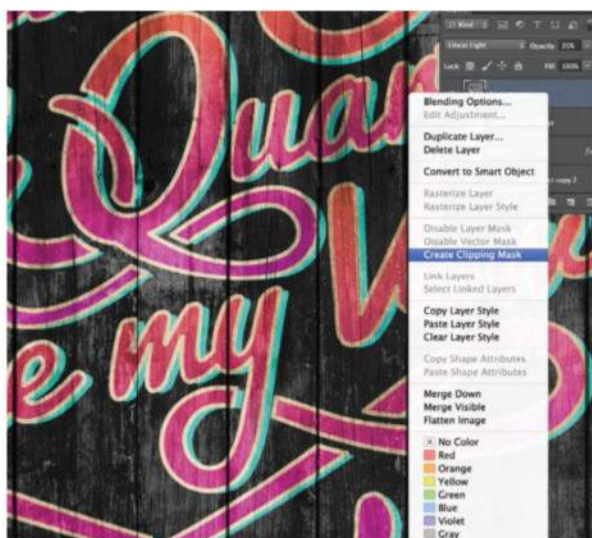
“Fairground typography is unapologetic in its relentless desire to provoke an emotional response from the viewer/reader”





## 12 MAKE THE BACKGROUND

Fill the Background layer in black. Drag in the repeating timber planks texture and copy it repeatedly, tiling it systematically as you go to fill the entire canvas. Merge the timber texture layers together and drain the colour out of it by selecting Image>Adjustments>Desaturate. Place the layer at the top in the Layers panel and select Hard Light as the blending mode. The text should now show through the texture as though it has been painted on top of it. Lower the opacity setting of the texture layer accordingly.



## 14 ADD TEXTURE TO THE TEXT

To create a subtle painted effect for the lettering, drag in the paint texture again into the canvas. Follow Step 13 to create enough paint texture so that it covers the lettering. Place this layer directly above the lettering layer in the Layers panel, right-click on it and select Create Clipping Mask. The paint texture will now be clipped by the lettering layer. Set the blend mode for the paint texture layer to Linear Light and lower the Opacity setting to below 40%.



## 13 PAINT TEXTURE

Drag in the paint texture into the canvas. It's likely that the Paint texture image will not fill up the entire canvas. To extend the texture, select the layer and draw a boundary using the Polygonal Lasso tool (L) in the areas where you would like additional paint. Select Content-Aware under the Fill command (Edit>Fill) and Photoshop will add additional paint areas using the current image. Place the layer below the timber texture and change the blend mode of the layer to Screen and lower the Opacity to below 20%.



## 15 CURVES ADJUSTMENT LAYERS

To correct the washed out effect that the paint textures create, click on the circular icon at the bottom of the Layers panel and select Curves. This creates a Curves adjustment layer, which will adjust the tones and contrast in the image. Place the Curves adjustment layer above the clipped paint texture layer and slowly but surely, change the RGB, Red, Green and Blue curves in the Properties panel until the contrast looks correct. Use the suggested values in the screenshot as a basis.



## FINISHING TOUCHES

ADD THE ADJUSTMENTS TO FINISH OFF YOUR MASTERPIECE



### QUICK TIP

Sometimes you just want to work on one layer without the distraction of all the others. Instead of hiding each layer manually, simply hold down Alt and click the eye symbol on the layer that you want to work on and all the other layers will be hidden.

## 16 ADJUST THE VIBRANCY

With two paint textures on top, the colours on the lettering may start to look a little muted. To bring back some of the vibrancy of these jewel-bright colours, create a Brightness/Contrast adjustment layer and place it directly on top of the lettering layer. Increase the Brightness setting until the colours look correct (approximately 15 in this case). The effect is very subtle but it's the cumulative effect of all of these subtleties that bring this image to life and make it convincing.

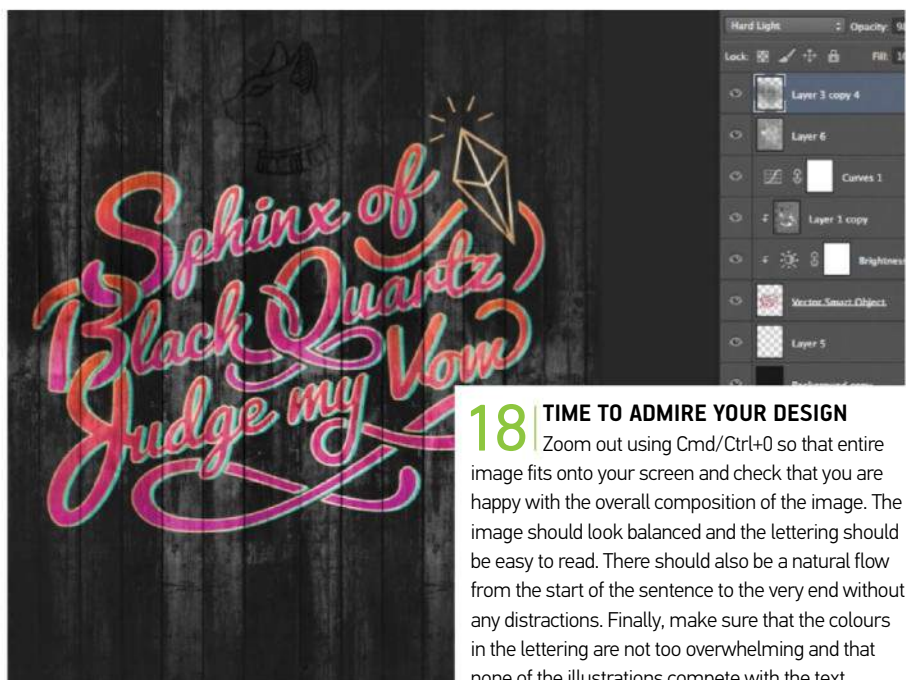
## 17 ADD AN EXTRA SOMETHING

It is always good to hide a little something in your designs to give your work a bit of an edge, it can be something obvious, or something more cryptic but they all serve to add another level of interest to the image. For this image, we added an Egyptian mau at the top. Create the illustration with the Pen tool (P) on a new layer like Step 8. Right-click on the layer and select Rasterize Layer. Change the blend mode to Subtract. The illustration will appear to have been burnt into the timber.



### ADJUSTMENT LAYERS

I never used to be a fan of 'non-destructive' editing – life is too short to be tentative! However, since being introduced to adjustment layers, I am now almost evangelical about them. The edits made with an adjustment layer usually affect all the layers beneath it. To apply edits to only the layer directly underneath the adjustment layer, simply select the adjustment layer in the Layers panel and then click the Clip icon at the bottom of the Properties panel. To affect multiple layers, place these layers into a Group (Cmd/Ctrl+G), place the Group directly under the adjustment layer and the effect will be applied to the whole Group.



## 18 TIME TO ADMIRE YOUR DESIGN

Zoom out using Cmd/Ctrl+0 so that entire image fits onto your screen and check that you are happy with the overall composition of the image. The image should look balanced and the lettering should be easy to read. There should also be a natural flow from the start of the sentence to the very end without any distractions. Finally, make sure that the colours in the lettering are not too overwhelming and that none of the illustrations compete with the text.





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# USE CLIPPING MASKS CREATIVELY

UTILISE CLIPPING MASKS AND BLENDING MODES TO COMPLETE A PAINTERLY ILLUSTRATION

Inspired by current trends in design and apparel featuring galaxy and nebula imagery, this tutorial will show you how to incorporate Photoshop's fantastic tools and effects in digital painting to create an otherworldly piece of artwork.

Using clipping or layer masks, various effects, vector tools, and blending modes within Photoshop can not only speed up the creation of a fantastic digital painting, but also brings something new to the design that may have been avoided due to tedium, or not have been executed as well if done manually. Photoshop is a powerful tool, and using it to its

fullest is a great way to expand your skillset and get your artwork to a higher level.

In this tutorial, we'll use clipping masks to complement a painterly design. We'll start off drawing a sketch of the portrait and establish our composition. Then, we'll refine our line artwork, paint and render our subject's face and body using default and edited brushes. Last of all, we'll use stock images to create a nebulous hair design. Using clipping masks and blending modes within our layers allows our elements to remain editable as we apply non-destructive changes.



## OUR EXPERT

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Mary works as an illustrator and graphic designer under the brand Acrylicana® designing apparel, jewellery, and illustrating for companies like Disney Consumer Products, Jakks Pacific, Jada Toys, Tuts+ and more.

## SOURCE FILES

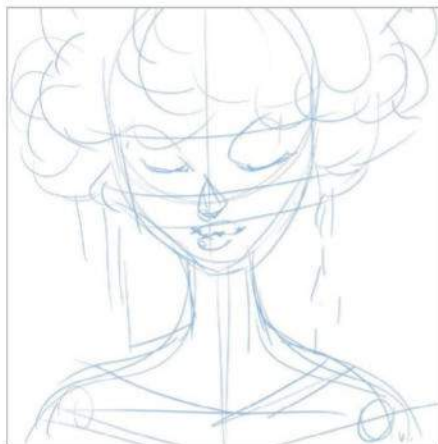
Included are two line art sketches. You can download the stock images used from [www.dreamstime.com](http://www.dreamstime.com), image numbers 11693269, 25682422 and 31634656.

## ■ PREPARING THE BASE

CREATE SKETCHES AND LINE ART AND PREPARE YOUR STOCK

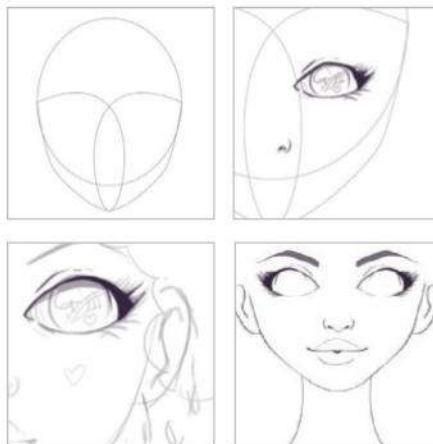
### 01 | PREPARE THE SKETCH

Open a new document in Adobe Photoshop and create a new layer in the Layers panel. We're going to start with a simple, rough compositional sketch. Use the Brush tool (B) and a Default brush of your choice to sketch out a portrait similar to the one pictured. Use reference if it helps with your design.



### 02 | REFINE THE LINE ART

Create a new layer in the Layers panel and use the Pen tool and Ellipse tool in order to better define the shape of the head and jaw. On another new layer refine your original sketch. This may take a few layers of progressively cleaner line art. Once satisfied with your work, merge (Cmd/Ctrl+E) your final line art layers together.



### 03 | PLACE THE BIRDS

Use the bird silhouette stock photo to copy and paste birds onto new layers over others. Use the Lasso tool to select the area around each bird when copying them into your working document. Use the Magic Wand tool to delete the background of the birds. Collect layers into folders in the Layers panel to keep yourself organised.



## ■ WORK IN PROGRESS

FROM CONCEPTION  
TO COMPLETION



Progress 1: Prepare the sketch



Progress 2: Render the face



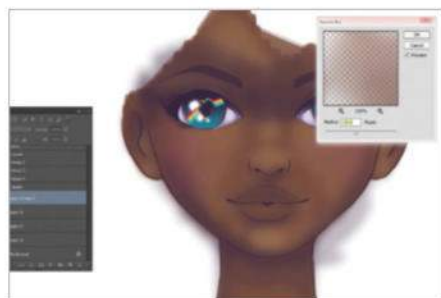
Progress 3: Drawing and rendering the portrait with the Brush tool



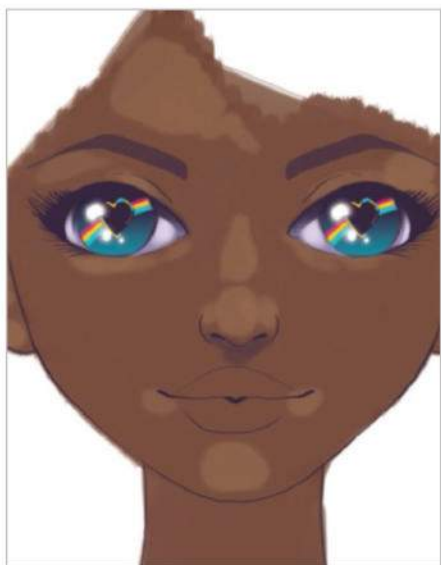
**04 | ADD SOME FLAT COLOURS**  
Under the line art layer, use the Brush tool, set to a default Hard brush, to fill in your portrait's skin tone. We're going to use various brown tones for this design, but you can deviate from any of the presented colour palette if it works better with your overall design. On a new layer, colour in the eyes with shades of grey-violet. Later we'll use a clipping mask in order to add stock images to each eye rather than rendering the irises manually.

**QUICK TIP**

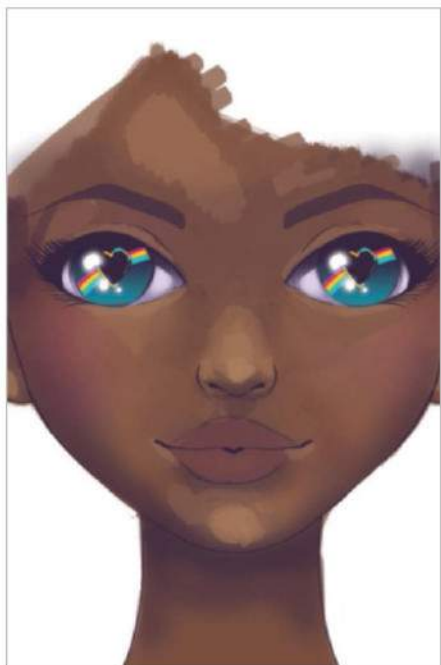
So far we've used Hard brushes. Now that we're on the rendering section of this design, use softer brushes with modified Opacity and Flow in order to blend the pixels while painting on each layer. This brush type works well on the cheeks and to blend shadows around the jaw.



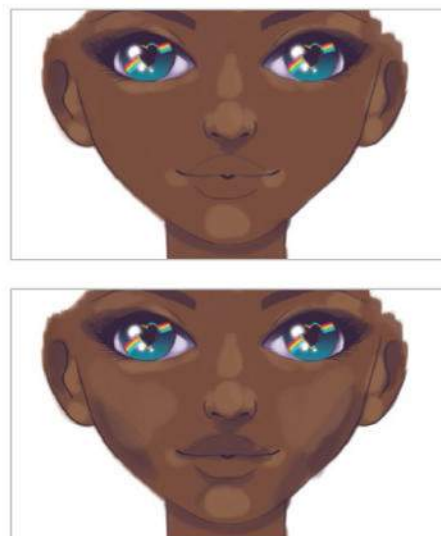
**07 | USE GAUSSIAN BLUR**  
Next we'll go to Filter>Blur>Gaussian Blur to apply a smooth Gaussian blur. The radius applied to the layer will depend on the size of your document. We're going to apply a radius of 16.9 pixels so the highlights and shadows blend together without extending too far beyond the face within the design. Hit OK and use the Eraser tool to erase the blur effect from outside of the face. This will keep your design and background clean.



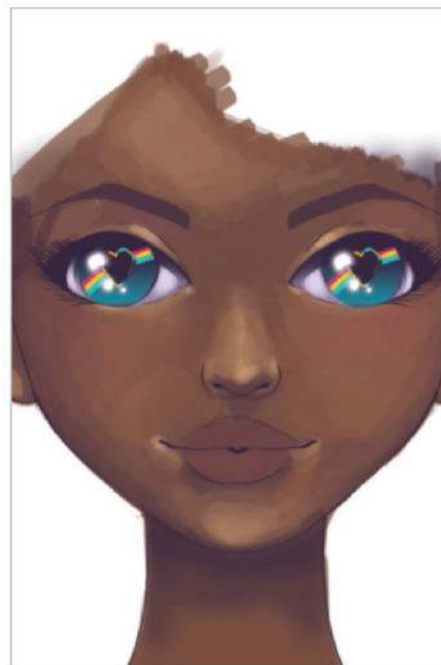
**05 | HIGHLIGHT THE FACE**  
We'll draw highlights onto the face on a layer above the skin tone layer. Using a Smooth Hard brush, map out areas of the face that would be hit by light first. Consider the nose, chin, part of the forehead, beneath the eyebrows, and the sides of the mouth as areas to highlight. Use a light brown a few shades lighter than the base skin tone rather than white for this step. We'll add bright hot spots to the design later.



**08 | PAINT THE FACE**  
Create a new layer above the blurred layer and continue building up values in the same manner as was done before. Vary the opacity of your brush and consider using textured brushes in order for the skin to look more painterly rather than as if it's been



**06 | SHADE THE FACE**  
For the shadows, we'll use a brown that's a few shades darker than the skin tone. Paint it into areas where facial features are overlapping and casting shadows onto other parts of the face. Consider under the nose, inside the ear, on the outer edges of the upper eyes, and under the chin to be areas cast in shadow. Reduce the opacity of your brush while painting shadow shapes in order to build the value up. You may also change the lighting completely if you feel it benefits your composition.



cel-shaded like a cartoon. You can also use the Blur tool to blend pixels in smaller areas of the portrait rather than blurring an entire layer. Add mauve-coloured blush to the cheeks and warm brown for the lips.

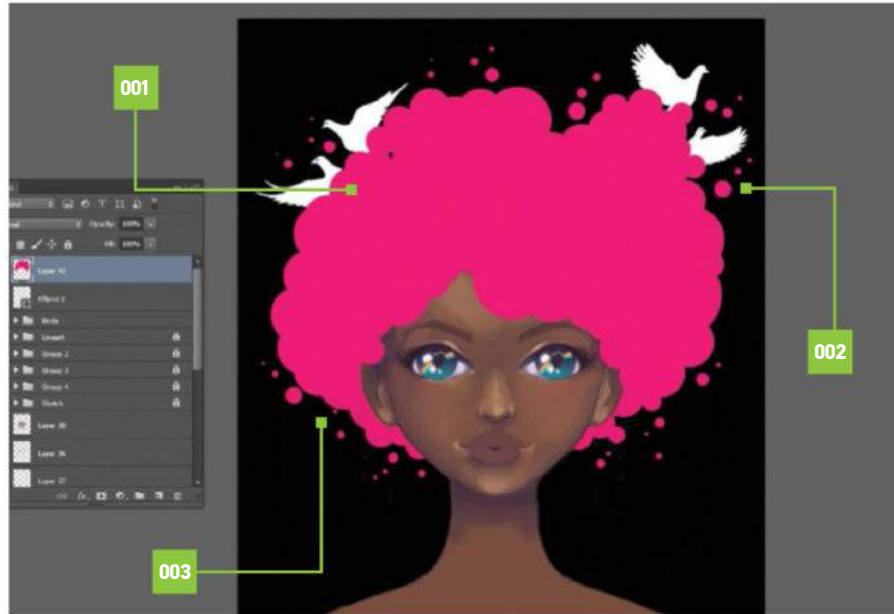


## WORK UP THE COMPOSITION

### ADD HAIR, BIRDS AND ASSORTED FANTASTICAL DETAILS TO THE DESIGN

#### 09 MAKE CLOUDY HAIR

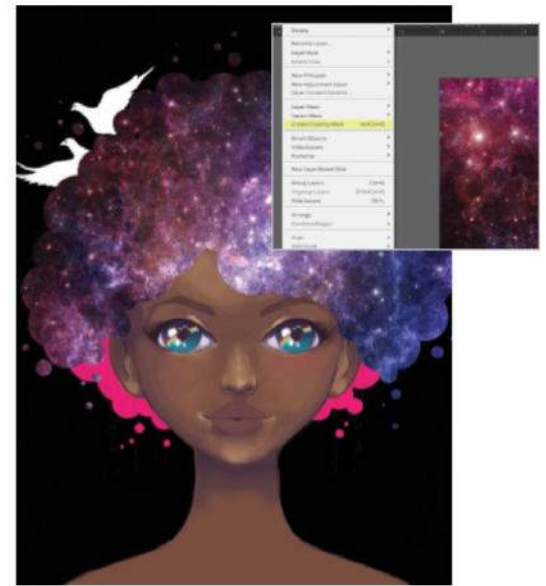
On a new layer, we'll build the hair. Our subject's hair is fluffy and cloud-like. In order to create it you'll need to overlap ellipses with the Ellipse tool. Hold down the Shift key while drawing your ellipses in order to create a singular mass. Fill the shapes in with a bright, easy to see colour in the Properties panel.



**001 | BIRDS STAND OUT**  
Use the Paint Bucket tool to change each bird silhouette's colour to something bright and noticeable against the black background

**002 | BUBBLY HAIR**  
Add smaller ellipses around the hair and birds so the hair looks bubbly and fantastical. Take advantage of negative space

**003 | DRAWING BEHIND THE HEAD**  
The hair behind the head, neck, and ears is on a new layer underneath the rest of the design's content



#### 10 CLIPPING MASK THE HAIR

Import one of the listed galaxy stock images to your document. Place it above the filled-in hair layer in the Layers panel. With the galaxy layer selected, go to Layer>Create Clipping Mask (Cmd/Ctrl+alt+G) to clip that layer to the one below it. Now we have fantastic galaxy hair! Note that you can use the Move tool to change what portion of the galaxy image appears within the boundaries of the hair so long as you're only moving the galaxy layer.



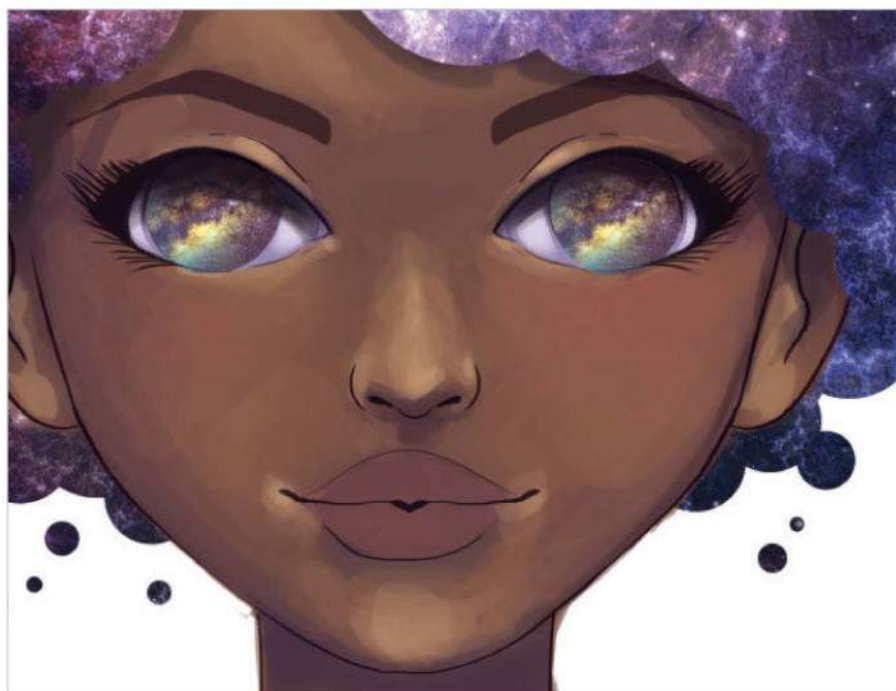
#### 11 MASK OTHER ELEMENTS

Repeat the previous step of applying a clipping mask to the portion of hair in the layer behind the back of the head. You can either adjust the stock image so both galaxy layers line up or you can choose a darker portion of the stock image to give the illusion of depth within the hair. Then, you'll do the same thing to the bird silhouette folder and the eyes. Clipping masks applied to a layer above a folder will clip to the folder's contents.



#### 12 SHADE UNDER THE HAIR

On a new layer underneath the base hair layer, paint brown and dark brown to give the illusion of the galaxy cloud casting a shadow onto our subject's forehead. When you reduce the Opacity of the brush to 40% and the Flow to 60% you can build up the value slowly and use a softer brush to blend those shadows in together. Follow the direction of the shadows we created earlier in the tutorial to remain consistent within our design.

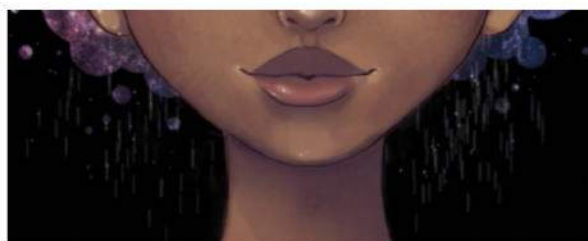
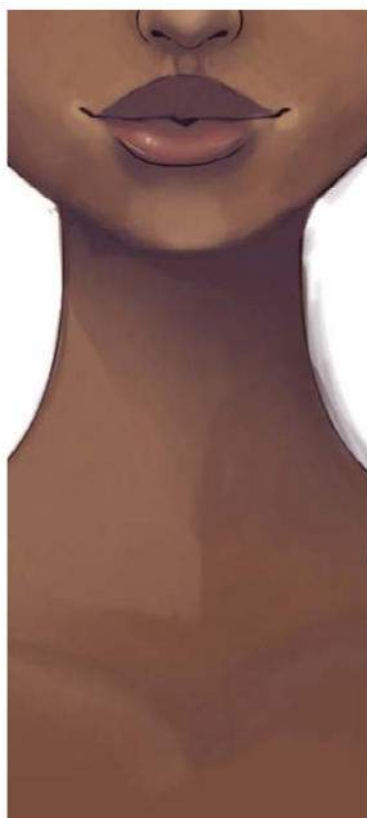


“Add shadow and subtle highlights with a soft, transparent default brush for a slightly realistic look”

**13 SHADE THE EYES**  
Direct your attention to the eyes. On a new layer, use the same dark purple or dark brown we used in creating the line art to shade the eyes. Reduce the Opacity of your Soft brush to 20% and build the shadows up organically to create depth within the face as well as soften the look of the eyes themselves. We're not going to add any more detail to the eyes than this, since the second galaxy stock image is detailed enough.

**QUICK TIP**

Most of the time we spent rendering the face was beneath the line art layers. If you paint details over the line art layer you can get a more painterly look compared to a cartoony look. The final design that we have created is a mix of the two styles.



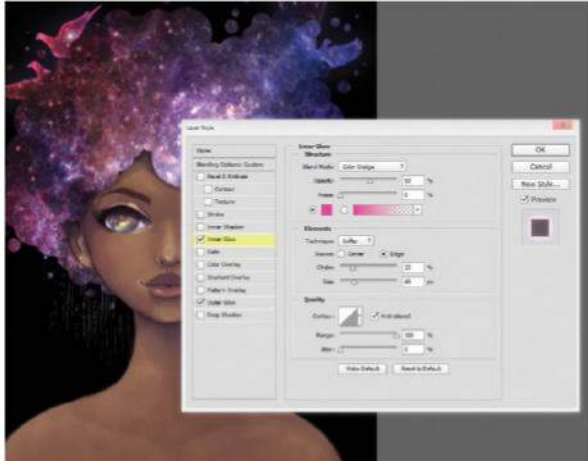
**14 COMPLETE THE PORTRAIT**  
Next we'll finalise the portrait on a new layer above the rest. Smooth out the values on the face, add additional highlights to the eyelids, and deepen the shadows being cast by the hair. Move down from the face to the neck and shoulders. Add shadow and subtle highlights with a soft, transparent default brush. Switch to a Chalk or Scatter style brush to add texture to the skin on the face and body. Doing so gives the portrait a slightly realistic touch.

**15 CREATE THE RAIN**  
Now we'll work on some fun details within the rest of the design. Notice how our subject's galaxy cloud is raining in the final image. To make the rain effect use a very small one to four point Round brush and draw a series of dots around the bottom of the hair on a new layer. Go to Filter>Blur>Motion Blur and apply a Distance of 156 pixels at a 90° Angle. Duplicate the layer, repeat, and set the Opacity of the second layer to 41%.



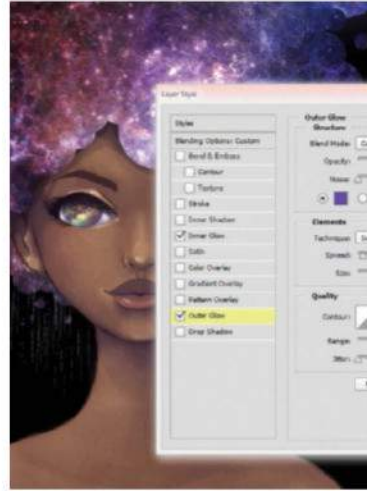
## BRING IT ALL TOGETHER

FINALISE THE DESIGN AND FOCUSING ON COMPOSITIONAL DETAILS TO TIE EVERYTHING TOGETHER



### 16 ADD RIM LIGHTING

In the Layers panel, select the bird folder, right-click, and hit Blending Options. Choose the Inner Glow option to create a rim lighting effect. Set the blend mode to Color Dodge, Opacity to 53%, and the Color to pink or blue. Set the Technique to Softer, Source to Edge, Choke to 22% and the Size to 49%. The other settings are all at their default. You may find that you adjust these settings to work better with your composition and colour palette.



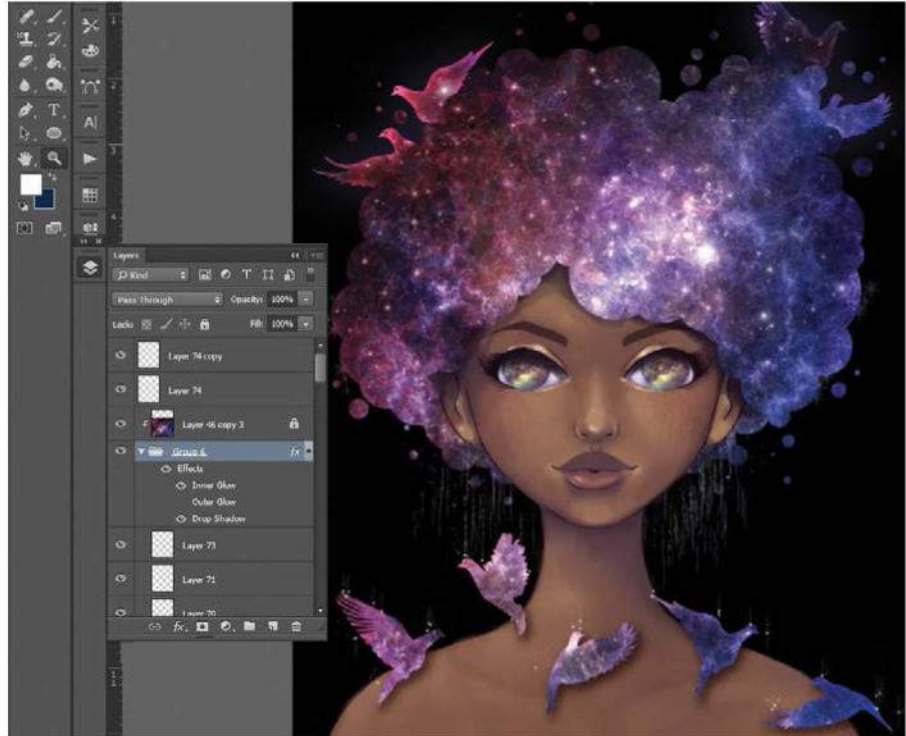
### 17 CREATE AN OUTER GLOW

Once again, select the bird folder in the Layers panel, Cmd/right-click, and hit Blending Options. Choose Outer Glow this time. Under Structure set the blend mode to Color Dodge, Opacity to 56%, and the Color to indigo or purple. Under Elements set the Technique to Softer, Spread to 7%, and Size to 250 px. Finally, in the Quality section, set the Range to 73% and the Jitter to 0%. This and the previous step help the birds pop out from the dark background.



### OUTSTANDING DROP SHADOWS

To get elements like the birds or hair to pop out from the figure, consider adding a drop shadow as the blending option. Such an effect was applied to the second folder of birds that are flying around the figure's neck. Set the blend mode to Multiply, Opacity to 60–65%, and the Angle to 120-degrees. Set the Distance to 28 px, the Spread to 8%, and the Size to 49 px. Finally, if you set the Noise to 11% or so, texture will be added to the drop shadow, which goes well with the painterly style of this design.



### 18 ADD ADDITIONAL BIRDS

Add additional birds as a sort of necklace or shoulder decoration in order to fill in the composition and finalise the image. Like the other bird folder, make sure each bird silhouette is cut out from its background and a galaxy stock image is clipped to the folder itself. Draw sparkles, highlights, and raindrops with a Small Round brush as was done with the rain effect earlier in this tutorial. Perhaps the rain's colours mimic those from the galaxy images themselves.

# SPECIAL EFFECTS

## PRODUCE ICE-EFFECT TYPE

LEARN HOW TO GIVE YOUR TEXT A PHOTOREALISTIC ICE EFFECT

**R**obert Frost once said the world will end in either fire or ice; consumed by passion or frozen by rationalism. I have a slightly different variation on this; creating fire and ice effects in Photoshop can sometimes *feel* like the end of the world.

Fire and ice are notoriously difficult to replicate convincingly in Photoshop – the graveyard of half-hearted attempts in the images section on the internet is a testament to this. Perhaps it's the fact that they are both forces of nature and therefore their unpredictability is difficult to capture. Or perhaps it's the fact that both elements are non-consistently translucent,

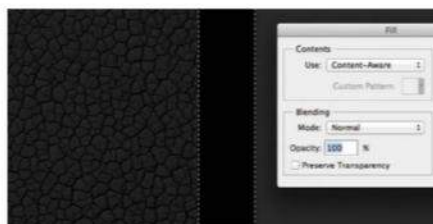
revealing and concealing at their own discretion under a billowing diaphanous cloud of smoke and condensation – an effect that is extremely hard to replicate manually. Too much passion and the effect is overwhelmingly unrealistic, too much rationalism and the image ends up looking stiff and unconvincing.

Always up for a challenge, I am going to up the ante by combining both of these dastardly difficult effects in one image. Using Photoshop's powerful adjustments layers and equal measures of passion and rationalism, I am going to prove that creating these effects convincingly doesn't have to feel like the end of the world.

### ■ PLATE TECTONICS CREATE A BACKGROUND FOR YOUR TYPE

#### 01 FILL THE CANVAS

Fill the canvas in black using the Paint Bucket (G). Drag a cracked earth texture into the canvas. Extend the texture by drawing a boundary using the Polygonal Lasso tool (L) in the areas you need to fill. Select Content-Aware under the Fill command, Edit>Fill, and Photoshop will use the current image to fill in the blank areas.



#### OUR EXPERT

**ANDY HAU**  
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Andy Hau is a London-based architect, designer and the owner of A.H.A Design. For him, design is an escape from the futility of modern life, not an endorsement of it.

### ■ WORK IN PROGRESS COMBINE ICE AND FIRE EFFECTS



Progress 1: Set the scene

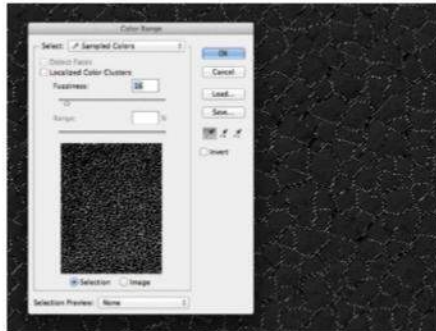


Progress 2: Create an ice effect



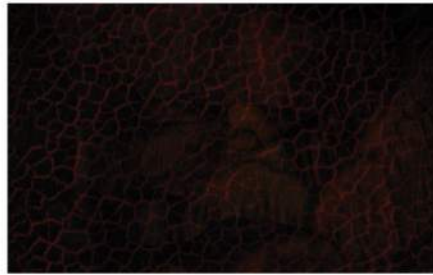
Progress 3: Add steam and condensation





## 02 | SELECT COLOR RANGE

To make the cracks in the earth glow red with magma, go to **Select>Color Range** and use the Eyedropper tool to select the cracks. Copy and paste the cracks onto a new layer and double-click on the Layer in the Layers Panel. Select **Color Overlay** and give it a searing hot red colour.



## 03 | MAKE ADJUSTMENTS

Select the cracked earth texture and the new magma layers in the Layers panel, right-click on them and select **Merge Layers**. Play with the Levels, go to **Image>Adjustments>Levels**, and opacity so that it appears convincing. Use the Eraser (E) on a Soft Round brush setting to lightly delete the edges of the magma layer so that it fades into the darkness.



## 04 | INSERT THE TEXT

Merge the layers together and forget about it. Better yet, click on the eye icon in the layers panel and hide it altogether. Create a new layer on top and fill it in black again using the Paint Bucket (G). Type in your text using the Type tool (T) – I'm using Impact but feel free to use any font you like. Adjust the tracking setting in the Characters panel, **Window>Character**, to change the spacing in between the letters.



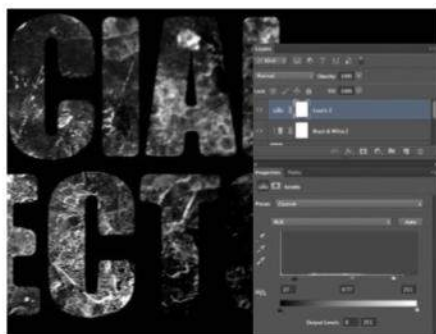
## 06 | APPLY THE FIRST ADJUSTMENT LAYER

Select the ice texture layer and text layer in the Layers panel, right-click on them and select **Merge Layers**. This will lock in the clipping mask, which means you won't be able to move the ice texture layer through the clipping mask anymore. To remove the colours in the ice text, apply a **Black & White** adjustment layer by clicking on the circular icon at the bottom of the Layers panel and select **Black & White**. Adjust the settings to the suggested values in the screenshot.



## 05 | CREATE A CLIPPING MASK

Right-click on the text layer in the Layers panel and select **Rasterize Type**. Use the Eraser (E) with a Hard Round brush setting to round off the corners of the letters. Make a copy of this text layer and hide the original – we'll need it later. Drag in the ice texture into the canvas. Place the ice texture layer on top of the copied text layer. Right-click on the ice texture layer in the Layers panel and select **Create Clipping Mask**. The ice texture will show through the text.



## 07 | BOOST IT WITH ANOTHER LAYER

To boost the contrast in the ice text, add another adjustment layer. Click on the circular icon at the bottom of the Layers panel again and this time select **Levels**. Play with the settings until you get intense areas of black and white. The suggested values in the screenshot are a good starting point but feel free to adjust the settings according to what's right for your image. The more contrast you can get at this point the better – it will help to build the feeling of transparency later on.



## 08 | ADD MORE TEXTURE

To add some more texture to the ice text, unhide the original text layer and repeat Steps 5 to 7. This time however, make sure that you use a different area of ice through your clipping mask. Merge these new layers and place the layer above the ice text layer. Change the blending mode of this new layer to **Hard Light**. You should have more areas of white and black and the contrast level should have greatly increased.

### ■ QUICK TIP

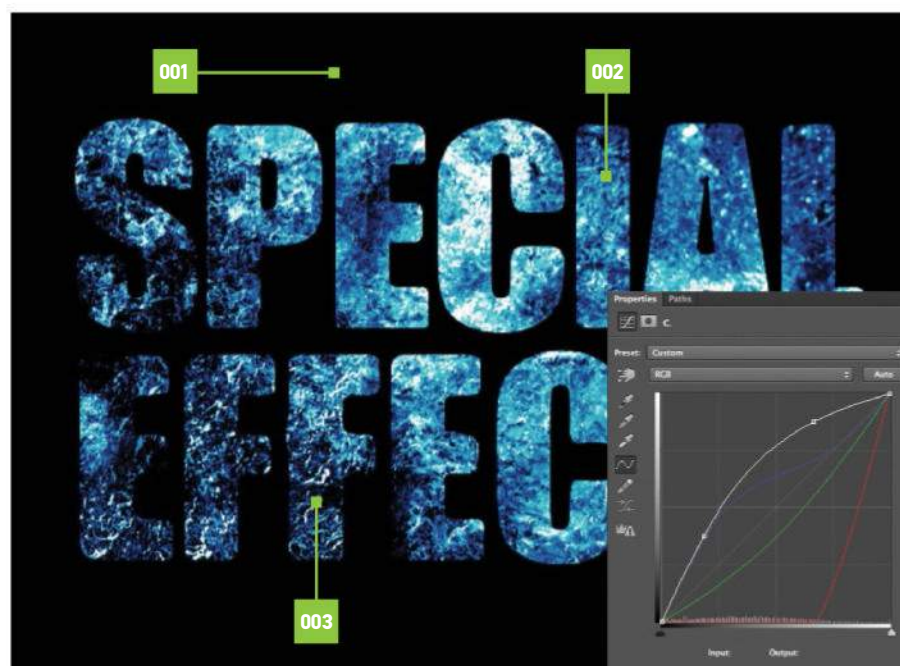
Creating an ice effect isn't an exact science. This tutorial gives you the suggested steps and settings to use but a lot of it will be down to personal judgement and experimentation. Don't be afraid to tinker, adjust and carve up the layers until they give you the effect you want.

## FROZEN FRACTALS

### CREATE ICY TEXT

#### 09 | ADJUST THE COLOUR

To give the ice text a chilling blue hue, a Curves adjustment layer is required. Click on the circular icon at the bottom of the Layers panel and select Curves. Alter the Red, Green and Blue settings individually by selecting the respective headings in the drop-down menu. Use the suggested values in the screenshot as a basis.



**001 | BACKGROUND**  
A searing hot magma background was created, which is currently hidden. This layer will be revealed in a few steps' time

**002 | ICE TEXT**  
The basis of the ice text was created using a mixture of clipping masks and adjustment layers

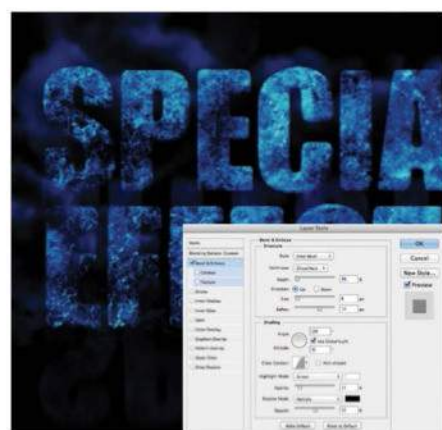
**003 | MORE EMBELLISHMENTS**  
Mist will be added and the ice letters will be given some depth by enhancing the shadows and highlights



#### 10 | INTRODUCE MIST AND CONDENSATION

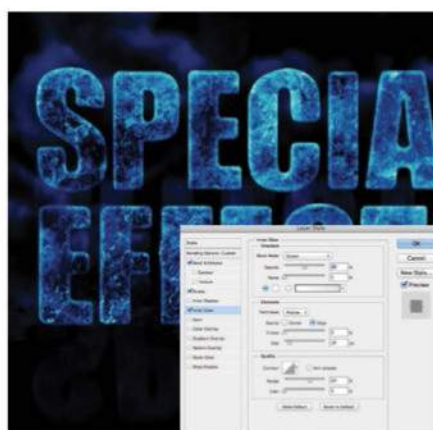
Create a new layer and use a Soft Round brush (B) or a cloud brush (available for free from the internet) on a very low opacity setting to paint areas of mist and condensation around the letters. Vary the brush's opacity setting and make sure the text remains readable. Use the Eraser (E) on a Soft Round brush setting to softly delete the edges of the mist so that it fades into the background.

“Creating fire and ice effects in Photoshop can sometimes feel like the end of the world”



#### 11 | BEVEL AND EMBOSS

Select the ice text layer and double-click on it in the Layers panel. In the Layer Style panel, select Bevel & Emboss and select Inner Bevel in the Style drop-down menu and Chisel Hard in the Technique drop-down menu. Set the highlight colour to a white and the shadow colour to black. This will start to soften and blend out the harsh contrasts in the ice texture. Play with the Soften and Size settings to give the ice text some soft shading.



#### 12 | ADD INNER GLOW AND STROKE

With the Layer Style menu still open for the ice text layer, select Inner Glow and adjust the settings until it give the ice text a subtle highlight. Finally select Stroke in the Layer Style menu. Change the Position to Inside, the Blend Mode to Hard Light and the Fill Type to Gradient. This should sharpen the edges of the ice text to give it a sleeker and more defined appearance. Adjust the size and opacity settings for the Stroke as necessary.



#### 13 | MERGE LAYERS

Select all the layers apart from the magma background and merge them together. This should give you a layer that contains the blue ice text and mist on a black background. Unhide the magma background layer and set the blending option for the ice text layer to Screen. Your ice text and mist should now be sitting on top of the magma background layer. If the ice text looks faint, copy the layer and change the opacity to get the brightness that you want.



## ■ MIST AND STEAM

CREATE THE VAPOUR THAT TIES BOTH WORLDS TOGETHER



### 14 MAKE IT GLOSSY

The blue colour of the ice text is likely to be too vibrant for the background. Play with the Hue and Saturation settings, Image>Adjustments>Hue/Saturation, for the ice text so that it appears natural against the background. Create a new layer and change the blending options to Vivid Light. Use a Soft Round brush on a very low opacity setting to paint over any areas of light on the ice text in white. This will give the ice text a nice glossy and slightly wet appearance.

### 17 ADD SOME EMBERS

To create embers rising from the magma, create a new layer and use a Soft Round brush (B) to paint some white dots around the letters. Don't forget to include some dots that emanate from the ice text towards the edges of the image. This will help draw the eye back to the text. Double-click on the layer in the Layers Panel and select Outer Glow. Set the colour of the Outer Glow to orange and lower the opacity of the layer.



#### ■ A LAYER MASK ALWAYS PAYS ITS DEBTS

Adjustment layers are a brilliant way to change the colours and levels of an image without affecting the layer permanently, also known as non-destructive editing. To adjust portions of the layer rather than the entire thing, select the Layer Mask in the Layers panel and use the Brush tool (B) to paint in any areas that you do not want to be affected by the adjustment layer. Using black will eliminate the effects of the adjustment layer completely, grey will partially remove the effects of the adjustment layer and white will completely reveal the effects of the adjustment layer.



### 15 USE LOWLIGHTS

To make the ice text seem more transparent we need to make the dark areas even darker. Create a new layer and change the blending options to Vivid Light. Use a Soft Round brush on a very low opacity setting to paint over any dark areas on the ice text in a deep navy or black colour. Dab the brush in a random manner rather than using long strokes so that the lowlights seem natural and blend smoothly with the highlights into the ice text layer.



### 16 PAINT AREAS OF STEAM

Use a Soft Round brush (B) or a cloud brush on a very low opacity setting to paint areas of steam around the edges of the image. This will help to draw the viewer's eye towards the ice text. Use a brush with an even lower opacity to paint some steam near the ice text and then use the Eraser (E) on a Soft Round brush setting to lightly delete the edges of the steam so that it fades into the mist.

#### ■ QUICK TIP

Clipping Masks are incredibly useful but creating one is not immediately obvious. To perform a Clipping Mask quickly, place the cutting object layer below the image layer. Hold down Alt and click the line between the two layers in the Layers panel to clip the image to the cutting layer.



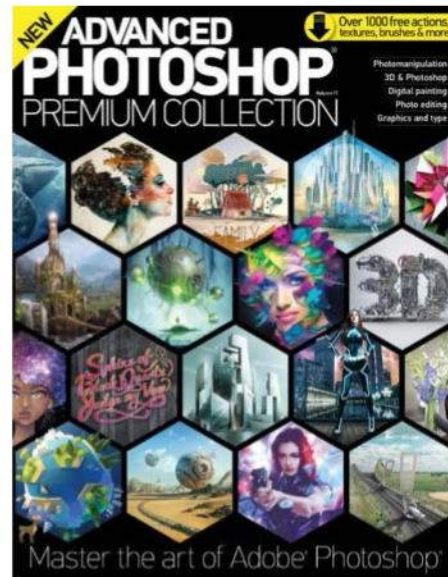
### 18 FINISHING TOUCHES AND REVIEW

Zoom out using Cmd/Ctrl+0 so that entire image fits onto your screen. Check that you are happy with the overall composition. As an optional extra, you might want to add some shattering ice shards behind the text to add some dynamism to the image. This is created using the same steps as creating the ice effects above. Finally, make sure that the magma background layer is not too overwhelming; it should enhance the ice text layer, not compete with it.



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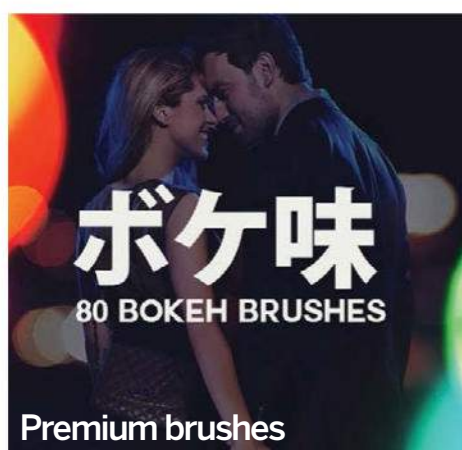
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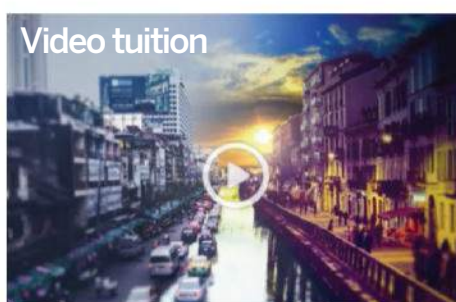
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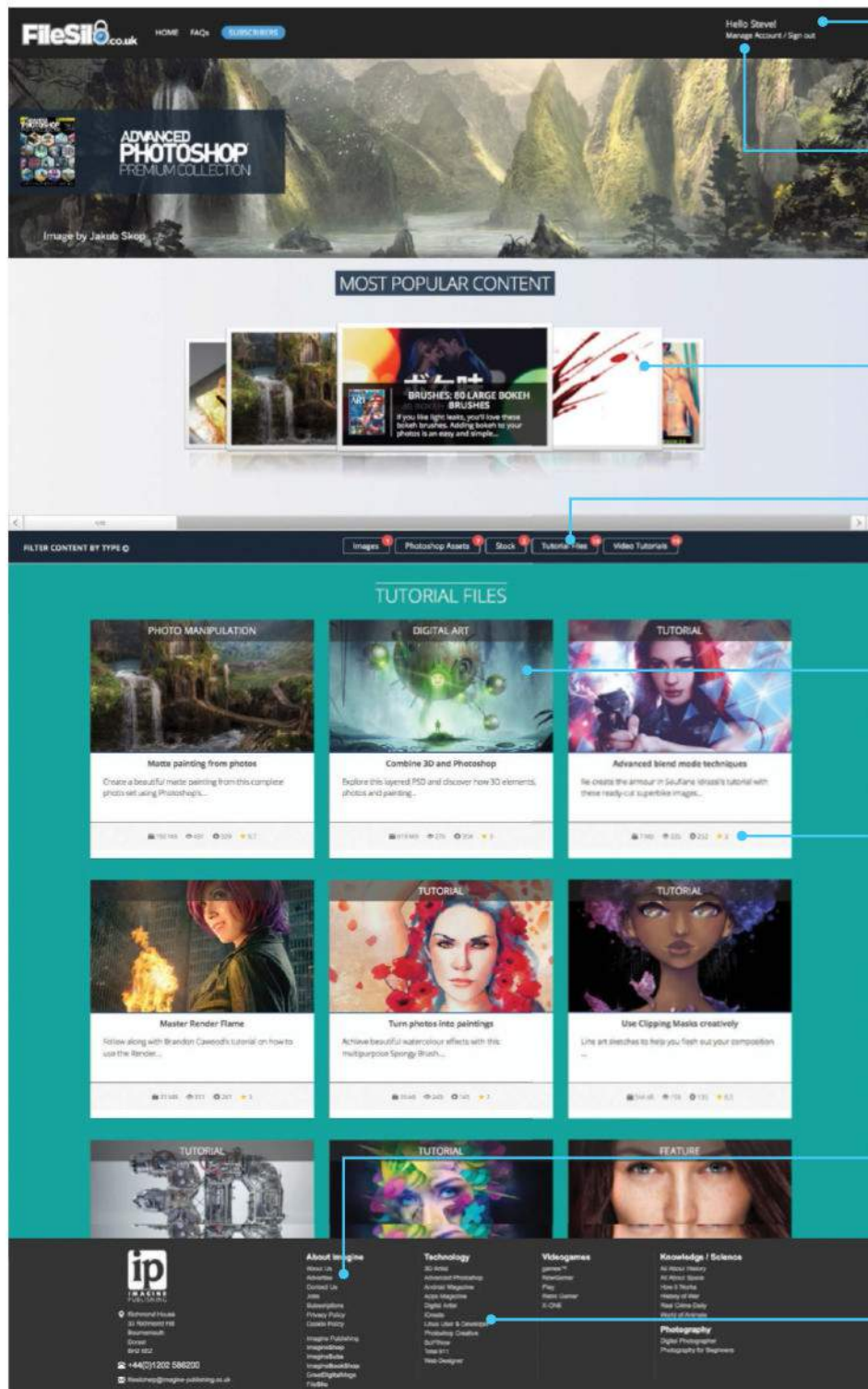
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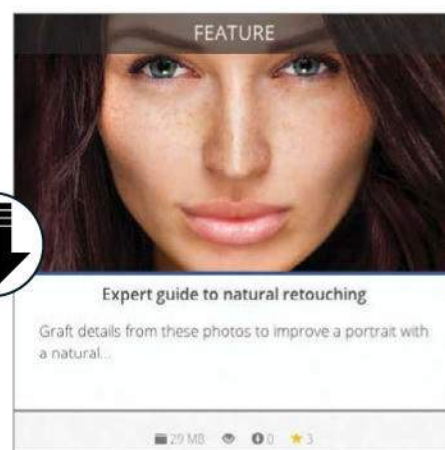
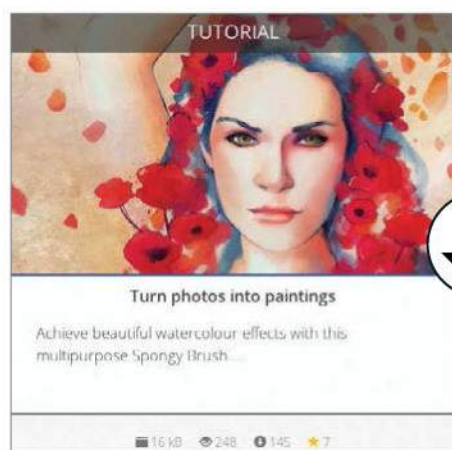
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