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Volume 1

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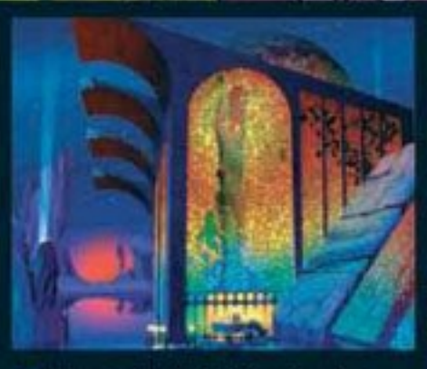

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Welcome to

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First in a new series of bookazines for **Digital Artist** magazine, this collection showcases some of the finest examples of digital art and is packed with step-by-step tutorials for you to follow. Beginning with a style guide which takes you from fantasy worlds to typography design, the **Digital Artist Collection** explores and celebrates the range and diversity of art being produced today with computers, tablets and smartphones. Expert tutorials are grouped under the four main players in professional art and illustration: Photoshop, Painter, ArtRage and Illustrator, with a further section of tutorials devoted to getting creative with your iPad or iPhone. And, if you are still hungry for more, the helpdesk at the back is full of inspiring ideas and techniques. Not to mention the disc at the back that we've stuffed full of brushes, textures, tutorial resources and stock photos for you to play with... Have fun!

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IMAGINEER OF THE YEAR DANIELLE DIXON

IMAGINE PUBLISHING

TEAM OF THE YEAR BOOKAZINES

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Digital art styles explained

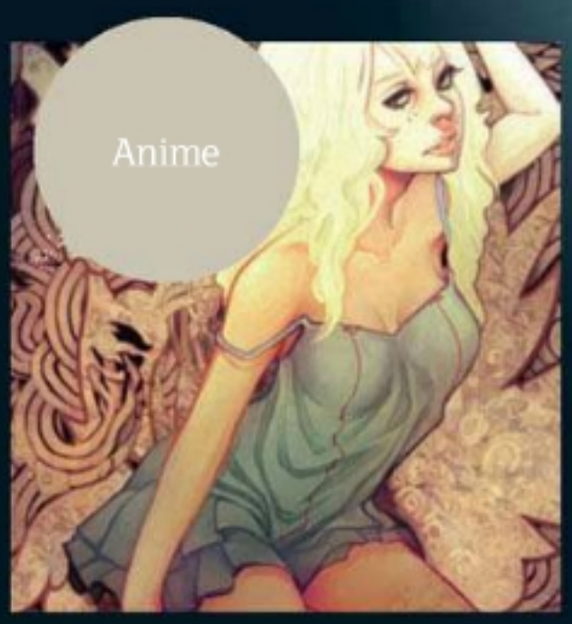
A look at the genres and painting styles currently popular in digital art

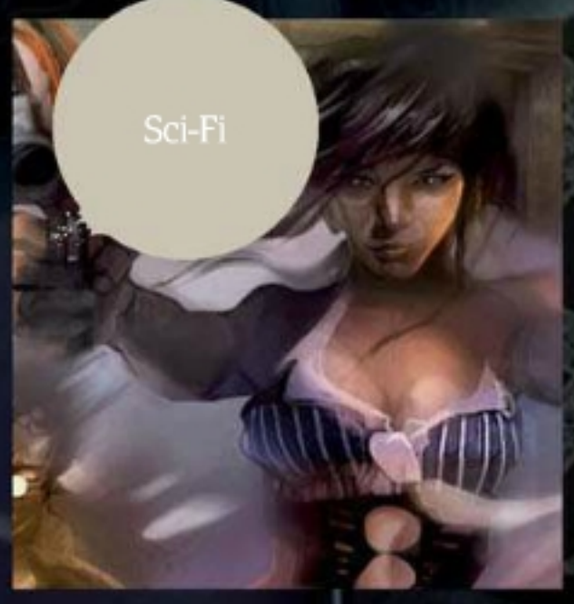
My name's April, and I'm an art historian. Or at least I was. Since I went digital, I've discovered that the regular art world and this one couldn't be more different.

For a start there are people Actually Painting – can you imagine? You know we live in a messed-up world when everyone is surprised at a 'real artist' painting but thinks it's normal for a software user to do so. But while the contemporary art scene has continued to be fascinated with meaning, digital artists have kept to the nuts and bolts of what painters do best – produce artwork that's aesthetically pleasing. This is what I'm interested in, and in art historical terms that probably makes me a rebel, which is a good start.

In this feature I'll look at some of the key styles in digital art right now. It's by no means an exhaustive list, and it veers between genre-based movements such as fantasy, sci-fi and manga – all genres that dare the artist and the viewer to dream – and technical movements like vexel and photo-manipulation, which hark back to the deep-rooted artistic impulse to mess with your tools and find a better or more interesting way of making marks and expressing ideas.

I think digital art is the best showcase of both kinds of art movement, and I'd like to show you why. From fantasy and sci-fi to the ways contemporary illustrators push their software to the limit – then a little further – the genres and styles shown here reflect some of the most creative artwork being shown, and perhaps more importantly, commissioned and bought, today.





Sci-Fi

Type

Artwork by Mario Wibisono. Hand of the Jade Dragon, Legend of the Five Rings CCG 2009. Legend of the Five Rings and Hand of the Jade Dragon copyright Alderac Entertainment Group

INTRODUCTION

Digital art styles explained

Fantasy

Myth, magic, swords and sorcery

Fantasy has its roots in fairytales, legends and mythology. It's about painting the fantastic, so it's a genre every artist should try at least once – if not for the ability to let your creativity run rampant, then for the hefty pay cheque it can command! Fantasy is hugely popular among print and poster buyers, to say nothing of the potentially lucrative market in book jacket designs.

There are a lot of sub-genres within fantasy. On these pages are examples of mythical and fairytale-based images. Orientalism is a popular style – the 'otherness' of ancient Asian buildings, clothing and armour, together with the visual richness, appeals to consumers who grew up on videogames and Saturday morning cartoons. Over the page are examples of traditional high or heroic fantasy and its earthier equivalent, swords and sorcery.

ARTIST PROFILE

Amber Hill

http:///vantid.deviantart.com

Tell us about this painting...

You've seen it. Baby animals start scratching behind their ears or something, and then WHOA!!! They see that they have a FOOT and oh my gosh, it's amazing.

What genre do you primarily work in? What interests you about it?

Fantasy wildlife is a new genre of art that is gaining popularity. The focus is on creatures of myth and legend instead of swords and sorcery. I try to make them appear as though they exist in the wild, almost like wildlife art. To me there's nothing more epic-looking than a dragon flying through a tumbled cloudscape with rolling countryside below, or a gryphon perched on a snow-covered pine tree at sunrise.

What other genres interest you and why?

Traditional wildlife art is my favourite. It's my personal goal to move into this genre with my body of work yet still maintain that element of fantasy I love so much.

Mah Feeeeet!
Amber Hill, 2009
Painter/real media. The emerging genre of fantasy wildlife

Small Geisha, Svetlin Velinov, 2008
Photoshop/Illustrator. Historical fantasy based in ancient Japan

"Fantasy has its roots in fairytales, legends and mythology. It's about painting the fantastic, so it's a genre every artist should try"

The Bitter End,
Erin Kelso, 2008
Photoshop. A fairytale-based image with Oriental overtones

INTRODUCTION

Consumed by Beetles, Svetlin Velinov, 2009
Photoshop. Copyright Paizo Publishing. An example of a heroic fantasy composition

©Paizo publishing, LLC

ARTIST PROFILE

Svetlin Velinov

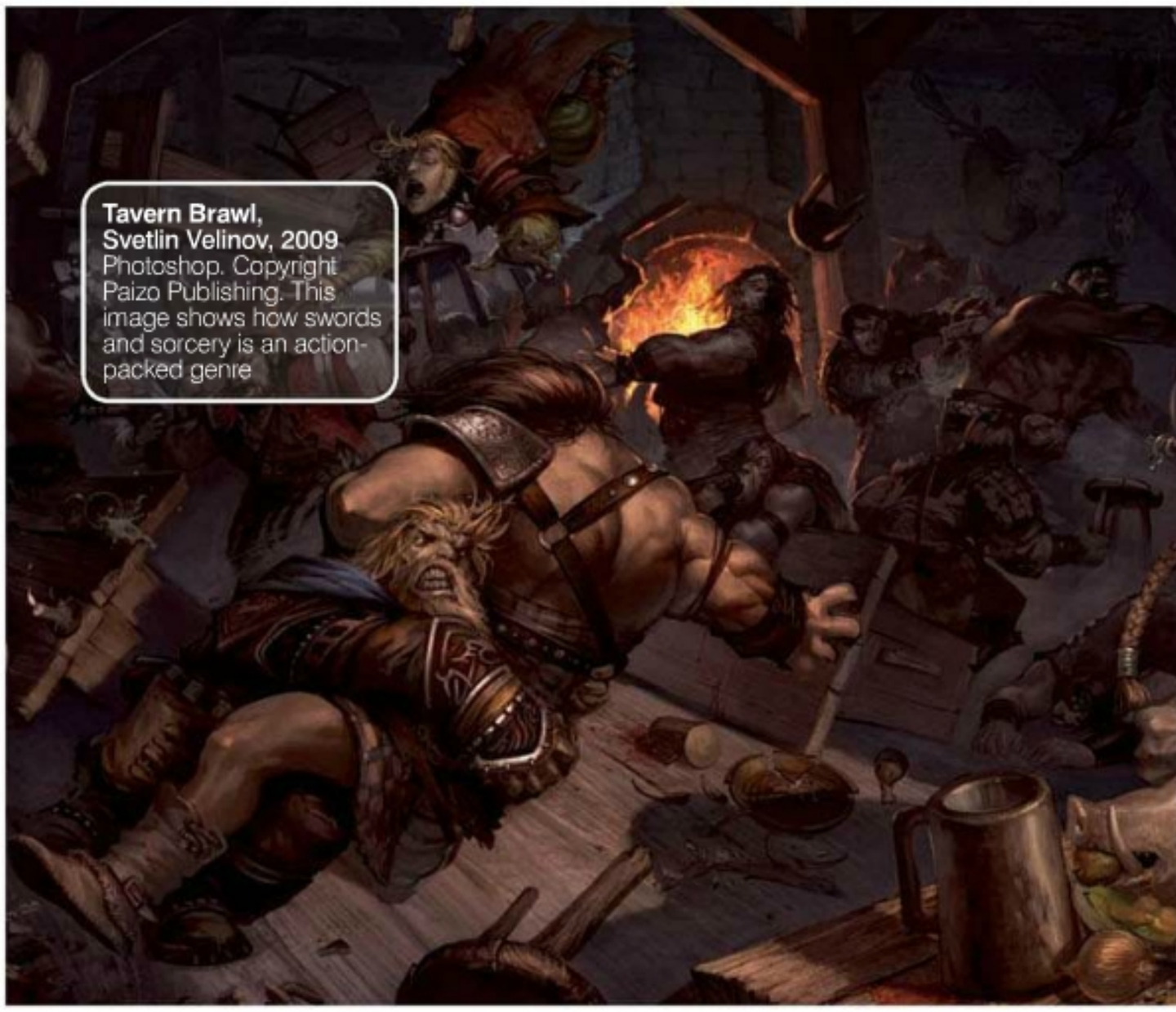
www.velinov.com

How would you describe your style?
It's hard for me to describe my own style. I know it's something that will never stop changing and transforming.

What genre do you primarily work in? What interests you about it?
My primary genre is fantasy. It's an entire new world without the limits of imagination and senses. It gives you the freedom to create a whole new universe of fantastic creatures, unique landscapes and heroic battles.

What other genres interest you and why?
I'm interested in sci-fi and horror art. It is a great combination, which makes an entirely new genre if you mix them together.

What would be your advice to other artists working in this genre?
Keep your originality and personal style, and never forget where you have begun. Be true to yourself, and when you finish one work enjoy it within an hour. Then start a new one.



Tavern Brawl, Svetlin Velinov, 2009
Photoshop. Copyright Paizo Publishing. This image shows how swords and sorcery is an action-packed genre

Digital art styles explained

Vectors

Taking stylisation to a new level

Vector and vexel art both have their roots in editorial illustration, which requires clear delineation to get its point across. The difference between them is that vectors are created using vector-based programs (which rely on shapes), while vexel art is created in raster-based programs (which rely on pixels). Traditionally vector artwork has always sported a clean, pure and stylised look. Shapes can be drawn freehand or traced over an image to create smooth, stylised 'primitives' which are then worked up with colour fills and gradients. However, many artists working in this field have recently been introducing elements which make their artwork look deliberately rough and handpainted. It demonstrates the technical skills these artists have with their chosen tools and programs.

RED Fever, Svetlin Svetlin Velinov, 2009 Illustrator/Photoshop. A good example of how vector-based artwork is developing a grungier look

Parrot, Dennis Gonchar, 2009 Illustrator/Painter. A combination of vector and raster-based programs created this vibrant and colourful composition

Fields and Firebirds, Klarizza Jose, 2009 Photoshop. Vexel artwork done in a raster-based program with the intention of creating a smooth, vector-like appearance

> "Vector and vexel art both have their roots in editorial illustration, which requires clear delineation in order to get its point across."

Digital art styles explained

Vexel

Tool-based trickery

Vexel images mimic the look of traditonal vectors; they're often clean and precise with crisp colour shifts and strong lines. So it might surprise you to discover that they're created using raster-based programs: the ones that are designed to blend colours and create real-media effects. The term vexel is a portmanteau of 'vector' and 'pixel'. Vexel artists use layers, textures, lines and fills to create the smooth look they want, typically in Photoshop. Why not Illustrator? That would be entirely too easy...

Carrot Cuisine, Laura Ebbenhouse, 2009 Photoshop. An example of a vexel image done in kawaii (cute) manga style

Digital art styles explained

Manga

Japanese comic art

Manga and its animated equivalent, anime, are styles with a strong visual hook which originated in Japan but are increasing dramatically in appeal worldwide. With a distinctive cartoonish look and Zen-like purity of line, they require patience and skill to master, despite the fact that 'manga' means 'whimsical pictures'. Fantasy and sci-fi are common in manga art, but other sub-genres include cute or 'kawaii' and 'shoujo' or 'for girls', which often feature real-world settings and storylines. Manga is often monochrome in transparencies of grey or screen-tones. The distinctive visual style is also used in videogames and packaging designs here and in Japan.

> Manga and anime are styles with a strong visual hook which originated in Japan but are increasing in appeal worldwide

ARTIST PROFILE

Stein Louisse & Stephanie Wetmore

http://uberkut.deviantart.com http://cusd.deviantart.com

Tell us about the painting...
Stein: It's a character Stephanie created in an oekaki-based program we both like to mess around in. I took it into Photoshop and gave the piece a rather different vibe.

How would you describe your style?
Stein: Cartoon, although it does depend on the mood I'm in. For instance, this picture I'd say would be some kind of mutation of Art Nouveau.
Stephanie: I categorise it as anime.

What software and media do you use?
Stein: Photoshop mostly.
Steph: I use the poor man's digital art tools; usually sketching and designing with Paintchat, then colouring and finishing something with OpenCanvas.

What genre do you primarily work in? What interests you about it?
Steph: Anime is the basic style and structure of any work I do. It's an art type you can find all over the place in different forms: comics, television, video games, toys, cards, posters and even CD covers. How many art styles really reach that far?

> It's a character created in an oekaki-based program. I took it into Photoshop

Digital art styles explained

Anime

Art derived from animation

Anime may sometimes feature simpler character design but it's richer in colour and the background detailing is often lavish. In Japanese it means 'animated' but in the West the term has come to refer (rightly or wrongly) to the visual style of Japanese cartoons and some videogames. Like manga, its European popularity started in France before branching out across the continent and eventually to Canada and the US.

Sea Stories, Stephanie Wetmore and Stein Louisse, 2009
PaintChat/Photoshop. Produced using collaborative manga-drawing web services called oekaki boards

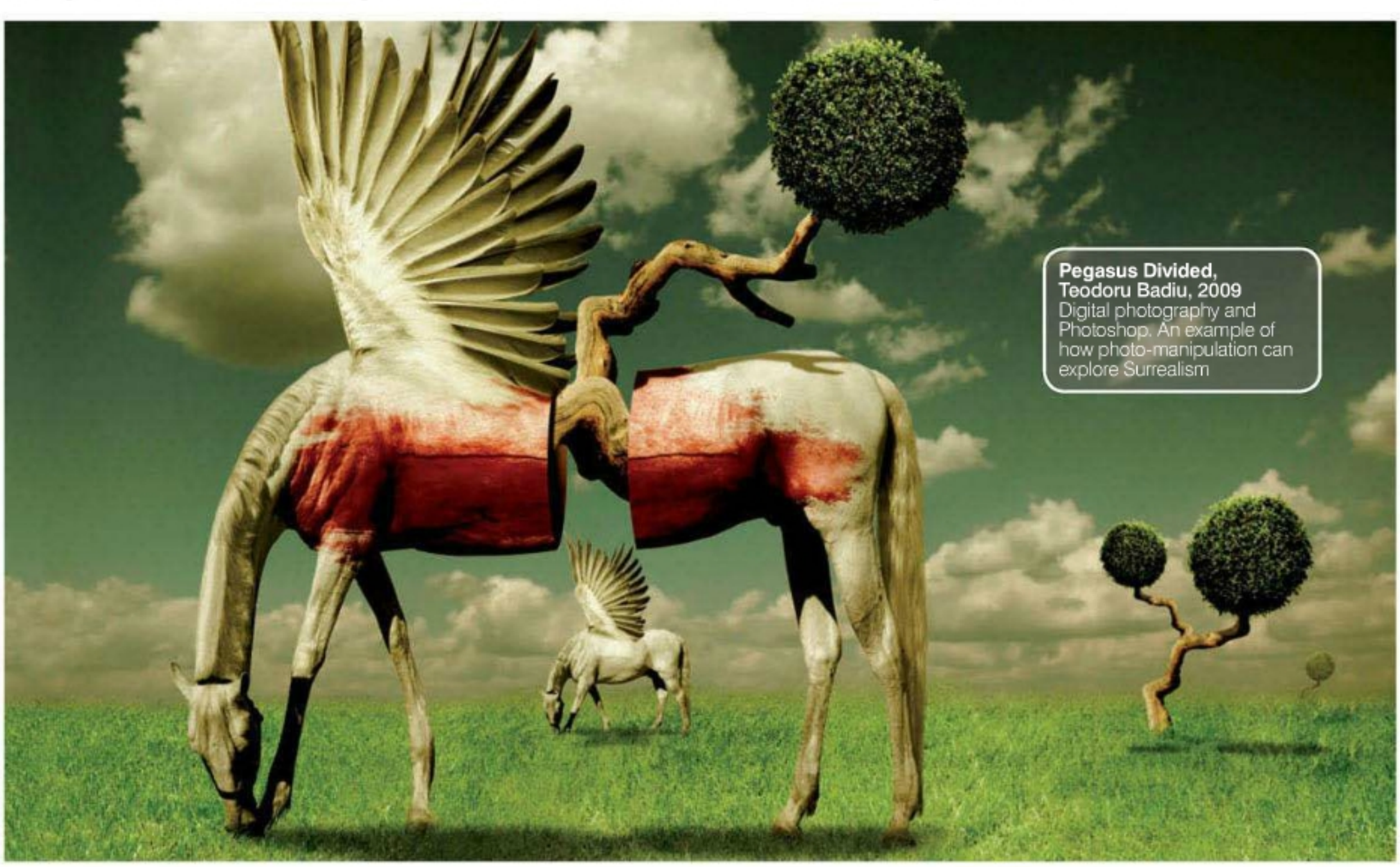
Digital art styles explained

Photo-manipulation

Over a century old, it's still going strong now it's digital

Photo-manipulation has been around since the inception of photography, but the digital revolution has brought it new life. Adobe's market-leading image-editing software Photoshop, was designed specifically for photo-manipulation and has dramatically increased its possibilities.

Photo-manipulation can be subtle or obvious, but its inherent realism means that believability is the key to making it work. Whether the image is designed to be viewed as a photograph or as a piece of digital art, the composition requires a high degree of precision.



Pegasus Divided, Teodoru Badiu, 2009
Digital photography and Photoshop. An example of how photo-manipulation can explore Surrealism

ARTIST PROFILE

Teodoru Badiu

www.apocryph.net

Tell us about your images...
They are surreal works where I create a link between life and death. Once I get an idea I think for a few days about it until I have a clear vision of the way the image will look. Then I start preparing the parts I need to create it. I always use digital photos that I shoot myself using my Nikon D70 and I create all the textures using Photoshop. Once I have all the parts I need, I start working on the image using Photoshop.

How would you describe your style?
I have an obvious bent for Surrealism. I like to show how things could be and not how they are, and try to give them soul and meaning. I also like to use a relatively warm colour palette. This approach allows me to touch the viewer in a way they don't expect, because when they look at these images, the message in their mind says this is dark, cold, depressive, but the eyes have something totally different in front of them and they say it is warm and pleasant. This contradiction makes the image interesting and it catches the mind and the attention of the viewer.

Trophy,
Teodoru Badiu, 2009
Digital photography and Photoshop. The photo-realism of this image makes the eponymous trophy look like a real artefact

“When they look at these images, the message in their mind says this is dark, cold, depressive, but the eyes have something different in front of them”

INTRODUCTION

Environment 3,
Svetlin Velinov, 2009
Photoshop. The fluid lines and dramatic scale of futuristic space opera sci-fi

Digital art styles explained

Sci-fi

Looking into the future

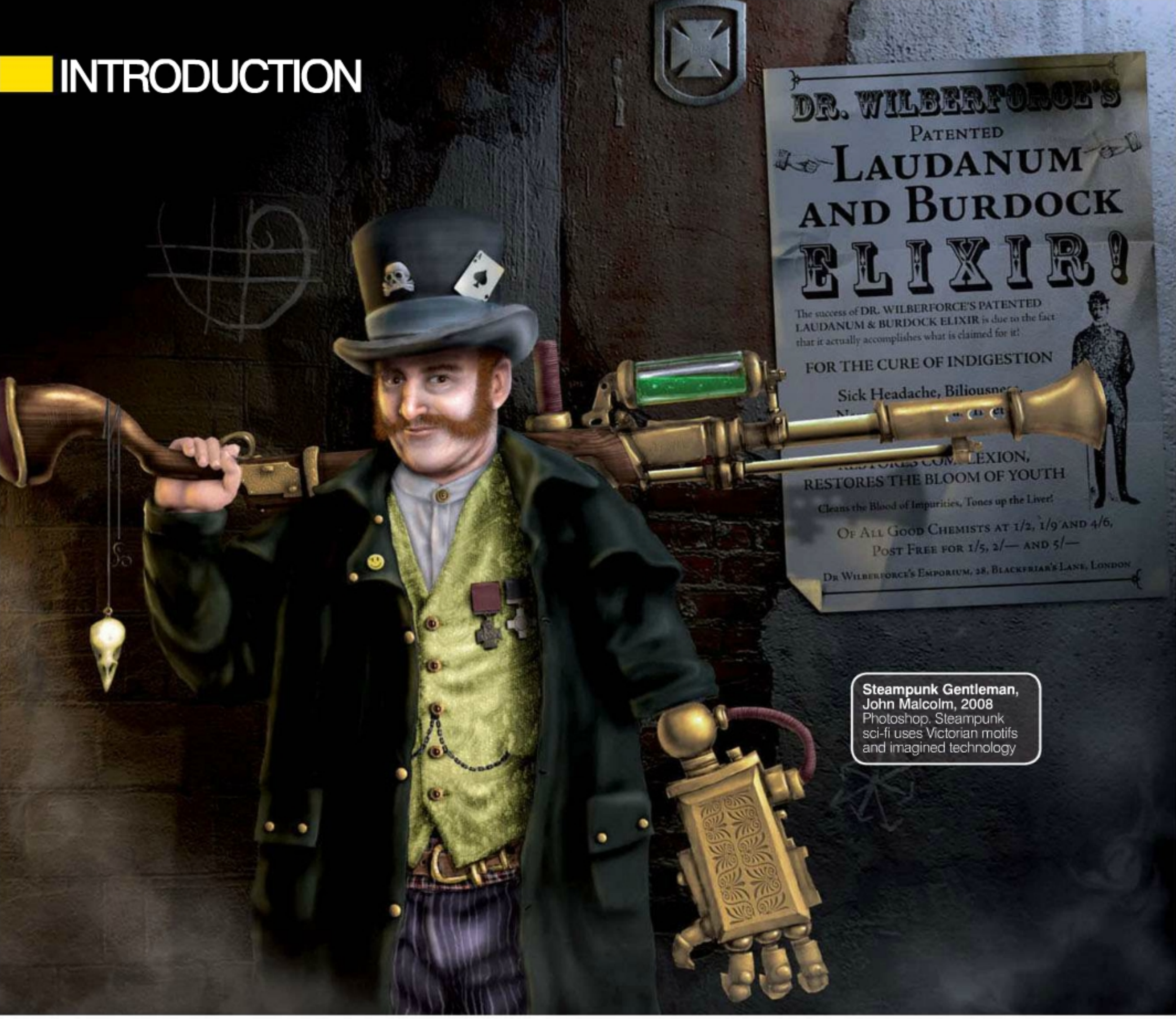
Sci-fi, like fantasy, is primarily concerned with imagined realities. Unlike fantasy however, sci-fi looks to the future rather than the past – apart from in one unique case. An abbreviation of the term 'science fiction', sci-fi art offers similar technical opportunities to the artist in that it allows you to imagine alternative worlds and possible futures. The 'space opera' style of sci-fi features stunning starscapes on a truly galactic scale, and spaceships and stations which often echo elements of Art Deco and Modernism in their design. It also offers opportunities to conceptualise alien beings and landscapes vastly different from our own. The look is typically clean and airbrushed in order to display complex technical details.

Dystopian sci-fi and cyberpunk tend to look at dark, imagined futures; cyberpunk is particularly concerned with technology. Both feature a gritty, urban style with dark tones and rough textures. A spin-off from cyberpunk that has dramatically gained in popularity recently (especially with digital artists) is steampunk, which imagines historical eras embracing technology early. It's characterised by steam and clockwork-powered devices, from computers to cars, often combined with a 19th Century setting and figure characterisation. Like traditional sci-fi art, it's typically clean and precise in appearance.

Bang! Alex Martinez, 2009 Photoshop/pencil. A great example of action-based cyberpunk sci-fi

“Sci-fi, like fantasy, is primarily concerned with imagined realities. Unlike fantasy however, sci-fi looks to the future rather than the past – apart from in one unique case”

INTRODUCTION



Steampunk Gentleman, John Malcolm, 2008
Photoshop. Steampunk sci-fi uses Victorian motifs and imagined technology

ARTIST PROFILE

John Malcolm

www.johnmalcolm1970.co.uk

Tell us about your artwork...
Steampunk Gentleman is a mixture of photo-manipulation and digital painting. The character is based on an old friend who loved steampunk before the genre was named. He had the honour of naming the weapon: The Cuthbertson & MacAndrews Mark. IV 'Yeti Cannon'.

What software and media do you use?
I use Adobe Photoshop CS4 and Corel Painter X along with my Wacom Intuos4 Large. I find I'm using Painter more and more these days, but Photoshop is still utilised in all stages of an image. They complement each other well. If I don't try to use Painter like Photoshop and instead keep my layers down to two or three at a time, I find I can work much faster (instead of one Photoshop file with 70+ layers I end up with a folder full of sequentially saved files from Painter).

What genres do you work in?
Fantasy, science-fiction, steampunk. Alternate history. I love the freedom these genres give to the artist. The only limit is their imagination or perhaps the imagination of viewers (who can read into images things the artist never even considered). I like the fact that even a standalone image, created just for fun or practice, can seem like a snapshot from a complete story.

> "I love the fact that even a standalone image, created just for fun or practice, can seem like a snapshot from a story"

Digital art styles explained

Type

The classic art of lettering

Typography is another older artform, like photo-manipulation, which has been changed by digital tools. Like vector-based artwork a lot of font design is done in programs like Illustrator these days. This offers artists the opportunity to push the boundaries of font design with illustrated illumination. A popular market for typography is in product design, particularly in clothing and album art. The ability to create a snappy corporate logo or a decorative form of a buzzword makes it attractive to advertising agencies. Font design's history, first in calligraphic lettering and then in engraved and later moveable type makes it the oldest genre, apart from painting itself, to have gone digital, and many font studios will still refer to themselves as 'foundries'.

Imagination, Klarizza Jose, 2009 Photoshop/real media. Digital tools have allowed typography to develop further as a commercial artform

Parade Armour, Aleksander Rostov, 2004 Photoshop. An older example of the steampunk genre before it developed into what we see today

Digital art styles explained

Tools

Software for digital art

Much of the artwork in this feature makes use of two excellent programs, Corel Painter and Adobe Photoshop. These two programs are at the heart of digital painting and each offers its own unique features. Painter emulates real media, while Photoshop's strengths lie in image manipulation. Both are raster-based programs. Adobe Illustrator is a vector-based program used for creating shapes and lines. It gives a clean and precise look but many artists like to add texture to their Illustrator artwork. Oekaki boards meanwhile are online drawing boards (the name comes from the Japanese term for scribbling) used primarily for creating manga art.

Photoshop

Create a distinctive style of art

24 Painting expressive eyes
Understand the eyes and add dazzle

30 Use dynamic colour
Create a unique identity through colour

36 Combine digital art and printmaking
Develop a digital linocut print

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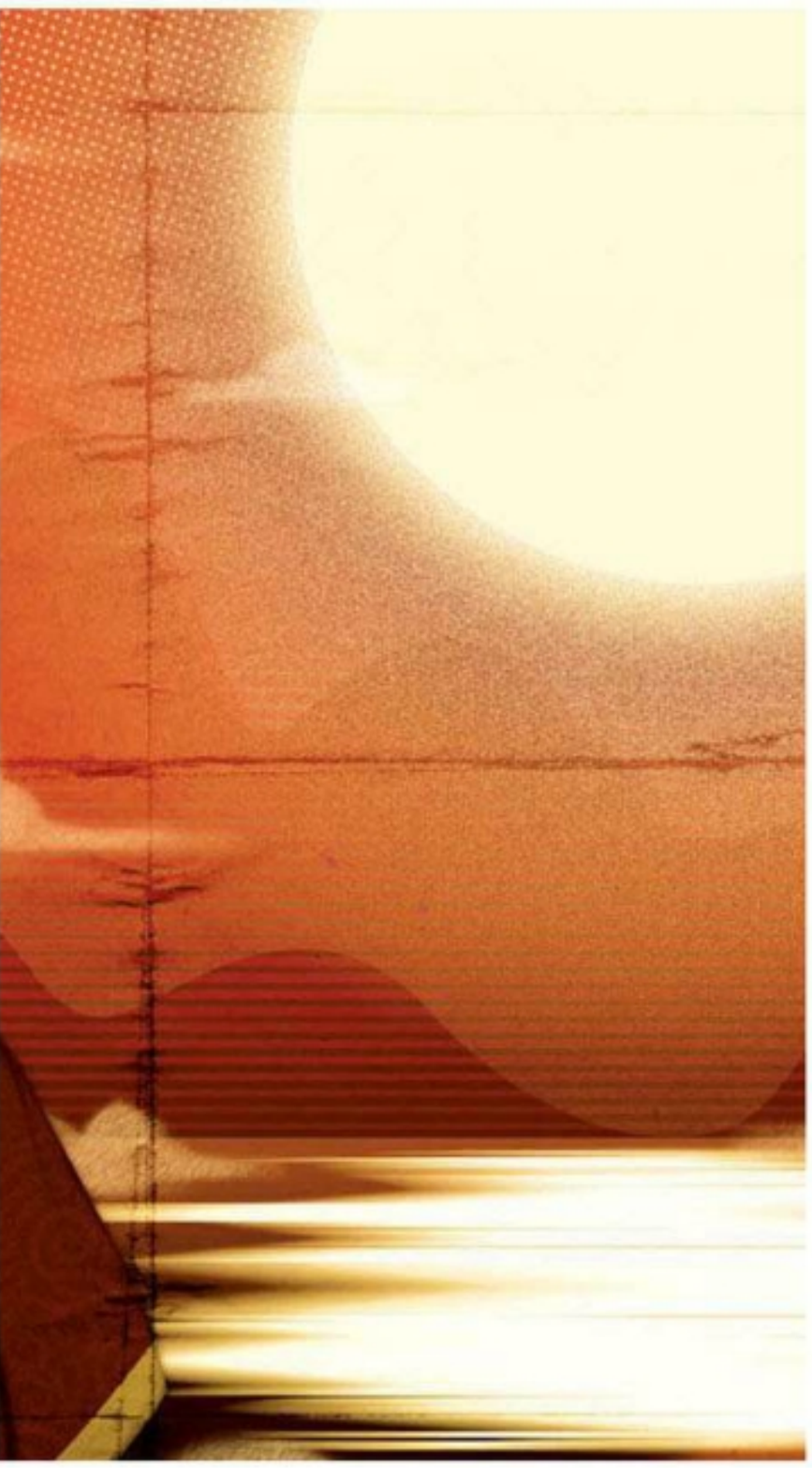


Image manipulation tools are rarely as powerful and diverse

42

48

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Sara Biddle

Personal portfolio site
www.salizabeth.net
Country **USA**
Software used **Photoshop**

Sara is a self-taught digital illustrator and has been freelancing for the past two years. She has always enjoyed art and its creation and her passion for the craft continues to grow with every stroke of the brush.

Source files available

Sketch

Digital painting

Painting expressive eyes

Working Progress

Master eyes for a bewitching image

Step 2, Start sketching

Step 13, Blend the whites well

Step 19, Soften with texture

Step 29, Increase lash texture

Captivation 2011 **Photoshop**

> My goal here is to show how important a role the eyes play in an image and how to create dazzling features in Photoshop
>
> **Sara Biddle** Illustrator

They say that the eyes are the window to the soul, that they can communicate without saying a word. They show our doubts, share our fears and reveal our truths. Our eyes are carefree beacons, showing off everything even if we don't want them to. In our eyes, our emotions run free.

Our eyes are also all different. There are so many different shapes, colours and sizes that make each of us unique. Ethnicity plays a large role in our bone structure, muscles, fatty deposits and skin that all determine the shape of our eyes. There are many colours as well such as blue, green or brown. The colour pigments inside of the iris can vary greatly even within a pair, which means that like snowflakes, no two eyes are the same.

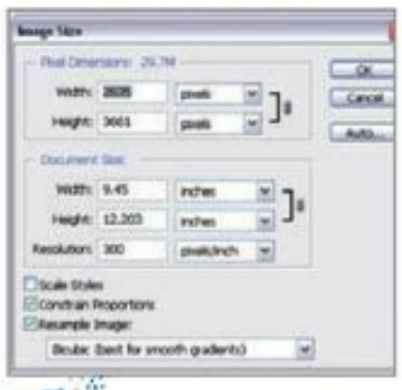
Our expressions tell a story and I believe that story begins with the eyes. Along with anatomical structure, eyes are one of the important parts of a painting. Few things are as flexible and even fewer are as expressive. No matter how realistic your painting may be, if there's no life in your painting, then there's probably no life in the eyes and many digital artists in particular find this difficult.

The shape and position of the eyes and eyebrows are two very important details. With just a few brush strokes an eye or eyes can go from delighted to angry. Caution should be used at this point. One wrong stroke and your painting could go awry. Attention to shape and expression is paramount; a happy expression is more than just a smile of the lips as eyes have a way of smiling too. When anger is present on the face the smile fades and the eyes squint, with the eyebrows eagerly following them down.

When painting the eyes great care should be taken to ensure the right shape for the character, natural colours and authenticity. With so many factors to take into account, the flexibility of digital editing allows you to get it just right.

Construction of the image

A complete walkthrough from sketch to polishing



01 Create the canvas Begin by creating a new document with the dimensions that you wish your final image to have. For maximum detail, I try to work on as large a canvas as I can without slowing down my computer. In this case, the canvas is just larger than A4. I create a new layer and prepare to sketch.

02 Start sketching Using a hard round brush, I begin to sketch the basic outline. I'm going for intense eye contact, so I make the brows strong, tilting downward, and the eyes less open. The sketch will be the guideline for the painting process, so take some time to perfect the expression and gesture you want before moving on.

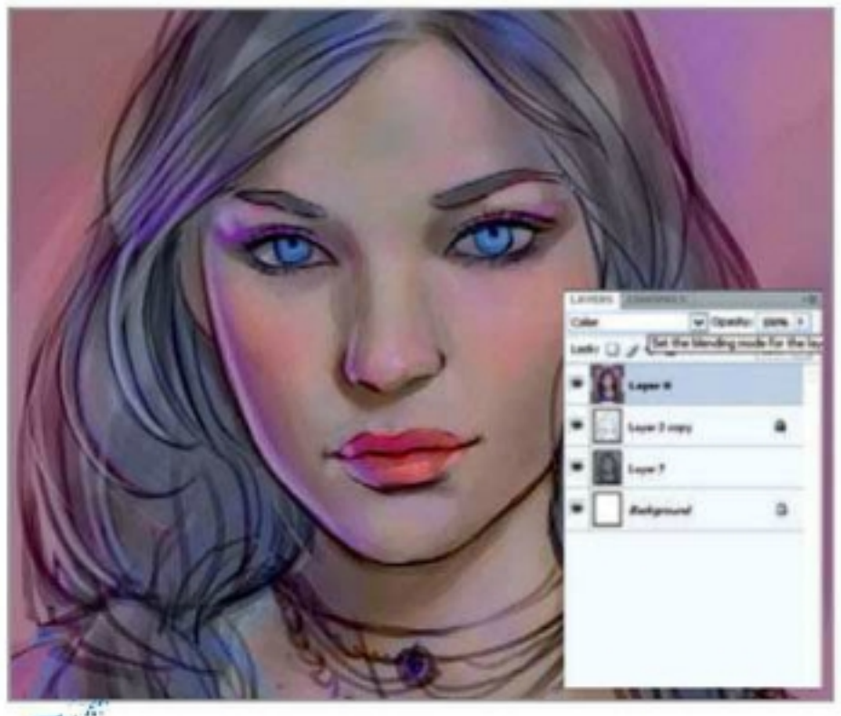
03 Work in greyscale Now that I have a guideline, I can begin building up the form of my character in greyscale. I begin by setting the sketch layer's mode to Multiply. I lock this layer to prevent myself from unknowingly painting on it. Next, I create a new layer underneath the sketch and fill it with a medium gray.

Establish engaging colour

Balance the eye and skin tones

04 Build the form On a new layer below the sketch, I apply shadows and highlights, being careful to choose a definite light source direction and work accordingly. Using a dark and a light gray, I loosely block in areas that define the form of the character's face with a hard round brush.

05 Blend the tones Take some time to blend the tones together. Merge the layers underneath the sketch and select the Smudge tool with a hard round tip, Spacing at 165% and Scattering checked. The Strength is around 50%. Gently go over rough areas with this to smooth things out. I use this method throughout.



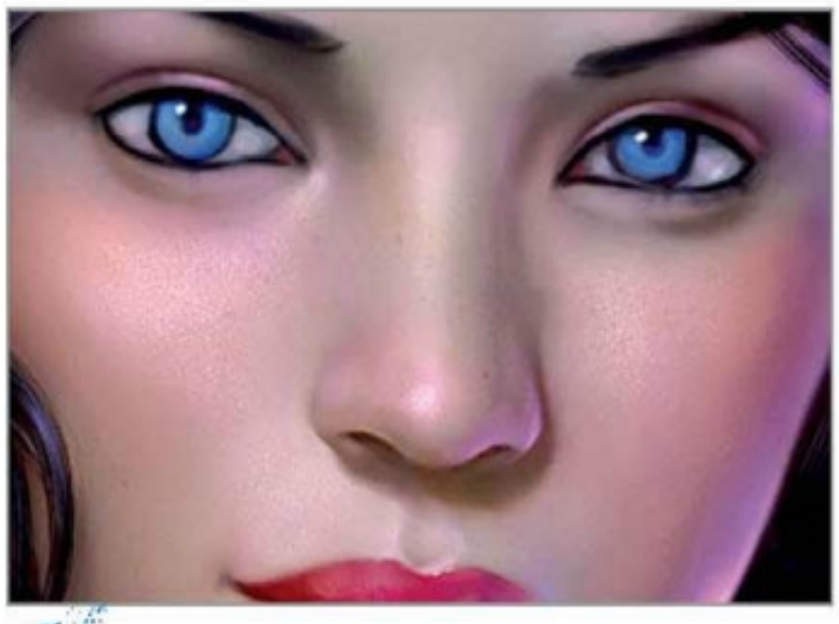
06 Colourise Make a new layer on top of everything and set the blending mode to Color. After choosing a few basic hues, I use the Brush tool to colour over the entire canvas.

07 Detail further Duplicate the sketch layer, move it to the top and turn it off for later use. Merge everything else together. Using the round brush and the Smudge tool, begin further detailing. Pay special attention to concave and convex areas. Bear in mind for example that protruding areas will catch more light and receding areas more shadow.

08 Shape the lower lid The eyeball itself is rounded and fits into the bony orbits of the skull, surrounded by muscle, fatty tissue and skin. The differences in combinations of these things give our eyes different shapes. In order to paint the eyeball, we must first have a place for it to go. Start by adding a small bulge, just under the eye, to form the lower lid.

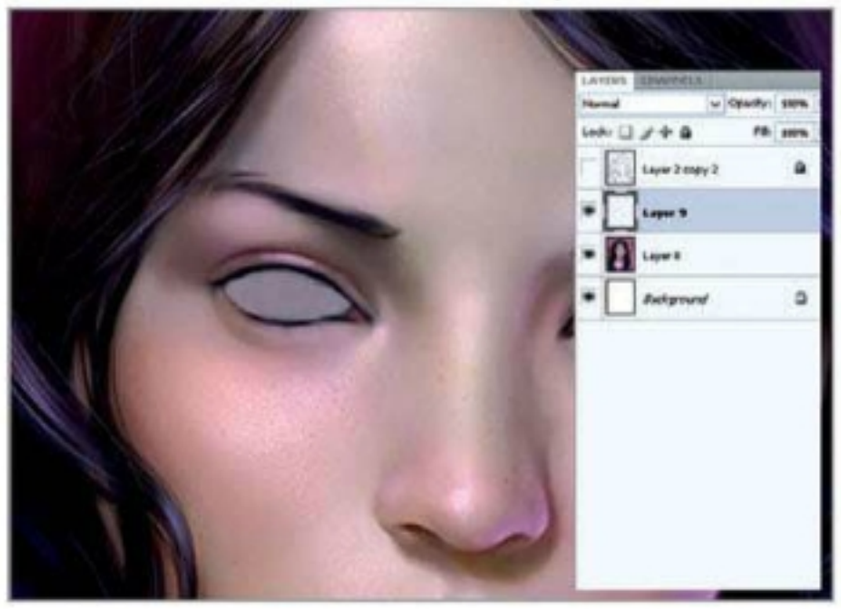
Using eye contact in an image

Similarly to elements such as symmetry and depth of field, eye contact is a powerful tool in the composition of an image. If the subject appears to be looking directly at the viewer, it can have an intensely engaging effect. That isn't to say that all subject's need to be looking out, however. A character's gaze could be equally usefully directed at something else in the image you wish to draw attention to.

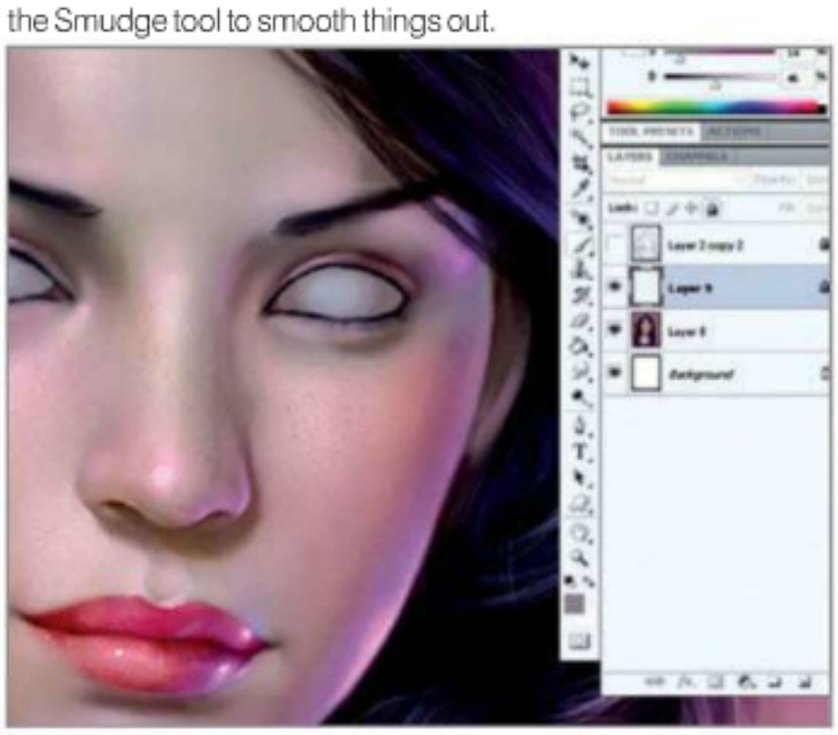


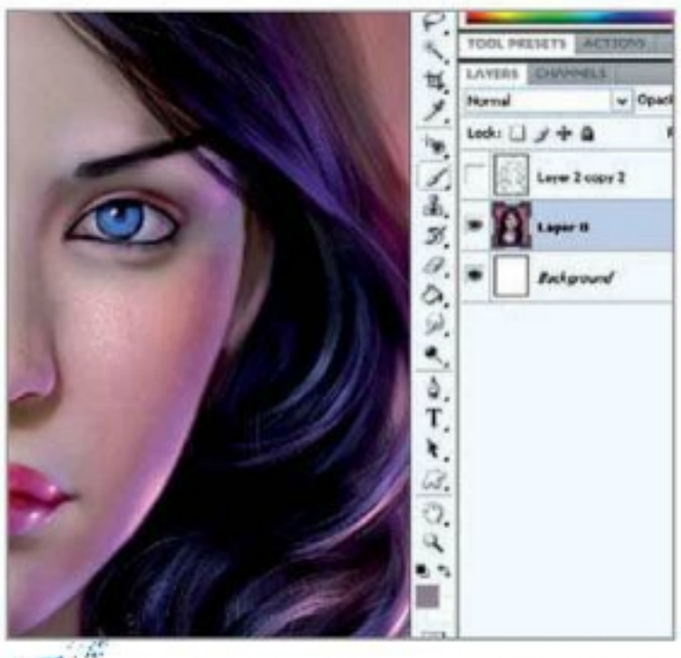
09 Define the upper lid Next, I define the upper eyelid. I add shadows along the crease and highlights to the brow bone. Because the eyelid protrudes slightly, be sure to add highlights to the area that would capture the most light, keeping your light source in mind all the time.

10 Fill the eyeball Make a new layer. Take into consideration colour choices for the whites of the eyes. Many factors such as age (in which case they would be more yellow or pink) could apply here. I've chosen a lighter, more desaturated skin tone and filled the entire eyeball.

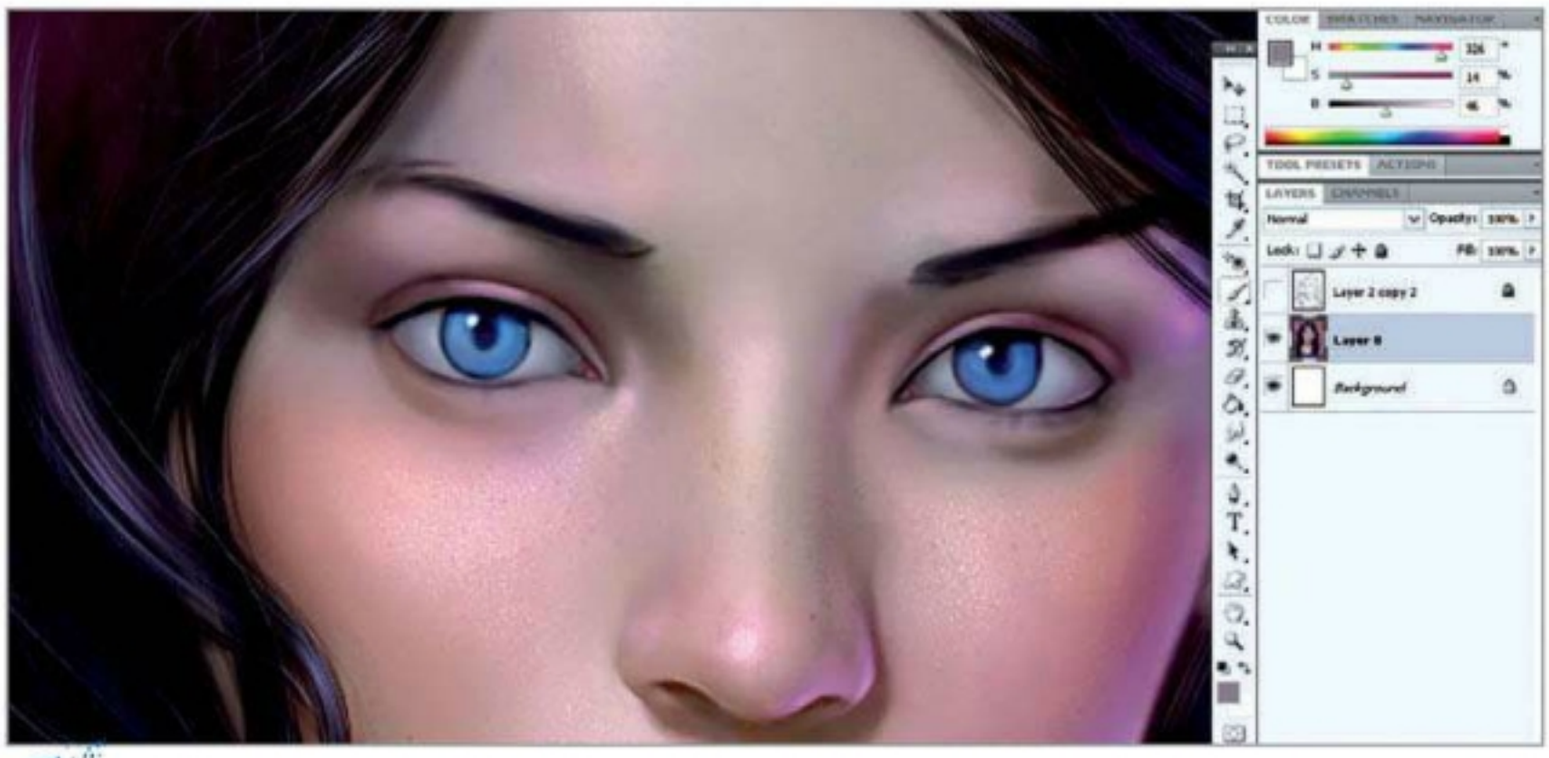


11 Make the whites round Lock transparency on this layer. Select the colour you chose for the whites of the eyes and make it lighter and less saturated. Brush the innermost area of the eyeball to create a sense of roundness. Gently use the Smudge tool to smooth things out.





12 Uncover the iris Next, lower the layer's Opacity setting to about 50% and unselect the Lock Transparency setting. Using the Eraser tool, erase on the iris and pupil so that they show through. Bring the layer's Opacity back up to 100% and merge with your character layer.



13 Blend the whites well Use the Smudge tool around the iris to blend slightly with the whites of the eyes, toward the inner eye (around the tear duct) and any other parts of the white that appear rough. If left unblended, you run the risk of your eyes appearing dry and unrealistic in the final image.

14 Add thickness to the lower lid Next, I choose a light pink colour that is similar to the skin tone and brush it along the edge of the bottom lid. The thickness of the lid is obvious toward the outer eye, but disappears as it reaches the innermost edge, so make it less pronounced there.

15 Begin iris detail Now we will begin detailing the iris. Start by picking a colour from the pupil and paint with small strokes, radiating toward the outer edge, disappearing on approach. Do the same with the outer edge of the iris; colour pick and make thin strokes toward the pupil.

Artist showCase

Other intense gazes from Sara's portfolio

What a Shame
2008, **Photoshop 7**
● I spent a couple of months working on and off in the making of this image. It is one of my very first digital paintings and holds a special place in my heart.

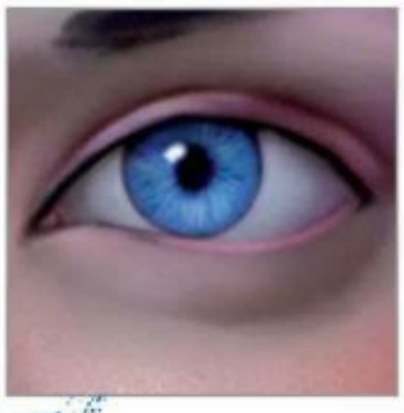
Only in Mirrors
2008, **Photoshop 7**
● I sat tirelessly at my computer, so excited as it came to life before my eyes; that wonderful feeling of watching my imagination spilling out.

Forever
2010, **Photoshop CS4**
● This is my latest personal artwork. I had a lot of fun designing the character in particular, but it was a challenge getting the concept just right.

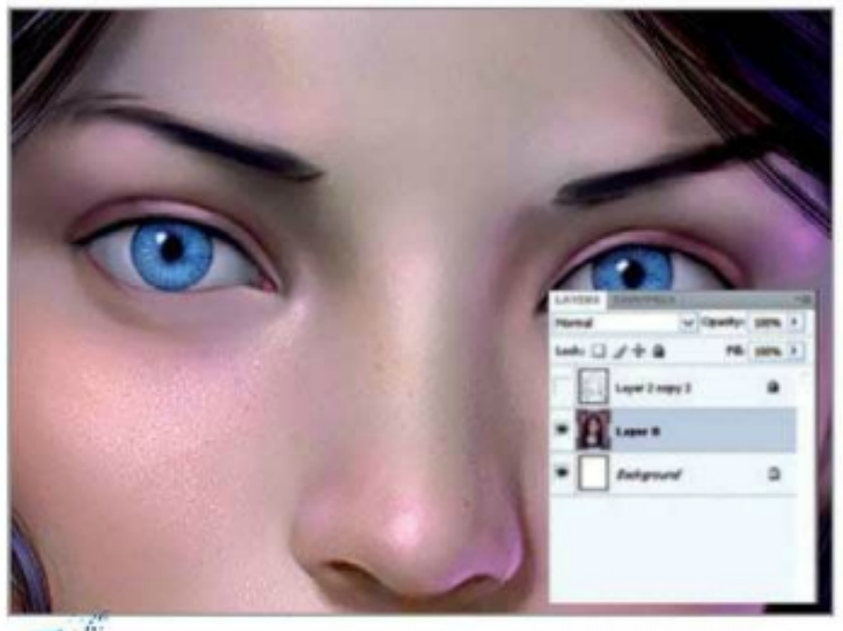
Keep your eye on the prize

Complete the image with texture and detail

16 Add colour variation Next, colour pick the iris colour, using the sliders in the Color menu to generate a slightly different hue from the original. Make radiating strokes just as before. Do this a few more times with various colours.



17 Texture the iris Use the Smudge tool to blur the inner and outer edges of your strokes. Take a look at your own eyes in a mirror. Notice how there's spots of colour, lines and different shapes. Feel free to add squiggles and tiny dots to make the irises dynamic.



18 Create depth Continue adding more radiating lines, squiggles and dots. It's important to create a sense of depth. An underdeveloped iris will tend to look flat and lifeless. I select the iris using the Lasso tool and apply the Unsharp Mask filter. Blur out various areas using the Smudge tool.

19 Soften with texture Colour pick the whites of the eyes using the Eyedropper tool. Make the colour slightly lighter and a bit of a different hue. In this case, I used a very light blue. Make a new layer and using an airbrush, go over the top edge of the whites. The eyeball texture looks softer now, almost like a boiled egg.

20 Smooth the rough edges Use the Eraser tool to remove any excess of the airbrushed colour that is not inside the whites. Afterwards, merge this layer with your character layer. If there are any rough edges left from erasing, use the Smudge tool to smooth.

21 Add eye reflection Using a very pale (almost white, in fact) shade of blue, I add in a shiny reflection for the eye. This is a distorted reflection of the light source and can be any shape you like. I've chosen a slightly skewed square shape.

22 Create the tear duct The tear duct is the pink tissue in the inner corner of the eyes. It's this part of the eye that carries tears to the nasal cavity. Carefully paint the tissue in using a medium desaturated pink. Add in some bright highlights to bring moisture to the appearance.

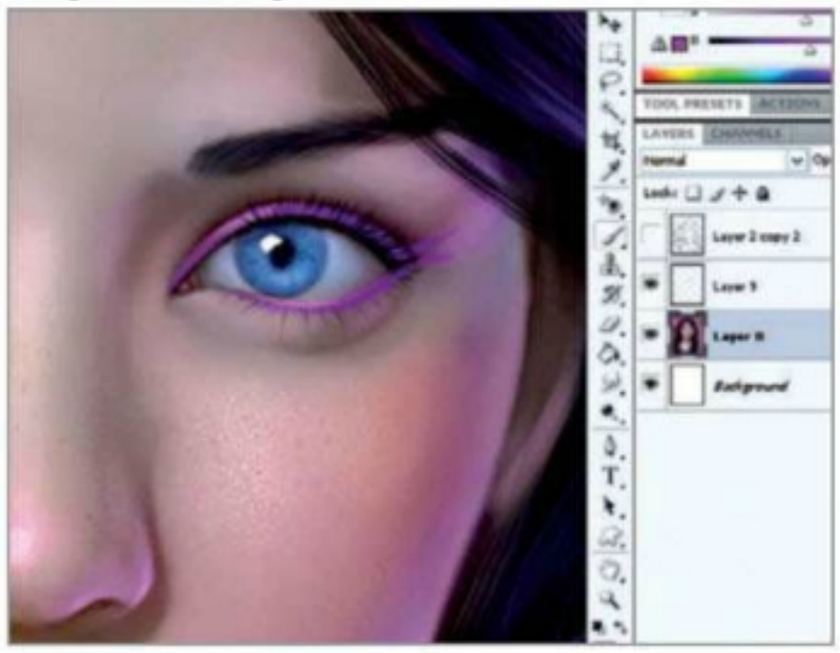
23 Incorporate skin texture Take another look at your eyes in the mirror. Notice how the skin around the eye is textured with some small wrinkles and porous skin. Using a dotted, textured brush, I go over the skin of the outer eye to create some texture, colour picking surrounding colours as I go with the Eyedropper tool to give variation and shadow.

24 Brush on the makeup Makeup is a great way to bring extra attention to the eyes. To do this, make a new layer and set its blending mode to Color. Select a colour of your choice and brush along the upper lid and the outer two thirds of the lower lid. Vibrant colours attract the most attention, so I've chosen a very saturated lavender that pops.

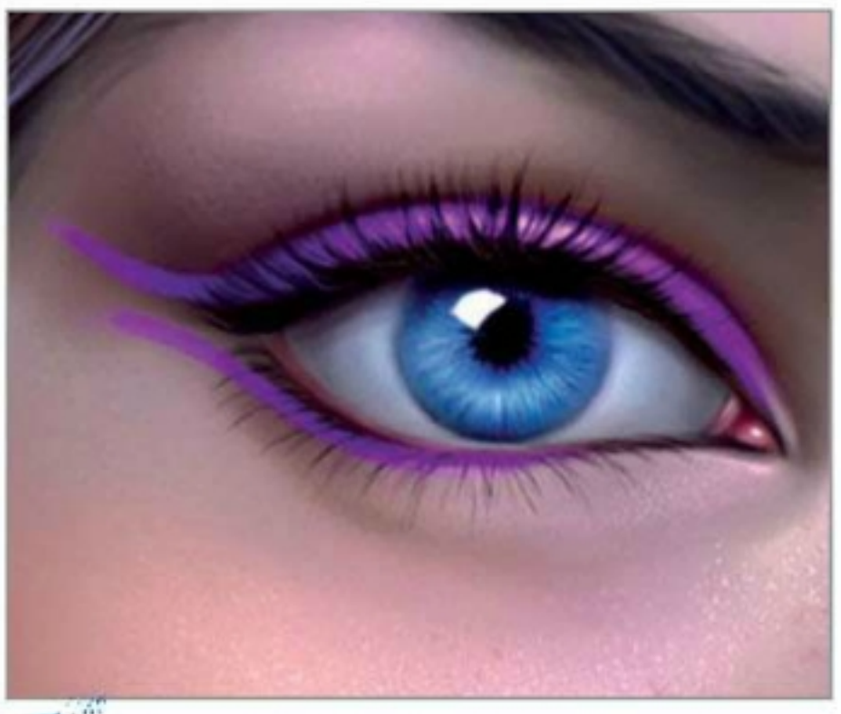
25 Make an eyelash brush Before we start on the eyelashes, we must make some minor adjustments to the hard round brush. Tick Shape Dynamics on and set the Minimum Diameter to 0% and choose Pen Pressure for Control.

26 Paint the top lashes Working from one edge to the other, begin adding long, thin lashes to the top eyelid. Remember that eyelashes are curved upward, so make your lines appear curved as well. Depending on if your character is wearing eye makeup, lashes could be stuck together in groups. In this case she is, so I opt for the mascara lash look.

27 Add the lower lashes We'll now begin adding in the bottom lashes. Keep in mind they are normally shorter and much more thinly placed than top lashes. Working from one edge to the other, begin adding in the bottom lashes along the bottom edge of the lower lid.



28 Enhance the lash volume Additional eyelash volume can be achieved by running an airbrush along the lash line of the upper and lower lids. Be careful not to go overboard; brush just enough to create the thickness of lash you need. Too much and all of the hard work spent creating the individual lashes will be lost as they won't be distinguishable.



29 Increase lash texture Colour pick from the whites of the eyes using the Eyedropper tool. Using the eyelash brush from before, make very thin lashes following your established curvature. This creates a sense of overlapping lashes and gives back some texture lost from the previous step.

30 Give it one last look Take a step back and examine your work with a critical eye. Last minute adjustments to the shape can be made by using the Liquify filter, or by using Warp under Edit>Free Transform.

Colour co-ordinate

It is no accident that my character's eye makeup, necklace and dress are all a similar hue. Connecting elements in this way gives cohesion to an image and can really draw the eye to its key parts. It's useful to think beyond the obvious elements however and incorporate unexpected colours in other areas. For example, in my image I used a tone that I picked from the dress in the highlights on her cheek as well as her hair, giving a unity to the whole design.

Use dynamic colour

Confetti Flyer 2010 Photoshop

> Use colour as a powerful tool to create a unique and personal identity for your illustrations

Simon Wild Illustrator

There have been many theories about colour, its properties, its power and its uses. I personally believe colour can change a mood, alter a perception, or drive a thought process. Colour defines my own work; I am naturally drawn to it. To me colour is a key ingredient of any image you create, helping to shape its narrative and make it readable. With the right colour palette in your work you can make a bold statement, which contributes enormously to the development of a strong, identifiable visual language that sets your work apart from others.

Analogous colour schemes are made up of a series of colours or hues that sit next to each other on the colour wheel. All colours are from the same hue, but all have a different shade or strength. These are particularly useful for uniting various elements of your image. An analogous colour scheme can also act as a starting point, used to complement other colours.

For example, working with analogous colours alongside hotter or more intense colours means that it is possible to have colours that clash and colours that harmonise all within the same image. This can give your work a strong and individual voice. It can also help to balance the image so all of your elements are working in harmony and share a strong unified identity.

Analogous colours are useful for illustrations that require a high level of graphic impact, such as logo designs, screenprints, children's book illustration, or book covers. By creating an analogous colour scheme, you add another character to your artwork, one that helps to define and enrich the quality and function of your illustrations. If you are searching for a unique personal visual language for your ideas, then colour is perhaps one of the most valuable tools at your disposal.

Illustration

Working Progress

Take your use of colour to new heights!

Step 7, Prepare the drawing

Step 15, Attention to detail

Step 18, Blend it

Step 18, Add the clouds

Source files available

Creative Pack

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Simon Wild

Personal portfolio site **www.simonwild.com**

Country **UK**

Software used **Photoshop**

Simon is an illustrator working from his studio in Suffolk. He creates colourful whimsical illustrations inspired by toys, flight, and travel. He hopes one day to invent time travel and live in a lighthouse.

USE DYNAMIC COLOUR

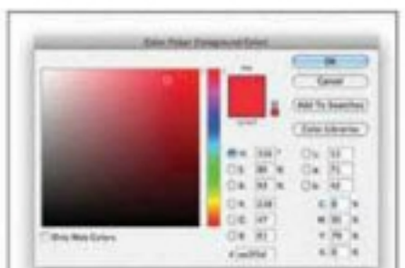
Colours that work for you

Create colour palettes that harmonise

01 Create colour palettes If you are not too experienced with colour, a good place to start is to call up one of Photoshop's preset colour swatches. Go to View>Swatches and select one of the Pantone colour bridge CMYK swatches. The colours are laid out in different shades of the same hue, and you can also view the colour spectrum easily.

02 Choose the dominant colours Adding colour to an illustration can largely be an intuitive process, but it is a good idea to have a colour plan to facilitate this. Choose around six strong hues from the palette that mainly sit alongside each other in the colour spectrum. These will form the dominant colours of your illustration in which you can work around later.

03 Analogous colour schemes You'll notice that analogous colour schemes have already been set in multiples of seven. Making your own can be useful if you want to reuse the same palettes later on for other projects. Using the Eyedropper choose the first of your seven colours and open the colour picker in the toolbar.

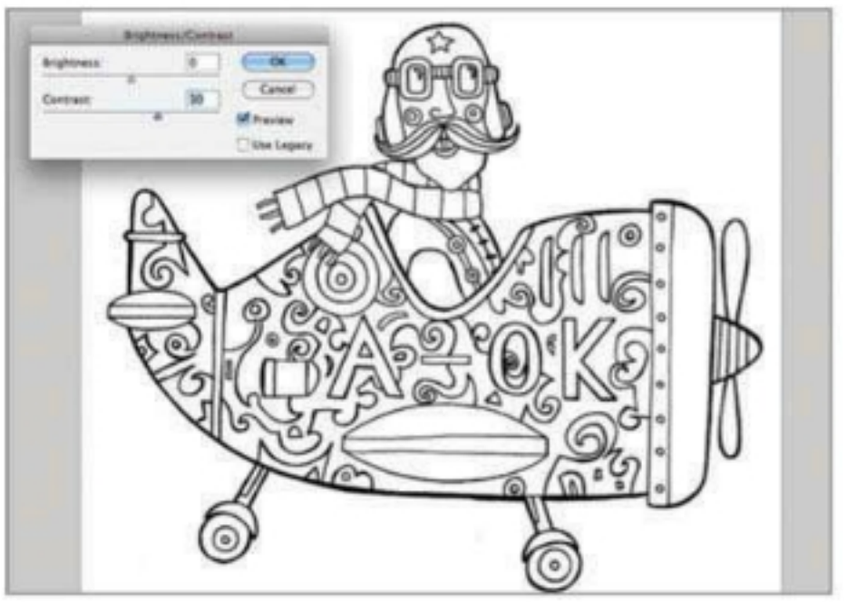


04 Add colours to the swatch palette Create a set of colours that vary in shade. Drag the colour pin to the left of your selected hue and choose Add To Swatches. This will create a new swatch at the bottom of your swatch palette. Repeat this a few times for each hue, lightening the shade a little more each time.

05 Use the palette You now have a system of colours in the swatch palette that will work in harmony with each other. You can also save your colours as a PSD file that can be opened as and when you need it. I find this a quick and easy way to call up and select colours.

06 Darker shades You may wish to create an additional palette that uses darker shades of your chosen hues as well. Open the colour picker again and drag the colour pin down to choose and add darker swatches to your palette. This palette might be useful for drawing attention to smaller details.

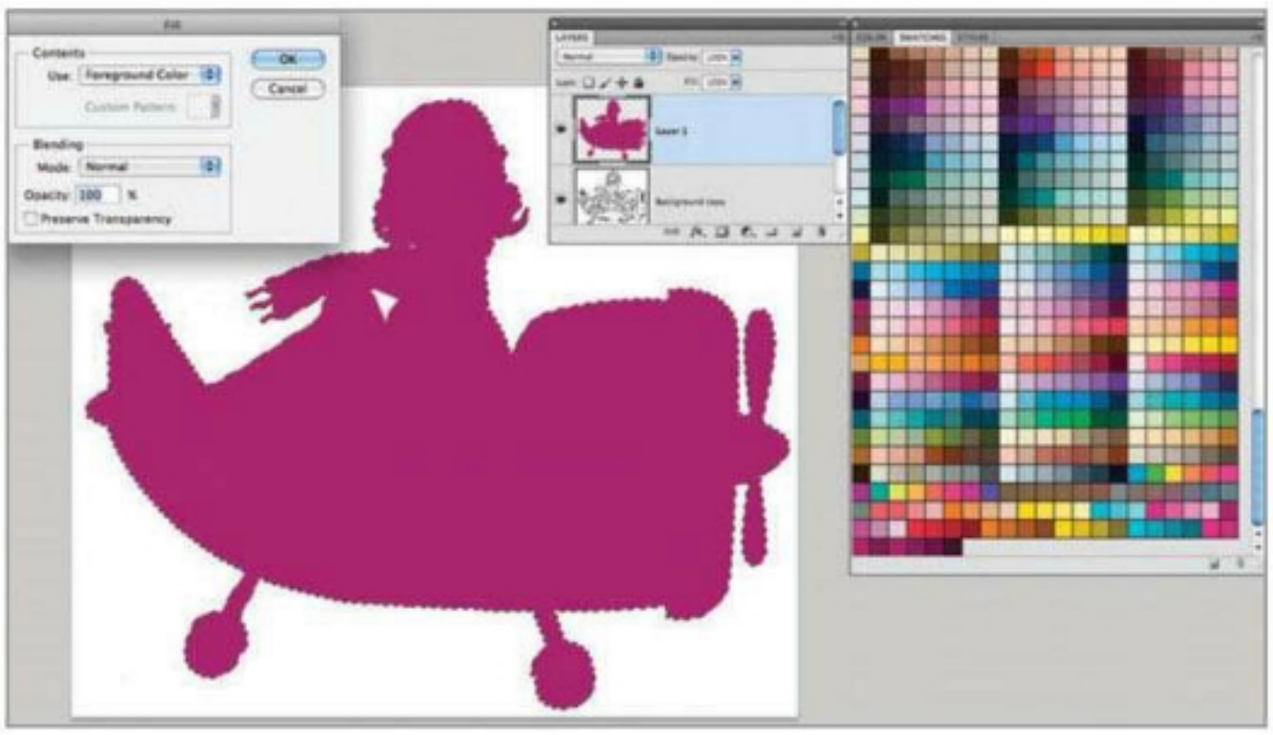
07 Prepare the drawing This illustration will be created from a scanned line drawing. The drawing will act as a stencil in which colour will be added, so it is important that the drawing is clean, and complete with no breaks in the lines. Adjust the Brightness and Contrast so the lines are black.



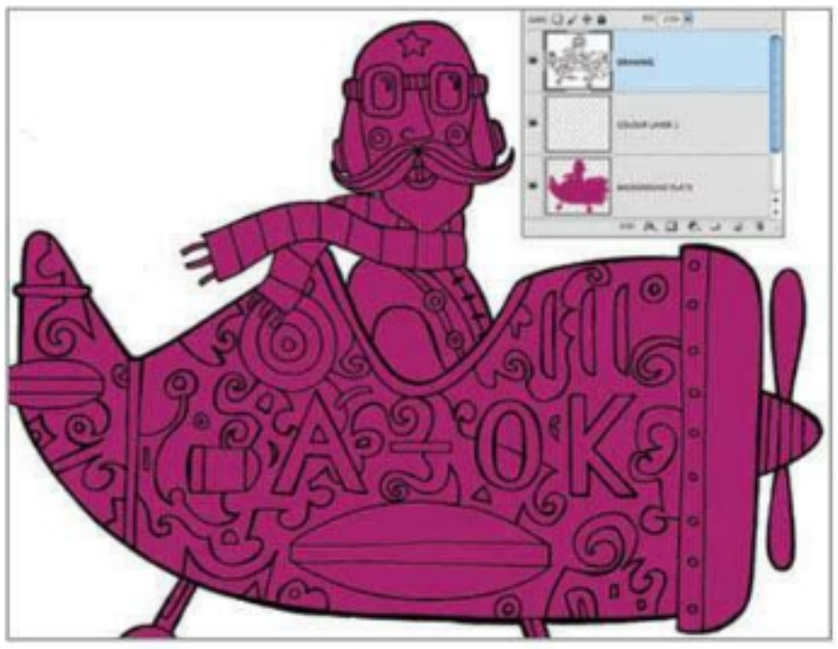
A web of colours

For some inspiration, **www.colourlovers.com** is a community site where you can share colour ideas and discover the latest colour trends including branding, street fashion, magazines and websites. It also allows you to create basic and advanced colour palettes from photographs.

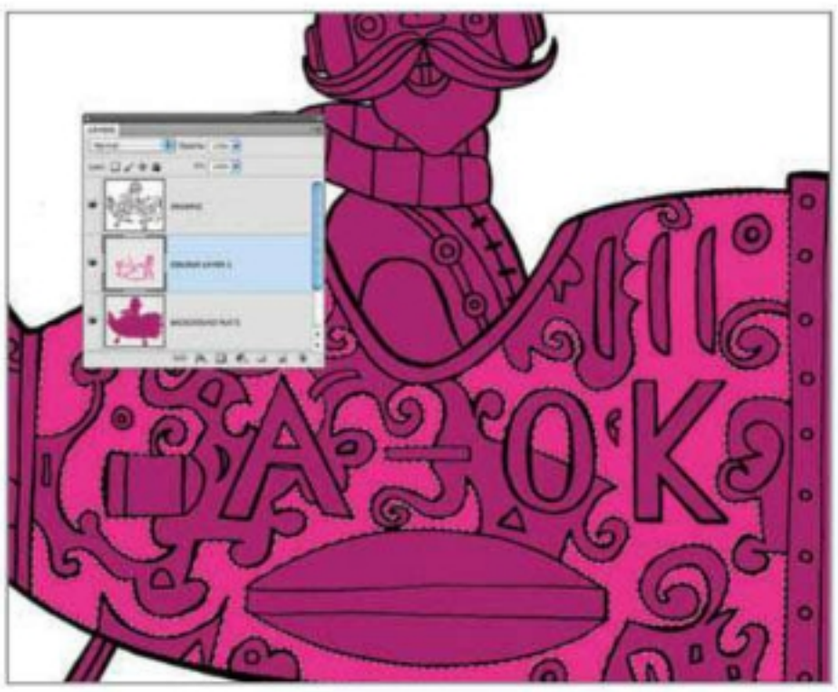
08 First stages of colour Begin by creating a background colour plate. Choose a dark shade from the newly created palette. This will be the dominant colour holding everything together. Select the white space around the artwork and invert the selection. Create a new layer and fill the selection with the foreground colour.

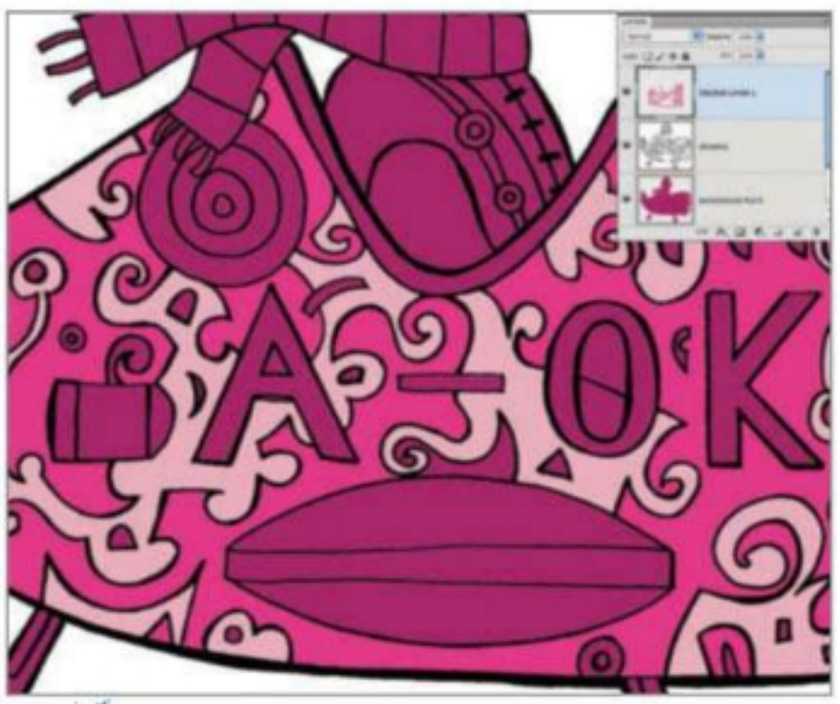


09 Use the drawing as a template In the Layers palette, copy the drawing layer and position it at the top of the layer stack. Change the blending mode to Multiply and you will now be able to see through to the colour background plate below. The drawing can now be used to select areas for painting. Delete the original drawing layer.



10 Start painting Colour provides identity to artwork so it's a good idea to group different elements of the artwork together by assigning different colour schemes to them. Begin painting the aeroplane with a dominant colour.





11 Lighten the details Use a lighter shade from the same hue for some of the details and patterns. This creates the first stages of colour harmony and groups these details together effectively.

12 Develop colour identity Paint the front of the plane and the nose cone with the other dominant colours. You should see the first signs of a unified colour identity beginning to emerge. Leave the propellers for now.

13 Link the front to the back Paint the tail using one or more colours that you used for the front and nose cone. Links with certain parts of the aeroplane are now being established through colour choices. Leave the tail wing for now.

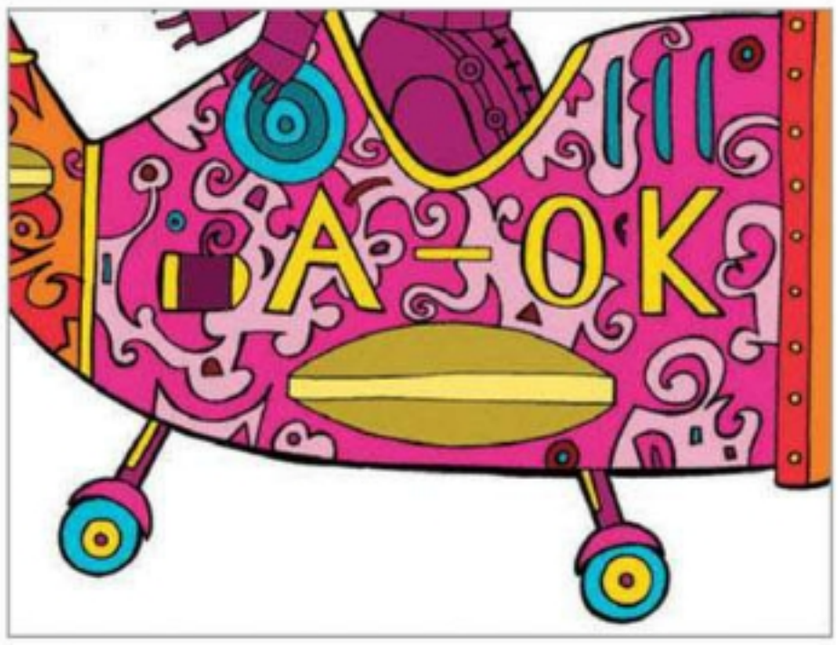
14 Wings Okay, wings next! Use a combination of bright and dark shades from the same hue. The wings are a major feature of the artwork so they need darker shades to stand out a little more.

15 Attention to detail Pull out some of the aeroplane's details with another bright colour. Yellow works well against the other dominant colours. By now each part of the aircraft should have a small colour scheme assigned to it, while at the same time a unity should be continuing to develop in the overall colour scheme.

Bring it all together

Make the colours harmonise and add contrast

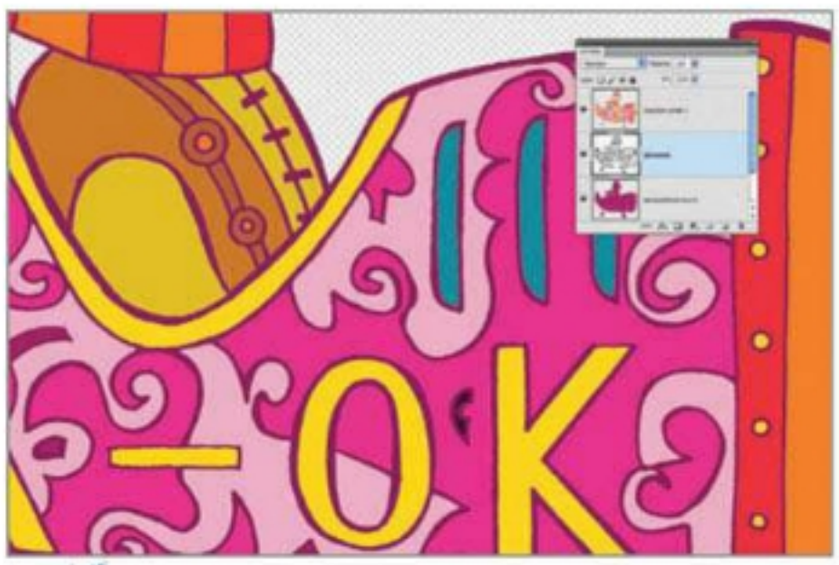
16 Smaller details Pull out the rest of the smaller details of the aeroplane using darker shades of colour. These little details help to break up the larger areas of colour and balance the overall colour scheme.



17 Paint the pilot Use a combination of dominant hues mixed with lighter and darker shades to bring out the character of the pilot. The pilot's features need to stand out, so using lighter shades for the face and moustache will help to do this.

18 Uniform The pilot's headgear and jacket should be painted with lighter and darker shades from the same hue. The darker shades from the orange hue work well for this. Paint the scarf using two dominant colours you used for the aeroplane. This will help to connect the pilot to the aeroplane.

19 White out Clean up the lenses of the goggles and paint with a darker shade of purple. Draw white reflective highlights on them. Using white on just the features of the pilot increases his impact when dropped onto a colour background.

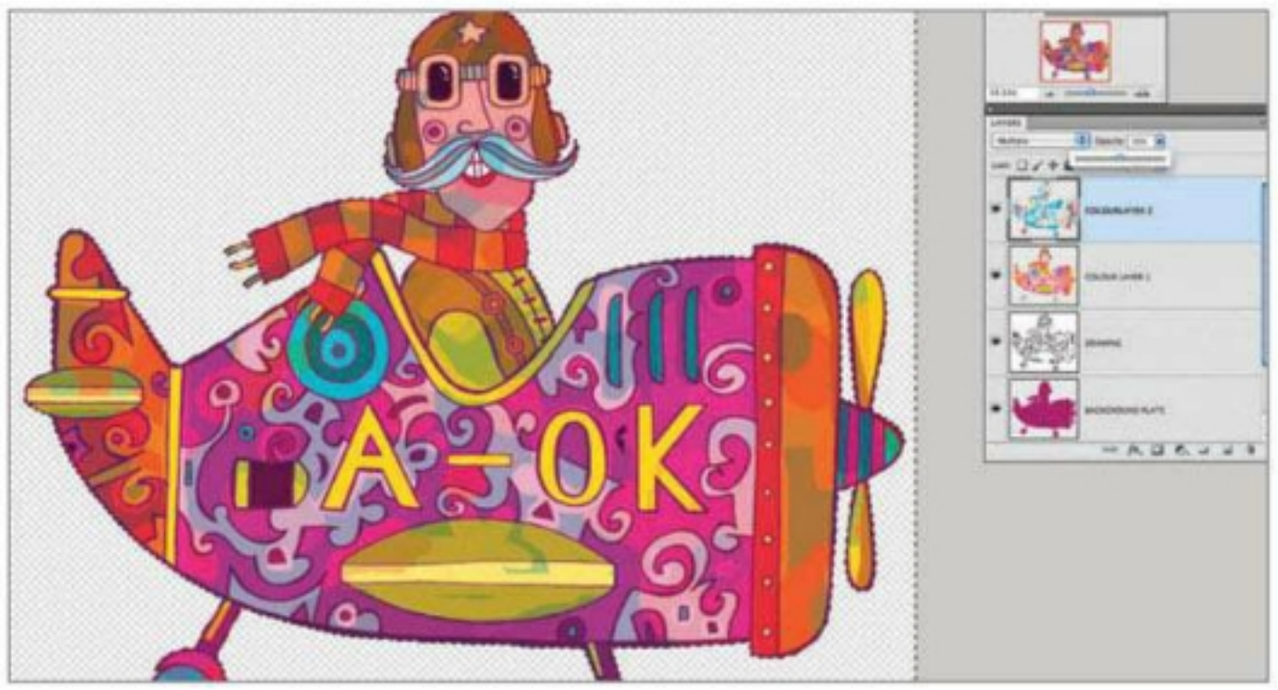


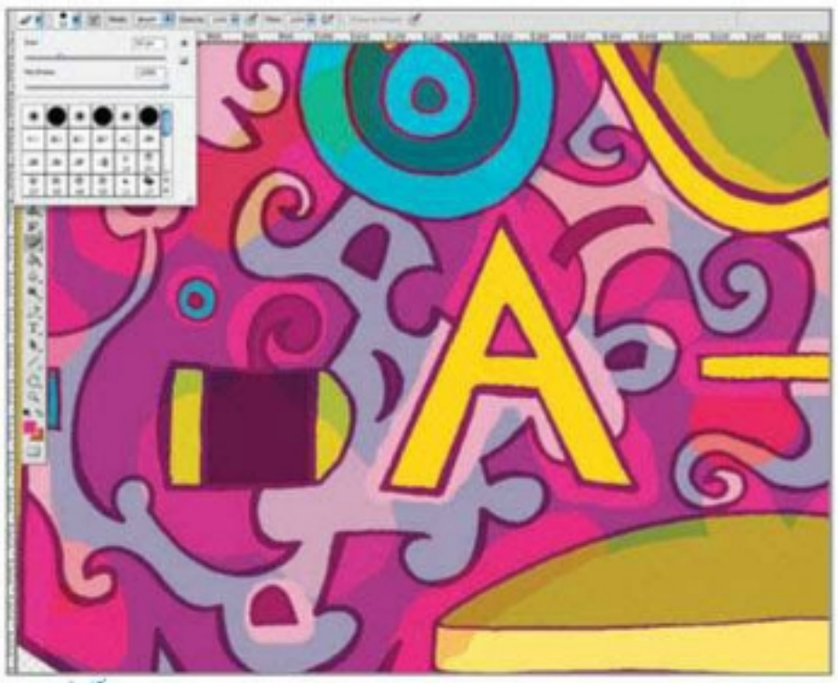
20 Blend the background colour Time to make use of the background colour plate by pulling the colours together. Turn the opacity of the drawing layer down to 15 percent. This provides the overall artwork with an interesting colour clash between the line and the bigger bolder graphic shapes, while also managing to harmonise the colours as well.

21 More colour Create a second colour layer. To enhance the colour further, paint a texture of shape and pattern. This enrichs the overall palette. For this, use a combination of lighter and darker shades. At this point it can be useful to turn the other layers off and paint almost a new image.

22 Clean up the texture Turn the other layers back on. Select the background colour plate layer and using the Lasso tool, select the space around the shape. Now select the second colour layer and hit Delete. This will leave you with a texture that sits perfectly over just the pilot and the aeroplane.

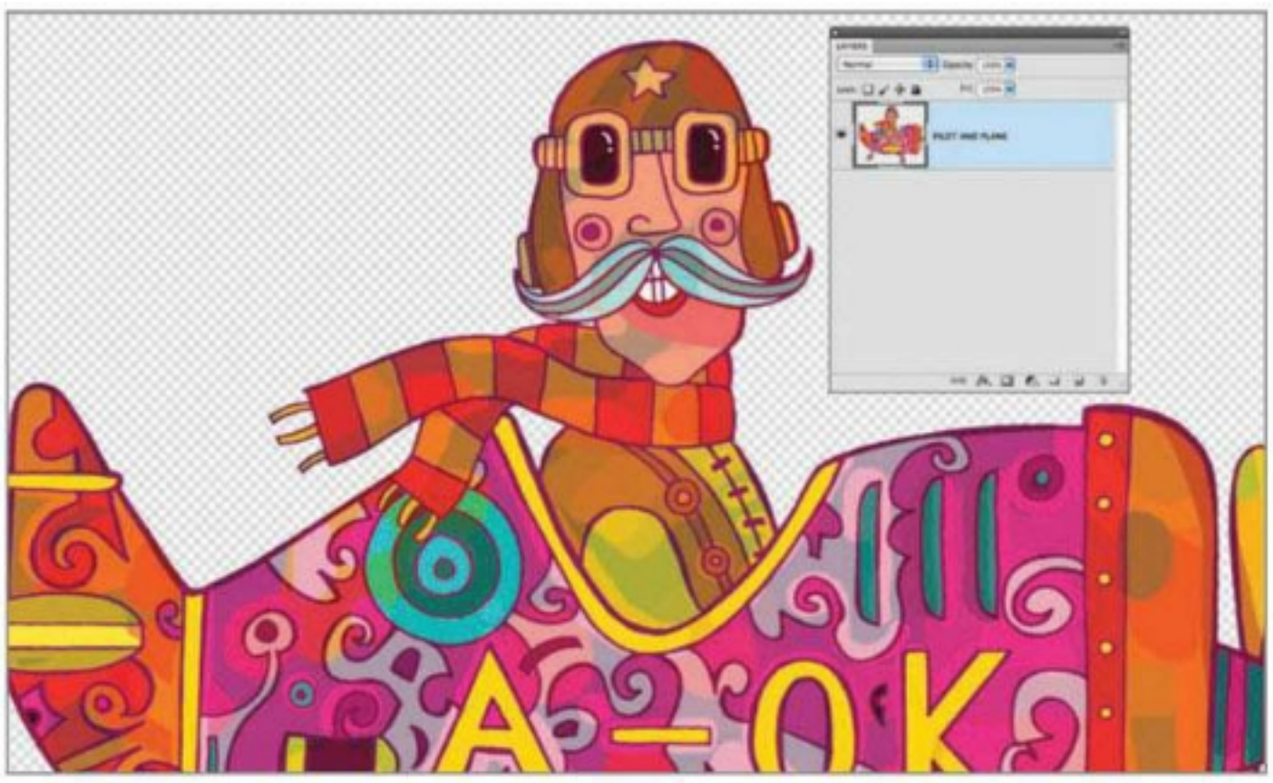
23 Blend it Set the blending mode of the second colour layer to Multiply. The two colour layers will now blend together. It will probably look a bit too dense at this stage, so turn the opacity of the second colour layer down to about 50 per cent.



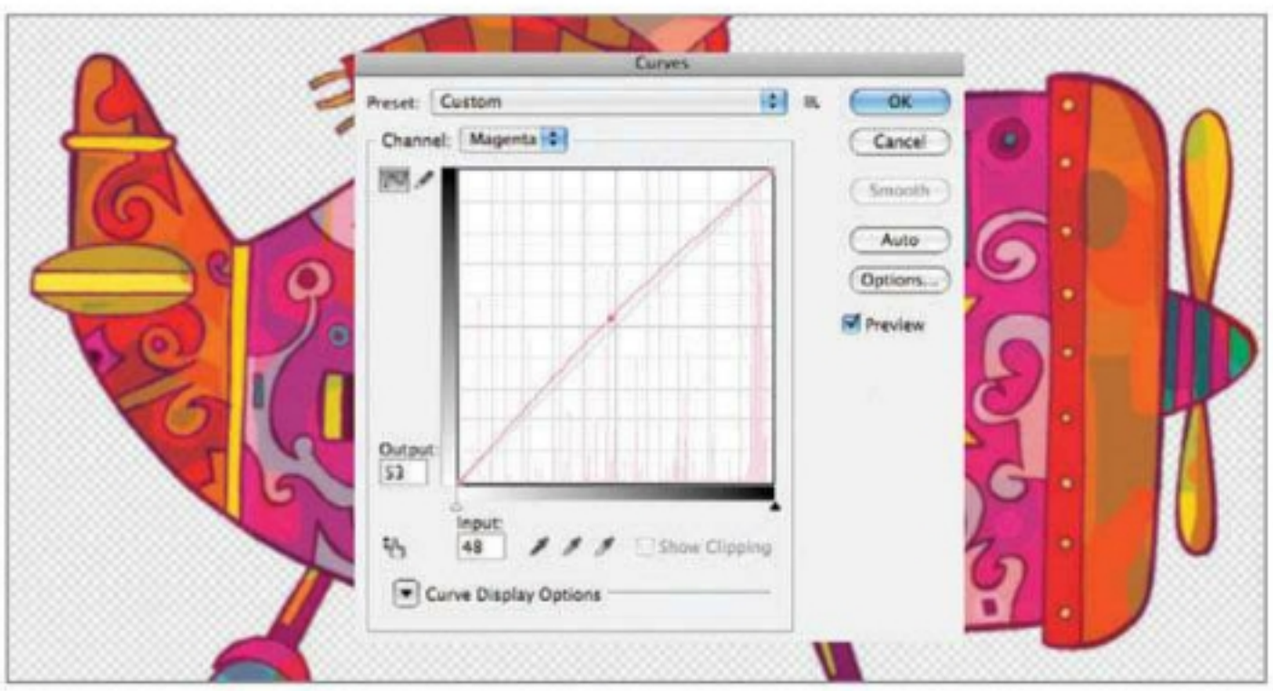


24 Clean up A little bit of clean-up is needed now just to bring back some of the details. Select the Eraser tool with a brush size set to 50 pixels and remove areas from the second colour layer. Make sure any important details are not left obscure by unwanted texture.

25 Flatten all artwork Flatten all the layers by selecting Layer>Merge Visible. All of the artwork should now be sitting on one transparent layer. You can create additional colour layers if needed, but it should be looking okay by this point.



26 A little more zing As this artwork is using the CMYK print colour mode, the colours will not be as intense as an RGB screen colour mode. It is possible however to give the colours more life by selecting Image>Adjustments>Curves. By adjusting the Cyan and Magenta values you can intensify and warm up the colours further.



27 Time to fly Drag the aeroplane onto a new canvas. Create a plain-coloured background. A light sky blue will work well for this. Select Edit>Free Transform and rotate the aeroplane slightly to make it soar up into the sky. When the aeroplane is in position, double click inside the bounding box selection.

Colouring book

Some essential further reading on colour includes *Colour Index* by Jim Krause. It's a really useful book with over 1000 colour combinations for print and the web to help you explore and experiment with colour. It should be on every illustrator's bookshelf!

28 Add the clouds The clouds are created exactly the same way as the aeroplane and pilot, again by using a line drawing as template to paint through. Drag some clouds onto the canvas and place them in front and behind the pilot by arranging them in the Layers palette. This will bring a little bit of depth to the artwork.

29 Confetti The multicoloured confetti is painted from a line drawing of simple shapes again using the same process as the pilot, aeroplane and the clouds. Paint the shapes using all of the colours you created for your palette. Drag the confetti to the canvas and copy the layer a couple of times. Re-position the confetti layers so they fill the canvas.

30 Final cleanup Remove any unwanted confetti from the pilot's main features and re-position all confetti to the top of the Layers stack. The entire colour scheme should now be working in harmony, giving the artwork a rich, strong identity.

PHOTOSHOP

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Abi Daker

Personal portfolio site **www.abigaildaker.com**

Country **Cyprus**

Software used **Photoshop, InDesign, Illustrator**

Abi's artwork frequently depicts areas of landscape from unusual perspectives. Linework and colour are often used to create a unique sense of space.

Combine digital art and printmaking

"Expand the potential of a linocut print with digital preparation and editing"

VENICE

Working Progress

We're having new age fun with a vintage feel

Step 5, Block in the colours

Step 8, Make the first print

Step 15, Layer modes

Step 20, Erase background

Venice 2011 **Photoshop**

> By working digitally, you can print each stage on separate sheets and then combine them in layers, creating the effect of a two or three-tone print

Abi Daker Illustrator

One of the aspects of linocut printmaking I've found hardest is creating an image that prints well in reverse. Often the surprise of a reverse effect can be pleasantly intriguing, but with a commissioned piece, you need some level of certainty about what the final image will look like. By planning your design digitally, you can make sure you have control over the final work and that any important aspects are not distorted or lost during printing.

Sometimes during the printing process, you might make several prints and find that each has a defect in a different section; none is perfect enough to be used alone, but each image will have areas that printed well. By working digitally, you can combine several different prints in a run to create one perfect whole without a single error.

One popular technique in linocut printmaking is the 'reductive method'; one colour is printed, then some more of the lino cut away before a new print is made. The effects of using more than one colour are fantastic, but with each colour used, the potential for error increases. By working digitally, you can print each stage on separate sheets and then combine them in layers, creating the effect of a two or three-tone print without the risk of ruining the first print.

For this piece I started with a pencil sketch, but you can work just as well by drawing digitally – just choose the method you feel most comfortable with.

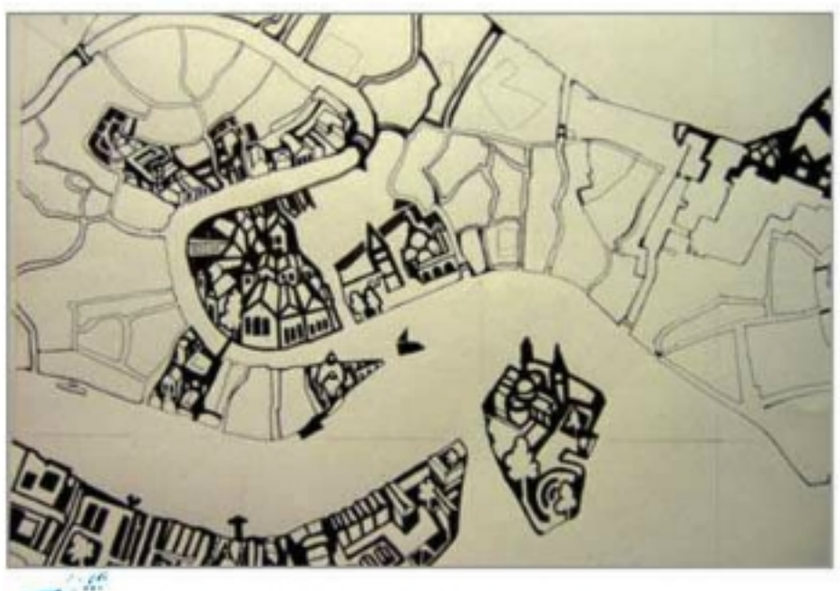
Be flexible in your approach to the project

Not all drawing styles translate well to printmaking. Look at some examples of linocut artwork before starting and try a drawing or a small test print first to see how your style works best. It's important to work with the media you are using, not against it.

Virtual printmaking

Marry the flexibility of digital artwork with traditional media

01 Draw the design Start by making a rough sketch of your subject. Make it the same dimensions as the piece of lino you'll be using. Try to keep lines quite simple as linocutting is naturally imprecise, but if you find yourself getting too detailed, don't worry as you can solve this later.



02 Work out light and dark areas It's far easier to replicate your design well as a print if you spend a bit of time getting it right at the start. Work out which areas you want kept dark and which areas need to be light and block in the dark areas. At this stage, it's best to work in just black and white.

03 Block in the colours of your sketch Scan your drawing. Working on the Background layer, use the Paint Bucket tool to fill in the black areas of your design. Then Layer>Duplicate Layer. Working on your Background Copy layer, use the Paint Bucket tool to fill the white space in the drawing in a bright blue. Layer>Duplicate Layer again so you have a layer called Background Copy 2.

04 Simplify a layer On Background Copy 2, use the Paint Bucket tool to colour in the black areas in white. Use the Paint Bucket again to fill in some of the more detailed areas of your drawing and to make the shapes simpler. Then move this layer beneath Background Copy. Reduce the Opacity of Background Copy to 50% and see how it looks.

05 Experiment At this point, you should experiment a little with the opacity of your layers and the layer modes until you get a two-tone effect you like. Delete the original Background layer and rename the bottom layer 'Print One' and the top layer 'Print Two'.

06 Reverse the design As you need to draw a mirror image of your final piece on the lino we now need to reverse layers. Select All>Flip Horizontal on Print One. Repeat for Print Two.

07 Copy the image onto the lino View>New Guide and set guide lines both horizontally and vertically at 25%, 50% and 75% on your design. Then divide each side of your lino into four equal parts and draw a grid on the surface. This will help you to redraw your design accurately.

08 Make the first print Hide the top layer of your design and cut into the lino using the Print One layer as your reference. When you have carved out the lino, make a test print, using a light or bright shade. Green and red both work well for this. Make one or two prints of this version and scan them.

09 Make a second print Unhide the top layer and use it as a guide for the next stage of linocutting. Cut out more detailed and specific shapes and make some more prints in a darker colour. Black, blue and purple would all work well. Scan these prints.

10 Assess your work You should now have several images from each stage of printing. Look closely at each print and decide which areas have printed well and which areas not so well. Layer the best prints from each run on top of one another in a single file and Edit>Transform>Rotate to make sure they all align.

11 Tidy up your work Use the Healing Brush tool>Replace and tidy up any areas in each print that have errors in them. You will need to vary the brush size for this. Be careful not to over-edit the prints; it's important to retain as much of the handmade quality as possible – you do not want your lines to become too smooth.

12 Make one layer for each stage of printing As you are editing, aim to create one layer to correspond to each stage of printing. If there is a large error on an otherwise perfect print then use the Lasso tool to select an area from another print from that stage and Copy and Paste onto your chosen print. Delete all unnecessary layers.

Style School
Art genres in a nutshell

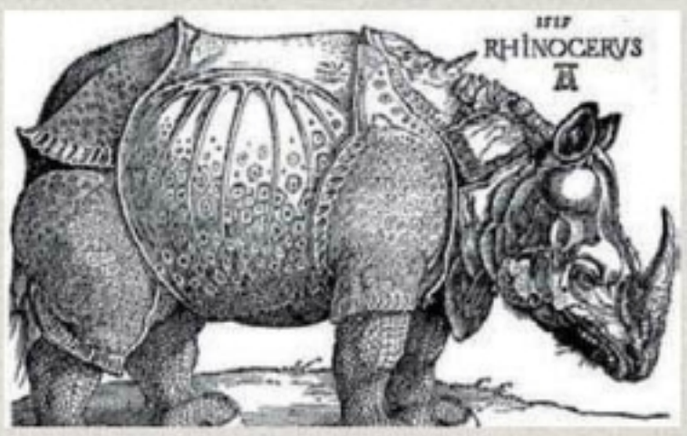
A timeless media

The enduring appeal of printmaking

Artist: Albrecht Dürer
Image: Coat of Arms **1523**
Owner: British Museum, London

● The striking use of black and white in this image is built up out of a succession of small strokes and crosshatching. It gives the piece a lovely complexity which contrasts beautifully with the simple graphic colours. This style was widely reproduced in the 16th Century.

tinyurl.com/DA-DurerA



Artist: Albrecht Dürer
Image: Rhinoceros **1515**
Owner: British Museum, London

● In this piece, Dürer uses a variety of strokes to depict the organic shapes in the rhinoceros and crosshatching to indicate the shadows on the ground. Again, we can see use of parallel lines underneath the animal. Dürer was famous for his incredibly accurate drawings of natural subjects.

tinyurl.com/DA-Durer1

Artist: Jost Amman
Image: Formschneider (Blockcutter) **1568**
Owner: From *Das Ständebuch* (*The Book of Trades*), 1568

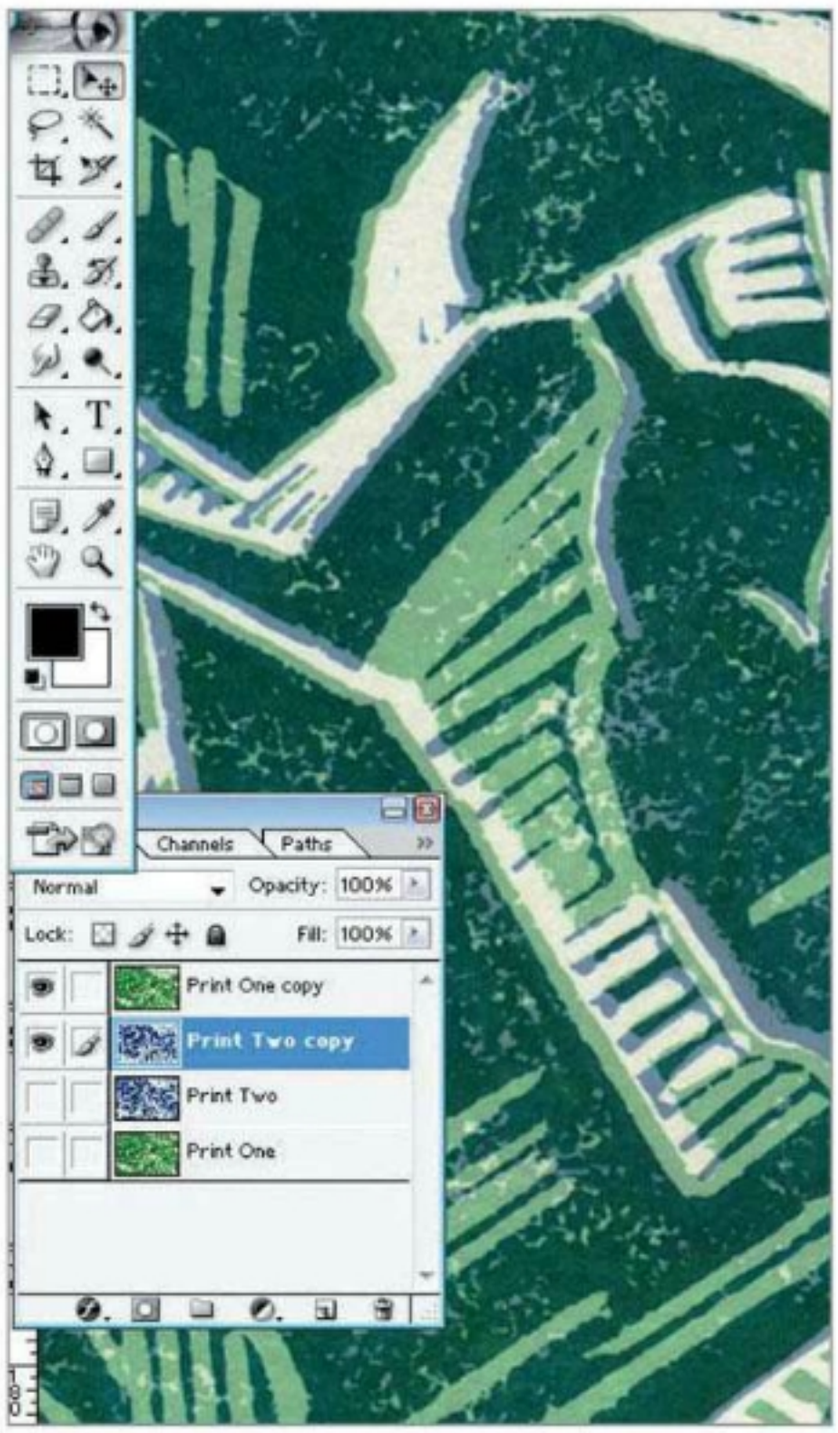
● This image actually depicts a blockcutter at work engraving wooden printing blocks, and is rendered in this medium itself. The light and shade in this piece is depicted by parallel and diagonal lines. This distinctive way of rendering shadow is a result of the grain of the woodblock limiting the variety of strokes the artist is able to make. It also adds a unique tactile look.

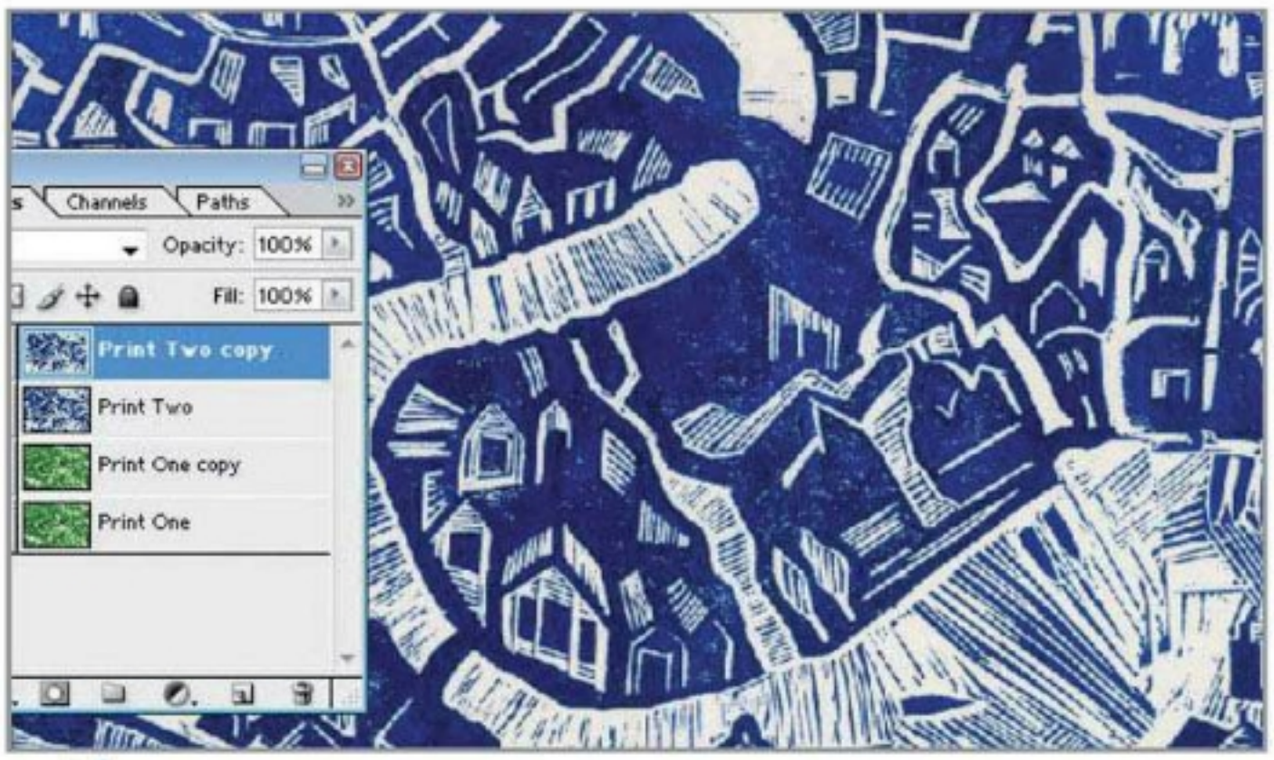
tinyurl.com/DA-Amman

Prints charming

Add interest with digital tweaks

13 Experiment with layer order At this stage, there are a lot of possibilities for experimentation. You can start by moving the layer order around and reducing the opacity of each to see how the two layers work together. Once you've seen the two layers merged, you might find that you need to use the Healing Brush tool again on some sections.



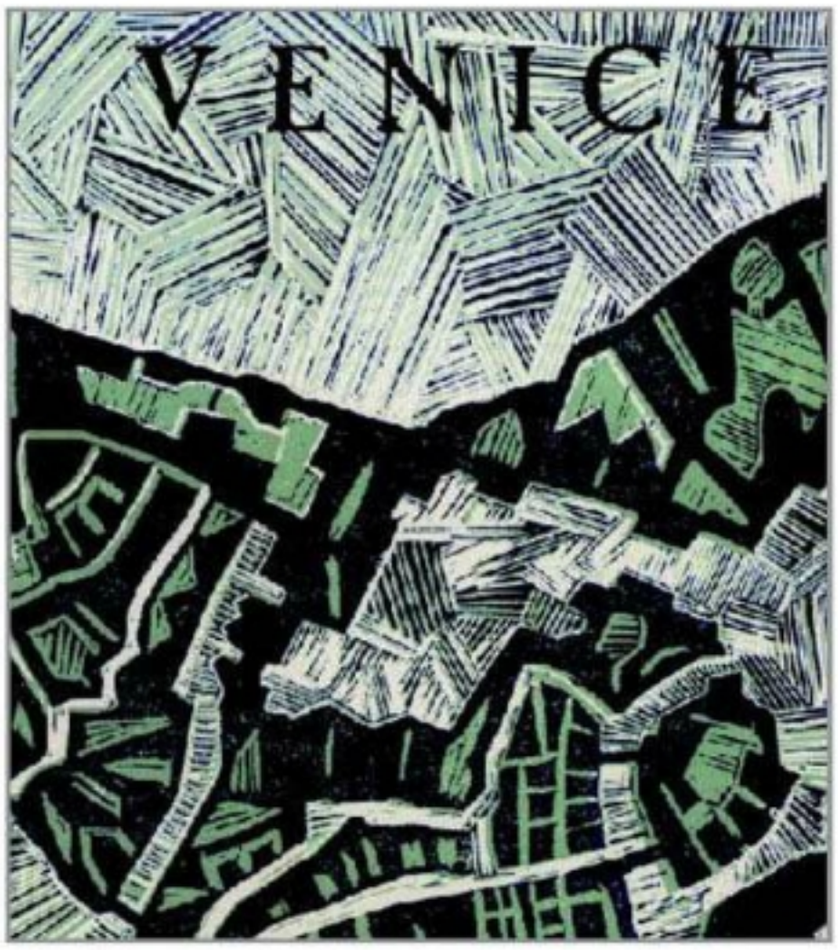


14 Organise your layers If you have not already done so, give your layers distinct names. Call your first print 'Print One'. Layer>Duplicate Layer. Call the second print 'Print Two' and Layer>Duplicate Layer. Hide both the original layers; these might be needed if you make any mistakes later on.

15 Play with your layer modes Working on the copy of Print Two, try Layer Mode>Multiply. Alter the opacity level as well. Then Layer>Duplicate Layer and change the mode of the new layer to Color Burn. You can play around with the layer modes at this stage until you are happy with the contrasts in the colours.

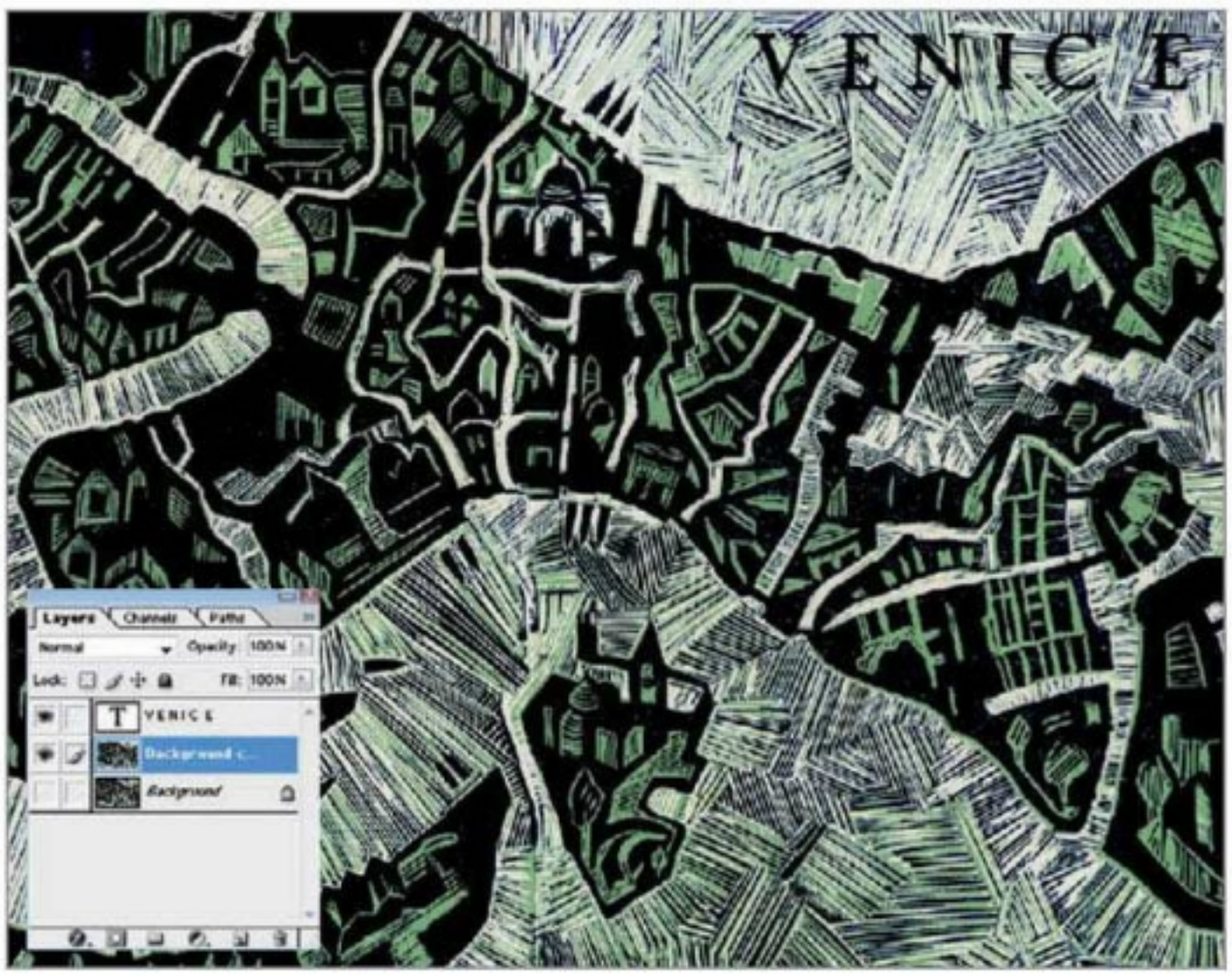
16 Add a layer of flat colour Create a new layer and move it to the bottom of the layer order. Use the Paint Bucket tool and fill this layer with a colour complementary to the colours in your print. Apply Layer Mode>Overlay. Move this image around the layer order, adjusting the opacity to taste.

17 Finish the image If you like, add another overlay to your image. One layer of yellow and one layer of blue work well together. Try changing one of the layer modes to Multiply. Once you are happy with the look of your image, go to Save As>Layered File. Then Layer>Flatten Image and Save As>Final Image.



18 Add a title If you choose the right font, a title can complete your image and provide a reference for viewers if your image is abstracted. Choose a font that complements the style of your print; antique fonts work well with linocuts. Select the Horizontal Type tool and use the Color Picker to sample a colour from your image.

19 Make the text clearer For this image, I wanted to add the word 'Venice' in the top right corner, but the text is affected by the print marks behind it. Select the Background layer and Layer>Duplicate Layer. Select the Background layer once more, Layer>Duplicate Layer again then reduce the Opacity of this layer to 50%. Now hide the Background layer.



20 Erase part of the background Working on the layer directly below the text, select the Eraser tool>Brush Mode>Rough Dry Brush and set Brush Opacity to 40%. Erase the area under the text to make it clearer. You might need to alter the opacity of the layer beneath a little; you only need to fade the area under the text, not obliterate it. When you are satisfied, Layer>Flatten>Discard Hidden Layers. And you're done!

Working Progress

Rough block outline to finished masterpiece

Step 2, Two to three colours

Step 11, Double checking

Step 19, Finalise anatomy

Step 29, Dust

Digital painting

Use vibrant colours in portraits

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Bao Pham

Personal portfolio site
www.baophamart.com
Country **USA**
Software used **Photoshop**
Bao is a painter working with traditional and digital media. His digital work stays in the fantasy genre and the occasional gore. When working with traditional media, he likes to work from life and record as accurately as he can what he sees.

Blush Dust 2010 **Photoshop**

"Learn how to use and maintain bright and luminous colours in your digitally painted portraits"

Bao Pham Painter

Working with colours can be a difficult process. The task of knowing where to start can sometimes be overwhelming, but having a basic understanding of the primary colours and of their complements will help ease you into the process.

Just like learning to walk before you can run, it is imperative to have a core understanding of value, hue and chroma. In short, hue refers to the colour itself, chroma is the measure of its saturation or vividness, and value is the measure of its lightness and darkness as it moves from white to black. Familiarise yourself with this concept by experimenting with the colour wheel. Choose blue as the dominant colour, add its complementary colour yellow/orange, then add its adjacent colour blue-purple and shift the value towards white to get a pinkish colour. This is the basic palette and the start of this painting.

Start with a simple, almost monochromatic palette to make the task less daunting. This also puts the focus on the anatomy and composition of the painting and prevents you from being overwhelmed by the colour spectrum. Once the structure has been established, then it is a matter of shifting each colour to its adjacent to add interest to the starting palette. From this point on, it is important to remember not to stray too far from the spectrum chosen or create confusion visually.

It is too easy to go from clear to cloudy, to muddy colours. To keep their clarity and vibrancy you must look past the colours themselves and think of their complement and adjacent colours, and how they play against each other. This tutorial will help, breaking down the process and peeling off the layers that make up a vibrant and luminous painting. So let's get started and look at building up a painting with vibrant colours.

Keep it simple

Start with a simple but strong foundation

01 The idea The painting starts with an idea of a girl with blue hair and bright eyes. The dominant colour is sky blue and the secondary colour is a dusty pinkish flesh with a variation of a darker value of each colour. With a big chalk brush, lay down the general shape of the figure with her pink flesh and blue hair against a dark background.

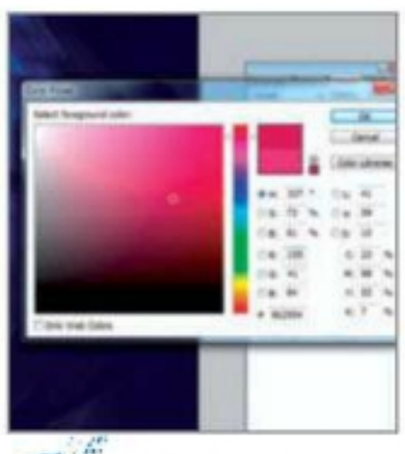
02 Two to three colours Start with a couple to three colours as a base to build on. It minimises the thinking process and shifts the focus to the anatomy and shape of the figure as it relates to the background.

03 Colour outside the line Loosely indicate the eye sockets, the shadow under the nose, and the lips. Think of them not as features, but shapes on a curved plane. Let the brushstrokes move into each other to create mid-range colours to pick from.

Colour and form solidify

Form and colour come together to realise the idea

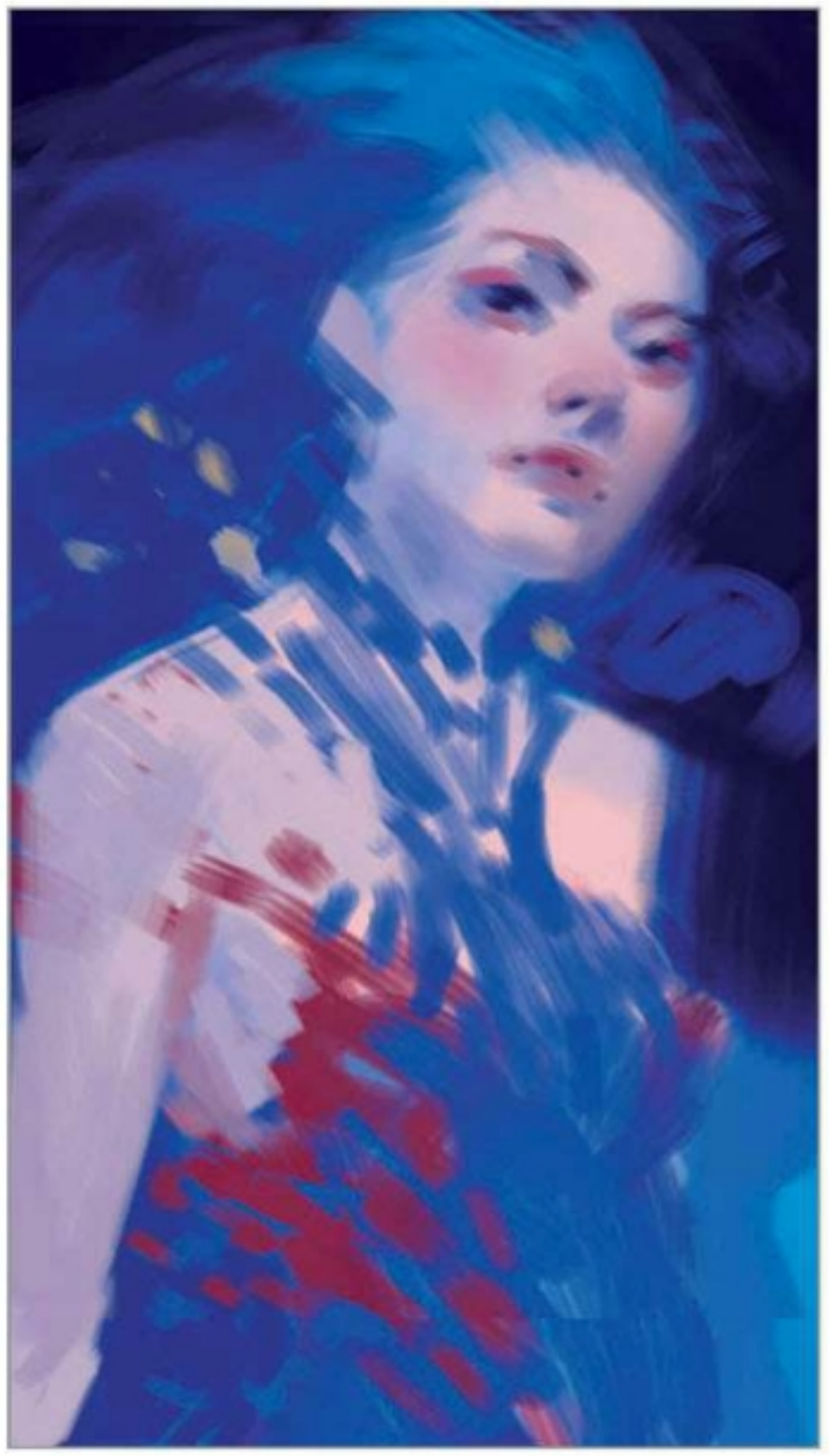
04 Shape breakdown Break down the larger shapes to form the structure of her face. Pick colours that have been laid down and use them to add shadows. Brushstrokes are put in wildly, but intentionally vary from distinct shapes to very soft gradation.



06 Add warmth The figure has so far been painted with the three colours that were put down at the beginning. To add more warmth to the face, use a medium saturated pink and faintly add touches to the cheeks, nose and lips.

07 Juxtapose light and dark Play with the juxtaposition of light against dark. Contrast her pale skin against the dark upper background and her dark dress against the brightly lit lower background. This brings the figure out from the background and adds depth to the image.

05 Composition strength Use the hair to frame the figure and to add movement to the image. The face is tilted up to indicate it's on a higher plane to add to the perspective of the image. A soft round brush is used to quickly and broadly indicate soft shadows on the face.



08 Be a designer Have a little fun with the costume by using odd shapes and breaking it up into flying pieces. Use it to add visual interest and create a lifting motion in the figure and the image.

09 Introduce the complement Experiment by adding a complement. Red is replaced by yellow using Image>Adjustments>Selective Color. The dress and the design is further explored using the complementary colour.

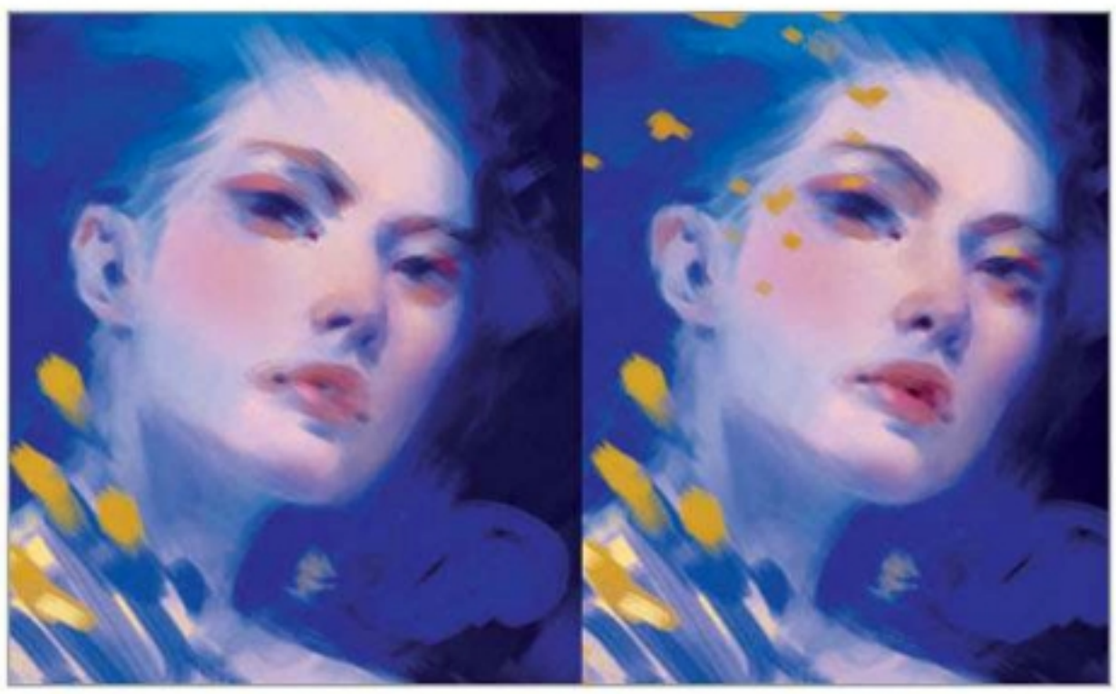
10 Refine anatomy Make simple changes to the anatomy of the figure by first making a selection of the area that needs to be moved, then use Cmd/Ctrl+Shift+C to copy all parts of every layer. Paste the compiled image using Cmd/Ctrl+Shift+V and move it where it needs to go.

11 Double checking Continue work on the anatomy and design, while keeping the image zoomed out to prevent the addition of unnecessary details. Make sure all the features are aligned on the same perspective. Move the body back to extend the neck and add tension to the figure.

12 Use shadows Darken the edges of the image by creating a new Overlay layer and adding a soft gradient of dark blue. This sets the lower part of the body back and moves the focus to the face. It is the same as setting the figure in shadow and it should take on some of the blue of the background.

13 Liquify To move the features around on a small scale, use Filter>Liquify. Use the Move tool to move the eyes into alignment. Before doing this, make sure all the layers are combined and duplicated using Ctrl+Shift+C (PC) or Cmd+Shift+C (Mac) and Ctrl+Shift+V or Cmd+Shift+C.

14 Soften the features Zoom into the face and use a medium sized chalk brush to refine and soften the features. Lift the brow and part the lips slightly to add some sensuality to the face. The lower lip is brightened with a slightly more saturated colour, while staying close to its value.



15 Going back The yellow wasn't adding much warmth to the painting, so it is shifted back to the pink in the original sketch by using Layer>New Adjustment Layer>Selective Color. This keeps the adjustment on a different layer and the original can be brought back again using the mask created with it.

16 Everything in its place Up until this point, the image has been painted as if it was one layer. With everything coming together to form this more extensive sketch, it's time to prepare it for the next step. I've cut out the pieces of feather and butterfly and pasted them into a new layer. This will make changing them easier later on.

Artist showCase

Bao Pham's other amazing paintings

Enoki
2010, **Photoshop**
● This was done as a commission portrait of a client's character. The colours were all there in the reference image, so it was only a matter of how to use them in a realistic way.

Nature Boy
2009, **Photoshop**
● This image was a product of several previous images I've created. They were cut up, stretched, and overlaid on top of each other until an image appeared and I took it and ran with it.

Pearl
2009-2010, **Photoshop**
● This was a limited palette painting in blue. Keeping the colours subtle was a challenge, but the limited palette really shines when a complement is added in the right places.

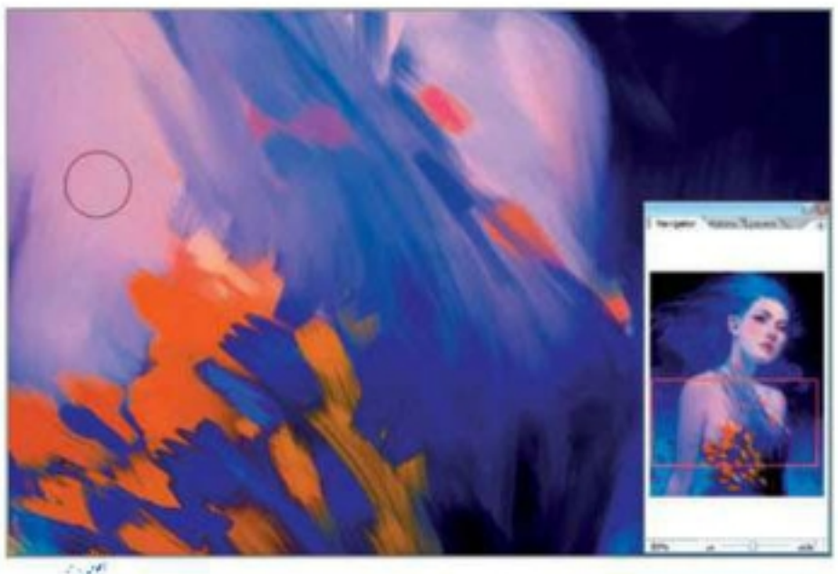
Time for fun

The foundations have been set, and now it's time to build and decorate

17 Cloudy First, turn the butterfly layer off and out of the way. I've decided that the dress will be sheer as it wraps around her shoulder. To suggest the texture of the fabric pick a darker value and slightly saturated variation of the skin tone and gently brush it on with a soft broad stroke. The warmer colour will contrast nicely with the cool skin tone.

18 Sheer Add in strips of saturated blues to indicate where the fabric is folded. It looks too pink now, and the blue of the fabric needs to come back. Once again, use a large soft brush to gently brush on a very saturated blue, pressing harder where the fabric concentrates on the chest. Add more strips of blue to bring back the folds.

19 Finalise anatomy The right arm needs some special attention, so with some references on hand, I make the correction. At the same time, I work on refining the facial features by picking colours from the surrounding area.



20 Smooth The focus now is on the anatomy of the figure and it should be finalised. When smoothing skin tones, use a large soft round brush and pick from the surrounding colours. Gently airbrush the surface while maintaining some of the brushwork underneath. For smaller areas, use smaller brushes to maintain the edges between the forms.

21 Hair Move onto the hair and start breaking down the large shape. Think of it as ribbons moving against and into one another, twisting and curling as they pass through each other. Use dark shapes to accentuate the shadows and to suggest the separation of the layers.

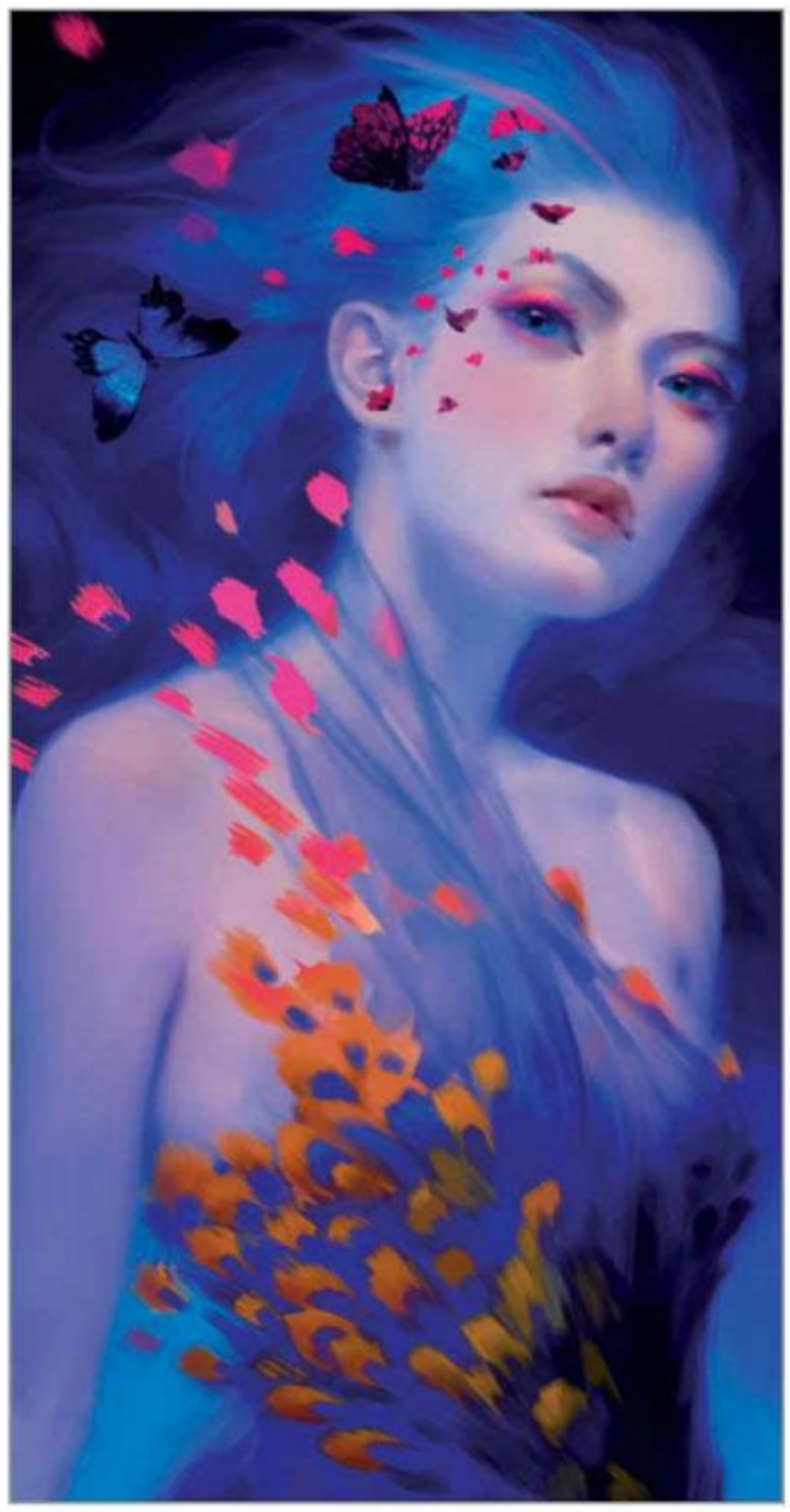
22 More hair Work with a large brush to 'comb' out the ribbons of hair, and then decrease the brush size to breakdown the larger shapes. Create a new Overlay layer and brush on a mass of dark blue to set some of the hair back. Also, use a bright blue-green colour to pull some of the front hair forward.

23 Bright eyes On the same Overlay layer, brighten the eyes using bright blues and turquoises. To contrast with the blue of the eyes, brush on some violets, pinks, and yellow. Vary the colours to get the effect you desire. The brightness and saturation of the colours brings the focus to the eyes and draws the audience in.

24 Tweaking the figure With the figure almost finished, go back and examine the alignment and anatomy of the figure. Use the Liquify tool again to realign the eyes and the lips, and finish off the figure.

25 Tweaking the design Add interest to the design of the dress by creating a pattern with the blue and orange. Reference the design after birds and butterfly patterns to tie it in with the flying butterfly imagery.

26 The secondary character With the figure finished, it's time to flesh out the butterflies. Keep in mind the general movement of the group and how it can add to the composition of the painting. Keep them on a separate layer so that they can be moved to work with the composition if needed.



27 Flapping leaves Think of the butterfly as two triangular leaves attached to each other, flapping in the wind. Start with the general shape, varying the moment that each one is in motion. Once that has been established, create the pattern using references, remembering to stray a little to keep the design unique.

28 Rearrange As you work on individual butterflies, it is easy to loose track of them as a group and that can create clutter. Take a step back and edit. Change a colour if it contrasts too much and remove it entirely if it's too busy.

29 Dust Add some magic to the painting by sprinkling dust around the butterfly and on the figure. Once again, it adds visual interest, movement, and an otherworldly quality. Add in moderation and appropriately or it can cause confusion.

30 Glow Once the painting is finished, flatten it and make a duplicate layer. Set it to Screen and apply a Gaussian Blur set around 20 to create a glow. Lower the Opacity to keep it subtle. Duplicate the Screen layer and set it to Overlay to deepen the colours. This also helps tie everything together.

Shadows

The colour and light of the background always find their way onto an object. Using the colour of the background for the shadow is a good way to set the figure within the painting. Don't be afraid to use pure colours for the shadows. As long as it is the right value, you can use any colour for the shadow.

Digital painting

Fantasy photorealism

Growth 2010 **Photoshop, ZBrush, Apophysis**

> I am trying to show how a variety of tools and techniques can be brought together to create a convincing yet fantastical image

Phil McDarby Freelance illustrator, concept designer and photographer

My brief was to create a fantasy scene using Photoshop, incorporating photography and 3D to illustrate how you can achieve rich and realistic results by combining different programs.

After discussing various concepts, we settled on the idea of a willow-haired female forest sprite, grounded in the 'real' world.

I decided that the best way to create her was by using the fantastic and powerful ZSphere/ZSketch combination in ZBrush. I shot a background plate which I felt would be suitable for my little woodland denizen, and then set to work in ZBrush.

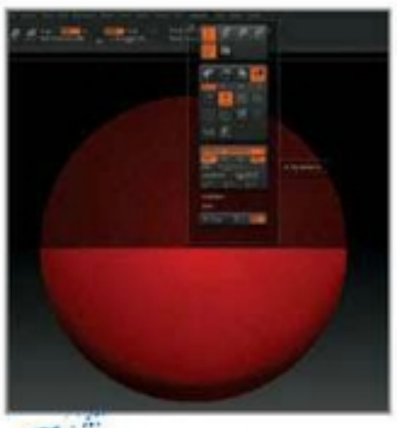
Even when working to a brief, it is always a good idea to keep your options open. The idea of 'Growth' – the image of this little creature using magic to grow or heal this tiny flower – only occurred to me halfway through the image's workflow. Of course it helps to have an open-minded editor who doesn't balk at late changes (thanks April!) but do prepare yourself to be drawn in by happy accidents in lighting, modelling or photos which may spark ideas or suggest shapes you can work up and refine.

My goal when I begin work on any image is to create a sense of magic and discovery. A lot of my work is based around theme of woods, because for me, forests are the most magical places in the world.

As a forest photographer I have reams of references and textures to draw on for this kind of image. It's great fun sifting through various mossy, gnarled shots looking for elements that fit. Anyway, I hope I've managed to capture some of the magic at the heart of the forest, and I hope you enjoy the tutorial.

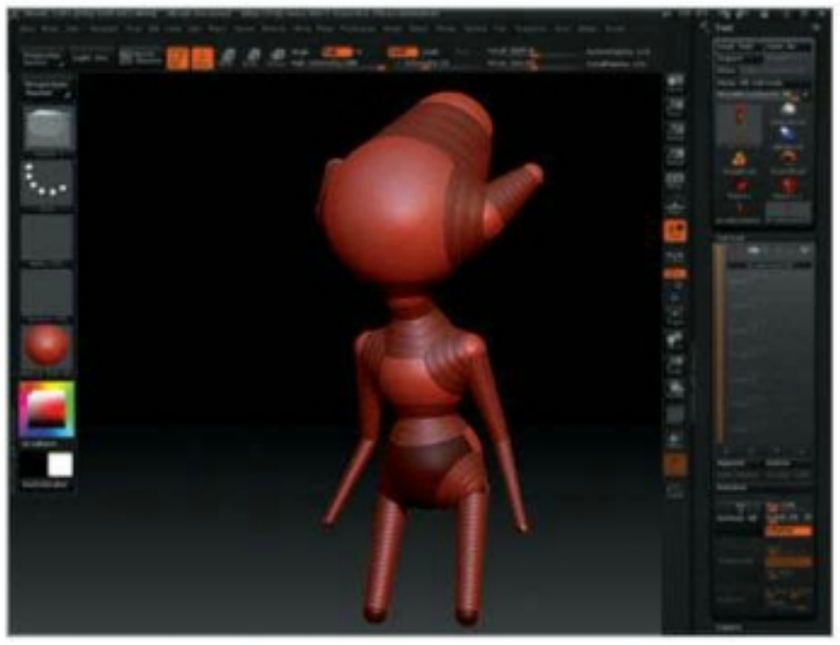
Creating the character

I build the character's armature using ZSpheres in ZBrush



01 The ZSphere tool In the Tool palette I select ZSphere. An editable ZSphere appears on-screen. By default, I'm in Draw mode. I tap 'X' to turn on Symmetry, and begin creating the trunk and limbs of the character, clicking and dragging the ZSpheres to the desired size.

02 Beginning the armature I build up my character's 'skeleton' limb by limb. Remember that I am going to use these ZSpheres to 'paint' onto, in ZSketch mode, so I am just trying to approximate a form. I can add as much detail as I like once I start adding 'clay'.



03 Creating the hands I pay particular attention to the creation of the hands – these will feature prominently in the 'narrative' of the scene. One will be holding the seedling, the other will be pouring magic downwards onto it.

FANTASY PHOTOREALISM

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Phil McDarby

Personal portfolio site
www.philmcdarby.com
Country **Ireland**
Software used **Photoshop, ZBrush, Apophysis**

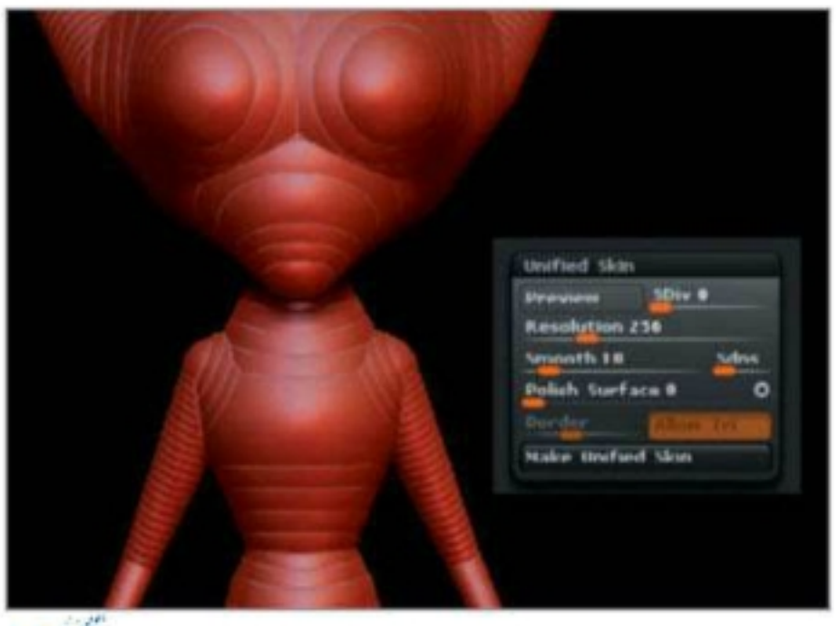
I'm a freelance digital artist and photographer, and have worked in digital art/concept design for 12 years. I use a various programs – from Photoshop to ZBrush, Maya to Apophysis – all combined with my love of photography and matte painting. I always try to create a sense of magic.

Source files available

Resource pack

04 Advancing the armature I continue to build up the armature, ending with a form that I am satisfied with. I make sure I am happy with my proportions (head and hands slightly oversized, good sense of balance in the form).

05 Creating a surface to ZSketch on Once I am happy with the form of my armature, I hit Ctrl+A to create a surface on which I can paint geometry directly, in ZSketch mode. My form is established, and now it is time to start building up detailed anatomy.



06 Setting Unified Skin settings I find for this purpose that a Density of 256 is more than enough. Leave all other settings the same. Any higher and we'll begin to see the ZSketch spherical forms too clearly; any less and it will be too rough to maintain the form I'm trying to establish.

07 Begin to create features Using the Sketch1 brush (the default brush in ZSketch mode) at maybe 8-12 in Size, I begin to paint in 'clay'. Every now and then I press 'A' to see what my Unified Skin looks like. I can always delete tendrils that I am unhappy with by holding Alt in Draw mode and then erasing my strokes.

08 Adding more detail I travel up and down the body painting in clay tendrils, creating a bark-like texture, always toggling 'A' to see how the form is shaping up. I'm not too concerned about the feet, as at this point I thought they would be submerged in water.

09 Creating and texturing a Unified Skin When I am happy with the look of the character, having toggled 'A' back and forth all the way through the process, I press Create Unified Skin in the Unified Skin panel. An editable mesh which we can begin sculpting has now been created.

Using Fade

Using Fade in conjunction with various tools can give you a lot of control. For example, if you burn in shadows, immediately go to Edit>Fade and decrease the Burn value – this can give you beautiful translucent light. Fade is one of the handiest tools you can have when you're trying to create fantasy realism as you can use it in a lot of ways to create dreamy, hazy, semi-transparent or foggy effects. You can also duplicate areas you've used Fade on for a stronger look.

10 Smoothing Mesh Holding Shift while in Draw mode means the brush will smooth out the model. As this character is female, I want to make her facial features as smooth as possible, so I gently brush away a lot of the rugged details which were generated when we created our Unified Skin.

Bringing the character to life

Adding eyes, hair – and a touch of magic

11 Adding eyes In the SubTool palette, I click Append and choose a sphere. Using the Transform tools, I scale and move the sphere into place. I repeat this for the second eye.

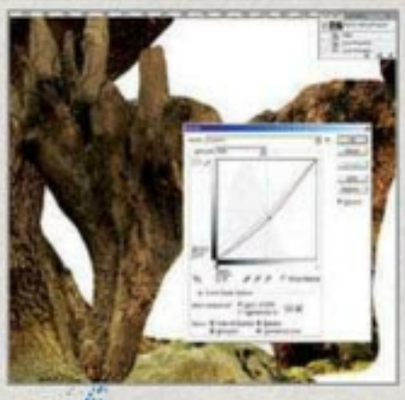
12 Setting the mesh colour I want the character to have a basic texture coming out of ZBrush, so I use one of Froyd's (Marco Pendorff www.froyd3d.de) wood textures. Marco kindly let me use one of his mats for this tutorial. For the material to work, the mesh colour has to be set to R44 G41 B28 (Color palette).

13 Applying texture The mesh appears very dark, but this is remedied once we apply the texture. I apply Froyd's NaturalWood2.zmt, which I load up from the Material palette.

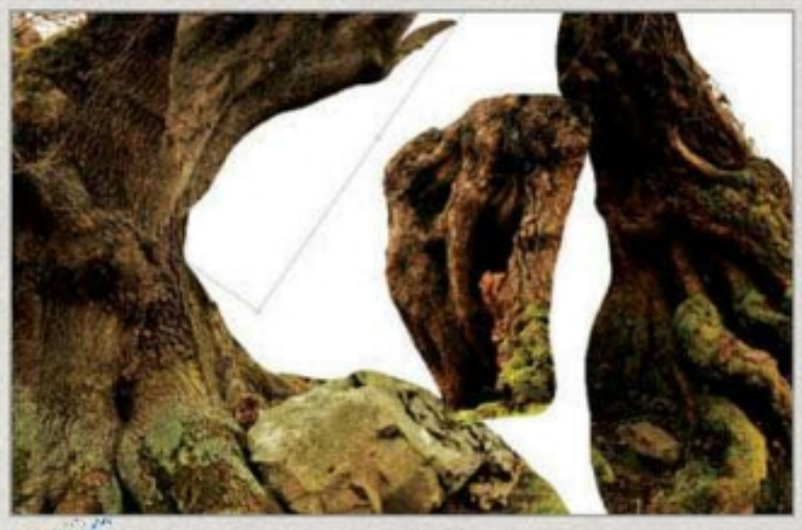
Unify the lighting

Using Curves, Brightness and Contrast, plus Dodge and Burn, we can unify the lighting

01 Establishing a base palette Let's begin by analysing our image. I want the main trunk on the left to be the foundation for the others. It's too bright, and too 'green'. I open up Curves, and decrease the overall RGB and Green.

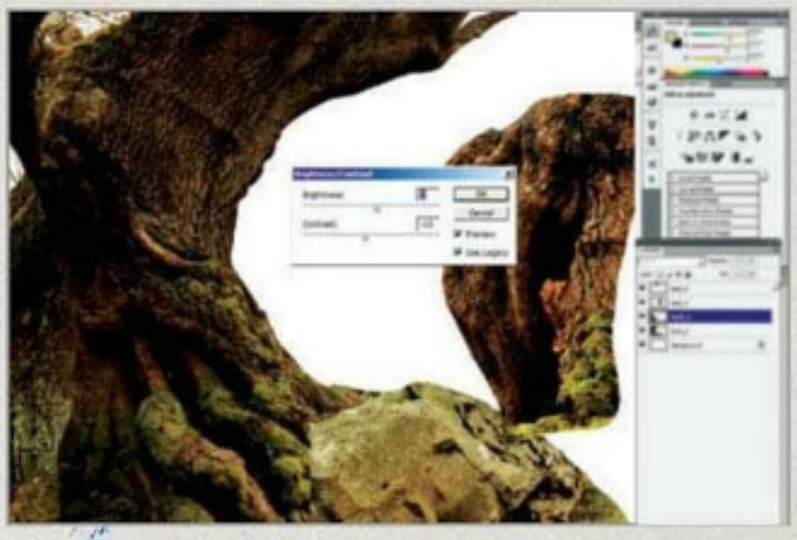


02 Colour matching the second element The second element is too bright and too 'pink', so I reduce RGB in the Curves palette and slightly reduce Red.



03 Transforming the element I press Ctrl+T, flip the second element horizontally, rotate it and place it near the top of the original trunk. I can see it's still a bit bright, so I reduce RGB Curves some more.

04 Blending the elements Using a large, soft eraser, I now erase any hard edges between the layers, choosing natural lines and contours in the bark to follow.



05 Reducing contrast I colour match the mossy roots layer using Curves, and I adjust the Brightness and Contrast slightly. I erase anything I don't need using a large, soft eraser.

06 Repeating steps I do the same for the remaining element. I flip it horizontally using Transform, colour match using Curves, and adjust Brightness and Contrast slightly. I erase hard edges, blending them down.

07 Lighting I flatten all layers. Using Burn set to Midtones 50%, Protect Tones UNticked, I paint shadows at the base of the tree etc. Using Dodge, Highlights at 100%, Protect Tones UNticked, I paint light coming from the right.

14 Lighting the model The light source in my plate is flat, diffuse lighting, so I mimic this in ZBrush using a single light. I don't need anything too fussy, just a simple setup to establish soft shadows. ZBrush has a great renderer for these purposes, so I don't want to over-complicate things with fills/rims etc.

15 Posing/rendering I use Transpose and Masking to bend the limbs into the pose I want – cupping something in her right hand, sprinkling something with her left. I resize my document to 4000 x 3000 (Froyd's texture looks best when the object is rendered large). I redraw my character on-screen (after hitting Ctrl+N to clear the layer) and render with Best, SoftZ and SoftRGB clicked in the Render menu.

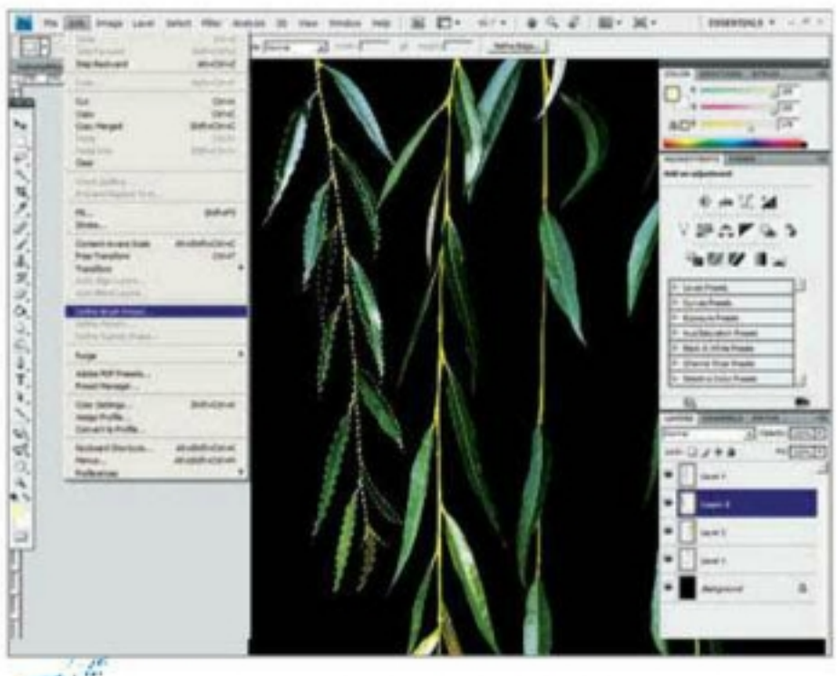
16 Creating more texture I export the image (Document>Export) as a PSD and open it in Photoshop. Using the Magic Wand on a low Tolerance, I select the background all around the character, press Ctrl+I to invert the selection, and copy and paste my character to a new document. I want to add a kind of golden bark-like sheen to give some extra punch to the ZBrush texture. I copy an element of bark ('bark.jpg') in beside my character. I resize the bark element using Ctrl+T, and using the Clone tool I choose areas of bark to fit.

Flip it

Flip your image back and forward from time to time during its creation – you will immediately spot things that don't look right. It's a lot easier than the Old Master's trick of looking at their image in a mirror, although you should allow for the fact that something will look odd when you've first flipped it. Flip your image, walk away, and look at it later to enable you to be objective about areas that may need some fixing.

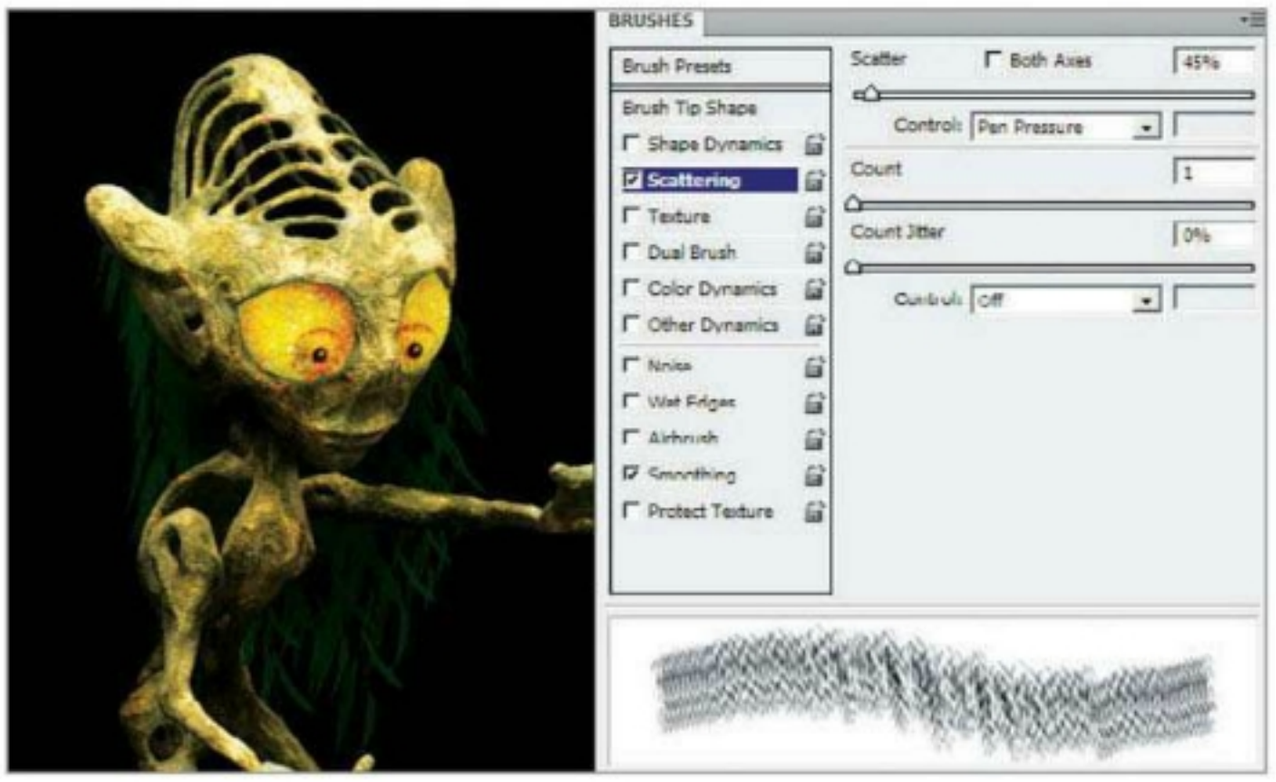
17 Set the layer to Color Dodge When I have roughly covered most of the body, I set this layer to Color Dodge in order to create the sheen.

18 The eyes I try a watery surface for the eyes, copying a Spherized section of a river photo, toning down with Curves. I copy a pupil onto the screen, and I distort it into shape, duplicating it for the other eye. I erase what I don't need, use Curves to bring out warm tones; set blend mode to Hard Light.



19 Creating the hair brush I have masked out four separate strands of willow leaves from a stock image ('willowStrands.psd'). I make a brush from one of the strands by holding Ctrl, clicking on one of the strand layers in the Layers palette to select only what is on that layer, and going to Edit>Define Brush Preset.

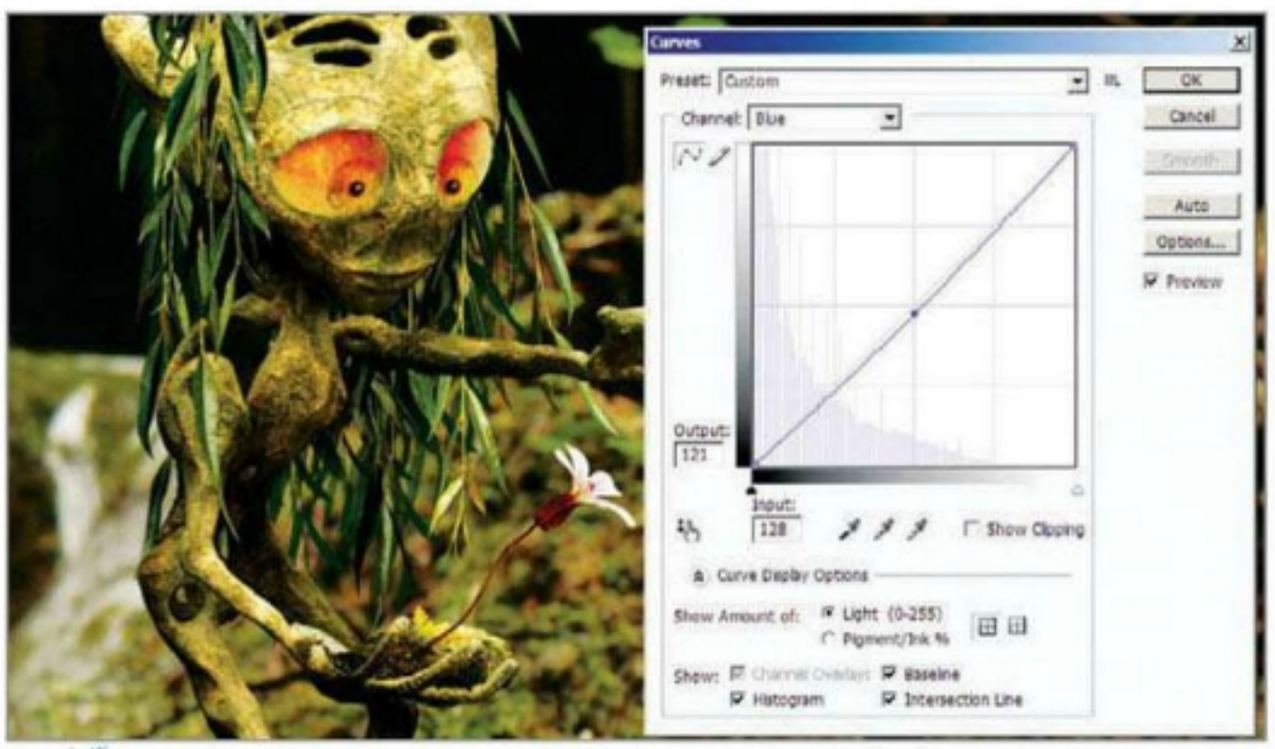
20 Painting background hair I use this brush with a dark green to create some suggestion of darker hair/foliage behind the character. I set a slight Scattering in Brush Properties to fill it out a bit, and I erase what I don't need.



21 Creating the hair I then build up layers of hair by copying strands from my Willow PSD, transforming, flipping, some behind, some in front, until I am happy with the hair. I use the Burn tool to darken some of the strands down, and lower Brightness and Contrast in Image>Adjustments to push some of the strands back a bit.

22 Adding the flower and moss I select a section of moss from my moss photograph, as well as the flower and leaf elements. I do this by using the Lasso, holding down Shift and selecting in increments. When I'm happy with my selection, I copy the elements in, mask out the fingers of the right hand so that the hand appears to be holding the moss, and use Curves to colour blend the elements.

23 Into the background I tidy up details and flatten all the elements into my final character. I select it, copy and paste it against the background. I chose this plate because its light is soft and diffuse, much like my ZBrush lighting setup. I use Ctrl+T to resize the sprite (Shift+Alt to maintain size ratio).



24 Matching the light, or colour grading Using Images>Adjustments>Curves, I tweak the colours to make the sprite blend into the scene. I think it needs more yellow, so I decrease Blue and increase the overall RGB a touch.

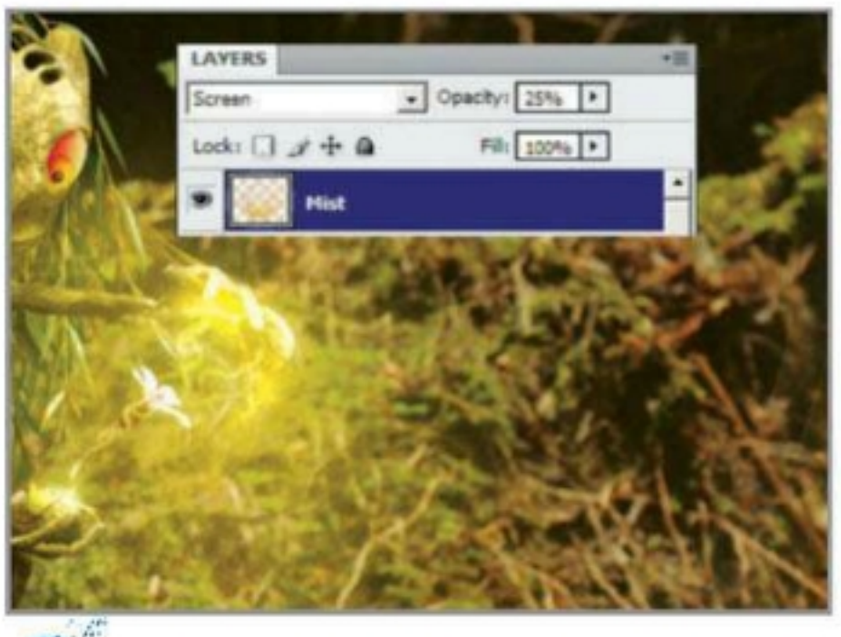
25 Masking feet I create a layer mask for the sprite and obscure parts of her feet so they look bedded down in the scene. I use the Burn tool (Highlights 50%, Protect Tones UNticked) and darken the edges of her feet a bit. I switch to my background plate and burn in shadows around the feet. This grounds the character in the scene.

Final touch

Experiment with Unsharp Mask (Filter>Sharpen> Unsharp Mask) when you are finished an image. It can really add an extra pop to your work. Do be careful with your file's original resolution though. The more you filter and especially sharpen an image, the more harshly the pixels in the image will stand out. Work at a minimum of 300dpi. If you try this trick on an image at 72dpi, you'll start to see massive pixel delineations appear.

26 Magical glow There's a wonderful program called Apophysis, which I highly recommend (PC only). It generates fractals, or 'flames', and is easy to use. I render out a flame I like, against a transparent background, save it and load it into Photoshop, then copy/paste it into my image. Using Ctrl+T, I resize it, place it around the left hand, and using a large, soft eraser, get rid of what I don't need.

27 Magical details I set the layer blending to Screen, and use speckled brushes to paint in tendrils of light wrapping around the flower. With the Dodge tool I add texture and a feeling of magic to the glowing light. I dodge in highlights around the sprite's face, picking up some of the magical glow.



28 Creating atmosphere I copy the Apophysis flame into my main image again, this time transforming it so that it is as big as the image. I set its Layer Opacity to about 25%, giving the whole scene a faintly ethereal quality.

> "There's a wonderful program called Apophysis, which I highly recommend (PC only). It generates fractals, or 'flames', and is easy to use."

29 Final touches I flatten the image and copy it to a new document. I use Curves to darken it (by pulling the RGB Curve downward). I clicked my History icon into the History State just before using Curves, and with a large, soft brush I paint back in the light around the sprite – creating a focal point for the image and adding more magic and mystery. I paint final details on the feet (which I initially thought I wouldn't see!) – and the image is done.

Dissect an image

Art structure explored

1 Pushing the background back I want my sprite to pop a little from the background. To achieve this, I decrease the contrast and increase the brightness of the background, leaving the foreground as it is.

2 Magical light The Dodge and Burn tools, used correctly, can create some really magical lighting effects. The key is keeping a light touch when applying these tools and making good use of the Fade function to calm down over-Burned areas.

3 Character details By giving the character Willow Leaf hair, we tie her into her environment. The bark-like skin and leafy hair make her as much a part of the forest as the moss, water and flowers in the surrounding scene.

4 Atmosphere Always add a sense of atmosphere and depth to your images. In this case, strands of mist lend a magical air. If you'll pardon the pun, mist adds mystery, while the glowing magic that the little sprite wields is gentle and non-threatening.

Build a woodcut effect

Woodland 2012 Photoshop

Use layers and texture to evoke the look of this traditional print style

Sam Brewster Illustrator

Woodcuts are at the absolute core of mass printing, evoking images of beautifully bound books and decorative type lavished in earthy colours. First developed in ancient China, the method predates most of the modern ways in which we reproduce images, yet it is still a popular and desired effect. Many emerging artists are playing with the possibilities of wood and printmaking, and with the recent craft renaissance the woodcut effect seems to be popping up just about everywhere.

The popularity of woodcuts throughout the years has lead to a wide range of styles and quality, from simple stamps to hugely intricate biblical scenes. These days they're being used more and more for things like card making, bespoke invitations, stationary, decorations, art prints and so on. And because of the specific quality that they convey – that a lot of time has been spent – even less sophisticated images can look considered and valuable.

This look is surprisingly easy to achieve without having to slave over a plank of wood for hours, (although that is definitely an experience it is worth trying once). First of all you need to make sure that this is the right approach for the subject that you're tackling; it's not the style to go for if you want to have an image full of gradients, for example. I've decided to use a typically pastoral scene full of natural imagery to enforce the method.

To begin with you'll need to work on a line drawing of the image with no shading or gradients in the understanding that this drawing will all be one colour (in this case black). Once you've come up with something that you're happy with you can trace it using a light box, a window or, if the image is dark enough, you can just trace it on the table top with some copy paper (90gsm approx). To darken the sketch, if you've not got an appropriate light source to help with the tracing, you can scan it into Photoshop

Source files available

Line art

WOODCUT EFFECT

Illustration

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Sam Brewster

Personal portfolio site
www.sambrewster.com
Country **UK**
Software used **Photoshop**

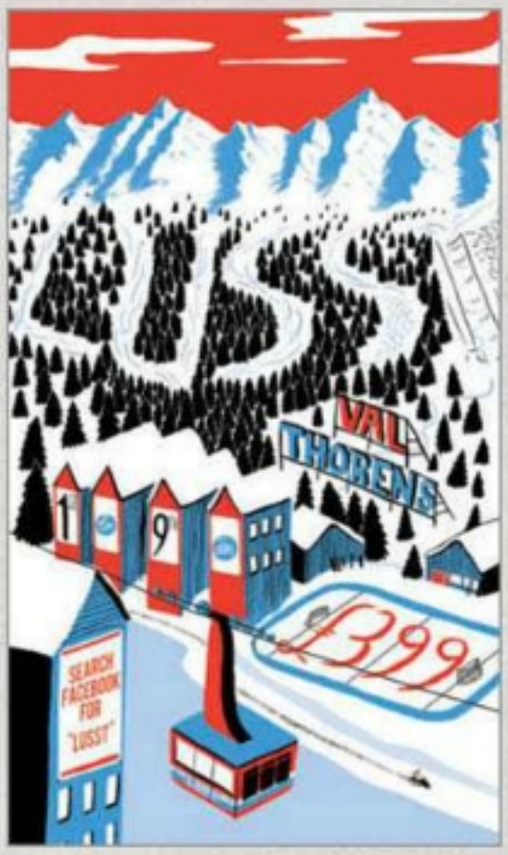
I've been working as a freelance illustrator for three years, in which time I've worked for clients in editorial, advertising, music and apparel. I like to keep a minimal yet decorative look to my work, often utilising limited colour palettes.

Artist showCase

More inspiring artwork from Sam Brewster

Ride
2011, **Real media, Photoshop**
● This was an illustration for an article published in *The Ride* journal last year about the pursuit of the Rainbow jersey.

Philadelphia
2011, **Real media, Photoshop**
● I work with a magazine called *BeerAdvocate* to depict the brewing scene in various cities across the world.



Ski Holiday
2009, **Real media, Photoshop**
● As the in-house illustrator I created posters to advertise for the Snow-sports Society while at university.

Make noise and burn

Prints are tactile so give yours an authentic look

The look of the image is defined in the subtle alterations to essentially flat colour layers. When you add noise it instantly has a naturalistic feel as the grain implies that the ink has been squeezed into each and every microscopic crevice on the paper, giving it an almost imperceptible matte look. Burning and sponging the colours imitates the way the ink on paper would dry. The burnt parts are where the ink may have been more concentrated as it was applied, for example.

and change the Levels via Image>Adjustments> Levels). You can then print this darkened version to trace instead of the original pencil drawing.

You'll need to make two tracings with the first being the solid black areas, for instance the bushes and the tree trunks. The reason that you need to make these solid black areas to begin with is that for the second tracing you'll be filling in the parts you'd like to appear cut out of the solid black.

Once you're done with the first tracing, set it aside and move on with the next one, this time marking down all the little details that you'd like in each element, for instance the wood grain on the trees, the highlights in the dark bushes and the water ripples. Now that they're all finished you can scan in the three drawings (the original isn't integral to completing the image, it just helps as a template to arrange the other layers according to your composition).

Now that you've got the drawings scanned in, open them with Photoshop on separate layers and widen the canvas by 50mm. This makes it easier to read your image by giving you some space.

Make sure that each layer is a well-contrasted black and white (with no transparent parts – you may need to fill the excess space with white to complete the layers) and use the Magic Wand tool to make a selection of all of the black on each layer. I find the easiest way to do this is to make a negative selection and invert it. First make sure that Anti-alias and Contiguous are not ticked and then click anywhere in the white space. You may need to change the Tolerance of the selection to find something that works well with your drawing to get a good, sharp selection (I find around 80 works well), then invert it (Select>Invert). Create a new layer and fill the selection with black. Repeat this for the second tracing, only this time fill the selection with white and move the layer above the black one. Now you can get rid of the original images so that you only have the two newly created layers and the original drawing.

Fill the gaps Fill in the empty gaps of each layer – easy as long as each shape is pixel-based.

Align the cut out parts of the drawing by nudging the layer around until you're happy with it, then select the pixels and delete the selection from the first layer. You can throw away the second layer so that you only have the first black layer and the original drawing.

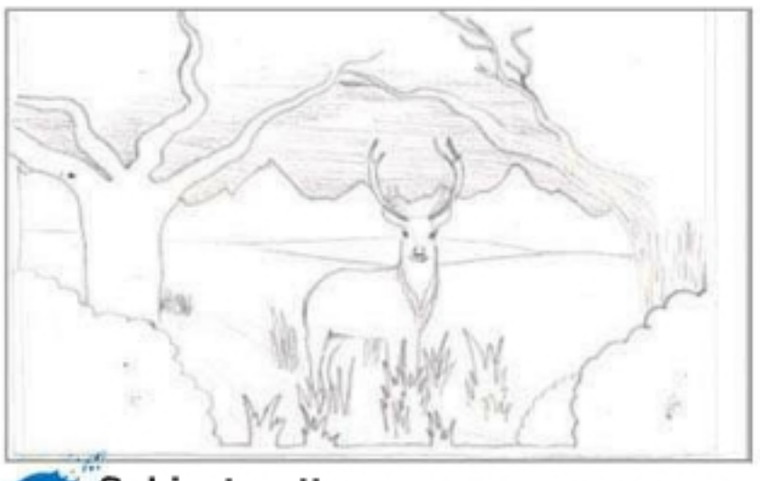
Using the drawing as a template (you can move it to the top and set its layer mode to Multiply) and create a new layer to put the colour in. I highly

Choose a subject Use a subject that works in a woodcut style and create two drawings to be scanned in. I recommend 400dpi or higher.

Separate the image Take selections from the drawings and use them to create new layers. Begin by putting together the black parts of your image.

How to get the woodcut look

Achieve its elegant charm without a single carving tool



01 Subject matter Come up with an idea that'll work as a woodcut. I've used a woodland scene, flipped horizontally to sit better within the layout.

02 Block it out Trace two layers; the first will be the positive (black) areas and the second will be the negative parts. Scan these and select the shapes.

03 Colour it in Draw using the Pencil tool where you want the colour to be on new layers. Use the Burn and Sponge tools to give the colour an uneven finish.

04 Add texture Add 5% Noise to the black layer, desaturate it (via Image>Adjustments>Hue/Saturation) and scan in a piece of textured paper.

07 Erase shapes Use the negative shapes to delete parts of the solid black areas; effectively you are digitally scooping wood out of the main image.

recommend a new layer for each colour as this way you can change the Hue/Saturation of individual tones without affecting the others. It's probably best to only use two or three shades to keep the look and feel of a woodcut anyway. Each layer would have been expensive and timely to produce, so do what you can with a limited palette for this effect.

The colours can be drawn in with the Pencil tool as the areas are often large, flat shapes that aren't meant to be intricate. Make sure your hues are below the black layer and set it to Multiply. Once you've drawn these in you can muck them up by using the Burn and Sponge tools to evoke the uneven spread of ink, or overlay two colours to create a third.

The image will be taking shape now, but to add that extra crafty look, you need some texture. First of all I recommend you source some good paper or card, scan it in at a high dpi (600+) and set it as the background for your image. If it's too intrusive, you can play about with the Levels (Image>Adjustments>Levels) and the Brightness and Contrast values (Image>Adjustments>Brightness/Contrast) until you're happy with it.

There is a slightly trickier part to finish it all off, but I promise it's worth it. In a new document bring the contrast right up on a texture (you can use a scanned piece of paper, envelope or card) using the Levels and the Contrast options, then use the Magic Wand tool to select the grain of the texture. To get the right kind of selection you might need to experiment a little with the Tolerance value, which you can find in the top Options bar with this tool. When you've found a setting that you think works well, create a new layer and fill the selection with white.

Copy this layer into your image document and use a selection of the pixels to delete parts of it. It might be worth contracting the selection (Select>Modify>Contract) if it takes too much of a bite out of each layer. Experiment for your specific image.

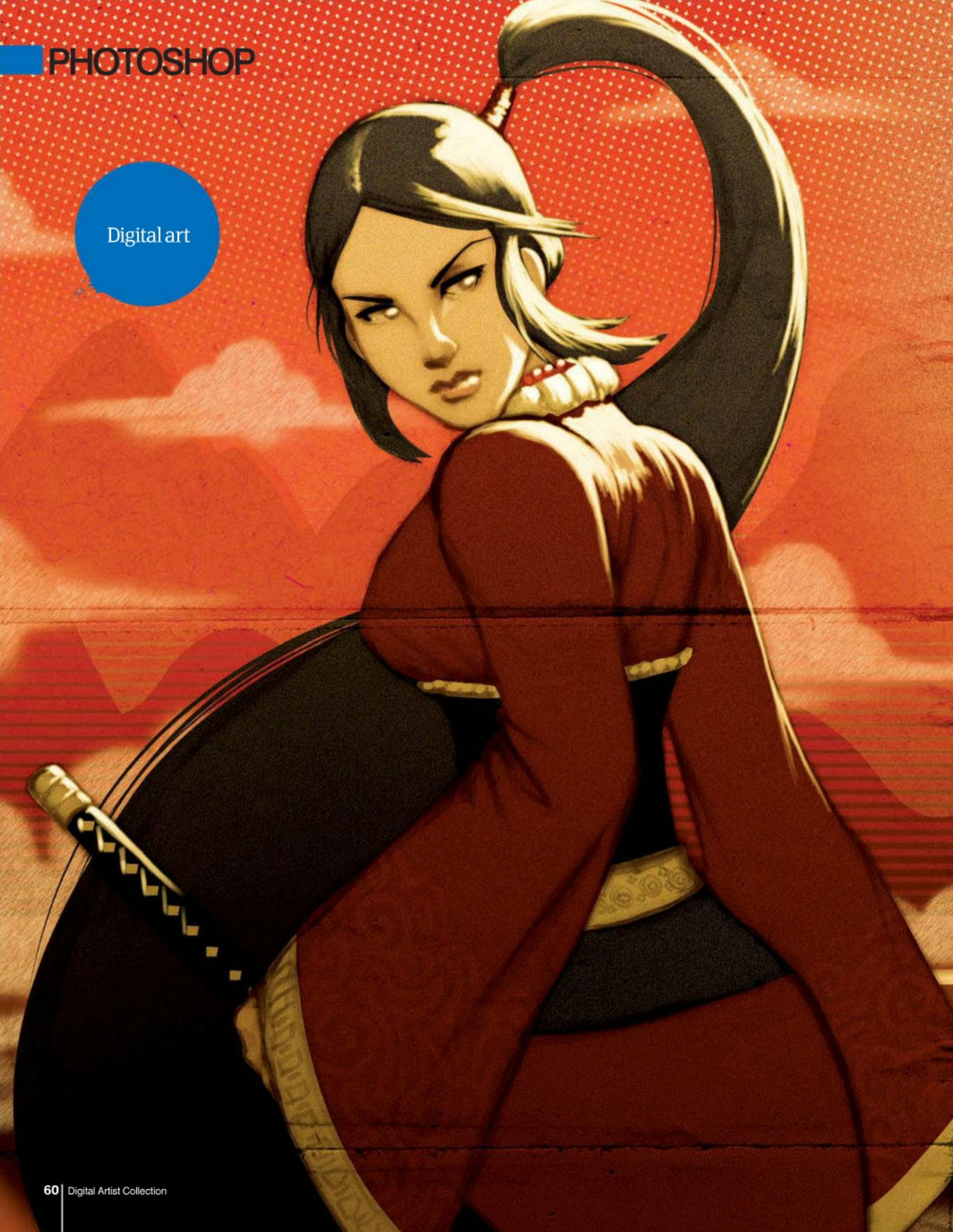
Once you're done texturing each layer, delete the stencil and your original template, and there you have it; a woodcut image without one bit of sawdust.

Textures

I have a folder titled Textures, which is further sub-divided on my computer. I always keep my eye out for a nice piece of paper or grainy cardboard that would be worth saving. Scan them in at a very high resolution (600dpi at least) and they'll serve you well.

Finish with paper Use textures to finish the effect, giving life to the image and paper to set it all on.

Digital art



Use filters creatively

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Francisco Perez

Personal portfolio site
www.pac23.com
Country **United States**
Software used **Photoshop**
Pac23 makes use of his graffiti, video game and music influences in most of his art. From robots to flying pandas, to drumming vultures, to girls with tattoos, he adds his own colourful flair to each of his pieces.

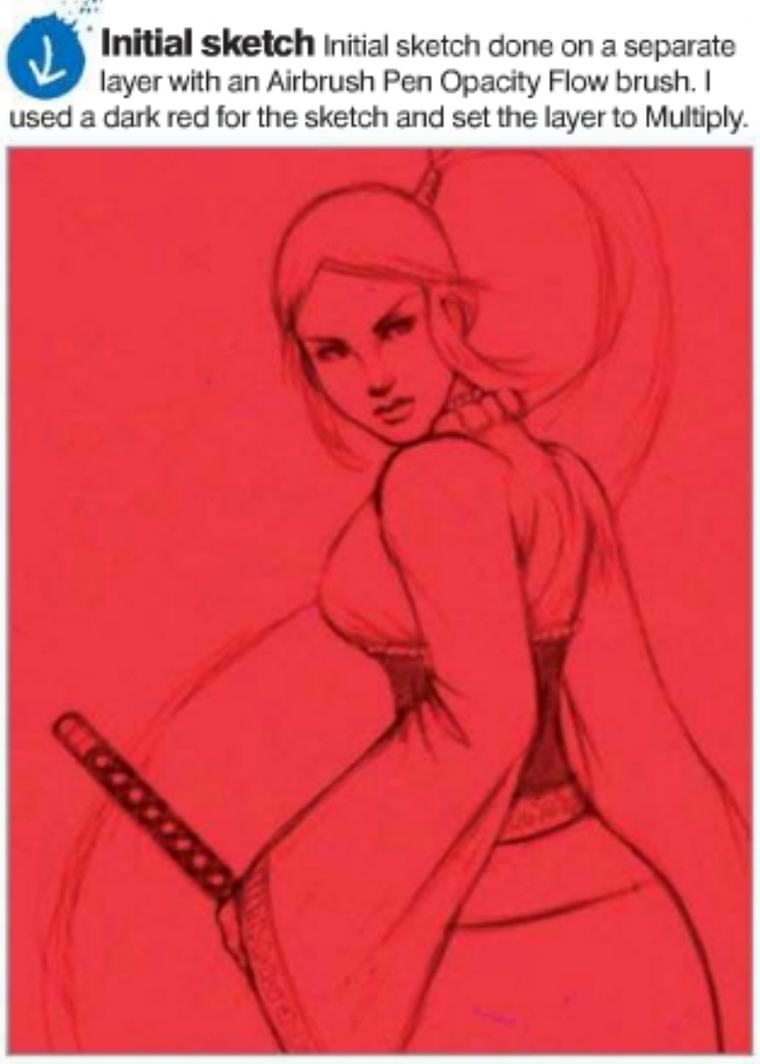
Deadly 2010 **Photoshop CS4**

"Learn how to take advantage of several filters for some nice subtle effects"

Francisco Perez Illustrator

Source files available

Unfiltered artwork



Initial sketch Initial sketch done on a separate layer with an Airbrush Pen Opacity Flow brush. I used a dark red for the sketch and set the layer to Multiply.

Colours Flat colours in the layer underneath the line art. Since the line art is set to Multiply, the colours blend nicely with the art on top. Added the sun.

Using filters in Photoshop may be a little tricky, because you don't want the image to reek of Photoshop. That will simply make your illustration look as though it has been created by an amateur Photoshop user.

When I first started using Photoshop in my early teens, I remember using every filter available to me because I thought they were 'cool'. I then realised that my images looked like something anybody could have created through a simple click of a button. As I became more familiar with the program, I started using the filters in a different way – not using them as the main focus of my image, but rather as a tool to enhance the illustrations. I found that the best approach is to mix certain filters along with layer styles in order to get the most out of the effect I am trying to create.

Vintage martial arts movie posters inspired this illustration. We have a lovely but deadly katana-wielding female character. The actual character is detailed, while the simple background maintains certain 2D Asian style minimal shapes. Adding a few filters to the background really made a difference, and actually made the foreground character pop out even more.

Reds and oranges are the predominant colours used, while a light yellow along with a dark brown was used to create some contrast between elements and to bring them together as well. A sunset setting with a simple background along with warm colours is what I had in mind the whole time that I was working on this. I wanted the viewer to feel the heat coming from this illustration! And a white border can always add that poster/postcard feel, if that's what you're trying to achieve.

I start by sketching out the character very loosely. I use a 9x12 Wacom Intuos3 tablet (in case you were wondering). Once I'm happy with the pose and the layout, I start erasing some of the lines while going over other ones.

One of my favourite effects that's really easy to achieve is the subtle 'glow' you can get from your line art. Sometimes line art just looks too boring, and this

Preview settings

Don't just use filters on their default settings, that's a surefire way of looking like a smudge artist. Use Photoshop's Preview function to see what happens when you adjust levels of colour, saturation, special effects etc. And remember that filters don't have to be applied to the whole image area too!

Glow Copied the line art layer and applied a Gaussian Blur to give a subtle glow; same for the sun, and added water and white border around the image.

Reflection Sun reflection in the water was made with the Wave filter to give a ripple effect. Added mountains in the background to give some depth.

Retro I added a Halftone Pattern filter set to lines on the mountains to give a retro look. Also added some designs on the sleeves of the kimono.

Build up filter effects

Build up filter effects to achieve the look you want

01 Define shape This will be the sun's reflection. I use a flat coloured oval under the sun as the defined shape; I'll distort to make it look like it's reflecting in the water.

02 Wave filter Play with the Number of Generators, Wavelength, Amplitude, Scale. Copy the layer, set to Screen, apply a subtle Gaussian Blur and stretch to the sides.

03 Distortion I used the Rectangular Marquee to select areas of the reflection and move them to the sides. Added some lines (Line tool) to break up the waves.

04 Motion Blur Apply Motion Blur at 0 degrees to the reflection to make it look like calm water with little movement. This blurs the side edges, giving the right look.

definitely gives it some life. Make a copy of the line art and set it to Multiply at around 50% Opacity. Now apply a Gaussian Blur at around 4 pixels or less, and you'll see the smudged-out look the line art gets. This doesn't always work obviously, as it depends on what type of illustration you're working on. If you're going for a squeaky clean look, stay away from this effect and try using the Sharpen effect instead.

Another filter I used was the Sketch>Halftone Pattern filter. It gives you the option of applying lines, dots or circle patterns. I believe this works best on gradients, and keep in mind that it will utilise the foreground and background colours that are currently picked. That's the filter I used for the mountains to create some sort of 'fog' and introduce depth to the image. Fading horizontal lines remind me of old Art Deco style illustrations.

The clouds looked very cartoon-like, and this created a nice contrast against the detailed foreground character. The effect even made it appear as though she were standing in front of some sort of wallpaper. The clouds felt a little too flat once I drew them, so that's when I decided to add the Graphic Pen filter. The layer was set to Screen, and this definitely gave a sort of 'fluffy' look and it separated the clouds from the solid coloured shapes that were in the background.

I even played around with the mountains in the background, by making the ones in front a solid colour and the ones behind set to a Pin Light layer style. I made a copy and dropped the opacity, then moved them to the side slightly, which gave a nice offset print effect.

I then felt that the sky was too plain, so I added another Halftone Pattern filter set to Dots – and that effect always works if you're trying to pull off a vintage-looking poster.

The sun's reflection on the water was intentionally made to look detailed but very crude at the same

Artist showCase

A look at other work by Francisco Perez

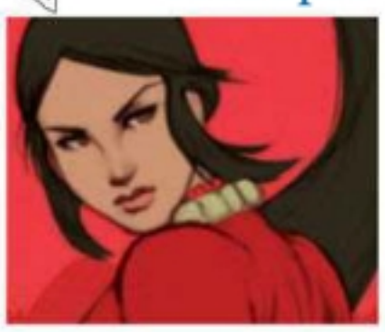
1-2-3
2004, **Photoshop**
● Pic of my girlfriend based on a photo I took. I thought the angle of the sun and her stance would make a nice drawing.

Dead Astronaut
2010, **Photoshop**
● Based on an idea I'd had for a while but didn't know how to approach. I was happy once I came up with this layout.

Vulture
2010, **Photoshop**
● I'm a big Dave Grohl fan and this is a homage to Them Crooked Vultures. I've always been fascinated by drums!

Give the character a new look

A couple of filters will do the trick



The character looks very clean and light, so it's not really 'popping' and it blends with the background. Make a copy of the line art and apply a Gaussian Blur to give it more of a 'messy' smudged look. Now darken the flat colours and apply the Add Noise filter. This gives it a grainy, vintage look. It definitely helps to separate the character from the background.

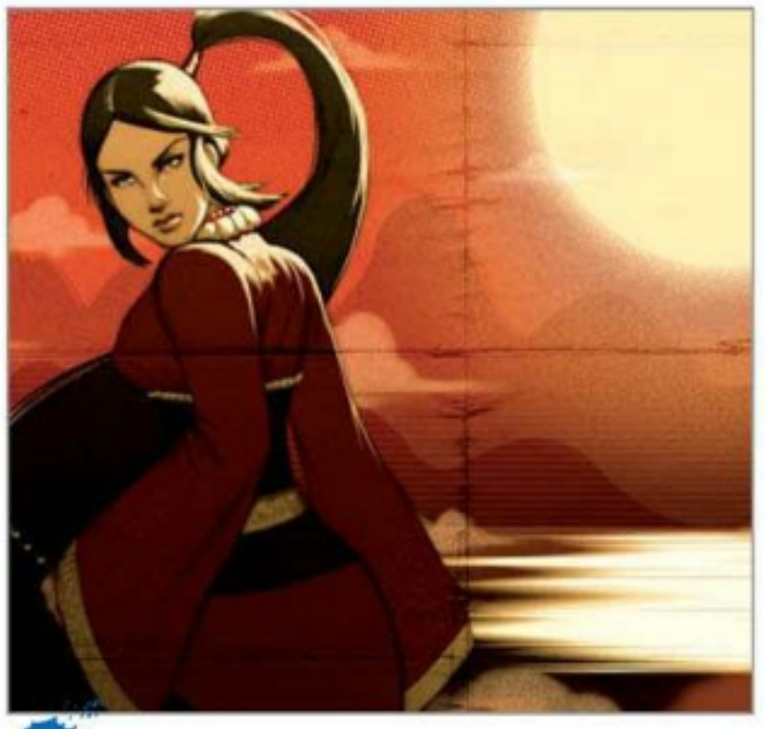
time. Gaussian Blur and Motion Blur were the only two filters that I used to obtain that effect.

I also used a Gaussian Blur effect on the highlights that are on the foreground character – but very slightly. When I first drew the highlights they looked too sharp compared to the rest of the character's style. That's the one element that connects the background with the foreground, because you can see yellow in the sky, the water and the character. The designs on the character's sleeves are just doodles set to Screen at a very low opacity.

I always think that very subtle, intricate details add a lot to an image. It's something that many viewers may not catch the first time they look at the illustration, but once they do, it's also something that makes them say, "Wow, the artist went to the trouble of adding something so minimal that some people won't even notice!"

Some of the filters that I find myself using over and over again are the Blur filters. They can be your best friends if you use them correctly. I always recommend using them in a very subtle way, and even combining them. There are many times when people ask me how I created a certain look or style in my illustrations, and when I explain to them that I used 'x' filter with 'y' filter, they always say, "Ahhh, so that's how you do it!"

Screen Added clouds to the background set to Screen using the same brush as before. Also highlights on the character, again set to Screen.



Nice vintage I added a paper texture with folds as the top layer and set it to Overlay. This makes the entire image look older – like a vintage movie poster.

Everything is fairly simple, and if you are familiar with the program then you know that there are many different ways to attain the same effect. I also added the Noise filter to the main elements in the illustration to give it that printed, aged look. From the start I knew that I was going to add an orange layer on top set to Color, and that I was going to use a folded paper with a creases layer set to Overlay. These two things were always going to be the icing on the cake that would bring the whole image together in creating the look I was going for.

Remember too that filters don't have to be applied to the whole image in a blanket effect. They make the most visual impact when they're used to pick out some key areas and fade others into the background. Use the Freehand Selection tool and make sure you've set Select>Feather to at least five pixels' worth of bleed, depending on the area you're filtering and the effect you're using. This will ensure that the area or object you're applying the effect to will still fade realistically around the edges. And try to avoid the run-of-the-mill oil-painting style filter at all costs. Nothing makes a digital image look less professional!

Bring it together I added a Graphic Pen filter to the clouds and applied an orange layer set to Color on top of everything. This brings all the elements together.

digital artist Cheat guide: Street art

Francisco Perez demonstrates how to combine photos and digital painting to create a believable, Banksy-esque effect when trying to emulate the look of hand-drawn graffiti in a photomanipulation. Get tagging!

Excess paint off stencil Make a selection with the Lasso tool next to the part close to the art, and use a soft round brush to give the effect of excess paint sticking to the edges of the stencil. You want it to look tactile.

Details Stencilled images don't have that much detail, so keep shapes simple and make sure your layers are on Multiply at about 80% Opacity. This will help underlying structures like brick show through, adding authenticity.

Streaks Use a textured brush to erase around the darkest parts to make the background texture come through, which gives it that worn-out look. Think about how rain and wind would weather the artwork.

Background spray Make your selections with the Lasso tool and fill them in with your desired colour using a soft round brush, then apply a subtle Gaussian blur.

Whites Use white to help the image pop out from the background, while keeping the layer option as Color Dodge at about 60%.

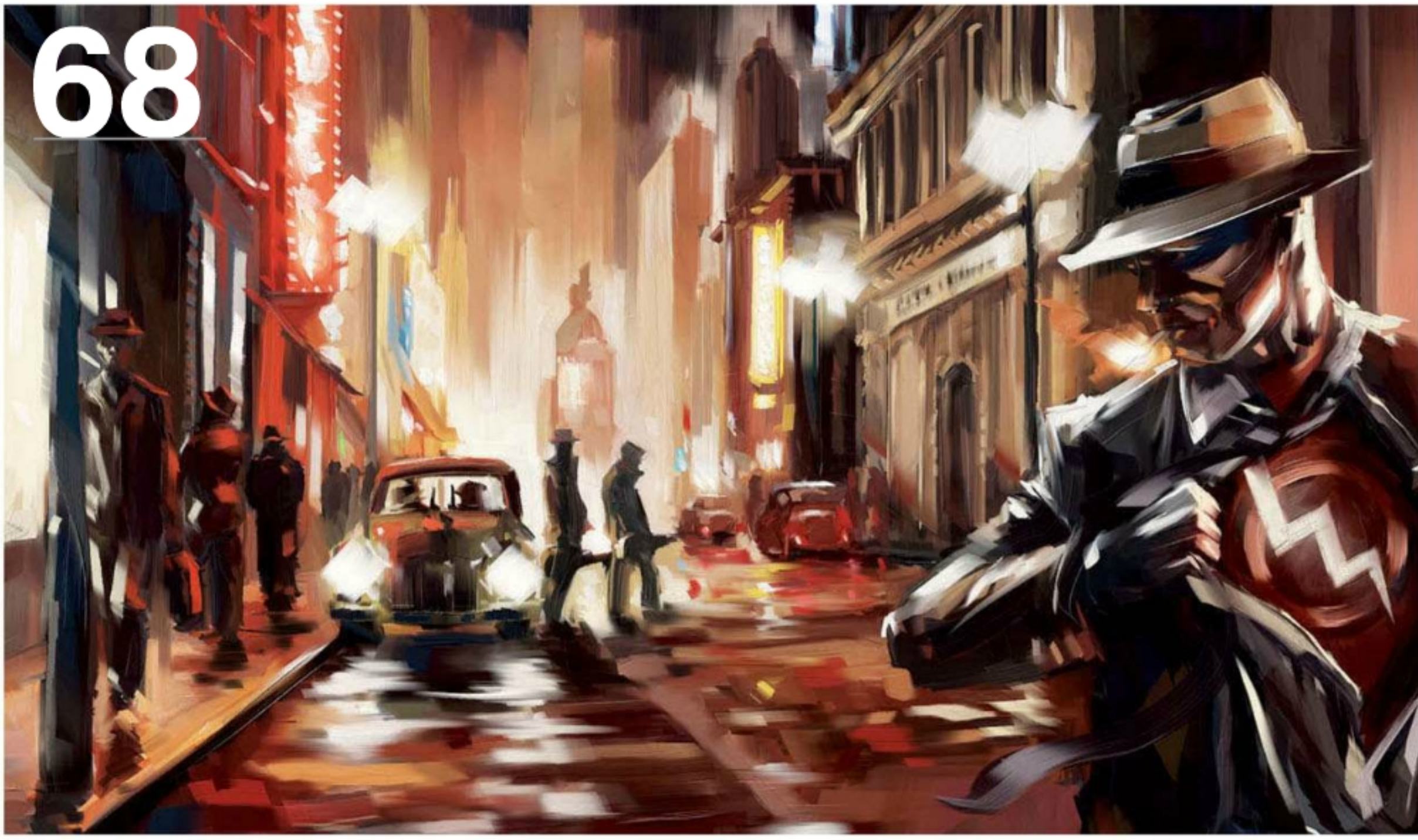
Fades Use a textured brush at 25% to erase sporadically around the bottom. Graff is usually faded in this way.

Drips Use a soft round brush to make it seem as if it's been sprayed more on certain parts first. Now switch to a hard, round brush to create the paint dripping. Hold down Shift to create a straight line, then add spots on the ground where the paint has fallen to create the effect that paint has dripped down all the way to the ground.

Textures Place a layer on top of the art at a low screen opacity. Use a textured brush to create the effect of the wall's texture on top of the art. For instance, that part of the wall is lighter since it's getting the most light from the top. You can do this in smaller parts, like at the edges of bricks, too.

Blurs Use the Blur tool around certain parts of the black edges to give the spray effect. This helps the image a lot, because it enables it to lose that sharp look which would give the impression it was an image that was simply pasted on top of a photograph.

Painter



Build, paint and create a striking scene in Painter

68 Paint with palette knives
Illustrate wet light and expressive subjects

72 Painting Ukiyo-e style
Explore classic Japanese woodblock prints

78 Cubist painting
Create a bold and colourful landscape

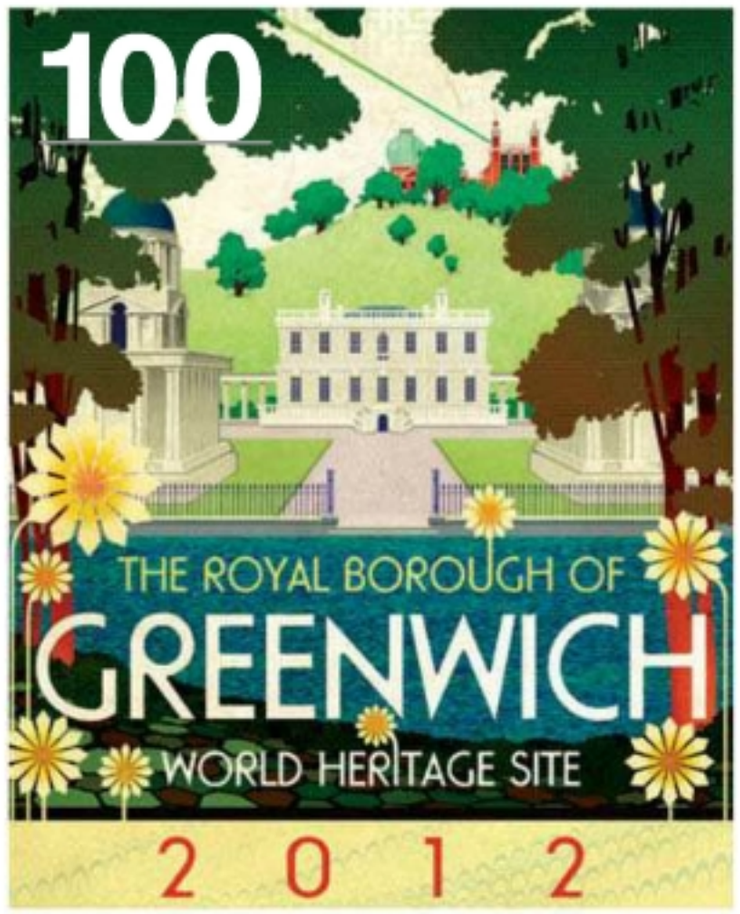
82 Combine 3D models and painting
Use Google SketchUp to build a city

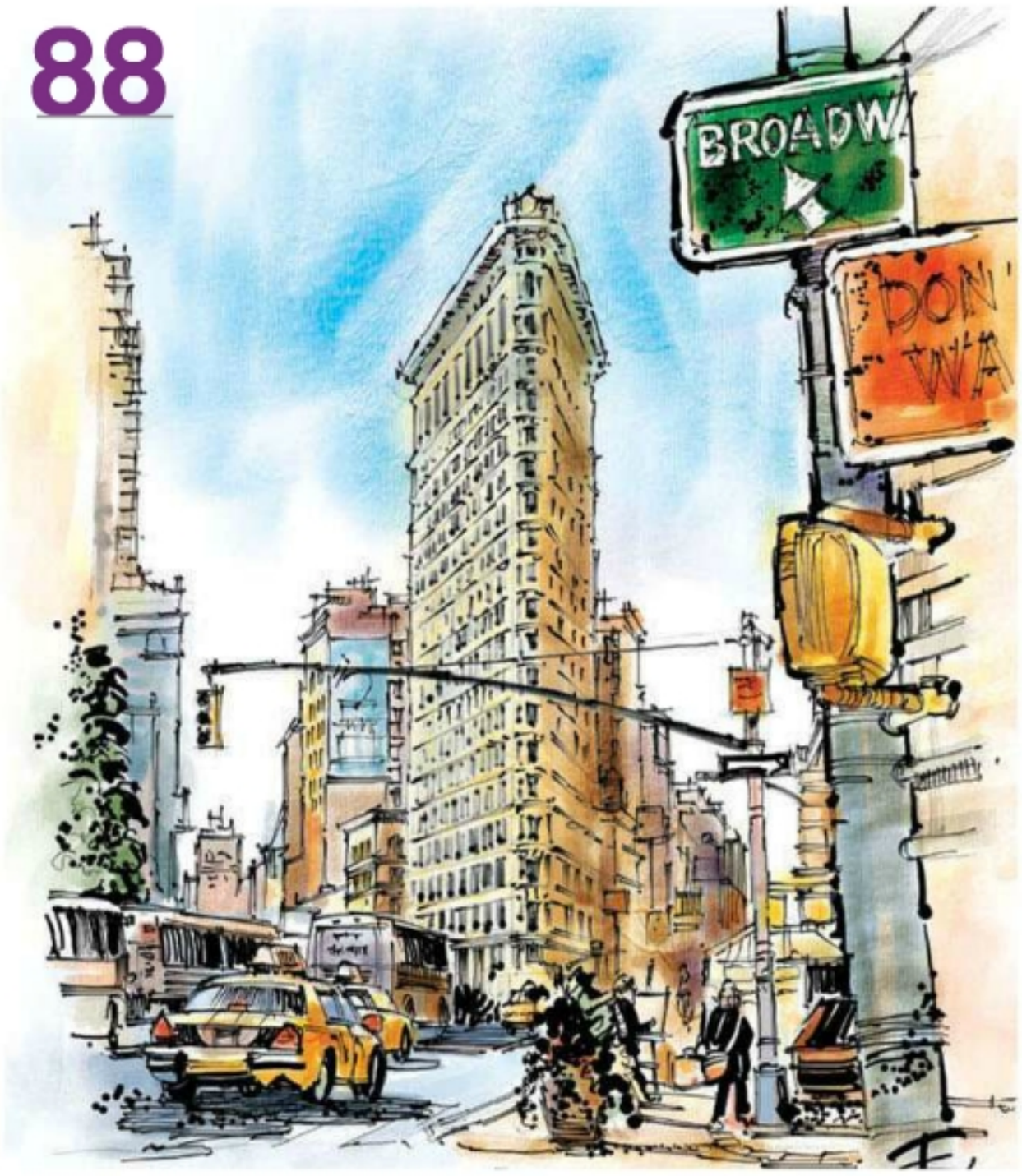
88 Mastering digital ink strokes
Sketch, ink and colour the Flatiron building

94 Tessellating shapes
Build a stained-glass window

100 Add effects with Esoterica tools
Enhance and speed up your workflow

106 Create an antique glaze effect
Generate atmosphere in a scene





A real range of lifelike brushes and effects allows you to be creative

Digital painting

Paint with palette knives

Catching Bad Guys 2009 **Painter and Photoshop**

> Palette knives produce a rich spread of tactile colour which is ideal for illustrating wet light and energetic, expressive subjects too

Paul Cartwright UK-based concept artist

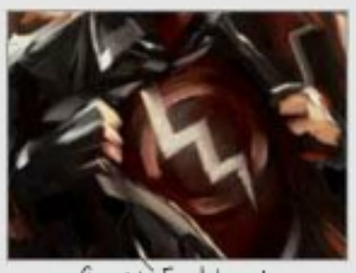
Working Progress

Create a scene with palette knives

Step 1, The scene

Step 5, Wet look

Step 12, Impressionist detail



Step 14, Final tweaks

Although very popular in traditional painting, palette knives sometimes get overlooked when painting digitally. They need a different approach to other brushes, as most of them don't actually apply paint but rather push it around the canvas. In Painter the brush modification options for the Palette Knife category are limited compared to other brushes, so can feel restricted at first, but when you get to grips with them they can be rewarding.

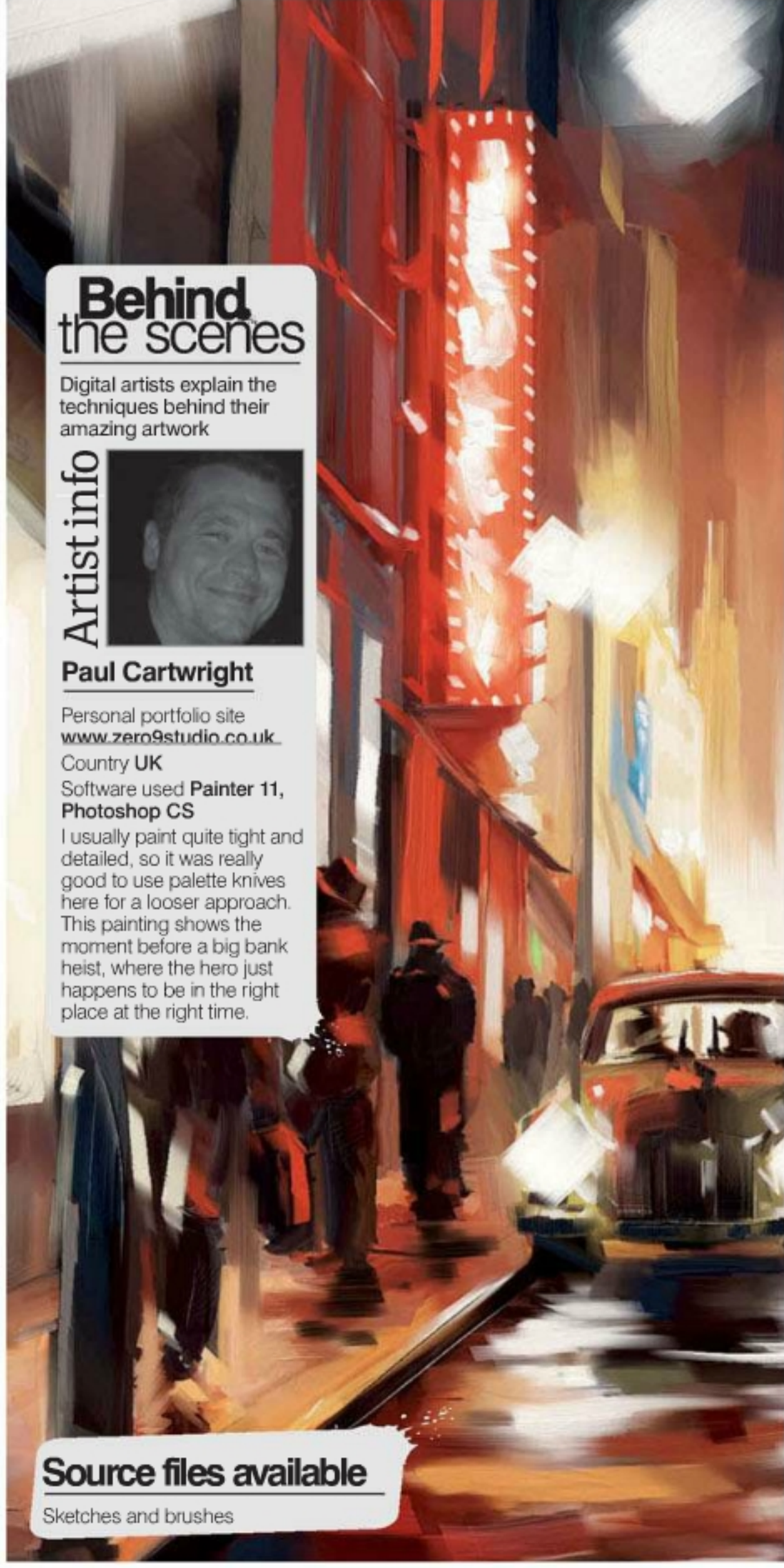
After using finer brushes and painting in a detailed style, palette knives really are a welcome change. By taking an element of control away from the artist, they provide an escape from having to paint in every little detail and give the opportunity to be more expressive in the way you paint.

The bold strokes they produce make for a spontaneous approach and result in a more impressionistic style. They're also a very effective way of achieving a realistic look when blending colours. By laying down paint quickly with a Loaded palette knife then using a Standard palette knife to blend, you can get some very natural looking results. Used with an impasto effect, the palette knife can be a very powerful painting tool for simulating the real thing.

Palette knives have been widely used by artists of different styles, from van Gogh to Georg Miciu-Nicolaevici. The latter is a fine example of how palette knives can be used to capture a scene in motion.

Figures can be created with just a few sweeping strokes, and this can really add movement and dynamism. To create a convincing figure with a minimum of strokes takes practice, but it's really enjoyable to grab a palette knife and some reference pics, and try to capture the poses quickly.

In this tutorial we'll look at some of Painter's Palette Knife brushes to create a street scene with a twist.



Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

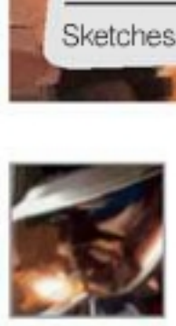
Paul Cartwright

Personal portfolio site
www.zero9studio.co.uk
Country **UK**
Software used **Painter 11, Photoshop CS**

I usually paint quite tight and detailed, so it was really good to use palette knives here for a looser approach. This painting shows the moment before a big bank heist, where the hero just happens to be in the right place at the right time.

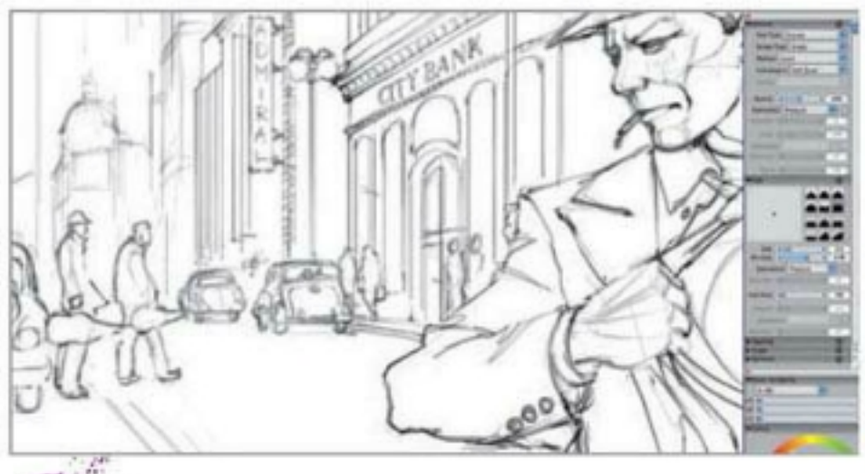
Source files available

Sketches and brushes



Palette knives

Find out what they can do

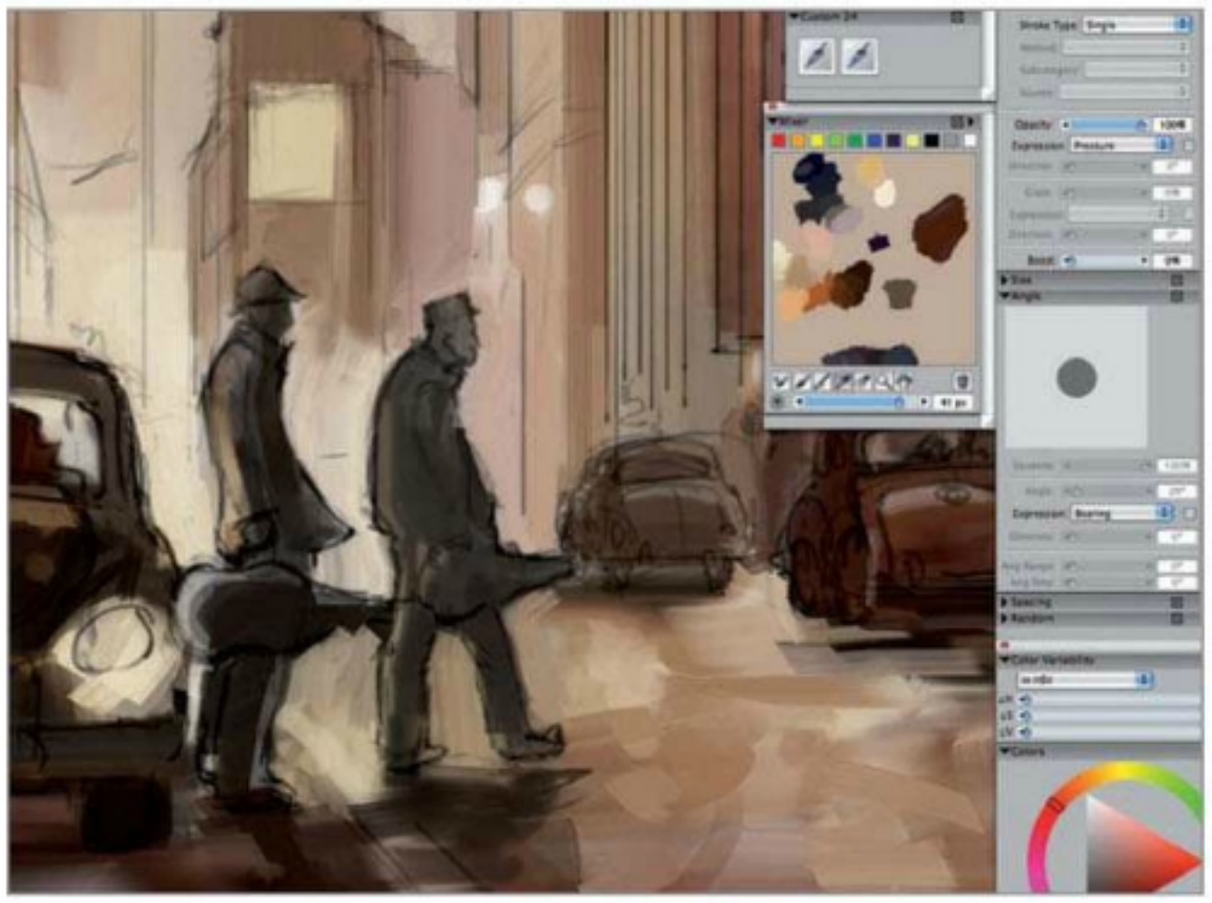


01 The scene First I use a basic round brush to loosely sketch my scene. The final image will be quite impressionistic, so I don't worry about detail, and just work on the shapes and figure proportions. I want detail to happen spontaneously when I'm painting.

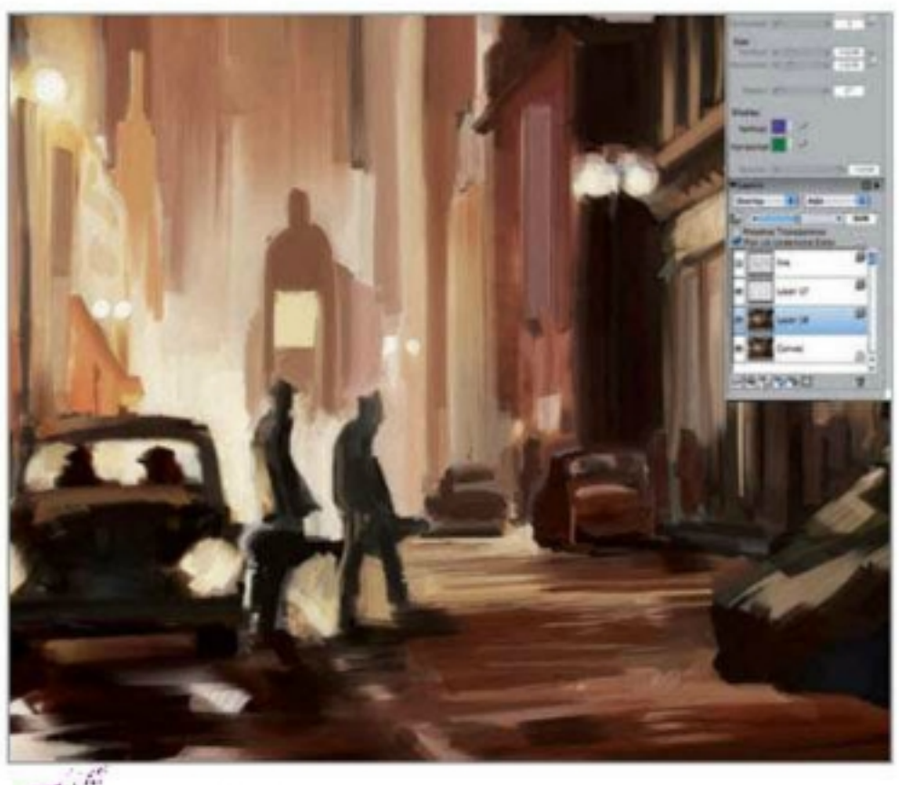
02 Shadows and light On a layer underneath my sketch I block in shadows and light using a basic round brush. This Fifties city street has a kind of film noir feel to it, so I use brown tones for a dated sepia effect. Adding these values acts as a first colour wash over my canvas and is a good foundation upon which to use the palette knives.

03 Blocking in I start painting over the image with the Loaded palette knife on a new layer to establish my colours. At this stage I'm just slapping the colour onto the canvas with quick strokes. To get flatter colour I use the Color Variability palette and move all the sliders to 0%. I also set the Angle Expression to Bearing.

04 Pushing paint Now I have my overall colours sorted, I drop my colour layer to the canvas and grab the Standard palette knife. This knife does not add colour but rather pushes the paint around, so it's great for tidying up rough edges. As before, I set the Angle Expression to Bearing to give me more control.

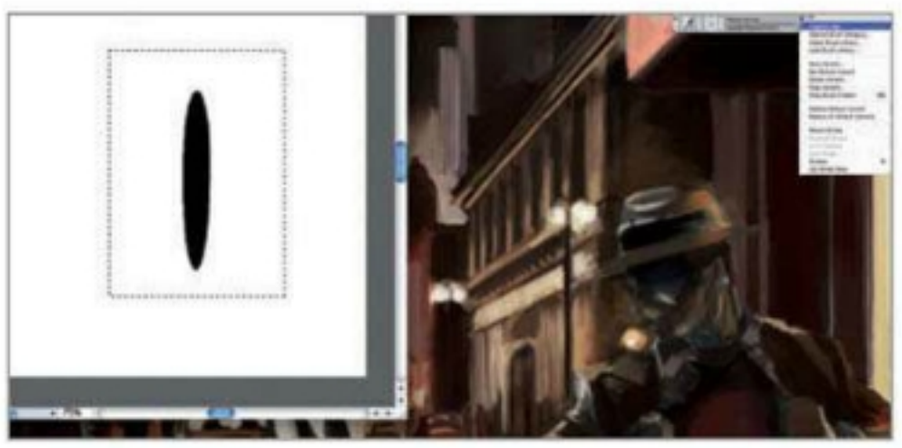


05 Wet look With the Sharp Triple knife I paint short horizontal strokes over the road and pavement, reducing the size of the brush as I paint further away. This increases the impression of a slick surface.



06 Boost the image I create a copy of the colour layer and set it to 50% Overlay. This boosts the values and makes the image bolder. Then I hide my sketch layer as I no longer need it as a guide.

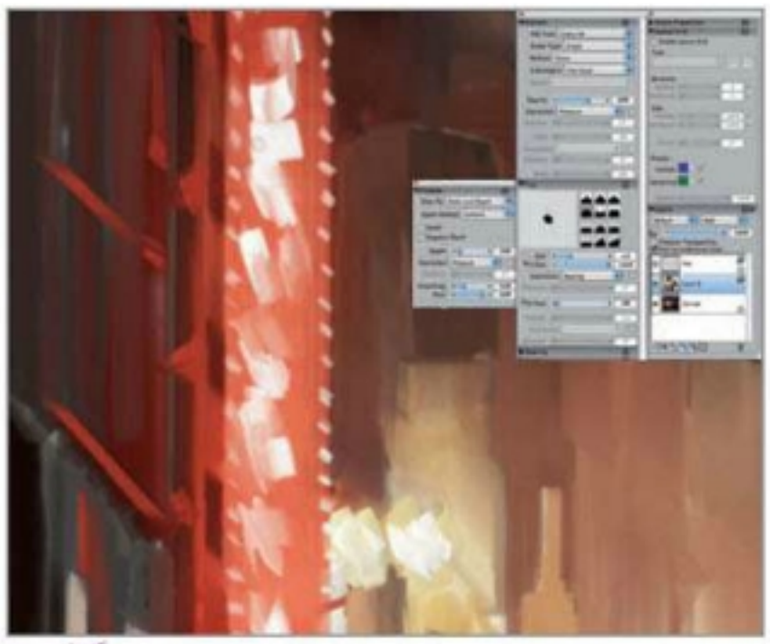
07 Custom knife For more detail I create a custom knife. I save a variant of the Loaded palette knife and in a separate document draw a thin oval, then Capture Dab.



08 Detail I zoom in, and with my new knife paint in more detail. I use the knife to add more paint, and use the Standard knife at 5% Impasto Depth to move it around.

Turn Photoshop brushes into knives

Start with a Hard Round brush. Rotate the tip to 90 degrees, set Roundness to 10%, Spacing to 4%, Opacity Jitter to Pen Pressure. In Shape Dynamics set all sliders to 0%, Angle Jitter to Pen Tilt. You can also create palette knives by defining your own brush tips. I made silhouettes by tracing photos of actual palette knives, then used the Define Brush preset to create tips. Set Spacing, Opacity Jitter and Shape Dynamics as before. Real palette knives and paint don't give such a smooth stroke, so add imperfections via the Dual Brush option for realism.

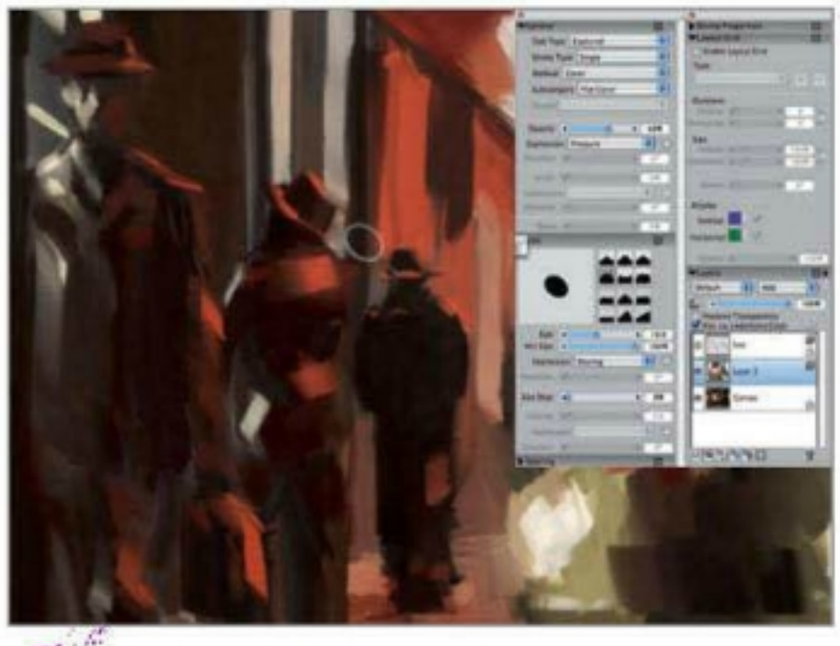


09 Electric light I zoom out and decide it's time to focus on the electric light sources in the image. Using the Loaded palette knife with Impasto Depth 5%, I paint large strokes for the base of the neon signs, then I decrease my brush size significantly to paint in smaller lights such as neon letters and car lights with my custom palette knife.

10 Character For the foreground character I use the same process of adding colour then moving it about. I use quick strokes, picking out edges with highlights. I keep my brush fairly large so as not to go into too much detail, so the style stays impressionistic.

Impasto mistakes

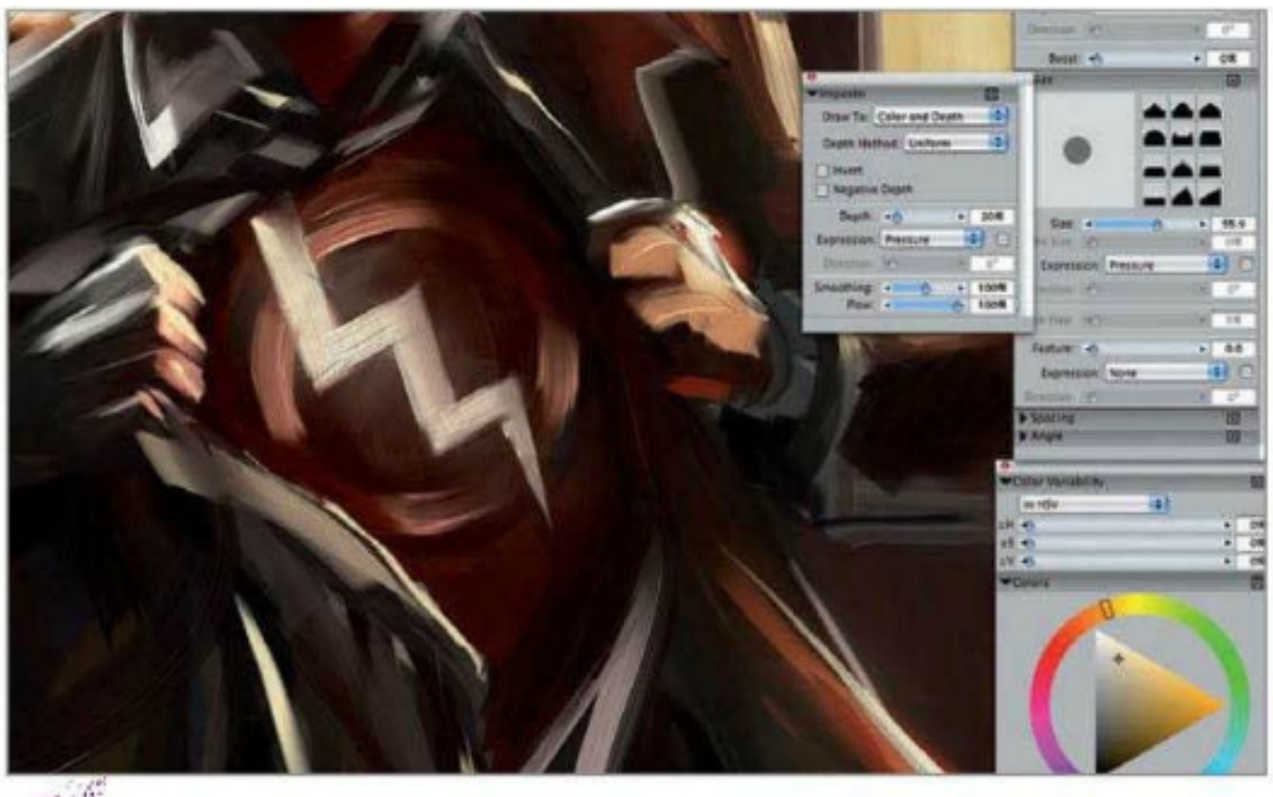
The Impasto effect cannot be painted over in Painter, but there are ways around this. Saving a TIFF of your image will merge the effect with the canvas so you can blend away mistakes. Alternatively, the Impasto Depth Equalizer is a great way to reduce or remove the Impasto effect from the canvas.



11 Background characters With the background figures I use a minimum of strokes to get the gesture across, so it helps to have a hand poised over the Undo function here. I make a bold stroke, and if it doesn't look right I hit Undo (Ctrl/Cmd+Z) and try again until I'm satisfied with it. This technique helps to add movement to basic figures.

12 Impressionist detail I'm happy with the overall scene but feel it needs more implied detail. I go over the whole image with my custom knife set to a small size and add signs, lights and detail to buildings. I just use blobs or small dashes of colour to suggest details without getting too technical.

13 Impasto edges Real palette knives have a tendency to leave thick paint at the edges of their strokes, and I want to mimic this effect. I grab the Standard palette knife and crank up the Impasto to 20%. Then, making sure I angle my pen so I get a thin line, I thicken up the paint on various parts of the image.



14 Final tweaks I alter the logo on the main character's costume to make the hero element more obvious, then I transfer the image to Photoshop. I use Color Balance to add slightly more blue to the overall image, and finally I use the Sharpen filter to make the Impasto a bit crisper.

Style School
Art genres in a nutshell

The palette knife in art

Discover the unique look of palette knife artwork and learn how you can achieve this effect digitally

Palette knives have been used to paint all kinds of subject matter, with the impasto technique being favoured by artists of all styles from traditional landscapes to modern art. Here are some examples of how artists of very different styles use the palette knife to achieve very different results. Two of these examples are of traditional palette knife artwork to give you an idea of its textural, three-dimensional quality, but as you can see from the third example, digital artists make great use of palette knife brushes too.

The masters

Palette knife – the master way

Georg Miciu-Nicolaevici
www.georg.com.ar
La Capada 2007

● Georg Miciu-Nicolaevici is a master of figure painting with the palette knife. *La Capada* is an inspiring example of how movement, depth and atmosphere can be conveyed in just a few strokes. This is an example of traditional, hand-painted palette knife work; you can see how thick and craggy the paint looks, giving it a sculptural quality.

Vincent van Gogh
Starry Night 1889
www.moma.org

● Vincent van Gogh often used palette knives that were heavily loaded with thickened paint in order to apply bold swirling strokes to his paintings. This deep impasto style made them extremely rich in colour as well as texture.

Kirsi Salonen
Light and Metal 2009
www.kirsisalonen.com

● Kirsi Salonen is an outstanding digital artist who uses Painter's digital palette knives often in her work to create beautiful and atmospheric fantasy art. One method of Kirsi's is to use Painter's Neon Knife at very small sizes in order to create details and finishing on hair. This subtle use of palette knives combines with her use of light and metallic colours to create a smooth sheen across her paintings.

Painting Ukiyo-e style

The Beckoning Gates 2010 **Painter**

> Explore the delicate and thought-provoking style of classic Japanese woodblock prints with digital ink

Amber Hill Fantasy and wildlife artist

A veil of mist. Laughter from a stage. Moonlight and shadows on a street fair. These are only just a few of the ephemeral moments captured by the deft hands of the Japanese masters of line and design, the masters of Ukiyo-e.

Ukiyo-e literally means 'floating world' and the thousands of woodblock prints designed and printed from the 1650s to about 1912. The art depicted modern life, cityscapes and landscapes, and was popular among the emerging middle classes of Japan who were flocking to the cities from rural farms. These workers couldn't afford original paintings like the aristocracy, but Ukiyo-e prints were within their price range. Portraits of famous kabuki actors, geishas and popular tea servers were all the rage, as the middle class imitated the folks with more money.

Ukiyo-e has many looks, but generally has very definitive straight lines for buildings and hard edges, with the softer thick and thin lines for organic shapes and curves. The traditional art isn't just line work, it is the whole package of composition, brushwork, carved wood, and also careful pressure on the wood blocks, combined with vibrant colour, to create the reproductions.

Most painting programs have brushes that can be modified into the perfect inking tool. This tutorial was created in Painter, but you can apply the techniques discussed here in many programs and in real media.

Contemporary Ukiyo-e inspired art can be found in popular video games such as *Okami* and *Muramasa: The Demon Blade,* and has an influence on animation styles. Your own art can have a similar look to this beautiful style, without the limitations and frustrations of block printing.

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Amber Hill

Personal portfolio site **http://vantid.deviantart.com**
Country **USA**
Software used **Painter 10**

Amber Hill, whose art education consists mostly of dissecting dead things and watching live ones, specialises in fantasy wildlife art – flights of imagination inspired by the living and breathing world.

PAINTING UKIYO-E STYLE

Working Progress

Create your own 'floating world'

Step 2, Place the sketch

Step 9, Block in the rest

Step 14, Add texture

Step 19, Don't keep them waiting

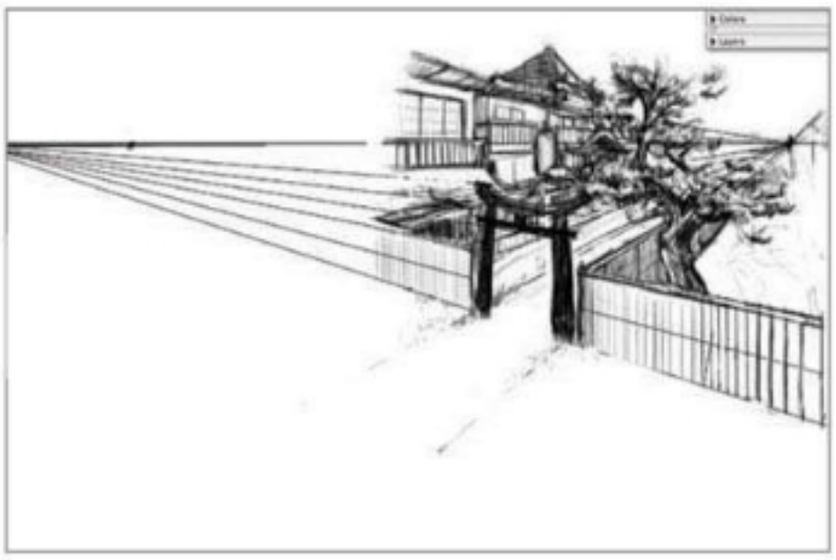
Source files available

Sketched line art

Lay the foundations

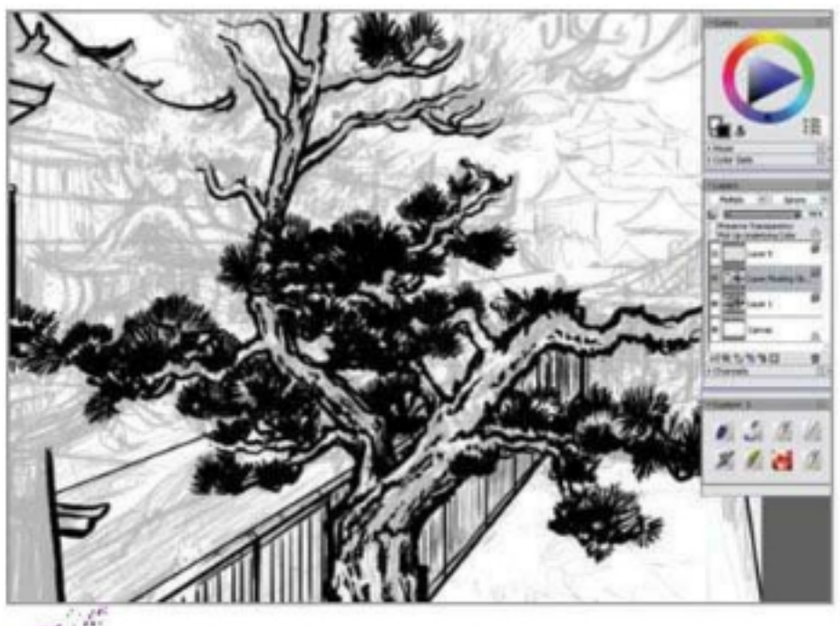
Build this town from your imagination

01 Work out the sketch For this Japanese town you need to lay down some perspective lines. Create a new document that's much wider than needed so you can place your vanishing points at a good distance from one another. Make it easy on yourself and, using a Detail Airbrush, work smaller than the final image's resolution for the sketch's framework.



02 Place the sketch There is some leeway with perspective in this style of art since traditionally it was based on isometric perspective. Once you are satisfied with your sketch, open another document that is the correct size and resolution. Select all (Ctrl/Cmd+A) of your initial sketch, then copy, paste and resize the sketch layer to fit the new image.

03 Begin inking Now for the inks! Set your sketch layer to about 30%, or whatever is easiest on your eye. Create a new layer above the sketch layer. Select the What! Inker (see the tip below) and begin laying in some heavy lines on that torii gate.



04 A careful hand Inking in this style is both frustrating and rewarding. It takes experimentation with stylus pressure and control to get lines similar to the Ukiyo-e masters. For tree bark, wiggle your hand with each stroke while pressing. Try to feel the energy of the tree. You want to express nature!

05 Stay straight Alternate between straight lines (V) and freehand lines (B) to create the buildings more quickly. Line up all the horizontal lines with your vanishing point. The combination of organic and straight lines adds variety to the piece. Cats add interest. Once the inks are complete, hide the sketch layer and set the ink layer to Multiply.

Perfect brushes

Corel Painter has a great set of brushes called Sumi-e which are based on traditional Japanese inking styles. You can find thin, calligraphic brushes and thick, washy ones for applying colour. By default their colour will build up to black on a Gel layer so for more delicate hues, go to Brush Controls and change the Dab Type to Cover. A fabulous inking brush is the What! Inker: http://what-i-do-is-secret.deviantart.com/art/Painter-X-Brush-Inking-Pen-71938847

06 Spill the cream This is an evening scene and should look dark, yet the crepuscular scenes of the old prints are usually bright despite approaching night. Fill the background layer with a pale cream. Select the Fine Tip Soft Air Airbrush. Make it big – 100 pixels or so. Grab a pale, rich yellow and gently brush the top of the painting.

07 Layer the sunset Layer more yellow, then orange, dark red and finally a dark sienna all the way across the top of the whole painting. Ukiyo-e prints have distinctive dark bands of colour on the top and/or bottom of the pieces. Keep layering colours until you have a nice glow.

08 Plot the grass With the same Airbrush tool, sized down, paint in all the grass at the base of the fence and inside the little yard. Add some variety of colour in the tufts, but not too much. Most of our colours are going to be simple, with textures placed on top.

09 Block in the rest Grab the What! Inker tool and block in the flats for the rest of the scene with a red brown. Make a new layer for the red gate. Leave the cats white. This step takes the least amount of control and is your chance to go wild and loosen up your wrist after all that tedious inking!

10 Create subtle shades Gradations of dark to light throughout the image add contrast and help guide the eye around the composition. Lighten the bottoms of the bamboo fence and the grass foreground of the yard. Add some light blue clouds near the sunset.

Style School
Art genres in a nutshell

Floating world images

Discover traditional Ukiyo-e art and how it's used in contemporary media

There were hundreds of 'floating world' artists, but only a few stood out as masters, for example Hokusai, Hiroshige, Yoshida Hiroshi and Kuniyosha. These artists and this school of art left a lasting impression that still inspires to this day. Some contemporary artists such as Yamaguchi Akira continue the look and feel of Ukiyo-e with mind-boggling displays of line. The 'floating world' pops up in sushi bars, video games, art and animation.

The masters
Ukiyo-e in history and today

Hiroshige
1797-1858

● Ando Hiroshige is considered the crowning glory of Ukiyo-e with his brilliant use of colour and design, and is famous for his *100 Views of Edo*.The son of a samurai, legend has it that Hiroshige dedicated his life to becoming an artist after seeing the paintings of the most famous of Ukiyo-e painters, Hokusai. While his early work features the people and social scenes for which Ukiyo-e is famous, he later turned to landscapes before becoming a monk. **www.hiroshige.org.uk**

Okami
2006

● *Okami* is a video game originally created by the now-defunct Clover Studio and animated in a style inspired by woodblock prints. The characters sport mostly flat colouration with subtle gradations, brushwork outlines and a paper texture. Its sequel is out this year. The cats in the piece are inspired by the game. **www.capcom.com/okami**

Hokusai
1760-1849

● If there was ever an image iconic of Ukiyo-e, it's Hokusai's *The Great Wave*. This is the image most people think of when Japanese woodblock prints are mentioned. And no wonder – the piece is so beautiful. It has graced the walls of many a living room and has been reinterpreted by a range of artists, the most recent of whom is Gorillaz creator Jamie Hewlett. **www.katsushikahokusai.org**

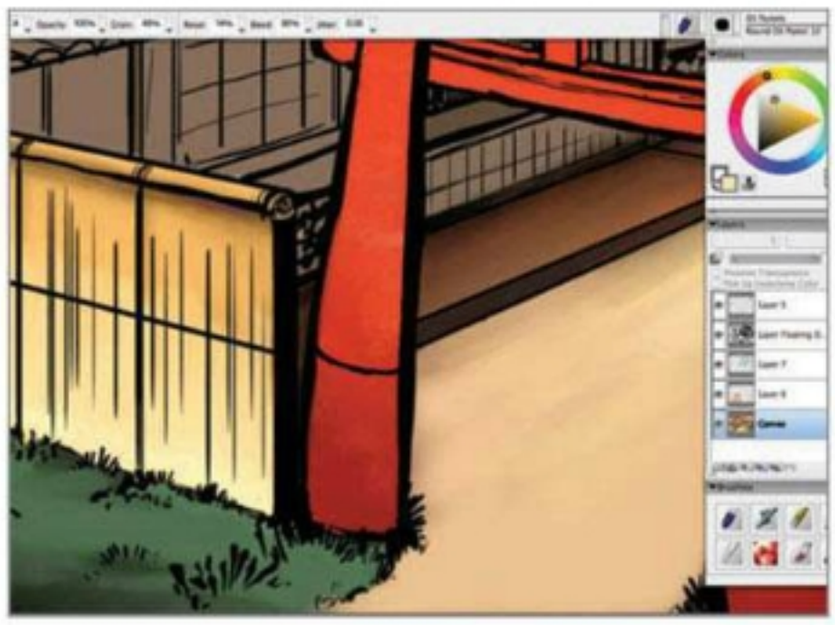
11 Add more to the story It's evening time and the shop owners have gone into their lofts. Give them some light to read by with a rich gold colour. Don't forget to show some light through the slots of the railing!

12 Colour Add the third dimension with dark brown on the sides of the buildings. A blue grey whitewash on the front emphasizes that this is a working district for the middle class. Add fall colour to the trees. Start a dark-to-light gradient on the pavement with the Round Oil Pastel.

13 Add the woodblock look Create a new layer under the ink layer. With the What! Inker add blobs of green-grey for the pine needles. This imitates the look of ink transferred from the woodblock. Add red, cream and gold to the temple in the background.

14 Add texture Grab the Round Oil Pastel. Paint subtle colour variations in the fall tree and shade the temple. Now lower the grain and pick a paper texture that looks lumpy. Dab in texture that mimics the look of old paper.

15 Push the gradients Keep pushing the gradients around the image. Deepen the greens of the grass at the bottom, shade below the top of the fence, and give the gate some dimension without fully rendering the cylindrical shape.



16 Work on the tree Make sure all your pine needle clumps are surrounded by colour. Start a gradient on the trunk. Continue working on the buildings – paint the walls, roofs, light from the windows, and storefronts.

Dissect an image

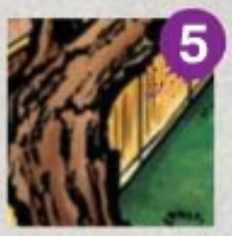
Art structure explored

1 Gradient band The dark gradient that appears on the top and/or bottom of the picture makes the image look like authentic Ukiyo-e. It's usually very dark, almost black, but is sometimes brown or blue.

2 Needling It's a lot of work to draw all these needles – but draw them anyway! They create a fullness for one of the focal points of the image. Trees were always an important motif in Chinese and Japanese art, and pine trees symbolise longevity.

3 Culture is in the details Little details – for example, the beckoning cat and the lanterns – add a lot of charm and life to the image. Elements such as this hint at untold stories for the viewer to ponder over.

4 Simplify the anatomy Keep the lines of the image curved and elegant for the cats. Make the anatomy as simple as you possibly can in order to avoid cluttering up the image with too much detail.



5 Look at the masters The bark was inspired by several prints by Hokusai and Hiroshige. When you don't know how to proceed, always go back to nature and then look at how other artists tackled the same problem.

17 Add more paper texture Now is when you want to add more of that old paper look. The Ukiyo-e masters were careful about which paper they worked on since the texture would show, and used it to their advantage. You can create your own mottled ink and paper look with a combination of Watercolor and Oil Pastels. When you are done with the Watercolor layer, drop it.

18 Breathe colour and life This shop has a fetching blue tarp. As with the previous gradients, airbrush the dark edge, blend with the low grain Round Oil Pastel, and this time grab the Grainy Water blender set to a low Grain and 20% Opacity. This makes for nice subtle blending.

19 Don't keep them waiting They have been patiently waiting their turn. Now it's time to paint the cats. With a Simple Round Wash watercolour, gently place warm greys in the shadows. Erase any over-diffusion with a Watercolor Eraser for a soft but clean look.

20 Finish it In the final step to imitating the Ukiyo-e style, add a paper texture. Go to Effects>Surface Control>Apply Surface Texture to pull up the menu. Adjust the Amount down a bit for a more subtle effect. You can experiment with the various settings to get a look that best suits your piece.

Digital painting

Working Progress

Get a Cubist effect with Painter's brushes

Step 1, All thumbs

Step 7, Plan the town

Step 11, Layer and merge

Step 15, Beef it up

Cubist painting

Mountain Village 2011 **Painter, SketchUp**

> Cubes, squares, rectangles and a few selections can be used to create a bold and colourful landscape

Joe Cummings Illustrator

It would be safe to say that most people have some idea of what a Cubist painting looks like. There is the convenient clue contained in the movement's name but, more importantly, Cubism was pioneered by one of modern art's most iconic artists, Pablo Picasso. His contemporary Georges Braque developed Cubism into an abstract and analytical art movement in the early 20th Century, depicting fragmented, monochrome figures and objects. However, their early work was influenced by Paul Cézanne, who was then creating landscapes that incorporated flat, geometrical planes of yellows, browns and greens, often ignoring perspective to concentrate on emphasising the flat surface of the canvas. It is this early stage of Cubism, and landscapes in particular, that I looked to for inspiration for this tutorial.

At this time, Cézanne and the proto-Cubists (as they became known), preferred to transform and simplify the intricate shapes present in nature. Although considered revolutionary at the time, it is now firmly established in contemporary design and painting, especially so in the work of digital artists. Many familiar tools available in Photoshop, Painter and most other painting programs are ideally suited to creating geometric shapes and filling large selections with bold colours. Using these tools creatively allows an artist to quickly and confidently create a composition and establish values. Soft and blurry edges, the bane of many digital artists, can be avoided with simple selections and a sharp-edged eraser as you compose your Cubist environment.

I tried to create a bold and colourful landscape, using some recent photos I had taken in Arizona as a starting point. I concentrated on the rectangular shapes and fissures in the rocks and simplified the forms of the trees and clouds to echo the mountain geometry. I also used Google SketchUp to create a basic village out of cube shapes, which allowed me to place an image in Painter where all of the painting was then done. Painter's Square Chalk was ideal for the task, so is our brush of choice here.

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Joe Cummings

Personal portfolio site **cummingsillustration.com**
Country **UK**
Software used **Painter, Photoshop, SketchBook Pro, Google SketchUp**

I have been working for 20 years as an editorial illustrator for national UK newspapers and magazines with an emphasis on caricature. I started out with pen and ink, but discovered digital art about five years ago. To be continued...

Start at square one

Build a background and establish the town

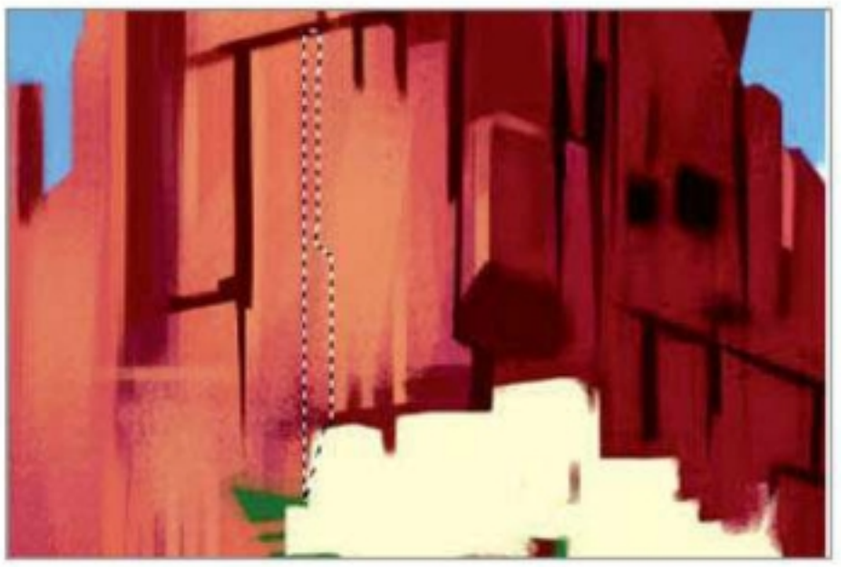
01 All thumbs It's always tempting to grab a brush and start painting straight away, but this is rarely a good idea. Draw some thumbnails or, as I did here, use the Selection tools and create selections in the right shapes then fill them with solid colour or gradients. Use the same tools to cut away.

02 Fade to white Bearing in mind the tried and tested rules of thirds and divine proportion, loosely draw out a composition on a new document in Painter. Open up the Gradient palette from the Window menu. Select a Two-Point gradient, a Main Color and an Additional Color, and move the circular slider round to 90 degrees. Fill the canvas with the Paint Bucket.

03 Moving mountains Create a new layer. With the Polygonal Selection tool, create the basic mountains. Select a red colour and fill the selection with the Paint Bucket, making sure that Current Color is selected in the Property bar. Deselect and cut into the right shapes with a hard edge eraser.

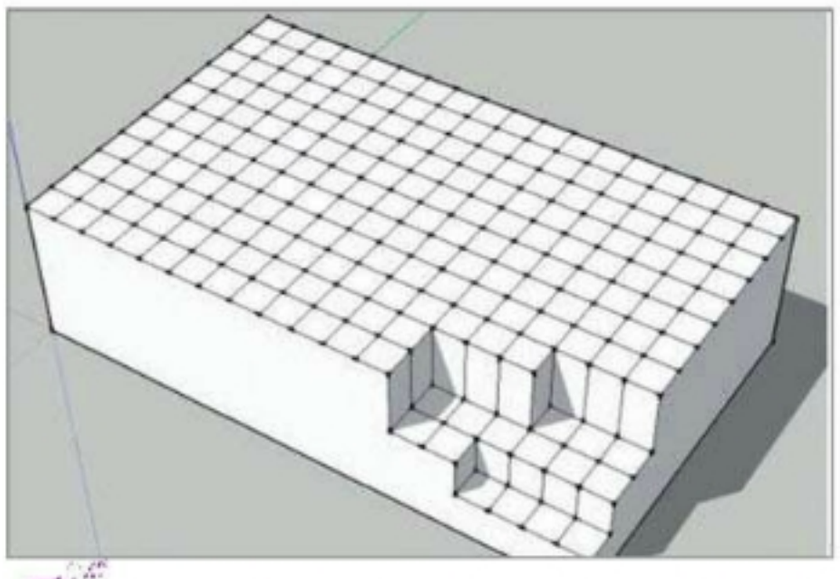
04 Begin the detail Now you can use the Square Chalk brush with Preserve Transparency in the Layers palette selected and begin to paint in some structure and values, safe in the knowledge that your edges will remain sharp. You can then merge these layers to keep your workflow smooth.

05 Paint over the cracks Again, the Selection tools (Marquee and Polygonal) can be used to create selections that allow you to paint details expressively and boldly while constraining the painting area and making sure other elements aren't affected. I found it useful to keep many of the cracks and darker valued areas on a separate layer until the end.



The Flip Canvas command

Throughout this process I have been regularly mirroring the canvas to check for errors. This can be conveniently placed as a one-click button on a Custom palette. Go to Window>Custom Palette>Add Command, then when the dialog opens, select Edit>Flip Horizontal to place it in a new or existing palette for easy access.



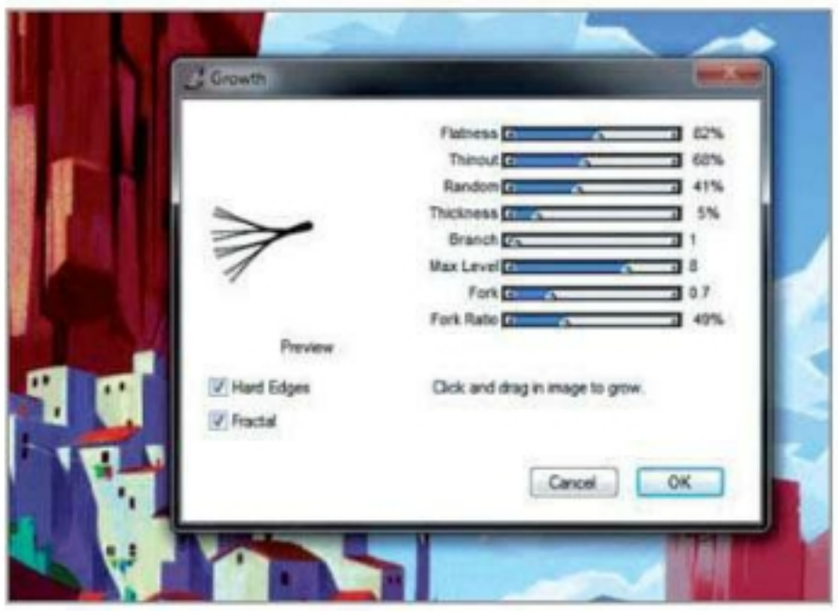
06 Push me pull me The mountain village is the focus of the painting, therefore it's worth taking a few extra steps to get the structure right. Google SketchUp is perfect for this. It's relatively easy to create a grid on the top surface of a large box and use the Push/Pull tool to make a rudimentary village on a slope. Remember to turn on the Shadows setting.

07 Plan the town Manipulate the view in SketchUp so that it matches the perspective that you've established in your painting and, after exporting the image, go to File>Place in Painter to insert it on a new layer of its own. It can then be transformed to fit in the scene. Change the composite method to Multiply and use this as a guide for a spot of town planning.

08 Down time Once the village is blocked in, take a step back from the painting for ten minutes. This is often a necessary step to reconnect with your initial idea. With simple geometry in mind, roughly paint in some trees and more detail to build up the interest. Check overall values by slightly adjusting the sliders in the Equalise palette from the Effects menu.

09 Texture Reduce the Grain setting of the Square Chalk brush in the Property bar to 11 and choose a paper from the Papers palette that resembles rock texture. On a new Overlay layer paint over the mountains. Reduce the opacity a little and, with a small eraser, cut into this texture to create new fissures. Use the 2B pencil to add shadows as well.

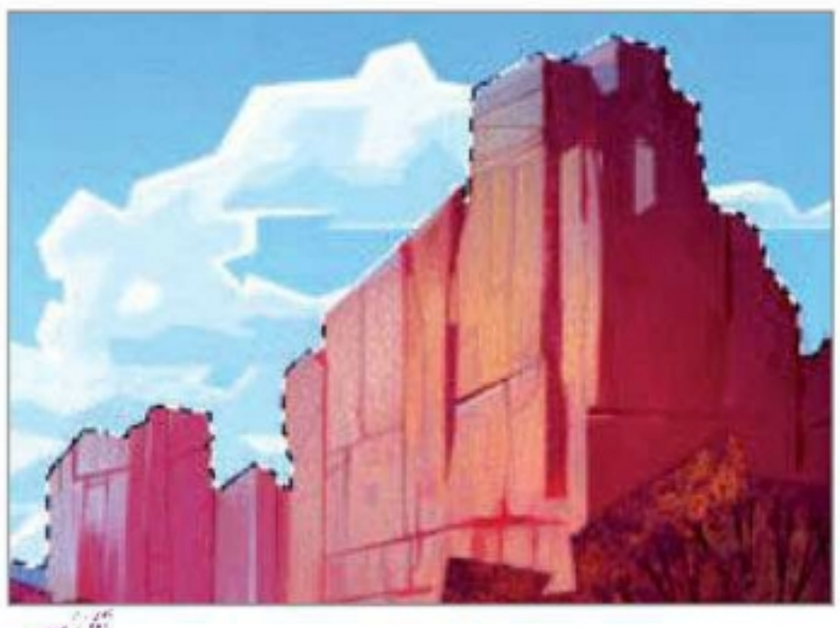
10 Going for growth From the Esoterica menu, open up the Growth palette and adjust the setting to make stylised branches. Keep the Branch setting at 1 unless you intend painting a cauliflower. On a new layer, click and drag to create a tree and press Ctrl/Cmd+Alt+T to transform and move it into place. Repeat for each tree then merge all trees to one layer. This will help keep your process slick and less confusing.



11 Layer and merge Again use the Polygonal Selection to draw and fill the angular lake with dark blue. Use Shift+Ctrl/Cmd+H to hide the irritating marching ants. On a new layer, use chalk to brush over a lighter blue with texture and reduce the opacity a little. Create a new layer on top and softly airbrush some more blues and then merge the layers.

12 Eroded trees Drag out a rectangular selection on top of a tree. With the Grain setting at 11, select Eroded Pavement paper and chalk in some texture over the foliage. Repeat this several times for each one of the trees. Highlight the Tree layer and select its contents by Ctrl/Cmd-clicking on the layer thumbnail, then erase parts of the texture you created.

13 Align to Path Once you have drawn in some telegraph poles, select the Pen and draw the wires. The Pen automatically creates a shape layer. Use the Shape Selection tools to edit the paths if necessary. Select the 2B pencil and highlight Align to Path in the Property bar. Draw in the wires and delete the shape layer.



14 Find a balance Add more detail and points of interest, especially to the village. Ask yourself: does the eye move freely through the painting? Choose appropriate colours to balance the whole image to help with this. Merge all the layers except the sky. Ctrl/Cmd-click the merged landscape layer, add a new Multiply layer on top and airbrush a cool blue over the mountaintops. Reduce opacity a little.

15 Beef it up The painting is finished now, but if it still appears a little light, duplicate the main layer and change its method to Multiply. Reduce the Opacity to around 20% and softly erase away highlights. Sharpen the image using Effects>Focus and move the Amount slider to 4 or 5.

Combine 3D models & painting

Wrong Side of the Wall

2011 **SketchUp, Kerkythea, Painter**

> This tutorial will demonstrate how to use Google SketchUp to produce a city scene

John Malcolm Freelance illustrator

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

John Malcolm

Personal portfolio site **johnmalcolm1970.co.uk**
Country **UK**
Software used **Painter, Photoshop, ArtRage, SketchUp, Kerkythea**
Although working full time for a local newspaper group, John has found his free time increasingly being taken up with digital art. Starting with photomanipulation in Photoshop, he is now happiest painting things from scratch using Painter.

A piece of 3D-modelling software can cost a lot of money and can take years of study and practice to master. Luckily, Google's SketchUp 8 is absolutely free and has a less steep learning curve. In this tutorial I'm going to show you how I created this city scene, how I used a second free program to render SketchUp's output and how I finally brought all the bits and bobs together in Painter.

The whole process of rendering this scene is quite a long and complex one, but once you've mastered the basics you can use that for the rest of the workflow. In this step-by-step, therefore, I'm going to cover just the creation of the tallest skyscraper in the scene as the same techniques and principals were used for every other building and object. There are extra resources for you to enjoy on the disc, such as the individual SketchUp files for many of the buildings as well as a couple of files which show a walkthrough of some of the other elements. For example, the file called '02 Creating the high rise.skp' has twenty-seven scene tabs along the top. Clicking on each of them in turn when open in SketchUp walks through the creation of the high-rise flats in the scene with annotations and explanations.

In addition to SketchUp I used another free piece of software called Kerkythea. SketchUp is great for modelling, but not so good at rendering. Kerkythea is available from **www.kerkythea.net**, and to use it with SketchUp requires two things. You must install the main standalone Kerkythea program, and you must install its SketchUp plug-in called SU2KT. I'd recommend getting all the various materials and model downloads they offer. To truly see what this program is capable of, I'd also recommend their forums, as they are the best place to learn and get to grips with these useful tools.

3D illustration

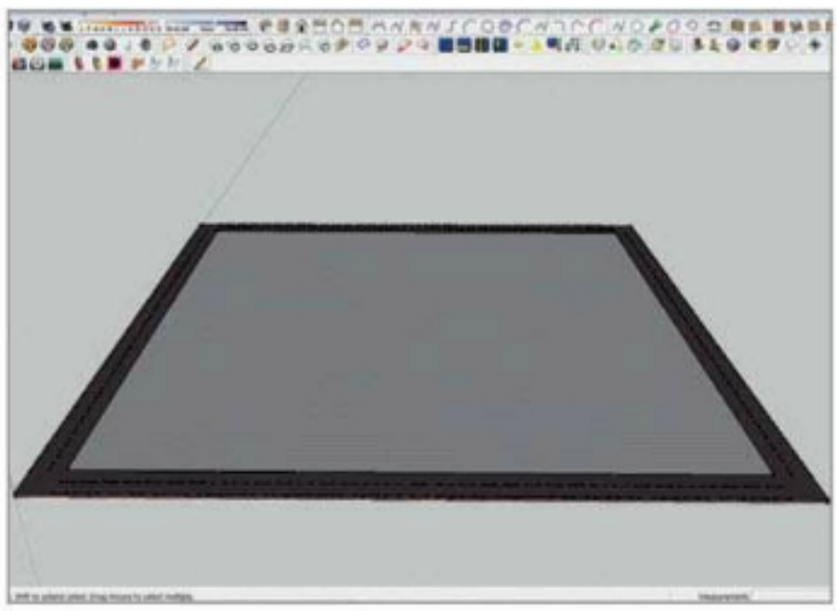
Source files available

Creative pack

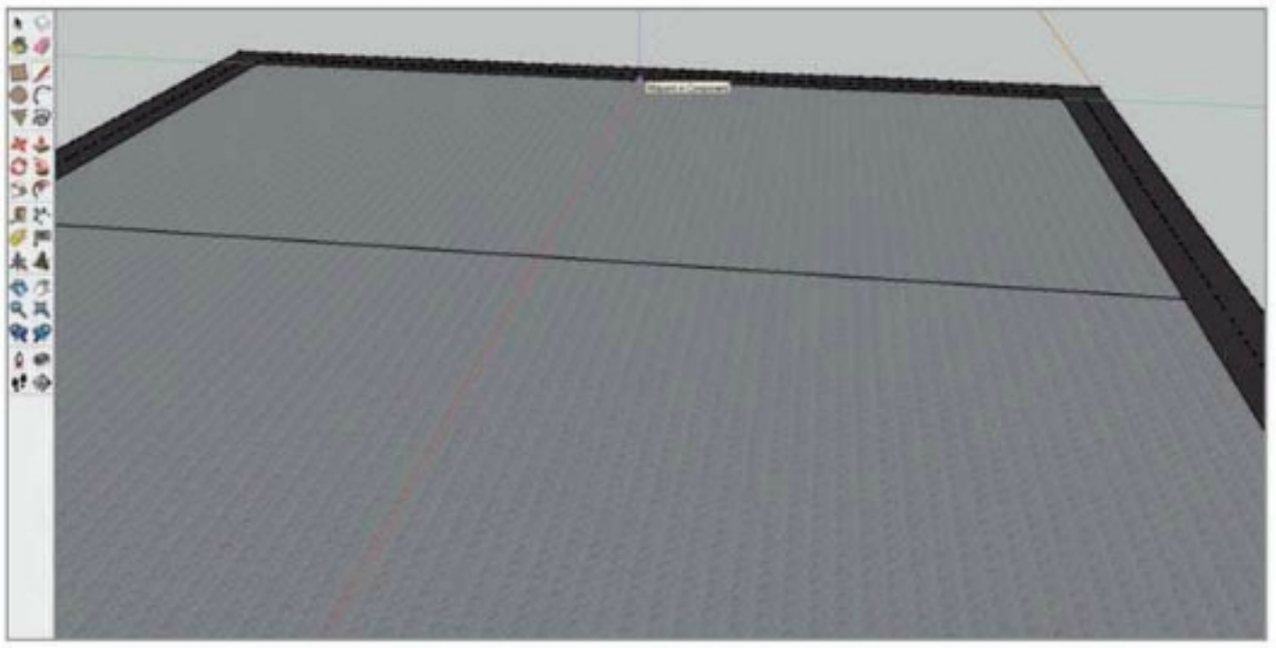
Create a skyscraper

The tallest building in the world is 830m – let's make one bigger!

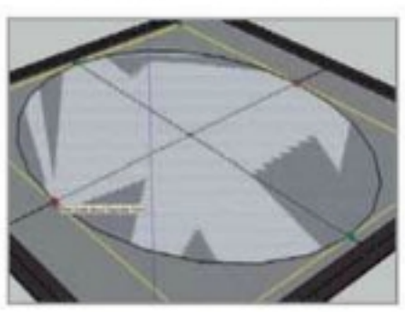
01 A good foundation I begin by importing an empty city block component I prepared earlier, thereby creating a space for my skyscraper to sit on. See the file called '01 Creating the blocks.skp', which steps through this. The only difference is that this block is 200 x 200m.

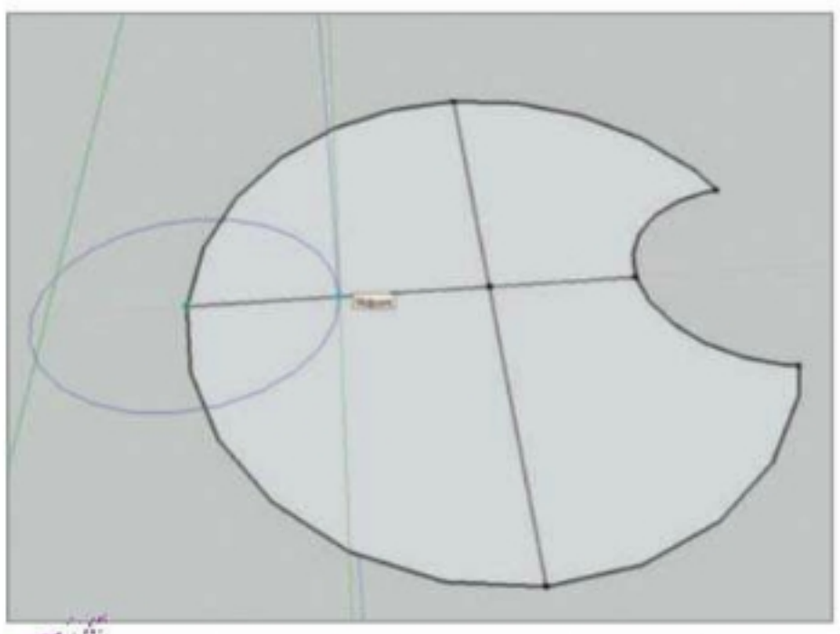


02 Divide and conquer Press L to select the Line tool and run the cursor over the middle of one of the sides of the block until you get the light-blue Midpoint inference. Click and then head over to the other side and do the same. The block is now split in two. Repeat this operation to divide the other way, and mark the centre point of your block.



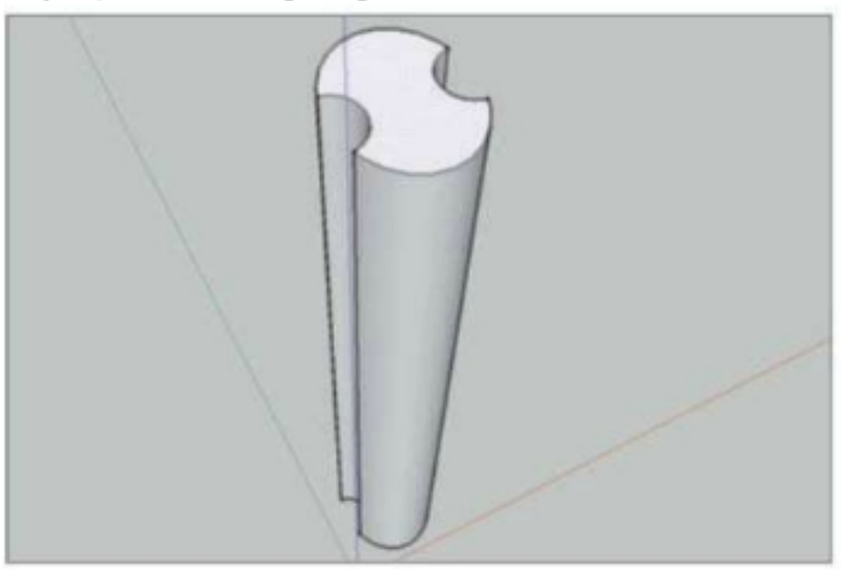
03 Circle to oval Select the Circle tool and click on the middle point. Move the cursor out, but instead of clicking to set the size, type 90m and hit Enter. With the Select tool, Shift-click on all four quarters of the circle then press S to scale. Move one of the sliders in while holding Ctrl/Cmd until the VCB measurement reads 0.80.

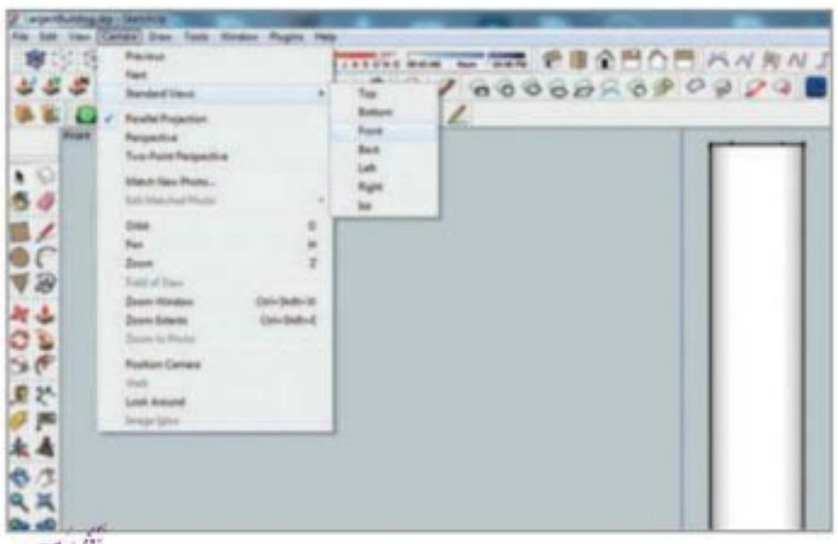




04 An interesting shape Ctrl/right-click on the block and hide it for now. Use the Eraser to trim the straight lines that fall outside the oval and then draw two smaller circles, beginning at the middle points of the longer sides and ending halfway to the middle. Now erase these from the overall shape.

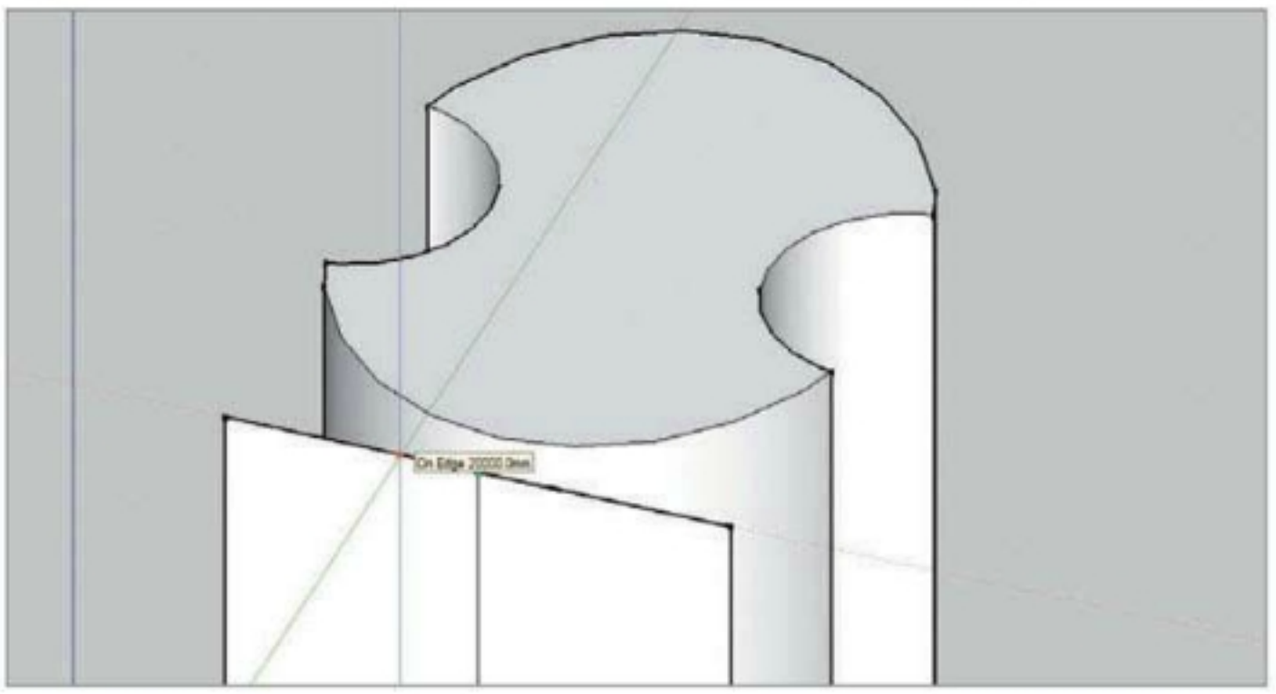
05 Onwards and upwards Select the Push/Pull tool by pressing P. Click once on the shape and start moving the cursor in an upwards direction. Type 1,000m and hit Enter. Zoom with the mouse scroll and (if you have one) use the middle mouse button to rotate the view. Holding Shift with this will also let you pan. It's worth getting familiar with these shortcuts.



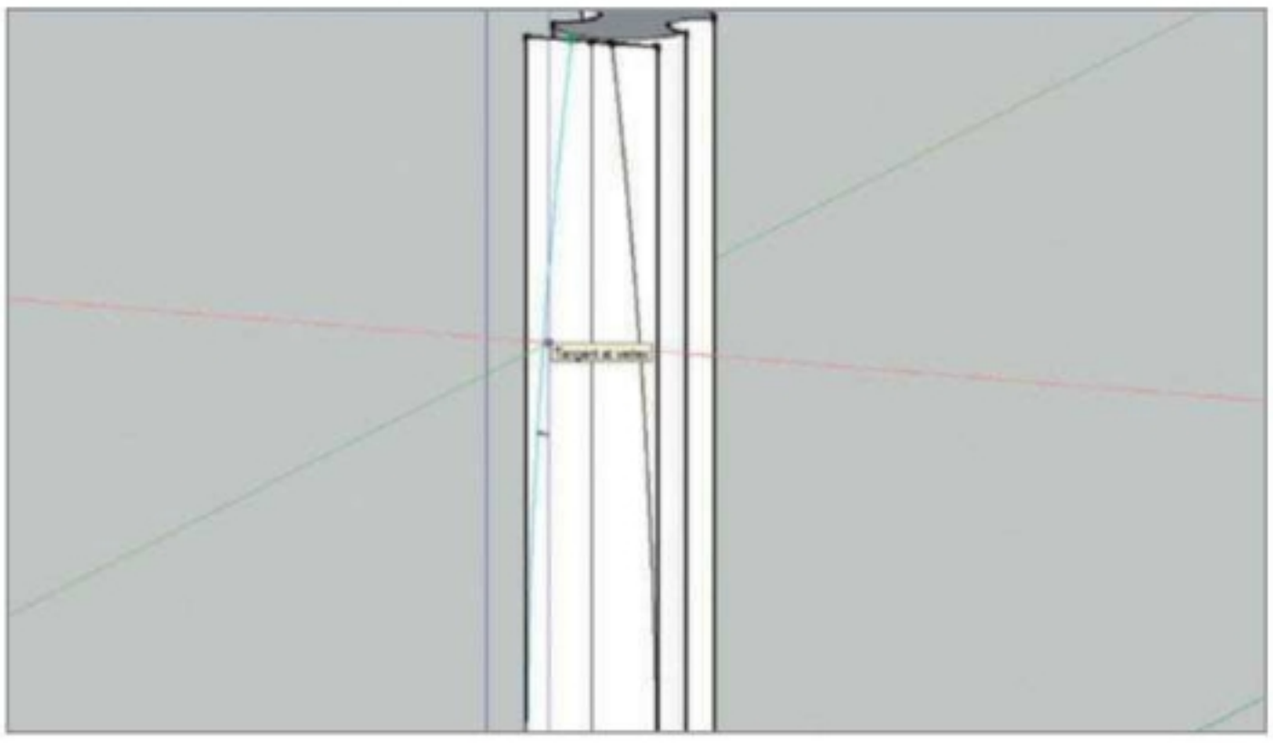


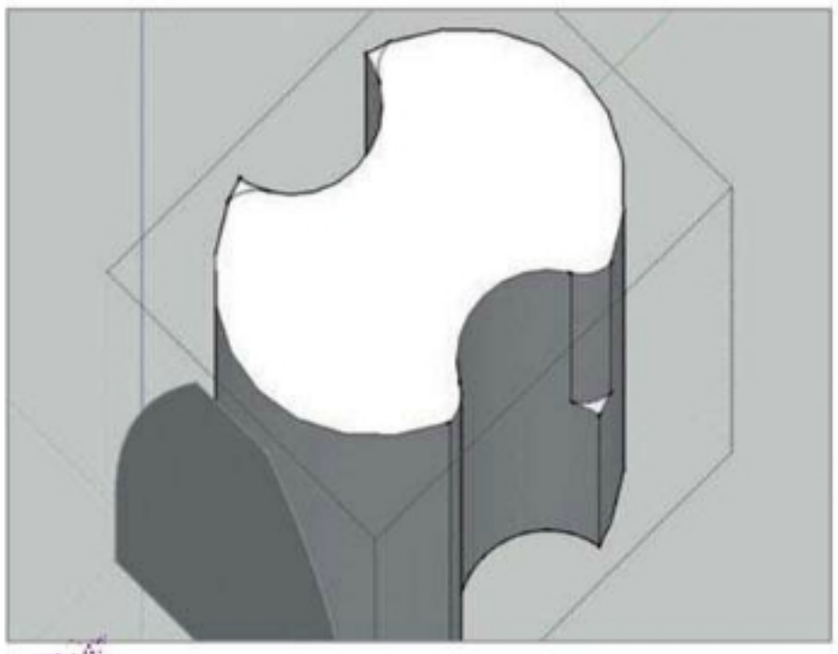
06 Groups are good Triple-click on part of the structure to select it all then right-click and choose Group. Select Camera>Parallel Projection and then Camera>Standard View>Front. Start at the origin point and draw a tall rectangle that hides your original tower behind it. Go to View>Face Style>X-ray and then press S. Scale the rectangle so it better matches the shape behind it then turn X-ray off.

07 Cut corners With the Line tool, split the rectangle into two halves from top to bottom. Press L again to begin a new line. From the top centre point, move the cursor along the top edge, then enter 20m to mark a point this distance from the centre. Repeat going the other way.



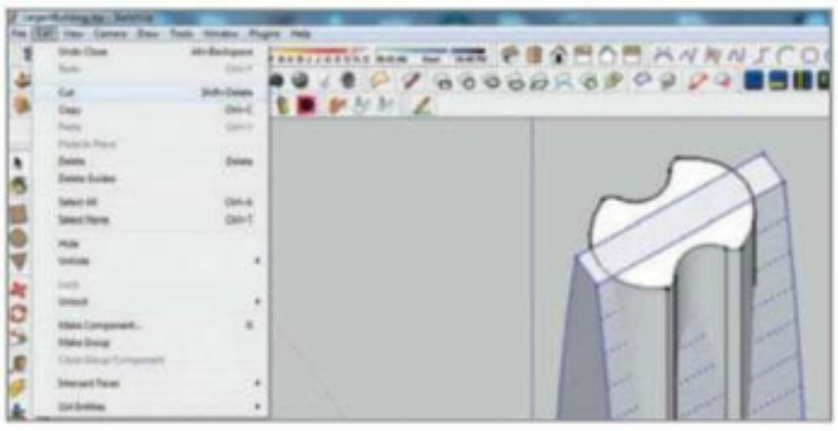
08 The Arc tool Now create points that are 250 metres up from the outside bottom corners and press A for the Arc tool. Click on one of the top points and one of the side points and you will see the arc of the top of this part of the building being formed. Move the cursor around until SketchUp offers the cyan Tangent at vertex inference then click to confirm.

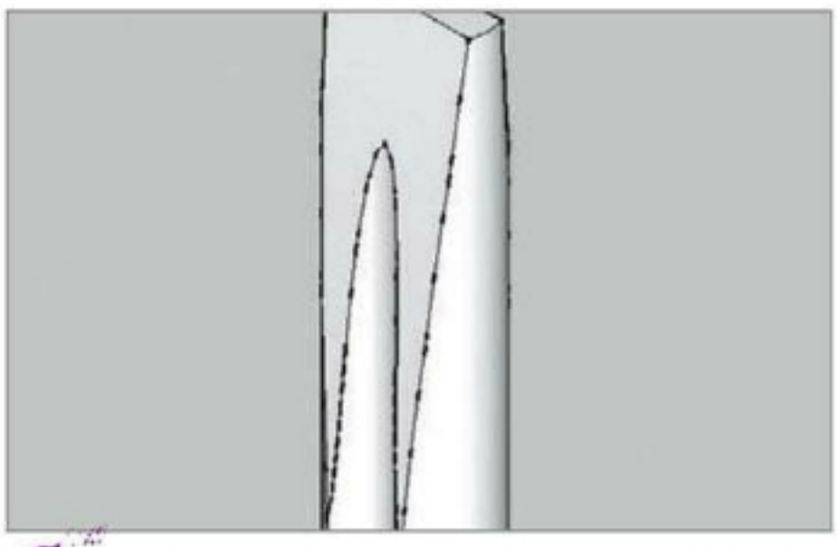




09 Round corners This is an optional tweak. I chose to modify the tower shape further before moving on. I double-click on it to edit the group contents and draw small arcs on the sharp corners at the top. I then use the Push/Pull tool on these shapes to push the unwanted bits all the way down to the bottom – until they disappear from the view.

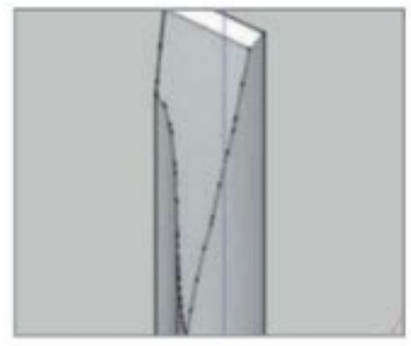
10 Intersect the shapes Click outside the group to close it then use the Push/Pull tool on the second shape to extrude it through the tower. As one object is a group, they don't interfere with each other… yet! Press Ctrl/Cmd+X to cut it out. Double-click on the group to edit it and then choose the Edit>Paste in Place option. Select All (Ctrl/Cmd+A), Ctrl/right-click and Intersect Faces>With Selection.





11 Time for some patience This part requires a bit of time and care. Erase all of the elements of the model that lie outside the intersection of the two shapes. The Eraser will only work on points and lines – it doesn't delete faces. Turning X-ray mode on and off can help this process along.

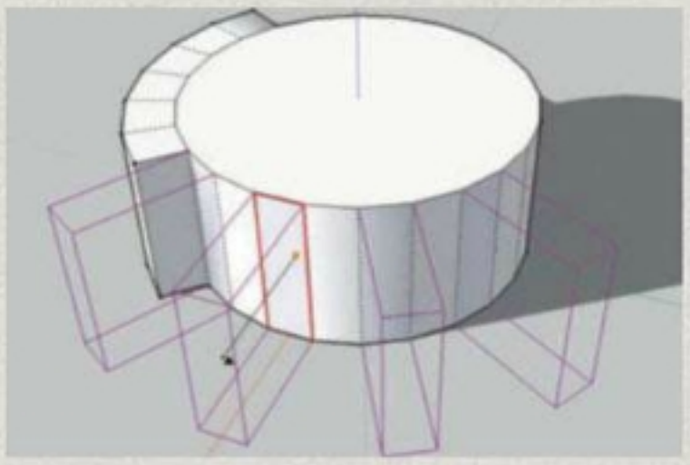
12 Quarter the shape Repeat the principles used in step 6 to draw two large rectangles, one from the front view and one from the side. Move these to divide the group into quarters and use cut, paste and intersecting faces.



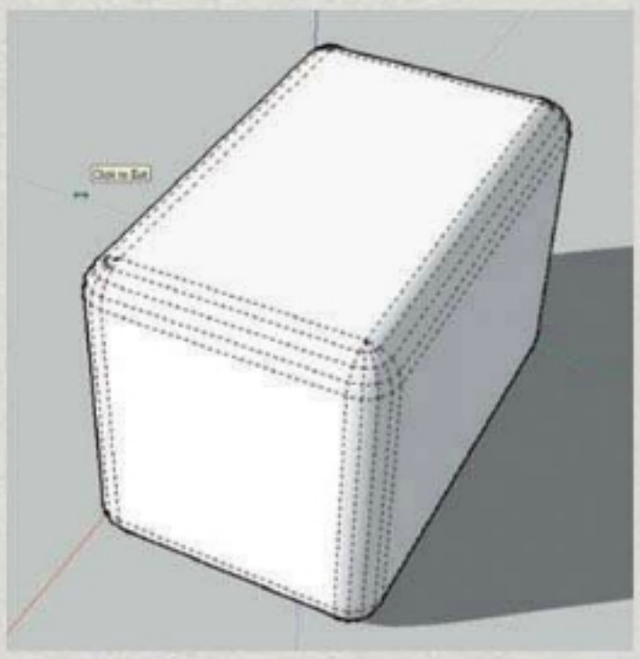
Style School
Art genres in a nutshell

Perfect plug-ins
Ideal free additions to your SketchUp program

Title: Protrude
Cost: Free
● This plug-in randomly divides selected faces every time Divide is pressed. Once there are a reasonable number of different sized faces, entering suitable minimum and maximum height values and clicking Protrude will extrude them out by random amounts. It was useful in this tutorial for generating some generic city blocks as well as the surface of the flying craft.
tinyurl.com/protrude-plugin

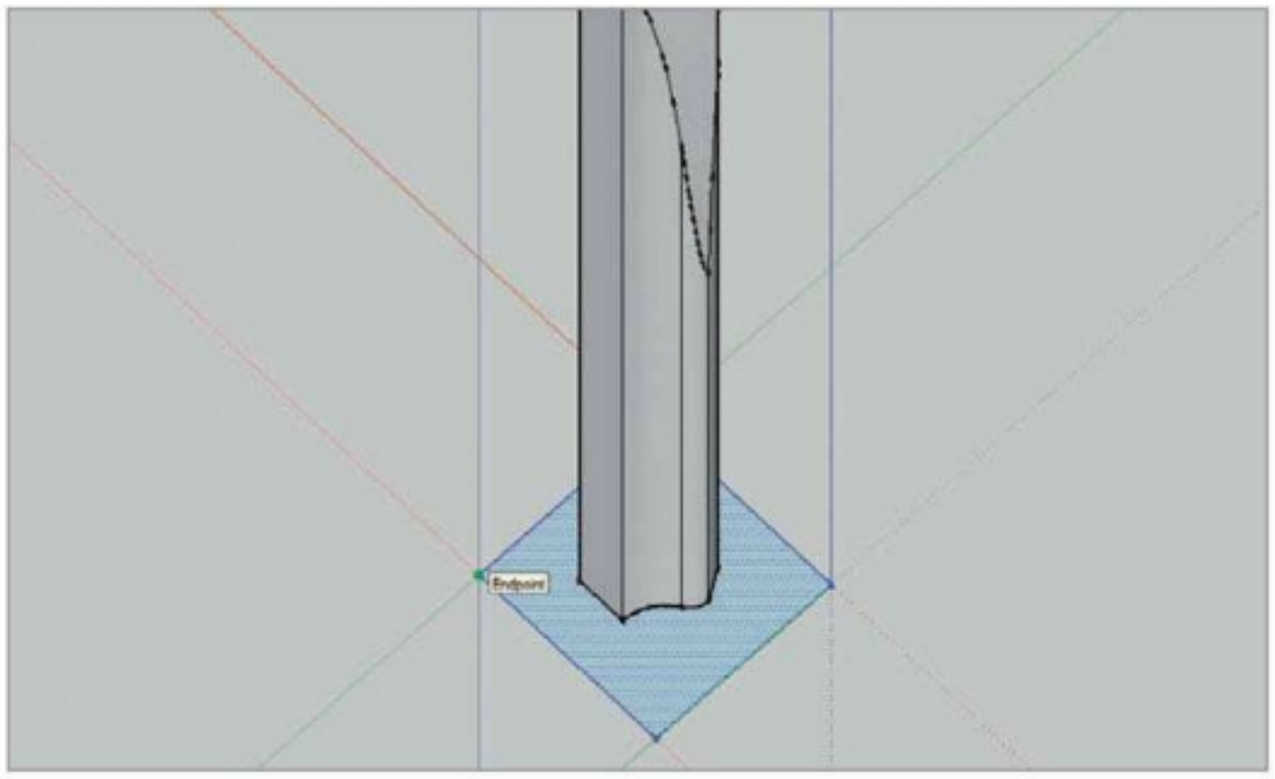


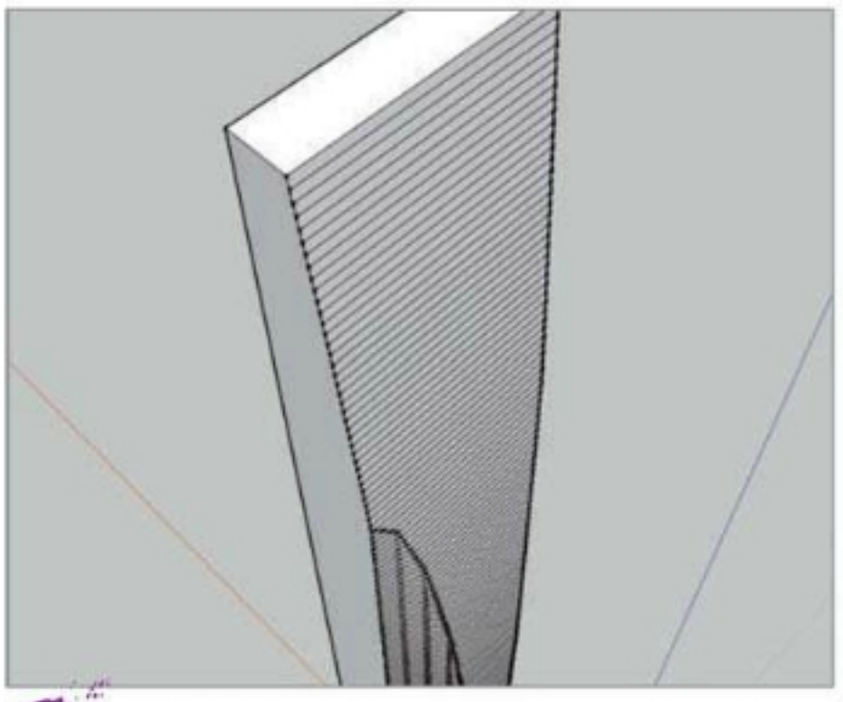
Title: Joint Push/Pull
Cost: Free
● SketchUp's built-in Push/Pull tool works well in simple circumstances. It's limited, though, to only being able to manipulate one face at a time, and it doesn't work on smoothed surfaces (like the exterior of a cylinder). This plug-in makes these things (and many more) possible.
tinyurl.com/jointpushpull-plugin



Title: Round Corner
Cost: Free
● This excellent plug-in makes rounding corners and smoothing out shapes easy. To do so manually requires a lot of faffing about with pushing, pulling and extruding shapes along paths. This one also comes with excellent instructive documentation.
tinyurl.com/roundcorner-plugin

13 How many floors? Select a rectangle around the base of the tower then choose the Move tool and press Ctrl/Cmd once to move a copy. Click and move the copy up (the up arrow will lock movement to the blue axis). Click at the top of the model and type /249 and hit Enter. Select all the copies and cut, paste in place and intersect them with the tower.



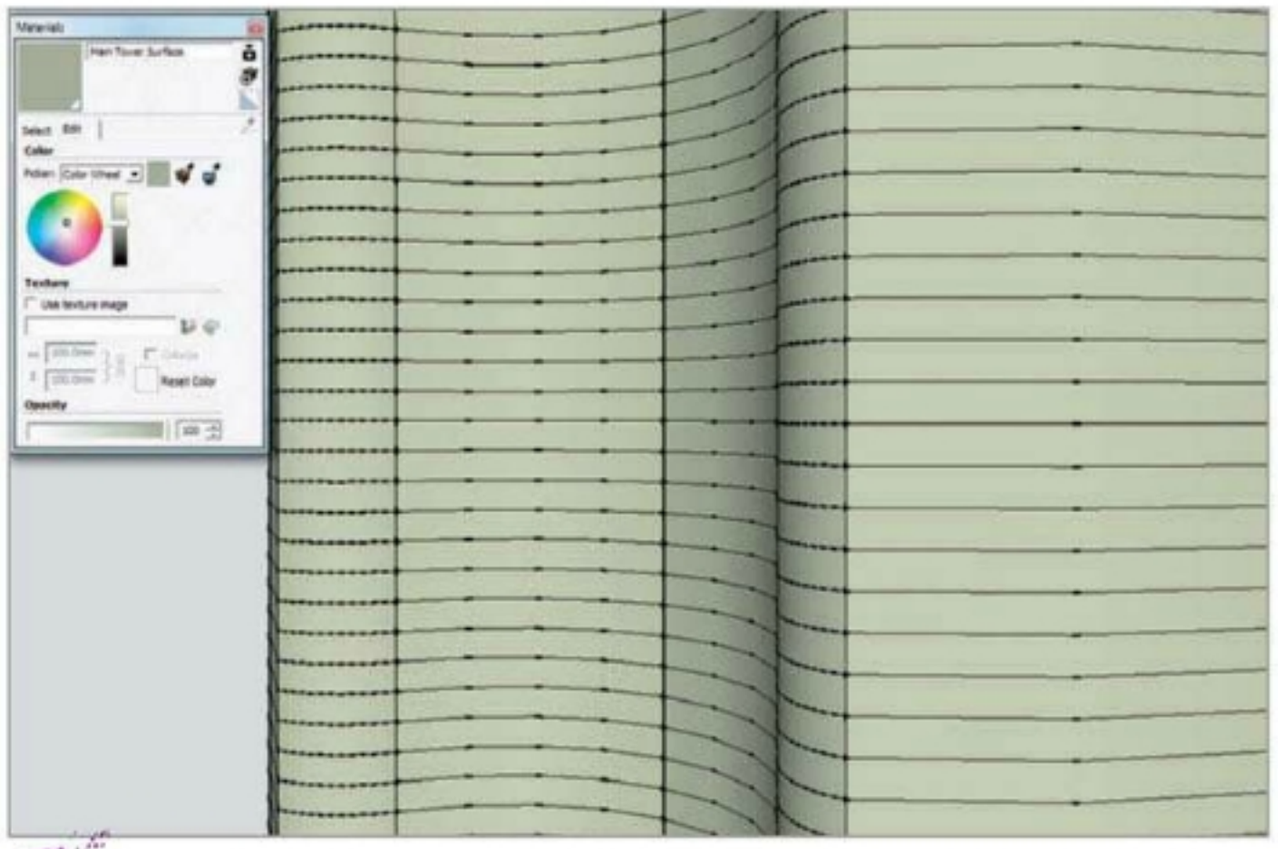


14 More patience Now use the Eraser tool, running it down the sides to delete all the unwanted lines. The building should now be divided into a LOT of floors. Ctrl/right-click on it and choose Explode the Group. Take time to hunt around for any stray leftover lines. When done, turn Parallel Projection back off (Camera>Parallel Projection).

Know your 3D tools

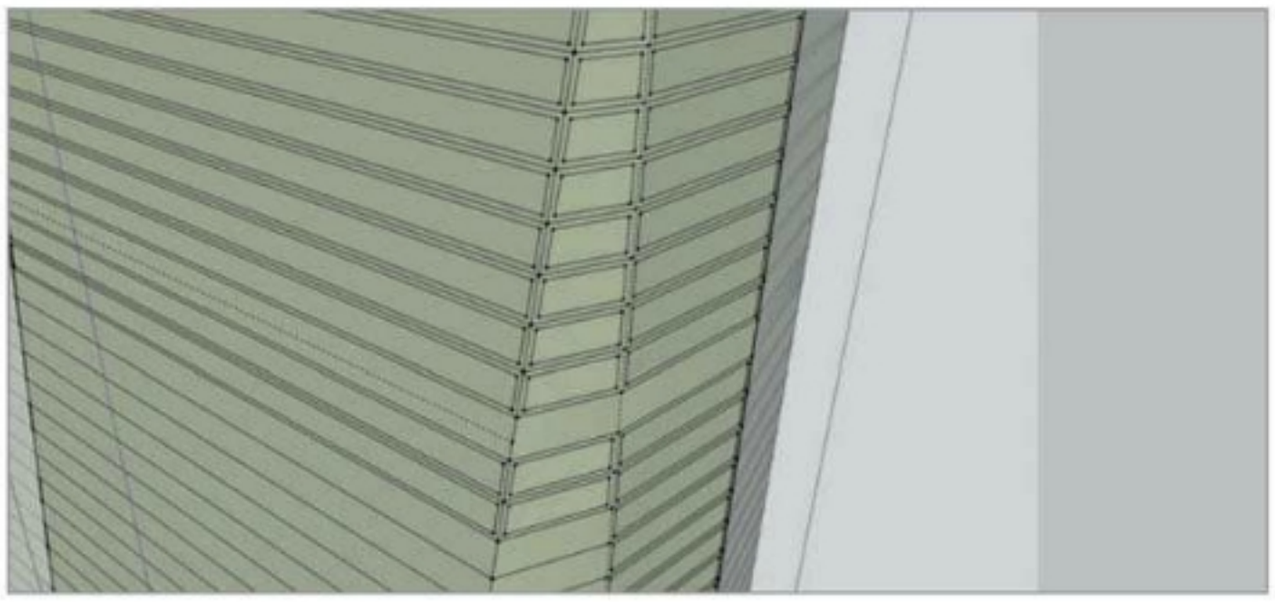
Groups and Components are useful features of SketchUp. Make parts of your model into Components if you wish to have more than one instance of it in your scene (the other instances can be flipped, rotated and even scaled differently). Groups are useful to prevent existing geometry attaching to anything else.

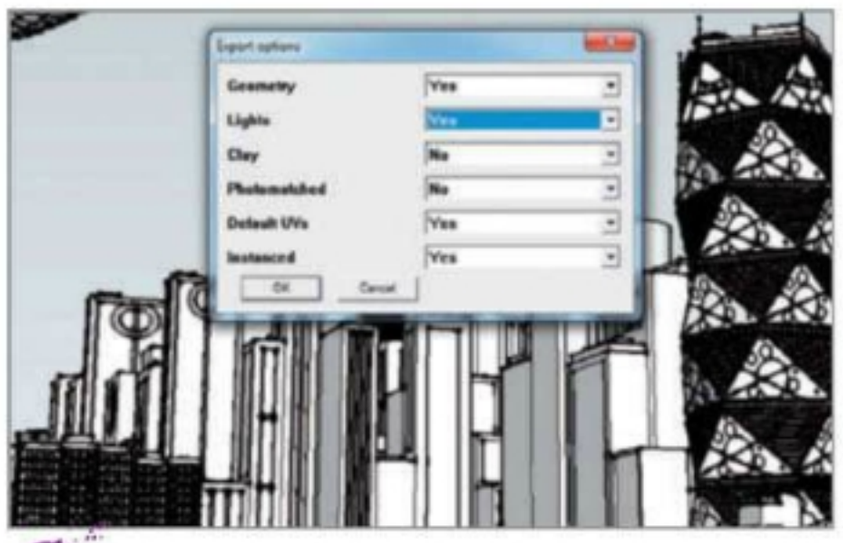
15 Component time Use Ctrl/Cmd+A to select the whole model, make it a Component (G) and press Create. Select the Move tool and shift a copy to the left. Ctrl/right-click on the copy and Flip Along>Components Red. Use Move on a corner and lock into place with the original. Select both, Copy Move and Flip Along>Components Green, then move those into position.



16 Materials Changes made to one quarter will now happen to all four. Select everything and open the Materials editor (Window>Materials). Click the New material button, choose a colour and name it, then use the Paint Bucket tool to apply.

17 Add windows Double-click on one of the components to edit it, choosing the Offset tool and then clicking on a face where you wish to suggest windows. Move the cursor inwards, then type 500mm and press Enter. Double-clicking on additional faces should repeat this offset. These can then be set back a bit with the Push/Pull tool and given their own material.





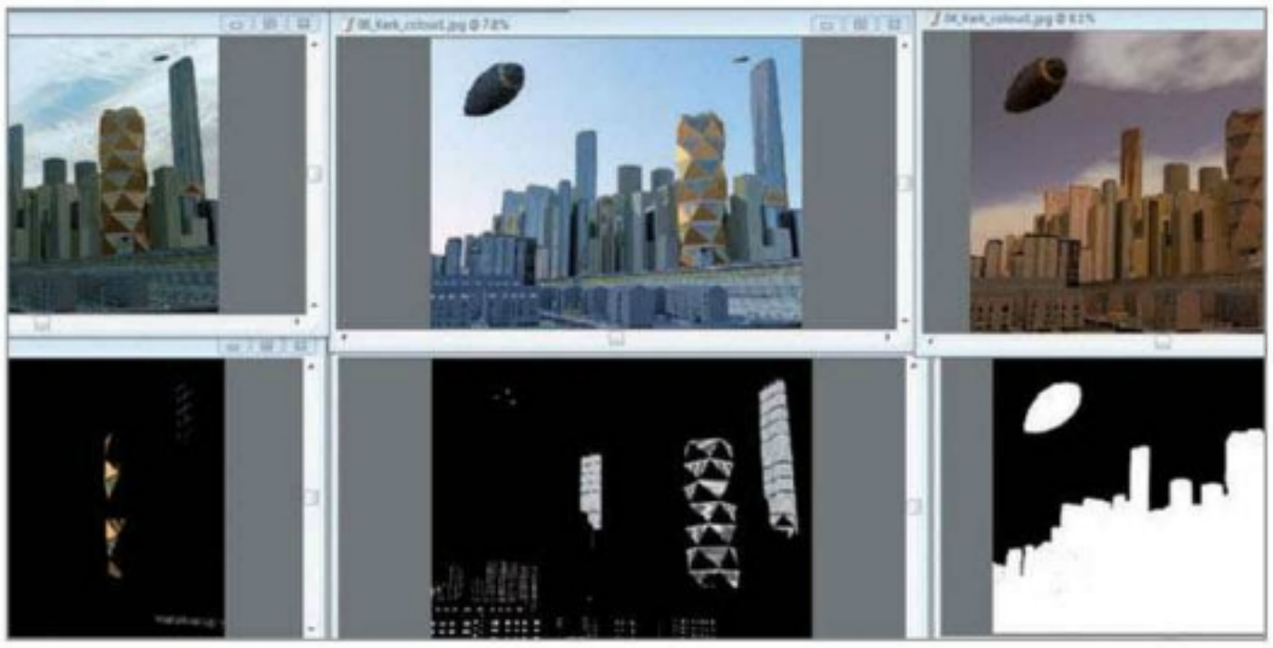
18 Arrange and export I import all of my models into a new document. Buildings as components can be used more than once to populate the scene. Click on Export Model to Kerkythea and make sure the Geometry says Yes (it can say Selection if something is selected). Instanced should be turned on. Repeat this twice, once with Clay active and once without.

Finish the image in Painter

Use blend modes, opacity and textures to complete the effect

19 Render Rendering in Kerkythea can be as easy as just hitting the Render button (your SketchUp sun will provide light and your SketchUp materials will work). It's capable of much more than that, though. I did several colour renders as well as some different types in it that will prove useful for the compositing stage of our image in Painter.

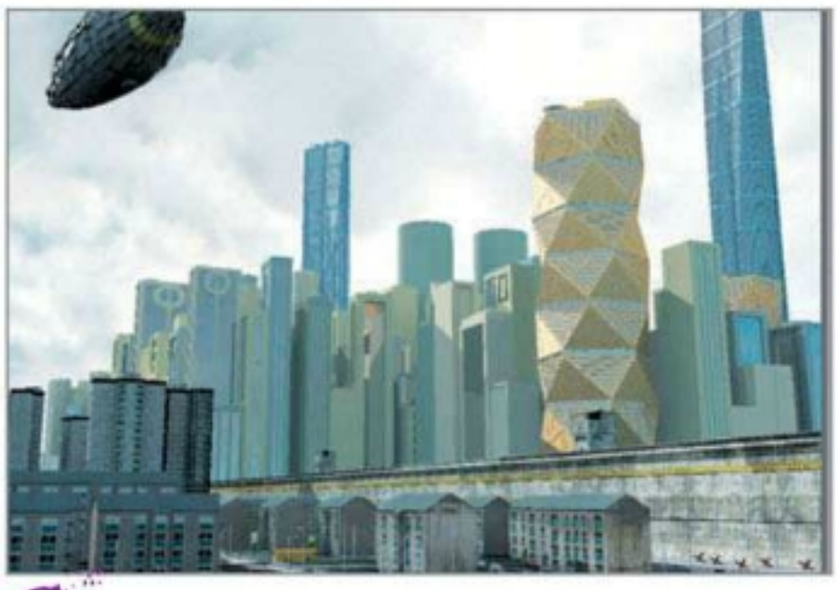
20 Into Painter I ended up with four colour renders, each with different lighting and mood. These included a clay-style render, a depth pass (greyscale with dark representing near objects and light further away), a straightforward mask, a specular pass and one that only shows where the windows and glazing of the buildings are.



21 Balance the layers I load most of my renders into Painter and paste them into one document. Along with my favourite colour image, I also use one with a blue sky (Screen 30%), the clay render (Overlay 50%) and Specular Pass (Screen 75%). I played around a lot with layer modes and percentages to suit.

22 A quick tidy up I like how the image looks at the moment, but I have to spend some time getting rid of a few niggles. There are black faces on some of the residential high flats, and the sky needs a bit of blending and smoothing. I get to work with a 2B Pencil, Rob's Basic (**tinyurl.com/robs-brushes**) and Just Add Water. I keep all this on a new layer called Tidy up.

23 Dirt and grunge The buildings on the wrong side of the wall look too clean, but a simple Google search for free-to-use dirt and concrete textures turned up some useful images. I brought them in and aligned with Edit>Free Transform>Distort. I switched their blend mode to Hard or Soft Light and reduced the opacity.



24 Atmospheric perspective Now utilise the Depth Pass. Select its layer and turn it on, then go to Select>Auto Select and pick Image Luminance. Turn off the depth layer and create a new one called Haze. Sample a colour from the sky, select the Paint Bucket tool and fill the selection and then reduce the Opacity of this layer to 40% on Hard Light.

25 Finish up Make a selection based on the Windows layer and, on a new layer with the Digital Airbrush, brighten up some of the glazing in the image. Use the Glow Brush around the edges where dark buildings meet light sky to add in a subtle, light-bloom effect. Finally, spend some time suggesting more detail on the nearer flying craft.

Digital painting

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Tim Shelbourne

Personal portfolio site
starvinginthegarret.com
Country **UK**
Software used **Painter**
Tim is an expert in many art software packages and uses decades of traditional art media experience to bring a loose, natural style to his digital canvas.

Source files available

Start photo

Mastering digital ink strokes

Flatiron Building 2010 **Painter**

> Due to its simplicity, pen drawing is ideally suited to both on-the-spot sketches and more detailed, studied studio drawings
> **Tim Shelbourne** Freelance artist

In terms of drawing materials, few are simpler or more direct than good old pen and ink. Drawing with a pen and then heightening the final drawing with a few loose washes of colour is a tried and tested technique that has been relied on throughout the history of art. And it's a method that transfers beautifully to digital.

Due to its simplicity, pen drawing is ideally suited to both on-the-spot sketches and more detailed, studied, studio drawings. Corel Painter has a wonderful range of Pen variants – but as we'll see here, one of the most important things about drawing with a pen is not the pen itself but the way that you use it to produce a variety of strokes.

Pen drawings are all about balance and contrast. By carefully taking advantage of the pen's pressure sensitivity, we can contrast very fine, razor-sharp strokes with freer, more expressive gestural strokes – and this contrast is vital to building up a sense of depth and movement in the scene.

It's also vital when drawing with a pen that you develop a kind of 'visual shorthand', where detail is indicated rather than described mechanically. In a pen drawing it's important that every line has personality and energy. It doesn't matter if a few of your lines are a bit wiggly or thicker in some areas than others. What can be classed as imperfections are actually vital in creating a lively and engaging image, as opposed to a flat tracing.

In our tutorial we are using a photo of the Flatiron Building in New York. The bustling streets of Manhattan are visual fodder for an energetic pen sketch and the architectural oddity of this particular building adds even more interest. You'll discover how to create an initial sketch from a photo and then how to apply the Pen brushes in Painter. We cover creating all the tell-tale signs of a good pen and ink image, including splats and dribbles, before applying a quick wash of colour.

You'll find the start photo on the disc in addition to a bonus photo of the Empire State Building.

Setting the scene

Sketch out your ideas

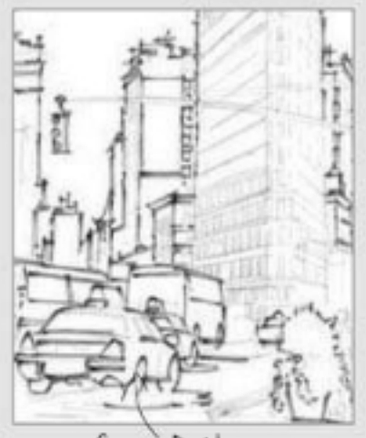
01 Prepare to draw Before you even begin to use any inking work, it's always a good idea to first make a simple pencil outline sketch to act as your guide throughout the drawing. Start by making a quick clone of your start image and use the Real 6B Soft pencil to create a light outline sketch.

02 A quick sketch Don't go into too much detail here. Just something simple will do fine, outlining and placing the main components within the image itself. Resist the temptation to trace too closely – we simply want to capture the essence of the scene.

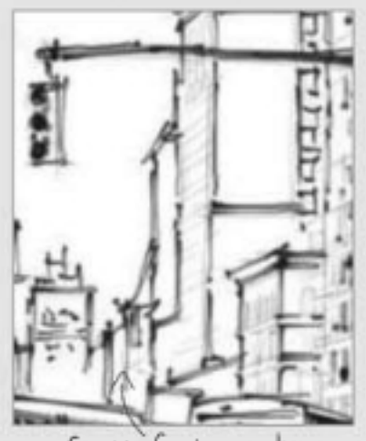
Working Progress

Learn to use the Pen tools in Painter

Step 2, A quick sketch



Step 6, Doubling up



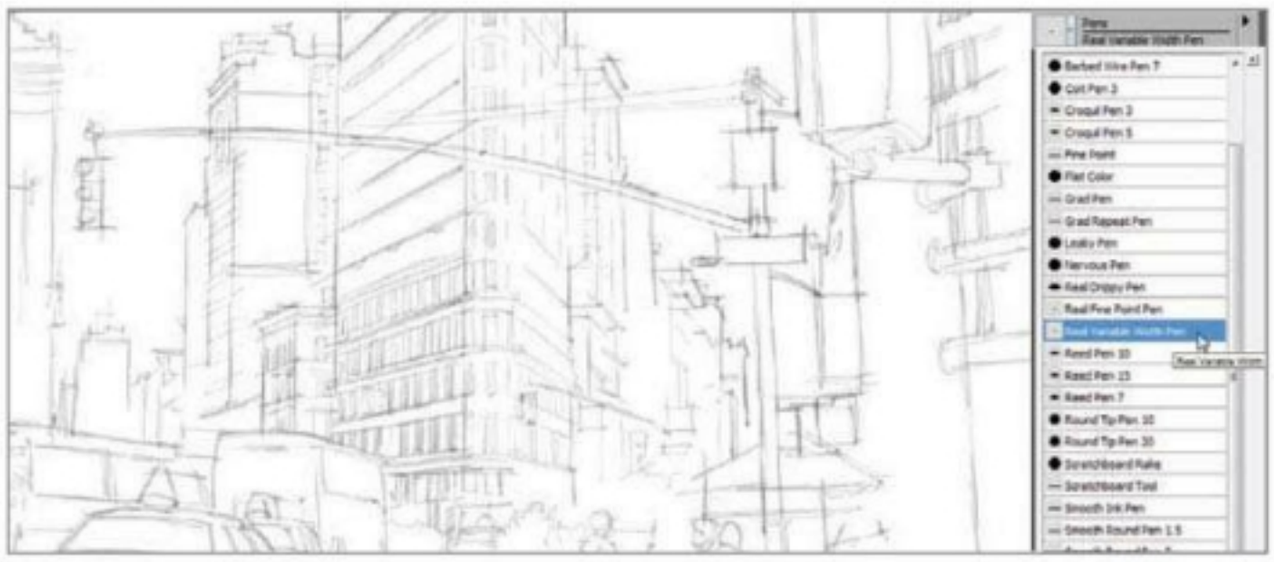
Step 14, Spontaneous line

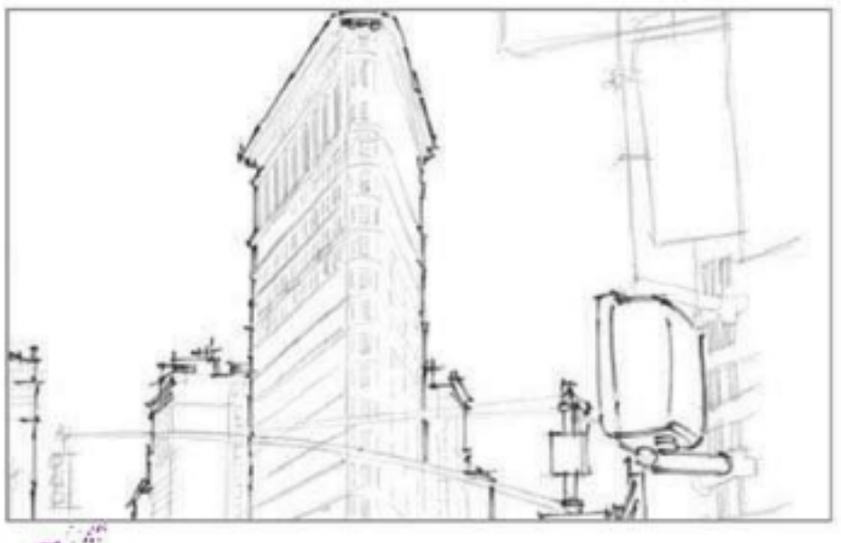
Step 19, Happy accidents

Keep things simple

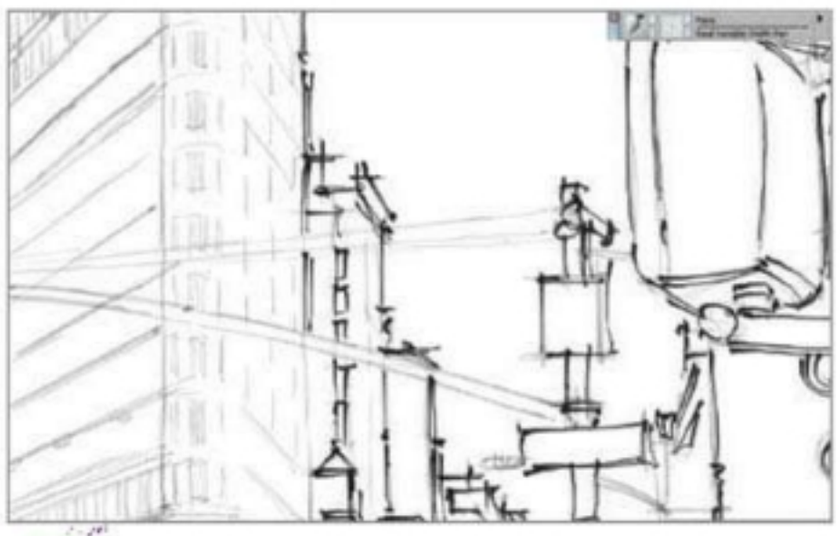
Create an impression rather than focusing on too much detail

03 Choose a pen With your pencil sketch completed, click the Tracing Paper button to hide the image and add a new layer. Now choose a near-black for the Foreground swatch and choose the Pens category of variants. We want to start with a foundation of very fine lines here, so choose the Real Variable Width pen.

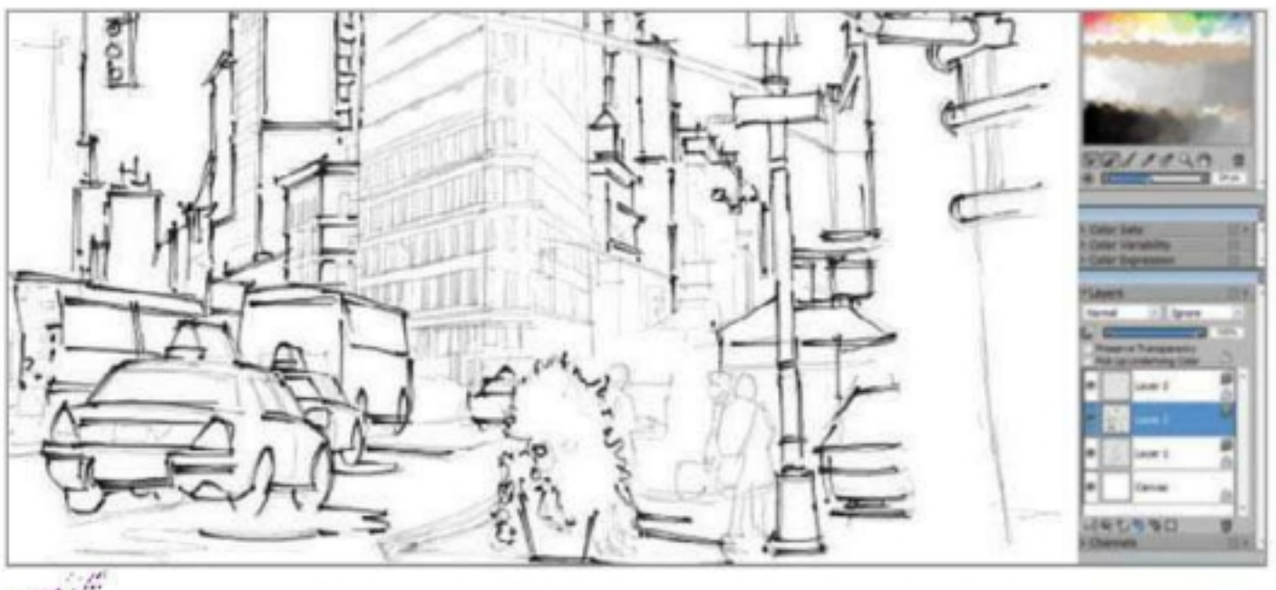




04 A simple outline First focus on the outlines of the buildings. This pen is very responsive to pressure, so use it at a slightly larger size than you're comfortable with and very light pressure on your stylus. This means you can go from a needle-fine stroke to a slightly heavier one with just a little more pressure.



05 Visual shorthand It's important to indicate rather than draw mechanical outlines. Work quickly, developing a kind of visual shorthand that expresses outlines in a simple way. Broken outlines are good – much better than perfect, straight lines.



06 Doubling up You're simply building a framework for further drawing here, so continue to loosely outline all the major components in the scene. Very fine double lines work well in places, so use these here and there to bring a spontaneous and sketchy feel to the drawing.

Style School
Art genres in a nutshell

Ink and wash

A major player throughout the history of art

Hung-Jen
Endless Rivers and Mountains 1661

● For centuries, Oriental art has relied on ink and wash. Although the artist used a brush here, the sinuous, fluid lines can be an inspiration, even when depicting our very modern subject.

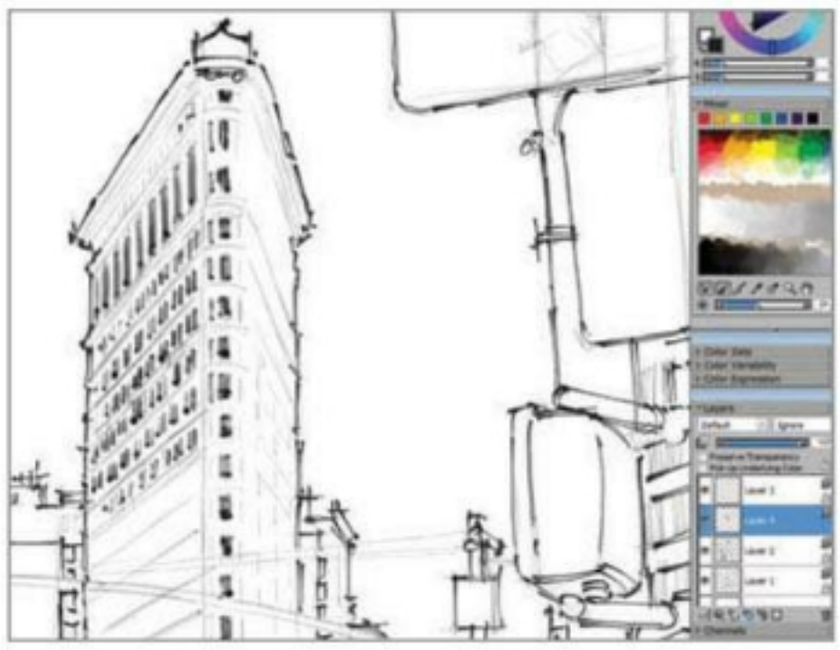
Jacques-Louis David
Napoleon's Arrival Before the Town Hall 1805

● Ink and wash has been used for preparatory sketches by many artists. With such a direct medium, it's ideal for establishing the subject and describing the play of light and shade.

Arthur Rackham
Giants and Freia 1911

● As in this Rackham example, ink and wash is also perfect for finished, precise illustrations. Rackham's mastery of line is evident here in the depiction of many forms and textures.

07 Indicated detail In pen work, the trick is to give the impression of detail without mechanically drawing around every single detail in the scene, so for the myriad of windows in the main building we need to choose a suitable pen. Select the Thick and Thin 5 variant, and via Window>Brush Controls>Size set the Minimum Size to around 40%.



08 Embrace the blobs! This pen works with ink at varying opacity, dependent on pressure, which is ideal here. Start to add in the indicated windows with short, fast strokes, ending with more pressure on your stylus. Make the most of the little 'blobs' that varying the pressure on this brush can produce here, and indicate the windows very simply.

09 Darks for balance At this stage it's very important to begin establishing the darkest darks in the scene. Choose the Scratchboard tool from the Pen variants. Once again, use the brush at quite a large size, controlling the width of your strokes via the pressure you use. Your strokes should follow the contours of the forms, such as the figures.

10 Getting bold To define the foreground elements from the features in the distance, use this brush to emphasise the outline of the foreground objects such as the signpost and the signs. Once again, use short swift strokes, paying close attention to the pressure you apply to the stylus. Use very light pressure to add lots of very fine contour lines here.

11 Simple is best For small areas of foliage, use lots of curved, descriptive strokes and dashes with plenty of pressure, quickly lowering the pressure as you stroke, to end in very fine points. Again, we're using this kind of visual shorthand to give the impression of foliage rather than carefully drawing every single leaf.

12 Follow the contours Following contours is the key to successful pen work, so where you have a flat vertical surface such as within the vehicles in the foreground, make sure to use plenty of vertical strokes placed closely together. Once again, indicate fine details by using very little pressure on your stylus.

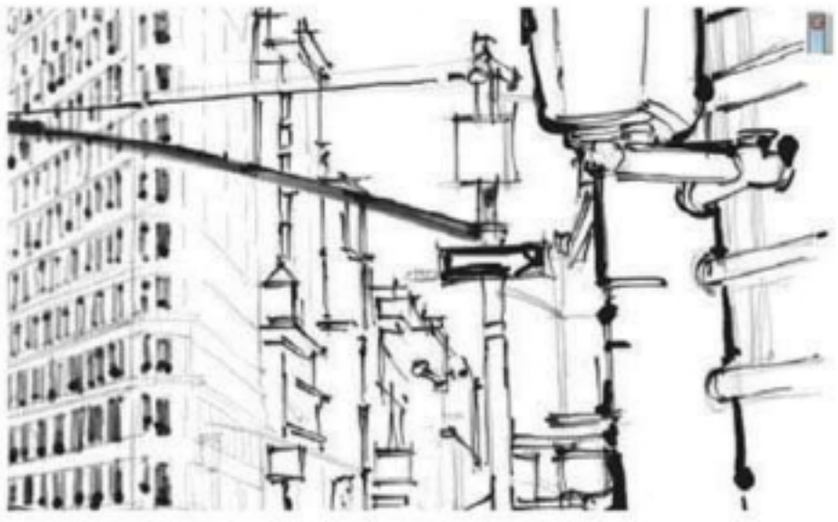
The wonder of washes

Pen drawing can really benefit from the addition of a little colour and tone. You can add this with some simple washes. First use the Runny Wash Bristle brush from the Watercolor variants to add overall subtle washes of colour. Remember to keep these washes light, just suggesting the local colours within the scene. On top of this, you can use the Broad Water brush from the Digital Water variants to add sharper strokes of colour, giving the scene more form and substance by adding darker shadow tones within the scene itself. Don't paint too much detail!

Bring the city to life

Refining your pen and ink masterpiece

13 Mess it up To stop a drawing becoming mechanical, it's often good to have a few more random strokes in some areas. Choose the Leaky pen from the variants. This pen places lovely random spots of ink around your stroke, and used at a small size here, it can add a little confusion and interest to darker, more textural areas such as those around the foliage.



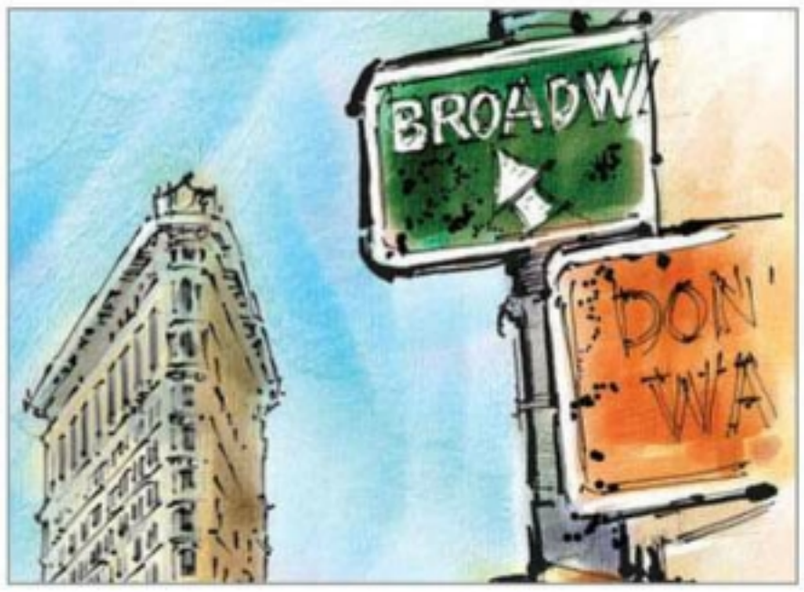
14 Spontaneous lines Return to the Real Variable Width pen. For descriptive areas of contour detail within the foreground elements in the scene, it's good to develop a technique of drawing quickly and continuously, without lifting your stylus from the surface. This will result in energetic, sinuous lines that will add a sense of spontaneity to the drawing.

15 Economy of line Because we'll depend here on the washes and dabs of colour to build tone, there's no need for any solid areas of shading with the pen. However, choose one of the small Croquil pens, and with a few sharp incisive lines, indicate areas of contour and detail in the distant buildings.

16 Sharpening up Now it's time to get back to the main building, so once again choose the Real Variable Width pen. At this stage we need to clarify the detail in the building a little. Start by establishing a few of the perspective lines between the rows of windows. The quicker you draw these lines, the straighter they will be.

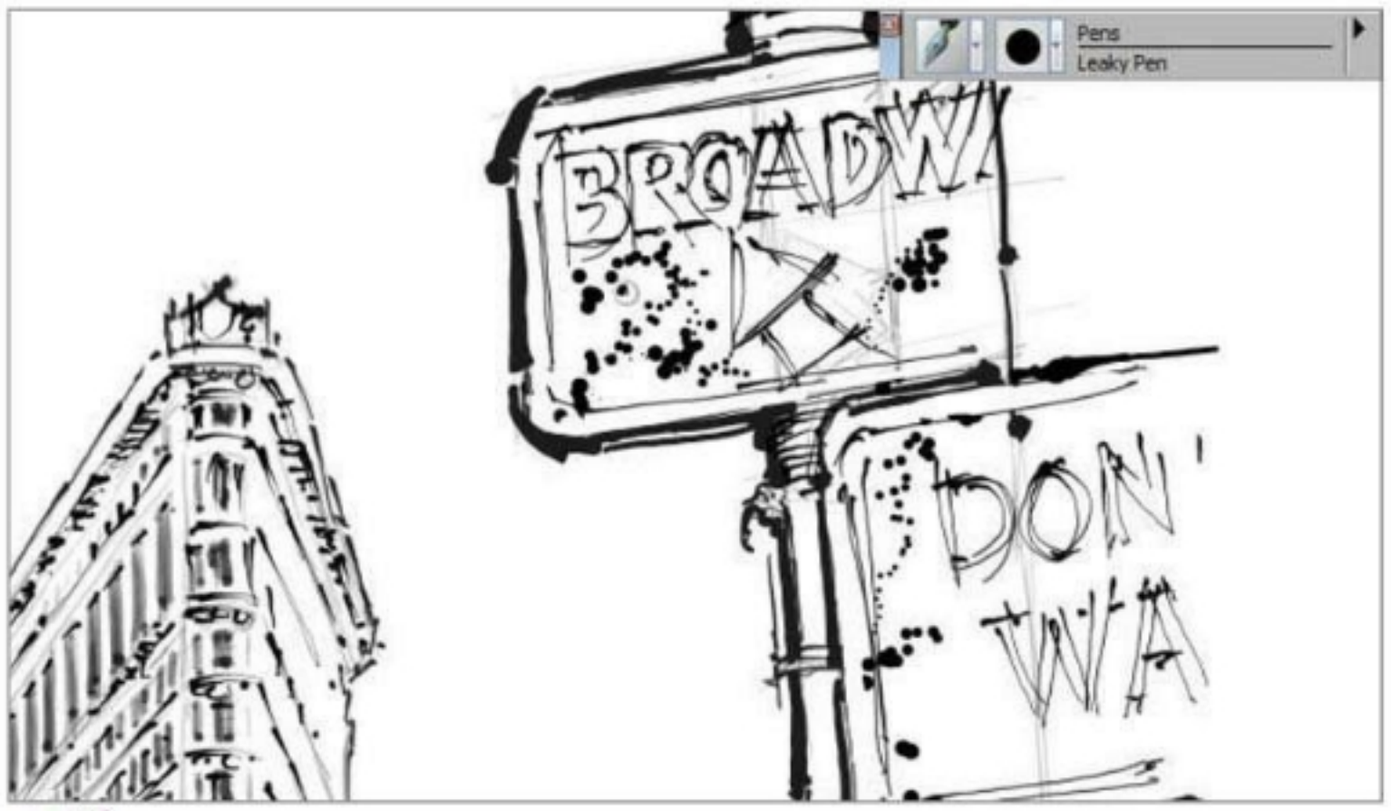
Using white

As well as using black to actually draw with when working with pens, it might be surprising that white can be very useful too! Using white with your pen can be very handy for breaking up very dark areas where you might have become a bit too heavy or enthusiastic with your black line work, and this applies especially when working digitally as we are here. Using white with the pen is also very useful for adding clarity and space within areas such as the lettering on the signs at the very end of the drawing process, when you've applied the colour washes.



17 Resolve the details Now you can begin to clarify the distant windows. This is a simple case of adding a few sharp strokes here and there to sharpen up some of the hard edges around each window. You can also indicate the small decorative elements around each window, using very little pressure to sketch in quite simple shapes.

18 **Love those letters!** The lettering on the foreground signs can be indicated very simply and broadly with fine, fluid lines. Use deft, energetic strokes here rather than trying to draw each letter carefully, giving the lettering a sketchy, casual and quite indistinct appearance.



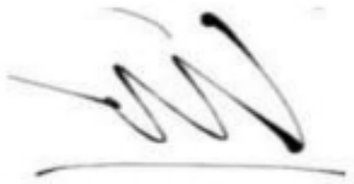
19 **Happy accidents** Add further shading and interest to the signs by using the Leaky Pen variant again to add a little more rough ink detail to the signs' surface. Although this creates quite a random pattern, these marks create an effective 'accidental' feel to these areas.

Ink in other programs

Although we've used Corel Painter in this project, you'll find brushes in a number of other programs that can be used effectively for simulating natural pen strokes. Essentially, any sharp brush that can use pressure sensitivity in terms of size can be used in a pen and ink sketch. Photoshop in particular has a group of Calligraphic brushes that work very well, and also a Rough Ink variant. Corel Sketchpad has the excellent Inking pen and pen variants, which are very responsive in use and can produce excellent results. Even Corel Paint Shop Pro has a really effective Calligraphy brush that is very responsive and capable of being used for really fine pen drawings.

Photoshop brush

PSP brush



Sketchpad brush

20 **Review and refine** Take your time now to review the drawing from a distance, and use the Real Variable Width variant to add any final touches of detail. Leaving the original pencil sketch layer visible adds to the natural media feel, but you can reduce its visibility if needed in the Layers palette.

Tessellating shapes

Use Painter's unique Make Tessellation tool to add geometric abstracts to all kinds of painting and illustration

Source files available

SketchUp model

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Joe Cummings

Personal portfolio site **cummingsillustration.com**

Country **UK**

Software used **Painter, Photoshop, SketchBook Pro, Illustrator**

I have been working for 20 years as an editorial illustrator for UK newspapers and magazines with an emphasis on caricature. I started out with pen and ink but discovered digital art about five years ago. To be continued...

TESSELLATING SHAPES

Digital painting

New World Cathedral 2011 **Painter, Photoshop, SketchUp**

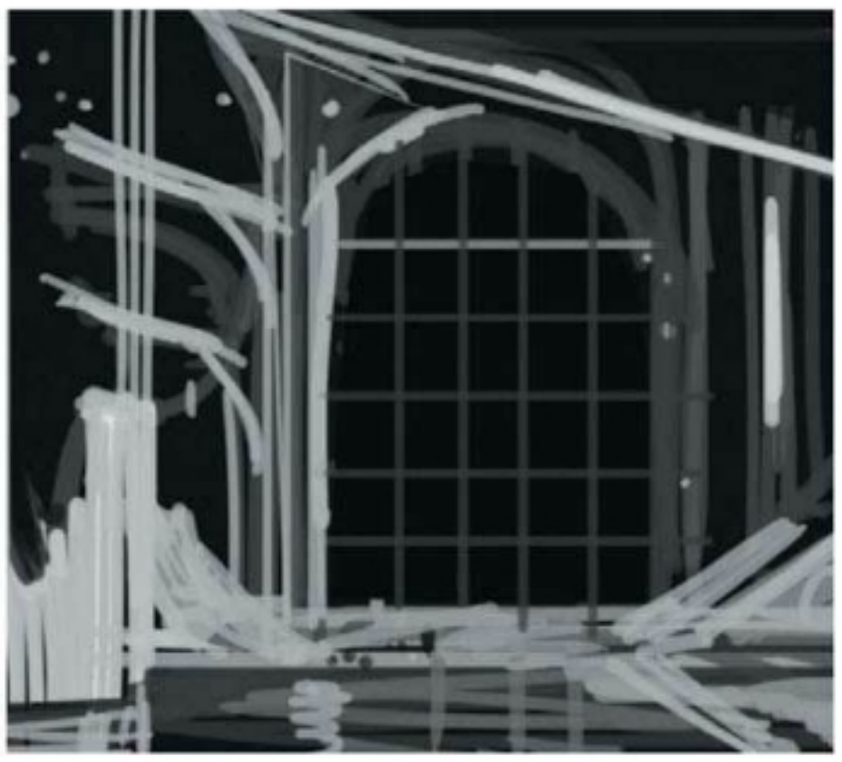
"Painter's Make Tessellation tool can be employed to add bold colours and strong design elements to your image for an inspired architectural scene"

Joe Cummings Illustrator

If you want to create the appearance of tiling or a mosaic in your painting, Corel Painter provides you with two very useful options; the Make Mosaic and Tessellation tools. The Make Mosaic tool enables you to paint mosaic brushstrokes (or lines of tessera, as the individual squares are called) onto the canvas, while Make Tessellation is more like a filter that affects the whole image. There are a few features that both have in common, but it is how to work with the tessellation features that we are going to concentrate on in this tutorial.

A tessellation is a pattern of interlocking shapes that fill a surface without gaps or overlap. There are many well-known examples in art, design and architecture, ranging from the intricate and beautiful decorations of the Alhambra Palace in Spain to MC Escher's clever, mathematically inspired tilings of morphing animals and everyday objects. There are also countless examples in nature too. Look closely at the ribbing of a dragonfly's wing, the texture of a pineapple or the strange hexagonal columns of the Giant's Causeway in Northern Ireland. Painter's Make Tessellation tool enables you to easily replicate these patterns.

The best way to apply the tool is to simply assign your image as the Clone Source and, from the Make Tessellation dialog box, choose Tessellate from Clone Source. This will turn your image into a mosaic. But that's not what we are after here. The Tessellation tool when used in conjunction with the options of the Make Mosaic feature provides you with more room for expression by enabling you to increase the density and size of the tiles as well as giving you the ability to colour each one individually.



01 Where to tessellate?

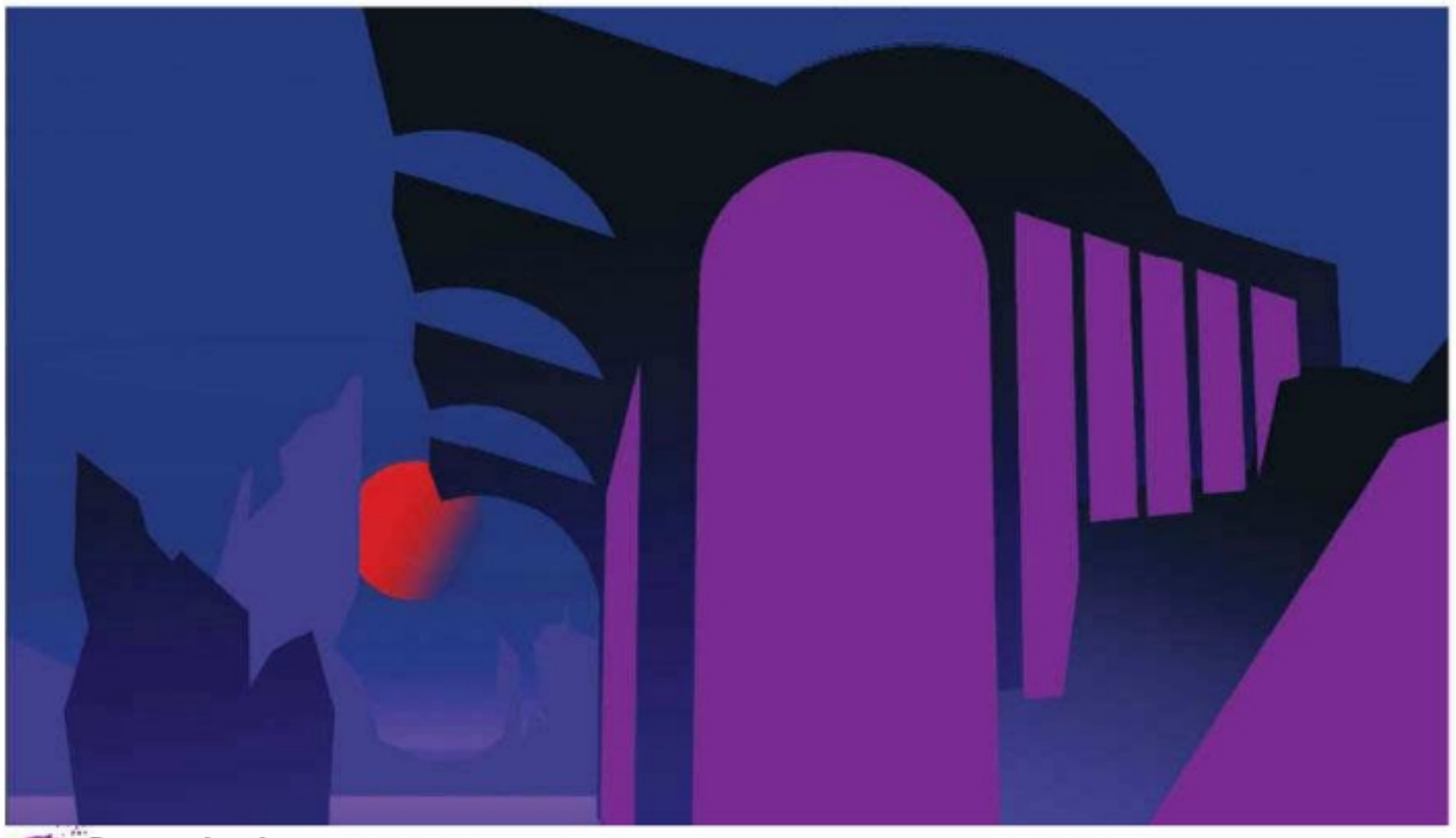
The aim of this tutorial is to paint a landscape containing a prominent architectural feature in order to house some interesting examples of tessellation. After running through some thumbnail ideas, I settled on something resembling a cathedral, perhaps on another world or even from our own future. This building will have large stained-glass windows that are reflected in a surrounding scene of water.

02 Start in SketchUp

Google SketchUp is great to quickly carve out 3D models for references. I won't describe the steps here, but I recommend you try this program. I made a simple shape, inspired by Notre Dame Cathedral, pushed in some recesses for windows then copied it several times.

03 Basic shapes

Having arranged the lighting and found a low angle, I exported a 2D render into Photoshop. I then used the Polygonal Lasso tool to trace around the building and create all the basic shapes on their own layers. Each shape was then filled. Using the Levels command, I adjusted the values of the different objects to create distance.

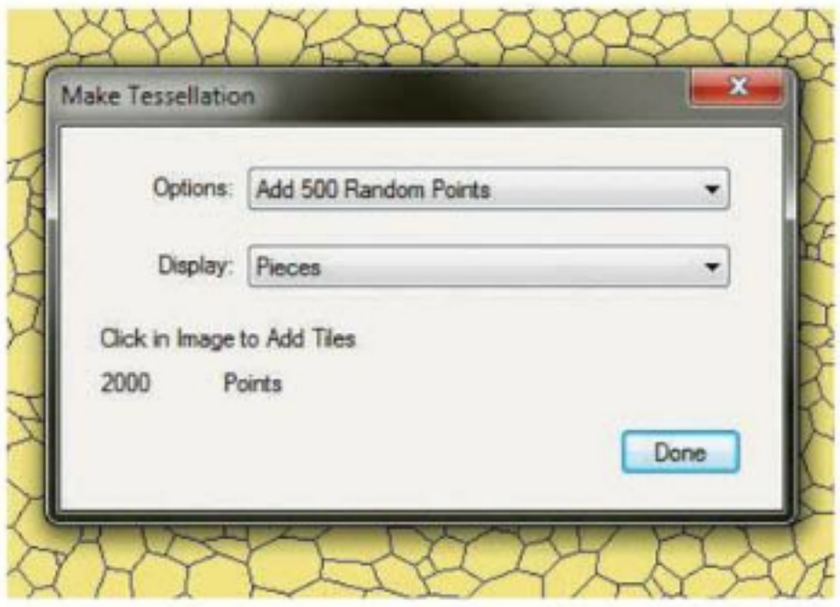


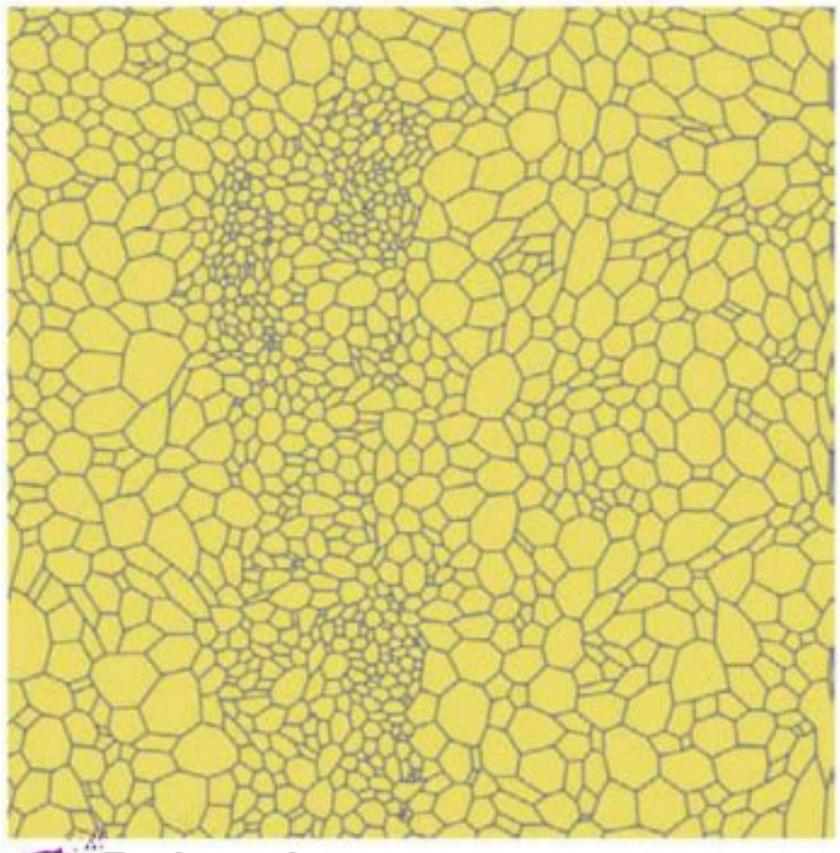
04 Save selections My big plan was to fill the windows of the cathedral with a colourful tessellation, therefore it was helpful to have the shapes of these windows on a separate layer. You could also save the selections as alpha channels.

05 More atmosphere For the sky, I made a series of long horizontal shapes with the Lasso tool, erasing sections to make it look more atmospheric. I then reduced the Opacity to 10%. On a new layer I used the paintbrush to rapidly draw contrail-like lines of different thicknesses. Again I reduced the opacity and merged these layers with the background.

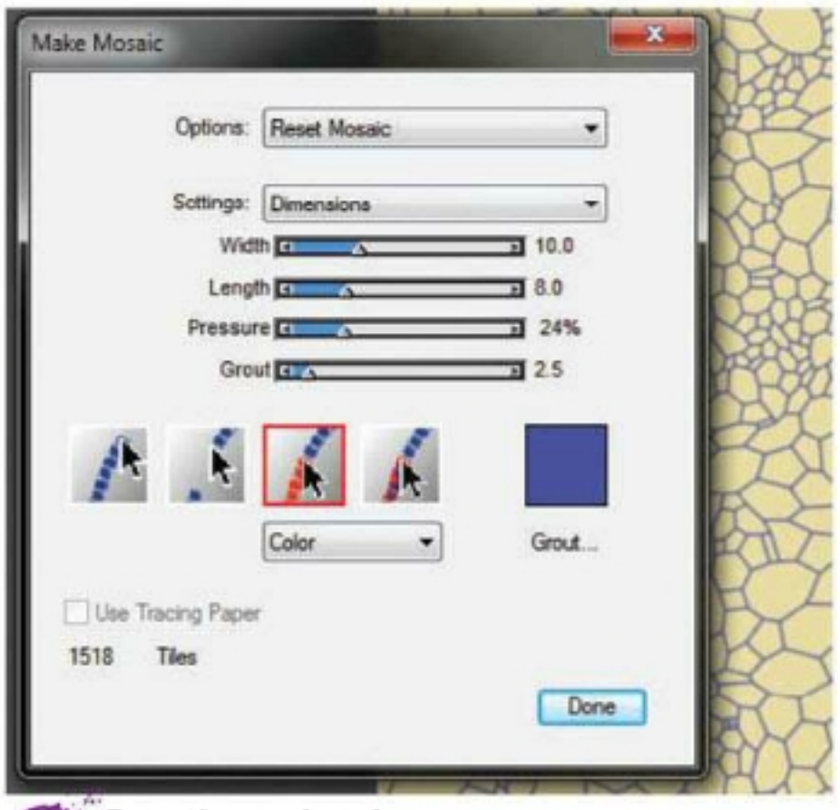
07 Esoterica For the tessellated windows, I opened a new canvas, went to the Effects menu and selected Esoterica then Mosaic. I adjusted the size of the grout (bottom slider) that appears between tessellations. There is always a certain amount of trial and error involved, but for my purposes I chose a value of 2.5. I also picked a colour before hitting Done.

08 500 points Next, I chose a light yellow for the canvas background and opened the Make Tessellation dialog, also found in Esoterica. I selected Pieces from Display. There are several ways to add tessellations, but I chose Random Points. If you want more than 500, keep adding a further 500 points.



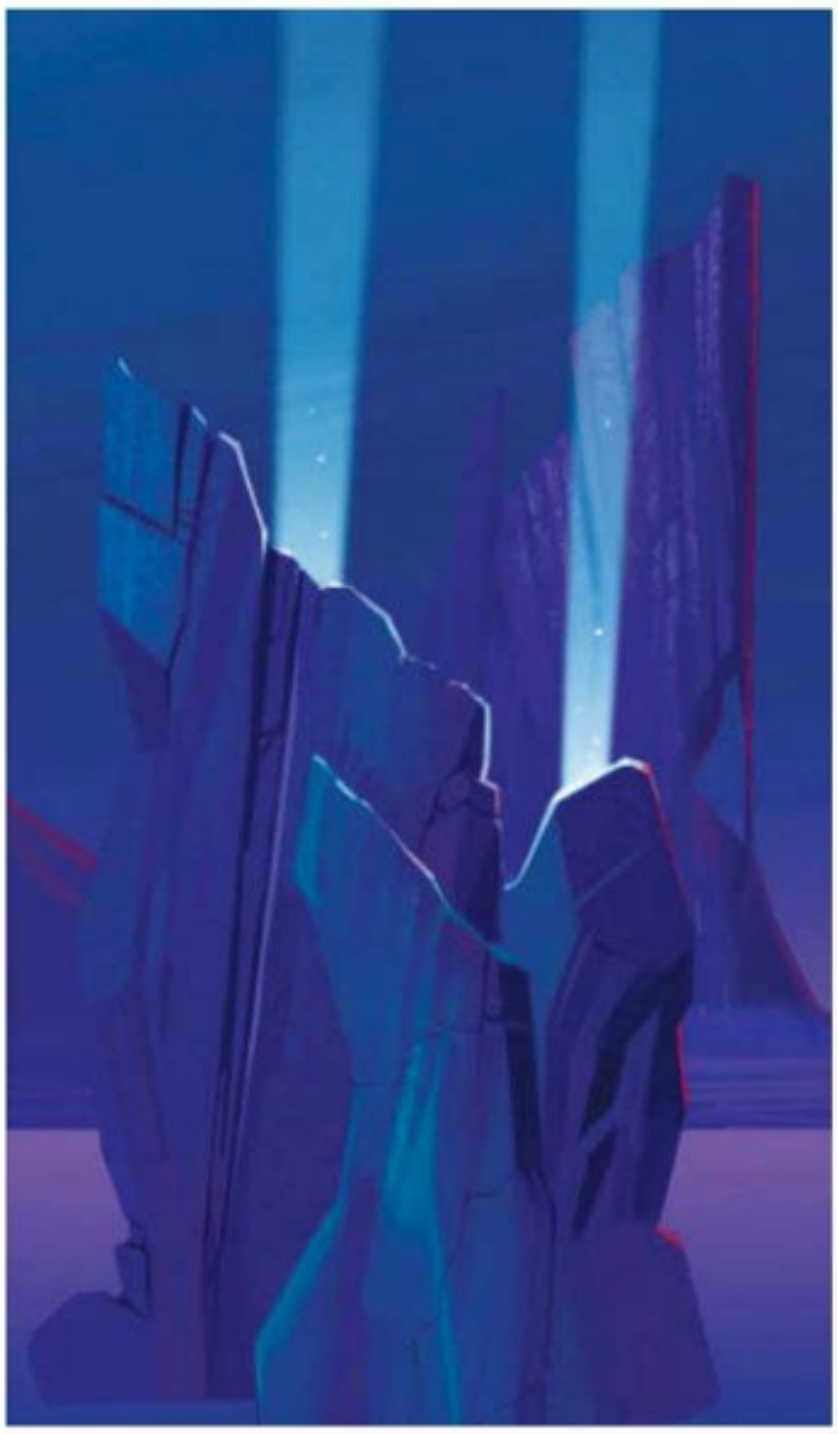


09 Further points I dragged the Make Tessellation dialog to the side to see the whole canvas. You have the option to either draw some strokes on the canvas to add more points or, as I did here, click continually to increase the density in particular areas. I gradually created the outline of a gaunt figure.



10 Creative colouring Now I reopened the Make Mosaic dialog and selected the Change Tile Color tool (third from the right). The drop-down menu gives you option to change the colour or darken, lighten, tint or vary the tiles you have created. These options add the necessary creativity and expressiveness to liven up the tessellation process.

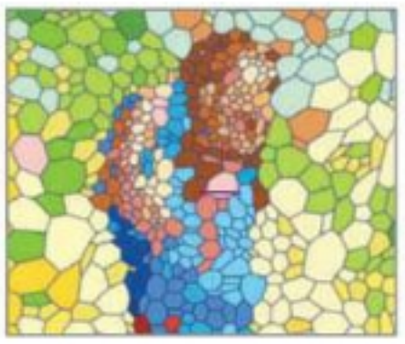
06 Cracking rocks I opened the image in Painter after adding some light beams by blurring long rectangles and using Distort to adjust the shapes. In Painter I set about painting the landscape and rocks using Acrylics for blocking out, Pencils for cracks and, finally, a Hard Chalk and the Eroded Pavement paper texture to easily reproduce a stone appearance.

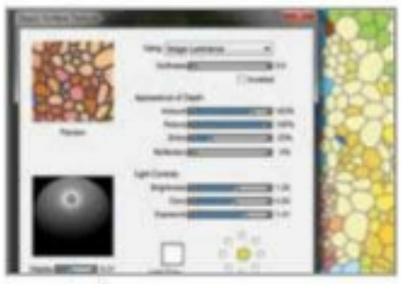


Change the composite method

I have been using Painter since version 10 and always found it very frustrating that when I tried a composite method for a layer, the menu would immediately close. In Painter 12, however, you can use the arrow keys to scroll through them.

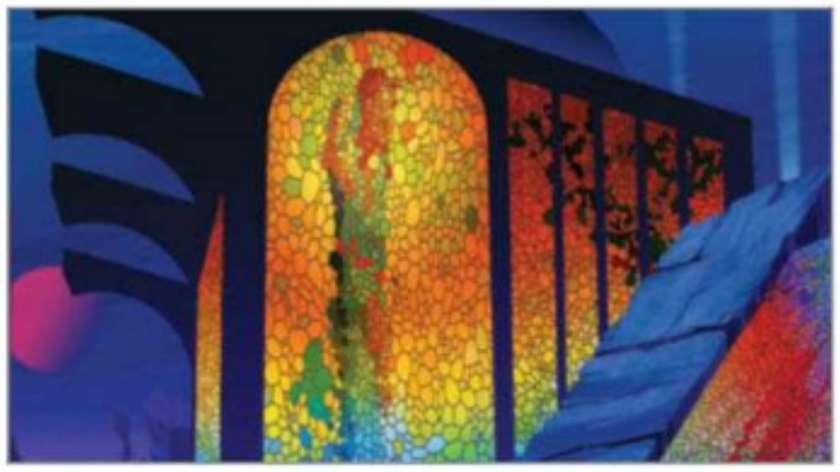
11 Modify It's important to bear in mind that once you have made a tessellation you cannot alter it. You can, however, modify the colour of the tiles and grout through the Make Mosaic dialog box. My figure does not need to be too precise, so with everything in place I hit Done.



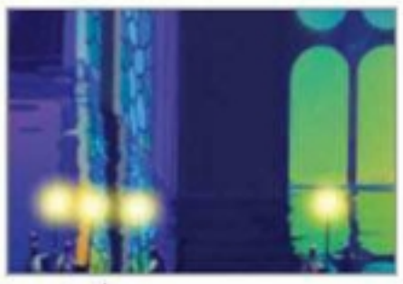


12 Surface control To turn the grout into lead for a stained-glass window, I opened Apply Surface Texture from the Effects>Surface Control menu. Selecting Image Luminance from the Using drop-down menu will create the illusion of hard, three-dimensional leading.

13 Transforming windows I created several more tessellations and saved them as JPEG files. I then opened them and dragged each into my painting. Using Free Transform and selecting Distort from the Property Bar, I manoeuvred each tessellation into each window recess and changed the composite method to Overlay. I used the window shapes created earlier to select and trim the tessellations.



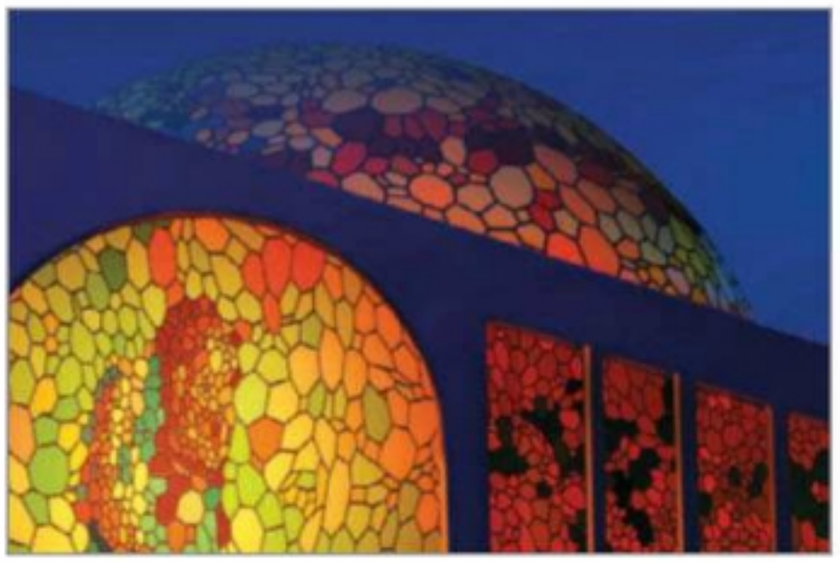
14 Ripple effect Duplicate parts of the image, flip them and knit together using Distort for ripples. In *Advanced Painter Techniques,* Don Seegmiller explains how to create a ripple by using Focus>Glass Distortion, but you can paint the waves manually if you are crazy enough not to own it.



15 A sense of scale I needed to draw in some figures to give a sense of scale to the painting. I used a 2B Pencil and quickly roughed in some small, robed figures holding staffs onto the platforms. I decided to change the staffs to torches and added some appropriate highlights with a soft airbrush.

16 Inspiration While looking over the artwork I wondered if the architect of this building had looked to the surroundings for inspiration. I decided to add a tessellated pattern to the extraterrestrial rocks by overlaying some simple tessellations set to Multiply, employing the same method as the windows. I erased parts with a soft eraser.

17 Spherize I reused a window tessellation for the dome but first I opened the JPEG in Photoshop, made a circular selection and used Filter>Distort>Spherize, first at 100% and then again at 50%. Ensure that the size and resolution fit the scene. I finished by overlaying a blue gradient.



Dissect an image

Art structure explored

1 Heart of the painting Although your eye may be drawn to the figures, the real focus of the painting is the glowing windows of the building. The Make Tessellation tool combined with my SketchUp source made this job so easy.

2 Overhangs Oddly enough, this is the part of the painting that I am most pleased with. The overhangs lead the eye nicely onto the jutting rocks, but the addition of the reflected light really opens up the painting and helps to highlight the marble.

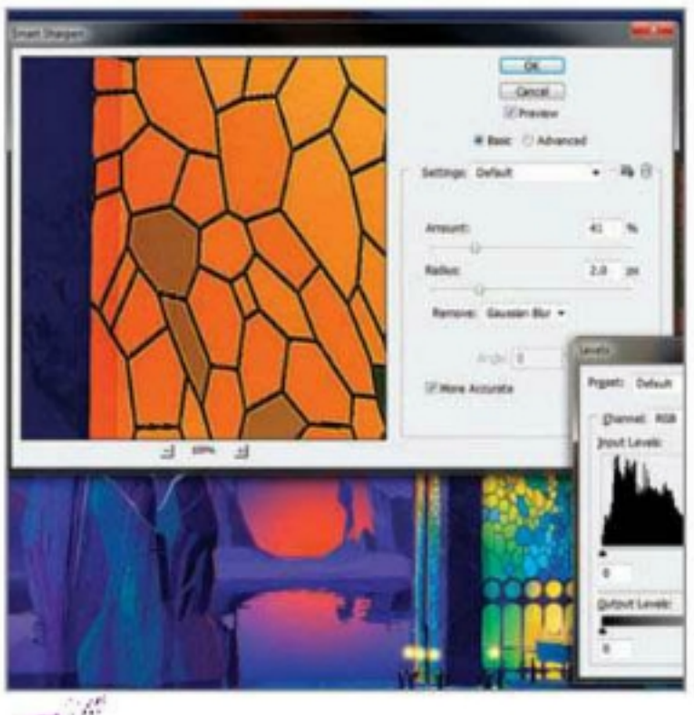
3 Alien sky I needed to have a plain background to the monumental and colourful cathedral, so a large area with a few indications of stars was perfect for the job. I did initially have a planet in the background but decided to remove it.

4 Scale These little figures are what indicate the scale of the building. The trick was to keep the detail to a minimum but include enough elements to get the viewer wondering. The addition of the glowing lamps helps, I think, to resolve this issue.

5 What, no waterfall? I wanted to have a water feature – a gently cascading waterfall trickling into the lake. In the end, due to lack of time, I decided against it, instead opting to add some more tessellation at the fore to lead the eye in.

18 Lighting highlights At this point I went round the painting checking how the light fell on each surface. The flat rocks at the side of the building sat unnaturally blue against the colourful windows, so I needed to paint in appropriate tones with a Chunky Oil Pastel at a low Grain setting. I also painted in some rim highlights around the other rocks.

19 Marbling The underside of the cathedral overhangs also needed some reflected light. I carefully painted in some dark orange with the SketchUp reference as a guide. The added light really enhanced the impression of volume on the square building. I finished off by importing some marble texture set to Multiply and used Free Transform to achieve the correct perspective.



20 Sharpen Finally I opened the file in Photoshop and, holding down Ctrl/Cmd+Shift+Alt/Opt+E, I duplicated the whole image on its own layer. With this layer selected I used Smart Sharpen and Levels to enhance the overall appearance of the now finished painting.

Illustration

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Joe Cummings

Personal portfolio site **cummingsillustration.com**

Country **UK**

Software used **Painter, Photoshop, Illustrator, SketchBook Pro**

I enjoy discovering and learning digital art programs, both 2D and 3D, in order to be able to find the best solution to each project. As a long-time traditional illustrator, I find I can work much faster and more creatively this way.

THE ROYAL BOROUGH OF GREENWICH

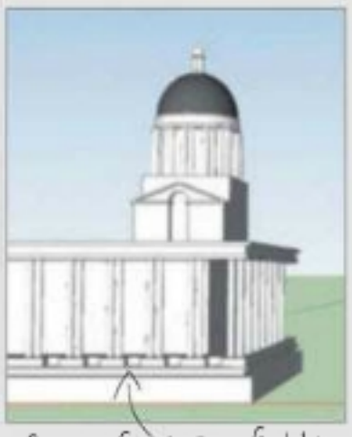
WORLD HERITAGE SITE

2012

Add effects with Esoterica tools

Working Progress

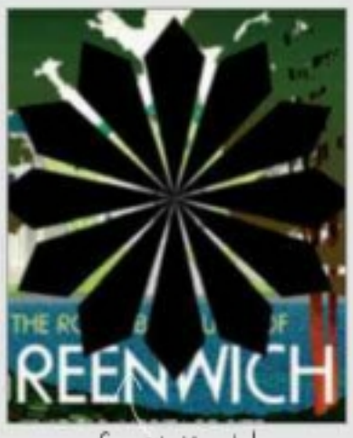
Use Painter's Esoterica effects for bold images



Step 05, Sketch from SketchUp

Step 11, Van Gogh clone

Step 17, Warp in Photoshop



Step 24, 12 petals

Esoteric Greenwich 2011 **Painter, Illustrator, SketchUp, Photoshop**

"This tutorial aims to show that Painter's effects, when used sensibly, can enhance and speed up your project"

Joe Cummings Illustrator

No one can accuse Corel Painter of being light in the tool department. It has, arguably, the most comprehensive set of artist's brushes of any digital painting program. It also boasts a powerful set of editing tools and filters, although in this department it faces stiff competition from the mighty Photoshop. Nevertheless, it is worth taking some time to delve a little deeper into this side of Painter, especially the oddly named set of effects that fall under Esoterica.

The temptation to focus solely on creating artwork using Painter's amazing brushes is understandable, but occasionally precious time can be saved if there is an automated alternative. Given that many of these effects are random and unpredictable, there is the added bonus of finding new ideas and inspiration from unexpected results.

So what does Esoterica have to offer? Growth is a useful tool for creating an organic, branching image, great for stylised trees and plants. It can also be used for cracks and lightning. Mosaic is self explanatory and very effective.

Tessellation will effortlessly produce complicated tilings that can help with designing stained-glass windows or paved roads. Auto Van Gogh will spread Vincent's distinctive swirling brushstrokes over your selection and Pop Art Fill will add a dotty texture for those times you want your image to resemble an old-fashioned screen print. Realistic marbled paper can be created with Esoterica's seemingly daunting Marbling effect and, finally, should you require a maze, Painter provides a one-click solution.

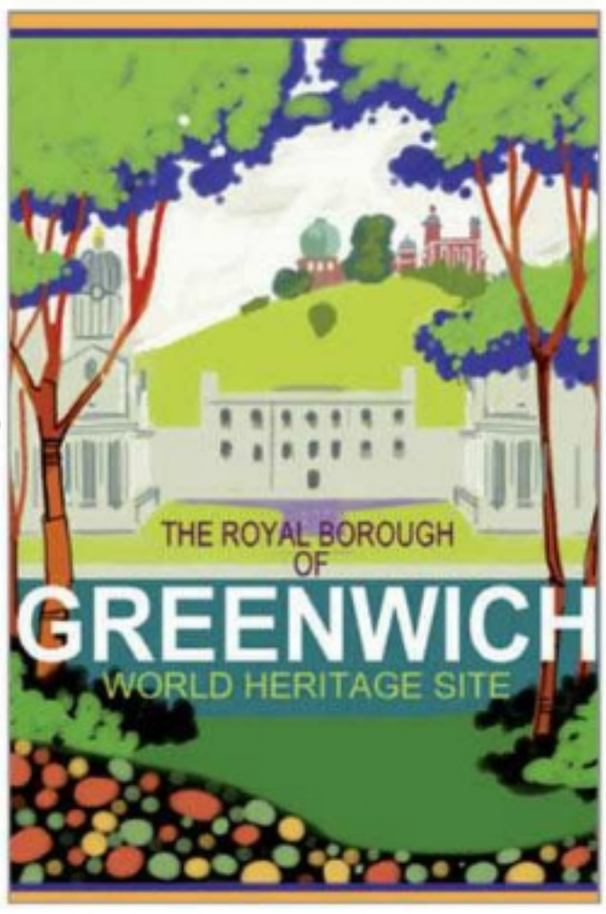
This tutorial aims to create an stylised poster design, similar to the old London Transport underground posters, using as many of the Esoterica effects as we can to really get to grips with these features. Hopefully it will show that, when properly targeted, the effects are easy to use and can help to enrich any image.

Introducing Esoterica

Use Painter's effects to seriously speed up your workflow

01 Glorious Greenwich

The London Transport Museum has an archive of old posters. These illustrate the places of interest served by each tube station. In order to create a similar design, I took advantage of my own spectacular London surroundings in Greenwich. Christopher Wren's glorious architecture, the river and Greenwich Park are an ideal source of inspiration for my own poster.



02 Fill the canvas

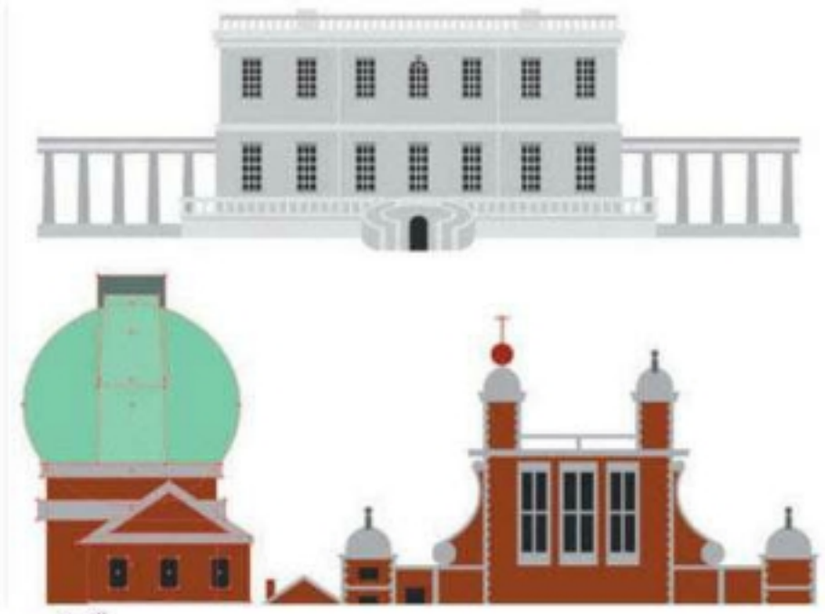
I opened a new file and filled it with a gradient to hide the white. Make sure Two-point is selected in the Gradient Library or Gradient Control window, and that the Angle slider is set to 90 degrees. Select Edit Gradient from the drop-down and choose appropriate colours. Use the Paint Bucket to apply.

03 Light source

Another way to create a gradient-like background is to fill the layer or canvas with a flat colour and apply a light source. From the Effects Menu, select Surface Control>Apply Lighting. Various options are open to you but I chose a simple Gradual Diagonal.

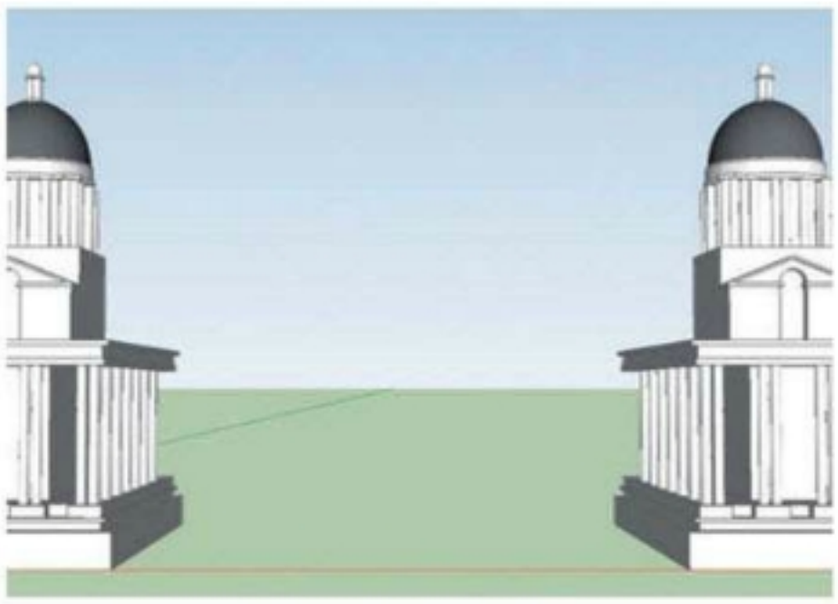
Bring in the buildings

Combine different programs in your workflow



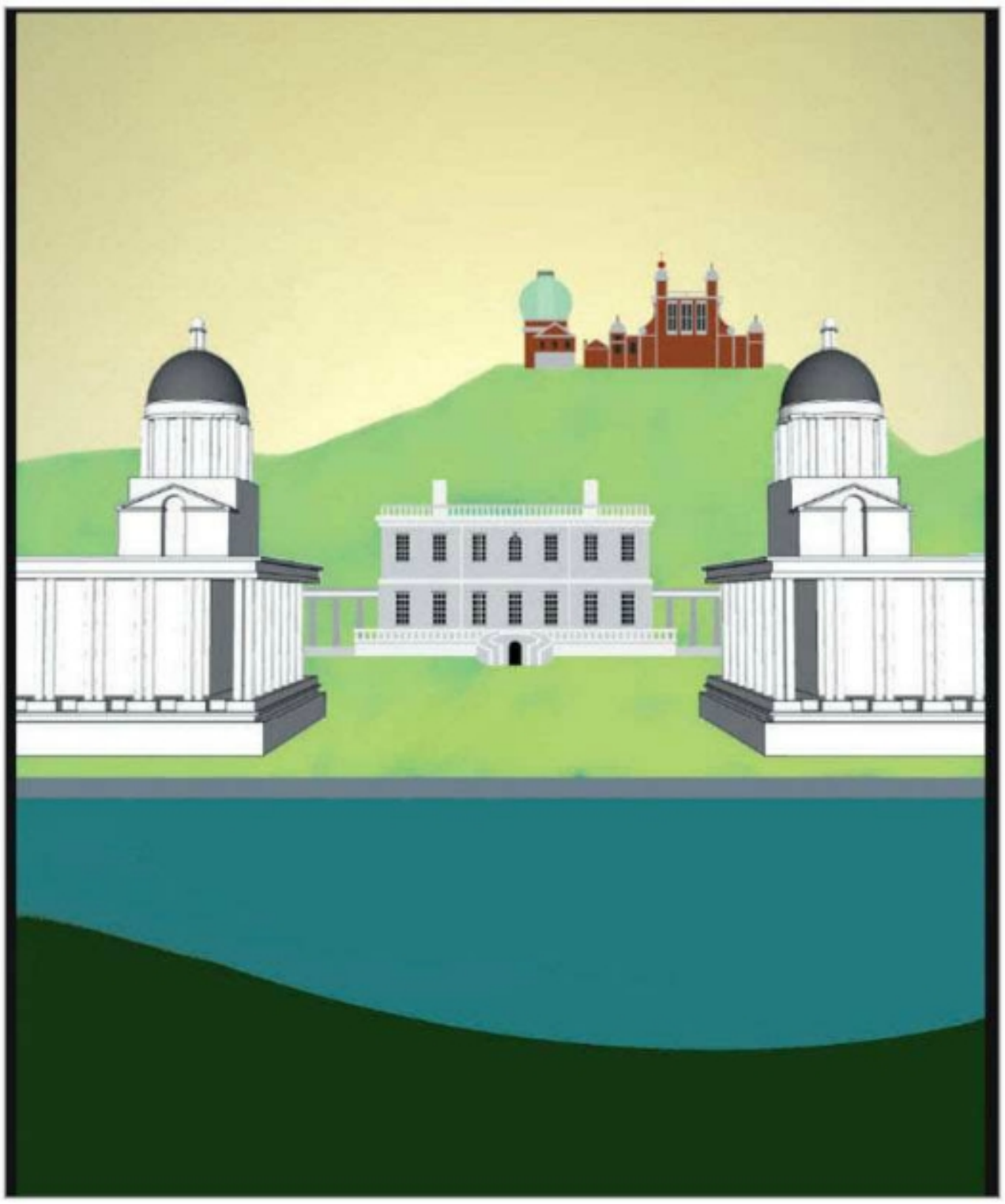
04 Use other software In this illustration, the Royal Observatory (on the hill) and the Queen's house are in the background and can be drawn as basic elevations. This can be done quickly in Illustrator as I did here, but, of course, can easily be drawn or painted inside Painter itself.

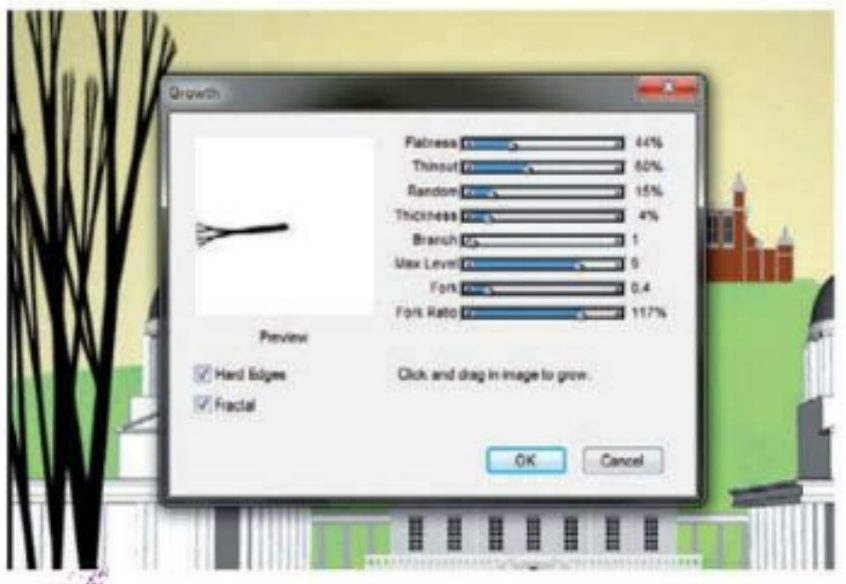
05 Sketch from SketchUp The Royal Naval College building is a little more challenging. Again, it can be rendered directly in Painter, but I find that Google SketchUp is a great resource for creating your own 3D references. The ability to alter viewing angles is enormously valuable.



06 Build the composition I gathered all the pieces together and, using the rough sketch as a guide, placed the buildings in the appropriate places. It's important to pay attention to perspective but this will be a partially stylised illustration so we can take a few liberties with scale.

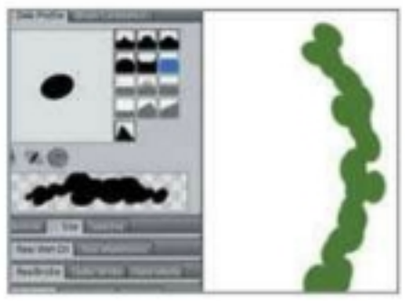
07 Chop and change I had a pretty good idea of the composition and colours to begin with, but I ultimately find myself chopping and changing all the time. Here I put down the background hills, River Thames and a foreground towpath. As they are so basic and on their own layer, I was able to try various colours and shapes to find the right balance.





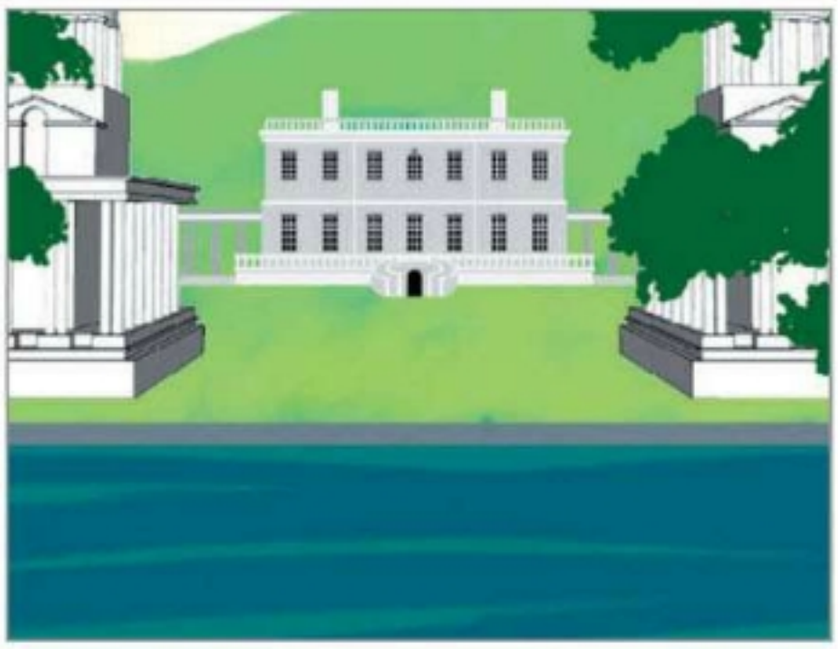
08 Tree grafting My first visit to Esoterica was for the Growth effect. I wanted to frame the main image with some tall, thin trees. Remember to first create a new layer and select a dark colour. Copy some branches and graft them onto others. Use Free Transform (Ctrl/Cmd+Alt/Opt+T) to distort the trees into tall thin birches.

09 Custom brushes For the leaves, adjusting an existing brush was sufficient. I chose the Leaky Pen variant, opened the Brush Controls and squeezed the circular dab a little. I adjusted the Angle, set Expression to Direction, Size Expression to Pressure and increased the Jitter value just a small amount.

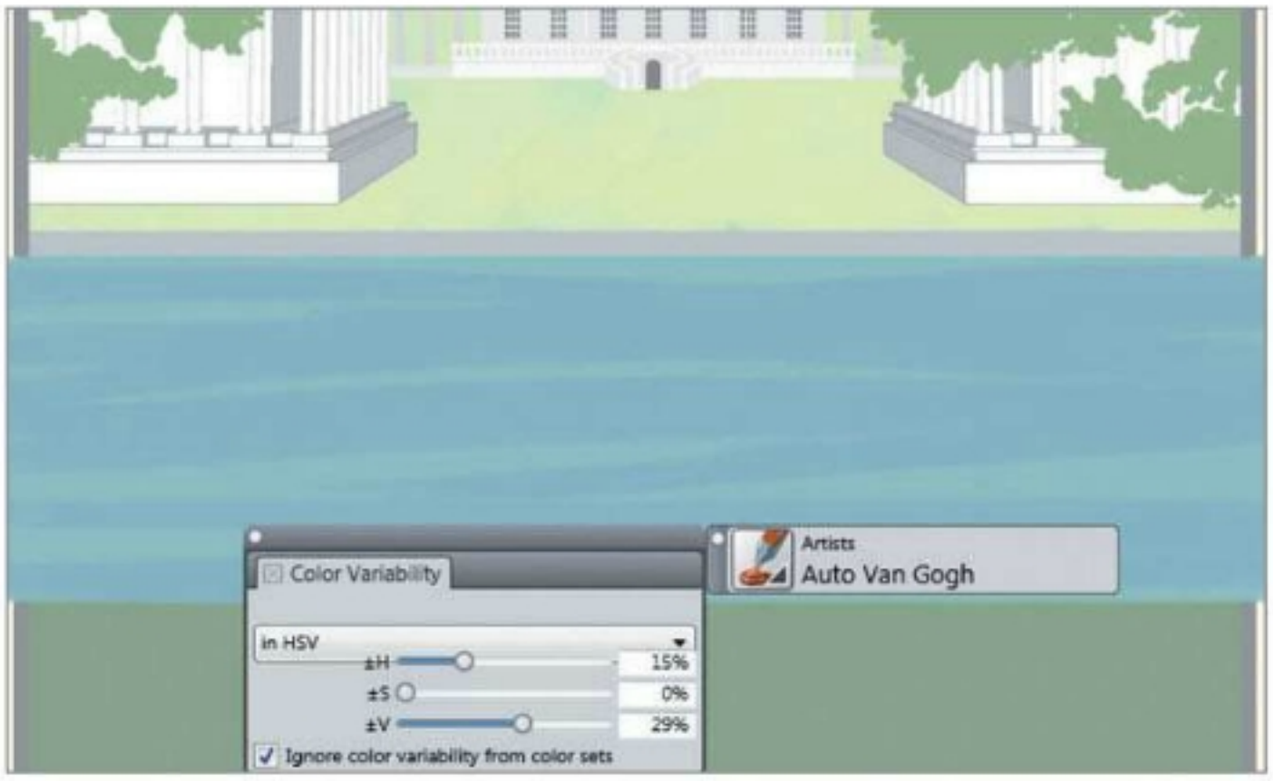


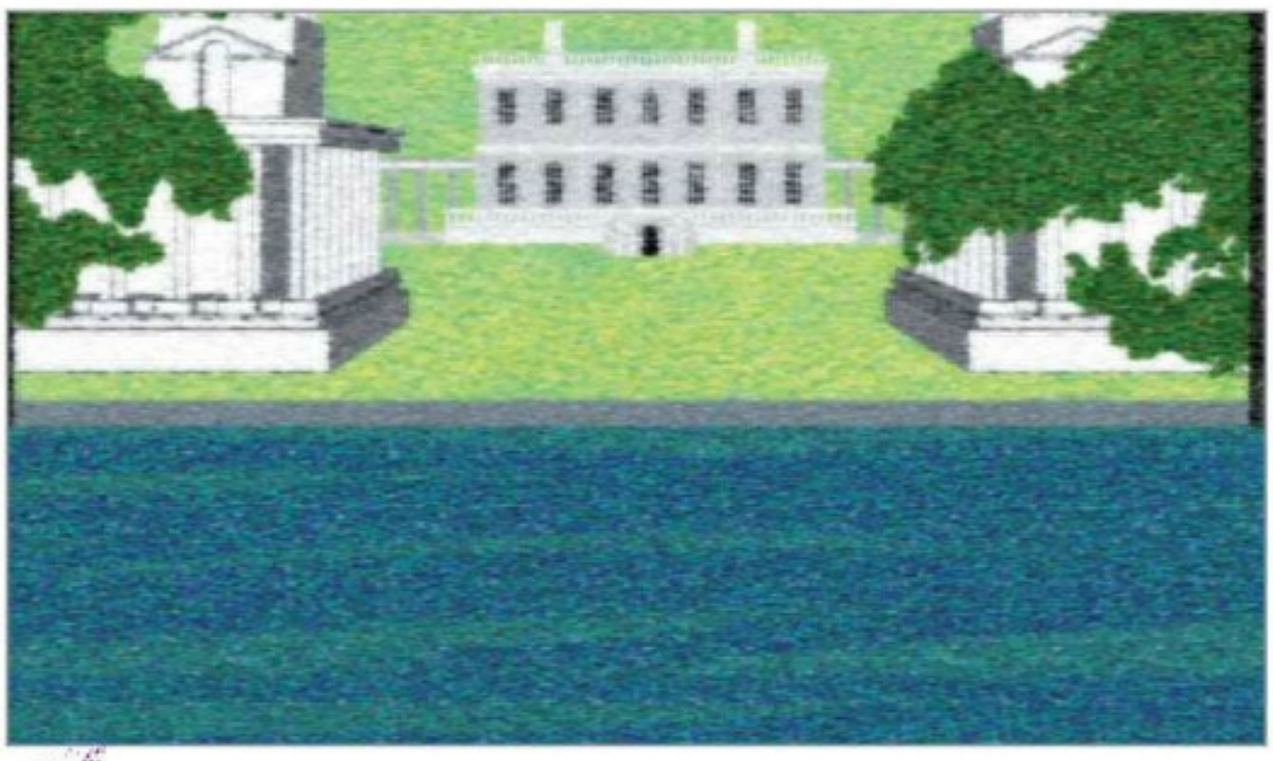
10 Leaf control I created a layer on top and behind the tree trunks which, when painting in the leaves, enabled me to control how much of the trunks remained visible. I then held down Ctrl/Cmd and clicked the trunk layer thumbnail to select the pixels. I applied a bright orange gradient, a colour that was fashionable for this style of poster.

11 Van Gogh clone Next I wanted to apply some stylised texture to the bright, azure waters of the Thames. The Auto Van Gogh effect in Esoterica seemed like a good candidate for this. I first added some more colour to the river to aid the process and then made a clone (File> Quick Clone) to create a target for the effect.



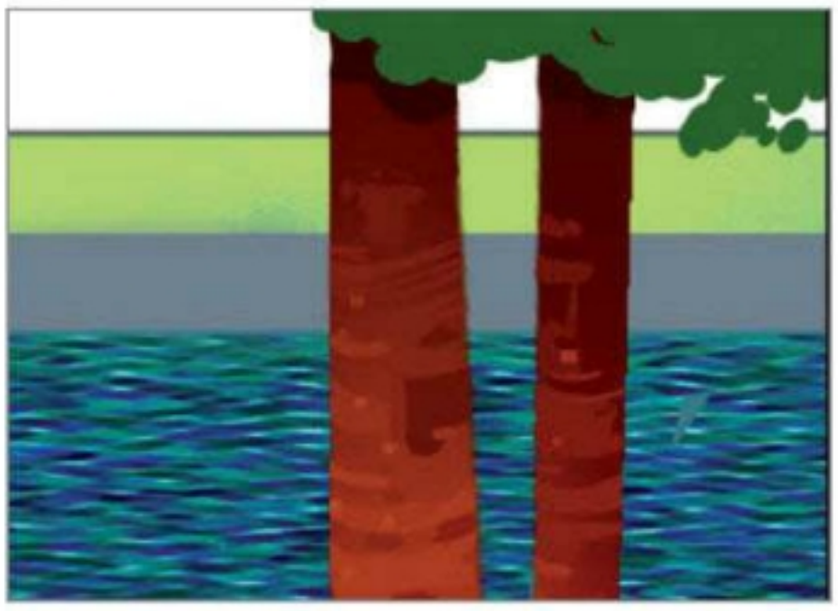
12 Variable colours With the clone active, I selected the Auto Van Gogh variant from the Artists category in the brushes menu, increased the Color Variability in the Brush Controls and adjusted the brush size. Go to Effects>Esoterica>Auto Van Gogh to apply it.



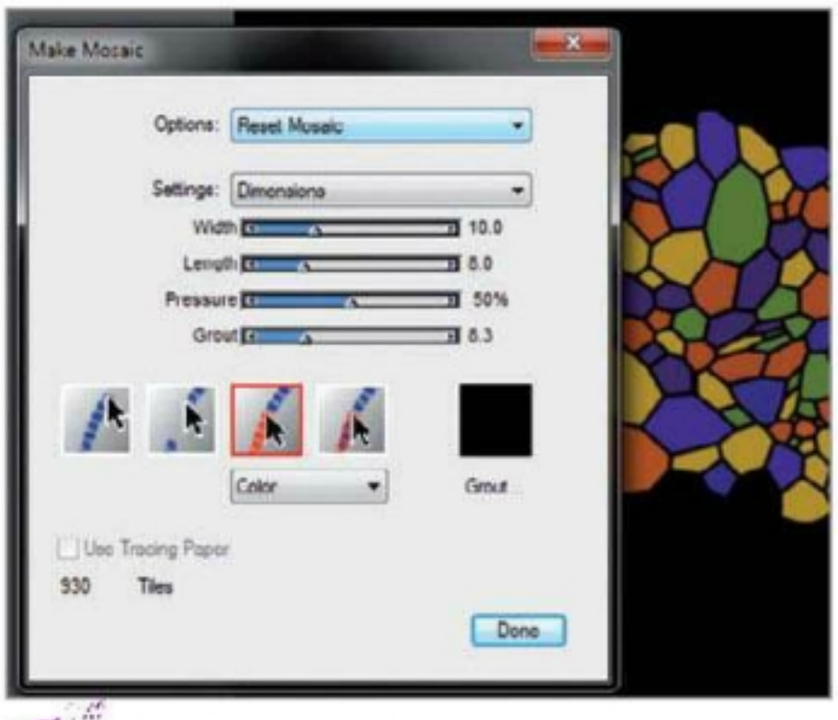


13 Try, try again You may have to hit Undo and try again to get the result you wanted, but it's worth experimenting with this effect as it can produce quite impressive results. For my purposes I just wanted a small, unobtrusive section to add to my image.

14 Clone a clone I could have simply cut and pasted the river section into my poster but I decided to clone that portion by opening the Clone Source window and selecting the image I just saved from Open Source Image at the bottom of the panel. I then used the Straight Cloner Variant to paint in the Van Gogh strokes onto my original for more control over the effect.



15 Grouting Next up was Tessellation. This was used to make a decorative towpath in the foreground. I created a new file, opened Make Mosaic and increased the Grout to 8 for bold lines. I then opened Make Tessellation and chose Add 500 Evenly-Spaced Points a couple of times.



16 Change colour Reopening Make Mosaic enabled me to colour the individual tiles by selecting the Change Color Tile icon. Clicking the Color drop-down menu means you can select Darken, Tint and so on, which are nice ways to paint in variation, as long as you keep the Mosaic dialog open!

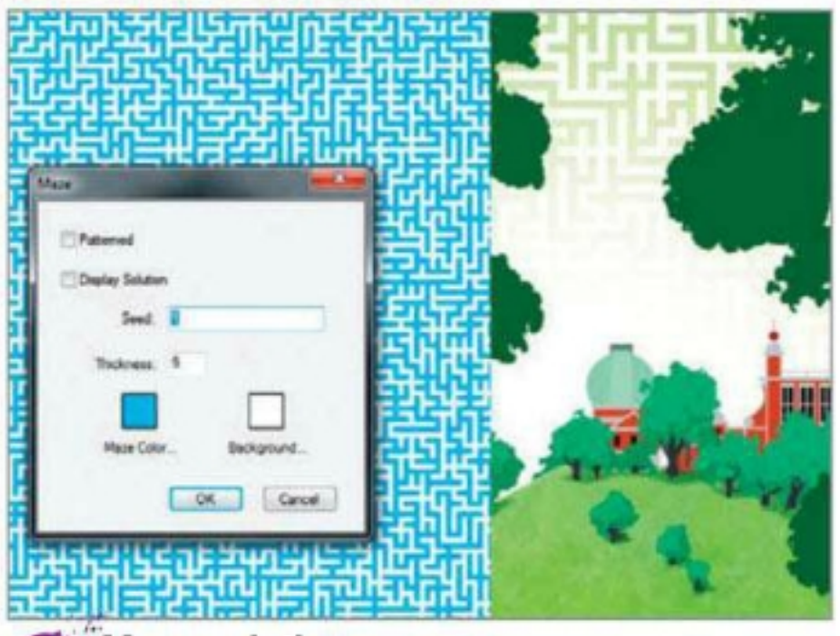
17 Warp in Photoshop I opened my file in Photoshop and placed the tessellation. Using Transform>Warp, I then distorted the tiles to the shape and curve of my path. Taking it back into Painter I changed the Composite Method to Hard Light and opened Adjust Colors to achieve the best hue and saturation for the image.

Repeat the effect

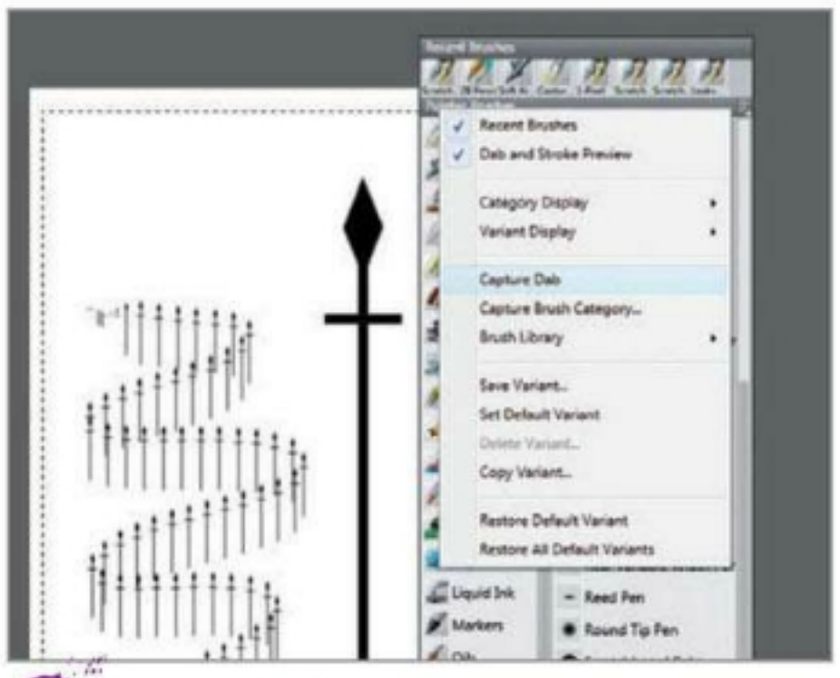
Many of the Esoterica and other effects need to be applied more than once, therefore, it's handy to know that the shortcut Ctrl/Cmd+/ will open the last used dialog window. This will help cut down on annoying clicking!

Create graphic elements

Design some railings and geometric petals

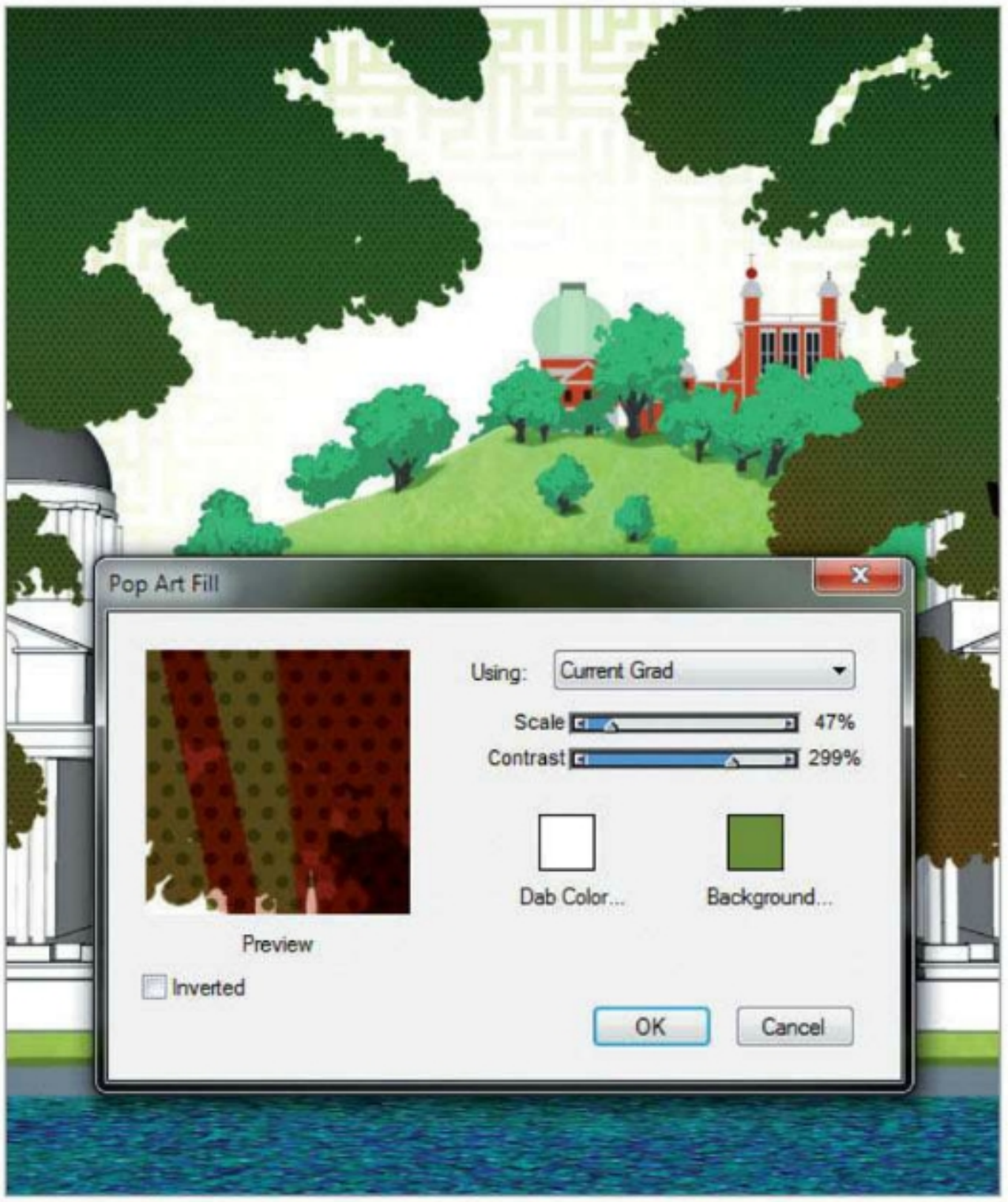


18 Maze solution Not all Esoterica effects are complicated. To add some pattern to the sky I created a Maze. Fill a new layer with any colour, open Maze, select a hue and hit OK. That's it. I changed the Method to Overlay, reduced the opacity and dragged the layer down below the others.



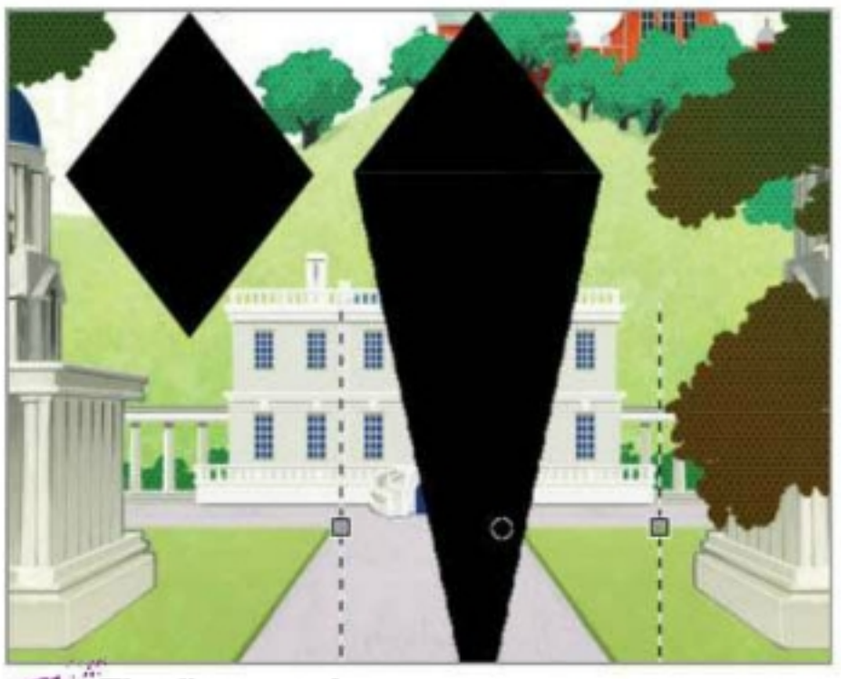
20 Captured railing Existing brushes cannot be adapted to make a railing, so this time I made my own by drawing a simple rail on a new canvas, dragging a selection around it and capturing it. I saved the variant and renamed it.

19 Pop Art pops A quick way to add some interest and variation to the tree shapes is to overlay a Pop Art Fill. First of all I selected all the trees by Shift+Ctrl/Cmd-clicking their layers. On a new layer I filled this selection with a black to transparent gradient. Using the Pop Art Fill changes this gradient to dots and creates a nice shading effect.



21 Building detail With the painting advancing, it was time to pay some attention to the buildings. The basic images are in place, so all I needed to do was paint over and modify each. The domed college needed the most attention; the others had most of the work done in Illustrator.

22 Essential text The text is an important part of the poster and, fortunately, most examples from this era had simple, bold, sans-serif fonts making it easy to choose. For this image I went for Blippo Light. I made each line separately layer and converted them to ordinary layers for arrangement. The text was aligned centrally using Effects>Objects>Align.

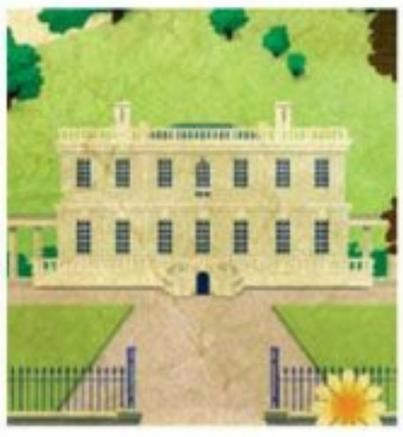


23 The first petal I wanted to add some stylised flowers at the base of the poster. This was done by making a solid square, rotating it 45 degrees, selecting the lower half and dragging the selection down using Transform to create a petal.

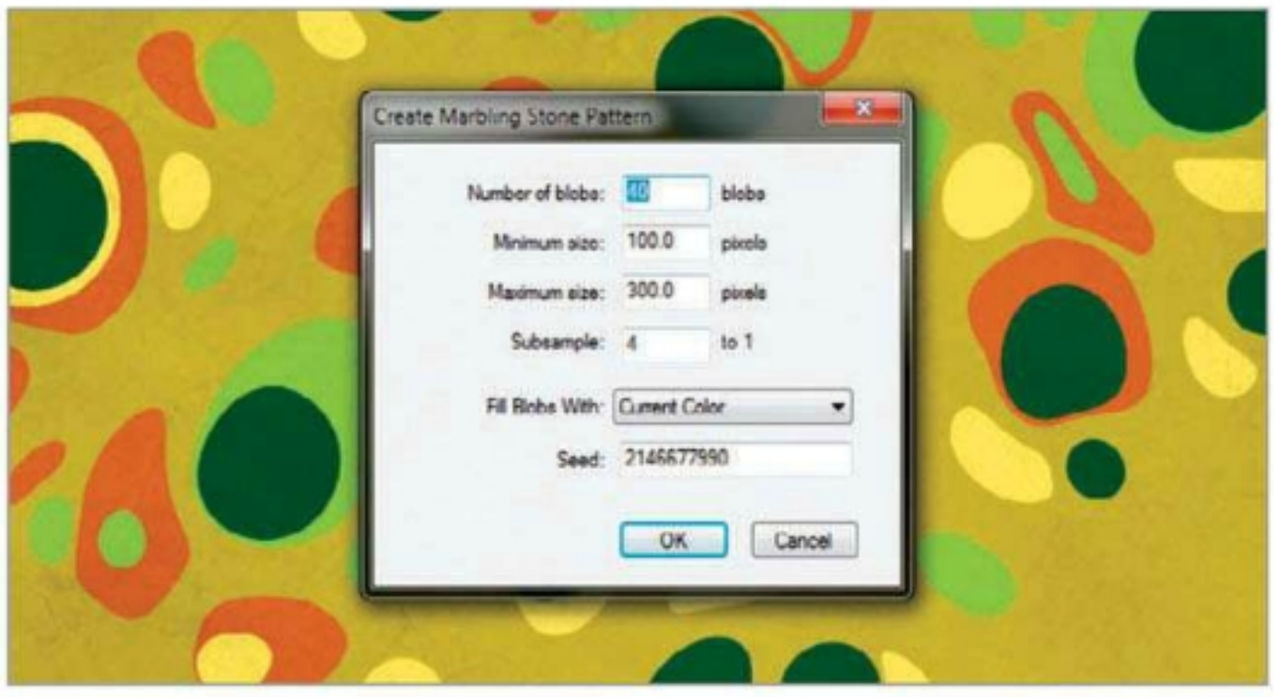
24 12 petals I duplicated the petal and hit Ctrl/Cmd+Alt/Opt+T. I dragged the central pivot point down to the base of the petal and, holding Ctrl/Cmd+Shift, rotated the petal 30 degrees. This was repeated a few times and the layers merged. The quarter flower was duplicated and flipped using Edit>Flip Horizontal. Flip Vertical completed the full flower.

25 Flowers completed I arranged some copies using the Layer Adjuster while holding down Alt/Opt. After resizing them, I locked the transparency and airbrushed some colour onto them. I finished off by painting in the stems and, spotting an opportunity, extended some of the uprights of the text to meet the flowers.

26 Old paper As most of us know, overlaying an image of some paper texture is an easy way to create the appearance of age in a painting, but it can often help to unify the numerous elements too. This texture is set to Multiply and reduced to 40% Opacity.

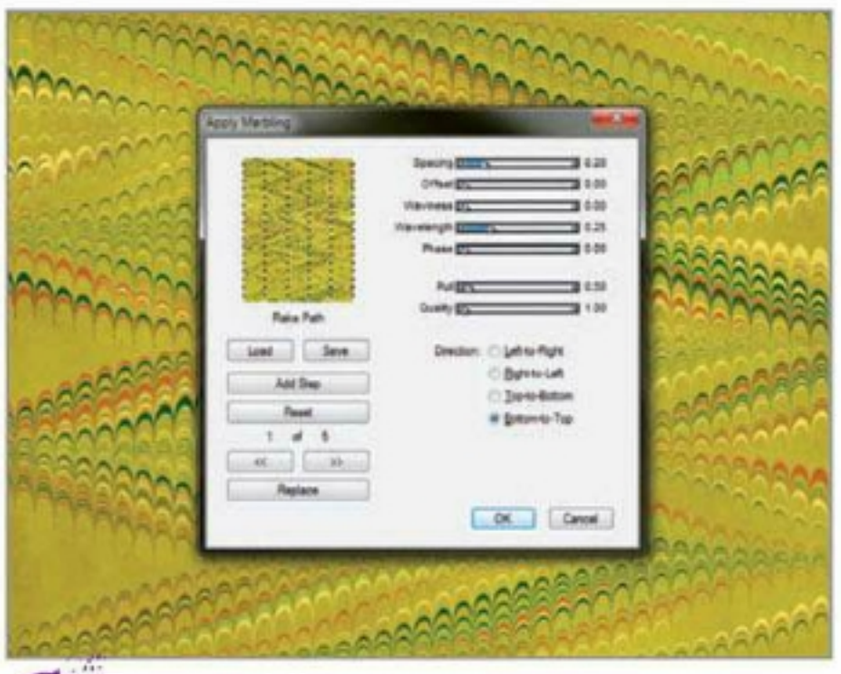


27 Add blobs Our last visit to Esoterica involves two steps. I wanted to add some old-fashioned marbled paper to the surround, so I first filled a new layer with colour, opened Blobs from Esoterica and added 60 blobs at a suitable size. I repeated this a few times with different colours (it can be a bit addictive, so be careful not to go mad!).



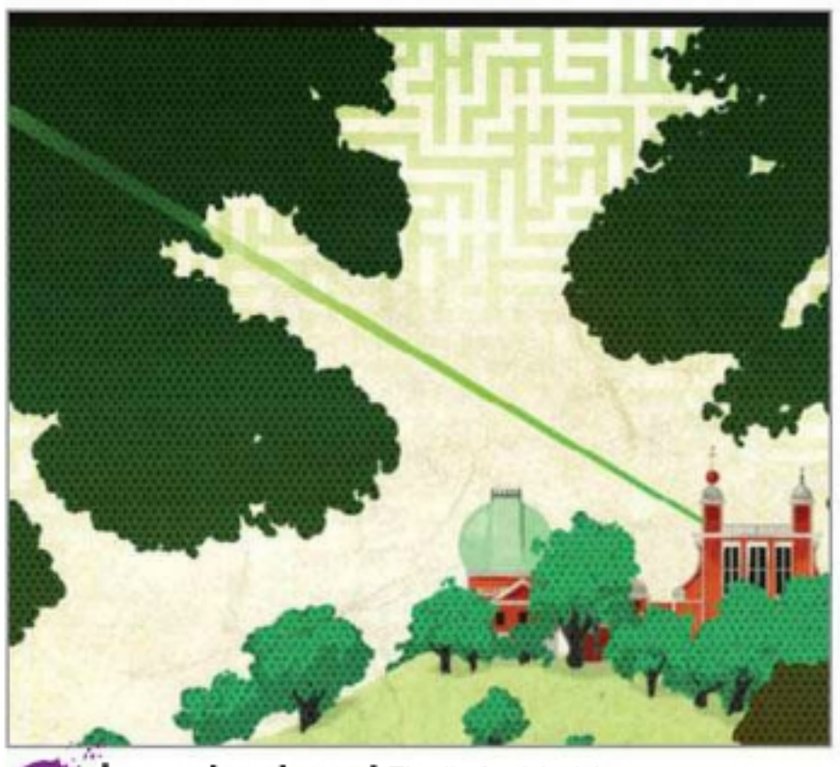
Deconstruct marbling

The Apply Marbling dialog looks very complicated with its series of obscure sliders but a good way of working out what is going on is to deconstruct a preset. Start the process of marbling but after loading a preset, click on each step to see how the recipe was created.



28 Easy marbling To complete the process I opened Apply Marbling. This is one of those daunting dialog windows guaranteed to be closed as soon as it's opened, but for our purposes we can simply load a preset from Painter's library. I chose the impressive Rake Path and the result was set to Multiply. See the side tip for more on marbling.

29 Adjust colours With different elements on their own layers, you are never committed to keeping the original hues and values. With the marbling layer selected I opened Adjust Colors (Effects>Tonal Control) and experimented with the Hue, Saturation and Value sliders until a balance was achieved.



30 Laser treatment Finally, I added the ever-present Greenwich Meridian Laser. It is not switched on during the day, of course, but it's so familiar to all Greenwich residents and visitors that I felt it needed to be there.

Create an antique glaze effect

A Night on the Town

2010 **Painter/Google SketchUp**

> The main aim of this tutorial is to show you how to create a cracked glaze effect, as well as a lot of neon

John Malcolm Freelance illustrator

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

John Malcolm

Personal portfolio site **www.johnmalcolm1970.co.uk**

Country **United Kingdom**

Software used **Painter 11, Photoshop CS5, ArtRage, Google SketchUp**

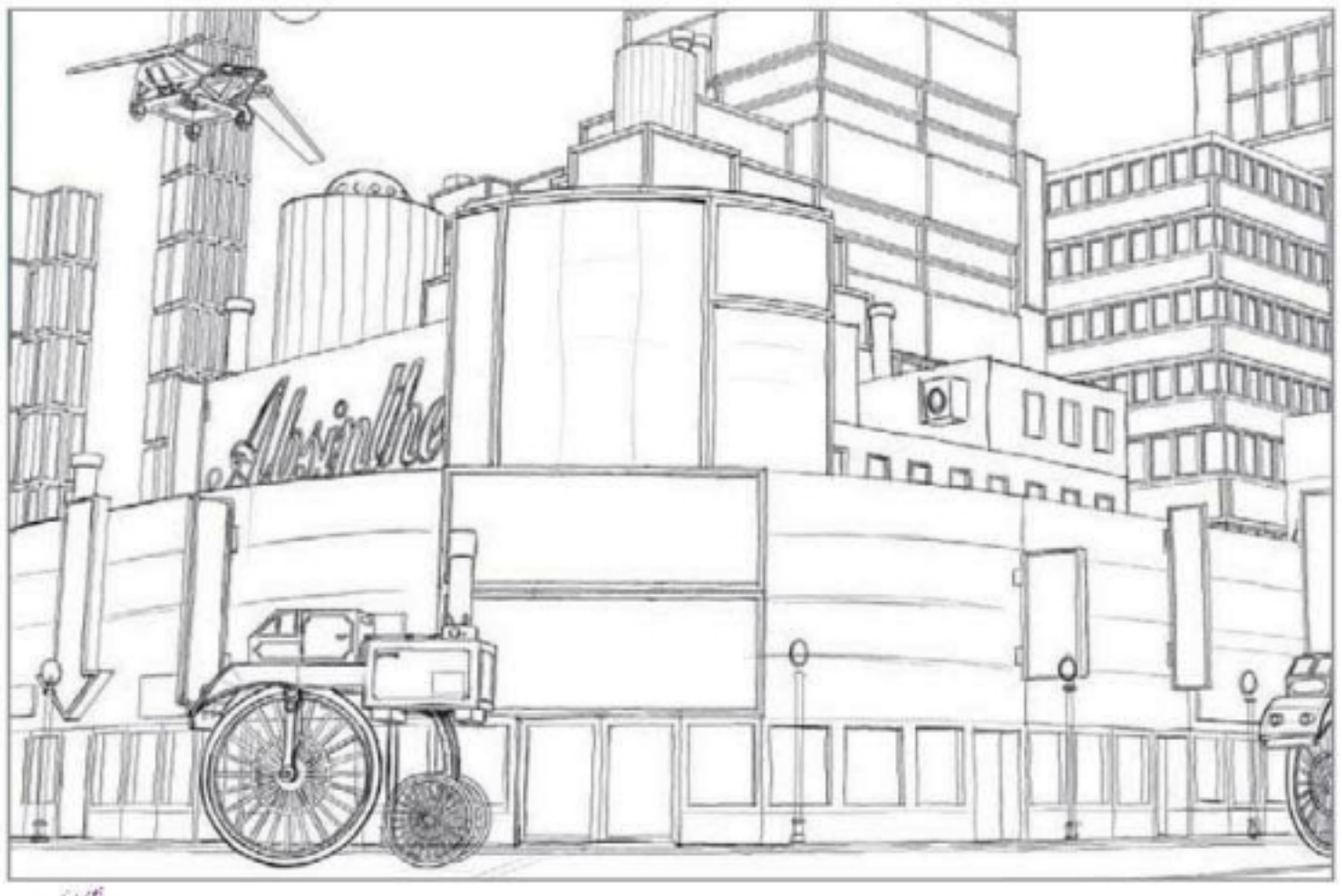
While working full-time for a local newspaper group in Scotland, John has found his free time increasingly being taken up with digital art. Starting with photomanipulation three or four years ago, he is now happiest painting things from scratch in Painter 11.

Source files available

Creative pack

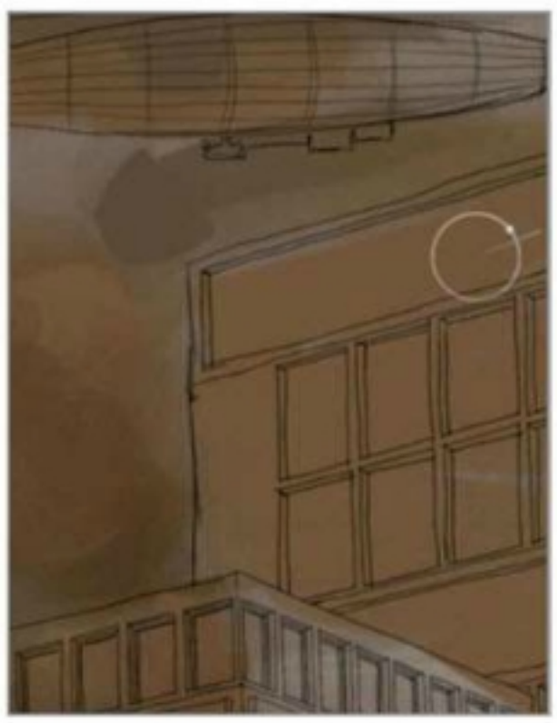
ANTIQUE GLAZE EFFECT

Digital art



Set the scene Here's the sketch I started with. Using Painter's Real 2B Pencil variant, I sketched over my rendered SketchUp file. I've chosen Artist's Canvas as my starting paper texture.

Warm it up On a new layer sandwiched between two copies of the original sketch, I am basically toning the canvas with warm brown colours to get rid of that white paper.



When I was given a brief that had the words 'steampunk' and 'Blade Runner-esque' in it I was over the moon. I'm a great fan of the classic sci-fi movie and I'm partial to the steampunk genre. At first I put the antique glaze effect to the back of my mind, because I knew it was something that would have to wait until the illustration stage was complete.

As the image involved a city scene with a lot of geometric architecture and man-made objects, I decided to use Google's free 3D application, SketchUp to begin blocking out my ideas. SketchUp is very popular, very forgiving and very easy to get to grips with. It's an ideal aid to illustration. I studied technical architectural perspective drawing at college, but that was many moons ago, and I am more than happy to do things the easy way when possible. It's available at **sketchup.google.com** along with all the help and tutorials you'll need to get started.

It was while I was building my basic scene that many of the ideas that ended up in the final illustration came to me. Most were beyond my 3D skills, but they were duly noted down for later. Things like neon signs in different languages, vehicles that look like hybrids between a penny-farthing and a steam engine, airships, an ornithopter that looks somewhat like an origami crane, a robotic manservant as well as some nods to the film *Blade Runner* and some other sneaky references. I always like to leave some questions for the viewer; is it a European city or an Asian city? Is it set in an alternate universe? What's an ornithopter? Is it a coincidence that the Absinthe sign look a bit like the Coca-Cola font?

With a clean line render of my 3D scene I was ready to start illustrating and get those ideas off my notebook and into Painter. I created a new document in Painter at the required size, 470mm x 310mm at 300dpi. I brought in the results of my SketchUp effort and created a new layer above this. I selected my favourite variant from Painter's Pencils category – the Real 2B Pencil. While I was in effect tracing over something, I was open to adding extra details and embellishments as I went along. I was also reasonably relaxed and not too concerned about following my guides too closely. When finished, I dumped the reference, duplicated the sketch layer and added a new blank layer between them.

I decided to mainly use the Artist's Oils brushes for this project and as I picked each one, I added it to a new custom palette. I first selected the Grainy Dry brush and began toning the canvas with some dark but warm brown colours. It helps to get rid of the white as soon as possible. I wanted things to begin dark enough to suggest that it is late without going too dark too quickly. I varied the colours as I went, fairly randomly, perhaps to hint at overcast clouds or some kind of evil steampunk smog.

With all the nasty white removed from the canvas, I selected Artists Oils>Wet brush. I was consciously only using brushes that had a fairly thin appearance. I didn't want any impasto depth on the canvas at this stage. I roughly blocked in darker areas of the buildings, differentiating them by varying the colours used but still keeping it all fairly muted. It looked like a muddy mess, but at this stage I was only creating the underpainting so that wasn't a concern. As the scene was to be set on a rainy and overcast evening, I attempted to create the effect of the bare minimum flat ambient lighting, purely to define my shapes.

Rough shapes A rather ugly, muddy-looking mess. Luckily, this stage is supposed to be rough.

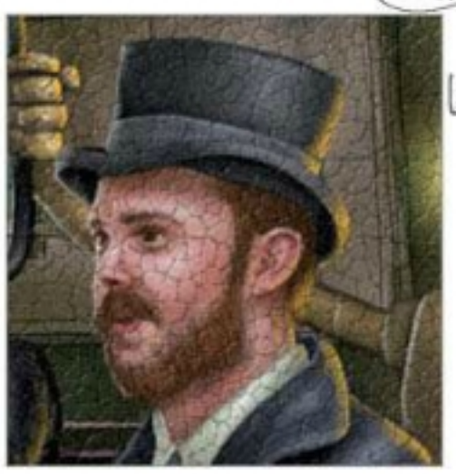
Adding texture to your surface

Painter's Apply Surface Texture feature makes it easy

Before

The first thing to do before using Apply Surface Texture is to open your Papers Library by going to Window>Library Palettes>Papers. There are some great paper textures available, but the ones I am interested in have to be either loaded from a Painter CD or downloaded from Corel's website (**tinyurl.com/PainterExtras**). The ones needed are called 'Crack Textures. papers'. I appended those papers to the ones already in my Papers Library and picked the one called Antique. It's a bit more subtle than some of the others in this library. Now all that's needed is to run the Effects>Surface Control>Apply Surface Texture command and mess around with some of the controls.

After



Deep light When painting the base colours of the large screens I stayed away from using pure white. I used the Impasto Oil brush to allow a bit of depth to build up.

Moving on to blending, I alternated between the trusty Just Add Water blender and the Blender brush from the Artist's Oils category. With the latter you have to have a light touch as it lays down colour with anything other than light pressure. For the sky I blended in small circular motions. I usually keep at most one or two working layers on top of my canvas. When happy with something, I'd rather drop it onto the Canvas and create a new working layer. When working with images this size, I find too many layers can cause performance issues.

Using the Wet Oily brush I began to tighten up the buildings, adding detail and blending as I went. I was still keeping in mind that the scene isn't lit by sunlight, just a dull, overcast sky and perhaps a touch of moonlight. All this time I've been careful to keep a copy of my original pencil sketch above my painting layers. This helps to be able to double check things. I slowly began to darken areas of the painting, making some of the shadows deeper and making the road and pavement surface very dark. I did this to help me add reflections on the wet street later.

One thing to note is that although I was concentrating on using the Artist's Oils category, I didn't allow myself to be limited and was open to other brushes. Sometimes a great way of deepening shadows or enhancing forms is to use a Pencil brush, some hatching and then a bit of blending.

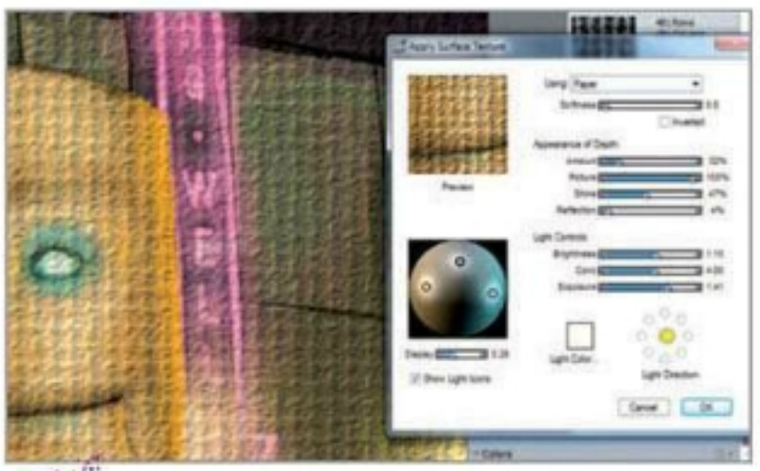
I finally got some impasto on the canvas, using the Impasto Oil brush and blocking in the large, central screens. I didn't use white, but several off-white colours, varying them for each screen. I didn't shade them as I envisaged that they would be self-illuminated as opposed to spot-lit.

I used the same brush to paint the many windows in the scene, again varying the colours as I went. A bit of preparation with the Polygonal Lasso tool comes in handy here to save yourself some time. I didn't select each window one at a time, but instead selected whole rows or columns and then held down Alt to remove the in-between parts. These selections can also be saved for you to use later.

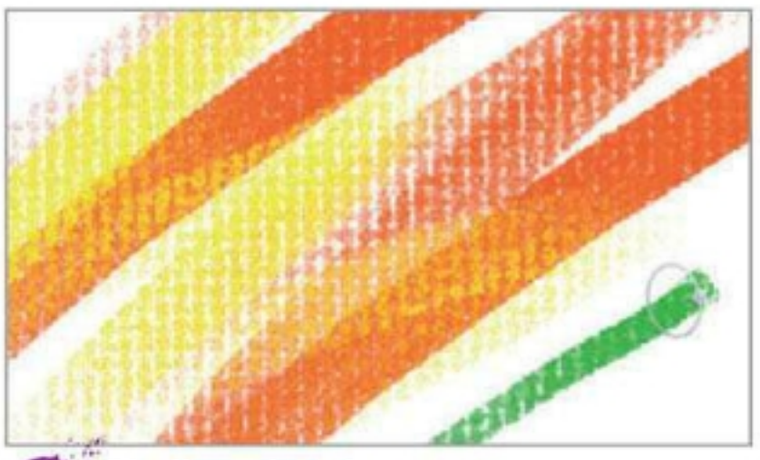
Just add neon I darkened the areas immediately around the neon and carefully blended with Just Add Water. This helps push the signs forward a bit and will also help when their glow is added.

Painting with textures

There's more than one way to get a textured effect in Painter

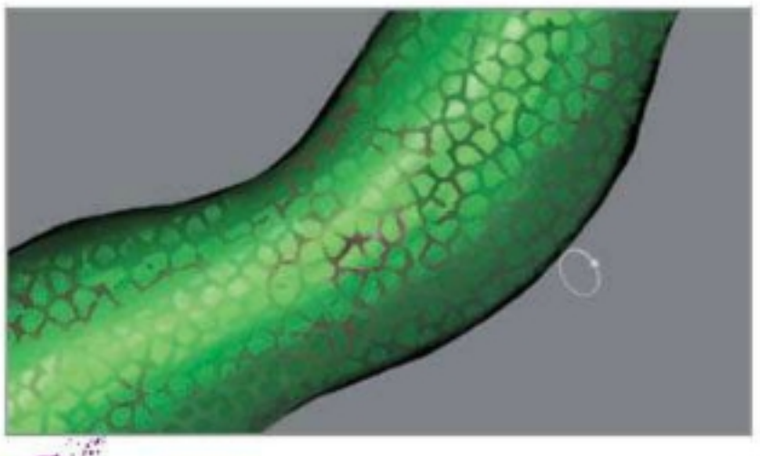


Light sources and textures It is possible to light your texture from more than one angle with any colour of light to create some interesting effects.



Chalk and grain Painters' brush categories such as Chalk, Charcoal, Conte and the types of Pastel interact wonderfully with paper textures.

Multiple textures Vary not only the brushes, but also the paper and colour and it's easy to build up some intricate and complex effects.

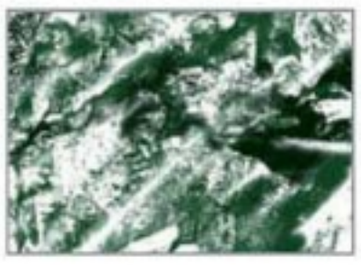


Inverting textures By clicking the Invert Paper button on the Papers Palette, you can paint the lower, darker portions. Great for skin textures.

The light fantastic This is where the neon comes to life. The Glow brush variant from the FX category was created for exactly this kind of stuff. It almost makes it too easy.

Make your own paper

You can make almost anything into your own paper texture. Open it up, go to Effects>Tonal Control>Adjust Color and turn down the Saturation to 0%. Make a selection, click on the menu fly-out on the Papers Palette and choose Capture Paper. Name it and use it!



Rain reflections Smearing the reflected areas with the Just Add Water blender breaks it up nicely and gives it a wet look. A selection makes sure it doesn't intrude where it shouldn't.

I began the first stage of the neon signs next, painting them in with the Impasto brush. This brush can sometimes be tricky to get around corners with when you're using it at small sizes. I just tidied them up a little with my trusty Real 2B Pencil.

Although the neon was painted in with an Impasto brush, the signs and characters still looked a little flat. I darkened the wall or signs behind them and blended the dark areas. This helped to push the neon forward a bit and would also help when it came to producing the glow effect I wanted.

At this point, I had some great fun creating posters for the big screens. I drew and painted them in a separate document before cutting and pasting them in. It was a chance to reference the *Blade Runner* film and also the author of the book it was based on.

When it came time to get the Glow brush out for the neon, I had to take a multi-layer approach. With the Glow brush at a fairly small size and sampling the neon colour, I worked over the signs directly on the canvas. This very quickly gets white and hot looking. On a blank layer above the canvas, using the same colour with a large brush size, I went over the neon again. This allows much more of the neon's colour to spread out. I also took the opportunity to use this tool to bounce some reflected light onto nearby surfaces.

Dropping everything to the canvas again, I selected small sections of the buildings facing the street, copied and pasted them into a new layer and flipped them horizontally while positioning them on the street. I then erased any bits that didn't look right, merged these reflected layers, turned the Opacity of this reflection layer down to 50% and, after making a selection only of the road and thin pavement, went to work with Just Add Water. I mainly used horizontal blending motions and varied the size of the brush and pressure until things looked right.

I next concentrated on the human aspect – adding a couple out walking, sheltered from the rain by their trusty robo-butler. Smaller figures across the street are simple silhouettes due to the bright light coming from the shop and bar windows. I hinted at rain drops by drawing diagonal lines, but soon turned the Opacity of that layer down as I felt the wet reflections suggesting the rain worked just as well.

Finally it was time to apply the antique cracked glaze effect. This requires some papers that aren't installed by default. You can find them on your Painter CD or if you have a download version go to **tinyurl.com/PainterExtras** and grab the Paper Textures file. I found the easiest way to add the papers to my Paper Library was by using the fly-out menu on the Papers Palette and choosing Paper Mover. I could then navigate to, and open the Crack Textures Paper Library and transfer across the ones I thought looked most interesting and appropriate for my piece.

When applying the cracked texture I found a bit of trial and error helped. It isn't always easy to get an idea of how something will look in the tiny preview window. That's why Painter has Ctrl/Cmd+Z. It's also a good idea to copy and paste your canvas before applying the texture. This opens up a whole range of options from turning down the Opacity (to fine-tune the effect) to erasing or masking parts of the cracked glaze out. I had a few attempts ranging from barely noticeable to something that looked like a Roman mosaic tiled floor. I was aiming for a more subtle effect and was happy with my final balance.

I'd like to finish by thanking two of the bar staff at my local for kindly allowing me to use their photographs as references for this piece, and I'd also like to apologise in advance if any of the Japanese signs are complete gibberish!

Foreground focus The foreground figures make a nice group. The see-through umbrella doesn't block the view too much and was easily achieved using a couple of layers and tweaking layer Opacity.

digital artist

Cheat guide: Create rock textures

Simon Dominic is a digital illustrator, and here he shares some useful tips with you for painting rocks to make them look both realistic and interesting

Rocks are heavy Ensure that your rock surfaces are true to your light source. This gives your rocks a solid appearance. Try simple, angular rocks before progressing to either rounded or complex forms.

Reflected light Areas of rock which are not lit directly by the sun can still be illuminated by light that is reflected from the environment. Exaggeration in this area can often work extremely well.

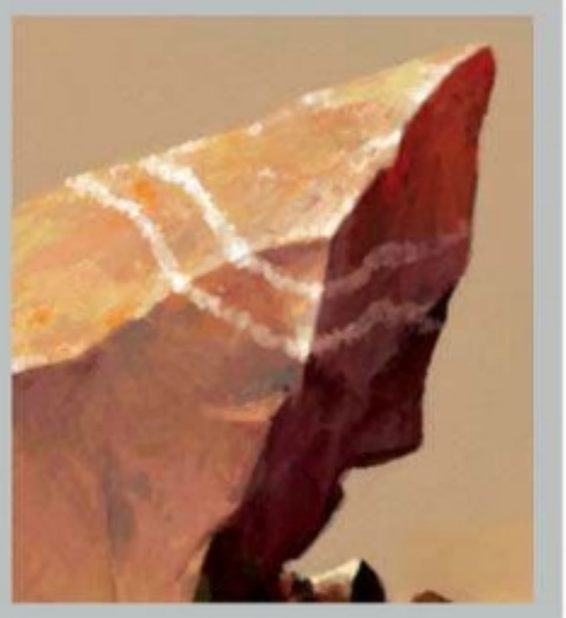
Consistency Give your rocks consistent features in your painting so that they appear to be part of a bigger geological landscape – rather than just distributing different types at random.

Exaggerate! Don't be afraid to exaggerate your rocky shapes and vary your colours, especially when working from reference. Rocks should never be boring!

Edges If your rock has sharp edges, emphasise them. Add extra highlights to those edges facing towards your light source, and shadows to those facing away.

Surface detail Most rocks are rough in texture, covered in blemishes, scratches, bumps and cracks. Even if these effects are subtle, make sure you don't forget them.

Weathering Rocks are heavily influenced by meteorological conditions. Here I've painted the deep grooves and rounded edges typical of a soft rock in a windy, desert setting. Think about how rain might affect your rock, or icy conditions, or the pounding of ocean surf.



Mineral veins To add interest you could include veins of minerals, precious metals or even different types of rock. Make sure they follow the contours of your rock, or else they will look 'pasted'. Perhaps add a bit of sparkle where the sun catches the minerals, or some rainbow colours if you're feeling adventurous.

Vegetation Rocks are often covered by vegetation, especially in damp locations like forests, stream banks, moorland and coastline. Here I've added moss to the stones poking out from the stagnant puddle. Lichen is also a good addition to rock surfaces, especially when depicting crumbling statues or ancient, mysterious stone circles.

ArtRage

Work quickly and intuitively with a painting simulator

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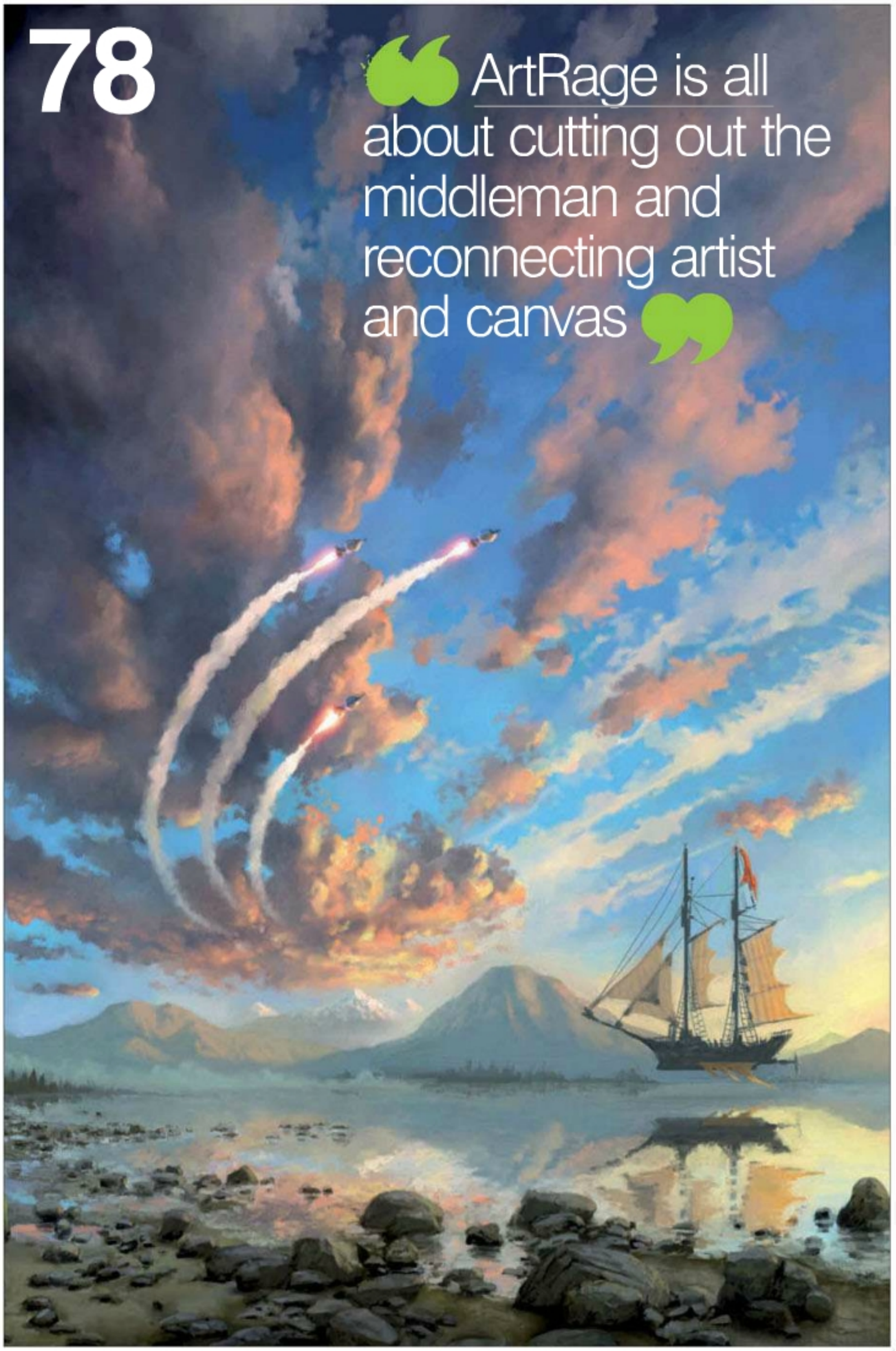
ArtRage history and essential features

124 Make metallic paint
Use bright, reflective colours

128 Painting dramatic skies
Perfect clouds and skies


78
ArtRage is all about cutting out the middleman and reconnecting artist and canvas

Inside ArtRage 3

Simon Dominic gets hands-on with ArtRage 3 Studio Pro, while we look at the history of the program

Ambient Design Ltd is the New Zealand-based company behind ArtRage. Still relatively small and with an informal approach to how it publicises its company structure (the most important staff member on the Biography pages is the company cat, Tycho), it has a cottage industry feel that's at odds with large imaging companies like Adobe and Corel.

Users of ArtRage have a gallery and forum on the company's website and regular contact with the development team, which has given rise to a lively and informal community. Perhaps it's for this reason that users of ArtRage are so very attached to it and are keen evangelists of the product. From its earliest inception ArtRage was planned as a painting simulation program. As creative director Matt Fox-Wilson explains: "ArtRage is all about cutting out the digital middleman and rekindling the connection between the artist and the canvas. We don't want users to have to learn how to paint again; we all know how to use a brush, so why should we have to learn how a computer wants us to use a ➡

Essential features

Quickly build up patterns and detail

Stickers The strange world of Stickers

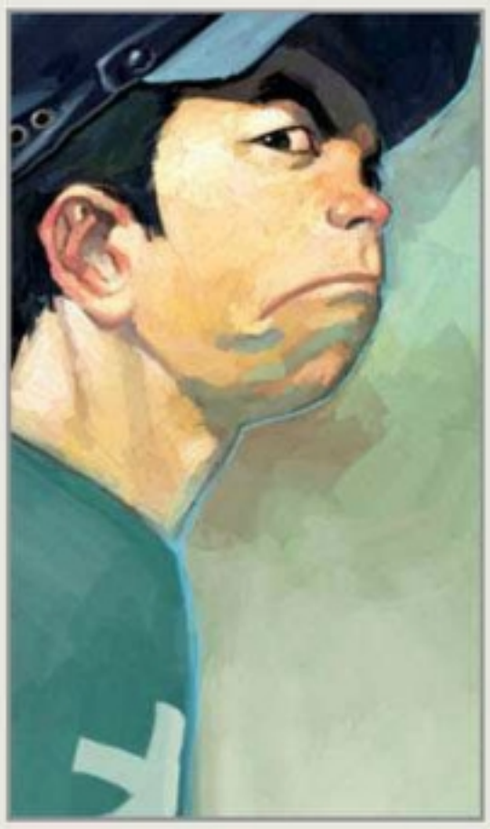
At first glance Stickers appears to be a gimmick, but a closer look reveals a tool with real potential – not to mention it being great fun to use. An initially bewildering array of settings allows you to squirt multiple shapes and textures over your canvas in a thousand different ways, to simulate everything from swarms of bees to forest canopies to complex textures.

ARTIST PROFILE

Simon Dominic
Website: www.painterly.co.uk Country: UK
Software used: ArtRage 3 Studio Pro, Painter, Photoshop

I'm a full-time illustrator and in this article I take a look at the features of ArtRage 3, which I used to create my painting 'The Gyre'

ARTIST PROFILE



Cuson Lo

Website: http://cuson.deviantart.com
Country: Hong Kong
Job: Illustrator

What media and software do you typically use?
Pencil, acrylics, markers, Photoshop CS4, ArtRage 2.5 and Painter Classic.

How long have you been using ArtRage?
I started using ArtRage about year ago.

What version of ArtRage did you start with?
ArtRage 2.5.

What do you think ArtRage does better than any other digital painting program?
It's user friendly and has a simple interface. The brushstrokes are very similar to real tools.

Elegant Girl 2009, Cuson Lo, ArtRage 2.5.
"Just a free, easy, uncomplicated drawing of an elegant girl character that I did one day"

"The rise of the Tablet PC made creating a paint simulation product viable for a small compant like Ambient Design"

brush? We set out to try and make everything as naturally accessible as possible, so that anyone can jump in and get right down to painting."

This is the feature that all artists using ArtRage mention when they talk about the program. "I love how direct the program is. The oils are just fantastic," says artist Jon Hodgson. Animator Julian Fumagalli agrees: "It's amazingly easy to start using it. You just open it and start to doodle. It's intuitive and is one of the few programs with an artist-friendly interface."

The first version of ArtRage – a free, Windows PC program – was announced in August 2003. There was a very specific reason why Ambient Design Ltd started developing the program, as Matt Fox-Wilson notes.

"We had spent some time before forming Ambient Design working with

Cthulu Dadi, 2009, Nora Mojas, ArtRage 2.
"A portrait of my boyfriend, Lovecraft style"

different image processing and production software, including Photoshop filters and 3D painting software. The 3D painting software led us to experiment with ways to use fast rendering models to simulate the appearance of paint on a surface, and that in turn led to using 3D mapping data to simulate how volumes of paint might blend together as they are pushed around with a brush. That was the technical part. The real catalyst for turning this techy concept of real-time paint volumes into a product came when the Tablet PC started to appear and all of a sudden there was a digital canvas available with a digital brush."

The rise of the Tablet PC and the graphics tablet among artists and consumers made creating a paint simulation product viable even for a small company like Ambient Design,

ArtRage history

See how ArtRage and Anbient Design Ltd, went from an acorn to a creative tree

August 2003
Ambient Design Ltd announces the release of a free Windows program, ArtRage.

December 2003
The first version of ArtRage goes into closed beta testing.

March 2004
ArtRage 1.0 is released as a free painting simulation program for Windows PCs.

March 2004
ArtRage 1.0 is downloaded over ten thousand times in two weeks.

August 2004
ArtRage is updated with the release of ArtRage 1.1. The program has been downloaded over a hundred thousand times.

September 2004
The ArtRage Gallery goes live on the program's website.

December 2004
ArtRage takes the grand prize in a drawing program competition run by Microsoft.

March 2005
ArtRage for Mac is announced and goes into beta testing.

June 2005
The Mac version of ArtRage 1.1, for OS X, is released.

Heroine, 2009, Jon Hodgson, ArtRage 2.5. "From my how-to art book *Fantasy Art for Beginners*"

and the product certainly took off. Two weeks after its release date in March 2004, this free software had clocked up over ten thousand downloads. A few short months later that figure had increased to a hundred thousand downloads, and ArtRage had taken the Grand Prize in Microsoft's prestigious 'Does Your App Think in Ink?' competition. By the end of 2004, ArtRage was becoming a cult classic among digital artists.

Move to Mac

In early 2005 a version of ArtRage was announced for the Mac, and in the summer of that year ArtRage 1.0 made its way into OS X. More users were soon able to embrace ArtRage's unique features and discover its potential. In its initial version ArtRage was a simple and pared-down program, and something of that ethic has stayed with it to this day. "It sounds a bit odd to say, but in a way the aim is to create a better environment for creativity by giving fewer options and tools," Matt Fox-Wilson told us. "In our earliest versions we didn't even include zoom, which we were pretty nervous about until we got a great email from a professor teaching art at a university somewhere, who told us that removing zoom had completely changed how his class used painting software: if you can't zoom, you can't pixel-poke and you're encouraged to just create."

The next few months seemed quiet for regular users of Ambient Design's website, who had been drawn there by the ArtRage Gallery. Then, in September 2005, Ambient Design started leaking teasers about a new product. Announced in January 2006, ArtRage 2.0 came on sale a couple of weeks afterwards.

ArtRage 2.0 built on the features of its predecessor, combining ease-of-use with spot-on media emulation and a simple, elegant interface. It was now available in a Free Edition as well as a low-priced complete version. This ➡

INSIDE ARTRAGE 3

Essential features

Playing with layers, colours and watercolour!

Watercolour

A brand new Watercolour tool

Hooray for the Watercolour tool! Through the Settings panel you can configure your brush parameters, such as the dilution factor of the paint, colour bleed and whether the paper is wet or dry. The results are strikingly authentic and the way the paint interacts with the paper.

Layer adjustments

Improved Layer tools

A number of enhanced layer options have been added in this version. You can now blur layers, perform colour adjustment and choose from a long list of blend modes, all in typically easy-to-use ArtRage fashion.

Colour Picker

Multiple Colour Picker layouts

The new Colour Picker is much improved over version 2.5. It can be configured in several ways, with the major divisions of RGB and HLS being further subdivided into sub-options, such as LH / S and BG / R. A Tint and Tone Picker is also available in addition to a Precise Colour Picker and custom options.

January 2006 ArtRage 2.0 is announced.

May 2006 ArtRage is updated to version 2.11

August 2006 Over a million copies of the free version of ArtRage have now been downloaded.

July 2007 ArtRage 2.5 is released. The free Starter Edition follows a month later.

November 2007 After a lengthy period of quiet, information about ArtRage 3 Studio and ArtRage 3 Studio Pro is announced.

January 2006 ArtRage 2.0 is released for Mac and PC.

July 2006 ArtRage Thumbnail Viewer is released, allowing users to view painting files easily.

May 2007 ArtRage Free Edition breaks the two-million downloads barrier.

November 2007 A boxed edition of the product, ArtRage 2.5 Plus, is released.

December 2009 ArtRage 3.0 Studio and ArtRage 3.0 Studio Pro are released.

ARTRAGE

Foray, 2009, Cuson Lo, ArtRage 2.5.
"Most of my artworks are inspired by Ashley Wood, like this one."

English Soldier, 2009, Slavyan Stoyanov, ArtRage 2.5.
"A pikeman who fought in the English Civil War."

➡ caused an upsurge in its popularity. The free version was a fairly small download with an efficient installation process, which made it accessible to almost anyone.

Full-on experience

Meanwhile, the full version and the special Wacom edition (which was bundled with Bamboo Fun graphics tablets) provided more experienced digital artists with a full feature set that included some great innovations. The canvas textures and customisable depth, shine and colour controls for them meant that users could emulate oil painting, encaustics, acid etching and much more. Metallic paint, glitter, stencils and the unique, real media-based brush customisation system made ArtRage attractive to both serious and amateur artists.

This universal popularity isn't without a downside for the developers, however. "We have a problem (albeit a happy one) in that our user base covers basically everyone. We have three-year-olds painting in ArtRage, professionals doing production work, schoolkids and elderly users who have to view their screens through magnifying glasses. Whatever we do has to be able to work in all those environments," says Matt. Unlike Photoshop and Painter, ArtRage was instantly attractive to a wide range of users – over two million of them had already downloaded the program by the spring of 2007.

It was in 2007 that ArtRage 2.5 was released and this is the version that most of us are familiar with. The fact that it was designed for tablet users is obvious from its interface – radial and temporal menus could be navigated with the flick of a stylus. Other features hinted at its uptake among professional artists. Support for the PSD file type without dpi loss meant that print-quality images could be bumped between Photoshop, Painter and ArtRage. Transparent layers also supported Photoshop's blending modes.

Support for dual-monitor setups was initiated and the ability to pin references to an image or use Tracing mode was introduced. Stencils and rulers allowed users to create precise shapes. With a free Starter Edition available as well as the attractively priced $25 full version, artists seriously began to fall in love with the program. "I think as a real media simulator it is largely unrivalled," UK illustrator Jon Hodgson explains. "The oils are wonderful and I love them to bits. I love the elegant simplicity and

Essential features

Selecting tools, keeping a clean workspace and new ways with a palette knife

Tool Picker

More functions

The existing Tool Picker panel has undergone a makeover as well as including a number of new media types, such as the appropriately named Gloop Pen. The stroke size is still displayed in a percentage in the inner quadrant, but round that now is an array of additional functions including Transform, Fill and Text.

Palette Knife

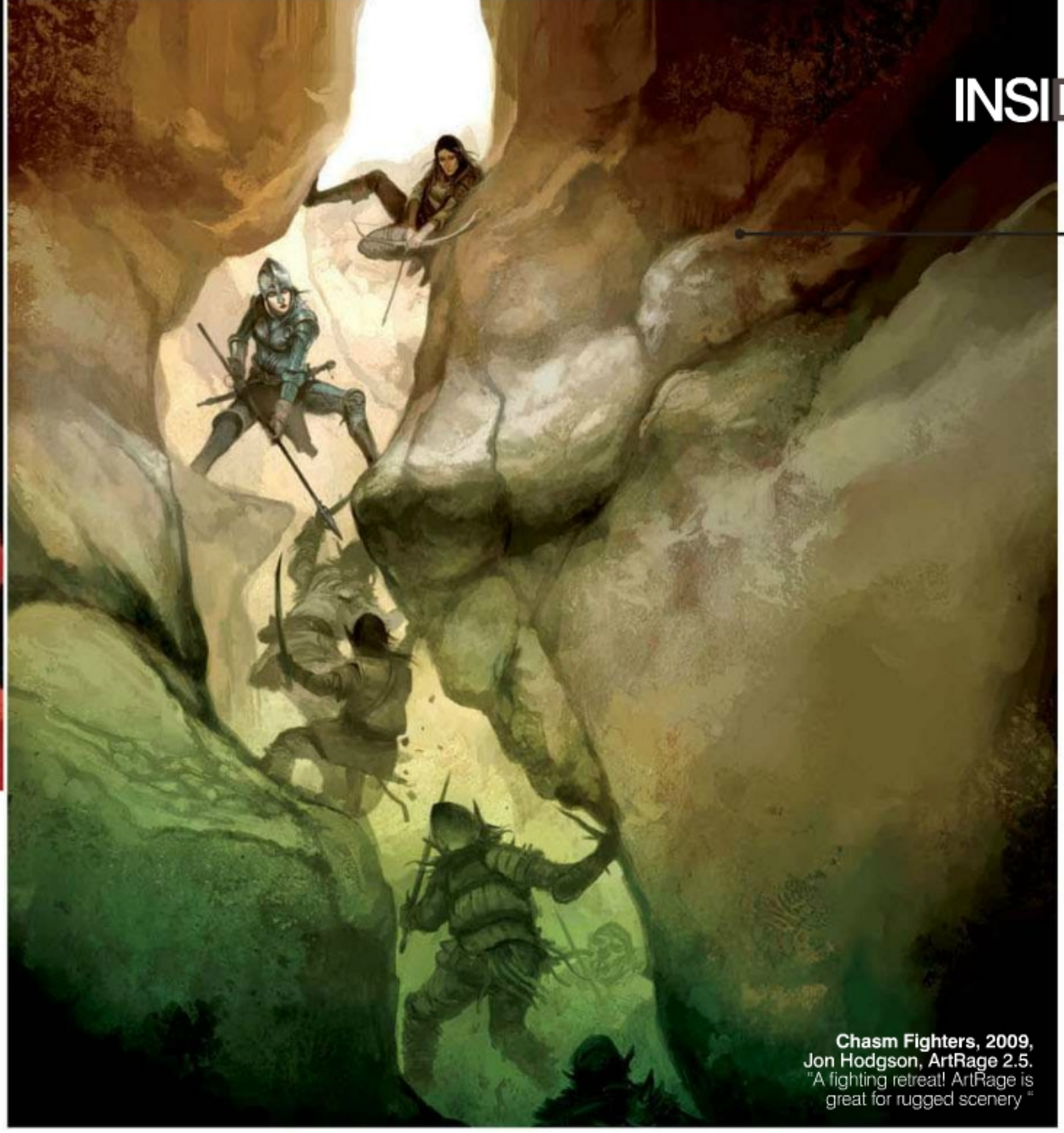
A big smeary overhaul

The Palette Knife function has hadan overhaul, making the results more realistic, as well as including two new options called Blur and Wet. Blur basically does what it says on the tin, and Wet is a flexible option ideal for creating painterly blends such as fog and smoke.

Pods

Neat workspace

Pods are a handy way of keeping your workspace neat. All of the control panels, even the Colour Picker and the Tool Picker, can be minimised to tiny square pods on the workspace by clicking their Close icon. To restore the panels, just click them again!



Chasm Fighters, 2009, Jon Hodgson, ArtRage 2.5. "A fighting retreat! ArtRage is great for rugged scenery "

real depth of the three variables of Pressure, Thinners and Loading within the Oil brush. There are a number of features it offers which are available in other programs, but ArtRage does especially easily – stencils are excellent, and the ruler is just brilliant."

Croatian graphic designer Nora Mojas concurs. "When I downloaded my first ArtRage Starter Edition, I was totally amused with the paintbrush and palette knife effect. I spent hours and hours just playing around with it and I was amazed how simple it was to create with it." Fellow graphic designer Stefano Fiore, from Rome, expands further: "I remember perfectly the afternoon when I tried the pencil for the first time. And today I can confirm that this is still the tool closest to reality."

The third realm

ArtRage 3 Studio and Studio Pro are both something of a departure from the program's original mission of accessibility. These two are designed especially for the growing user base of artists who work with the program professionally. You'll be relieved to know that Ambient Design still plans to support ArtRage 2.5, and is even plotting an upgrade for it. ArtRage 3 Studio and Studio Pro are new products, and they're built on a new generation of technology that's aimed squarely at advanced and pro users, particularly in the case of Studio Pro.

> ArtRage 3 Studio and Studio Pro are new products, and they're built on a new generation of technology aimed squarely at advanced users

Nonetheless, Ambient Design has produced a feature set that will attract users of all levels. The first thing that will grab you is the new interface. The ArtRage team had toyed with an interface akin to other painting programs but found that it overpowered the look and feel of the program. "There was an entirely different interface for a while. I played around with retracting trays, and the basic principle was working but it ➡

ARTIST PROFILE

Jon Hodgson

Website: www.jonhodgson.com

Country: UK

Job: Illustrator

What media and software do you typically use?
I use Painter, Photoshop, ArtRage and a little Illustrator.

How long have you been using ArtRage?
I've made serious use of ArtRage for a couple of years now.

What version of ArtRage did you start with?
I had ArtRage 1.0 for a long time, but never really got round to using it. Subsequently I tried the free version of ArtRage 2.5 and fell in love. I think it really dovetailed into what I was trying to achieve at that particular time.

What do you use ArtRage for and why?
I have three main uses for ArtRage. I discovered how good the Pencil tool is, so I'm doing a lot of my sketching in ArtRage. I also use the oils for blocking in large strokes of colour to break up my canvas, and begin to define basic forms. I like to lay down a really heavy impasto initially, and work back into it. The third use is an occasional one. If areas of a painting get too precious too early on I'll take the piece into ArtRage to lose control a little.

ARTRAGE

Progress, 2009,
Nora Mojas, ArtRage 2.5.
"This is an example of how I use ArtRage when working on more detailed traced pencil work."

ARTIST PROFILE

Nora Mojas

Website: www.nora-mojas.com
Country: Croatia
Job: Graphic designer

What kind of art do you create?
It's normally unusual art, psychedelic, surreal and macabre. But occasionally I get into my graphic designer mode and make subtle, trendy, modern designs.

What media and software do you typically use?
I use all kinds of media, both traditional and digital. At the moment I'm spending more time on my computer than playing in the dirt of paints and brushes, which are currently replaced with a Wacom Intuos 3 large pen tablet, Photoshop and ArtRage, combined with InDesign and CorelDraw.

What version of ArtRage did you start with?
ArtRage 2.5.

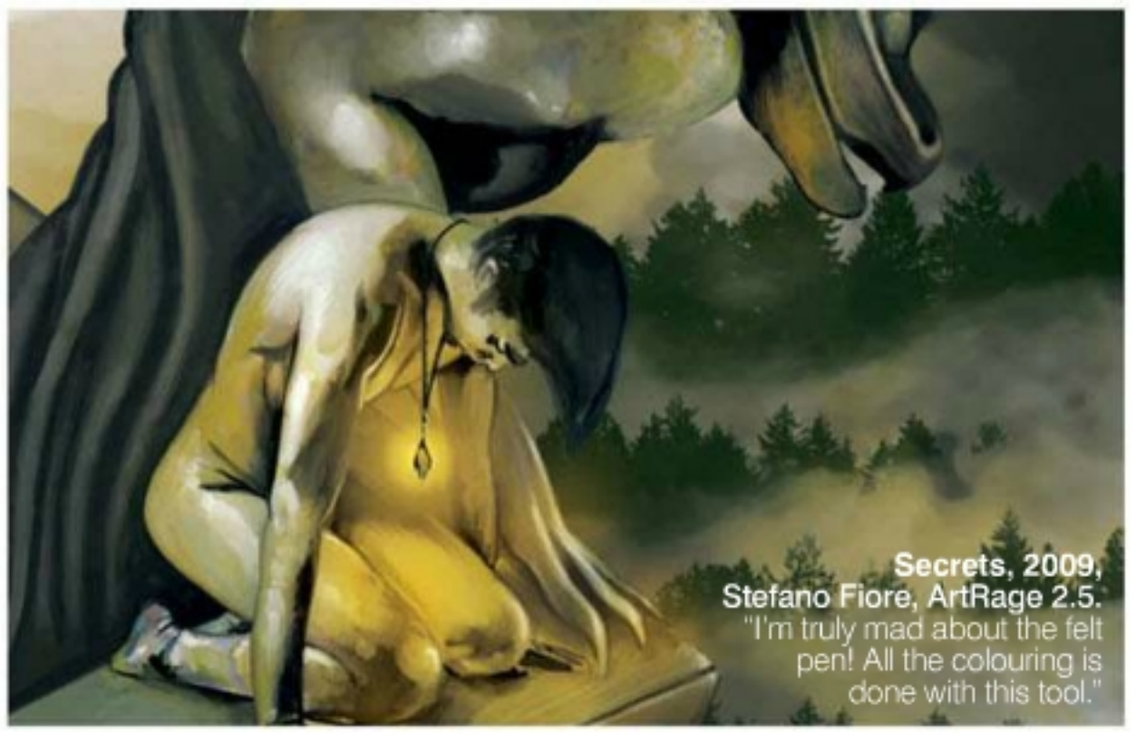
How long have you been using ArtRage?
Since 2006. I started with Art Rage 2.0.

What do you use ArtRage for and why?
Primarily I use it as a sketching tool, as research before starting some major oil on canvas thing. I find it easier to sketch in ArtRage than on paper, because of the Undo option. Then I try out some colours, see what works for the motif, and when I'm satisfied I paint it for real. I've also found ArtRage very useful when transferring my paper sketches in serious Photoshop projects. To begin with, I take a photo of my pencil sketch, then trace it in ArtRage. It's great, because I get the basic palette from the photo, then I edit it.

➡ never felt quite right. The sheer volume of controls was overwhelming, and we removed it around the middle of the beta period," Matt explains. He has returned to ArtRage's standard livery of elegant radials and unobtrusive fly-outs and drop-downs instead. This time however, the user is in charge. You can shrink, expand, move and even tear bits off your menus to keep them accessible yet out of the way.

Meanwhile, the so-called Canvas Puck makes it easier to navigate around your painting – ideal for Painter users who are used to fluid zooming and movement – while cropping, copy-pasting, colour adjustment and Free Transform have all been introduced for artists looking for the full digital paintbox they've become accustomed to in other programs.

The most obvious advance under the hood is in the new brush types. After many user requests, a Watercolour brush has been introduced. Rather than develop a special layer type (like Painter), watercolours in ArtRage 3 were implemented to feel wet but look dry. The technology that powers this brush also gave rise to others like the new Gloop Pen, and to tweaks and improvements with other brushes. The Pencil has been smoothed and the Airbrush tightened. For the first time ArtRage offers Real Colour Blending, an Impressionistic method of optical mixing. Now you can pull red paint into blue and create purple right on the canvas. There's a new Wet Blender for perfect watercolour and wet-brush effects along with a square Oil Brush



Secrets, 2009,
Stefano Fiore, ArtRage 2.5.
"I'm truly mad about the felt pen! All the colouring is done with this tool."

Mui Chan, 2009,
Cuson Lo, ArtRage 2.5.
"This was a gift to my friend, who created this joint ball doll that was called Mui Chan"

> If you've never tried ArtRage before you are missing out on a program that looks good, feels great and works like a dream

head, which can produce lovely Expressionistic strokes. Like previous versions of ArtRage, a metallic effect can be applied to the new brushes to create shine and sparkle.

Stuck on you

Another innovation is Stickers. This is one of those exuberant, only-in-ArtRage features like Glitter. Stickers work like an image brush to spray on pictures and designs, but there's far more to them than that. Matt explains in detail: "Stickers are sort of like dynamic clip art but they can carry their own textures and reflectivity, and each one is a micro-layer that exists within its own layer so you can spray hundreds of these things on to your canvas with the Sticker Spray tool and post-edit each one of them to scale, position and tint it to suit your image. You can build a beach from a thousand pebbles, then hand pick which ones to keep and remove, or erase that one bird from the flock that just didn't quite fit your vision, without damaging any other birds. Personally I use it to remove the orange Smarties – I never liked those. It's a really powerful concept and of all the new tools this is the one that we expect to cause the biggest stir."

We reckon Matt's right. Even without this awesome new feature, if you've never tried ArtRage before you're seriously missing out on a program that looks good, feels great and works like a dream. It may seem simplistic, but it's the same simplicity that you get with a rainbow of colours laid out on a simple porcelain palette, or from a round-tipped sable brush. Download the Starter Edition of ArtRage 2.5 for free from **www.artrage.com** now and we reckon you'll be handing your cash over within the week.

Meanwhile, if you're a dedicated ArtRage user already then this is the product you've been waiting for. It's packed with new features and improvements to classic and unique tools, and while there's no free edition this time round, it's more than competitively priced at $40US for ArtRage 3 Studio and $80US for ArtRage 3 Studio Pro. You can buy both products directly from the manufacturer's website, and there is a discount for existing ArtRage 2 users.

This is a significant update to a great product, and it could revolutionise the way you produce digital art. Don't just take our word for it – read on for an in-depth look at the development process from ArtRage's creative director. ➡

Essential features

New ways to naviagte, copy and illustrate

Cut and Paste

At last, cut and paste!

ArtRage 3 is the first version to implement cut/copy and paste. It encompasses several options, such as fixed shape selection, freehand and auto-detection, while providing a choice of selection modes and configurable edge feathering. Best of all, it's fast and super-intuitive.

Canvas Positioner

Easy canvas manipulation

The Canvas Positioner is a nifty new tool that enables you to drag, zoom and rotate the canvas simply by clicking on the gadget and dragging your pen. These operations are still available via shortcut keys, but it's handy if you like keeping your keyboard interaction to a minimum.

Ink Pen

Good news for cartoonists!

The Ink Pen is a great new addition for line artists. Building on the basic pen tool found in most painting packages, it goes much further by allowing you to configure a number of settings, most notably the Smoothing option. Smoothing turns your jiggly line into a curvaceous masterpiece – invaluable if your line work is wibbly.

Inside ArtRage 3 with Matt Fox-Wilson

Portrait of Matt, 2009, Hans Deconinck, ArtRage 3 Studio.
"A portrait of Matt Fox-Wilson done in ArtRage."

Dungeoneers, 2009, Jon Hodgson, ArtRage 2.5.
"Done for the hit German RPG *DSA* from Ulisses Spiele."

Digital Artist: **How long did it take to develop ArtRage 3?**
Matt Fox-Wilson: Around two and a half years. We're a pretty small team and there was a huge feature set to get in there. We also have a habit of redoing things until we're sure they are right, which led to the interface being redone a number of times and large numbers of tweaks to the tools.

DA: **What did you want to achieve?**
MF-W: The latest version is about improving the tools and filling in some of the real world gaps like watercolour, along with the addition of some digital utility tools that have been heavily requested.

The interface was redesigned to take into account changes in hardware. Everything in the latest version can be scaled dynamically and rotated to any angle. That means we're ready for horizontal touch surfaces and higher resolution screens where a standard interface might be too small.

Flexibility was also a pretty key component of the new design. We wanted people to be able to set up their workspace however they want, so we added tear-off panels and micro-utility buttons called Pods that give quick access to important functionality in a single, small button.

Wind in the Desert, 2009, Stefano Fiore, ArtRage 2.5.
"A Bedouin tribesman from northern Africa."

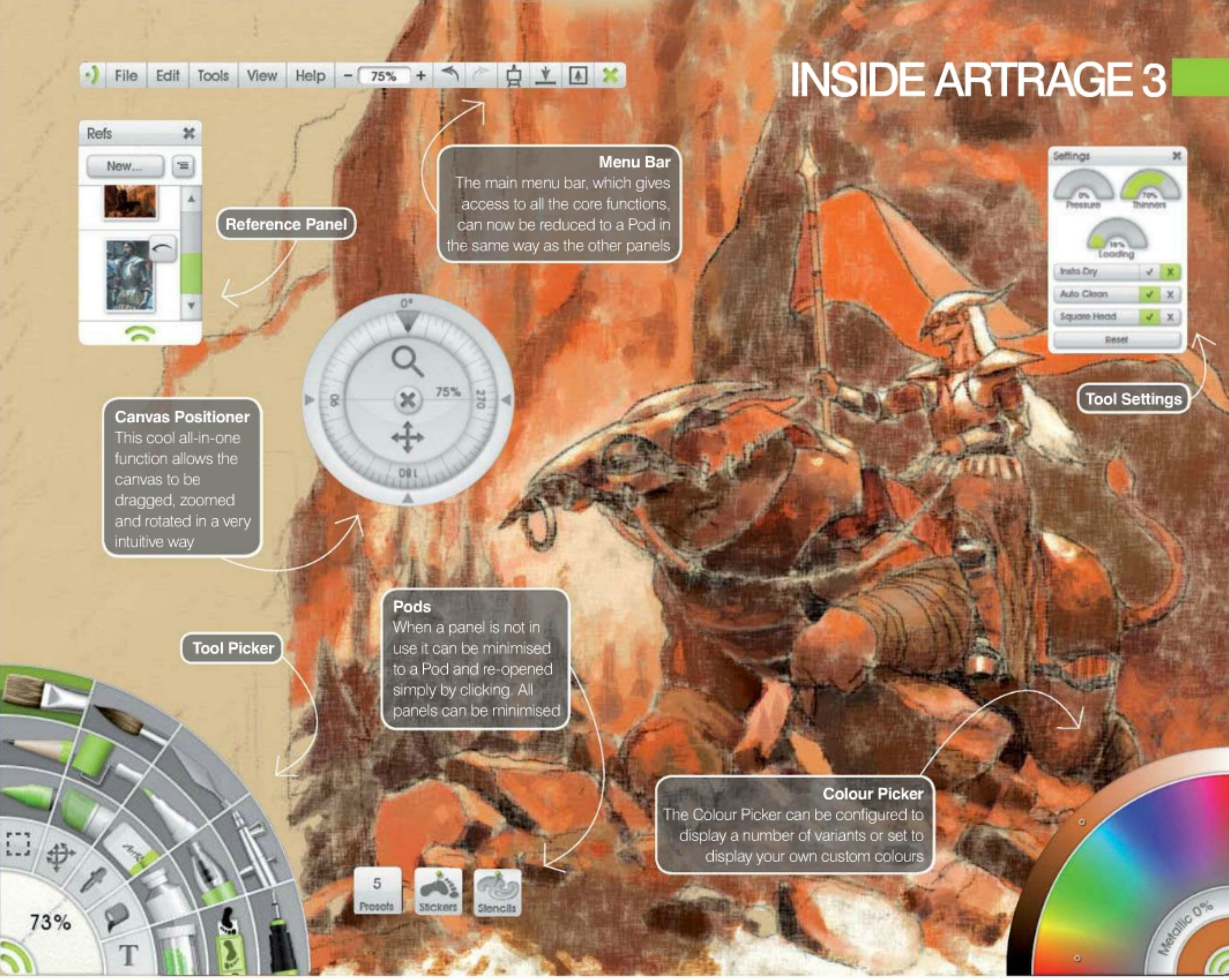
DA: **What did users ask you for in the new version?**
MF-W: The biggest single request we had for the new version was a Watercolour tool, so we added one and it has been really popular with the beta team. Our watercolours take the same kind of approach we took with the oils: simulating their real-world counterparts and maintaining some of that natural unpredictability that give them their appearance. Early experimentation with liquid dynamics also gave us the Gloop Pen, which is a special effect liquid pen that has a number of built-in shape adjustments based on real-time channel ops performed on the stroke alpha. The Inking Pen was also a popular request. Unlike the Felt Pen, this pen lays down solid colour and has automatic smoothing options to help iron out some of the kinks that can appear in paint strokes made with high resolution input devices.

Setting aside the big tool requests, I think the main request was for more utility. As the product became better known we developed a more professional user base and that meant more requests for things like click-drag brush resizing on the canvas, straight line shortcuts and that kind of thing.

Ultimately I think we were being asked to produce some new tools and make the product easier to use, while not losing the accessibility of the previous version.

DA: **How did you implement that?**
MF-W: Watercolour was a hard tool to implement. We had to rewrite our stroke technology to handle more dynamic interactions with existing paint on the canvas.

We did that previously with the real-time oil blending, but the Watercolour brush needed to be



able to adjust the shape of existing paint strokes as new wet strokes approached them. The other challenge we faced with the Watercolour was making it feel wet but look dry. When you use a tool like that the dynamics have to be those of live, wet watercolour, but the appearance on the canvas has to be that of a dried stroke. In the end I think it was well worth the effort, as the results look great and the technology gave us not only the Watercolour but significant speed improvements to the Airbrush, the new Gloop Pen, and auto-smoothing in the Ink Pen and Precise Pencil. It was one of those pieces of technology that starts out looking quite specific but ends up being widely applicable to other tools as well.

DA: **Was there anything that you or the users wanted to put into the new version of ArtRage that didn't work out?**

MF-W: There were a few things that didn't quite work out after testing. Up until the early beta versions the entire interface was constructed at 200% scale and scaled down on the fly. The idea was that we could do a high quality interface at double scale for future high-resolution systems. As it happened, the results never looked quite right.

Around ArtRage 3 Studio Pro.
Simon Dominic takes a look at ArtRage's new and improved interface

DA: **And which of the new or improved features are you proudest of?**

MF-W: I'd say this would have to be the Sticker system. It grew out of our desire to do cut and paste in an 'ArtRage way', and ended up providing a clip art style functionality at the low end, and really powerful instant detail up at the high end.

The Sticker Spray is a really complex tool, but as soon as you get to grips with it, you can build up some amazing effects.

We started off just spraying around flocks of birds and ended up with automatic cross-hatching and impressionist oil brushes.

> "Ultimately I think we were being asked to produce some new tools and make the product easier to use, without losing the accessibility" Matt Fox-Wilson, creative director at ArtRage

Digital art

Make metallic paint

Metal Paints Metal Paints Metal

2010 **ArtRage Studio Pro**

> Use the Metallic paint feature in ArtRage Studio Pro to create areas with a dramatically different feel
>
> **Jon Hodgson** Illustrator and art director

Despite its modest price and apparent accessibility, ArtRage has a lot of hidden features and aspects that are not often used by serious digital artists. One of the most overlooked of these features is the function of the Metallic slider.

Found on the Color Picker, the Metallic slider changes the appearance of all tools in ArtRage. Due to its name it's easy to think of it as something for the Sunday digital painter who wants to make day-glo metallic portraits of their pets, and of course there's nothing wrong with doing precisely that. However, like so many of the features and tools in ArtRage, with a little lateral thought it can prove itself to be a useful tool for any serious artist's tool box.

What the Metallic slider does in simple terms is increase how reflective the colour that's put down by the tool in use is. This is an artefact of the way ArtRage makes many of its marks; building a three dimensional model of a mark as you go along. By adjusting the slider you change how much light it is that the model reflects. What this does to your image in practical terms is offer very rich colours, deeper shadows and glistening brush marks. If you can move away from visions of glitter glue and badly made collages then it has some powerful uses.

This metallic effect can be used all over an image. It makes for very strong colours and increases the feeling of an oily impasto. It also increases the take-up of the canvas texture, as is to be expected with a more reflective medium. Using it sparingly can add an extra dimension to a piece of work.

Most pieces of art rely on contrasts to create their form. In terms of composition, light and shade, contrasts in colour and contrasts in shapes and sizes

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Jon Hodgson

Personal portfolio site
www.jonhodgson.com
Country **UK**
Software used **ArtRage, Painter, Photoshop**
Jon Hodgson is a full time illustrator and part time art director living in Scotland. He works digitally, mostly in ArtRage Studio Pro.

Source files available

Sketch

A perfect foil for painterly images

What is it that makes metallic paint metallic?

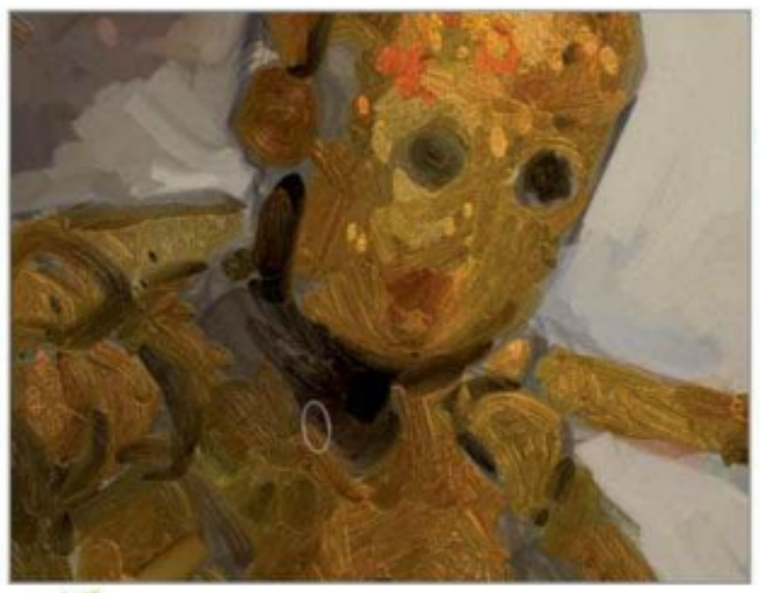
Metallic colours blend slightly differently to non-metallics. Due to the stronger saturation, brighter highlights and deeper shadows created, colour mixing on the canvas can be challenging. It can feel like the first time you use oils in ArtRage, slightly out of control and slightly difficult, especially if you're coming from a package like Photoshop which offers very high control. It is times like these when seeing this as a feature rather than a bug pays dividends for you. Strange colours are thrown up as light colours struggle to lie on top of dark when using a high percentage Metallic setting. This can provoke changes in the way you paint, and that is no bad thing.

Loose sketch The pencil in ArtRage is a marvellous digital drawing tool. Due to the flexibility and forgiving nature of digital media, you can start planning your image very loosely.

break up the picture plane and create the image. This is also true in terms of material handling. Large brush marks contrast with small as rough, scratchy marks contrast with smooth, considered ones. And so it is we can use the Metallic slider to create a contrast in the look of the materials we're using. This can be used as subtly or as outrageously as you desire. In this image the robot character is painted with 100% Metallic, in contrast to the background and surrounding details which are painted with non-metallic paint. This extreme variance in a small area is just one way to make use of the feature, and experimentation will quickly throw up even more ways too. Certain elements painted in Metallic paint, scattered around the canvas, can be picked up by the eye and create rhythm and pattern.

This painting begins with a drawing in ArtRage using the Pencil tool. Any tool that makes a line is fine for this purpose. You can draw with an Oil brush high in Thinners or the Ink Pen tool just as readily.

Anything done at this point will not be visible in the final image. When working digitally it is well worth taking advantage of the totally malleable qualities of the medium and working up a very rough thumbnail sketch on the canvas, then refining it step by step. It can be helpful to bring in some tone to show areas of light and shade. Generally speaking a midtone brown is the most versatile colour to use for this purpose. Working quite quickly, we build up an underpainting using washes of Watercolor on a tint layer. Generally the Watercolor preset Unclean Brush works well for this. Once the layer is full we flatten it and make a new layer. Building up too many layers isn't good for ArtRage's performance, so in general keep flattening as you go. Building in a variety of colour is helpful at this stage, with some cool and warm colours dotted around. Given that ArtRage really likes to pull colour up from the canvas, planning ahead and plotting in colour early is a good move.



Underpainting Underpaint in metallic opaque oil paint. Using marks that follow the form helps the shape to appear more three-dimensional.

Once the whole canvas is toned, with the darks and lights in the right places and plenty of interesting marks to work on top of, it's time to switch to some opaque media and get working with the Metallic slider. In this image, the oils are used with the Metallic slider at 100%. We use the Metallic Oil only on the robot itself – this will be the only area to use these rich strong colours. Everything else will be muted and non-metallic to emphasise the effect. Using dark, rich golden colours along with some reds, a further pass of underpainting goes in. The Metallic Oil is quite hard to control, so we have to take our time and make plenty of adjustments to the colours we pick.

Making the colours lighter than we would normally choose can help us get the effect we want. Once the burnished deep undertones are in place it is a good

Textures Importing a real texture into your design whether scanned or photographed is an ideal way to add interest, keep one foot in real media and cover canvas real estate fast. You can even make specific paint textures for a given project if you want.

Rim light On this close-up of the head of our robot, the main focus, the variety of golden colours can be seen in the second pass of metallic colour with the opaque highlights sitting on top. Getting that rim lighting right is crucial as it makes for a believable image.

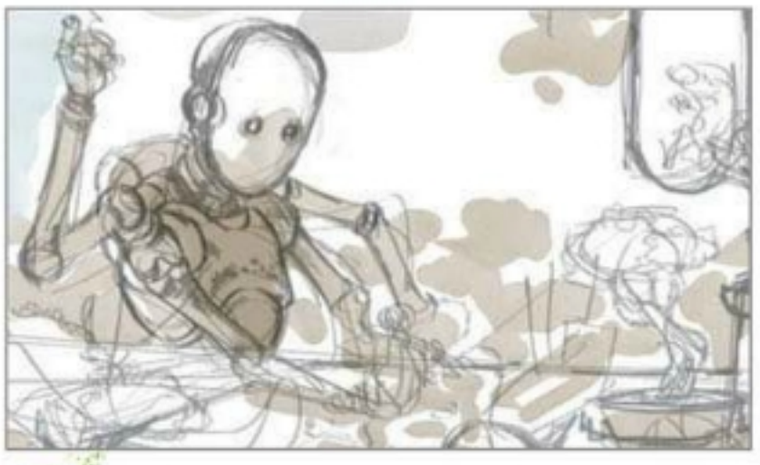
What it doesn't say on the tin

What adding more Metallic effects won't do is paint metal for you. You can't push the slider up and suddenly paint perfect chrome. You have to do all the work in picking the right colours and applying the right tone to your image. The metallic effect is designed to make the digital paint look metallic – not what is painted with it.

Reflections Attention to details like the reflected green foliage is another important point to observe. Metallic surfaces appear shiny because they reflect light and colour and that includes the scene around them.

Painting with Metallics

Learn how Jon's process makes the most of reflective effects



01 Sketch A simple line drawing midtoned with Watercolor. All the major details are here, but how detailed it needs to be depends on your painting style.

02 Set some colour Watercolor is used along with an imported texture to break up all the white space and provide some underlying neutral tones.

03 Opaque paint Highly metallic oranges and golds go in on the robot while flatter, non-metallic, muted colours make the surrounding area. Vary the hues.

04 Polish Lighter, brighter tones go in with strongly metallic paint. A further pass of non-metallic highlights are added on top for maximum brightness.

idea to switch to non-metallic oils and work up the surrounding areas so that everything progresses simultaneously and we keep our tones at the right relative levels. If you work one area too far it can make for a bitty image. A big part of making the golden tones of our robot really pop will be the contrast with the cyan coloured window, and it is worth getting that colour in there about now so we can see how it looks while we work.

Next, a texture is imported as a new layer just to break everything up and add further visual interest. In this case it's a photograph of a bronze statue in close up, which seems appropriate!

The next step is to return to the Metallic Oil paint and really work on the details and the midtones of the metal areas, pushing more towards yellows, golds and mid-oranges and leaving the darker areas showing through in the shadows. This takes the longest single period of time, and it needs a lot of care to work with those slightly difficult metallic oils. You can hopefully see the build-up of deep metallic colour and texture that begins to appear. Because the marks are so shiny and really show off that impasto feel, you need to take care to have the marks follow the form of what they are supposed to be describing or they will look unrealistic.

A couple of passes of lighter colours in Metallic Oils are followed by a switch in tool. The Ink Pen tool at a high Opacity with zero Smoothing is used to add in some very sharp highlights of reflected colour and shining gold. Because these need to appear as if they are lying on top of the metal body, non-metallic colour is used as it blends less and doesn't have that push towards deep colours.

This is the main basis of creating the metallic appearance you see in the image. Additional passes of Metallic Oil are used to tighten up the smaller details as well as introducing a few more areas of reflected warm orange and grey as a complement to it. From this point on, it is a case of adding as much detail as you like to flesh out the scene. Or to put it another way, it's all about polishing.

Digital painting

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Simon Dominic

Personal portfolio site
www.painterly.co.uk

Country **UK**

Software used **Corel Painter X, ArtRage 2.5**

In this tutorial I concentrate on atmosphere, both literally and figuratively, in order to create an overall impression of dramatic beauty, at the same time emphasising the grand scale of the heavens and showing how small we are in comparison.

Source files available

Nine Painter brushes
Color Set
Sketches

Painting dramatic skies

Working Progress

Apply colour in layers for the best results

Step 4, Block in the clouds

Step 7, Define the reflections

Step 10, Finalise those clouds

Step 11, Ripple the water

Soar 2009 **Corel Painter X, ArtRage 2.5**

> Sky and clouds are very important… they play a key role in setting the mood of your piece and also influence lighting

Simon Dominic Freelance digital artist

The sky is never the same from one moment to the next. The infinite variety of skies means that an artist can freely express themselves in terms of form, colour, dynamism and mood. You could say there is a sky for every occasion!

When painting a landscape, the sky and clouds are very important. Not only do they play a key role in setting the mood of your piece, they strongly influence the colour choices for your landscape and the nature of your lighting. Remember that clouds are subject to the same laws of physics as everything else. They can be lit directly by the sun and by diffuse light reflected from the environment. They cast shadows onto the ground and onto other clouds. They have length, depth and breadth.

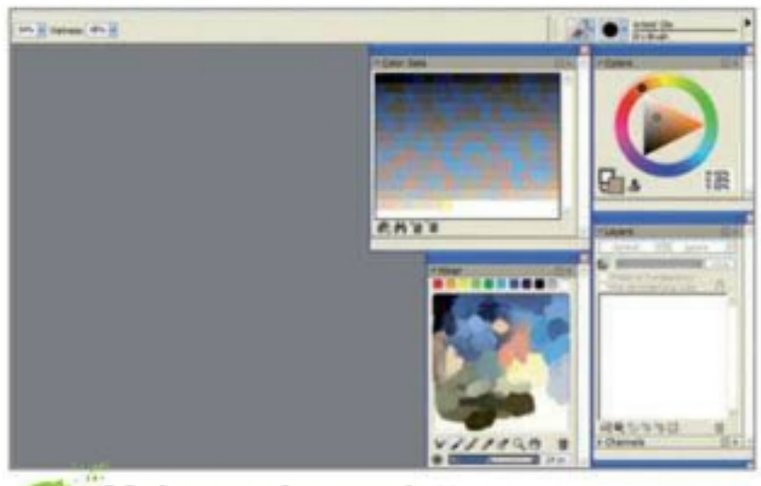
In this tutorial I'll be painting a dramatic cloudscape at sunset. The method I use is to block in coloured forms and refine those forms into cloud and sky as the work progresses, using only the canvas. It sounds simple, and it really is – if you bear in mind one thing. At every stage you must be clear about where your light is coming from, where your shadows should be, and remind yourself that clouds are three-dimensional objects floating in space and not just marks on a canvas backdrop.

I've chosen two painting packages, both excellent in their own right. I start painting with ArtRage 2.5 and later swap to Painter X, although initially I do use Painter briefly to create a custom colour palette. I find ArtRage superb at laying down rich colours that behave just like oil paints, while I use Painter to blend out any roughness and also work on fine detail. You could also use Photoshop or stick within ArtRage.

Once I've exported the image from ArtRage and gone to Painter, I don't use ArtRage again for the duration. The ArtRage file format includes extra information such as paint thickness, which is lost on export. This leads to unexpected results when trying to work on a previously exported piece, although I'm hopeful that the upcoming ArtRage 3.0 will make such transitions easier!

A dramatic sunset over water

Integrate sky and landscape to create atmospheric artwork



01 Make a colour palette In Painter I display the Mixer and Color Set palettes. I dab my colours onto the Mixer, and in the Color Set menu pick New Color Set From Mixer Pad. This creates a palette of 256 colours which I order by Level, Hue, Saturation (LHS). I resize the palette and use a screen capture tool to grab the swatches.

02 Create the ArtRage canvas I now move to ArtRage. The final image is going to be 2835 x 3661 pixels (A4 @ 300dpi), but initially I don't need to work that big so I create a canvas that's proportionally smaller: 708 x 915. I make it a dull tan, as white can be too dazzling.

03 Set up palette and brushes I load my captured swatch file, which I created in step 1, as a reference image. I then select the Oil Brush tool and set the Pressure, Thinners and Loading to 100%, 33% and 40% respectively. And that concludes the setup – we're good to go!

04 Block in the clouds I place the horizon line low to emphasise the vastness of the sky, and start to block in the clouds using a wide brush. I paint the clouds slightly elongated towards the top of the image to demonstrate depth and give the impression they are soaring over the viewer's head. Remember that the sky is a three-dimensional space!

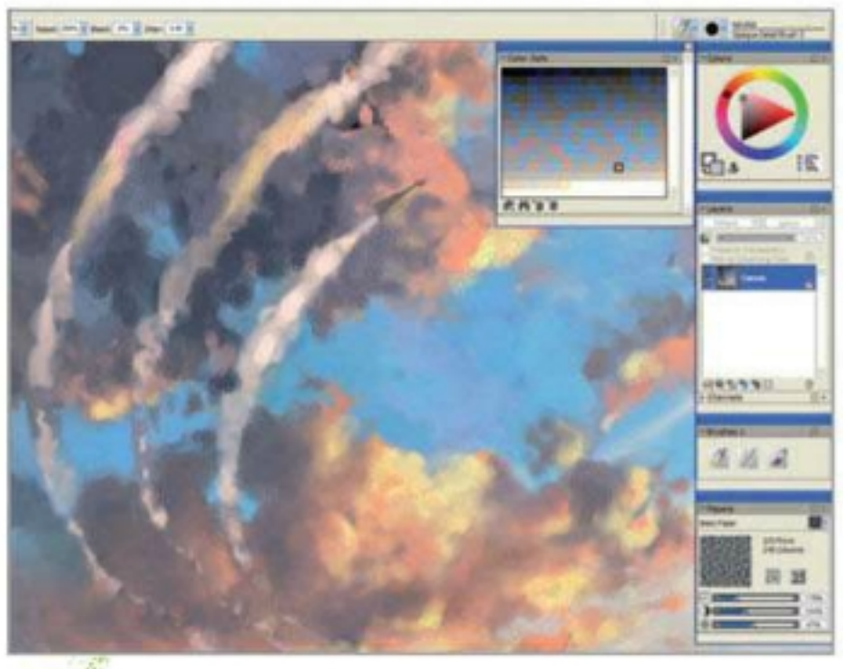
05 Get that colour down I'm eager to get the canvas covered in colour. I don't paint a background blue gradient for the sky, I rather add the blue in the same manner as the clouds. Later we'll see how this helps to simulate thin, high cloud. The sun is located rear right, so I colour the clouds accordingly – salmon pink lower right and underside, desaturated blue shadow above and upper left.

06 Resize up The canvas is now fully coloured so it's time to rescale the painting to full working size. This will make the image blurry, but because I haven't yet applied detail that's perfectly okay. Of course, there's nothing to stop you starting big – I just find it quicker to block in the colours on a small canvas.

Where should the reflection be placed?

The rules of how light reflects are complex. It can be tricky to understand where to paint a reflection. A quick method is to imagine that the object being reflected falls until it reaches the level of the water. Measure the same distance again below the 'impact point', and that's where the reflection should begin. For objects already at water level, such as the mountains in this picture, the reflection starts immediately.

07 Define the water reflections It's a good idea to block in the reflections in the water early on. The water has no colour of its own. It simply reflects its surroundings, which in this case comprise the blue sky, the sunlit clouds and the distant mountains. Save the file and open Painter.



08 Shape the clouds Now in Painter, I use a medium sized brush with pressure-dependent opacity and resaturation to add form to the clouds. I apply small circular dabs to distant clouds and more elongated strokes to those overhead. I press harder on the cloud edges than their centres. This helps mould and define the raw strokes I painted in ArtRage.

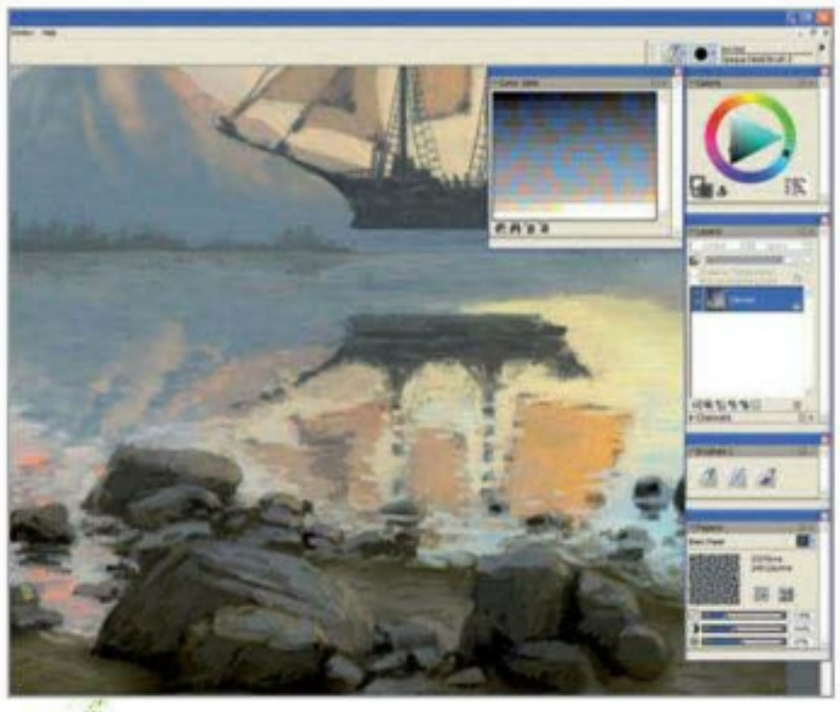
Don't skip ahead

It's sometimes tempting to start detailing a piece too early, and this can lead to awkward composition, time-consuming reworking and inconsistent results. Make sure all your major elements are in place and that you're completely happy with the composition before you progress to the detailing stages.

09 Blend the sky and clouds I use a medium sized blending brush to soften the main bodies of the clouds while leaving their edges slightly sharper. I also blend the blue shades of the sky. The imperfect blue gradient I created in step 5 helps suggest that above the main cloud mass there is a patchy layer of thinner, higher cloud. I enhance some of these areas as they become apparent.

10 Finalise those clouds I repeat steps 8 and 9 using smaller brushes, sometimes emphasising a cloud formation and sometimes smoothing the transition between colours in a cloud. I work at a magnification of 40% to 100%. This step should not be used for adding new elements but refining what is already on the canvas.

11 Ripple the water In step 6 I created the basic reflections. Now I create a distressed effect to simulate ripples on the surface. I do this by laying down repeated dabs with a hard Artists Oils brush. For the distant water I just tickle the surface, but as the ripples grow closer I make sure they extend horizontally to show perspective. The colours I use are already on the canvas so I colour pick from the water's surface.



12 Tidy up I spend a little time refining the foreground rocks with the Oil brush. Because the beach and rocks are in the shadow of the distant hills, they aren't lit directly by the sun. Therefore they are illuminated only by the diffuse blue light from above and the diffuse yellow glow rear right. I also soften the ripples a little with the small blender.

Style School
Art genres in a nutshell

The sky in art

The importance of sky in landscape paintings

All the great landscape and seascape artists knew only too well the importance of skies. Look at an accomplished piece and you can't imagine it with a different sky.

Talk of dramatic skies in art often brings to mind the paintings of JMW Turner, whose Impressionist style seascapes are recognisable worldwide. Turner's skies are so integrated with the other elements in his paintings that it's impossible to describe them separately.

One of my favourite artists, Albert Bierstadt, also used skies to great effect in his paintings of the plains and mountains of the American West. Bierstadt was a master of atmospherics, his skies and landscapes working in perfect harmony to create the mood he wanted.

Another master of atmospheric skies was Martin J Heade, whose skies were often understated yet hugely effective in helping define the emotion in his work.

When examining the work of these masters, it quickly becomes apparent that a sky is so much more than a simple backdrop to a landscape.

The masters

Great inspiration for your skies

Albert Bierstadt
1830-1902
Gates of the Yosemite 1882

● Bierstadt was a German-American painter who garnered much attention for his landscapes of the American West. His skies often included subtle clouds that helped set the tone of the piece. His work shows how the sky can be understated, yet powerful.

JMW Turner
1775-1851
Chichester Canal c1828

● Turner is one of the foremost artists to turn to for some sky inspiration. Often called 'the painter of light', Turner's work boasts incredible realism without seeming to try too hard. His work will give you lots of ideas for how to incorporate colour for impact.

Illustrator

Design and draw vector artwork in Illustrator

134 Apply colour to line sketches
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NO ROOM TO SWING A CAT?
A Suggestive Inquiry Into the Size of the British House
Have you ever wondered if your bedroom is smaller than the size of a scullery maid's cupboard? The British house has changed dramatically over the years, having faced two World Wars, a handful of recessions and the disco era. With house sizes set to drop again, find out how the British house has transformed over the past 150 years.
124%
47%
6%
300%

148

Illustrator

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Mary Winkler

Personal portfolio site **www.acrylicana.com**

Country **USA**

Software used **Corel Painter X, ArtRage**

Illustrator and jewellery designer Mary Winkler specialises in bright, cute, and kooky fashion and jewellery, childrens' pictures, and urban illustrations for a variety of media. She loves to create with bright colours and cute creatures.

Source files available

Sketches, AI file

Apply colour to line sketches

Rainbow Hat 2009 **Illustrator**

Rainbow colours can enliven vector artwork and create a cartoony effect that's perfect for whimsical art

Mary Winkler Designer and illustrator

The piece begins with an initial sketch, either done traditionally and scanned, or digitally and brought into Illustrator. From there the line art is traced and a line colour chosen. The line colour will determine the harmony of the other colours throughout the piece, although it can be nixed altogether to create something less cartoony. The base colours are put down beneath the line work, and gradients, transparencies and highlights placed over the top to create depth. Even more colours can be added, aside from a base colour, gradient shadow and highlight spots, to create more of a punch.

Tools used are the Pen, Pencil, Gradient, Transparency, Pathfinder and whatever palette is chosen for the job (entirely up to you). Most shapes created will be with the Pen tool and edited with the white arrow in the toolbar, to keep things clean and tight. For spontaneous shapes the Pencil tool comes in handy, as all it takes is a quick flick of the wrist with a tablet pen to create something new.

Not all the steps are needed, as the point of this tutorial is to tackle colouring a sketch or line art in a different way. Colours can easily be changed and moved around for multiple uses, especially screen-printing with the deletion of transparencies and gradients and creating alternate versions. It's also a good way to play with different colour palettes or a base for larger, more involved illustrations.

Working Progress

Apply colour in layers for the best results

Step 1, Initial Sketch

Step 3, Highlights

Step 8, Solid shading

Step 11, Definition

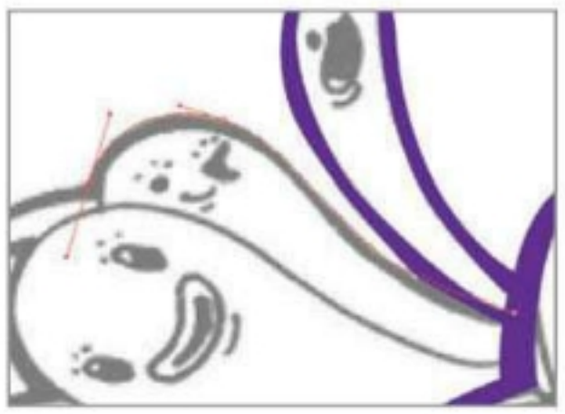
Bright and beautiful

Use Illustrator to colour sketches and line art

01 Handling the initial sketch Take your sketch and import it into Illustrator. It will occupy your first layer. Lower Opacity to around 50%, as you'll be tracing over it on the next layer and don't want such dark lines competing with your new layer.

02 Create line art Simply trace pieces of the sketch's lines. You're creating shapes that'll later be grouped and form the full line art. Now's the time to iron out mistakes. Even out lines, ditch extraneous shapes or add parts to improve the composition's balance.

03 Add permanent highlights Something simple and sweet. There are certain permanent highlights in this piece, such as the ones in the little monsters' eyes (hearts, sparkles, etc) that need to be above the line art. Either group your line art and simply add the highlights on top, or create a new layer altogether to keep things organised.



Artist showCase

A tour of Mary Winkler's past work...

Space Yeti Believer
2009, **Adobe Illustrator CS3**
● Sketched in Alchemy so I could work a mirrored image, it was taken into Illustrator and rendered in a few hours.

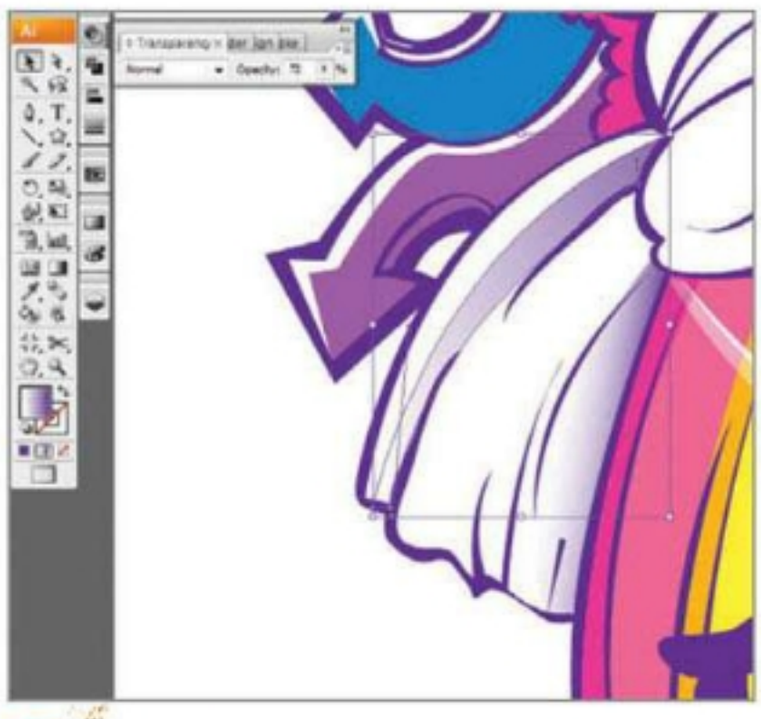
Splash
2009, **Adobe Illustrator CS3**
● Began as a biro doodle, transferred to Illustrator via a digital photo. I wanted to work lineless and play with colour.

Little Red
2009, **Adobe Illustrator CS3**
● Another Alchemy to Illustrator piece. This is the first in a small series of girly folk and fairy tales.

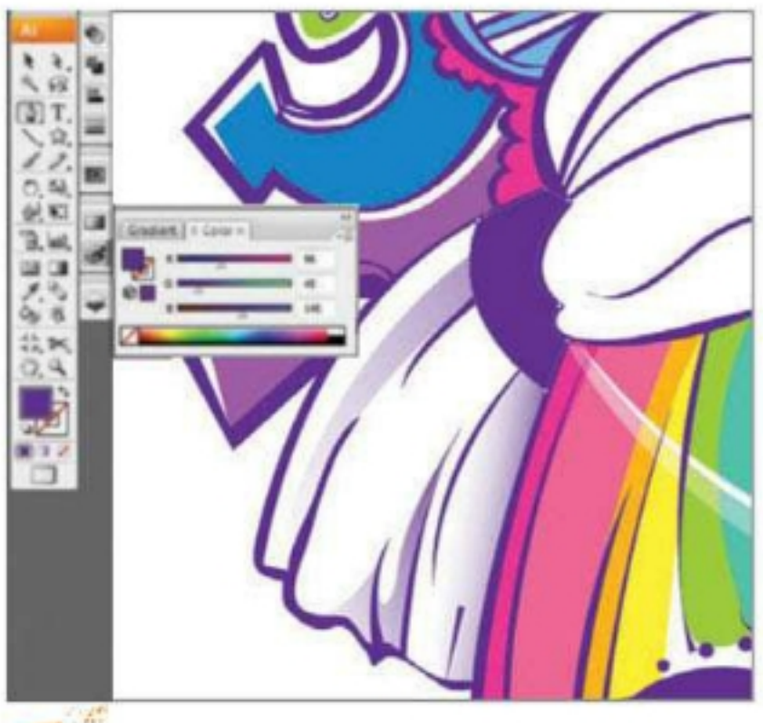
04 Base colours Make the sketch layer invisible, create a layer below the line art and start colouring. Create shapes with the Pen following the contour with colours of your choice (can be changed). Select the shape and pick a new swatch or play with the sliders in the colour bar.

05 Highlights again Instead of shifting the entire base colour layer to create an off-register look, you can easily create a new layer between the base colours and line art for some shiny white highlights. Entirely optional (not everyone wants little balloon monsters).

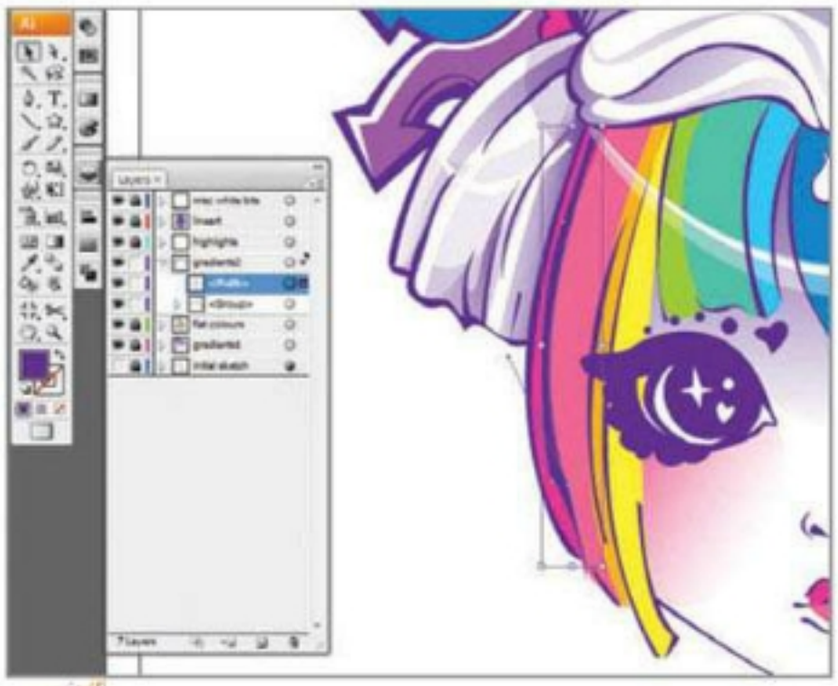
06 Gradients
Some gradients are needed on the face. For this part, the layer will be beneath the base colours so as to show only on the face. This girl needs some rosy cheeks. Create a rounded shape and use a pink to white gradient. Alter the degree and transparency of the object to your liking.



07 Start shading Make a new layer above base colours, below line art and highlights. Create a shape of a shadow. Follow the contour of the object to create depth. This gradient will be purple and white, since we established purple as our darkest colour and white as the base pigtail colour. Alter the transparency as desired.



08 Solid shading In addition to gradients used to shade, solid colours of various transparencies may be used as well. Create a shape arching over more of the hair (a larger shadow) and alter the object's transparency as desired (10%-30%). Overlapping shapes of various transparencies create a more complex object.



09 Flat transparent colour For coloured parts of the piece you can use a flat transparent colour or a gradient. The gradient will seamlessly blend your shadow into the base colour, while the flat transparent colour will have a harder outer line. Which one is used (if not both) is up to you. Some parts of your composition may need to 'pop' more than others.

10 Defining the face So as not to seem out of place with the hat being rendered, the face will need some defining as well. The fringe on this girl is rather large (as is the hat), so a shadow over the eyes and brow is needed. How dense or slight that shadow becomes is subjective.

Planning the sketch

In order to keep my sketches in the moment, I like working with a thin permanent marker on Bristol board. That way it's something I can save easily and it forces me to quickly think of ways around little mistakes. While many things can be changed later in Illustrator, I like my sketches to contain most of the final image. It's been great for wasting less paper through making mistakes, as well as saving time when I have deadlines and need to get sketches and ideas to clients.

11 Continue the definition Continue with transparent shapes and gradients similar to those in the hair to define the nose and mouth. The top lip is darker than the bottom. Under the nose and sides, show some curve and depth. Define the jaw and eyes as well, if desired.

12 Popping the hat out Now the face and hair have been rendered to the degree you're satisfied with, the hat needs to follow suit. As with the coloured parts of the hair, colour gradients and flat purple transparencies are used. Coloured transparent shapes also help in brightening the piece up.

Colourful world

I'm a big fan of bright colours and rainbows. I love the kiddish style of a rainbow and how it seems to be 'in order'. I'm also a sucker for girly colour combinations. Teal, pink and purple is one of my favourites, or pink with blue. I like line art, if used, to be some sort of colour rather than black. It causes me to think about what harmony my palette is making versus being something to define an area. My rainbows tend to be pink, yellow and teal if I'm limited on colour or if there's too much going on.

13 Working the background Create a layer above the sketch and below all others. This is the background layer. Make a rectangle of flat colour. The face and hair should remain white (or the colour you chose), so a shape above the rectangle following the line art contour is needed to preserve it.

14 Finalising the image Copy the image's layers, ungroup them and hit Add to Shape Area in the Pathfinder. Choose a colour and stroke colour. Alter the stroke so it's larger, and place this object behind the rest of the image. This creates an optional outline. Choose your final background colour, sign it and then save your piece.

Combine photos with illustration

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Geo Law

Personal portfolio site
www.getaloadageo.co.uk
Country **UK**
Software used **Illustrator and Adobe Photoshop**

Geo has been freelancing as an illustrator for the past three years, with regular clients in his local city of Sheffield, working with night clubs, design agencies and fashion, using a mix of hand-drawn illustration with software to finish.

Break Out 2010 **Illustrator, Photoshop**

“Here I show you how to couple illustration with a photographic scene”

Geo Law Freelance illustrator

Source files available

Illustrations, photo

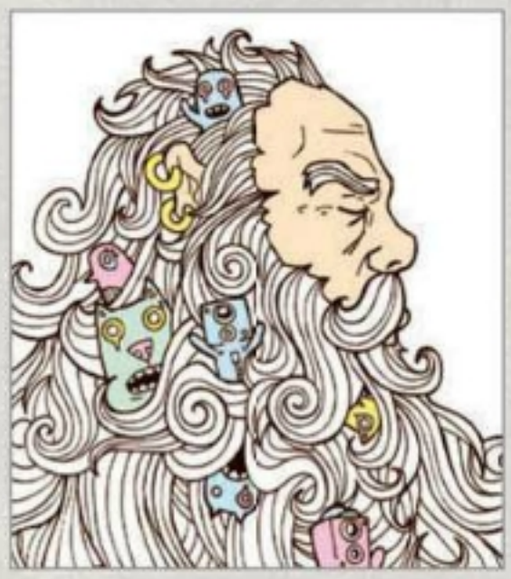
Digital art

Artist showCase

We take a look at Geo Law's past work

Alice In Wonderland
2010, **Pencil, ink and Illustrator**
● Promotional item for the opening of a new bar in Nottingham. Characters were drawn separately then pieced together.

Untitled 2009,
Photography, pen, PS, Illustrator
● Self-promotional Christmas card; photographer James Brown, stylist Natasha Lyons, model Lydia D. Ward.



Beardy 2009,
Photography, pen and Photoshop
● Part of a 'Bad Dandruff' collection. I focused on portraits and hairstyles, drawing in creatures to add some fun.

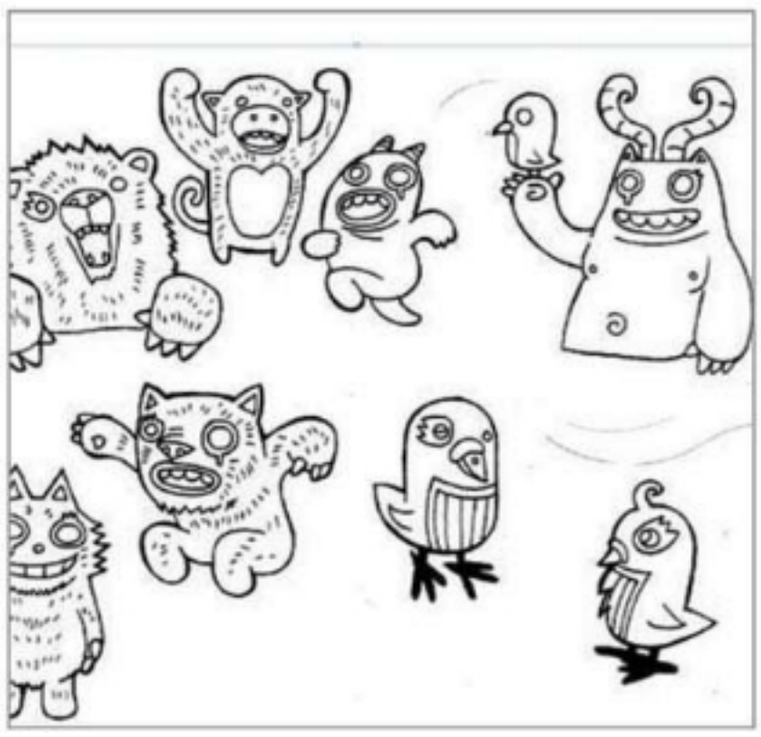
Plan your masterpiece Plan how you wish to merge your illustration with a chosen photo, and look at what kind of characters are best suited to depict within the scene and where they will stand within the picture.

This tutorial will focus on techniques to merge hand-drawn, illustrated graphics with digital photography. This achieved look has been adopted for many campaigns and fashion illustrations for its fantasy-induced mix of real life and imagination. A lot of my current work borders on imaginary monsters and settings, which I create in my head and reference towards a childlike stance. By mixing photography and illustration together you can create scenes that seem to pop out of another world and into our own.

Graphic designers like Vault 49 (www.vault49.com) are very good at utilising intricate illustrations with cleanly produced photography. The techniques in this tutorial are quite simplistic in their execution but still need thought when it comes to finishing off the piece. Within the final image, the touches on the shadows have been considered as well as areas that have been airbrushed to show prominence and perspective.

The first step would be to either find a photo or start with a sketch. By finding the right photo you can base your illustration around it. www.istockphoto.com is a popular site where stock photography can be purchased, but if you don't wish to part with money you can always take your own photos or collaborate with a photographer. If sketching and doodling is your first step, you can look for a photo that plays well to the intentions of your illustration.

Mist Cut out pieces of mist and place around the photo. Select Mist layers, go Layers>Merge Layers.



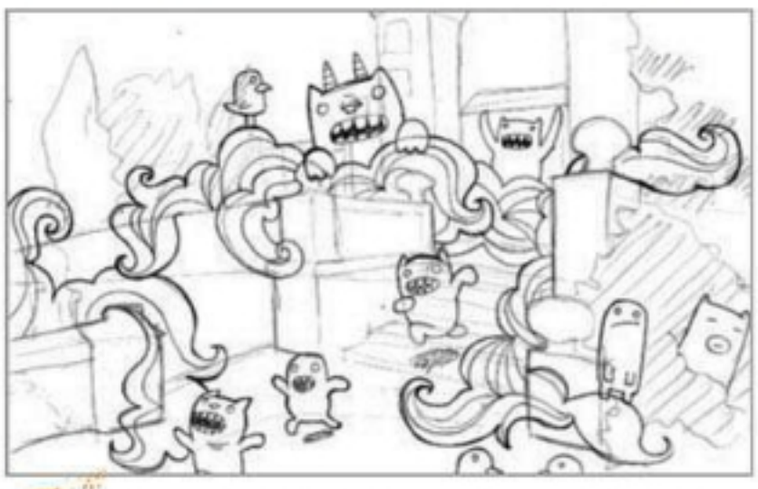
Sometimes the wackier the illustration the better it can be used within your chosen photo. The context of the scene you're creating is up to you, whether you choose a subtle approach or one that jumps out of the page. Always pencil down your intended layout, so you can plan which areas of the photo will become useful for spacing or crowding out with your characters and flourishes. Again, depending on what you draw or design, it's always good to remember that your illustration will become a focal point against

Live Trace Scan in your drawings and use Adobe Illustrator to transform them into vectors by using Live Trace to polish. Name and save PDF files for 'Characters' and a separate one for 'Mist'.

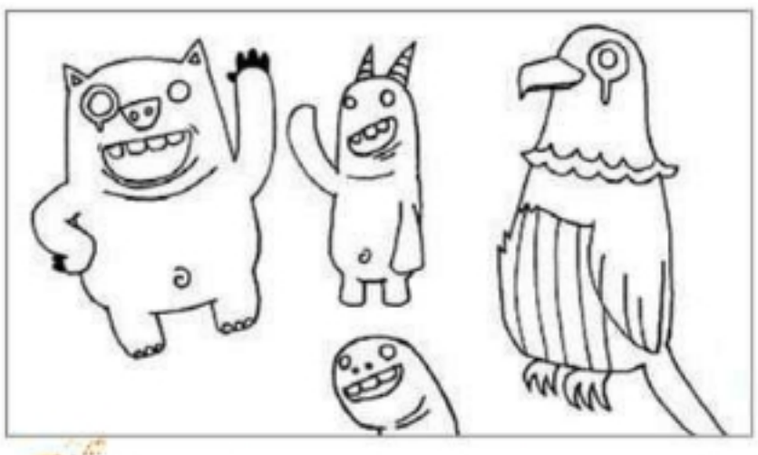
Delete the mist Select the Mist layer and go to the Layers panel. Set the Opacity to 70% before deleting away areas that interact with the photo.

Applying the illustration

Merge your illustrations to a photograph using Photoshop



01 Plan Sketch out where to place characters and elements. For this image I work the illustration around its content and consider the areas I want to balance out.



02 Characters The characters will be the focal point, so depict them as lively, as they'll add life to the scene. Deciding on the colour palette is also important.

03 Delete Once the illustrative parts are done, flatten the layers into groups, in this case 'Characters'/'Mist'. Delete areas that correspond and work around the scene.

04 Details We must add colour and shadows to the characters. Be mindful of where the shadows fall – it's important to merge the illustration with the photo.

Colour palette

Depending on the photo you choose to work with, always be mindful of your colour palette when touching up the illustrations and photograph itself. It's always important to balance the feel of the illustrated areas with the photographic capture, so they don't look too misplaced with each other.

Place characters Open the AI file where your characters are saved; select them individually using the Lasso (L) to cut them out, and drag into the photo.

the photo itself, so give your drawings a purpose within the piece. If you choose to have characters, give them a focus – make them funny, angry, sad, happy or outrageous. If your work is to be abstract, consider how the illustration visually balances out as a piece. You can always choose to crowd out the composition or focus on one hand-drawn feature. For this tutorial I've opted for a busy scene but not wanted to overpower it with too much, as the photo itself will balance the illustration.

I always hand-draw my illustrations in black pen, and use programs to gloss and smooth over the rough edges. I use Photoshop to clean up excess dirt and redraw broken lines on the scanned work, then adjust the colour levels by using the Magic Wand to select all black lines and make them look darker. I then import it to Illustrator where I use the Live Trace function to convert the image into vectors, which gives the work a smoother, cleaner line. If the scans have been edited with darker lines this helps the Live Trace. Once this is done I save the file and import it back to Photoshop where I cut out the images I'll use as layers and then save as a high-res PSD file.

The colour palette is important, but it can depend on many things – the photograph or the context of your illustration. You can choose whether to have the illustration clash and stand out from the photo or have all the components in your piece work together and merge. Again, this depends on the look you're trying to achieve. I adjusted the photo first by playing with the saturation levels and slightly dulling the colour by going to Image>Adjust>Hue/Saturation. Alternatively, you can adjust the colour balance and channels according to how you want to execute your image.

Within the tutorial I considered the colour palette to have a bright range but a more pastel tone. The

Delete characters Select each character and edit according to how they fit the scene. If some are standing in the mist, they will need to be airbrushed by using the Eraser tool (E).

Colour palette When applying colour, use the Magic Wand (W), select isolated areas (Contiguous On) and use the Paint Bucket tool (G).

Blur edges At the moment, the mist layer needs softening up, as it looks too sharp against the photo. Select the layer then go to Filter>Blur>Blur More.

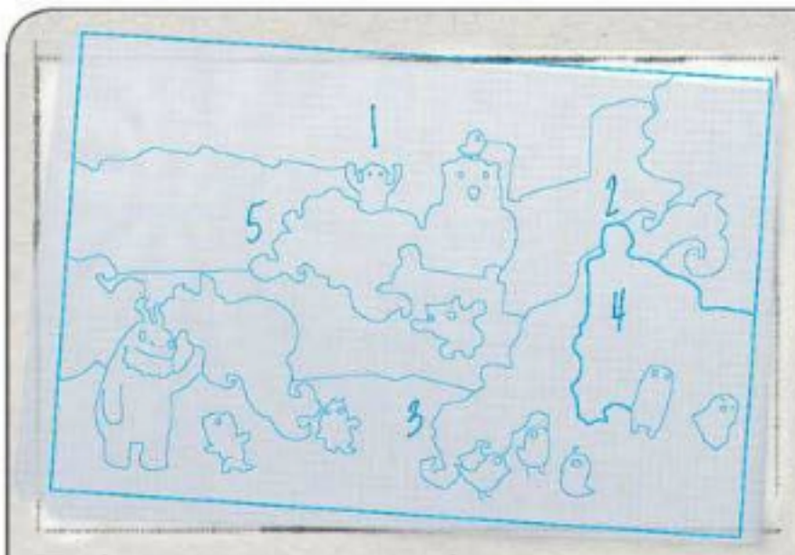
photo itself has a nice excess of colour, so I chose to avoid any slight visual clashes when applying colour to my characters and flourishes. I used the Paint Bucket tool on individual character layers combined with the Magic Wand to isolate areas I wanted to colour fill. The same was applied to the mist illustration, where I used the Magic Wand to select the black lines then adjusted them to a lighter grey to complement the colours in the background.

When I work with an illustrated photomontage, I tend to use Photoshop to piece the work together. All my characters are on separate layers, which I label, and once their position is set I place them in a group folder in the Layers tab for easy access. I first positioned the mist drawing pieces over the scene according to how I'd planned it in the sketch, then merged them as a separate layer independent from the photo. If you don't wish to merge the mist as one layer yet, you can save the layers in a group folder – just remember to label it accordingly. Once the layers have been merged, this makes it easier when you have to erase the parts that will play with the photos' perspective and interactivity. You'll see in the main image that some of the clouds and flourishes hug and hang over different parts of the stone courtyard. The same will be done with the characters' layer. Working from my previous sketch, I chose areas where characters and the mist would sit in front and behind parts of the photo.

When erasing or carving away bits of the layers, it's best to lighten their opacity in the Layers tab so it's easier to see the photo beneath or the corresponding layer. Consider how your illustration blends within the foreground and background of the scene.

Once all the characters and flourishes are carved and temporarily in place, you can look at the details that will bring the image to life. Adding shadows will connect your illustration with the photo, so darken areas where the mist or characters touch; consider where your light source is coming from and duplicate the background layer (photo) in case you wish to start again. Use the Burn tool to paint on a dark wash in your chosen areas. Don't overdo it – shadows don't need to be pitch black in a photo; we're looking for a subtle touch here. I've applied shadows to where the mist hangs in front of the brickwork and where characters stand and run within the scene.

The mist illustration itself might look a bit too sharp against the photo, as it's an imported vector file. To rectify this use a simple Blur filter in PS, which will soften the layer and make it look more translucent. I've also added stock PSD fog layers, downloaded from www.officialpsds.com. These layers can be duplicated to place in front and behind the mist layer to create depth within the fog and mist, which is another way of slightly softening the illustration. You can also play with the levels of opacity with these



Dissect an image

Art structure explored

1 Characters in the mist Once the position of the characters in the scene was decided, their Opacity was dimmed to 70% so that it was easy to airbrush away the parts that were supposed to be hidden by the mist.

2 The mist Part of the mist was also erased to fit around the features of the photo. To make things easier, the Opacity was dimmed to 70% to allow me to pinpoint the parts that were to be hidden by the obstacles in the scene.

3 Sharpen the photograph Certain parts of the photograph were given more emphasis by using the Burn tool with a dimmed Opacity setting to around 80%, to darken the foreground areas in front of the mist layer.

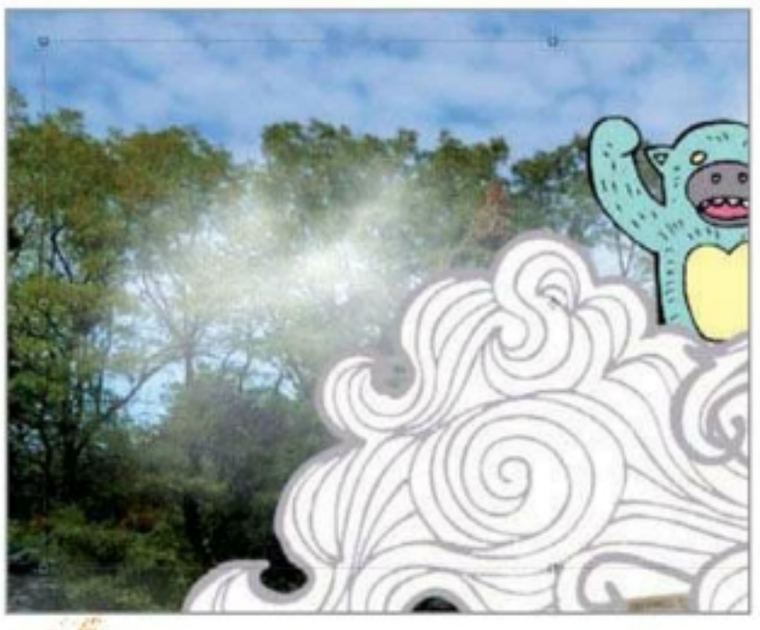
4 Shadows For more realism, shadows were applied to the illustrated objects by using the Burn tool at full settings and airbrushing over the background layer repeatedly to create some added darker areas.

5 Fog: A stock fog PSD file was dragged into the document to soften up the illustrated mist layers. These images were placed in front of the mist layers and then had their Opacity dimmed to around 75%.

layers, creating a light or thick fog (whichever you please). It can also be a way to dull any colours you deem a bit too sharp in the photo background.

The finishing touch requires the Burn tool to darken areas of the photo to make them more prominent next to the illustrated bits. In the main image you can see that where the mist wraps around the bottom of the stairs and touches the stonework is where I've applied light strokes with the Burn tool to give the photo a subtly sharper look. This tool darkens the contrast and 'burns' the colour, so be careful to not overdo it with multiple strokes. Always pan out and have a good look at how well the piece visually balances out – whether some bits are too subdued or more shadows need to be added. I've applied these techniques in a subtle way, and looked for the images to merge into each other, but of course you can decide on the tone of your own work yourself.

Add shadow Select the photograph and background layers to burn shadows behind the layers. Use the Burn tool (O) and it will paint a dark wash that resembles a shade.



Fog To add depth to the mist, drag in a fog PSD file and duplicate where necessary to give the illustration more life. You can download stock files such as these from the web.

Use paint textures to add depth

I Has Fish 2011 **Illustrator**

> This tutorial will focus on applying several brush textures to an illustration. Using simple techniques you'll soon be able to create depth in your images

Nigel Hopkins Graphic designer, illustrator

With any illustration work, my first port of call is my sketchbook, a blank piece of paper or a sticky note – basically anything I can draw on. I start sketching and writing down ideas that relate to what my illustration is about and how it will take shape. After filling several pieces of paper I select the strongest elements from each sketch and scan them in ready to start the digital work.

I'm comfortable illustrating a wide range of subjects, but I really enjoy creating colourful characters. This particular illustration is of a cat taking advantage of a situation to feed her family. The idea of a freak storm with fish and other objects falling from the sky appealed to me. Being cats they don't want to get wet, so I gave them umbrellas, but I also felt they wouldn't want to miss the opportunity of the fish that are falling, so the adult cat has an upside-down one to catch some tasty morsels. One idea leads to another. Using various brushstrokes enhances the image, but you have to choose what's appropriate for certain items within the illustration. For example, a smooth brushstroke would be better suited to the plastic umbrella than the fur of the cat.

The next step is to create a new document, place your sketches onto a layer, lock it and dim to 50% Opacity (to do this double-click on the Layers palette to bring up a dialog box, select the Lock box and Dim Images to 50%). I create a new layer above my initial sketch. I find it helps to name each as you go along to avoid confusion so I call this one Cats.

Now I turn my attention to the main focus of the illustration, which is the adult cat. As the dimmed out sketch is a grey colour, I find using a bright, contrasting tone for my stroke helpful. I also set the Fill swatch colour to None. I like to break my image

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Nigel Hopkins

Personal portfolio site
www.behance.net/bignige
Country **UK**
Software used **Illustrator, Photoshop, QuarkXPress**

Nigel Hopkins is one half of Blind Mice Design, working predominantly within the arts producing graphic design, character design, logo design and illustration. Nigel is very OCD about curves and symmetry!

USE PAINT TEXTURES

Illustration

Artist showCase

Discover the graphic world of Nigel Hopkins

Street Art exhibition
2010, **Illustrator**
● This publicity piece was designed as a large window vinyl promoting the V&A Street Art exhibition at the Herbert Art Gallery & Museum, Coventry.

Wild Worlds
2011, **Illustrator, Photoshop**
● Promotional poster for free summer creative play installation and activities at the Herbert Art Gallery & Museum.

It's Yours, Tape It
2010, **Illustrator**
● My contribution for It's Yours, Take It held at the Herbert Art Gallery & Museum, and an image of the week winner on **digitalartistdaily.com**!

Create depth and scale

Texture and tone for a dynamic effect

In the finished illustration the subdued colours of the background contrast nicely with the more vibrant and fun elements of the foreground, giving an overall balance to the image.

The brush textures that I've used really bring the scene to life. The watercolour-like trees fade into the background providing depth and a sense of scale, and the simple brush texture of the rain lends movement. The fur effect on the bodies of the cats is made up of separate brushstrokes grouped together, giving them a tactile quality.

down into separate objects as this gives more flexibility when changes need to be made.

Although I am using textured brushstrokes, I start with the Shapes tool to break the cat down into simple, separate parts. I use the Ellipse tool to create a circle that is roughly the same shape and size as the sketch of the cat's head, then for the ears I draw a square and rotate it to a diamond shape. I drag and copy the diamond for the second ear (Alt/Opt-click and drag), then to combine all three elements I select the two diamonds and the circle and click Unite in the Pathfinder menu. Using the same method I can create the eyes, nose and mouth. Using the Direct Selection tool I tweak the anchor points to fine-tune the cat's head and get exactly the shape I want.

For the body I use the same approach as I did for the head, breaking it down into separate elements and again using the Shapes and Pen tools when necessary to create the various elements. For the parts that are symmetrical – for example the inside of the ear, the eyes, teeth and paws – I only need to create one of each as we can duplicate these by selecting the Reflect tool then choosing Copy.

I approach the umbrella, squid and fish in the same way using the method above. Once happy with the composition I can start changing the colour of the stroke and the fills to bring the scene to life.

To add texture I load in a selection of stock Illustrator brushes and custom brushes. I go to the Brushes palette and click on Open Brush Library, and for the stock brushes go to Artistic and select Artistic

Character shapes I assemble the component parts of the characters using the Shape and Pen tools. I then continue tweaking the lines and shapes until the character is fully formed.

Paintbrush. To load in custom brushes I go to Open Brush Library, Other Library and navigate to the Illustrator brushes you'll find on the disc.

I use stock Illustrator brushes on the sand dunes, trees and all background imagery, and custom line art brushes for the rain (**jimro.deviantart.com/art/Lineart-Brush-updated-26865887**). I use the deviantART custom brushes for the cats' outline and fur as well and they can be found via **maniacresources.deviantart.com/art/AI-Custom-Drawing-Brushes-1-66424977**. Websites like deviantART are a great resource for brush tips and other downloadable assets, and can give your imagery an edge in terms of real-media effects.

Now I create a new layer called Rain and place it underneath Cats. By drawing a line that is roughly the height of my page and colouring the stroke Cyan, I can then copy it. Do this several times to start building up some semblance of rain. Once I have created ten or so lines, I alter the position, vary the height and then add the brushstroke to them. I select alternate strokes then apply the Lineart 16 Left brush and increase the stroke to 3pt. Deselect those and select the remainder, giving them a 1pt stroke and

Colour first Before moving onto the brush textures, I finish off colouring all the parts that make up the different cats until I'm happy with how it looks.

Textured strokes Replacing the smooth lines with textured brushstrokes gives the cats character.

Combine gradient with a film grain

The areas of water at the base of the illustration and in the umbrella are textured. To get this effect, make a copy of your water, fill with a black and white gradient, then go to Effect>Artistic and select Film Grain. This gives the water an aged quality.

Add depth Bringing in scans of aged or crinkled paper and using custom patterns or grain effects all help to give the illustration extra texture and depth.

Work with your brushes

How to add, modify and apply custom brushes to a piece

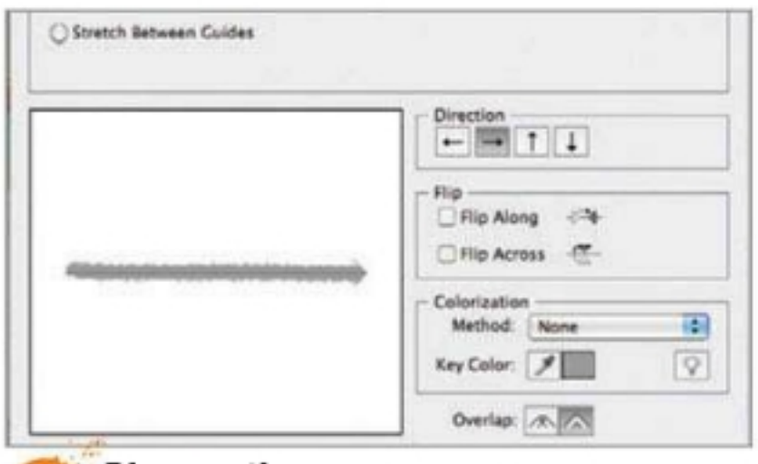
using the Lineart 12 Right brush. This is what I used but you can experiment with the brushes available. I select all the lines, group and duplicate them, filling the rest of the background with rain and continuing this until the screen is full, changing the height and stroke thickness to make the effect less uniform.

Next I create another layer and call it Sand Dunes. Using a combination of the Shapes and the Pen tool, I draw my sand dunes and trees. I fill them all with flat colour and move into place, making any alterations to their position as necessary. I start applying some simple brushstrokes to the background elements as well at this stage. For the sand dune I choose a 1pt stroke and Quick Brush 1 from the stock Illustrator Artistic brushes. Increasing the thickness of the stroke gives a rougher and less predictable brush texture for an interesting look. Apply the same techniques to the rest of the background elements, experimenting as you work with different brush textures and stroke thicknesses to get your desired effect.

For the cats I use the deviantART brushes again, in particular Brush DB04, but I make some changes to suit this illustration. I select the head and give it a 0.6pt stroke, set the Variable Width Profile to Uniform and the Brush Definition to DB04. Because I made alterations to this brush, rather than select it from the custom drawing Brush palette, I select the amended version from the default Brushes palette. Select the outline for the arms, body and tail, and give it the same variable width profile and the same brush definition, changing it to suit your taste. With the adult cat done I can apply the same technique to the kittens using a smaller pt stroke due to their size.

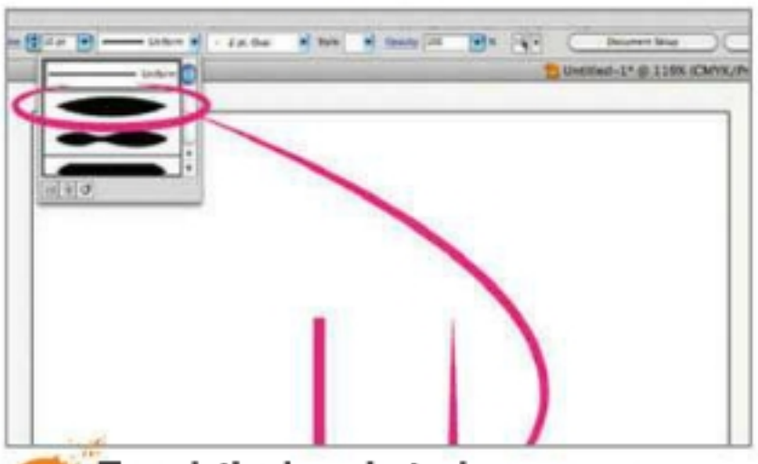
Once happy with the overall appearance I add some fine detail with these texture brushes to further enhance the image. Experiment with brushes and colours to pick out the fine details of your image, such as the fur effect on your cats.

01 Add custom brushes In the Brushes panel, click the far-right menu and go to Open Brush Library. Locate the custom brushes under Other Library.



02 Change the name Locate brush DB04. It will appear in your Brushes palette, so double-click to open the Art Brush Options. Change the name here.

03 Art Brush Options You can change the Width and the Colorization Method. I set the Width to 50% and the Colorization Method to Hue Shift.



04 Tweak the brushstroke Using Variable Width Profile 1 gives the stroke a tapered point and finish. This has been used on the arms of the cat.

Data decor

No Room to Swing a Cat 2011 **Photoshop, Illustrator**

> Infographics needn't be boring. With a few simple tricks, they become digital art in and of themselves

Andy Hau Architect, graphic designer, illustrator

We've all been there: stuck in a grey meeting room, waiting for yet another presentation on something we couldn't care less about. The projector goes on and there it is: the dreaded PowerPoint riddled with incomprehensible flow diagrams. Pour yourself a coffee and think of England – we're in for a long afternoon.

Unfortunately, things don't get much better when presentations try to be fun and engaging, either. These ones usually consist of a car crash of colours accompanied by whooshing text and you just know at some point that Comic Sans will be used – without the slightest hint of irony – for that touch of joviality (although just how much joviality you can bring to a health and safety update is debatable).

With people's attention spans fast diminishing in the digital age, infographics need to not only enable readers to quickly digest and understand complex data, but to catch their attention in the first place. Boring and uninspired graphics will quickly convince them to ignore the information, while an overly complex graphic will encourage viewers to not even bother. Infographics sit on the threshold between art and science, and are often much more powerful than words or imagery alone as they transcend the layers of context, meaning and understanding to form a comprehension that engages the observer in a different manner. At worst, a successful infographic will let an observer understand a complex subject but at best, it could inspire an observer to research more about the subject in their own time.

This tutorial will demonstrate the different ways of making infographics more appealing and more effective through your use of colour and shapes. There's probably a statistic and corresponding infographic somewhere for just how effective infographics actually are, but I won't bore you with that; 87.255% of all statistics are made up anyway.

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Andy Hau

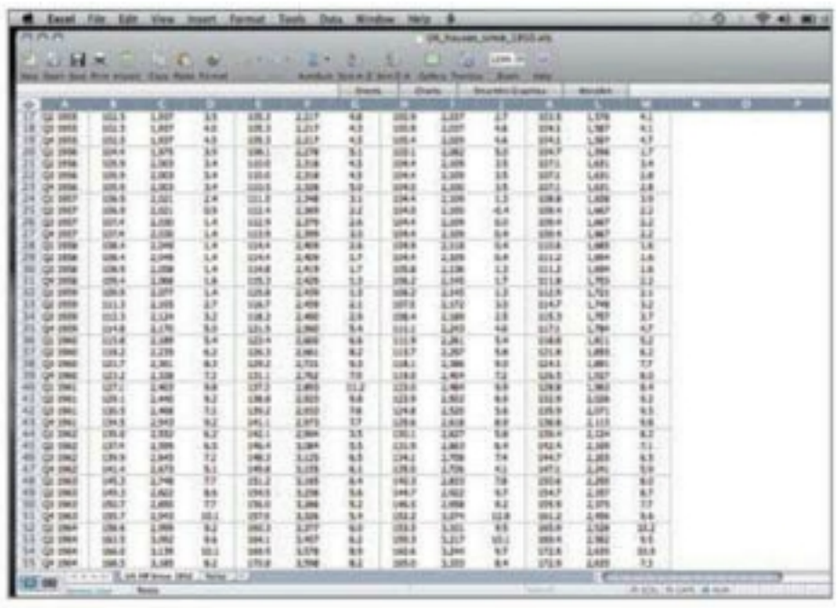
Personal portfolio site
www.andyhau.com
Country **UK**
Software used **Photoshop, Illustrator, 3ds Max**

I am an architect exploring the unexpected results created from the interface between architecture and graphic design.

Create an infographic

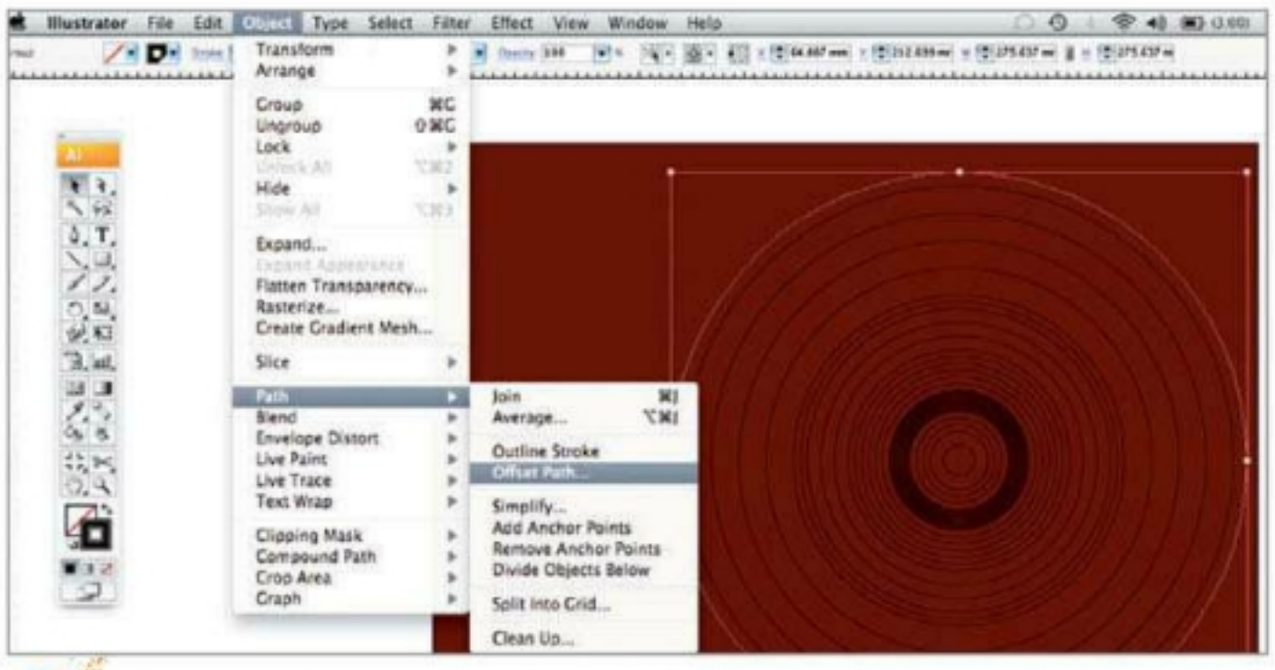
Learn the basics for building an eye-catching design

01 Gather data Analyse the data that you are working with and determine how you want to display it. Bar graphs and pie charts are especially good for simplifying and comparing complex data, while illustrations will be more recognisable to the observer and therefore more engaging.



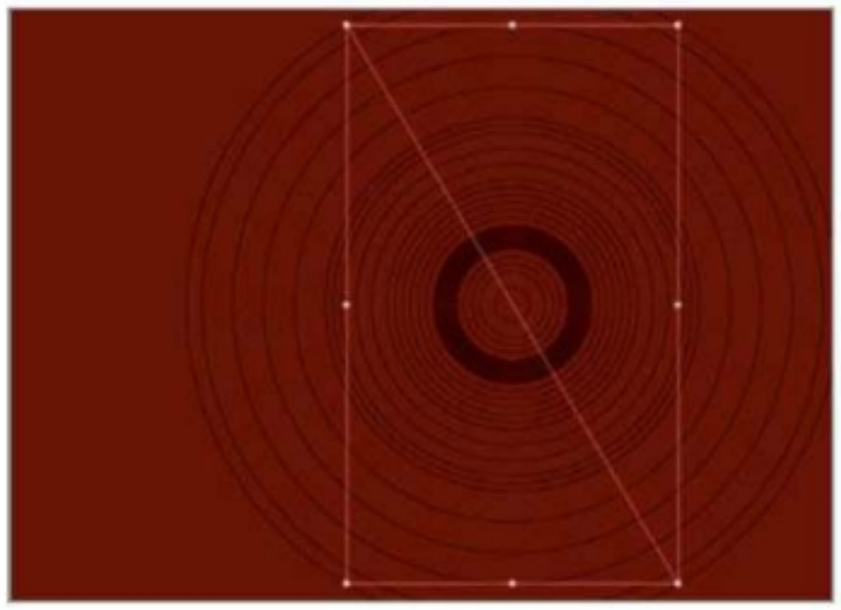
02 Background I am comparing the size of the British home over the past century and will be using a bar graph-pie chart hybrid to compare the data. Create a new document in Illustrator and fill in the background using the Rectangle tool (M) in a dark colour. The dark canvas will make the colours of the graphs pop.

03 Catchy title Since the graph will be relatively abstract, the infographic needs something that is easily recognisable, such as a humorous title, to draw in the observer. I am using Helvetica that has been kerned tightly (by setting the tracking to -100) for the title. To make it more interesting, I have expanded the font (Object>Expand) and removed the negative spaces from the centre of some of the letters.



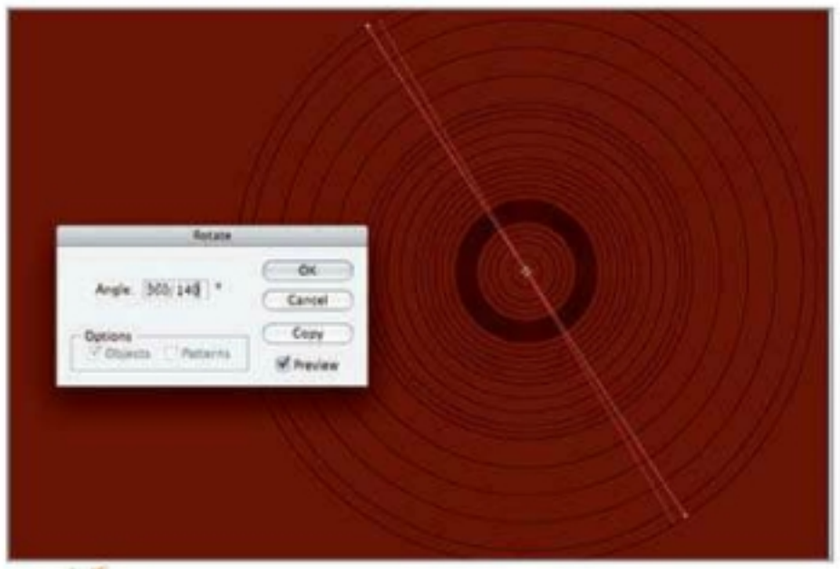
04 Ring grid Unfortunately, setting up the grid for the graphs in Illustrator is not particularly easy and may take several goes as you determine the appropriate sizes and units. Begin by drawing a circle (L) and offset it outwards with Offset Path (Object>Path>Offset Path), choosing an appropriate measurement for the offset.

05 Radial grid To create the radial grid, draw a line that bisects the circle. Ensure that the centre of the line and the circle are aligned. Work out how many segments you need; in my case, I am comparing 13 eras in units of 10 and will require 10 segments for the break. In total I will need 140 segments.



Perspective

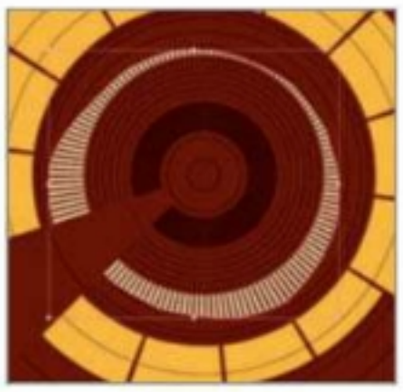
Although 2D diagrams are very successful for communicating information, 3D diagrams often add a sense of spatiality and dynamism which can engage more with an observer. Orthogonal perspectives, such as isometric projections, are particularly successful as they bring spatiality without confusing the information and can add an element of accuracy too.

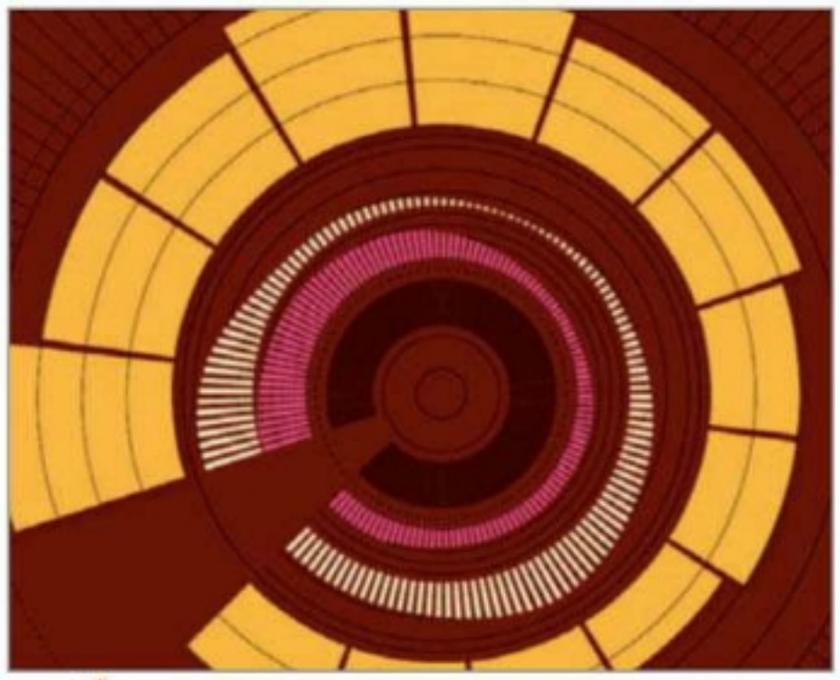


06 Create segments Double-click on the Rotate icon and enter 360/140 (or however many segments you require) into the box and click on the Copy button. Move the anchor point to the centre of the line, double-click on the rotate icon and click on Copy again to produce a segment. Hold down Ctrl/Cmd+D to repeat the action until the circle is filled.

07 Primary data Since the primary data is the most important, it needs to be the largest and therefore nearest the outside edge of the circle. Use the Pen tool (P) to create the blocks, using the grid as a guide. Make sure that the blocks are proportional to each other; a block representing 12m² should be three times larger than a 4m² block.

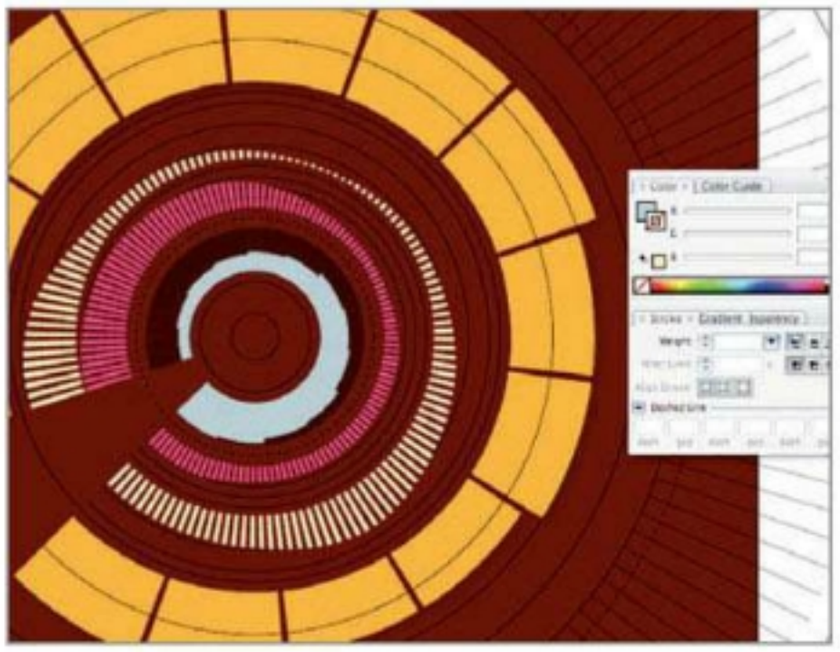
08 More data The secondary data should be represented differently from the primary data. Start by drawing a thin block that takes up half a unit at the beginning of every era segment. Join these up by drawing a Bézier curve with the Pen (P) through the top edge of every block and use this as a guide to fill in the remaining ones.



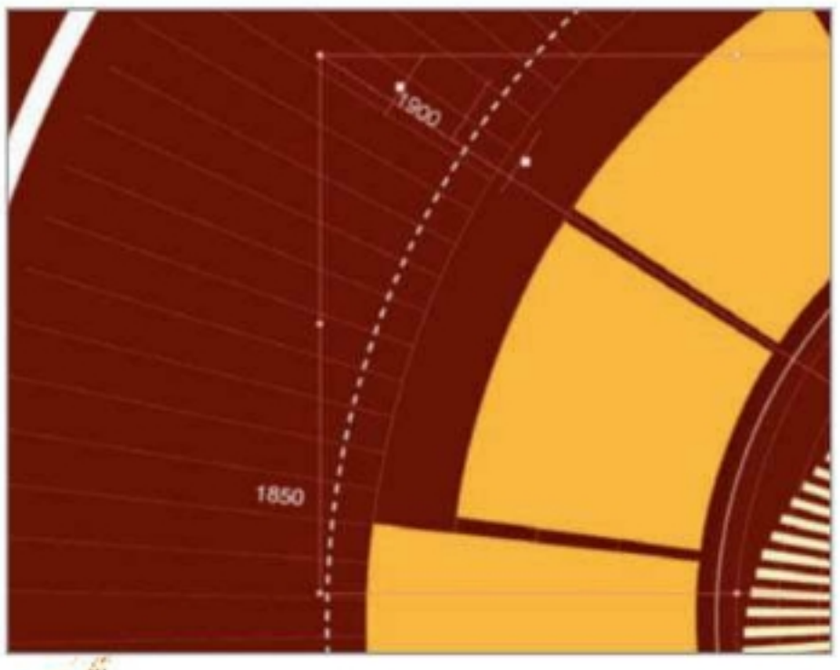


09 Sharp colours Since the tertiary set of data is in the same vein as the secondary set, it should be denoted in a similar fashion. Leave an offset from the secondary information and use the same technique to create the blocks for the third. Choose a vivid colour to lift them from the background.

10 Final information The fourth and final set of data gives circumferential information and is the least important set here. It is therefore nearest the centre of the circle and the smallest. Use the Pen tool (P) to create the blocks to represent the data, using a neutral colour so that they do not draw too much attention away from the main data.



11 Line weights Line weights can make or break a drawing and the same can be said for infographics. Keep the lines for the grids as light as you can (0.25pt or less) and make the circles separating the four sets of data thicker. For balance and depth, and to make them clearer, make the outermost and innermost circles very thick at 3pt or more.

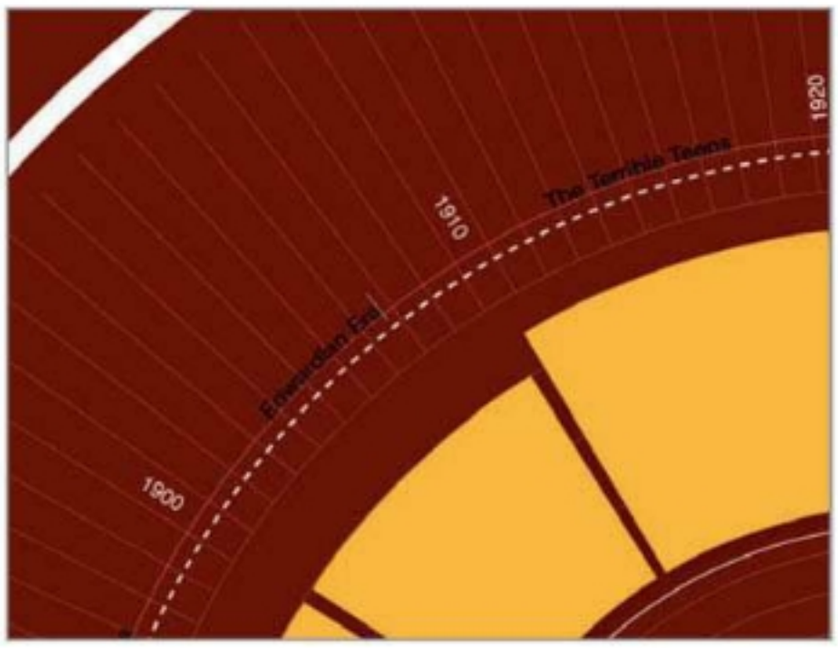


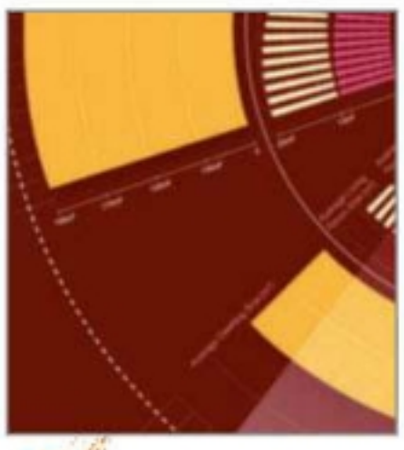
12 Type on a path Now use the Type On A Path tool on radial gridlines to define the different dates that the blocks span between. If you want to keep the gridline visible, it's best to make a copy of it before using this tool, as the line will disappear after you have used it.

Make grids

Unfortunately Illustrator is not particularly conducive to producing accurate radial grids. An easier way would be to use a drafting program such as AutoCAD to set up the bare bones of the diagram, which could then be brought into Illustrator afterwards for beautification.

13 Era text For the text describing the different era segments, draw a circle (L) and use the Type On A Path tool again. If the text comes out upside down, pull the text handle to the other side of the circle. Change the size of this circle by double-clicking on the Scale tool and entering a value, having pulled the anchor to the centre.

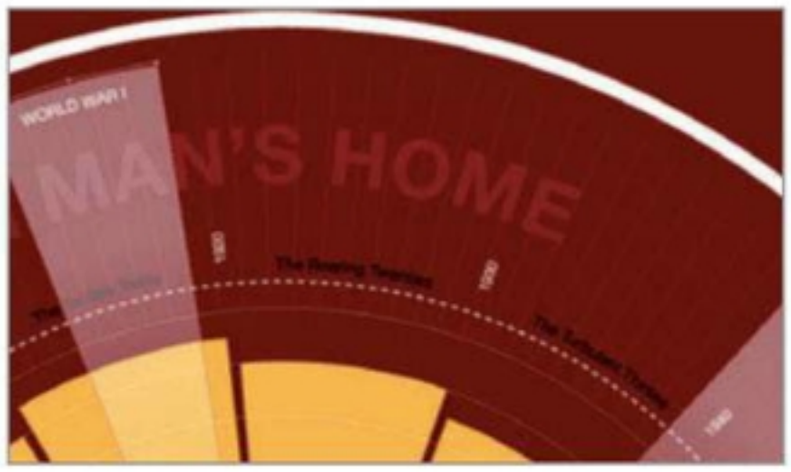


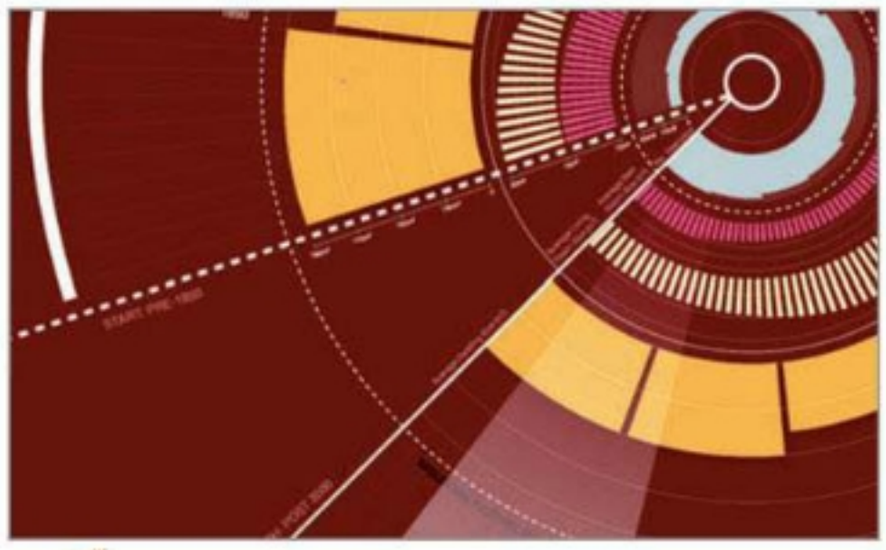


14 Defining units Units are important to inform the observer of the scale of the graph. Offset the radial gridline at the start of your graph using Offset Path (Object>Path>Offset Path). Draw smaller, perpendicular lines intersecting this one, which also relate to the ring grid, to denote the units.

15 Hidden text I like to add an element to my images that is not always visible at first glance. In this case, it is the words 'an Englishman's home is his castle'. Draw a circle (L) to an appropriate size and use the Type On A Path tool. Pick a shade slightly lighter than the background to keep it subtle.

16 Significant periods We can see from the graph that house sizes start to decrease significantly after the two World Wars and increase again during the property boom. To highlight these important periods, draw a block using the Pen tool (P) around the corresponding dates and fill them with white using a Gradient Fill. Turn down the transparency of these blocks accordingly.





17 Break To signify the start and finish of the graph, we need to have a break in the circle. Draw a thick line at the beginning and ending points, coming out from the centre of the circle to the edge. Make the line at the starting point dashed as this will form the call-out line for our second image, the context graph.

18 Context All infographics need a bit of background information. However, make sure you keep the description short so that people actually read it! Next, we are going to create a second, smaller graph to contextualise its big brother.

NO ROOM TO SWING A CAT?

A Suggestive Inquiry Into the Size of the British House

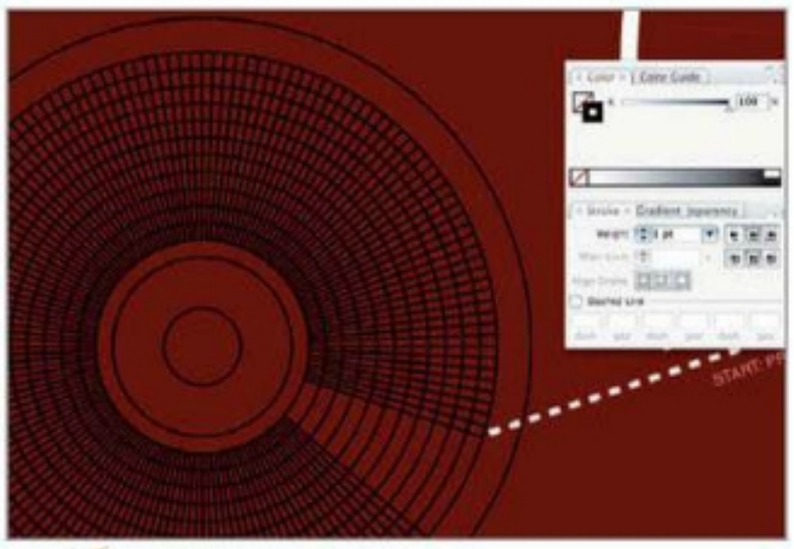
Have you ever wondered if your bedroom is smaller than the size of a scullery maid's cupboard? The British house has changed dramatically over the years, having faced two World Wars, a handful of recessions and the disco era. With house sizes set to drop again, find out how the British house has transformed over the past 150 years.

124% The average British house is 124% smaller than it was over 150 years ago.

47% An average house in Luxembourg is 47% larger than a house in England.

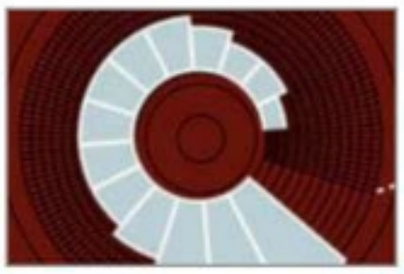
6% The size of the British house decreased by 6% after World War I & World War II.

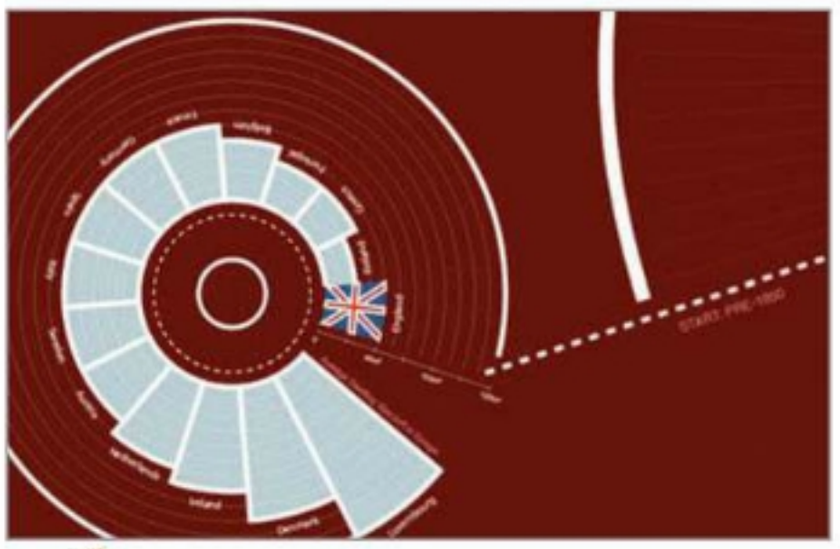
300% The number of households has increased by 300% in the past 150 years.



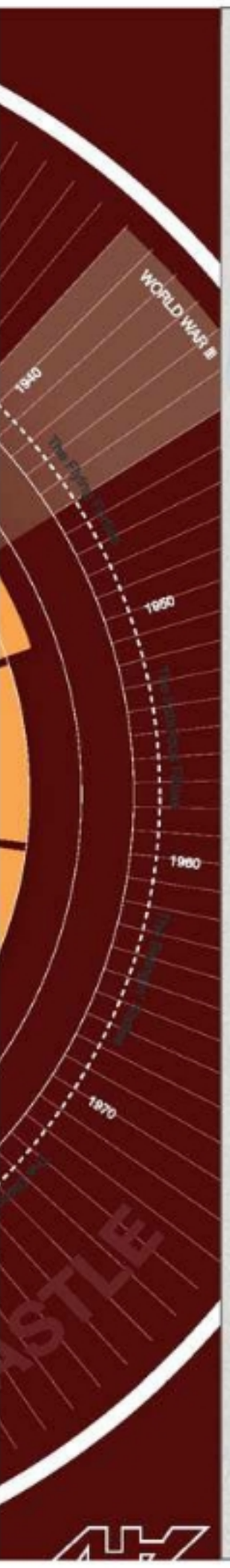
19 Second graph The context graph is showing auxiliary information and needs to be smaller and simpler. Create a ring grid and radial grid in a similar way as before, except this time make sure that the break is on the other side so that we can join the two graphs later on.

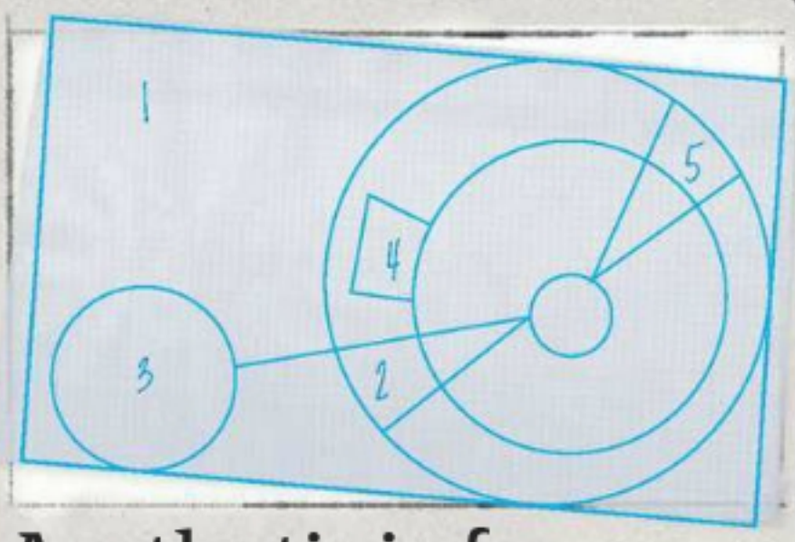
20 Context graph data The data for the context graph should be simple and relate to the other graph. I am comparing house sizes over a period of time in Britain, therefore my second graph shows the average house size as compared with Europe. Use the Pen tool (P) to create the blocks that denote the data.





21 Visual continuity The line weights for the context graph should relate to the larger graph to create a sense of continuity. Therefore, if you've used 0.25pt for the grid on the larger graph, use the same for the smaller graph. Try to also keep the colour and style for the lines similar.





Aesthetic info

Stats can be beautiful too

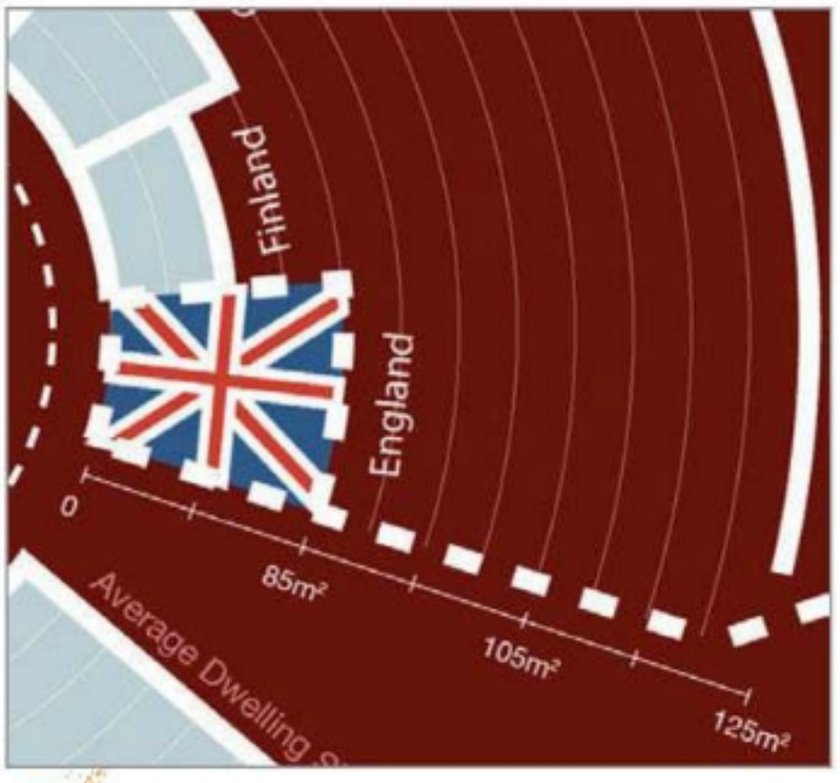
1 Tagline Use a catchy or humorous tagline to get people's attention. Keep the tagline vague enough for people to be interested yet not so obscure as to confuse. Keep the font simple with a few eccentricities so the eye is drawn to it.

2 Colour As tempting as it may be to use black, white or grey for the background, a rich colour will create an unexpected burst of drama. Keep it dark and muted and make the hues for the graphs bright and citrussy for full impact.

3 Context It is often useful to set the scene and explain the context of the diagram. For example, I have a graph comparing the average size of a British house to the rest of Europe before introducing the main subject of the infographic.

4 Data Split the data that you want to show in order of importance. The most important data should be located on the outside of the circle so that it is the largest. Circumferential data should be placed near the centre so that it does not detract.

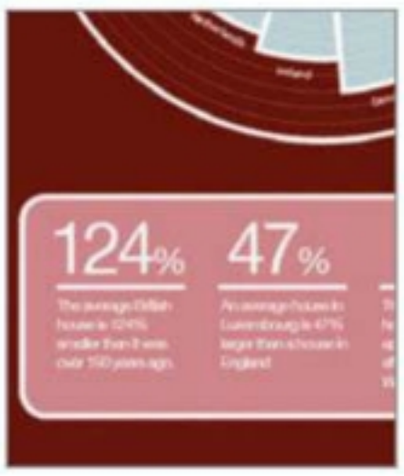
5 Highlights Significant portions of information need to be highlighted by using a semi-transparent white fill. Make sure that you use highlights sparingly so that they have maximum impact. A gradient fill will keep the highlights looking subtle.

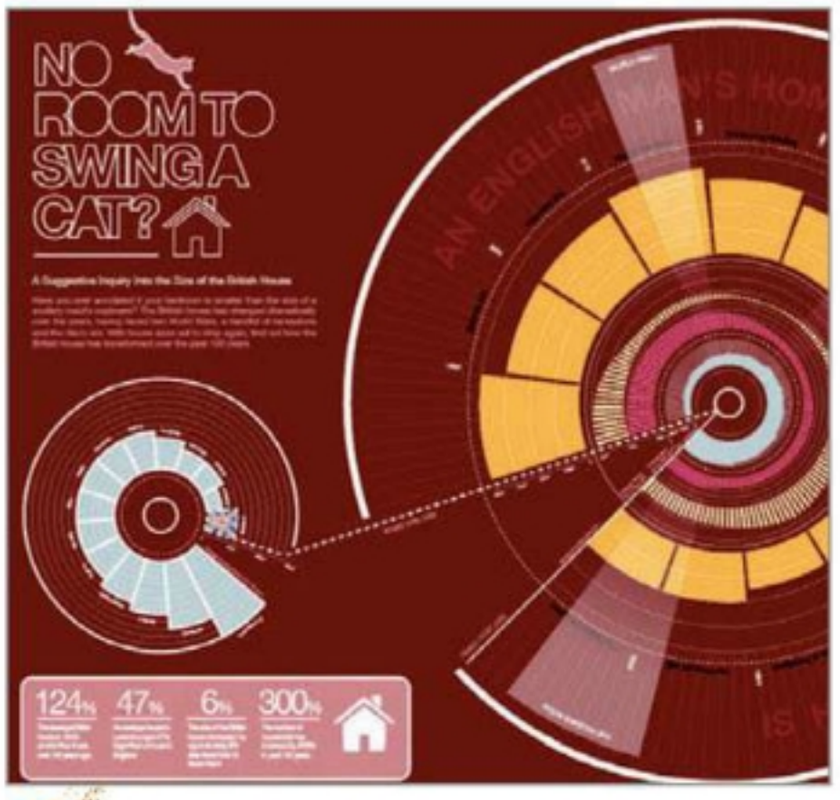


22 Call-out Link the two graphs by creating an unbroken line known as a call-out. Use the Pen tool (P) to draw a thick, dotted line around the block in the second graph that relates to the larger one. Extend a line to connect the call-out.

23 Icons Since the graphs are fairly abstract and the title is a little abstruse, it is necessary to create easily recognisable icons that the viewer will immediately see and understand. In my case, I needed a representation of houses. Use the Pen tool (P) to create the icons, stripping away as much information as possible to keep them simple.

24 Critical statistics In order to make the infographic as clear as possible, take the most important or interesting statistics and indicate them as numbers and text in a boxout using the Rounded Rectangle tool. Fill the boxout with one of the softer colours in your colour palette.





25 Overview Zoom out using Ctrl/Cmd+0 so that the entire infographic fills the screen. Make sure that the composition is balanced in terms of layout and colour, making changes where necessary, and you're done.

Illustration

Source files available

Image elements

Simplify a cityscape

"Create a simple but boldly-styled cityscape using textures in Illustrator"

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Liam Smith

Personal portfolio site
www.immrbrightside.com
Country **UK**
Software used **Illustrator, Photoshop**

I have a love for creating characters and the world around them with a non-traditional look using textures, patterns and added detail in Illustrator to get the desired effect.

Everyday Life 2011 **Illustrator**

> The aim of this tutorial is to show how simple and fun it can be creating a cityscape using textures to give it a bold, non-traditional look

Liam Smith Illustrator

Using textures in an image can give it substance and life with an added bit of character to really bring it all together. Using the methods that this tutorial covers will make your work stand out and give you an impressive portfolio for potential clients to see and enjoy.

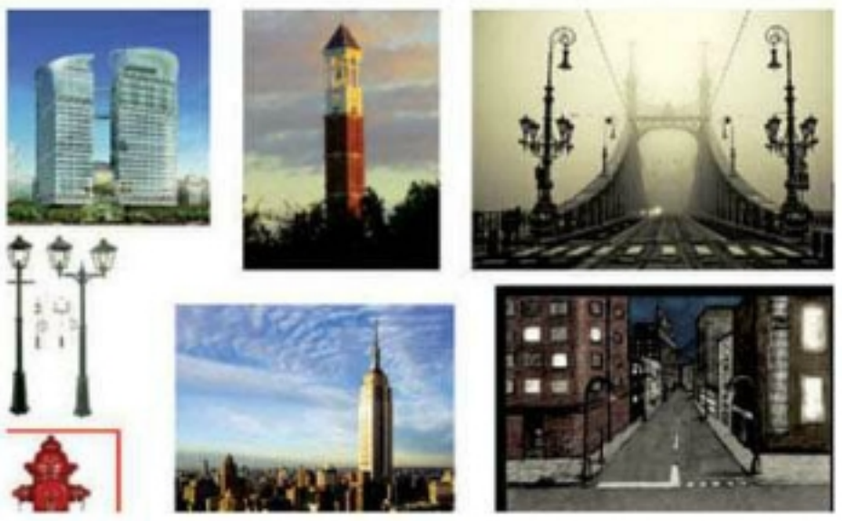
The goal of this tutorial was to simplify a cityscape while giving it a bold, stylised and playful look, and show that the image doesn't have to be cluttered with the generic buildings you experience in a real city to create an impact.

When researching cityscapes, I found the majority of them were distant views of skyscrapers, houses, bridges and roads packed together; stunning but cluttered scenes without much individuality. Part of my goal was to simplify this view of a cityscape so the final image takes a closer look, while still keeping typical city elements involved.

Having it like this means I can pay a bit more attention to the detail of these buildings and structures to add a slightly unconventional and playful look. It also meant I could have a couple of characters involved in the scene just to help bring the image to life and add something more individual, relatable and dynamic to the composition. I was against the same boring, square designs of these buildings, but kept some realistic, recognisable features, like balconies and elements of skyscraper architecture in my drawings.

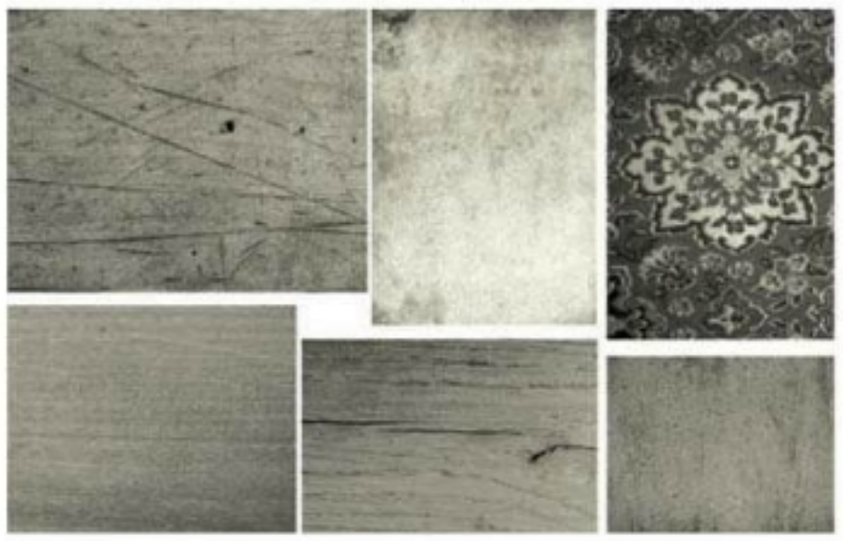
Along with using textures in the effect, we will cover the use of blending modes for shading as well as different types of strokes that are included in Illustrator to help give a non-traditional look. Ensuring we keep things less square and more playful, we'll build a fun, original cityscape.

01 Find references Although I'm not bringing too much realism into the illustration, it's a good idea to gather some images to help the early stages of the piece and to get an idea of what to include. When creating the layout, it helps to have references to set the scene and get your mind working.



02 Draw the main elements Draw some ideas for buildings, as they are the primary focus of the piece and set the scene. Don't go for typical square architecture, use curves and add a sense of playfulness to the building shapes and detail. It's also worth drawing a layout for the image.

03 Find textures Think about what textures would suit a cityscape. Wood, stone, grunge and metal textures are a start. Also, look for patterns that may include flowers, stencils, marble or a chequered effect. Photograph images or use online resources such as www.bittbox.com.



04 Start building In Illustrator, start making a basic and flat image of the buildings you have drawn. The side of the buildings should be visible so, to get the darker colour, create the side of the building then copy (Ctrl/Cmd+C) and paste (Ctrl/Cmd+V) it onto a new layer. Next, use the blending mode Multiply on this.

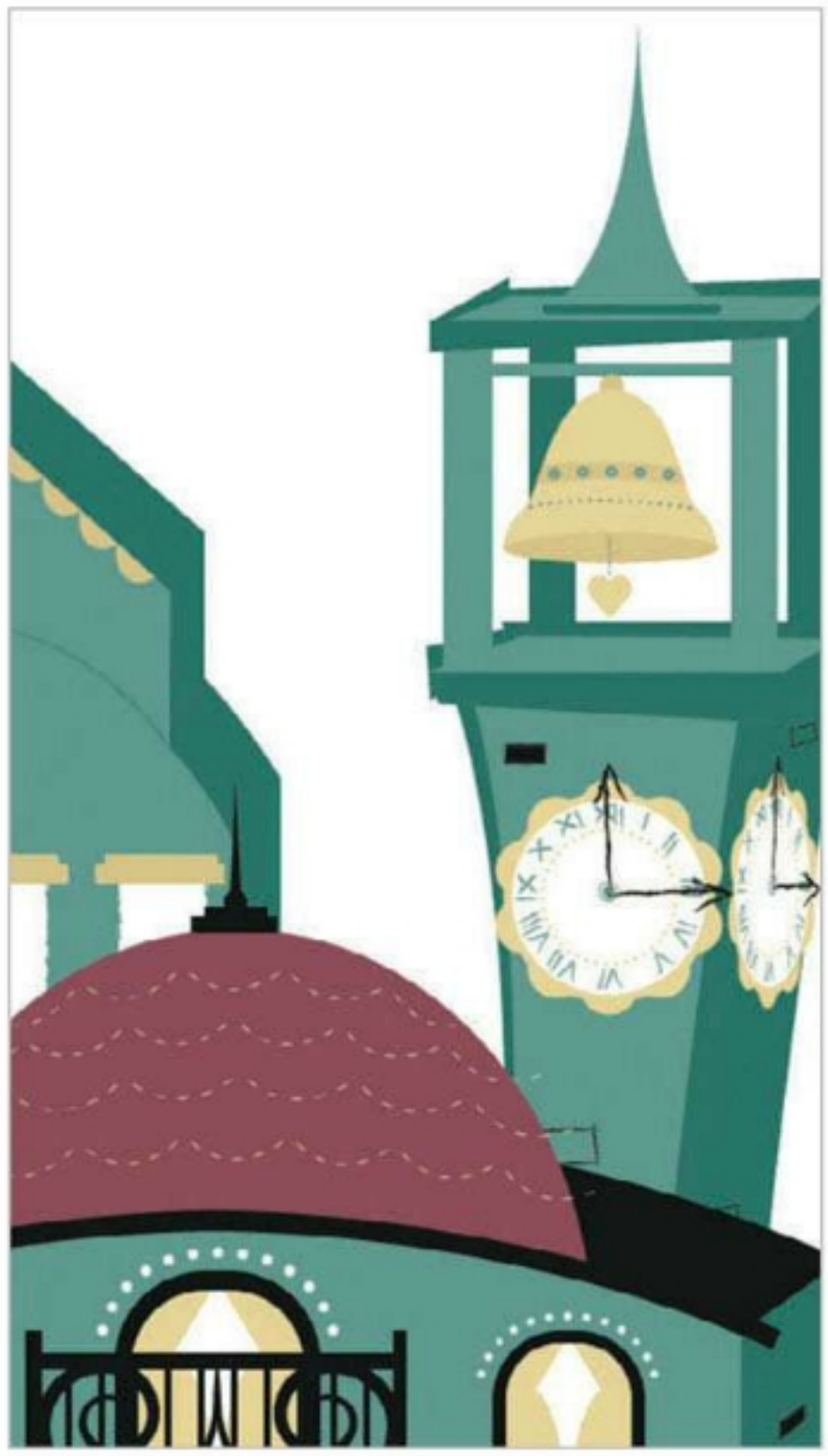
05 Create and prepare pattern brushes Pattern brushes can add detail, help save time and bring an unconventional look. Create a circle, open the Brushes palette with the circle selected, click New Brush then select Pattern Brush. Feel free to play with the dialog box for the desired effect and try playing with other shapes for different looks.

06 Add building detail Using the pattern brushes you've created, start adding detail to the buildings, varying when and where they are used so no two look the same. Add curtains in the windows of one building and hanging flowerpots in the window of another, for example, to keep real-world elements included.

07 Create the balcony Creating the balcony is simple and effective in aiding the development of the image. Using the Spiral, Pen and Rectangle tools together, create half of the design then make a copy and reflect it across. Use Shift and the arrow keys to keep the rectangles the same distance apart.

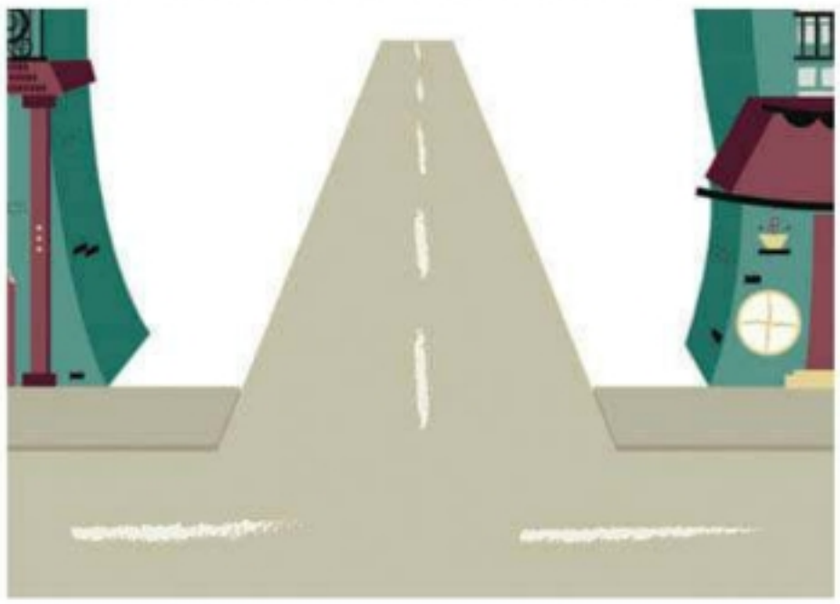
08 Lay some bricks To create an unnatural and rough look to the bricks, I used charcoal brushes found in the Brushes palette under New Brushes>Artistic> Artistic_ChalkCharcoalPencil. Using strokes along with textures in this way will stop the illustration looking flat and one-dimensional.

09 Render more buildings With the style and some techniques set, start working on more buildings including skyscrapers and a bell tower. Keep it varied and avoid anything too square or traditionally urban. Use more charcoal brushes, brush patterns and different elements to achieve this.



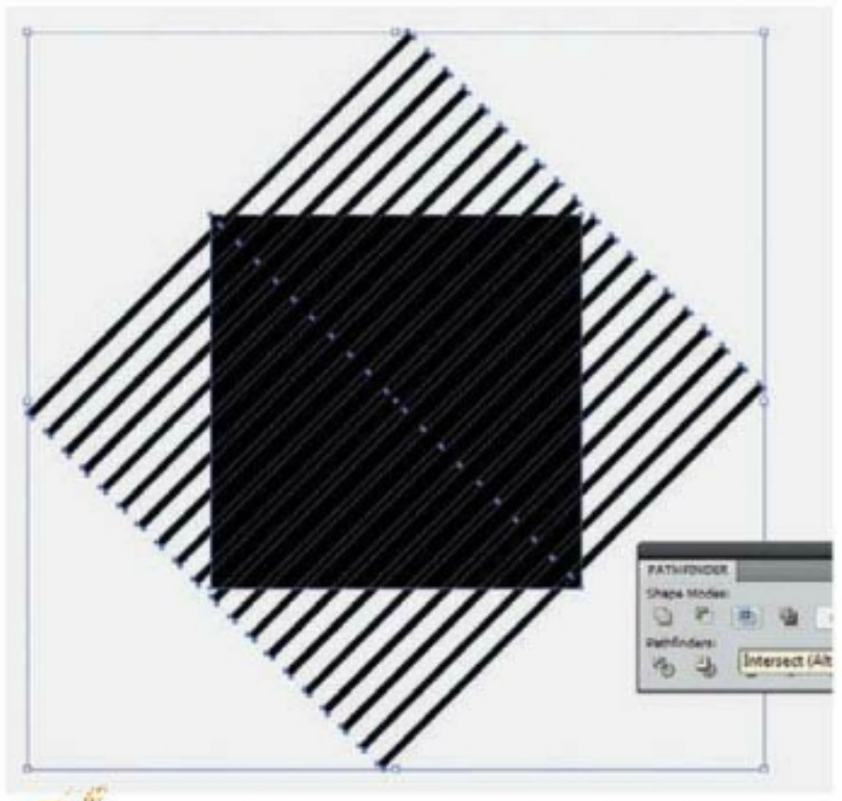
10 Design the layout With a fair few buildings created and detail added, start building the layout of the cityscape, positioning the elements how you want. In my case, there will be a bridge in the middle with a road at the front. I arrange the smaller buildings in front and the taller buildings at the back, which, along with the bridge, will add depth.

11 The road With the buildings in place, the road placement is set. Use rectangles to create the road and pavements with the bridge road narrowing off towards the end to show perspective. Use charcoal strokes again for the road markings. It looks flat for now but textures will soon bring it to life.



12 Bridge columns Create the columns with the Pen tool, using the same method for the darker sides as you did with each building of copying onto a Multiply layer. Add a box shape to the top with overhanging edges, a circle and long triangle to act as a spike, and then make an arch and rectangle to put between the columns.

13 Fencing fill pattern Make a pattern of curved lines with the Pen tool for your bridge. Select this pattern and click Object>Expand. With it still selected, right-click, Group and then drag it over to the Swatches palette. It is now a fill pattern, so you can make a shape between the bridge arch and fill it for an instant fence on your bridge.



14 Stripe pattern Create a square document and make a rectangle just outside, longer than the square length. Copy and Paste the square a number of times using Shift and the arrow keys so that they're the same distance apart. Group these, rotate 45 degrees and add a square over the top. Select both and, with the Pathfinder tool, Alt+click Intersect.

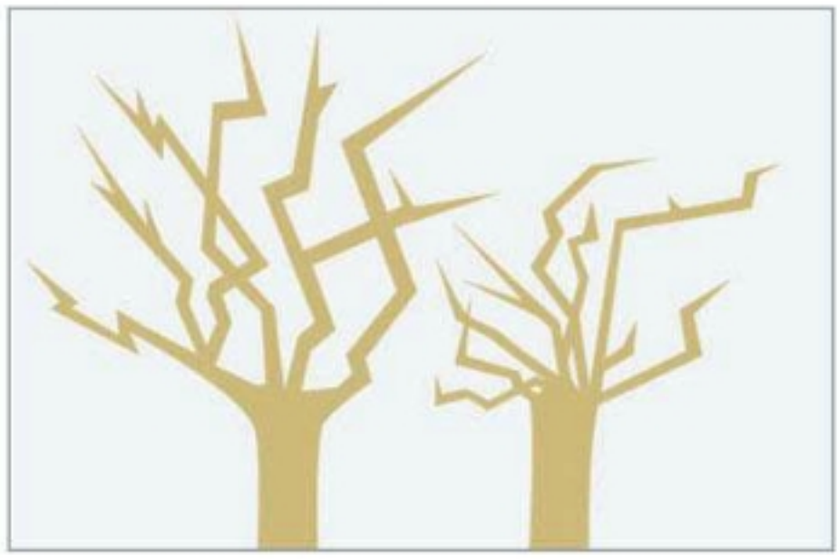
Set your textures to greyscale

If your textures have bright colours in them, such as a red flower pattern, make sure you greyscale them in Illustrator by going to Edit>Edit Colours> Convert to Greyscale. This really helps blend the pattern or texture into the background without any bright colours looking out of place.

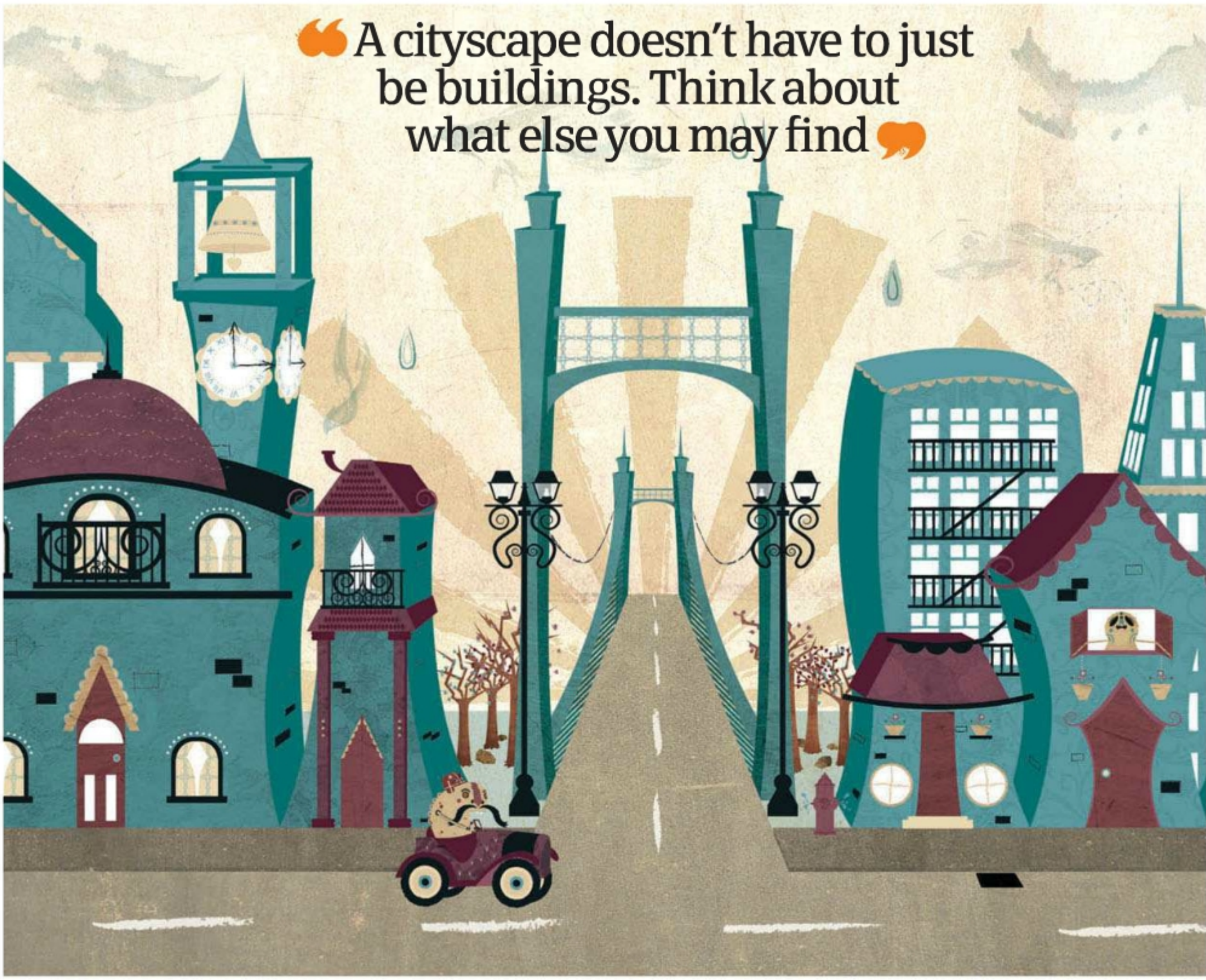
15 Bridge railings Add the pattern created to the Swatch palette after expanding. Copy and Paste the two columns and the finished arch, then shrink it down. Make the sides of the bridge curve upwards and use the striped pattern fill to act as railings. Put in two charcoal strokes at the top for cables.

16 Lampposts The lampposts are made out of basic shapes using the Shape and Swirl tools, while the Pen tool adds decoration. Using real lamppost references can really make a difference. Put the lamppost in front of one bridge column, duplicate it, then move to the other side for symmetry.

17 Trees Use the Pen tool to create the tree and vary the length and direction of the branches, keeping in mind the simplified tone of the piece. Use the circle brush pattern from before to add decoration to the trunk. Using textures later on will really bring the tree to life as you'll give it a realistic wood effect.



18 Tree leaves Create a circle and choose New Brush in the Brushes palette, with Scatter Brush clicked this time. Play with the values, especially Scatter and Spacing. Use the Pencil tool to make a rough squiggle around the branches then add a thick charcoal stroke to give the leaves a natural look.

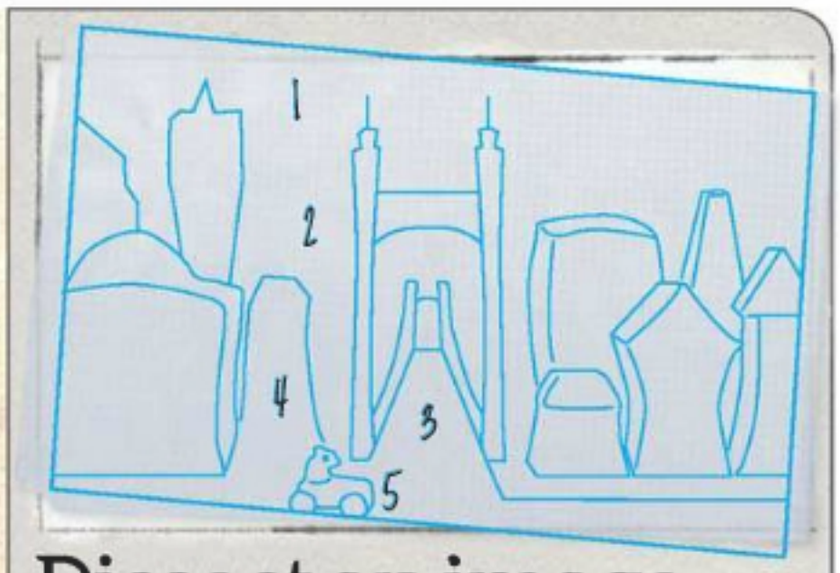


19 Background I wanted to build the background up a bit as it was looking too bare, so I used a light grunge texture and reduced the Opacity to 36%. I ran a long rectangle along the bottom, which would be the horizon, changing the blending mode to Multiply, with Opacity reduced to 43%.

20 The sun Create a yellow circle and a long triangle. Centre it at the top of the circle, pointed down, then duplicate and rotate the triangular shape 22.5 degrees. Keep doing this with each new triangle until a quarter of the sun is done. Duplicate and reflect to the other side and add a charcoal stroke. The blending mode is Multiply with Opacity at 68%.

21 Clouds and smoke For the clouds and chimney smoke, use the Watercolour brushes found under Brushes>Artistic>Artistic_Watercolour. Change the blending mode to Multiply and Opacity to 44% so they're not too prominent.

22 Place and use textures Place (File>Place) the textures into the document one by one and drag them to the Swatch palette, turning them into a Pattern Swatch. When you want to use a texture, copy and paste an object in front, fill with the Pattern Swatch and use the Multiply mode.



Dissect an image

Explore the stylised city

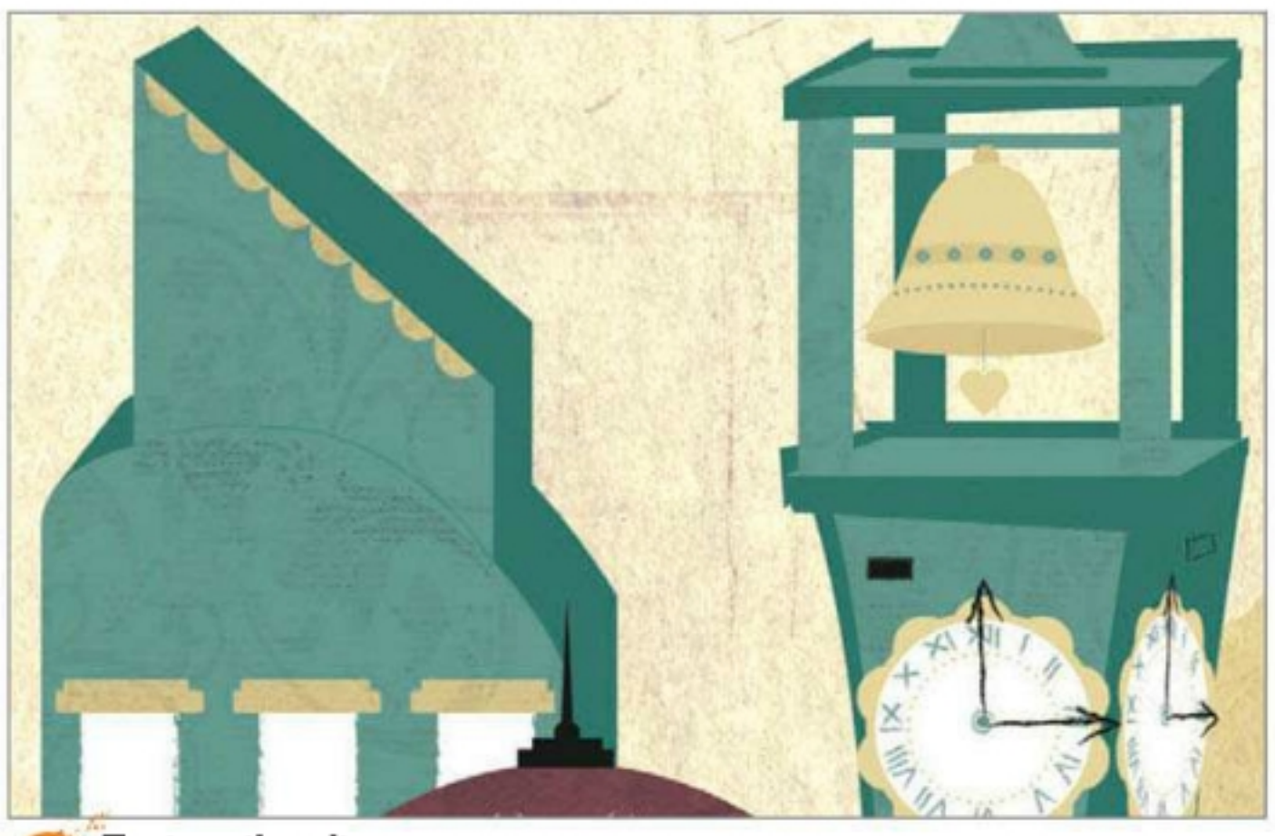
1 Grunge background texture Using a texture like this saves the image from being flat and works well with the rough, unclean background elements like the sun and clouds. Using Multiply on objects will bring some of it through.

2 Light source The sun brings a bit more life to the image, adding a different element to the many buildings. As it is centred, it helps the bridge become a focal point for the scene. Setting the sun to Multiply also creates a sense of warmth for our city.

3 Focal point The bridge separates the buildings and really draws the viewer's eye. It's a different element to the buildings, gives more life and another visual dimension to the scene. It also offers some negative space in the composition.

4 Floral texture You could go with a typical grungy texture to cover the buildings, but try something a bit different. A light, floral pattern gives the city some character. Feel free to experiment with blending modes and Opacity as well.

5 Include characters Although the buildings and structures are the point of the piece and a cityscape in general, adding one or two characters is a nice touch. Put them in different situations to bring a lighter feel and help break up the layout.



23 Texture the city Duplicate the front object and fill with the texture. Change the blending mode to Multiply and reduce the Opacity so it blends better. Do this to every building. Play with different textures on different objects, such as wood for the doors.

24 Complete the buildings Use a rough, gravelly texture on the road and pavement. Duplicate the texture on the pavement so it's made darker and separates itself from the road. Use this method on the trees as well, but with a wooden texture instead.

25 Bring the city to life With the main cityscape done and textures added, bring the final bit of life to the image. Create characters, cars, bikes, road signs, fire hydrants, rocks, rain – anything that you can relate to a bustling city will help finalise and add individuality to the piece.

Digital art

Create a paper cutout effect

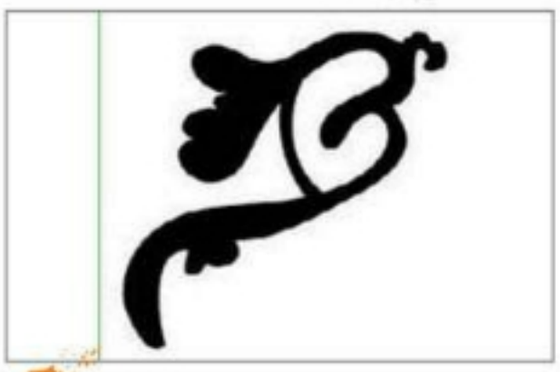
Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Mary Winkler

Personal portfolio site
www.acrylicana.com
Country **USA**
Software used **Illustrator, Photoshop, Paint Tool SAI, Corel Painter**
Acrylicana is whimsical, vivid and often child-like, depicting sweets, fanciful creatures and rainbows; explores the world of fashion in illustrated form.



Doodling Start doodling out shapes in any colour on a layer with the Pencil tool – or Pen for more control.

Zap! 2010 **Illustrator CS3 and Photoshop CS3**

> The aim of the game is a digital paper cutout that has the depth and dimension of the real thing

Mary Winkler Freelance illustrator and jewellery designer

Open your file in Illustrator and grab the Pencil tool (it should be in your toolbar and not your pocket). Work like this begins with doodles, and the easiest way to have it flow from your stylus or mouse is to go crazy with shapes and the Pencil tool. First, create balloons, hearts, zig-zags or lightning bolts, clouds, or silhouettes of fruits, mugs or art supplies – anything at all.

While doodling out shapes, consider the design space. Do the shapes flow together, or are they simply connected later by a series of wiggles or rectangles? That's another thing to consider: how do they connect? Shapes can branch out from one another or simply have paper doll-like strips jutting out to form connections between one section and another.

As the initial image is created, you can also group together certain parts of the design, copy, paste and flip over a vertical axis. Or the horizontal axis. Where the symmetry is (or isn't) is entirely up to you. This is an experiment. Get messy and let it grow. You can refine your ideas as you progress.

Flipping portions of the piece over an axis allows for a more symmetrical design. Even half the image could be done, then flipped, and you can move on in the steps. Or use flipped images as extra elements and continue playing with the Pen and Pencil tools in doodling out swirls, ghosties and other shapes.

Patterns The good old layer styles are just the thing for quickly adding patterns to objects, and can be saved for future use.

Mimicking a damask design lends itself wonderfully to cutout style. Another idea worth exploring is to reference Victorian style wallpaper or textile designs.

Finish up the initial design with big blocked-out shapes and small, delicate ones. The variation not only shows an emphasis on some pieces of the work but also enables the viewer to have some rest space for their eyes. It's quite a bit like having thick and thin lines in an inked illustration.

Go back and refine the edges of the design with the white Arrow tool (pull and push the points until you get it just right), and check that all paths are

Quick shading Photoshop's layer styles are excellent when it comes to adding shading and definition to 3D shapes. We used them to apply colour to our text and keep all the contours and angles lovingly created in Illustrator.

Artist showCase

We take a look at Mary Winkler's other work

Valentine
2010, **Adobe Illustrator CS3**
● Sweets and jewellery done in candy colours created for print media and a possible calendar down the line.

Sip of Summer
2010, **Adobe Illustrator CS3**
● Simple piece combining sweet treats and summery colours. Fruits chosen to complement the colour of the drink.

Twenty-one
2010, **Adobe Photoshop CS3**
● Began as a doodle. After scanning in, colour was applied on a layer below, gradients on top and a colourful fill.

Pack a bit of a punch

Add the darker copy

Adding the darker copy of the white cutout beneath the design layer helps make the image pop out from the background. Without it, the image doesn't pack as much punch and just kind of sits there. You could add a drop shadow, but the hard edge of the under shadow layer helps keep with its graphic look.

closed from using the Pencil tool (simply select a shape, grab the Pen tool, tap one point and then connect it with the other). Depending on how fluid or rough you want the design to look, this process can be done quickly or become quite a time-consuming effort. Feel free to get into the zen of paper cutout design!

Now lock the design layer and create a new one. This is for your shapes cut out of the cutout itself. In this case the little ghosties need some faces, and some other shapes have to be chopped out of chunky design space. This is also a good time for you to use cutout shapes as a means to refine your design in case you have begun with very heavy looking shapes.

Any shapes (black over white) put into the secondary cutout spots (white over black) have to be connected back to the original image. Pieces of the 'paper' must connect back to the rest of the paper elements, or otherwise it would just fall away if this was a real cutout.

Apart from various shapes, letters can be cut out as well. You can create them with the Pen or Pencil tools, or simply use a typeface that you think complements the image style. Don't forget to set it to Outline, so that you can easily manipulate the shape of the text.

Keep it real Make sure any additional designs within the 'cut out from cutout' spaces are attached to the main 'paper' image. Otherwise they'd simply fall away if cut from real paper.

Shapes Complete your design, create a new layer and get to work on shapes cut out from the cutout itself. These will be deleted later to allow the background to show through.

Select the main layer's shapes (all black objects), group them together and change the colour to white. Change white shapes to black (on the layer above). Save your file once more (as an .ai file) and reopen it in Photoshop. The Illustrator portion of this tutorial is now complete.

Copy your design and paste it into a new, large file (the margin space is entirely your decision). Create a new layer underneath your design. Fill it with a dark colour (a rich brown works wonderfully). Later on, this layer will contain a texture or stock photograph of woodgrain (as seen in the final image).

Now take the Selection Wand and select the black shapes in the design and delete them. The background should now show through where the black shapes were.

Select the inverse of the white design shape (select outside the design space), add a new layer, fill the selection with a dark brown or black (or a darker

Adding the background Open the design in Photoshop after changing paper colour to white. Fill a background layer with colour, delete the 'cut shapes' (the black shapes) to allow colour to show through.

Gradient Convert the paths to selections and apply a radial gradient (colour to transparency). Direct the gradient where you'd like the shadow to be cast. Be delicate, and layer to avoid harshness.

Doodling

Allow your shapes to form naturally and flow into one another. The biggest task of this piece is creating the design itself. The rest of the work is merely adding some oomph to your art.

Shadows Using the Pen tool, map out shadow areas. These will give depth to the image, popping some shapes out (connected to other 'popped out' shapes) and holding some back.

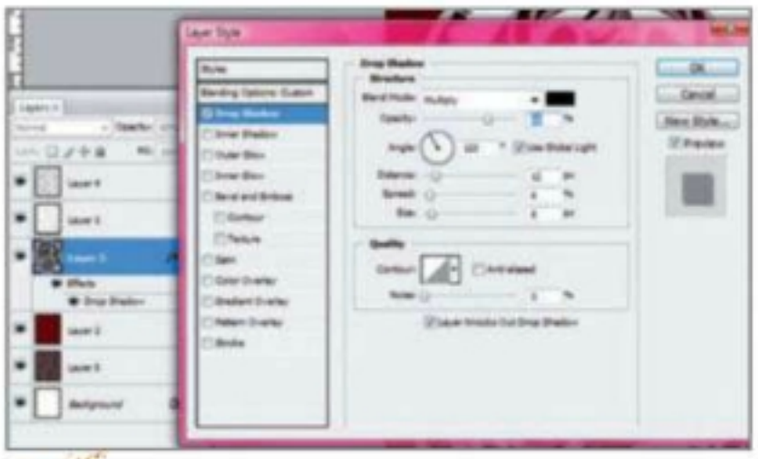
Add depth Use the Pen tool in Photoshop to select areas that you want to alter the depth of and use the good old radial gradient to lift areas forward and push others backwards

version of whatever colour your background layer is), lower the transparency of this shadow layer and move the layer out from under the design a bit (just to the right and down).

Next, create a new layer and then grab your Pen tool in the toolbar. The following step is aimed at composing depth within your cutout design itself. Construct spaces where you'd like to pop certain shapes out from the rest, or where you'd like to show a change in the level of the piece. Change the path shape to a selection and then apply a radial gradient lightly and carefully (this may take quite a few attempts in order to get the exact angle that you want). The gradient used in this piece was dark brown (the same as the background) to transparency. If your background is another colour, then simply using a darker version of that colour will give the best look.

Travel around the image, applying bits of gradated shadow. Pop some bits out, shade some bits in. You can layer gradients on top of one another to create more depth, or even work it with the Brush tool. Once your gradients are complete, select the white design and invert the selection, then go back to the gradient layer and delete all of the colour outside the white cutout space.

Your final step is to apply a texture or stock photograph in the background layer to finish. You can add gradients below the design for more depth, or leave it as it is.



Adding a background

Add a texture background to create a sense of reality

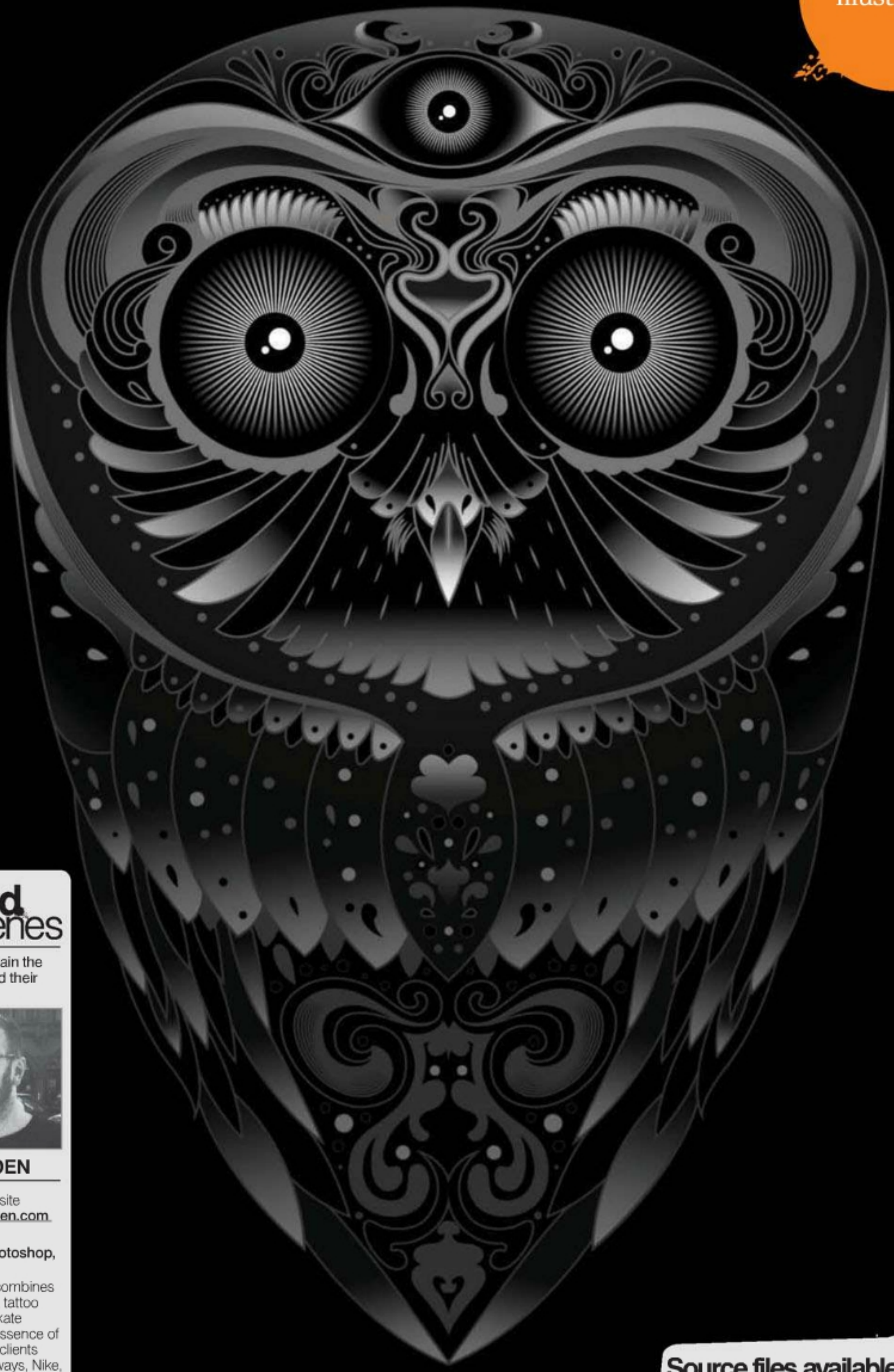
01 Drop shadow You can add a drop shadow to the black, off-register layer. In Layer Style on the selected layer, hit Drop Shadow and adjust as needed.

02 Background Copy background texture from the original; paste to a new layer below the background colour. It can stand alone or be altered by the layer above.

03 Set layer above The dark colour used for the background may remain. Fill the layer above the background or use a gradient (dark brown to burnt orange).

04 Alter layer above background Set filled layer to Overlay to add its colour to the background layer below. Reduce transparency to your liking – 50-65%.

Illustration



Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

MEGAMUNDEN

Personal portfolio site **www.megamunden.com**

Country **UK**

Software used **Photoshop, Illustrator**

MEGAMUNDEN combines nature's creatures, tattoo design, Eighties skate graphics and an essence of the Far East. Past clients include British Airways, Nike, Toshiba, Penguin and *New Scientist* magazine.

Source files available

Line art

Shade your vectors

Working Progress

Design hypnotic vector images with real depth

Step 7, Duplicate and flip

Step 19, Shading and depth

Step 21, Expand your selections

Step 25, Gaussian finish

MEGA-OWL 2011 **Photoshop, Illustrator**

"The aim of this tutorial is to show you how to create a shaded vector illustration combining Illustrator and Photoshop"

MEGAMUNDEN Illustrator and senior designer at ilovedust

This tutorial guides you through the process of creating a fully shaded owl illustration in vector form and then in Photoshop. The use of bold, pattern-based linework and powerful psychedelic shapes coupled with strong shading make this an eye-catching piece of design, but there is plenty of room for you to make the final result of this tutorial your own. During the drawing section of the guide you can add your own style or even choose a different subject. This will make it more exciting for you as the end product will be original – you will simply have followed some basic steps in terms of tools and techniques to help you get there.

Owls are such a popular and interesting subject they come up all the time in contemporary illustration. The addition of the third, all-seeing eye in my illustration gives it a slightly unusual edge. Hopefully this helps to grab the viewer's attention more than the standard two!

To complete the tutorial you will need access to a printer and scanner in order to make your drawing. However, it is also possible to skip the drawing stage and instead create your half-owl by using solely vector patterns if that's how you prefer to work. If you're following that workflow, ignore steps 4-6 and use the Shape tools in Illustrator instead.

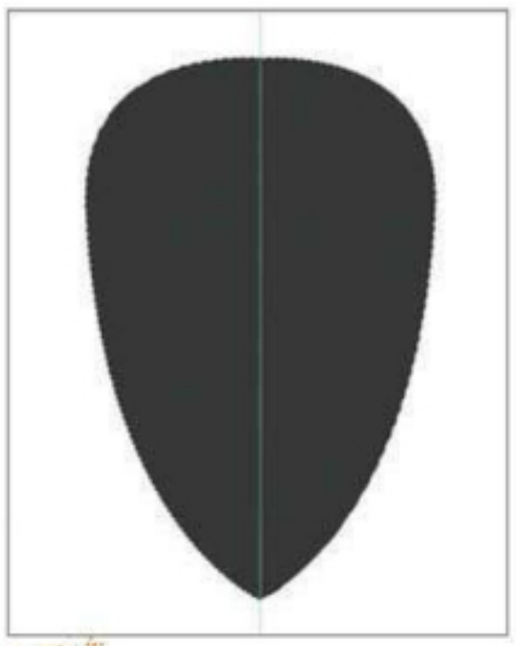
Before beginning the tutorial it's certainly worth gathering plenty of reference pattern imagery, as I think the patterning is what really helps the piece become more than a straightforward image of an owl. It adds interest, so take a look at Art Nouveau, heraldry-style patterning, contemporary designers and anywhere else you can think of to find great inspiration. The more references the better.

The two main shading techniques you will learn are the use of the Blend tool in Illustrator and gradients in Photoshop. The Blend tool enables you to draw two separate lines than run parallel to one another (they can be curved) and then fill the gap in-between these with a selectable amount of keylines and blend them into one shape. Gradients give you a smooth blend of colour from one tone to another, or even through a multitude of hues. These techniques form the basic skills needed, so follow along to build your own stylish vector creation.

Software at the ready – let's go!

Source references and sketch a mock-up

01 Collect references Begin by collecting your own reference imagery. Flickr is useful for this as is a Google Image search. It's always beneficial to look at photographic references to get around your subject, in this instance how an owl looks. I tend to make very rough Photoshop mock-ups with found imagery as a guide to draw from.



02 Mock-up In Photoshop open a new file at the size you wish, around A3 is good. I had an idea of the basic shape I wanted my owl to have – quite a stylised, graphical shape – so I began by drawing this straight in using the Pen tool.

03 Create and reflect Using the Polygonal Lasso tool and the Cut and Paste commands (Edit>Cut / Edit>Paste), create half of the owl image using a composite of your reference images. Because I want this image to be graphic, a reflected style will work well. Duplicate the half and use Edit>Transform>Flip Horizontal.

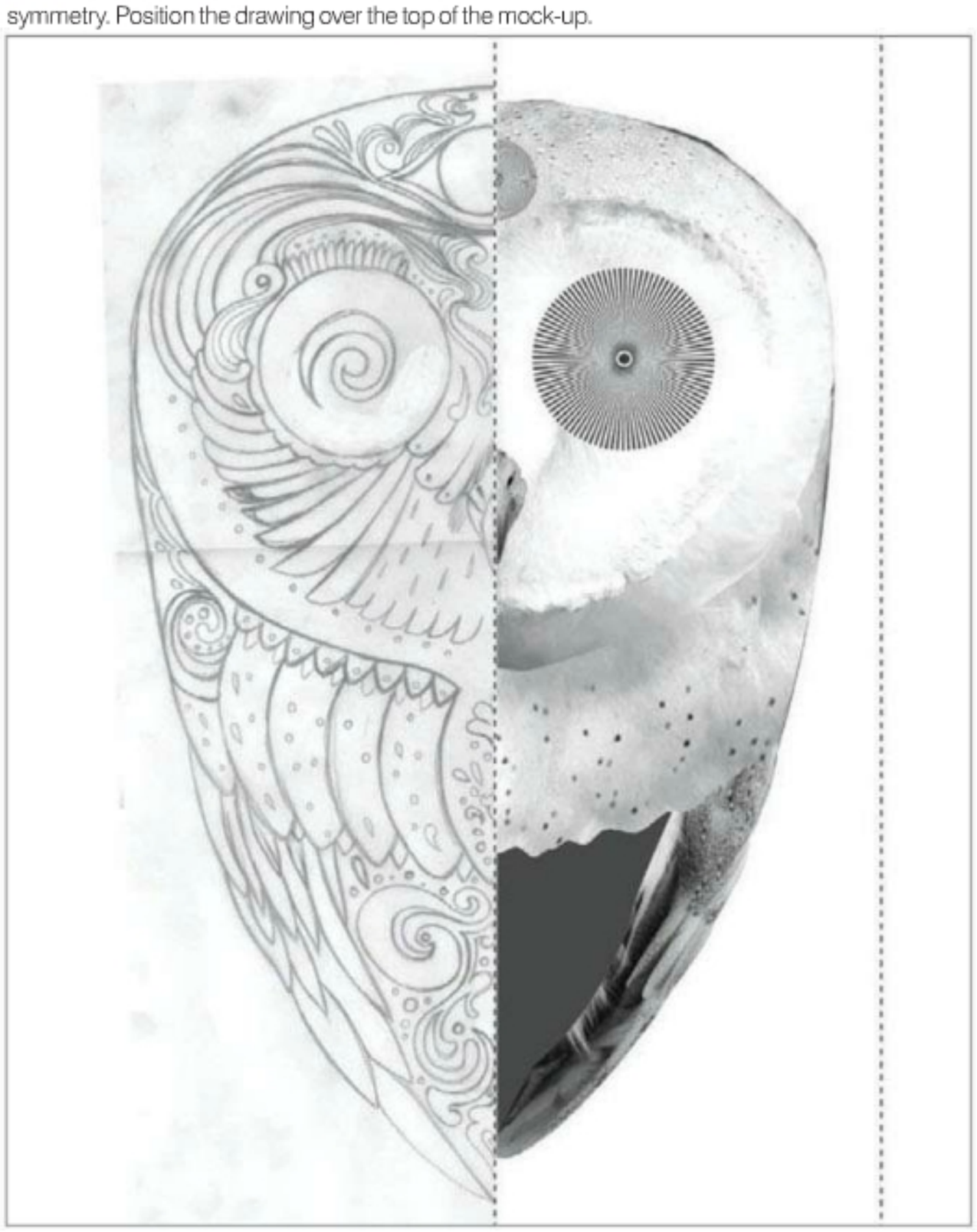
Create the line art

Use a composite of photo references to guide you

04 **Print and draw** Now print out your reflected composition, preferably at A3 size. Using tracing paper, begin to draw out half of the owl by hand. I wanted my subject to be very ornate and decorative, so I added my own swirl details.

05 **Half drawn** You really only need to draw half of the piece, as I have in pencil. You may find you make mistakes, so you can always make a tracing of the sketch for the final design. This may help progress the image from the rough stages, which is of course a positive thing.

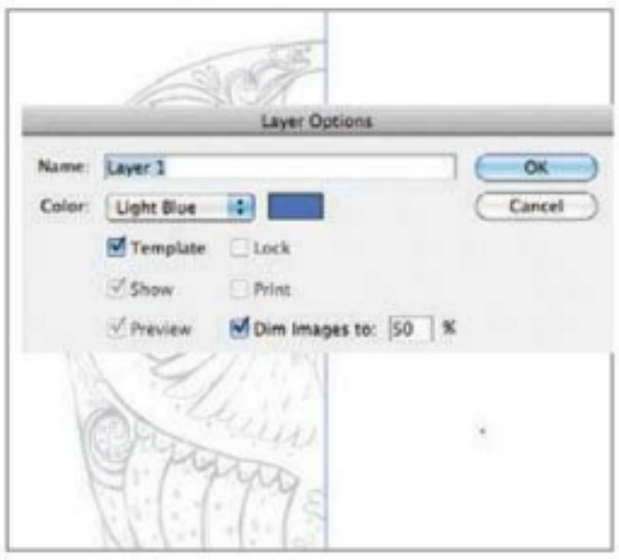
06 **Scan and recompose** Scan in your drawing once you are happy and bring it into Photoshop. If you drew slightly more than half, crop the drawing so you have an exact line of symmetry. Position the drawing over the top of the mock-up.

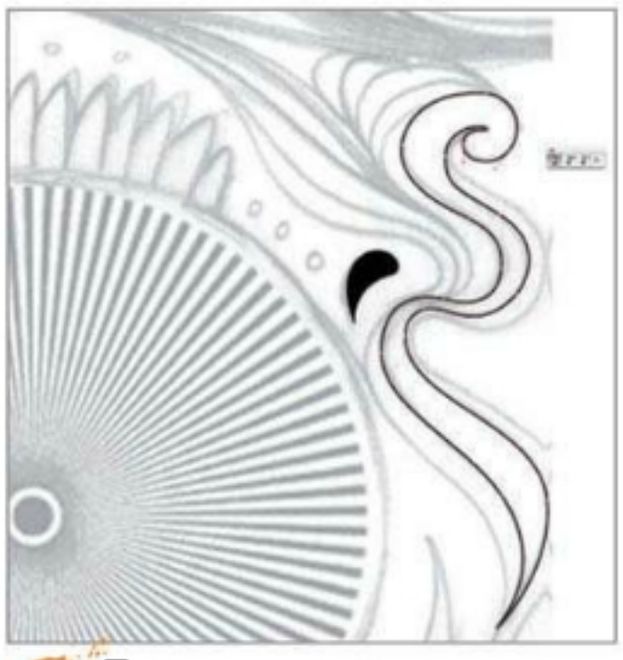


07 **Duplicate and flip** Once you have exactly half of the owl in position, duplicate that layer. You can then go to Edit>Free Transform, Ctrl/right-click on the layer within the image and select Flip Horizontal. Adjust the second half into position. Now merge the two layers of your drawing.

08 **Clean it up** Using the Dodge tool set to Highlights and an opacity that doesn't compromise the line quality, clean up your drawing. Around 50% Opacity works well.

09 Into Illustrator At this point you need to save out a JPEG of your Photoshop document and place it into Illustrator (File>Place). In the Layers palette, double-click on the layer you see and set it to Template mode, with a Dim amount of 50%. Now cover half of the design with a white block and lock the layer so you cannot edit it.





10 Trace It's time to begin tracing – the longest stage of the process. Use the Pen tool for this as it offers the most control. All you need to focus on is creating single lines and closed shapes that directly trace the drawing below. Do this on a separate layer.

11 Blend vectors In a few areas I used the Blend tool to create some really nice shading effects. This works when you draw to fairly parallel lines (even if they are curved), select the Blend tool in the main palette and click on each of the two lines. Go back to the Tools palette and click on the Blend tool symbol. This opens a dialog box where you can choose Specified Steps and adjust how many blending lines appear between your two existing marks.

12 Patch in There might be times when the Blend tool gives some undesired results, or times when you simply need to cover a section of the linework. Do this by creating a solid shape and filling with black.

13 Untidy blends Sometimes you may need to tweak the effect of the blends. Adjust the lines between the initial two by selecting them and choosing Object>Expand. This will enable you to edit all of the curves in the blend.

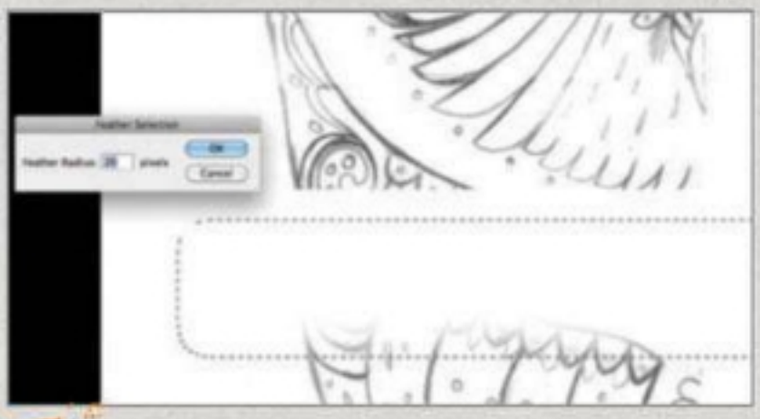
How to digitise your linework

Transform pencil or ink sketches into on-screen art

01 Scan straight Always clean your scanner well, and if you are drawing at A3 size but scanning at A4, make sure you line the halves up precisely.

02 The Dodge tool The Dodge tool is very useful when it comes to hand-drawn linework, enabling you to lighten the shadows, highlights or midtones.

03 Multiply The Multiply blending mode enables you to set one layer so that all the white on it appears transparent, leaving darker colours opaque.



04 More blending You can also select the edge of one image with a marquee and feather it so that when you overlap two pieces they blend seamlessly.

Artist showCase

MEGAMUNDEN's work gets everywhere...

Duo of Skulls
2011, **pen and Photoshop design**
● Commissioned by Gavin Strange at news.jam-factory.com.

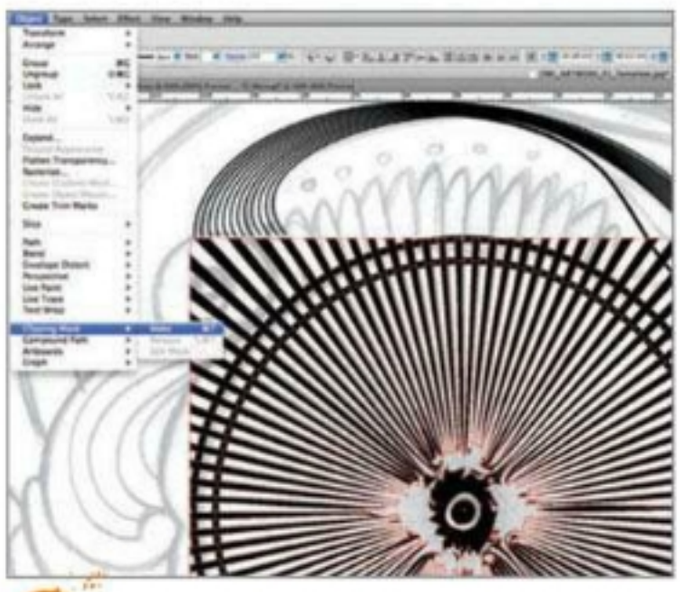
Floodit
2010, **pencil, Fineliner, Photoshop**
● A piece for Nottingham's Floodit show with live music and screen-printing. Organised and curated by Waste Studio www.wastestudio.com.

The Bomb (Brighton)
2011, **Posca pens, acrylics**
● Freehand mural for The Bomb all-sex hairdressers in Brighton's North Laine, 39A Sydney Street.

Shade in Photoshop

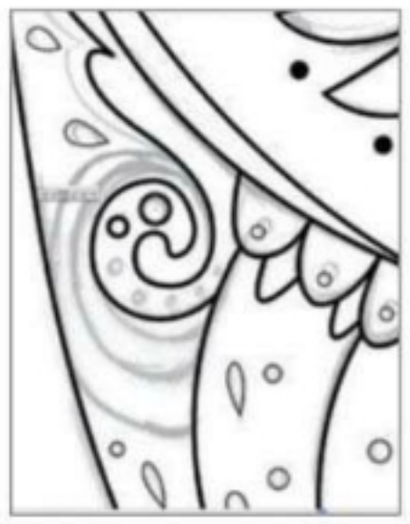
Add depth and interest with gradients

14 Make patterns I used a section of a photograph I took, adjusting the levels until there was clear black and white (I did this in Photoshop via Image>Adjustments>Levels). Once this was complete I brought the image into Illustrator and used the Live Trace option to convert it to vectors, setting Threshold to 128 and Blur to 0px.

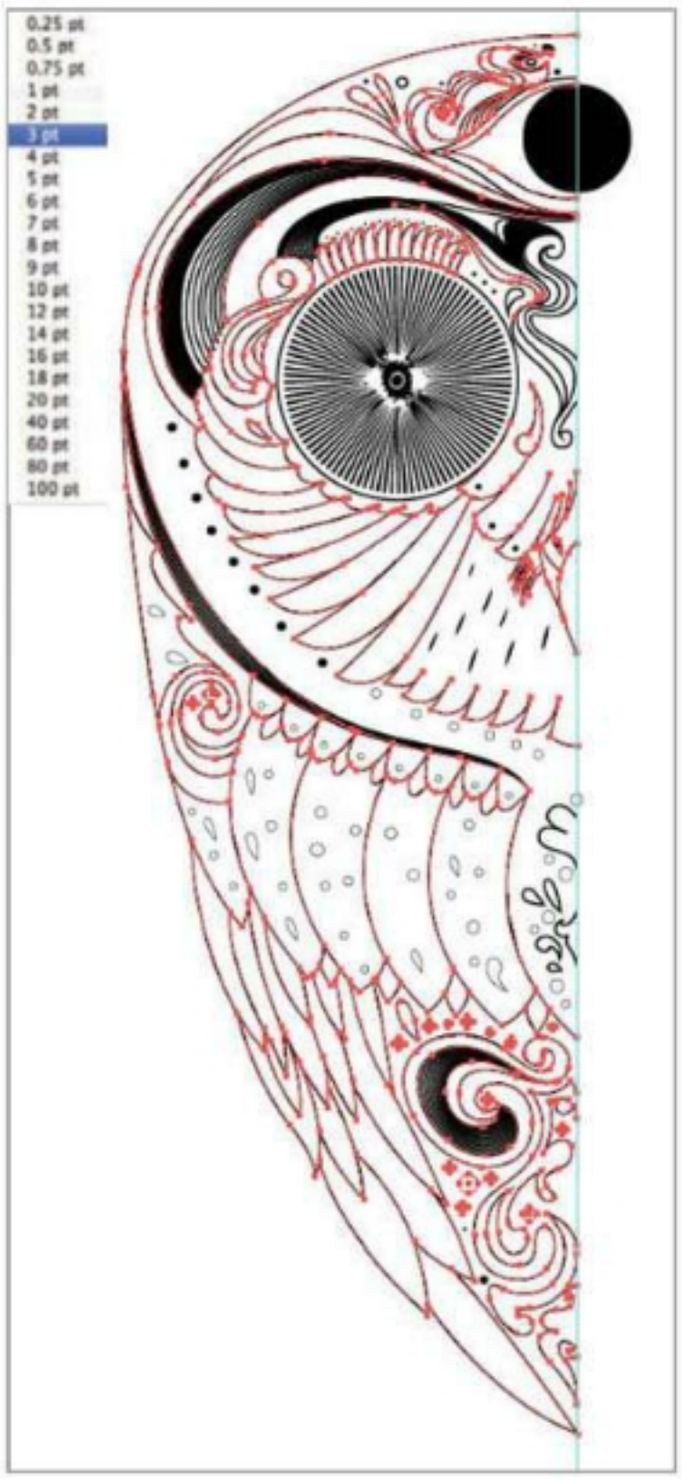


15 Clipping masks This pattern will be used for the eyes of the owl. To hide the square edges of the pattern I used a clipping mask. This is done by drawing a space over the area you want to keep, selecting both the shape and the pattern, and using Object>Clipping Mask>Make.

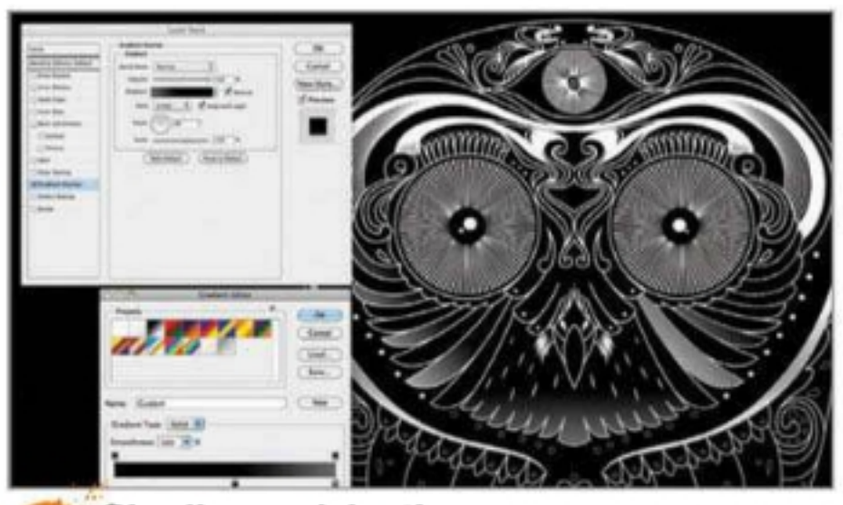
16 Details The owl half will now be coming together. Add to the graphic nature of the piece by using some geometric shapes to create patterning. I've used circles a lot in this image.



17 Stroke width It's good to only have a small number of line weights going on in your piece. In my version there are only two – 3pt and 1pt. Hold Shift, select the lines you want to be the same size and use the Stroke dialog to choose your width.



18 Back to Photoshop Once you have drawn up all of your owl, copy half of the lines and paste them into an A3 sized Photoshop document. Duplicate the layer and flip it horizontally to create your full composition. I wanted to adjust the eyes a bit in Photoshop so I copied them separately.

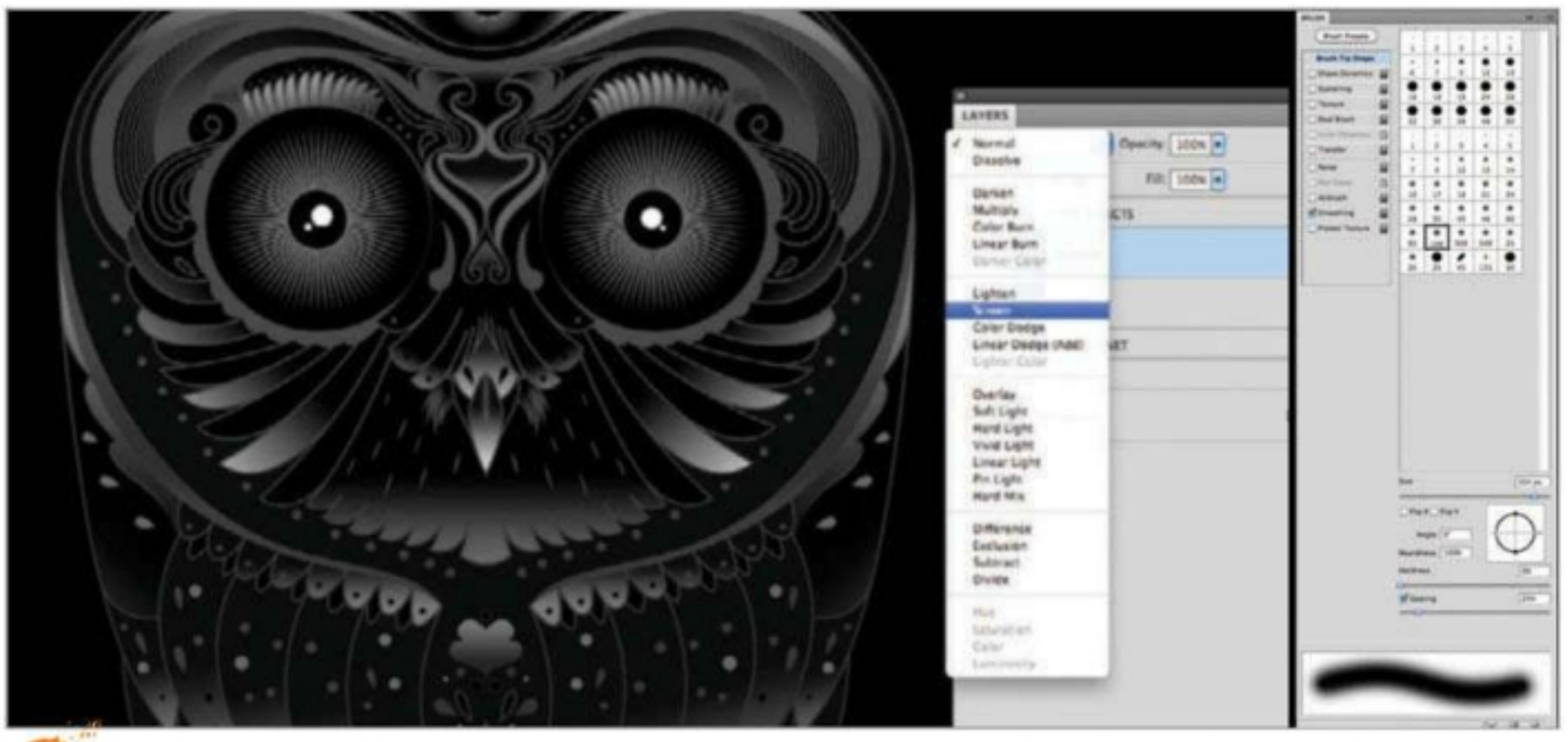


19 Shading and depth On the linework layer, use the Magic Wand to pick out areas you want to highlight. Once you have made a selection, create a new layer and fill it with a solid colour. Double-click to view the Layer Style dialog box, select Gradient Overlay and then click on the rectangle to open the Gradient Editor. Adjust how you want the shading to appear and pick your colours. Repeat this step all around the image until you are happy with the shading balance.

20 Colour half It's important to remember to only colour half to save yourself the workload. Once you've coloured, flip the shading layers horizontally after duplicating them.

21 Expand your selections You can use the Expand dialog (Select>Modify>Expand) when shading. This enables you to make a Magic Wand selection then expand it by pixel rate. When you fill that selection with shade you will not get any gaps or odd joins in colour.

22 Erase instead of gradients To get more control than with the gradient technique, fill an area with solid colour and, with the Eraser tool on a low opacity setting, slowly erase some of the colour from the edge.



23 Add some punch Once you have shaded to your heart's content, Select All (Ctrl/Cmd+A), copy all (Ctrl/Cmd+Shift+C) and paste the copy into a new layer set. Now duplicate the new layer and set the blending mode to Screen.

Keep it consistent

The owl design has been composed by creating half of the design, then copying and flipping it. But one little detail can let you down if you're not careful: the eyes. As we know from manga artwork, the catchlights in the eye govern a lot of expression and show the direction the subject is looking in. Make sure that the catchlights in the eyes (including the owl's third eye) are consistent and all point in the same direction. Remember that they'd all be reflecting the same light source at the same angle.

24 Focus on the eyes Draw a loose oval around the owl's eye area with the Lasso tool. Invert your selection (Ctrl/Cmd+Shift+I) and Ctrl/right-click on the selected part to bring up the drop-down menu. Select Feather and enter 100-150px. Press OK, then the Backspace key. This adds a bit of subtle highlighting around the owl's eyes.

25 Gaussian finish To finish the piece I added a mild Gaussian blur to the flattened art layer, but not the top layer that is set to Screen. This helps to keep the eyes sharp and the rest a little softer. I set the blur to 1px. Save out and you're done.

Cheat Guide

Superflat scene

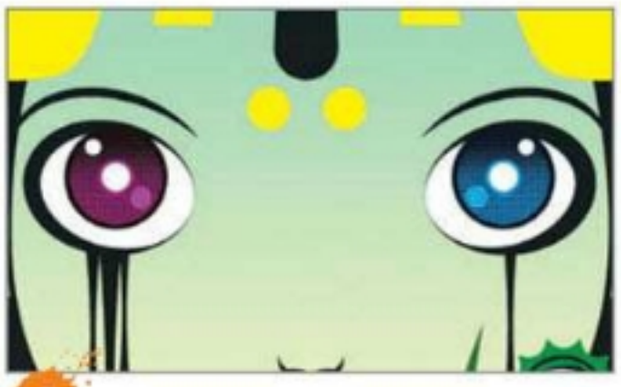
Nigel Hopkins creates a Superflat landscape

01 Get to grips with the tradition of Superflat art

The term Superflat gives its name to two key areas. It refers to the postmodern art movement founded by Japanese artist Takashi Murakami, but also denotes his idea of blurring barriers between high art and mass culture, and the flattening or compression of artistic genres.

The term was coined by Murakami and published in his Superflat theory in 2000. He noted that there was a long history of flat, two-dimensional imagery in Japanese art and the Superflat style is one that is influenced by and celebrates two different artistic genres – manga comics drawings and anime, which are animated cartoons. It is often also characterised by its two-dimensional appearance, it emphasises surface and employs the use of flat, saturated colours, and the themes used are often otherworldly and mystical.

As well as Murakami, other artists whose work is regarded as Superflat include Aya Takano, Sayuri Michima and Chiho Aoshima. Aoshima is a Japanese pop artist who produces computer-generated fantasy cityscapes that often include ghosts, nature and young women. This tutorial will help you create your own Superflat landscape.



Manga style Superflat art encompasses manga and anime styles. I have incorporated this into my image using bold, flat colours and a shallow sense of perspective. Wide, open faces prevail and the characters are often round-faced with huge eyes; innocent and sensual at the same time. The woman's face in the hillside mirrors these aspects as she stares straight ahead.

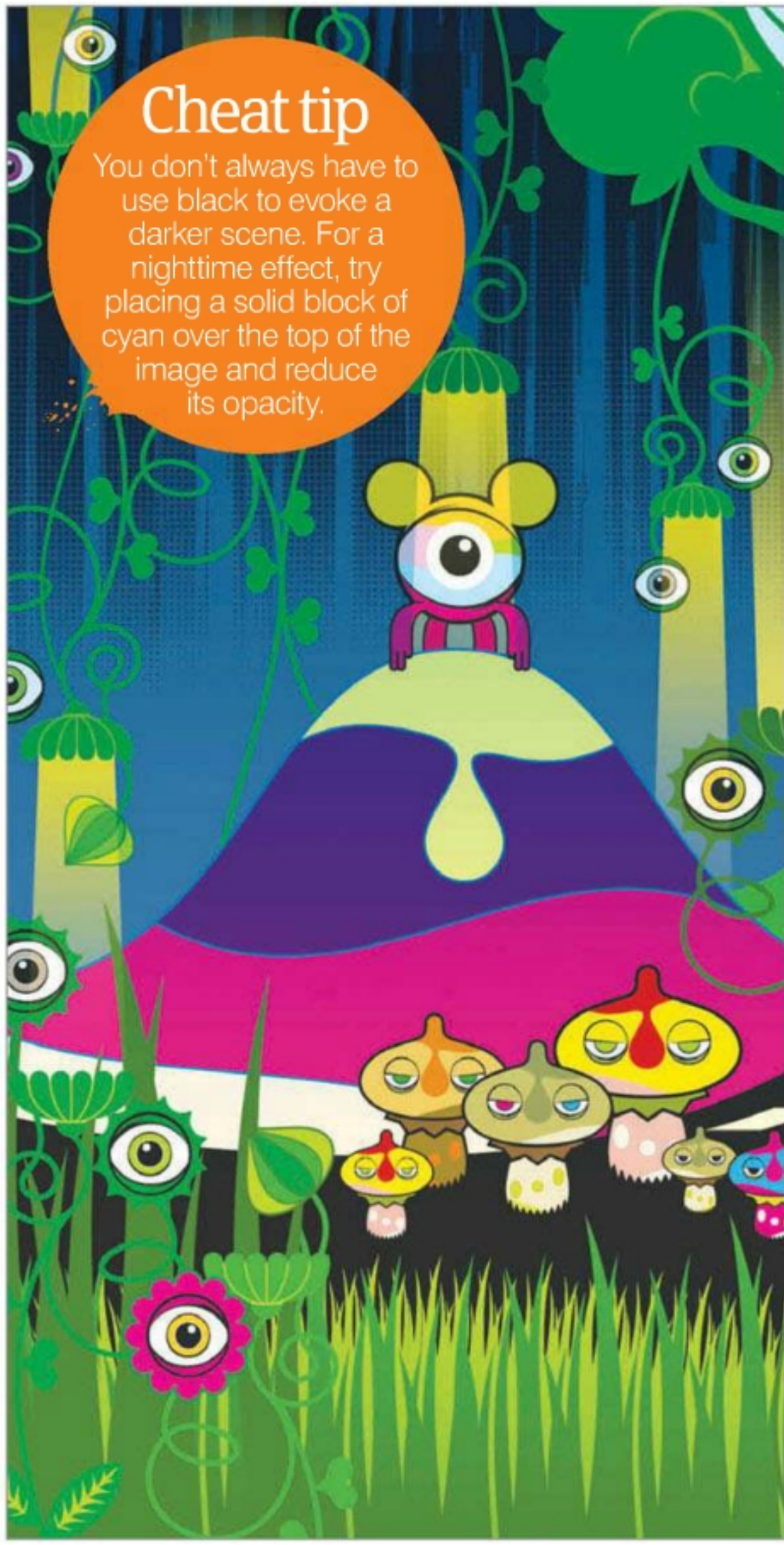
Cuteness Another key feature of Superflat art is one of cuteness or kawaii, meaning loveable or cute in Japanese. The face of the woman in the hillside is rounded and childish and her eyes are wide open. As well as appearing cute she is also slightly provocative. The mushrooms each have faces and the one-eyed creature on top of the coloured hill has cute, mouse-like ears.

Characterisation I really wanted to bring my Superflat landscape to life so I gave everything a character and personality. A small embryonic form sits at the heart of the central tree. Plants and foliage have eyes and the mushrooms all have faces. The main hill is the head of a young, wide-eyed woman to convey a sense of innocence in contrast with the wise mushrooms with their heavy eyelids.

Eeriness Eeriness often plays a part in Superflat landscapes, so I wanted to convey this. The background is ambiguous, as there's a sense that something else is out there in the forest, but the shadows and shapes aren't clear. There are also eyes everywhere, staring right at the viewer. Some of the plants have beams of light shining from them giving an otherworldly feel to the scene too.

Cheat tip

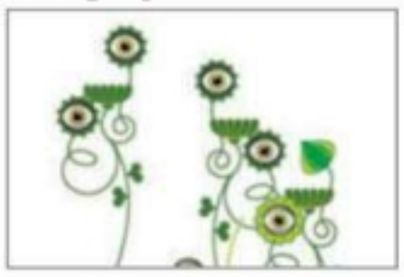
You don't always have to use black to evoke a darker scene. For a nighttime effect, try placing a solid block of cyan over the top of the image and reduce its opacity.



02 Five steps to producing your own Superflat art

Starting point Look at pictures for reference and sketch out ideas. Scan these in to use as a starting point in Illustrator.

Block in Block in some simple shapes like the hills to get the landscape composition. Start to think about (and use) colour.

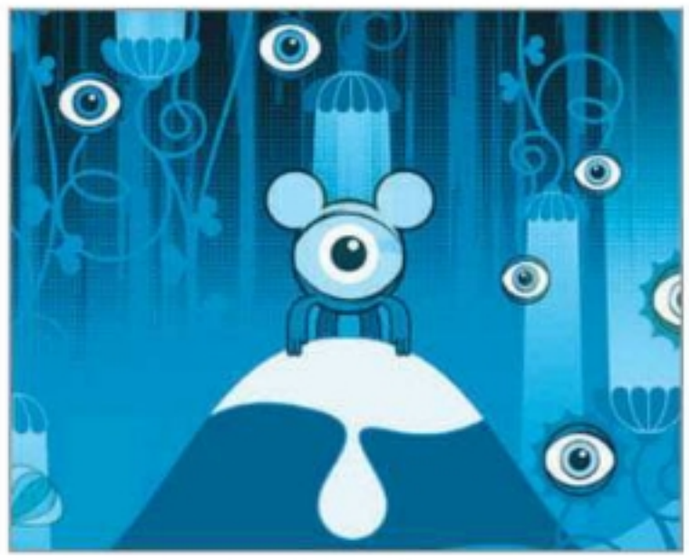


Layers Separate the image into foreground, middle-ground and background layers, labelling each accordingly for clarity.

Add character Begin to work on all the objects added, giving them their own faces, expressions and personalities.

Refine the image Set about refining the image, fine-tuning shapes and adding in extra details where needed.

03 Be influenced by other art styles and enhance your image



Incorporate other styles You could evoke other art styles into your Superflat landscapes. Nihonga is a more traditional form of Japanese art and if you wanted to portray the essence of this style you could use a more muted colour palette to give the effect of a wash of colour. Alternatively, you could opt for a monochrome feel using several shades of one colour.

So far SoFlo If you wanted to keep a bold palette of colours, you could try your landscape in the style of SoFlo. SoFlo is a genre of art that started in Miami and is based on Superflat. Images are vividly coloured and very flat. They are often made up of repeating patterns using geometric shapes and lines throughout. In my scene, an example would be the pattern of the hair on the face in the hillside. It is both brightly coloured and geometrical.

ILLUSTRATOR

Build a Pop Art image

Cycle Haven 2011

Illustrator, Photoshop

> This tutorial is all about creating an image with the use of collage, vectors and various textured techniques

Neil Stevens Illustrator, image-maker

For this tutorial I have created an image that draws inspiration from Pop Artists – such as Richard Hamilton – and mixed this influence with my own to give it a more contemporary feel. Hamilton's art would often involve collaging images to create original pieces. Found pictures, old photographs and various objects would all be carefully placed to create a whole new image. I've taken that influence on board, but also added a few simple shapes, cleaner lines and the usual colours and textures I tend to include in my work. With some simple techniques within Photoshop and Illustrator you can also create this look and feel. This approach to illustration is, in fact, quite new to me. I have been experimenting recently by adding something a little extra to my previous style. By mixing vectors with photographic images I have found a new direction. The best thing about the collage style is that anything goes, and the more inventive and crazy your approach and ideas become, the more interesting the results can be.

I have always been inspired by the work of Ciara Phelan, Jesse Lenz, Julien Pacaud and Marek Haiduk. To me, these guys are the best at contemporary collage work. If you want to be inspired and create work of their quality, finding their websites and browsing away is the place to start.

Before I began my image for this tutorial, I was given a number of images to work with and I also selected one of my own. The idea was to create an illustration of cyclists within a mountain scene. The beauty of the Pop Art style is that you can interpret the theme in numerous ways. When finding images to use you often have to be quite eagle-eyed. You could sift through numerous old magazines and

BUILD A POP ART IMAGE

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

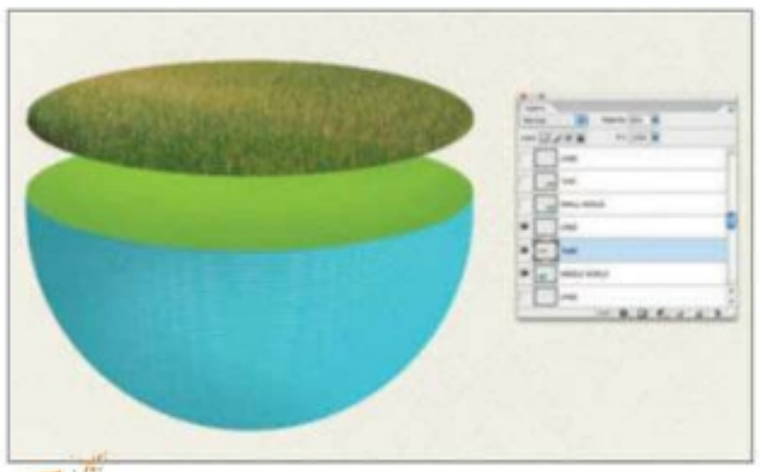
Neil Stevens

Personal portfolio site
www.crayonfire.co.uk
Country **UK**
Software used **Photoshop, Illustrator**

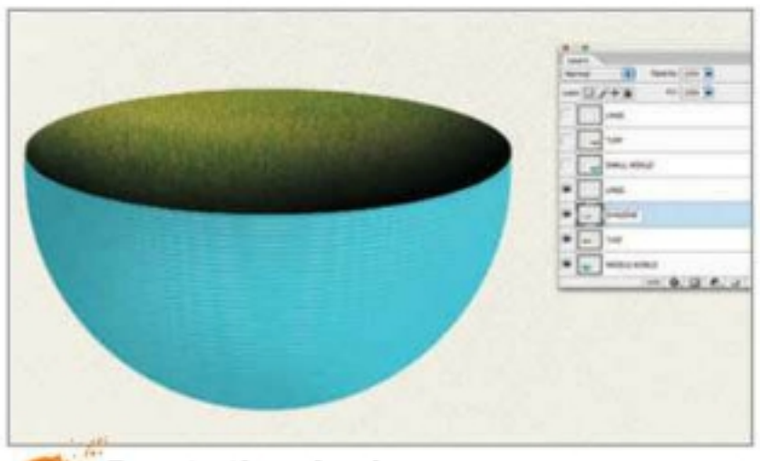
Neil often uses geometric shapes and textures to form the basis of his imagery. Influenced by mid-century graphic artists and contemporary collage illustrators, clients have included *The Guardian*, *Wired* and the *Big Issue*. He also sells prints of his illustration work online.

Bring life to your worlds

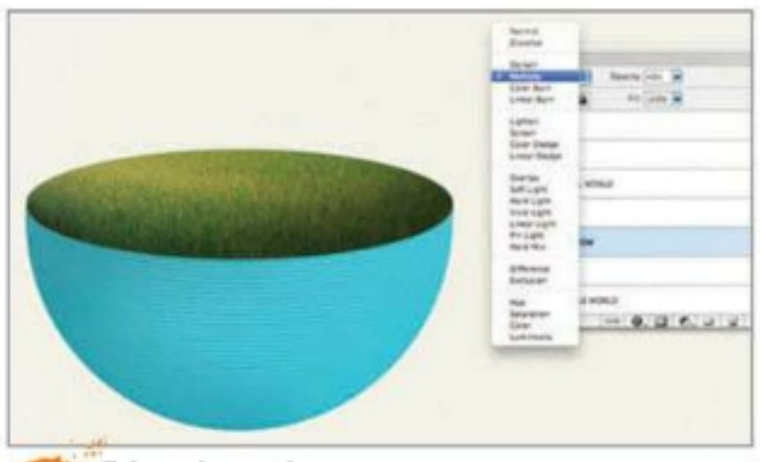
Add shading and texture to give the image an organic feel



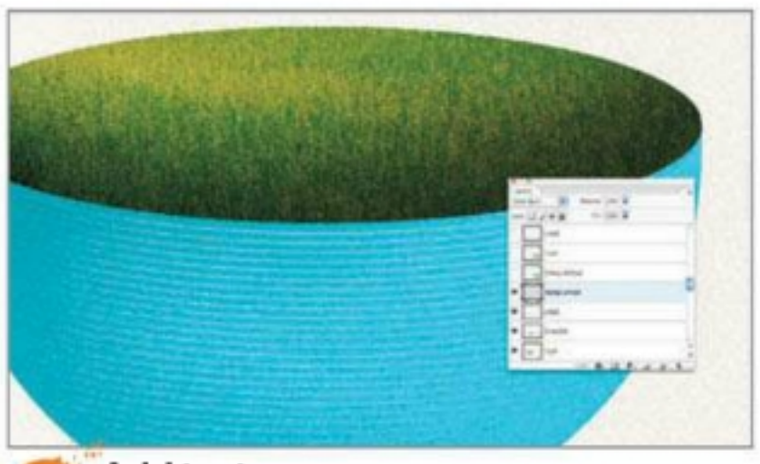
01 Import grass With the stock imagery of the field of grass you can select an area and bring it into your main illustration to lay over the flat worlds.



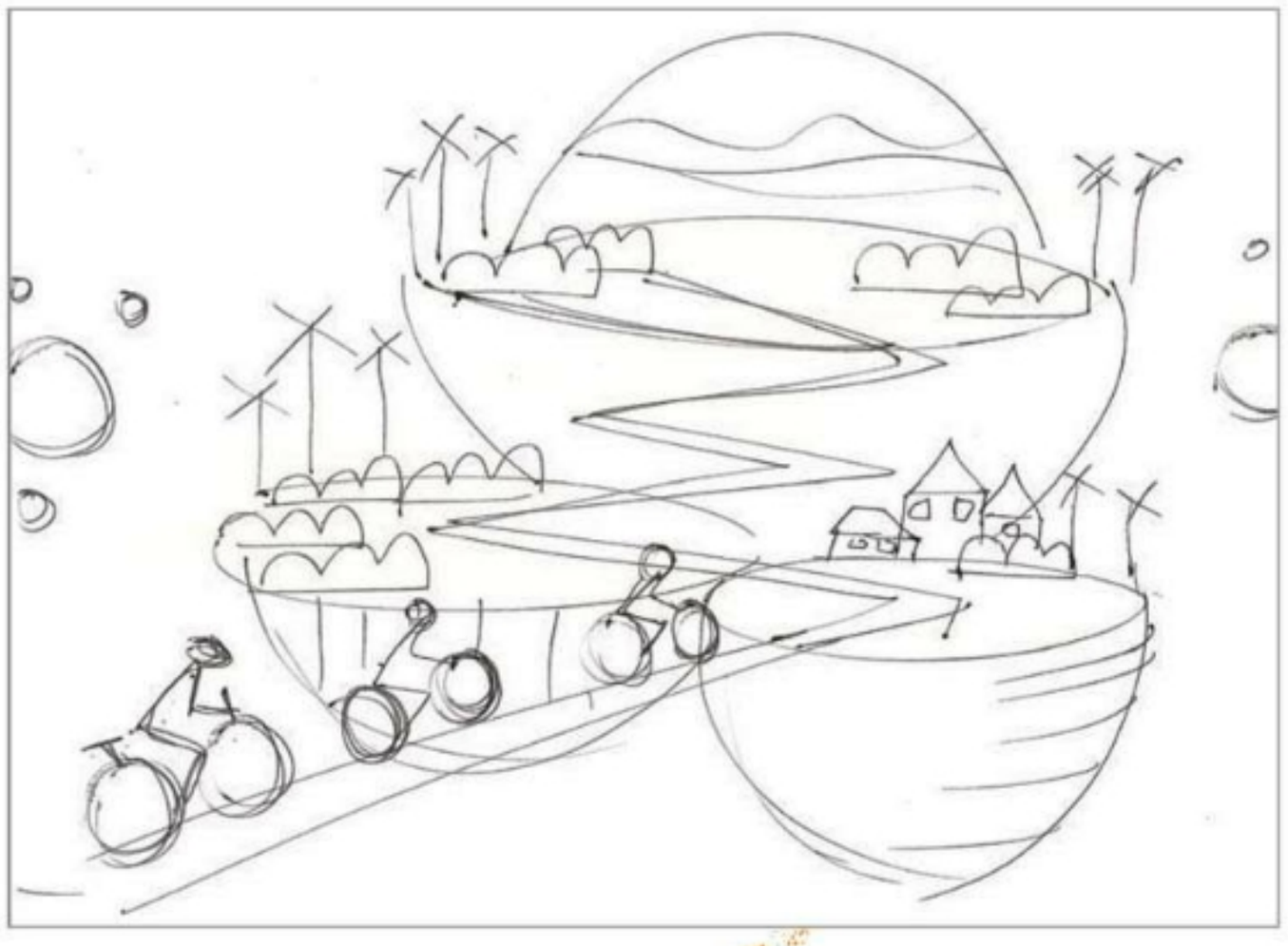
02 Create the shadows With subtle use of the Brush tool in black at 30-60% Opacity, you can carefully shade areas on a new layer above your world.



03 Blend modes You can use the blending options, such as Multiply or Darken, and change opacity to make subtle changes to your shadow layers.



04 Add texture Once you are happy with your elements, add a final layer at the top. Use the Add Noise filter at 20% and the Color Burn blend mode.



07 Rough sketch Sketch out your ideas to a clear visual. This will show how you would like to place the elements on your blank canvas and can be very rough.

stock photography and not find exactly what you're looking for. But, if you look harder, you may end up finding two different images that, when put together, will create exactly what you want. You can cut them out, change the angle, flip them, discolour them and add them to other scenes and images.

I had a couple of images of mountain scenes, a cottage, wind turbines and a cyclist to work with. I began sketching out ideas in a very rough fashion and decided upon creating a rather surreal world where cyclists are riding across planets or worlds to an ideal cycling destination. I first created the planets, or worlds, within Illustrator. I thought if they were sliced in the middle I could create the individual scenery on each flat surface. When I create scenery, it is often with geometrical shapes and so I added these in on the flat surfaces and chose autumnal colours. This then helped me to decide on the palette for the remainder of the illustration. I thought about connecting these worlds with a path for the cyclists to follow. Rather than have a round-edged path, though, I chose a zigzag to lend a futuristic feel. I picked a colour for my background and added in a few very small circles to represent planets in the distance, purely to decorate the image further and give it a sense of depth later on. As you create these shapes within Illustrator everything looks a little flat. Don't worry about this, though, as all the shading and depth will be created later in Photoshop.

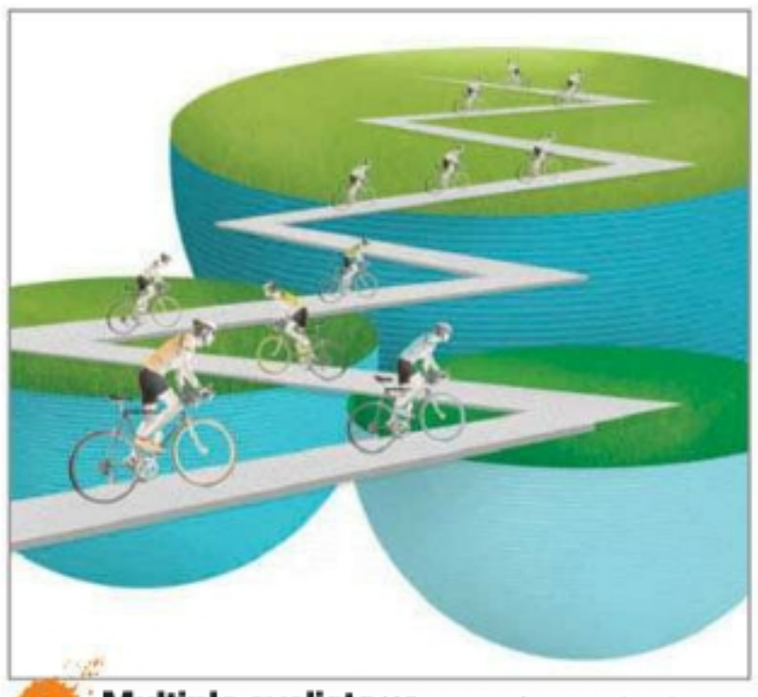
Once I was happy with my vector backdrop, I copied and pasted each element into the Photoshop blank canvas. I named each new layer as I copied them, as there will be so many that when you get to the final strait of creating the illustration it will really help if you're organised. For example, as I had three planets, I created a new group in the Layers drop-down menu and placed each new layer within this folder. This way I know where to look for all my bushes, hills and so on for each planet. I now had all my elements for the main background within Photoshop, organised with all the layers named

Organise your layers

When creating images that involve collage work, the layers can soon add up in Photoshop. To keep things less complicated as you progress further with the piece, it's always sensible to name and group the layers as soon as you create them. When you get towards the end and you really need to find that 14th tree from the left, you can find it with ease.

Graphic details I built up the scene of each planet, adding in geometric shapes for hills and bushes. At this point I thought about my colours, too, and went for an autumnal palette.

clearly. I now set about using the photograph of the cyclist. All I needed to do was cut out the cyclist using the Pen tool in Photoshop then trace around the perimeter and any gaps of the profile. This automatically creates a path and I then used Make Selection so that I could copy and paste all this detail into Photoshop. Here I converted the cyclist to greyscale, played around with the brightness and contrast and added a slight tint of colour with the Brush tool. I needed a handful of these cyclists, so I copied and pasted them 12 times and named each as Cyclist 1, Cyclist 2 and so on. I changed the colour of each of their jerseys for variation then set about placing them on the path, and as the path headed further into the distance I made sure that their scale was appropriate to their position. With collage you often don't need to worry about scale and perspective as much, but there are some situations when it can help enhance the overall look and feel, especially when you want to achieve the appearance of depth or a vanishing horizon. Again it is entirely up to you as to how surreal you make it.

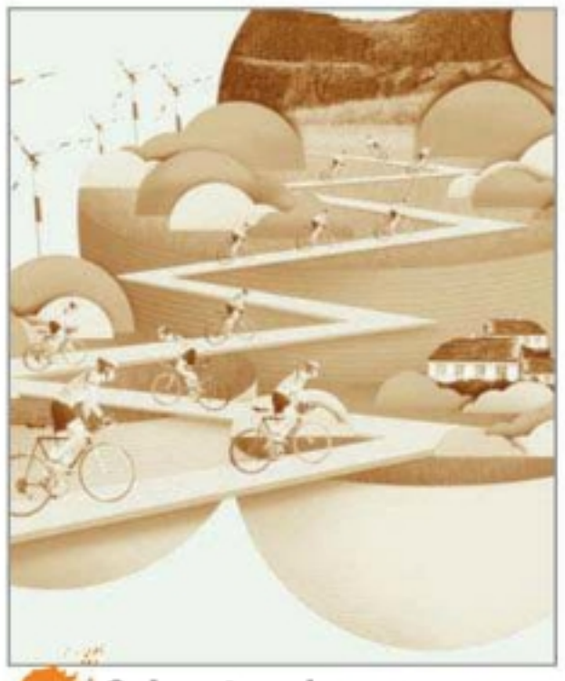


Multiple cyclists When you have cut out your image of the cyclist, place him on a new layer in Photoshop. Copy and paste as many times as you want to create more cyclists and decrease their scale.

I still had a few more stock images that I could add to the illustration, and one was an image of a few wind turbines in a field. As all the structures looked the same I only cut out one of them and then placed them into my design following the sketch I had created earlier. At this point some elements of your sketch may not work so you can still move them around. Negative space is always good, so don't feel like you need to fill the whole canvas with images; it's good to let the illustration breathe. I cut out the cottage from another stock image and once again copied and pasted a few of them together to form a cluster of buildings to add a bit of density. The final stock image I chose was of a set of hills and a valley with blue sky that I thought would be a great use of scenery and a distant haven for the cyclists to be riding towards. I echoed the shape of the hills and roundness of the planets in this element to make it blend in well with the illustration. I wanted it to seem like it could be a window to another world.

As I copied and pasted these various selections from the stock imagery, I noticed they all contained different tones and colours. To make them more harmonious you can decrease their saturation as you go or wait until the final flattened version. By doing them individually you gain more control through subtle changes. With this particular illustration, I decided to tweak each layer ever so slightly by adding noise. You simply create a new layer over the top of an element you wish to change, fill it with white and then select Filter>Noise>Add Noise. This gives you a new layer of texture, that, when you use the Color Burn blend mode, creates a roughened detail over the flat areas to give them a more life-like look and feel. Once you are happy with the placement of your layers, textures and elements, you can flatten the image and then play around with the brightness and contrast. It's also good to experiment with the hue, saturation, colour balance and even a photo filter of your choice to achieve the final colouring you desire. You can then stand back, take a good look and hopefully be happy with your work.

Add noise and flatten When you're happy with how all the elements and shadows look, you can flatten the image. To add a final texture and make the image feel more organic, simply add a new layer, fill it with white and choose Filter>Noise>Add Noise. You can then choose the Color Burn blending mode to leave your image with a subtle texture and then flatten the file once more.



Colour tweaks Select the whole image, copy and paste it on top of itself and now adjust the colours. To make the colours less vibrant and give it a slightly aged, retro feel, you can set the Foreground and Background colours to a dark and light brown respectively. Then choose Image>Adjustment>Gradient Map and your top layer will be transformed to these two shades of brown.

iPad/iPhone

Produce art on the go with tablets and smartphones

178 Create with your iPad
Design, sketch, paint and edit on the go

184 Paint on your iPhone
Pocket art studio

188 Create vector artwork on the iPad
Easy illustration with vectors

192 Manga illustration on the iPad
Paint beautiful manga

> The touch interface allows me to naturally experiment

178
188

IPAD/IPHONE

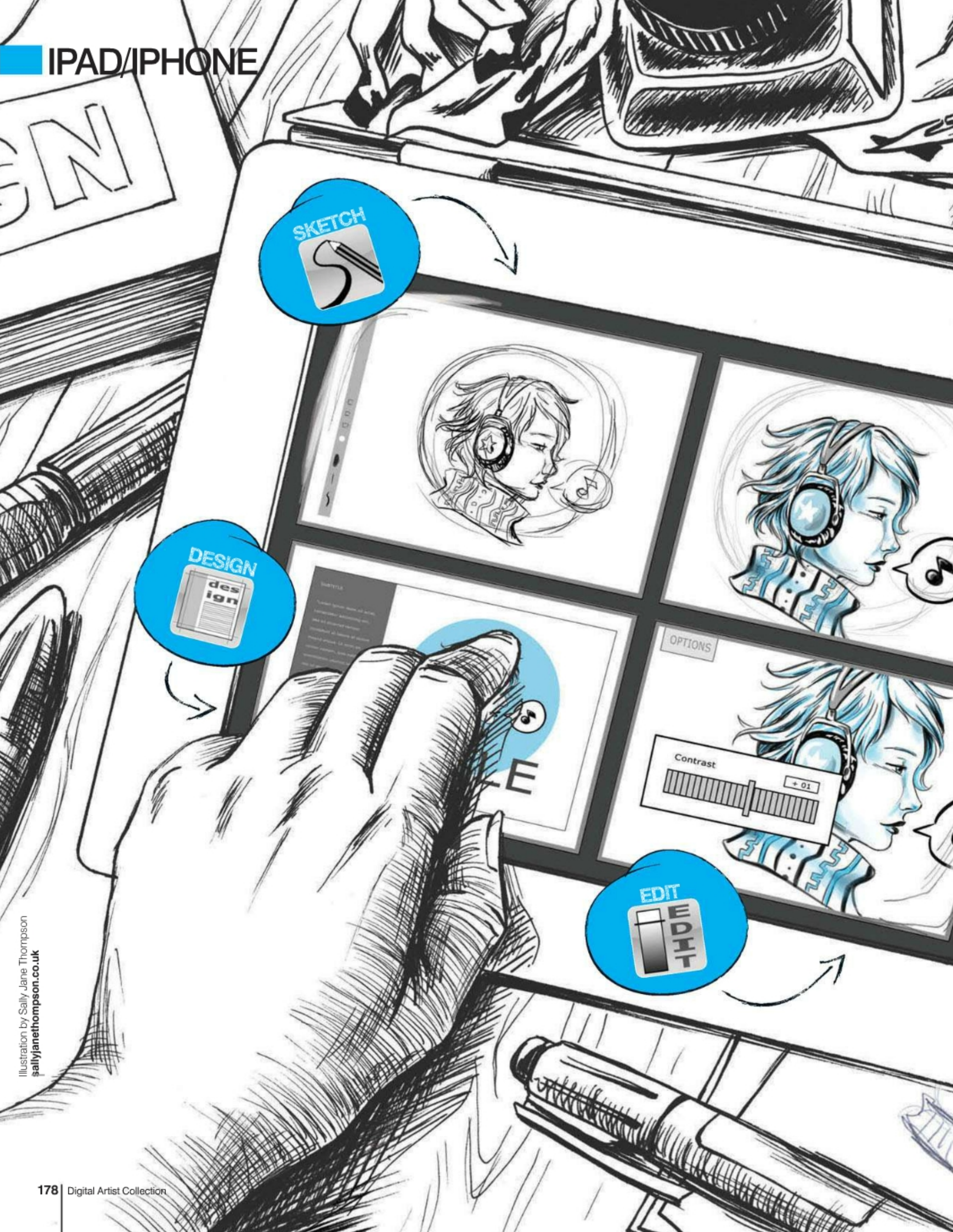


Illustration by Sally Jane Thompson
sallyjanethompson.co.uk

Create with your iPad

On the go or on the sofa, the new iPad is fast becoming a must-have for artists

Whatever style of art you're into, the iPad is perfect. It offers a world of easy experimentation since the apps cost peanuts and the web is awash with like-minded folk happy to share and explain the work they're doing. So whether you want to draw, paint, design or edit your photos, there are the apps and the accessories to suit. Although, admittedly, the latter might be more expensive.

Like many keen mobile artists, Mia Robinson got into digital art through her iPhone. She explains: "I had no idea until I bought my phone and now I realise how much mobility has become a part of my process and how natural it feels to use it. It gives me an opportunity to log my ideas in real-time."

"The ease with which you can carry it about means that the iPad lends itself to casual usage", says Kasper Jeppesen, and he adds that "the form factor and battery life give any app on it an immense advantage over desktop programs." But what's more important is that when Kasper sits down to focus on a specific piece of work, "there is something about the direct manipulation of the touch interface that allows me to more naturally experiment and feel a connection to the piece in the same way working with physical media can." So if you haven't yet used the iPad as part of your artistic process, it's time to sit down, browse the app store and get creative.

Sketching apps

The initial stage of laying out your ideas is crucial, and there's an option to suit every iPad user to get those roughs down

Sketch Club

$1.99US/£1.99
app.sketchclub.com

The big boy of the sketching world, Sketch Club has a lot of online support and a strong community. But actually it's a simple application with 100 levels of undo to play with.

Adobe Ideas

$5.99US/£3.99
tinyurl.com/DA-adobe-ideas

It's surprising that Adobe hasn't cornered a bigger share of the iPad apps market, but this offers simple vector functions with a great zoom and is ideal for work on the move.

iDraw

$8.99US/£5.99
www.indeeo.com/idraw

This vector-based app is great for drawing, but its matter-of-fact functionality makes it a fave for image planning. Great pen and shape tools, as well as vector brushes.

Interview: Mia Robinson

Website: www.mrobart.com **Apps used:** Sketch Club, SketchBook Pro, ArtRage

For Mia Robinson, one of the early adopters of mobile artwork, the iPad is now integral for both "quick and more developed sketch work." She often uses it for base sketches, but points out that the tools are so good you can "develop a whole piece that gives the effect of a developed ink or graphite drawing. [It's] always cool to have someone look at the piece and not know the difference."

She's a big fan of both Sketch Club and SketchBook Pro, and says she will typically use one of these two apps when it comes to "the quick sketches I do on the train, at home when trying to construct a portrait or even preparing base sketches to be imported into another app for development." And the best thing is that using the iPad enables her to "sketch out in public without making such a big production of it."

Legs
"Perching the robots on impossibly thin flamingo legs creates a sort of tension in the drawing", says Matthew. He added the harsh reflections and glowing light to finish the image.

Top ten accessories

A roundup of the finest styli, cases and peripherals to get the most out of your tablet

Sensu Brush $34.95US (£22.50 approx)

www.sensubrush.com

For the closest paint-on-canvas feeling, you should look no further than the Sensu Brush, a stunning stylus sporting an authentic brush tip. And it's not just for painting either – retract the brush and you can use the rubber tip for general navigation. The Sensu Brush looks incredible too, coming in both chrome and gunmetal finishes. It hits the shelves in the near future.

Crayola ColorStudio HD $29.99US (£19.32 approx)

www.griffintechnology.com

Unleash your inner child with the help of the innovative Crayola iMarker from Griffin. In conjunction with the ColorStudio HD software, the iMarker puts a marker pen, pencil, paintbrush and, of course, crayon at your fingertips. The supplied software has a host of fun colouring games for children, and the free draw section has enough functionality to let younger creatives explore their artistic side. The quality of the stylus means that adults will love it too, though.

Painting apps

The best in mobile splats and strokes

Brushes $7.99US/£5.49
www.brushesapp.com

The go-to painting app of the iPad set, Brushes deserves its sterling reputation. Perhaps it's a shame it doesn't have a blur tool, but its powerful layers and range of brushes are something to behold.

SketchBook Pro $1.99US/£2.99
tinyurl.com/DA-sketchbook-pro

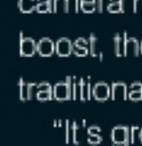
One of the most professional apps on the iPad scene, SketchBook Pro features six layers, blend modes and the ability to move, rotate and scale the canvas.

procreate $4.99US/£2.99
tinyurl.com/DA-procreate-app

Slick-looking with a range of custom brushes, procreate has a legion of fans. It also offers an HD-size canvas so that the grittiest of details can be added.

Interview: Matthew Watkins

Website: www.watkinsmedia.com
Apps: Brushes, ArtRage, Inkpad SketchBook Pro, procreate, Ideas



As Matthew Watkins puts it: "The real finger-painting revolution started in 2008 with the first iPhone." But, obviously, the iPad has developed what the digital painter can achieve with its larger canvas and more advanced apps. Matthew is a connoisseur of a whole range of them, including Inkpad, Ideas, Pixlr-o-matic and Snapseed on top of his painting favourites. The great thing, he says, is that "the iPad allows you to visualise an idea more quickly and to walk down more creative roads." He has found it also inspires him to explore the traditional techniques he is able to reproduce in the digital world: "It gives you the impetus to go out and try oils or encaustic, or cut a real wood block."

For Matthew, who likes to paint out and about and whenever the mood strikes, the fact that the iPad 2 has a camera has been another enormous boost, though he still loves "paper and traditional drawing and doodling.

"It's great that the new iPad has a camera and you can take a picture of your doodles then work them up digitally with colour." Wonderful as the new iPad is, Matthew is hoping for more in the future. "I would like to see screens become even more sensitive", he explains. "Pressure sensitivity would be nice. And better daylight contrast. It's hard to use an iPad in the sun. Oh, and can we have bulletproof glass?!"

Quirky Cradle

£/$TBA
www.quirky.com

For many, the choice of holding the iPad in one hand or placing it on a table for stability is quite a hurdle. Thanks to the Quirky Cradle, however, you can rest the iPad on your lap in a stable way, enabling you to create works while the device is clipped in place.

Griffin Colonel Littleton cases

$170-$495US (£109.53-£316.43 approx)
www.griffintechnology.com

We've seen a huge range of iPad cases, but nothing comes close to the Col Littleton range in terms of sheer class. Made from fine leather, this collection houses everything from pockets, cases and dockers to full courier bags. There's no denying that these are expensive, but we reckon that you won't find anything better out there.

iTee/iDress

$39.95/$89.95AU (£25.52/£57.46 approx)
www.iclothing.com.au

For the ultimate mobile experience with your iPad, iClothing gives you the option to wear your tablet. Have no doubts, though – the appropriately named iTee and iDress are not just about functionality; they are fashionable garments in their own right. The sleek pocket in each means you need to carry your iPad around while maintaining a hipster chic that will be the envy of your friends.

Design apps

Top choices for graphical work

Inkpad $7.99US/£5.49
www.taptrix.com

With an unlimited number of layers and a particularly comprehensive way of handling those crucial paths, masks and text, Inkpad has endeared itself to even the most loyal of Illustrator followers.

TouchDraw $6.99US/£5.99
elevenworks.com/touchdraw

With a sizable library of shapes for you to use in your work, TouchDraw is a pretty practical application and will suit you best if you have serious work to get done, and get done fast.

iDesign $4.99US/£2.99
www.touchaware.com

iDesign is a slick, professional little app, ideally suited to anyone doing drawing on the technical side of the scale. It's great with text too, and there are so many options that you have precise control.

More texture
To add texture and break the lines of the initial pattern, Kasper adds a series of shape layers, varying in opacity.

Finishing touches
To finish the image off, Kasper adds a small hexagon in the centre of each figure. This helps give yet more depth to the image.

Focal points
Darker hexagonal shapes are added to the centre of each existing hexagon, creating focal points and making it easier for you to see the individual figures.

Interview: Kasper Jeppesen

Website: kasperjeppesen.com
Apps: Inkpad, Inkscape, SketchBook Pro

Brooklyn-based Kasper appreciates the focus that iPad apps offer compared to their desktop counterparts and has thoroughly embraced them in his everyday workflow.

"Although some iPad apps are starting to suffer from serious feature bloat", he says, "they are, in general, much more focused on the very core of what they are trying to do… allowing me to focus on what I'm creating, not the tool I'm using to create it."

Inkpad is his most frequently used app for carving an arresting vector style. His work "will often start from a sketch in the form of an imported image or one done on the iPad in SketchBook Pro", he says.

"Once in Inkpad I continue there until I'm ready to export it as an SVG file. I use Inkscape to convert to a high-res bitmap and then Photoshop for final adjustments." The biggest challenge has been creating images big enough for print, but this workflow is enabling him to do that.

...Top ten accessories

ZAGGfolio keyboard case $99.99US (£63.91 approx)
www.zagg.com

Let's face it, iPad owners are more than spoilt for choice when it comes to cases, so it takes a lot for a case to stand out from the crowd. The ZAGGfolio keyboard case, as the name might suggest, is a multi-function case that sports a built-in stand and keyboard, transforming your iPad from covered tablet to fully working laptop in a matter of seconds. It looks great, as well.

Happy Owl Studio cases From $39.99US (£25.56 approx)
www.happyowlstudio.com

Combining a satchel-style bag with a sturdy iPad case, the Happy Owl Clutch offers protection as well as plenty of room to house accessories and general essentials. Made from 100% leather, the Clutch is the pick of Happy Owl's range of cases and is one of the only cases you'll find designed specifically with the busy female designer in mind, with options to pick up the bag in both black and red.

1. The basic pattern Kasper creates an initial pattern in Inkpad, using Path>Unite and introducing colour gradients.

2. Colour variations New shapes are added on separate layers. Kasper uses variations of colour to give the image a natural feel.

3. Introduce hexagons Now that the basic texture is complete, Kasper adds a series of semi-transparent layers containing triangles in hexagon clusters.

4. Add shading Kasper adds shading throughout to give dimension to the image – using Arrange>Group to combine the dark and light areas before duplicating for each figure.

Editing apps

Improve your images on the go

Photoshop Express FREE

photoshop.com/products/mobile

It might only be a baby version of the beast, but this is still Photoshop, and that's got to make it a must-have for anyone wanting to edit photos on the iPad.

Masque $3.99US/£2.49

www.masqueapp.com

With four layers, plenty of effects and what it calls a Multi-Touch Gradient tool, Masque is capable of satisfying even the most hardcore of photo-fixers.

Photogene $2.99US/£1.99

mobile-pond.com/MobilePond

Getting more professional with each version, Photogene is a simple-to-use editor that enables you to make the best of your snaps and then show them off.

Rita Flores. Image taken on iPhone

Edited with Photo Studio, BlurFX and ArtRage

Interview: Rita Flores

Website: ritaflores.wordpress.com **Apps used:** Photoshop Express, Photo Studio, Photo Finish, CinemaFX, ToonPAINT, BlurFX, ArtRage

Rita Flores got into photo-manipulation when she started playing with her iPod touch and then iPhone. Buying an iPad hot off the press was the next step, and she planned to transform some photos so that they looked like a series of oil and acrylic paintings she made in the Nineties.

Once she started experimenting with apps like Photoshop Express, she was blown away by what she could achieve and her interest in digital art grew. Now she's interested in app mashups, combining "various apps in one picture to get a totally unique image. Some of my favourite apps for that are Pic Grunger, WordFoto, addLib, BlurFX and ArtRage. I think of these as like the spices that you add to food."

Now a fully paid-up member of IAMDA, Rita likes to browse other mobile artists on Flickr to see "what apps they are using and I like to figure out what they have done."

Apple Wireless Keyboard

$69.00US/£57.00

www.apple.com

A design classic, the Apple Wireless Keyboard comes as standard with iMacs, but will give your iPad an extra dimension. The keyboard is slimline, chic and free of cables. There are many keyboards available but none come close to this one in terms of popularity and simplicity.

Architect Stylus

$22.95US (£14.67 approx)

www.thearcticstore.com

Picking your way through the mountains of affordable styli available for the iPad can be daunting, but that job is made easier when products like the Architect Stylus exist. Styled in anodised aluminium, the Architect is designed for all manner of tasks, and its 7mm rubber tip promises to make iPad users' lives a lot easier. Pick up the snug carry case for added protection.

JAVOedge cases

$42.95US (£27.45 approx)

www.javoedge.com

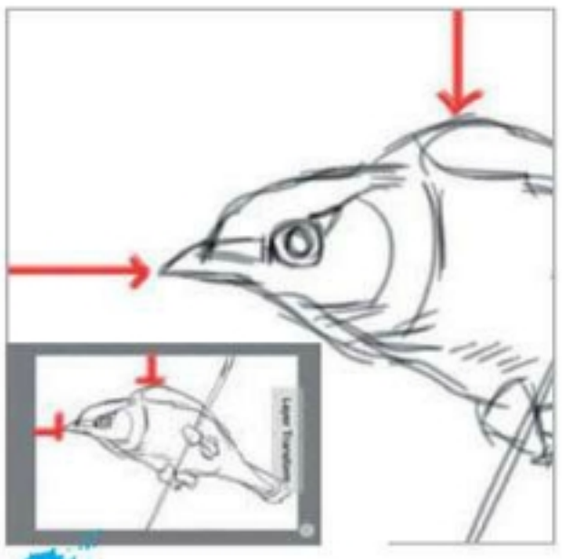
There are a million and one case options out there for safety-conscious iPad owners, but few companies offer ones as beautiful as JAVOedge. With everything from carry cases and sleeves to stands, JAVOedge provides a host of options to protect your tablet. Unlike the bulk of bland cases, the range is cutting-edge, colourful and guaranteed to raise jealous looks on the commute.

Paint on your iPhone

Waiting For Berries 2009 SketchBook Mobile on iPod touch

“I love carrying my studio with me everywhere. It’s easy to turn on and settle into a painting session any time the artistic muse hits”

Susan Murtaugh Artist



Rough sketch The rough sketch of the bird is done in pencil. The initial composition is too small, so I use the new Layer Transform tool to scale it up and reposition it on the screen.

The past year has been wonderful for artists. Even those who had never considered digital painting as recently as last January are now turning out wonderful art pieces suitable for a gallery.

The introduction of the iPhone and its phoneless sibling, the iPod touch, has opened up a world of mini program applications (called apps) to make the small devices productive and fun well beyond their intended use. Apple’s online App Store offers many inexpensive art tools to bring out your inner creative: Brushes, Layers, Jackson Pollock, Inspire, Vellum and ZeusDraw – just to name a few. Each has their own special features, techniques and devoted followers, and usually a connected online gallery so that the artist can show the world his or her latest creation.

Online giants Flickr and Facebook have sites not only for the individual apps but many for the device itself, each featuring the latest creations. iPhone art blogs and groups are evolving from the phenomenon, such as thefingerpainters.com. CAD (The Chicago Art Department) explores the new medium with a five-week course and Gallery Exhibition. To round out the professional aspects of this new medium, artist David Hockney has been producing thumb-painted works and using email as his print delivery method, and Jorge Columbo has painted several *New Yorker Magazine* covers en plein aire, to the delight of artists everywhere.

I’m discussing one of my favourites here today, SketchBook Mobile. It’s the little brother to long-time desktop drawing essential, SketchBook Pro, utilising the same drawing engine and many of the similar

PAINT ON YOUR IPHONE

Digital painting

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

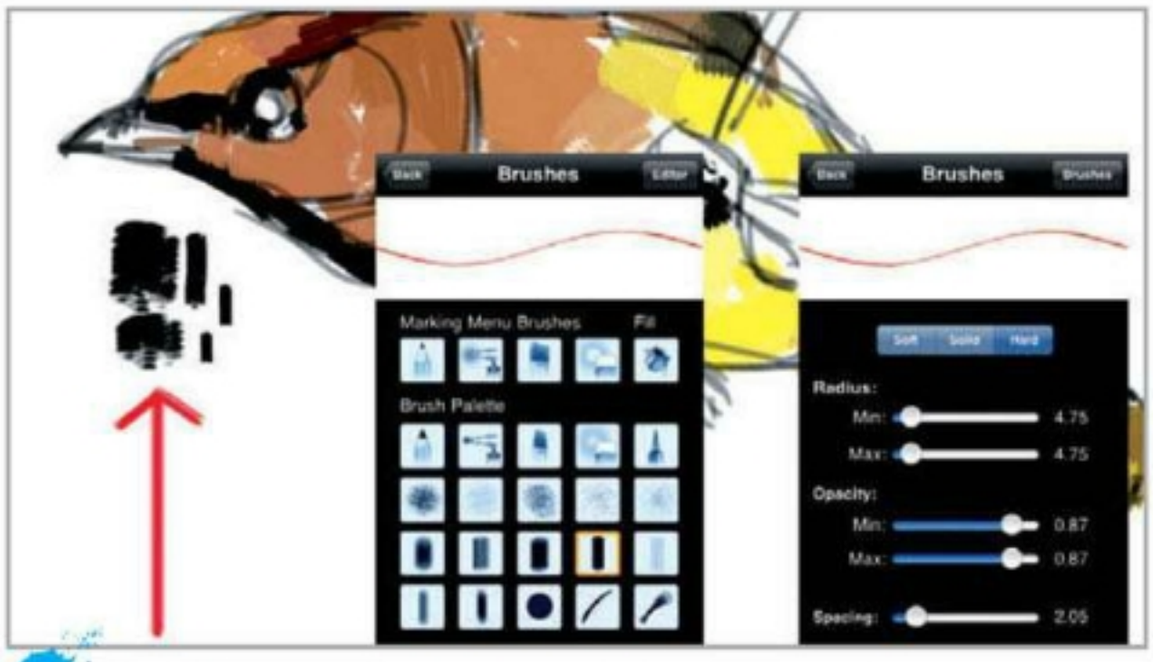
Susan Murtaugh

Personal portfolio site **www.flickr.com/photos/suzi54241**

Country **USA**

Software used **SketchBook Mobile, Brushes**

I'm a classically trained graduate of the Chicago Academy of Fine Art. I've worked over 35 years in graphic design and advertising. Recently I flipped to digital and have given away my old art supplies. I love my iPod touch!



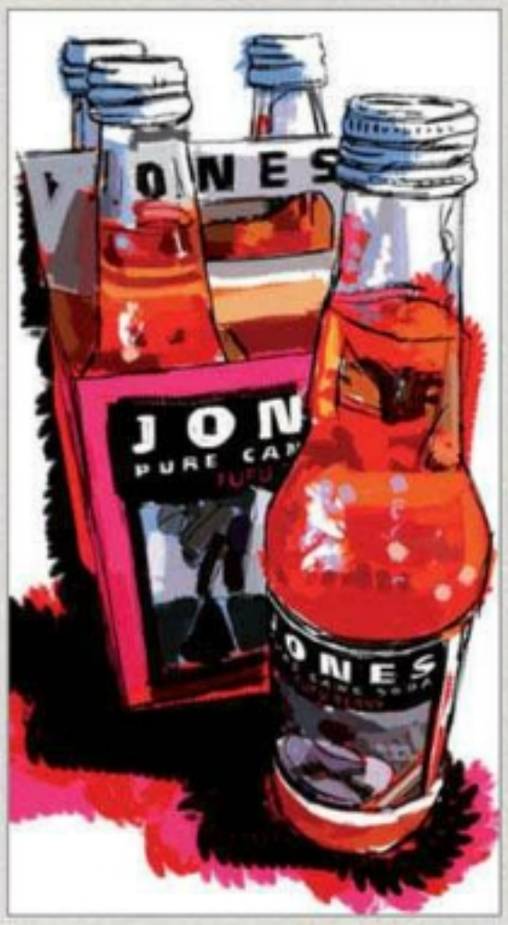
Edit Editing a brush to block in the colour is an easy two-step process. You can see the jittery texture this stoke makes. I start blocking on a layer under the sketch.

Going green Edit the Bristle brush for painterly texture. Add a new layer between bird and branch. At this point I delete the original sketch and fill a background layer with green.

Artist showCase

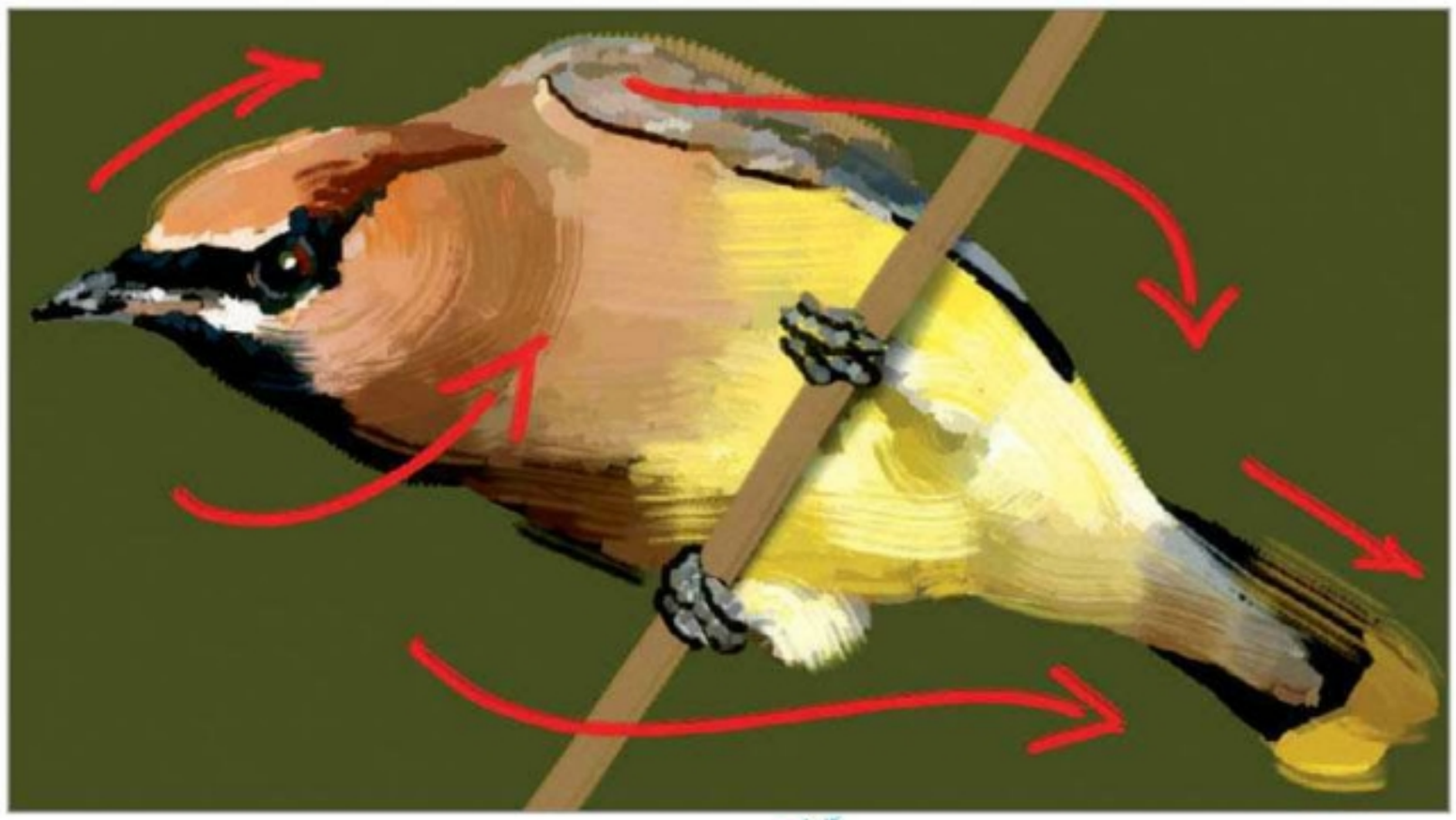
A tour of the featured artist's past work...

AVM 2 Hands
2009, **SketchBook Mobile**
● My son Alex is my favourite model. He's handsome, patient and has great hands, which I include for the challenge!



Jones
2009, **SketchBook Mobile**
● I enjoy painting ordinary things. Here the object was to unify type, glass and colour with the raggedy brush I made to give this piece its distinctive look.

South Bend Bait
2009, **SketchBook Mobile**
● I find antique fishing lures as subject matter irresistible. I seek them out. I feel I'm honouring the original craftsperson when I paint them.



Move it Merge bird and branch; make a new layer above. With the same brush, I swirl around, overlap strokes, and give the background movement and texture.

features we've grown to love and need. The interface SketchBook Mobile comes in two flavours: the free MobileX which gives a great overview of the paid app but with reduced canvas size and layer capability, and the full-featured SketchBook Mobile – only $2.99.

Apple iTunes voted it one of the best apps of 2009, and rightly so as far as I'm concerned. I have been able to make everything from little black and white rough sketches to full-blown commissioned portraits on my iPod touch. It has almost everything the desktop version offers in one small package. It boasts a full screen 1024 x 682 workspace. Pressing the small ring at the bottom centre of the screen accesses tools and menu options. The Marking menu appears, and you may select one of the default tools: Pencil, Airbrush, Paintbrush or Eraser. There is also a quick switch toggle to swap the last two brushes used, access to the colour panels, the layers panel and the all-important brush panels. In the centre is the puck, a very convenient way to size your current brush and control colour opacity. Moving your finger or stylus side to side reduces or increases brush size, and moving up or down controls opacity.

Blend I smooth rough strokes, using existing colour and brush overlap to give the look of paint on canvas.

A very light dialog box appears at the top with decimal equivalents to give you feedback. A visual circle in the middle of the puck also appears, showing current colour, opacity and size. Also available from the Marking menu is the upper left corner, Symmetry Toggle, to make your strokes mirrored. The lower left and right are for Undo and Redo. The upper right houses the new Layer Transform feature.

I find it best to zoom the art out a little when using Transform, so you can see the proportions and to help position the art. This is a very handy and much used feature for me, but it does take a bit of practice. Use two pinching fingers for zooming and moving around your art. This becomes so much an integral part of working, that you hardly realise you're doing it. SketchBook Mobile has one of the largest zooms available – 2500%.

While you're working, there are 'hot corners' to help keep you moving without interruption. Double-click

Stylus versus finger

Which way is best?

In an unofficial poll held on two Flickr sites, the results are in. Fingerpainting wins by a landslide. There are staunch Pogo stylus backers, roughly ten per cent, but David Hockney uses his thumbs. Also, in extensive testing this author could not tell the difference between finger versus stylus. That's because brush size and opacity are selected and the screen is not pressure sensitive.

Symmetry Turn on the Symmetry option, use the last brush and make funky swirls like tapestry. Reduce the opacity of the layer a bit to blend better, and this version is finished.

Pricing

Apps are much cheaper than full-blown computer software and a typical price is just a few dollars. SketchBook Mobile is available as a free version entitled MobileX if you want to give a more pared-down version a go, but the full edition of the software is such a bargain at $2.99 that you might as well dive straight in. Other art apps for the iPhone and iPod touch have similar pricing structures: popular app Brushes retails for $5 while another, called Sketches, has a not-so-whopping price of just $6. There are also many other free ones!

Pressure Varying your finger or stylus pressure results in rougher or smoother brushstrokes. Mix these up to create detail, with more textural strokes in the foreground fading into smoother ones.

Change key elements Another advantage of using layers is the ability to change key elements within a piece.

the top right, and you zoom the canvas out to actual size. Double-clicking the bottom right undoes strokes; right re-does them. Finally, double-clicking the top left corner will clear the entire layer, which thankfully can be undone in case of an accident!

The colour wheel and swatches toggle are pretty straightforward – the slick thing is you can replace the default colours with those you use most often. The Layers palette is also very advanced: newer devices can have up to six, older ones three. Layer order can be switched, and collapsed to make more. Opacity can be adjusted or turned off completely. Photos can also be imported to layers.

The last and probably most important feature is the Brushes palette, toggled with the Editor. There are 25 premade brushes, including Flood Fill and Texture brushes. SketchBook Mobile's engine simulates brush pressure sensitivity, allowing brushes to fade off and create smoother brushstrokes. The Editor allows you to tailor the brush: soft, solid or hard, as well as adjusting the minimum and maximum radius, opacity and the spacing of the brush texture. I love the Editor!

All saved art is stored in the very large gallery – most recent work first in the queue. There are terrific exporting options as well. You can send art to your saved photos to download later or email yourself a saved PNG or Photoshop layered file.

Meet the artists

Creating art on the iPhone

01 Cesar Augusto Mascarenhas
Against The Odds! SketchBook Mobile
www.flickr.com/photos/cesarmascarenhas

The act of drawing is, to me, similar to debate, to express yourself. You can go deep inside your mind and share with others. It's amazing what we can do on the go these days.

02 Benjamin Rabe
Sheepkiting Brushes
www.flickr.com/photos/nonuts

One reason I love fingerpainting is the shortened feedback cycles between creation and reception. And that creates such a steep learning curve for me that I'd never have in my studio creating traditional art.

03 Francesco Salvati
For You My R.
SketchBook Mobile
www.flickr.com/photos/35362282@N06

For me this is a new experience. For years I worked with traditional mediums; now I've added my iPhone. It's amazing what I can do with it.

04 Sandra Schmidt
Wilson Dairy Cow Brushes
www.flickr.com/photos/digidex

I've always had an aptitude for painting, drawing, creating, but no time for it until discovery of this amazing medium. My life has been greatly enriched and forever changed.

IPAD/IPHONE

Digital art

Create vector artwork on the iPad

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Matthew Watkins

Personal portfolio site
www.watkinsmedia.com

Country **England-born, Italy-based**

Software used **Brushes, Inkpad, ArtRage, SketchBook Pro, ArtStudio, Adobe Ideas**

I like to paint almost exclusively from my imagination and I think that mobile digital devices are a great way to free your mind and enable you to make the most of your creative time.

The Colonel's Surprise 2011 **Inkpad for iPad**

"Vector art on your iPad sound too good to be true? Here is a hardboiled account of using the Inkpad app"

Matthew Watkins Artist and illustrator

Inkpad is a powerful vector app and the latest program from developer Steve Sprang, creator of the best-selling Brushes.

Steve announced Inkpad for the first time in October 2010 at the iAMDA Mobile Art Con, so people were a little surprised that it took until March to hit the iTunes store. But it was worth the wait.

Inkpad is a richly featured vector drawing app with many of the key functions that you will find on professional desktop software like Illustrator or CorelDRAW. You can create and edit bézier paths, group, mask and create compound paths and use its fully featured layers, options and export capabilities including SVG, PDF and PNG formats. You can even save it to your Dropbox from within its interface.

This app is not a toy; it is as professional a design tool as you will find on the iPad. And at £2.99/$4.99 US, it's also a real bargain. You will need to have iOS 4.2 or later installed on your iPad to run the app.

It's solid, snappy and intuitive. The navigation is simple and concise, allowing you to get the job done without any unnecessary clutter, and the small floating tool bar is a nice aesthetic touch. Getting the hand of vector drawing with your fingers on this program requires a little more right-brain activity than most drawing or painting apps, but the results can be spectacular and you have the advantage of being able to output to unlimited size proportions.

If you have used vector apps on the desktop, expect few surprises from this iPad equivalent. It's really just a matter of practice before the commands become second nature. And the developer has made every button count with great use of gestures. Double-tap to reset anchor points, for example, or put an extra finger down to constrain a shape.

Draw the face I make the face out of four ovals and unite them via the Path menu. With the face still selected, in the Arrange menu I choose Send to Back.

Apart from unlimited output, there are great advantages to vector art, including its surgical precision, smooth gradients and the fact that you can reuse forms and tweak to your heart's content. You can even start tracing right over a scanned drawing or photo, or just jump in and build complex drawings from simple forms. Vectors will allow you to precisely tweak your artwork until you are totally satisfied.

For this picture I am going to run Inkpad over one of my comic characters, the Colonel. Let's see what trouble the Colonel can get himself into this time.

I will build my image on only three or four levels. This is my personal preference to keep life simple, but Inkpad supports unlimited numbers with no apparent problems. You will want to lock off the layers as you work to avoid unwanted changes, and if you turn on the Isolate Active Layer function under the Settings tab it will put all of the layers into transparency except for the one you are currently working on.

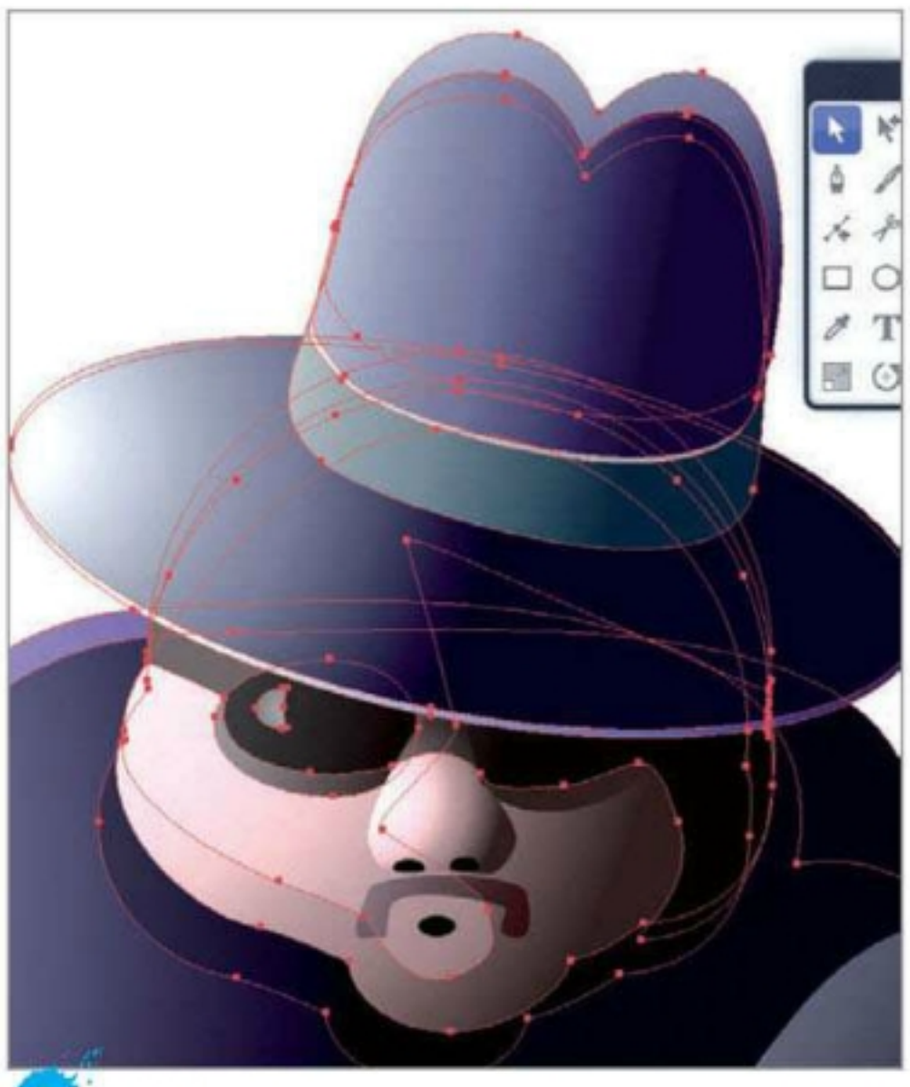
There are a few other really useful options in the Settings menu. Snap to Points, Edges or Grid, depending on the kind of work you are doing, can

Vector hat I will start the drawing with a hat. I draw three ellipses to construct the general form. Using the Multi-Selection tool I select two, and under the Path menu, I choose the Unite option.

Give your characters depth

Duplicate and resize to a better hair style

I like the black hairdo, but it's a little too flat. I tried dropping highlights to the left and right, but it still didn't have the depth I was after. To give a little volume I added a grey gradient to the hair, used Duplicate in Place and, with the Resize tool, made it a little smaller. I repeated this one more time, until her hair was positively de Lempicka, darling. To heighten the 3D effect of the hair I made a new shadow at the top of the forehead with the Line tool.



Lighting By using Duplicate in Place, moving and recolouring I am able to add shadows, highlights and varying line weight. Using the Intersect function on a copy of the head plus the rim of the hat, I create the shadow on his face.

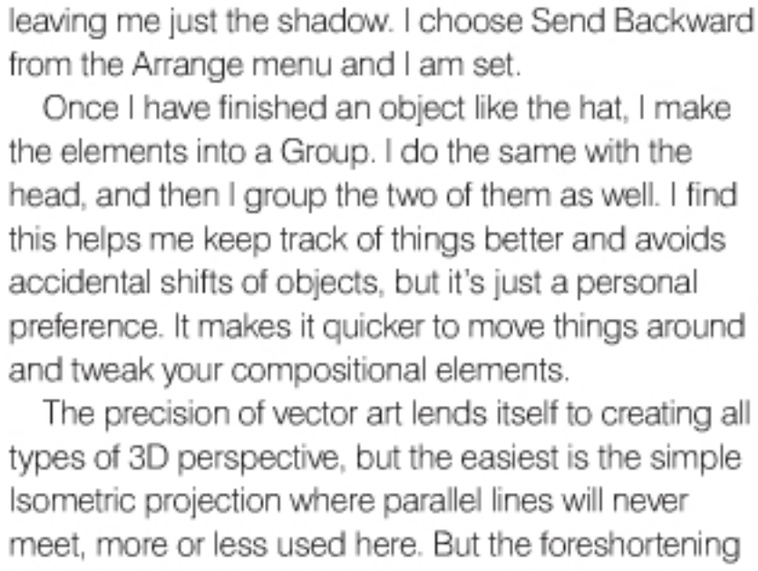
really help your precision. Outline mode is good for tracking any pesky vectors that have slipped outside.

You could start your drawing by using the Freehand or the Pen tool, but I find that the these tend to add too many erroneous anchor points and curves. To begin this drawing I just start making geometric shapes with the Circle and Rectangle shape tools, and unite them into single, fluid forms using the Path functions.

Anchor points are the key to vector drawing. I honestly would not have thought that using them on an iPad with your finger could be so easy and intuitive. Use the Selection tool to select a path, tap on a point and it will be selected. If there are no curves just tap twice and it will add them. Otherwise, tapping twice will remove them. The more you pull the curves, the larger and more extreme the angle, and if you are looking for sharp, fluid vectors, generally speaking the fewer anchor points you use the better. More anchor points will often lead to lumpy shapes out of keeping with the vector look.

And here is another grand gesture; to move the curved shape independently, hold an extra finger down while adjusting the line. This is a great feature.

One of my favourite functions is Duplicate in Place, and I make liberal use of it. This enables me to clone a path exactly on top of the original. Because of this, it is easy to create atmospheric shadows, highlights and apply operators based on Boolean logic like Intersect, Subtract Front and Exclude.



Window and blinds I create a shape for the window and position it with the Rotate tool. I make another shape into a white slat, Duplicate in Place, move it down, then Duplicate and Transform Again for blinds.

For example, I have drawn the brim of the hat, and the face. A quick way to make the shadow cast by the hat is the following. I clone both the brim of the hat and the head shape. I move the copy of the brim down the face where the shadow should fall. I select the repositioned copy of the brim and the copy of the face and choose Intersect from under the Path menu. This operator cuts off all of the excess brim and face, leaving me just the shadow. I choose Send Backward from the Arrange menu and I am set.

Once I have finished an object like the hat, I make the elements into a Group. I do the same with the head, and then I group the two of them as well. I find this helps me keep track of things better and avoids accidental shifts of objects, but it's just a personal preference. It makes it quicker to move things around and tweak your compositional elements.

The precision of vector art lends itself to creating all types of 3D perspective, but the easiest is the simple Isometric projection where parallel lines will never meet, more or less used here. But the foreshortening on the fan, the arm and the pistol belie a healthy, illustrative disrespect for the laws of physics. I've taken the same approach with lighting; the sources aren't strictly consistent. In some classic Noir films shadows were painted onto the sets to make sure they were in the right position, so I've taken a leaf from their book and a little artistic license.

After I have drawn my gunman and the room, I use a transparent rectangle with a purplish gradient placed behind him to add a little tonal atmosphere to the space. It's a little like adding a light wash in a watercolour to dictate the mood. Set one of the sliders to 0% Opacity and use the gradient handles to make sure that one of the edges is totally transparent.

Create the gun A few geometric shapes and some gradients can make you a convincing .38; this app is dangerous. I grouped the shapes so I could move the gun around to the right position and then added a simple arm and hand.

Environment Using shapes with grey gradients, I create the overhead fan on a new level. I use the circular gradient for the light bulb and the glow. Note the position of the gradient handles.

Precision shapes

To draw a perfect circle using the Ellipse tool or a perfect square with the Rectangle tool, just hold down an extra finger; this will constrain the shape. It is the equivalent of holding down the Shift key on the desktop in some applications. Very clever.

Expressionism Taking my time with the shapes and gradients, I tweak my picture into something a little more human and expressive. What did he do to make her so angry? You will notice that I am working with fill, but no line.

To draw the ceiling fan I created some ovals using grey gradients. I used the Duplicate in Place feature, moved the shape and repeated. With the Pen tool I drew a fan blade then cloned it. I selected the Rotation tool (the first tap will set your fulcrum), chose the middle of the fan and rotated 90 degrees.

From the Edit menu I used Duplicate and Transform Again twice to create the rest of the fan, then I resized them with the Scale tool to change the size of the blades for some perspective.

Using the same technique from the fan blades, I tried to make some rays of light coming from the light bulb, but it made the drawing too complicated and I reverted to a dull glow instead. Just because you can do things, doesn't always mean that you should.

Now that the Colonel is set, I start drawing the woman behind him. She is built from simple geometric forms and gradients as well. I clone the face to make the shadows and adjust the curves on the right to show a sliver of the brighter face underneath. This gives the effect of reflected light and helps to better define the form of her angry face.

The gun she is holding was started from simple rectangles and gradients based on my memories of what a Glock looks like, and I think it's convincing enough to stop the Colonel in his tracks.

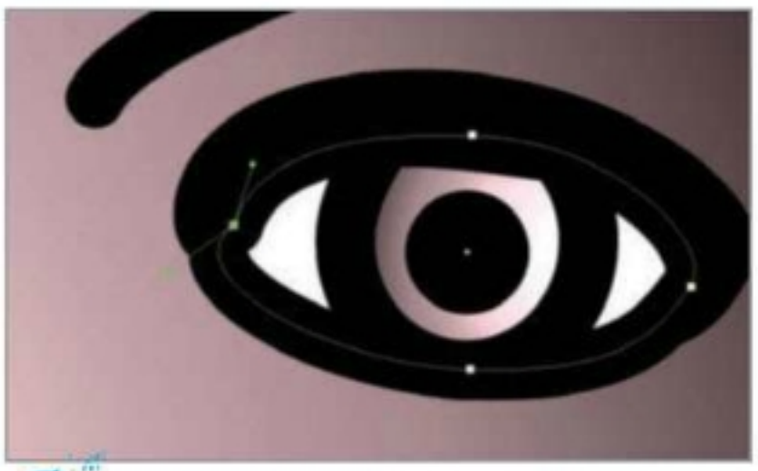
I wanted some smoke in the scene as well, so I made a series of perfect circles, used the Unite feature to bring them together and duplicated this three times to create layers of smoke. I gave all three the same coloured gradient and altered the tones by shifting the gradient handles for a bit of variety.

The nice thing about vectors is how you can move them around and scale them. I can make the woman bigger or smaller, setting the fulcrum of the rotation tool at the bottom, and I can shift her slightly to the left and right to see which position I prefer. I made the Colonel a little larger and moved the fan over to the left. This is made easier by having created levels.

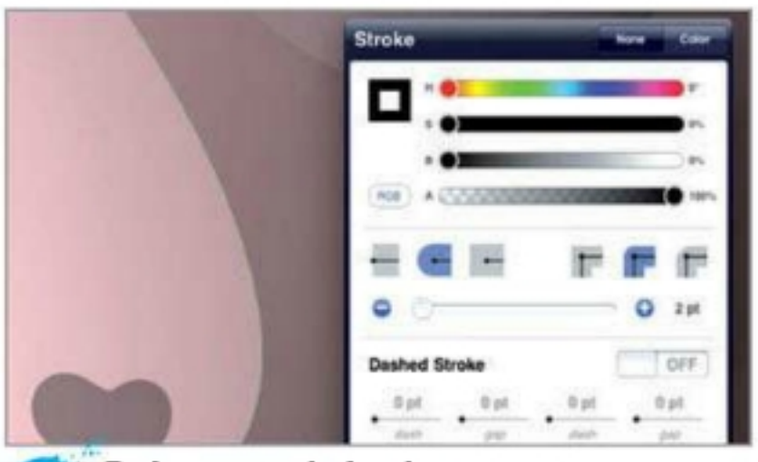
I think my work is done here. Another fine mess that the Colonel has gotten himself into, and I am not sure that even Inkpad can help him now.

Draw eyes with vectors

Render the windows to the soul with simple shapes



01 General form The iris and the pupil are made with the Circle tool. Touch the screen with a second finger while you draw to constrain it to a perfect shape.



02 Colours and shadows I reduce the line and add a blue, circular gradient to make the eye appear round. A white triangle makes a good reflection.

03 Gradient handles I redo the eyebrow as a shape, add a transparent gradient and use the gradient handles to increase contrast and translucency.

04 If looks could kill The left eye is a mirror image of the right with the gradients of the irises the same. The white part in shadow is set to 80% Opacity.

Manga illustration on the iPad

Source files available
Sketch

Backstreet's Den 2012 SketchBook Pro, procreate, Photogene

"This tutorial demonstrates a method for creating a beautiful manga illustration entirely on the iPad"

Patipat Asavasena Freelance illustrator

The advantage of the iPad is mobility. I like to work outside my studio and often carry a sketchbook with me, so now I also include the iPad in my bag. I can create designs with colour, tonal pieces or even rough paintings with it. When I get back to my studio I can then transfer those designs to my workstation and continue with them. That's how the iPad has changed my workflow. Furthermore, I can work directly on the screen and that's very intuitive.

There is a downside, however, and for me it's the accuracy of input. This is a particular problem when I try inking. I use a stylus, but even that's not much help. The iPad's screen also lacks the pressure sensitivity that you would get with a graphics tablet, and that is crucial for some artists. Hopefully these downsides will be improved in the next generations, the iPad 3 or maybe later, but for me it's still an invaluable tool.

So, is it possible to create an artwork entirely on the iPad? It doesn't have the flexibility of a desktop application, and it might consume more time during some tasks, but yes, we can do it. I will show you in this tutorial how I created a manga piece entirely on my tablet.

I used the SketchBook Pro, procreate and Photogene apps with an AluPen stylus on the iPad 2. SketchBook Pro is one of the best art apps out there, with high-quality tools and brushes built in. I mainly use this app for sketching and inking. As for procreate, it provides customisable, high-precision brushes and an advanced layer system. The user interface is also streamlined and amazingly fast so I usually use this app for painting. Finally, Photogene is for tweaking colour, brightness and contrast.

Note that you can't work on a high-res canvas if you are working on a first generation iPad, but the process is still the same so you can follow the steps as normal.

Thumbnail designs

Sketch a range of ideas to refine your concept

01 Brainstorm ideas I usually start with a lot of thumbnail sketches to explore the given concept. I create a blank canvas in SketchBook Pro and use the Pencil tool. I choose one thumbnail as a guideline and draw a more detailed version.

02 Concept sketch I create a new blank canvas and use Pencil brush no.4 to quickly sketch the image. Don't pay too much attention to the details here, just focus on the overall composition and draw loosely. I then export the image to procreate.

Working Progress

Go from concept to artwork in mobile apps

Step 02, Concept sketch

Step 05, Create a colour script

Step 09, Paint the hair

Step 18, Minor details

Behind the scenes

Digital artists explain the techniques behind their amazing artwork

Artist info

Patipat Asavasena

Personal portfolio site **www.asuka111.net**

Country **Thailand**

Software used **Photoshop, SketchBook Pro**

I moved away from a career in engineering because I love art and have been working as a professional artist for five years. My works have been strongly influenced by Japanese manga. Now I'm a freelance illustrator living in Thailand.

Digital painting

Colour and compose

Block in your tones and work on the details

03 Clean up the character I run procreate then create a new layer on top of the sketch. With a Normal brush at 1% Size and 60% Opacity I clean up the character. I flip the image horizontally to check for flaws, for example in the alignment of the facial features, and fix any I come across.

04 Draw the background I create another new layer for the background and loosely draw in the setting and the cats. How loose is loose? Just enough for me to know where they are and what they do. I will clean them up at a later stage.

05 Create a colour script iPad painting apps don't have the flexibility of Photoshop, so a colour script reduces guesswork. I use a large brush and try various combinations, then pick the version I like most.

06 Into SketchBook Pro Export the image to Camera Roll then run the SketchBook Pro app and create a new high-res canvas (turning on high-res canvas in the Preference menu). Import the image via Layer>Import Photo. Finally, tap the Free Transform tool to resize the image to fit the entire canvas.

07 Block simple colour I use the Paintbrush tool at 20% Opacity to block in some simple colour for the character, background details and cats. I slowly refine the overall elements but I don't focus on any minor details yet. Remember to work from large to small-scale detail.

08 Fix character proportion My character's proportion was slightly off, with her body too short. I revised this by duplicating the layer and using the Erase tool to remove all areas except the character. I then used the Transform tool to make the adjustment.

09 Paint the hair I begin to refine the small details of the character's hair. First, I use the Airbrush to blend the colours as it gives a soft feel. I then use the Paintbrush to paint the hairline. Finally I use the Pencil tool at 1.0 for the small details.

10 Details I use the Paintbrush tool at 10% Opacity for blending skin tone around the facial area and the costume. For the small details like hands, the bag and her eyes, I use the Pencil tool to sketch additional details and the Ballpoint Pen tool at Size 1.0 to refine the hard edge.

11 Revise the background When I looked at the overall image again I felt there was a problem in the composition. The details around the corners of the image look almost the same size; it's dull and static. To fix this I increase the size of the dark yellow sign and decrease the visibility of the top-left one. I'm now satisfied with the overall composition.

12 Paint the cats I use a small brush to clean up the shape of these cats and the Pencil tool to paint the fur. I add different patterns to make them look more interesting.

13 Minor details This is the best step; I love to add a lot of small details into an image to make it look interesting. It can be hard with the iPad because of the restriction of resolution and the accuracy of input, but the end result is worth it.

Lock screen rotation

Sometimes the iPad accidentally rotates its screen while you're painting. This can cause a lot of frustration and mistakes, which could harm your work. To lock the screen, double-tap the Home button and swipe your finger to the right on the Multitask bar. Tap the screen lock icon.

14 Look for any improvement I check the overall image once again to see if there is anything that can be improved. This image looks flat, so I repeat the method from step 8. I enlarge the bottom-right area a little bit to increase the depth of the image.

15 Adjust the colour and contrast I export the picture to Camera Roll and then open it with Photogene. I increase Contrast to 0.05 and the Sharpen amount to 0.15 before exporting again into Camera Roll and it's done.

Helpdesk

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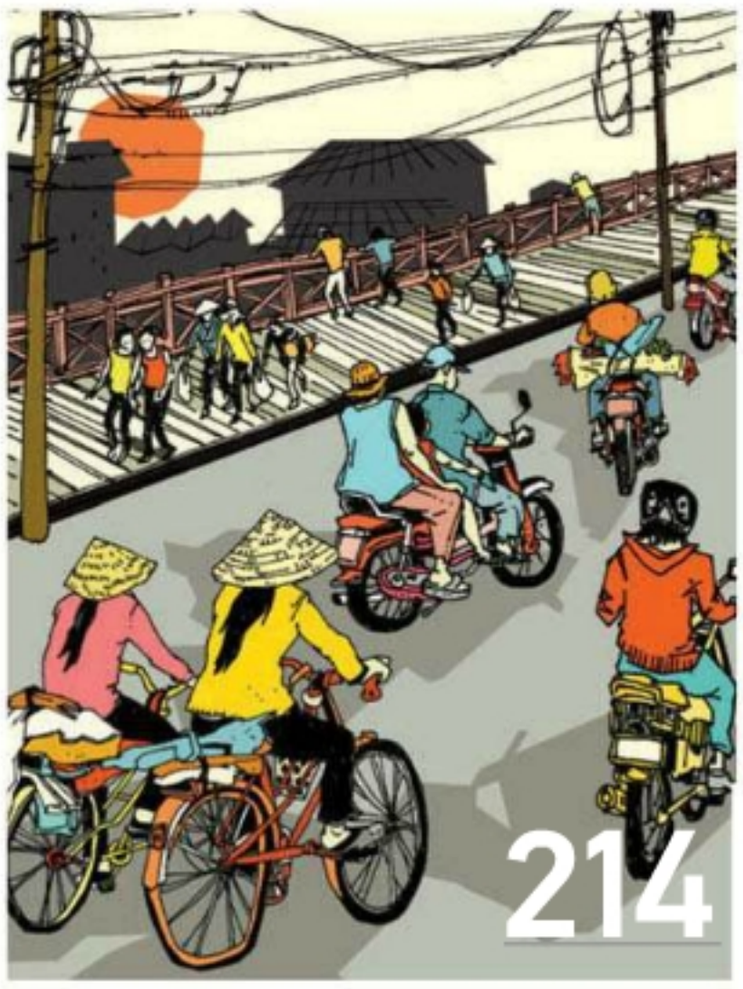
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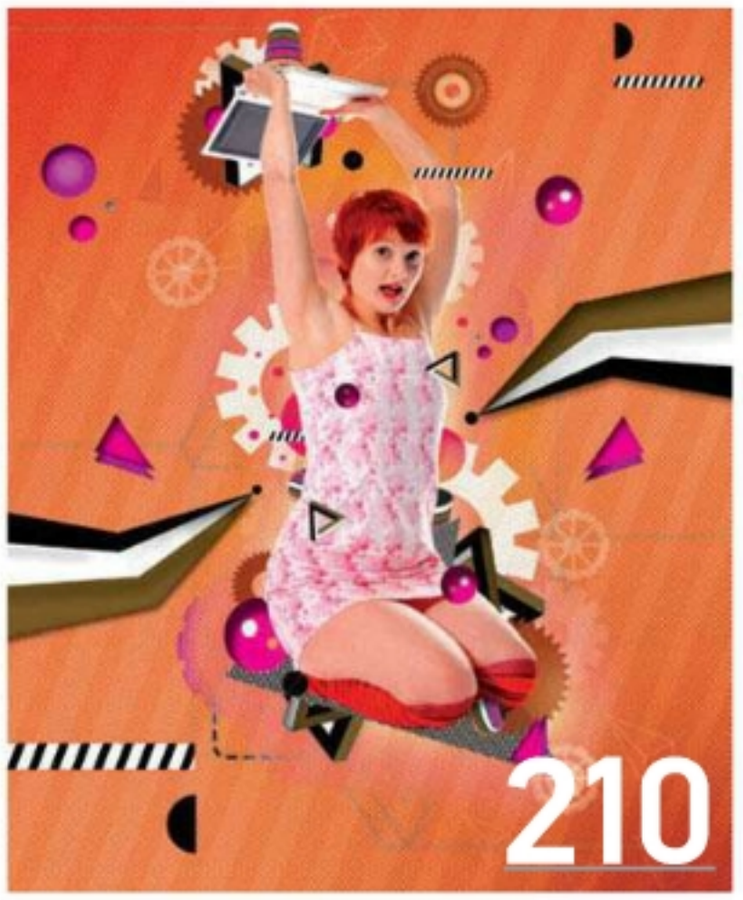
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Helpdesk

Key skills for illustrators, designers and digital artists

Master ArtStudio

“I've just got ArtStudio. As a traditional artist I want to paint a watercolour style. Any tips?”

Jonty Blake

ArtStudio is a powerful sketching and image-editing app which can do almost anything you ask of it. It has a hefty drawing engine and is also a top image editor with many advanced features available for the iPhone and iPad.

However, as you may have already discovered, the interface is not the most simple or intuitive. But once you get used to it, it gives you great control and offers a wide range of creative possibilities from within a single app.

You can use ArtStudio as a simple sketching/painting app making use of the brushes, spray can and smudge tools. But it also has an advanced selection tool and can be used to create gradients, clone, adjust colours, filters and even create your own brushes.

There are two major ways I like to start a painting using ArtStudio. The first is to take the Pencil tool and just start drawing as you would in your sketchbook. When I do this I usually create a separate layer for my drawing, and then start adding my colours underneath.

Another more painterly approach is to choose a brush and start blocking in shapes and forms. Here the Preserve Transparency option can really help. More on this later.

Remember that if you don't have it already, the ArtStudio Manual can be downloaded from www.iphoneclan.com/artstudio_manual.pdf.

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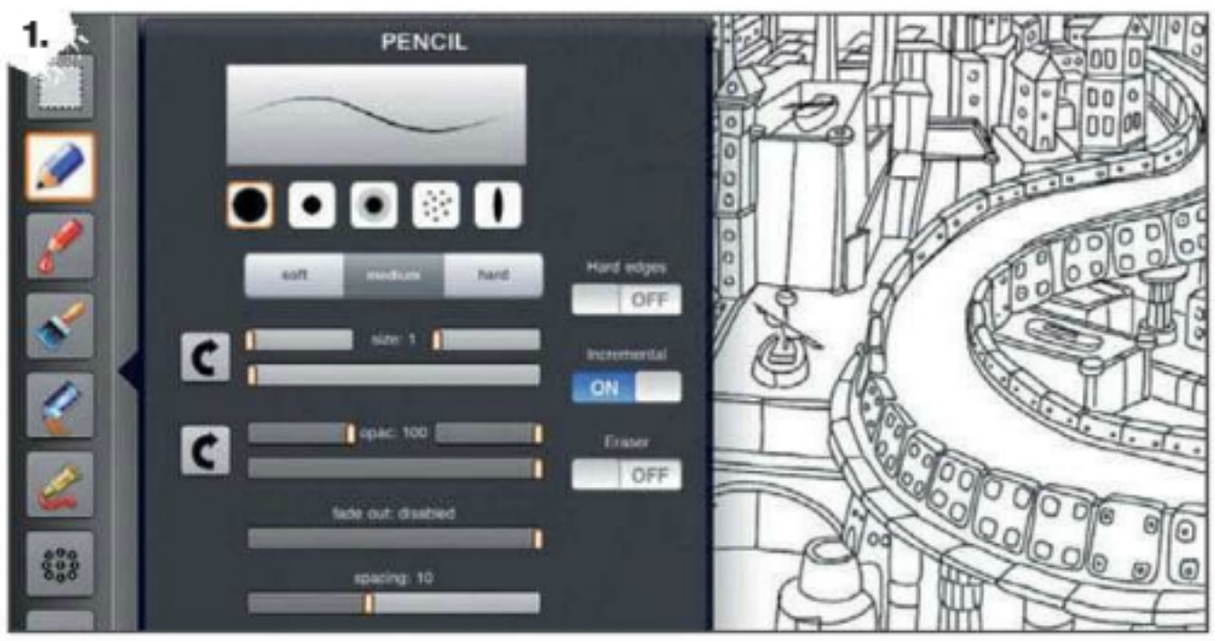

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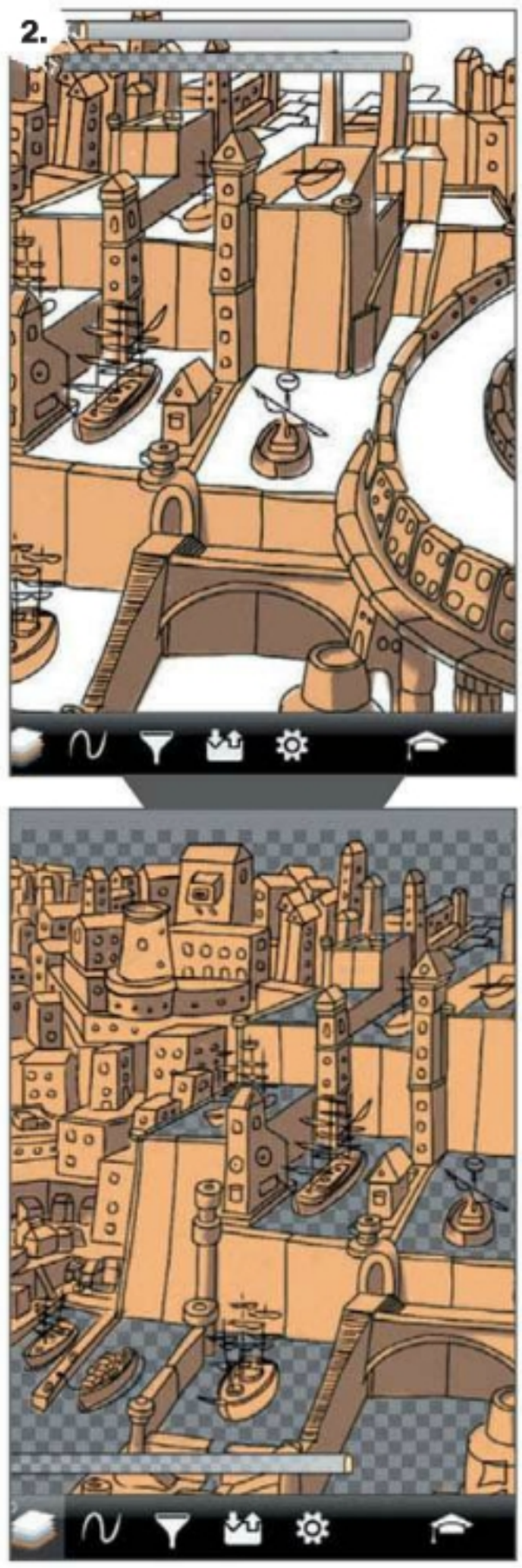
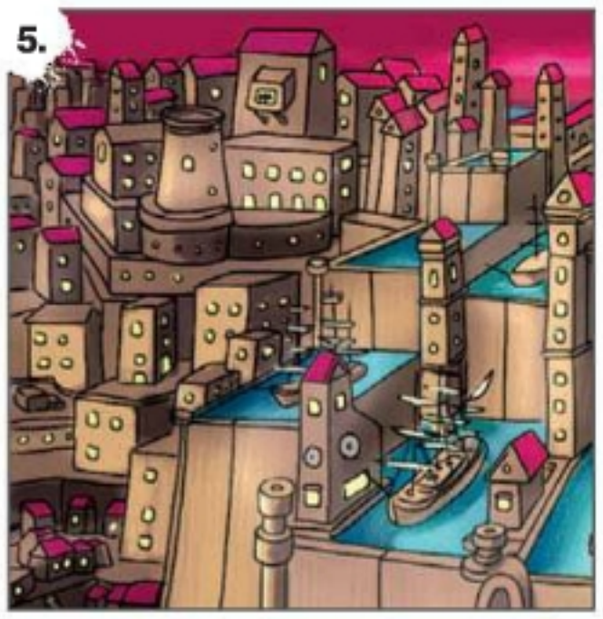


1. A pencil drawing to start
I start with a new document sized at 1,024 x 1,024 pixels. Still in the New Image box, I also choose the option White+Transparent. On the transparent layer I start drawing an imaginary city – just as if it were in my sketchbook. The drawing motor of ArtStudio is very good. More than emulating a pencil, I find it emulates a good pen more closely. In the presets you can choose if you want the strokes to trail in and out.

2. Paint to preserve transparency
I create a new level under my drawing. Using the Paint brush and a solid colour I paint all of the buildings and the boats. I do it this way so that I can then turn on Preserve Transparency in the Levels menu and freely paint the buildings any colour I choose without painting over what is now transparent. To bring up the menu options you can swipe the Layers icon or just keep your finger pressed on it.

3. Painting water behind your boats Since we preserved the transparency in the previous step it's easy to go in now and paint the water into the background of the image. I am imagining that the water in the locks will be really catching that evening light. To add shadows to the water I use Spray Paint set to 50% Opacity. I am going to paint the sky in on this same level using a colour that I will sample from a previous painting for convenience.



4. The Wet brush When you press your finger and keep it pressed, ArtStudio automatically samples the selected colour. I find that this works particularly well when working with the Wet brush. I used it in this painting to get the cascading water effect. It gives a very painterly feel to your image. I create a new layer under the original line drawing and, with the Spray Paint tool, start incorporating large transparent shadows and dark areas to the scene.

5. Apply the finishing touches After I have added the darks, I use the Eraser tool on the same layer to create highlights on the buildings and make them glow a little. Make sure you follow one source of light for realism. Go to the next level down and add the red roofs plus some ripples on the water. Nearly done now, I go to the Filters menu and adjust the Exposure and Contrast values, making the scene a little darker. I add a few more highlights to wrap things up.

Make an Asian print

“Any tips on creating a retro Asian print-style in an illustration?”

Sam Roginski

The most important thing to remember when creating this retro style is to keep it simple. A nicely textured background is really all you need to make a sketchy drawing look very much like a woodblock print on handmade paper. Asian prints are usually fairly monochromatic, so limiting yourself to a simple line drawing on top of a textured background will give you the look that you desire, but still give your image an eye-catching effect.

Another important thing to remember is experiment, experiment, experiment. There is a whole world of textures out there that you can use for the background, so don't just go with the first combination of textures you find, try as many things as you can think of before making a decision. As for the line drawing, just have fun with it. It doesn't have to be perfect. I actually find that straying occasionally from the long, fluid strokes fits the style and looks more natural.

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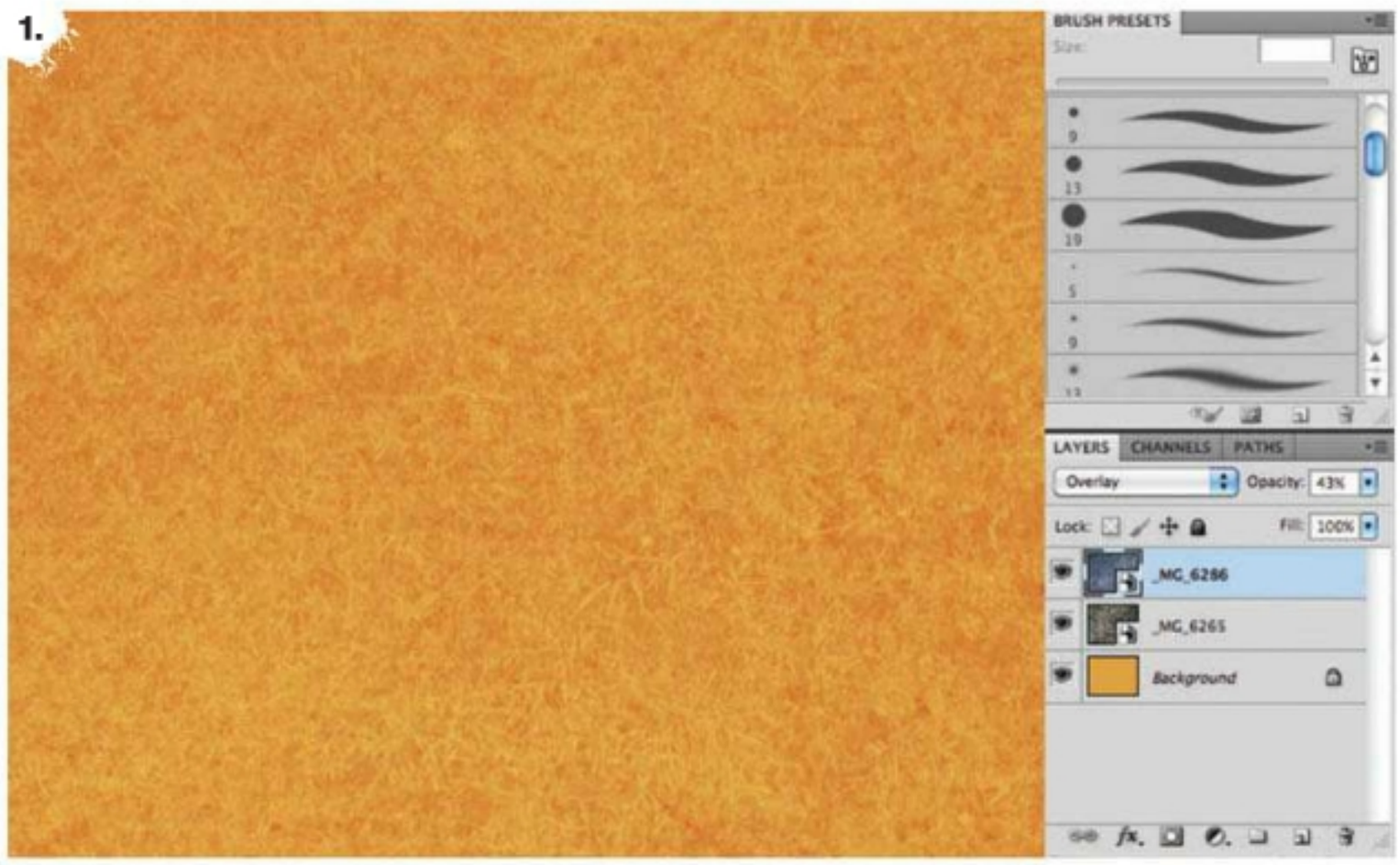

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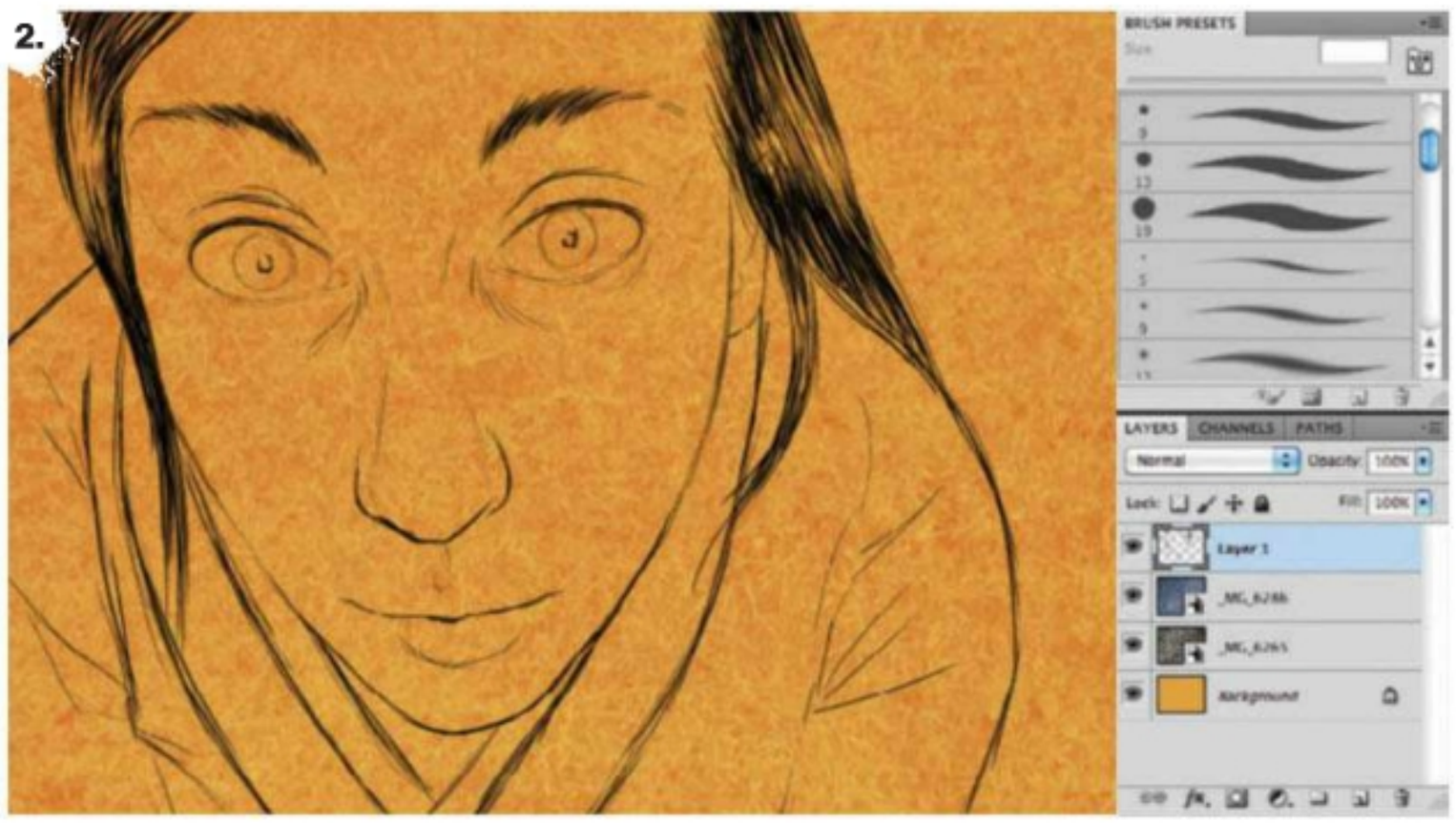

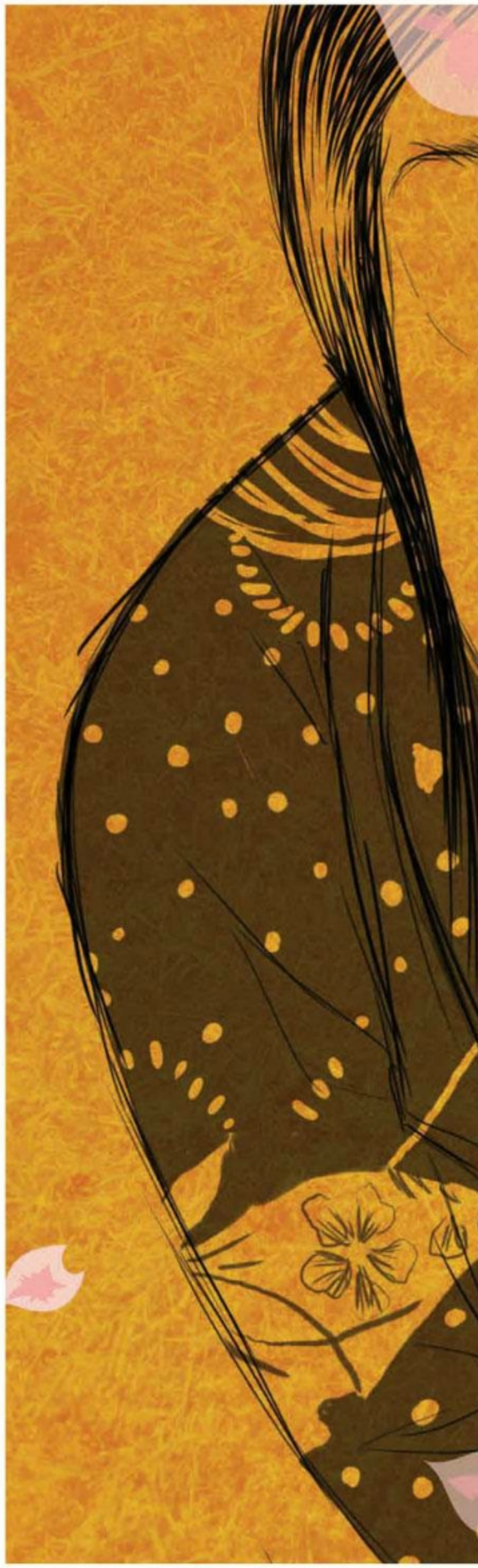

1. Background texture The first thing we want to do is make a nice, textured background to work from. To do this, you can use textured images and layer them over a flat colour layer in Photoshop. Find a couple of textures you like, put them on separate fill over the colour and start playing with the opacity and blending modes until you get the look that you prefer. Remember to experiment.

2. Drawing time Now for the fun part! I typically sketch right into Photoshop with a tablet, but if it is easier for you, scan in a sketch on paper and work from that – either way will work. To get the scratchy lines that resemble the different types of carving marks from woodblock prints, use a pressure-sensitive hard round brush and try to let yourself be a little free in your strokes.

> The most important thing to remember is experiment, experiment

3. Your fresh print At this point, some finishing touches will really spice up the image. I like to add some flat areas of black, sometimes with the opacity turned down a bit so it isn't too harsh but gives the overall image a more graphic feel. Also, adding in some small vector elements using Illustrator can really enhance the graphic-print look. So there you have it, a retro print that mimics the woodblock technique in a modern style.

Clean up line art

“How do I clean up and colour hand-drawn line art?”

Jacky Howes

Today's digital art technology offers artists unprecedented options for creativity. But you won't always be near a computer when that fickle muse strikes, so it's wise to have a sketchbook on hand for such occasions! Later, thoughts and ideas can be scanned in at home. Some artists also find it easier drawing with pencil and paper than with a stylus and tablet.

Scanning and cleaning up line art is an invaluable skill. The clean-up can take time, but it's easy and is usually quite satisfying to battle and overcome stray lines, scan lines, and grey spots and splotches. It provides flexibility for altering composition, fixing problems, creating colour mock-ups for a traditional painting or finishing the art as a polished digital painting. Clean line art can also be printed out to transfer to paper or canvas.

This demo is done in Painter X, but will work in most digital painting programs. The pic is from an inked sketchbook drawing.

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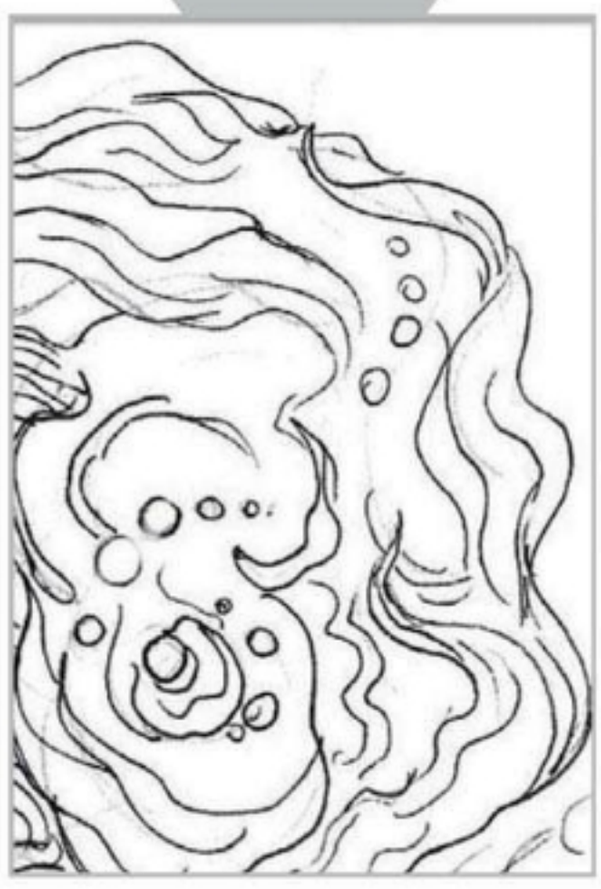

1. Scan the art Many scanners come with their own software, or you can download software from the internet. No matter what you use, the process is generally the same. Look for any automatic adjustments such as Auto Sharpen or Auto Contrast. Disable them! You want to have as much control over your art as possible. Scan the image at 300dpi in greyscale, following whatever instructions come with your scanner.

2. Aim for a white background Crop out the excess image information, and then adjust the levels of the image, or the brightness/contrast, by using Shift+Alt/Cmd+B in Painter. A higher contrast and lower brightness is best. Your goal is to get a white background. In this image, some of the tail went off the page and into the pesky crack of the sketchbook. The shadow of the crease is erased and the tail is completed.

3. Clean up your image! Now use a large eraser in order to clean up the noise and grit in the composition. Zoom in to get a close-up view of any mess next to your lines. This is the bit that can take some serious time, as you work with ever-decreasing eraser sizes. You now have some nice clean line art that you can work with. From here you could upload it to an online gallery or print it to transfer onto paper or canvas. However, we are ready to paint right now.

CLEAN UP LINE ART

It shows Take plenty of time to clean up the initial scan as much as possible. It will make the painting process a breeze.

Finishing touches A final layer atop the line art for whiskers and shine that makes the art sing. The shine obscures the lines for a bloom effect.

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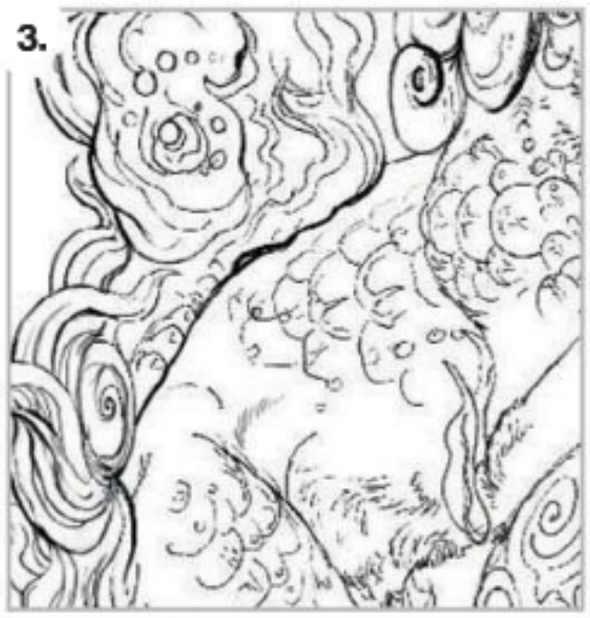

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4. Float it Select all (Ctrl/Cmd+A), and then go to Select>Float. Set the line art layer to Multiply. Because the line art is an integral part of the finished image, do not alter the opacity. Paint in your background onto the canvas. With the line art floated on a layer above it, you can toggle the line art layer on and off to see how your background colouring is coming along. Focus on how the background elements like lighting will have an effect on the subject.

5. Paint it Create a new layer under the line art and above the background canvas. Now you can mash in your colours as if this image is a colouring book. Enjoy the freedom of colouring outside the lines like a blissful two-year-old, because you can simply erase the stray marks as you go. You can switch to the line art layer as you're working, to add, erase or strengthen the existing lines. You can also duplicate this layer to darken and add definition.

Create vector characters

> What are your suggestions for getting a striking papercraft style in an illustration? I want to create an image with Foldee characters
>
> Jared Cullins

Papercraft is an intricate artform in itself, with models ranging in complexity from simple cuboid characters to highly detailed, scale models of spaceships.

When trying to re-create a 3D paper model effect in a 2D illustration, the key factors to concentrate on (once you've got your concept) are texturing and tonal shading. For the sake of this example, we'll be looking at a more simple, cuboid-shaped character rather than a full on diorama of the Millennium Falcon, but you can choose to make your subject as simple or complex as you like – the basic principles still apply.

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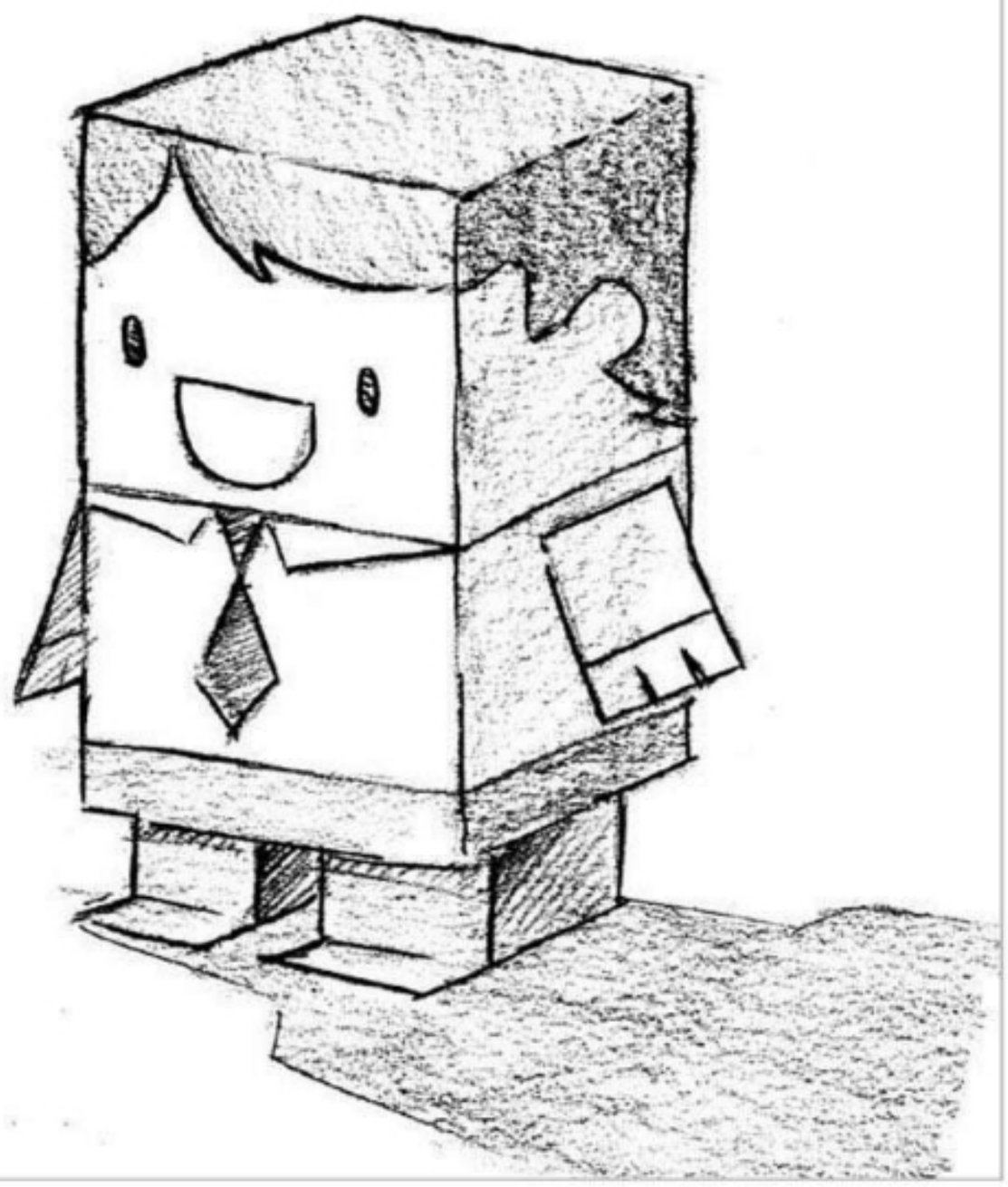

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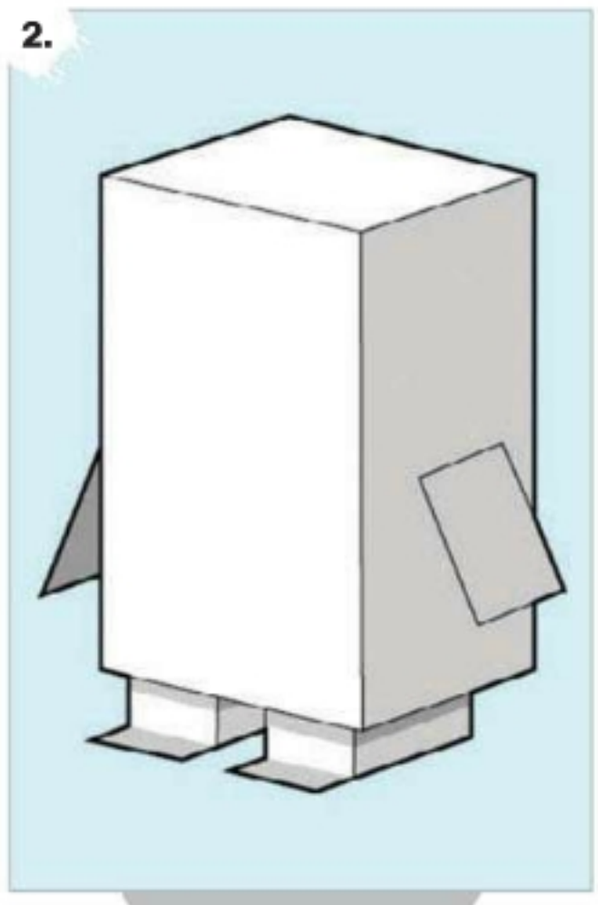

Paper textures
I overlay paper textures on the character for authenticity as well as the background for a bit of cohesion across the image.

1. Create the character We'll start by drawing out a relatively simple cuboid character for the Foldee. Simple, stylised characteristics will work best with this type of illustration, so think carefully about his personality and how that comes across. Now think about how to shade him appropriately, including the placement of the light source and how that will affect shadows. For this example, the light source is in the top-left corner of the illustration.

2. Render as a vector As an animator by trade, I will be using Adobe Flash to showcase this papercraft style, but the principles are the same across most vector art packages. Draw out your chosen character and shade the panels with the position of your light source in mind. Rendering in vectors is ideal for this kind of image as not only can it be resized without any loss of quality, the look produced is typically associated with character work.

3. Select your textures Next, we want to bring some life to the 3D paper model by adding textures, and you have several options as to how to do this. You can photograph or scan some rough-quality paper and import into your document, or you can download an image of card or parchment from one of the many free texture sites on the internet. Alternatively, you can always purchase hi-res stock images for a nominal fee on the web.

Flash alternative I created this piece in Adobe Flash animation software, but a similar look can be achieved in Illustrator.

Light source Use simple variations of tone and subtle gradients to suggest shading. Bear in mind where the light is coming from for a convincing 3D look.

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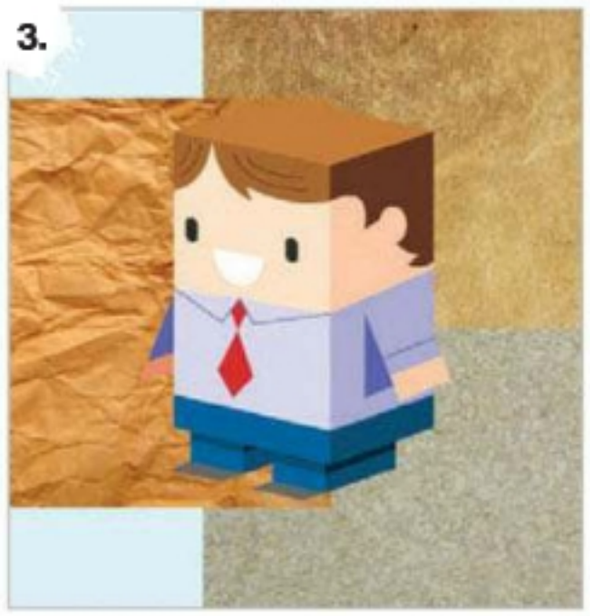

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4. Apply texture to the model
There are various methods you can employ when including textures in an image, but the thing to remember is that there is no right or wrong way as long as you are happy with the end result. I tend to lay the texture over the model and, after converting it into a movie clip as my image is intended for animation, play with the blending options. I have found that Overlay or Multiply produce the best results, but experiment with this.

5. Finishing touches Finally, we need to mask off the texture layer by using a duplicate of our Foldee character as the mask. Feel free to add dotted stroke lines to the character to replicate folds, adding a more authentic feel as if he was once a flat net that has been assembled. A generic paper background layer and a directional shadow help to complete the scene and you can create a population of other papercraft characters to join him too.

Add a retro look

How can I give a piece of artwork created in Illustrator a more retro look?

Sasha Henshaw

Using Illustrator initially suggests clean-cut, modern and fashionable illustration work. Therefore pushing Illustrator towards an analogue style may seem a little backwards; but tactfully tapping into the powerful features such as custom brushes, repeating pattern swatches and auto-tracing all helps to forge my homage to Fifties illustration.

Much mid-century illustration/animation shares common traits. From simple, well-constructed characters to a range of textures and mark-making, artists used a great deal of pastel, sponge and dry brushing for depth and tone, while linework had a naïve quality.

Fifties illustration has a timelessness, mainly due to its informed, well-designed and minimalist characteristics. Rarely bogged down by detail, perspective is all but thrown out of the window. Masters of the craft stripped back what they knew in favour of a more stylistic approach.

1.

2.

1. Construction Well-thought-out structure is integral to making simple artwork. A lot of mid-century illustration has a keen sense of space and composition. Not every plane of space is covered haphazardly. I always consider the visual balance, ensuring there's room for the illustration to breathe. With this piece I employed a sweep from bottom left to top right, then broke the flow with the hand holding the chopsticks for slight variation.

2. Limited colour At first glance the piece screams simplicity when it comes to its colour palette. Even so, you might be led to believe there are more hues than there actually are. In total I've only applied two colours to the bare white canvas. However, by overlapping in places and setting the Transparency to Multiply, I've created a third shade by blending the two together; this is a quick but effective way of emulating a screen-printed effect.

3. Halftones Further to the limited colour palette, halftone patterns are another quick way to add a retro feel while simultaneously creating a new hue to experiment with. I recommend using halftones for skin areas, or for semi-transparent objects such as glass; for instance, I used two halftone patterns to suggest a recurring glass full of sake. A slightly denser halftone next to a lighter one creates a kind of gradient effect, albeit a very subtle one.

ADD A RETRO LOOK

Don't be too neat With the soy sauce bottle, the liquid is shifted to the right, almost as if it were floating outside the glass; this technique is common in Fifties illustration.

Back to basics Instead of laboriously imitating every detail and shape of the glass of sake, a quick suggested form is all that's required.

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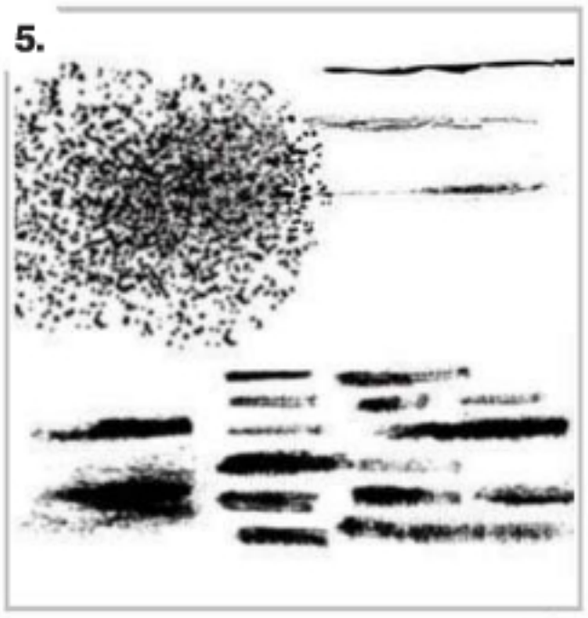

4. Hand-drawn elements Loosely draw selective elements then mix the almost-naïve line drawing with cleaner, bolder vectors and you'll find the result is very reminiscent of the Fifties era. Draw certain details selectively – for example, don't outline the whole character, but use simple vector shapes to define his overall form and only add in rough lines to define the eyes, nose and shirt pattern, etc. Think of classic cartoons like *The Flintstones* for inspiration.

5. Texture Another technique for that hands-on feel is to actually break out the paintbrushes, pastels and whatever tools you can find. Create marks, scribbles, dry brush strokes and use Illustrator's Auto-Trace function to transform these marks and textures into vectors. I've used dry brush strokes to shade certain elements, as well as to add highlights. Don't go too wild though; demonstrate control so your piece doesn't end up as one big mess.

Draw letters with character

> Any tips for turning illustrations into letterforms to use instead of a font?

James Stanley-Graham

My best tip is to start observing objects around you and your workspace as the most convenient place to find inspiration. You can observe letterforms in all objects; a pen looks like the letter I and your headset can shape the letter C. You can also put objects together and form letters. Three pens can form the letter A or N. You can also do this the other way around; find a typeface and look for resemblances between letters and objects. The letter S can look like a snake. This is certainly a fun way to start getting your head around letters as it is training your eye to look for the forms.

Once you have done this little rehearsal task you can start applying it to your work. Look back at your previous projects and search for shapes that remind you of letters. If you illustrate character designs, your characters can form letters. If you create patterns you can find letterforms inside them.

In this step-by-step guide I will show you some simple guidelines that I always follow when creating letterforms from my character designs.

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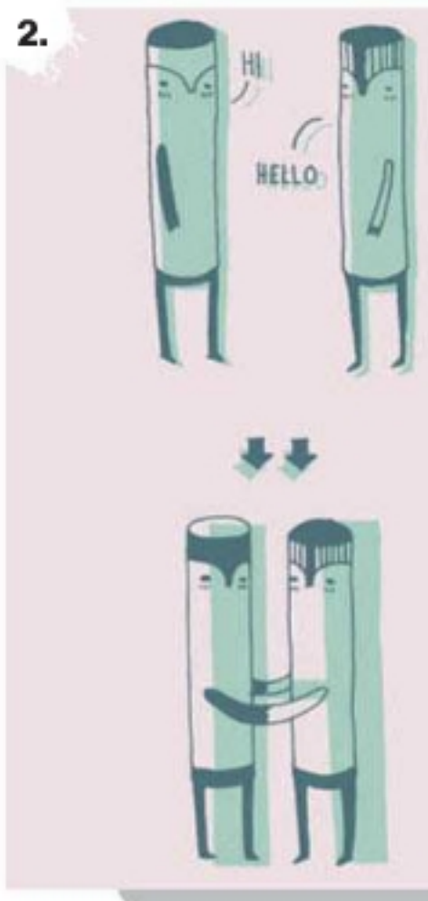

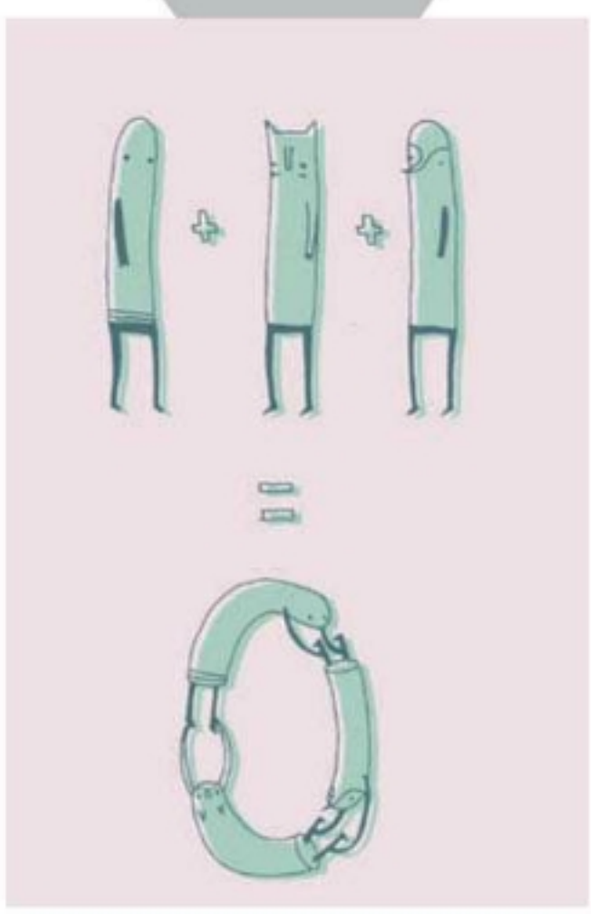

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5.

> My best tip is to start observing objects around you and your workspace as the most convenient place to find inspiration

1. Create a character This is an example of how I start creating a character. I find random objects on my desk and assemble them. Then I look for characteristics and start sketching out the body. This is good practice, and it starts to generate ideas for more characters. The more you have lying around your desk, the better (it's good to be untidy)! You can also go out treasure hunting for fun objects to assemble into a model, then draw it.

2. Combine characters When you have created a set of characters, you can combine them into letters. The options are limitless, which makes them even more fun to play around with. You can also just stick to one character to make a letterhead or a drop cap to use with a large block of text. Set up a grid first so you keep the same width and length to each letterform and character. This is not a must, but if you are creating a typeface for a piece I recommend it.

3. Add colour I work in Photoshop when I colour digitally. Here I am using the Color Overlay layer style for my line art. First you have to get rid of the white space around your lines by using the Magic Wand tool (Shift+W), or else it will overlay your entire canvas. Now click on the white space and press the Backspace key to delete it. It helps at this stage if the line art is black, as the Magic Wand reads the white space better to make the selection process easier.

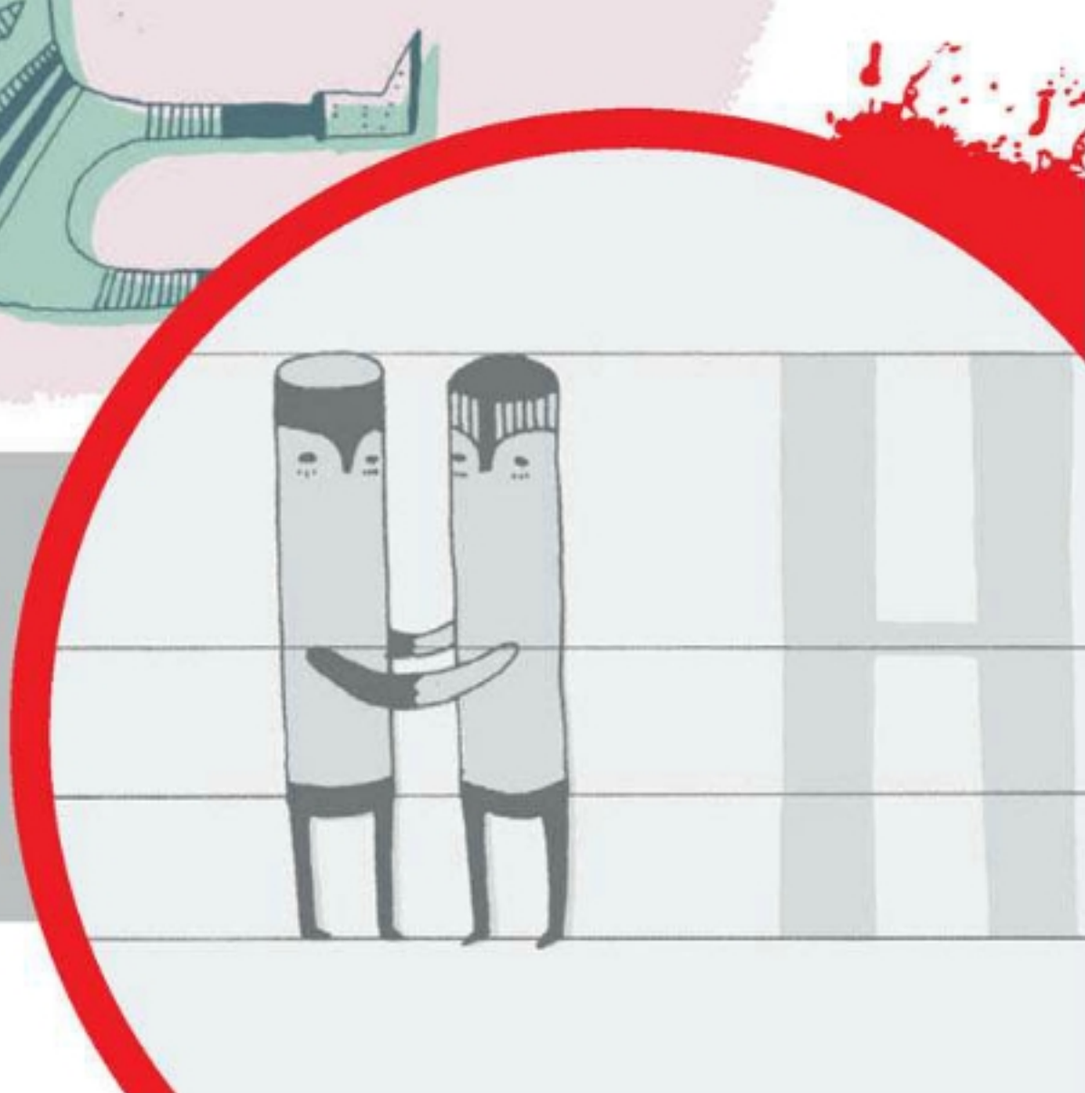
LETTERS WITH CHARACTER

Make a structure When creating an alphabet, stick to a grid so that you have a basic structure to work from. It makes it easier to read and it looks tidy.

What is a typeface?
A typeface is the artistic representation or interpretation of letters. When you create a letterhead, you probably want to design the whole alphabet, and that design is the typeface.

4. Add pattern Because I use a very limited colour palette, I think patterns are a nice filler to make the illustration more interesting to look at and add a bit of visual variation. I tend to stick to the same style of pattern when creating a typeface, as too many different ones within one illustration can make your typeface look muddled and confusing. Instead of using patterns, you could also use textures to add that little bit more interest to your artwork.

5. The final letterform This is one of my final designed letterheads. When it stands alone it can be its own illustration, but when put together with the other characters created in the same style, it creates a typeface. Illustrating your own typefaces is something I highly recommend, as it is fun and great practice for a range of art styles. It is also really useful for commissions regarding promotional material, so get creative with your letters and enjoy!



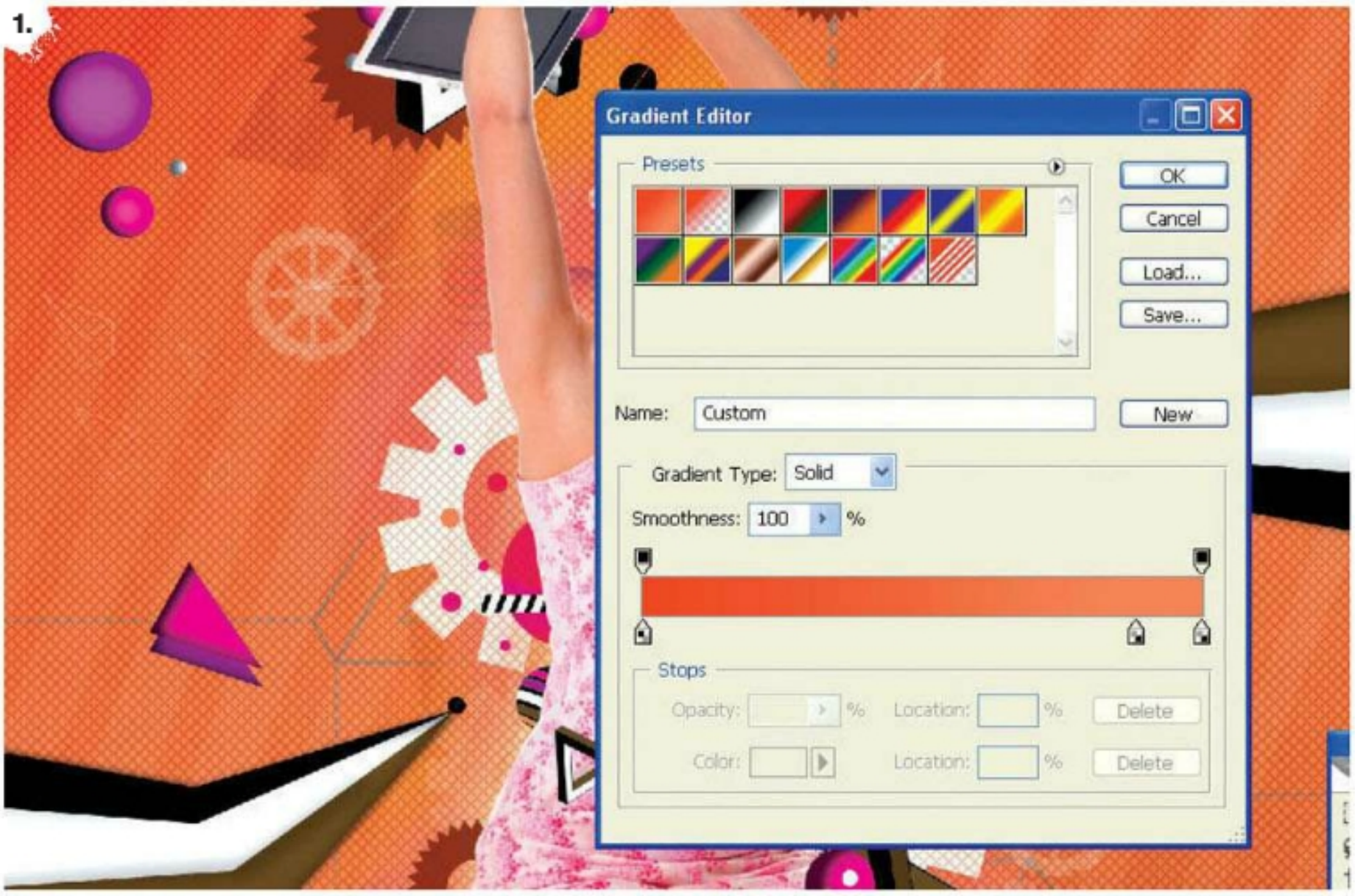
Bring photos to life

How can I make a photo-based design look more edgy?

Allard Winters

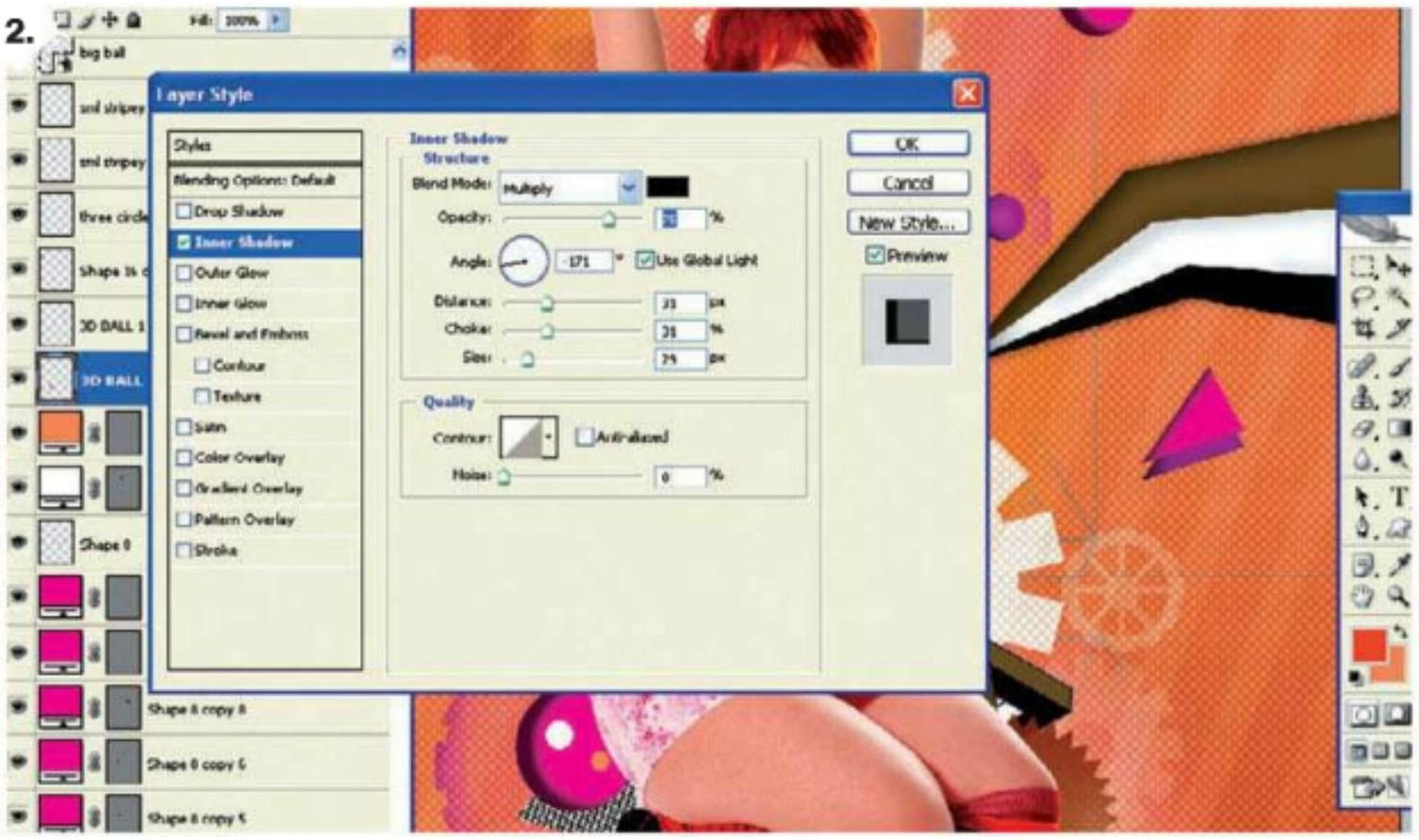
Photo-based design is really popular at the moment and therefore a hugely competitive market to be going into. So many designers are playing about with this type of work you need to keep well ahead of the game and make sure your images stay fresh and visually dynamic. Work in this type of medium can all too easily blend into the pack and get lost in the thousands of others vying for attention or, if not given enough care, your work can look far too cheesy with overused effects and finishes. Here are a few simple ideas for making sure you're leading from the front by using simple techniques in Photoshop to achieve a stand-out piece.

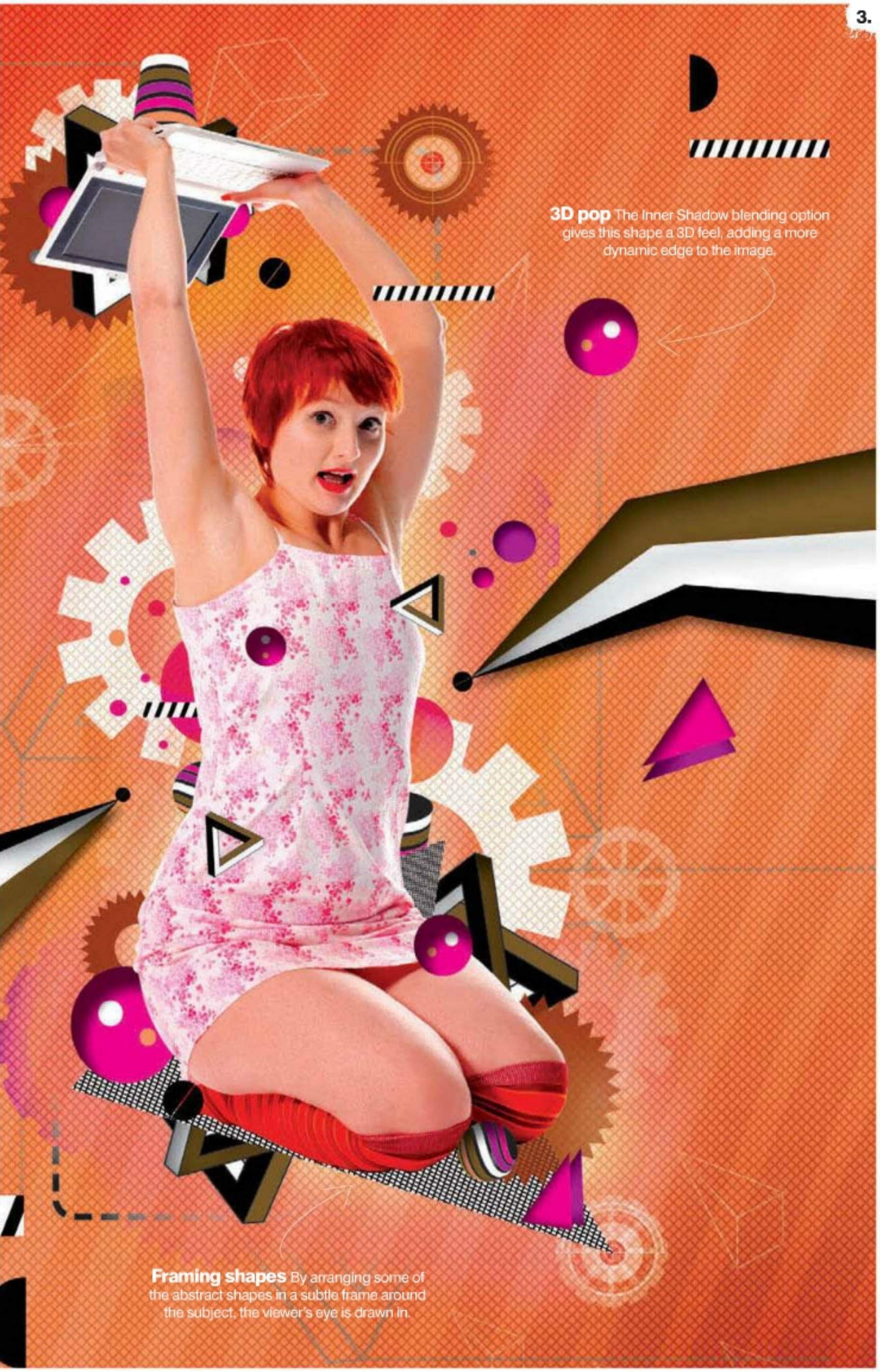
1.



> Use simple techniques in Photoshop to achieve a stand-out piece

2.





3D pop The Inner Shadow blending option gives this shape a 3D feel, adding a more dynamic edge to the image.

Framing shapes By arranging some of the abstract shapes in a subtle frame around the subject, the viewer's eye is drawn in.

1. Colour It may sound like an obvious one, but experimentation with colour can often create some fantastic results and be a determining factor as to whether a piece works or not. For a start, the background colour is very important. Too many photo manipulations can seem cold and forced and you want the viewer to find something appealing. Use the Gradient tool (G) to blend colours into the background.

2. 3D shapes Another way of making your design look more edgy is to experiment with vector shapes. Set your Pen tool (P) or the Custom Shape tool (U) to shape layers and create some vibrantly coloured elements. Now let's make these stand out even more by giving them a 3D styled look. Open Blending Options>Inner Shadow and change the Distance, Choke and Size until they really have an impact.

> "Keep well ahead of the game and make sure your images stay fresh"

3. Shape interaction You want to make sure that the image you have chosen has some interaction with the vector shapes around it; it's no good creating images just for the sake of it, they have to work with the photo. In this case, using the one photo in the centre of the image works well to have shapes popping out behind and in front of the character, drawing the viewer to the centre of the piece.

Curve the horizon

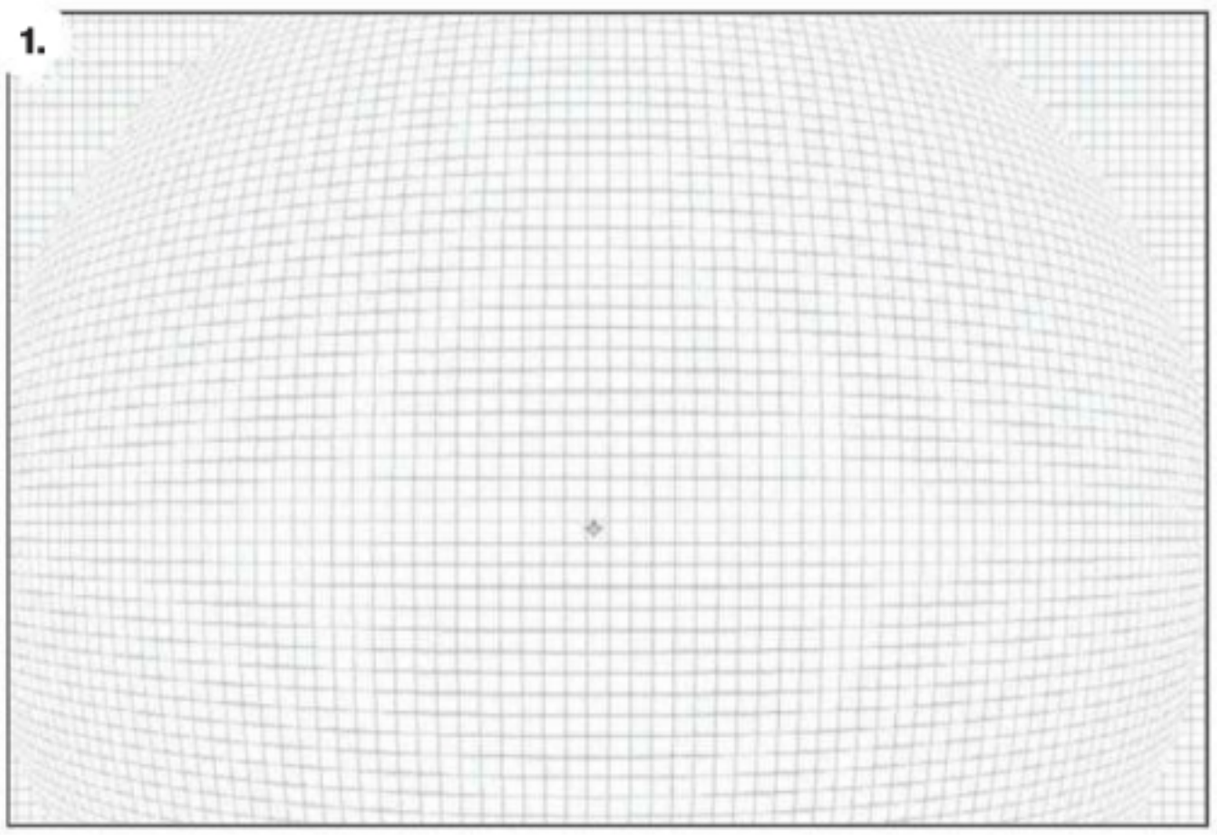
"I'm doing a landscape illustration from an elevated angle – how do I carry off the curvature of the horizon properly?"
Evan Scott

It's important to remember that the position of all elements in a landscape illustration will be affected by the curve of the horizon, not just the horizon line itself. For this we can set up a spherical grid guide. The lines on this grid will form the horizon lines and if we set up a vanishing point below the document space, we can use the grid to work out the perspective of objects in the landscape as well.

Bear in mind that the viewer will always see the curve of the horizon from the middle, so the vertical vanishing point should be placed from the centre of the image accordingly.

You should start by creating two documents in Photoshop; a grid document (which is 300mm x 300mm at 300dpi with a transparent background) and a document for your image (which for this example is 265mm wide by 200mm high at 300dpi with a white background).

1.



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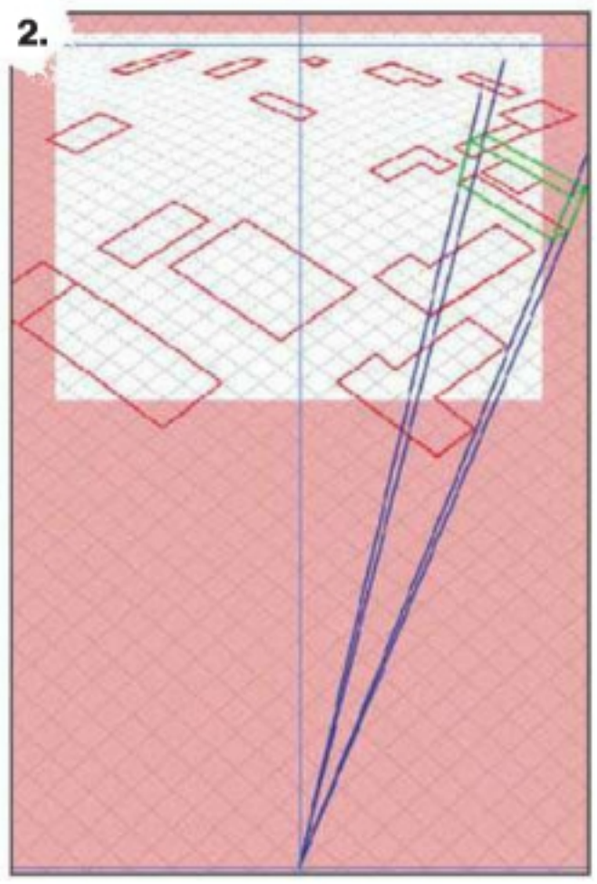


"Use grids to work on a curved surface plane"

CURVE THE HORIZON

3.

1. Create the grid On the grid document, choose Fill Tool>Fill Pattern>Patterns>Tiles-Smooth and fill. Select All and choose Filter>Distort>Spherize>Amount 100%>Mode Normal. Change the background colour and select Image>Canvas Size. Double the height and enlarge the width by about 50mm. Return to the grid then copy onto the image document with a vertical guide at 50%. Check View>Snap and Snap To>Guides.

2. Adjust the grid Select the grid and Free Transform>Rotate 45 degrees. Enlarge the grid layer by 400% in each direction and move until the top of the curve is where you want the horizon line to be. Make sure it is centred. The distorted grid now shows guide lines for the curved surface plane of your landscape. Next, use the vertical guide line to set a vanishing point underneath the image. This will help you establish your perspective.

3. Compose Use the vanishing point to compose the objects in your image. The grid represents the ground plane of your landscape. Draw the base of your objects on this plane and remember to follow the curve of the grid when drawing in the base of any object. Draw vertical lines from the vanishing point to create the perspective of the trees and buildings in the landscape. The perspective will be sharper in the foreground of the image than in the distance.

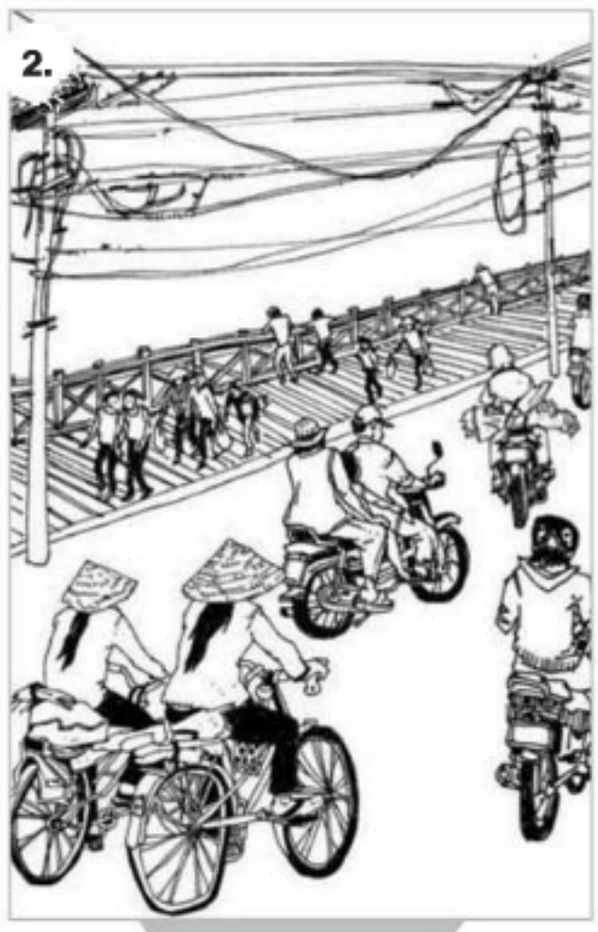
Blend sketch with colour

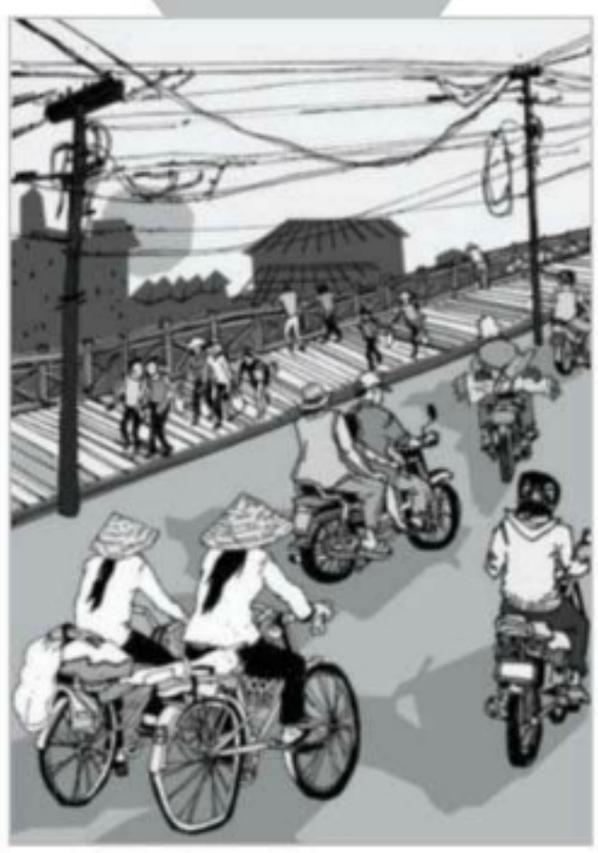
"How can I combine sketched ink linework with smooth digital colour fills without it looking messy and half finished?"

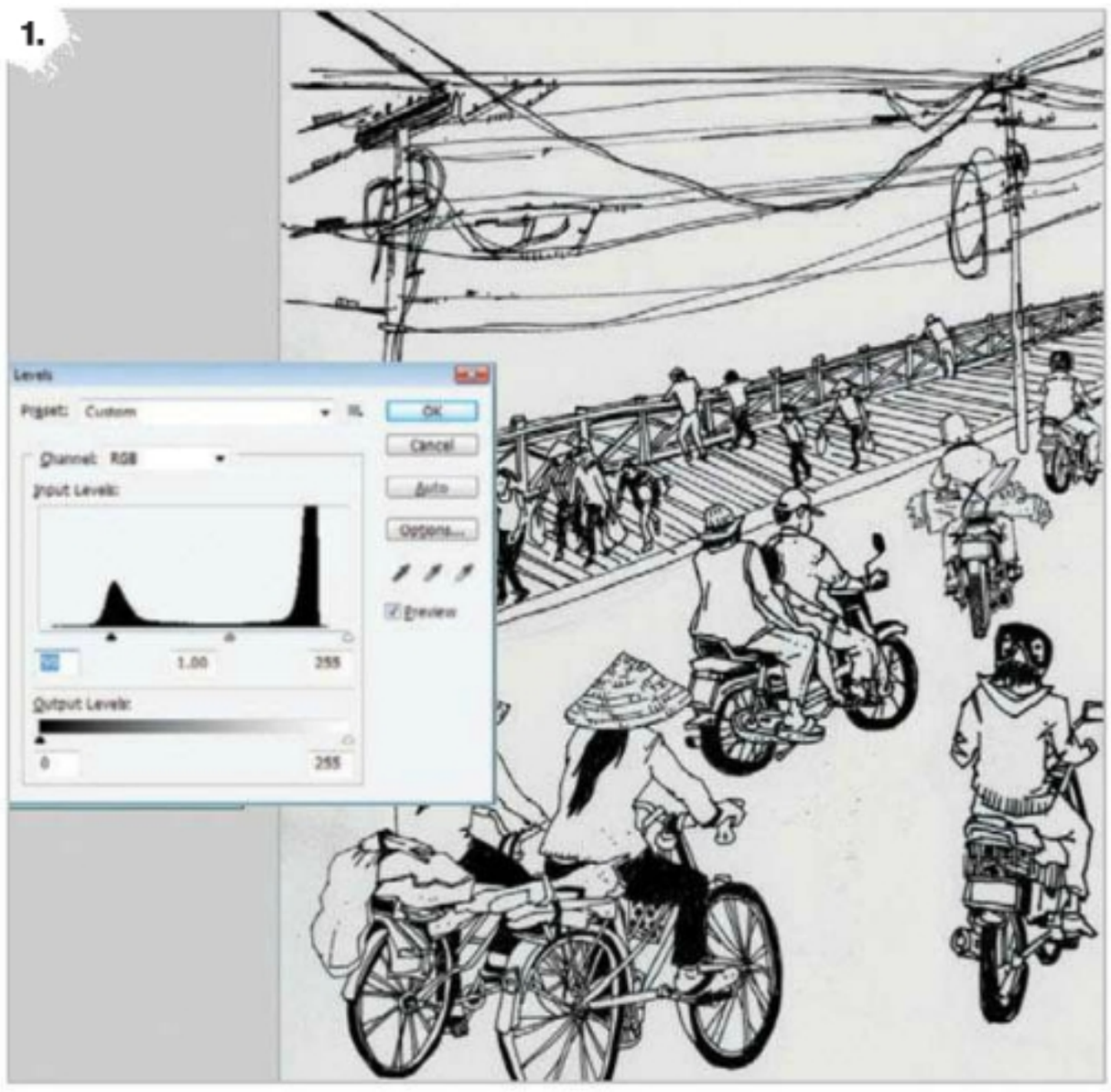
James Sanders

The drawings that I have the most fun with are often found in my sketchbook. Not only is it a great place to record daily life, but my sketchbook is where I am completely spontaneous with my drawings and free in experimenting with mediums.

When it comes to finishing a sketchbook drawing, Photoshop is a great tool. It helps to bring the piece to a higher level while preserving the original linework. Digital colour can also give sketchy drawings the structure and clarity they need to become more finalised. One of the most useful things I have been taught about working with colour, regardless of the medium used, is to be aware of value. It will bring depth and dimension to a piece and help it look finished. It is very useful to map out a value sketch before you start introducing your hues. An easy way to see if the values are making sense is to convert your image to greyscale and see if the black and white version describes the depth in space you want in your piece.



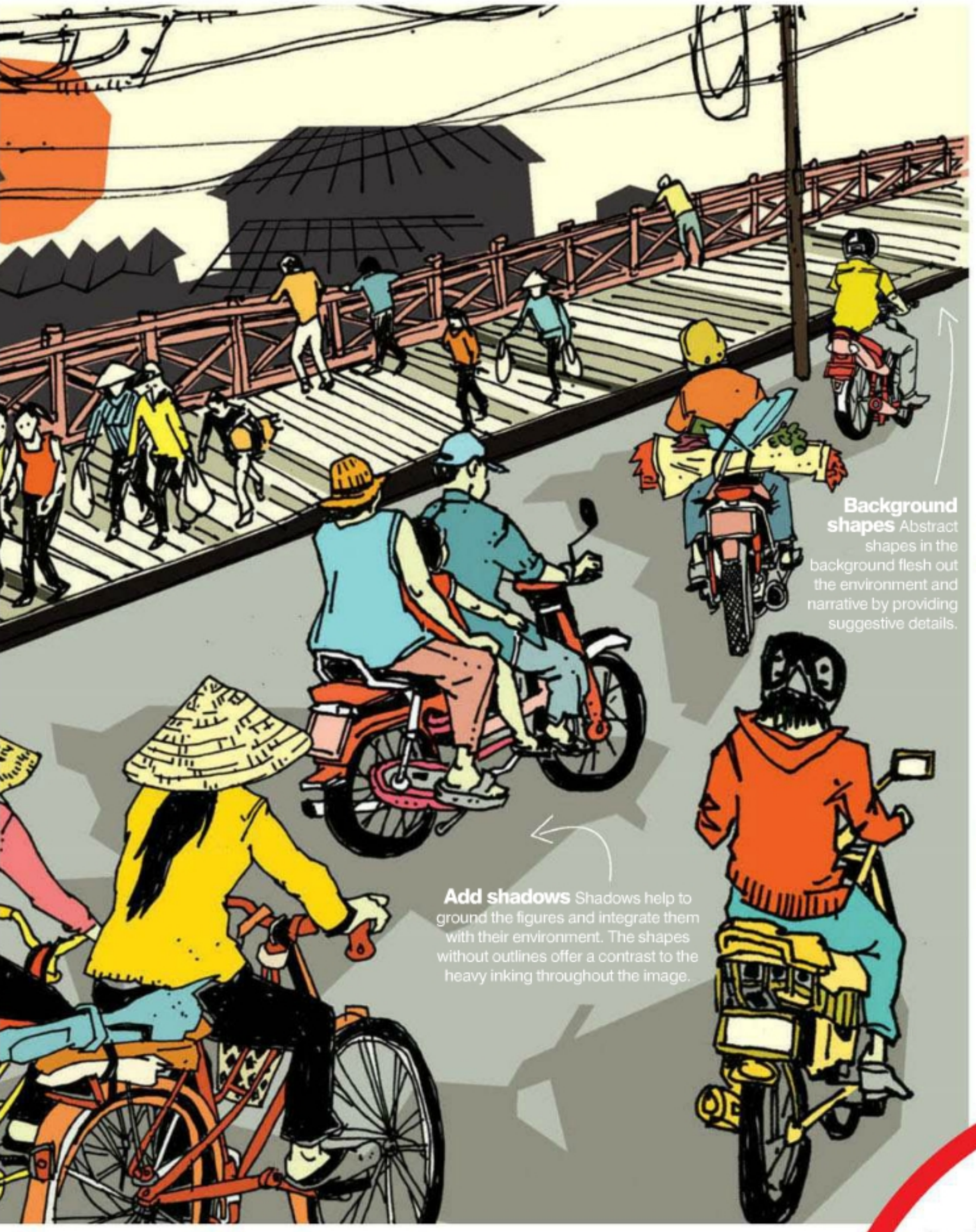




1. Adjust levels After your drawing is scanned in (with at least 300dpi) and open in Photoshop, you need to adjust the levels, either with an adjustment layer or the standard command. This cleans up the scan and brings out your line drawing. Sliding the left arrow right darkens your blacks and sliding the right arrow left brightens your whites. The middle arrow adjusts the midtones. Don't overdo this or you will lose some of your original line quality.

2. Value sketch Create a sketch with at least four different values. You can save this separately, but having it for reference will save you time and energy. Make sure your values work compositionally for the drawing. They can help to add depth to an environment, separate an individual from a big crowd, move the viewer's eye around the canvas or change the atmosphere of a scene. Even at this stage every detail should be distinguishable and clear.

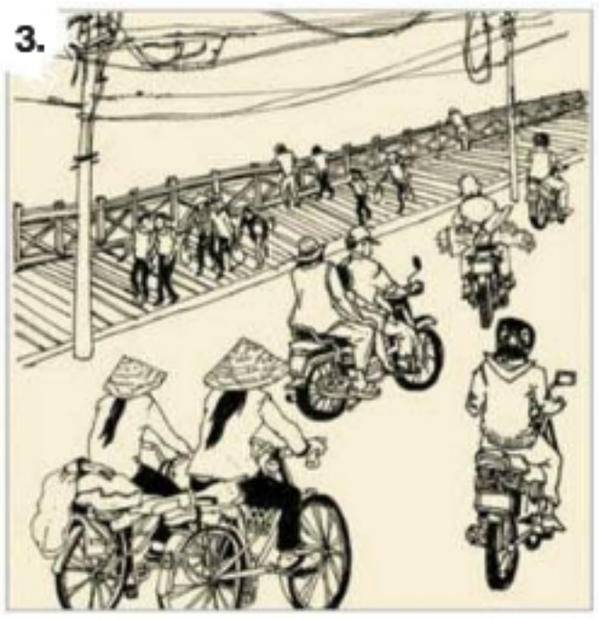
3. Choose a tone I find it helpful to start by laying a midtone colour over the whole canvas to get rid of any of those daunting, blank white spaces. Choose a hue that is consistent with the mood you want to set for your image. This can be adjusted later on, but for now it serves as a good starting point. Create a new Multiply layer over your linework and use the Paint Bucket to fill in the entire canvas with this midtone colour. You can reduce the opacity if needed.



Background shapes Abstract shapes in the background flesh out the environment and narrative by providing suggestive details.

Add shadows Shadows help to ground the figures and integrate them with their environment. The shapes without outlines offer a contrast to the heavy inking throughout the image.

3.



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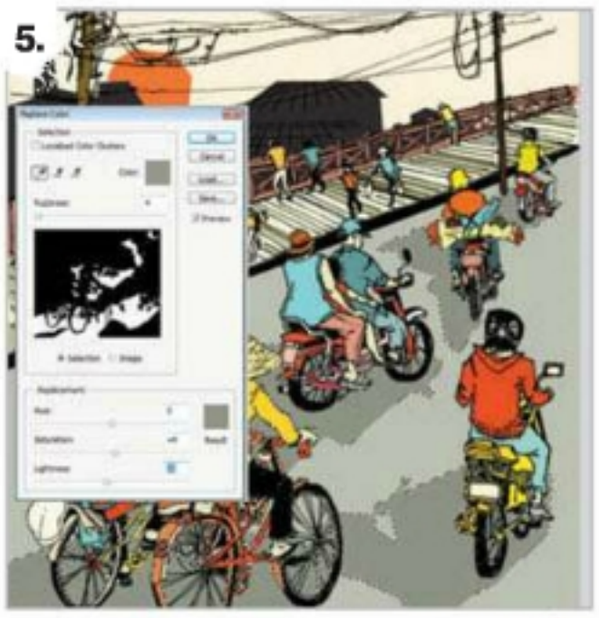


4. Colour the shapes Zoom in at least 100% and use a selection tool (like the Polygonal Lasso) to select the shapes that you want to colour. Make sure Anti-alias is off in the top Options bar for this stage. Fill your selection with the colour you want then move on to the next. For a very clean finish, make sure the edges of your selections lie inside the black lines. You can also use the Pencil tool for this process if you want to make your selection areas more precise.

5. Adjust final colours Tweak your colours until they are just right. Be sure to refer back to your value sketch and make any necessary changes. The Replace Color adjustment (Image>Adjustments>Replace Color) enables you to easily change the hue, saturation or lightness of any one colour in your image in one fell swoop. When you are finished, try slightly adjusting the levels of the whole image to give it a boost and really bring the whole piece together.

Children's illustration

"I need to stylise a crowded scene of a fairground for a children's illustration – help!"

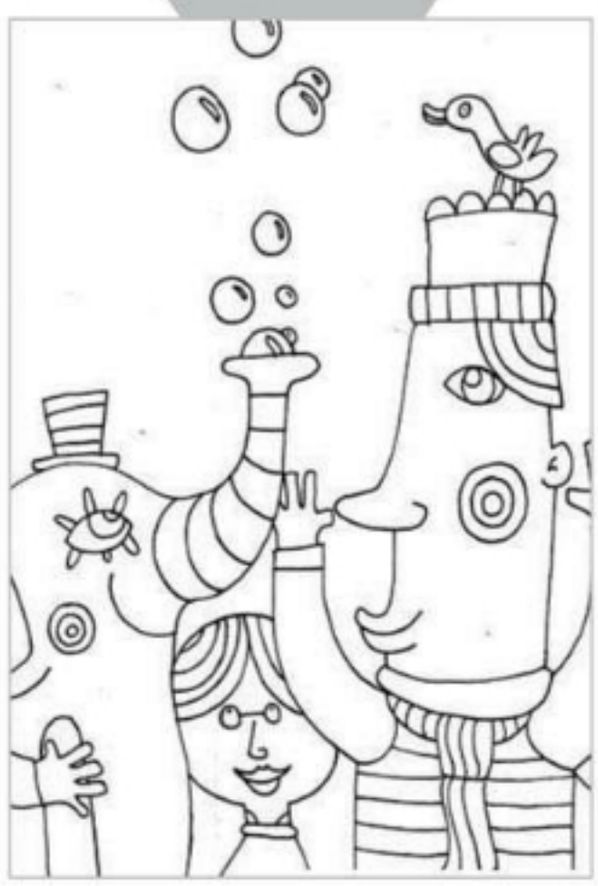
Nathan Sanderson

A crowded scene is, by nature, busy and colourful. For a children's illustration, the characters need to be grounded by some activity, have personality and provide colour and energy to the overall picture, with some that are clear and some that are partially obscured.

There will usually be a central character, and the nature of the characters in your crowd will depend largely on the narrative you are trying to convey. Your crowd scene may be an establishing scene for a story, it may be a scene where you have to look for a particular character or perhaps something specific is happening in the crowd that moves the story forward. Careful placement of its various elements is essential so that it feels balanced and not cluttered. Photoshop can be a useful tool to construct a scene that establishes a narrative, as well as build a theatrical and playful feel for the image.

1.

2.



1. Set the scene This fairground is made from a paper collage with blended textures. Position your fairground towards the top of the picture. This establishes a ground level and allows space for the crowd which will be added later on. The fairground should do just enough to describe the setting and complement the positioning of the crowd. Other fairground elements you can see like the stars, spots and typography can be added to the picture at this stage too.

2. Character personality The crowd can be split into layers consisting separately of the foreground characters and mid-ground characters. For fun, I've made them an eclectic mix of aliens, animals and people. Characters can be stylised by the distinguishing features you give them, for example, wide eyes, long necks and big noses all help to bring the characters to life. Some can be active as well, blowing bubbles or carrying balloons with them.

3. Colour the characters It can be useful to work on a neutral base like grey, which makes it easier to see how your colours are working with one another. Use a broad range of bright, fairground-inspired colours to bring the foreground characters to life such as reds, yellows, pinks and blues. White also helps to distinguish eyes, teeth and other important features. The mid-ground characters can be painted with slightly darker colours to create depth.

3.

4.

5.

4. Position everything Now it's time to assemble the image. Position the mid-ground characters in your fairground first. Experiment with different positions so that you find a balance between the population of your scene and the background. Now position your foreground characters and stagger them slightly so they become balanced with the mid-ground characters. All elements of the picture should now be making good use of the space.

5. Some depth of field To give the characters a little more depth, add a drop shadow behind the foreground characters. Copy the foreground character layer and use the Brightness and Contrast sliders to change it to black. Position the drop shadow and turn its Opacity down to 3%. This could be repeated for the mid-ground characters as well if you like. A night-time setting will work well to intensify all those bright fairground colours, so I've stuck with black.

Design a pattern

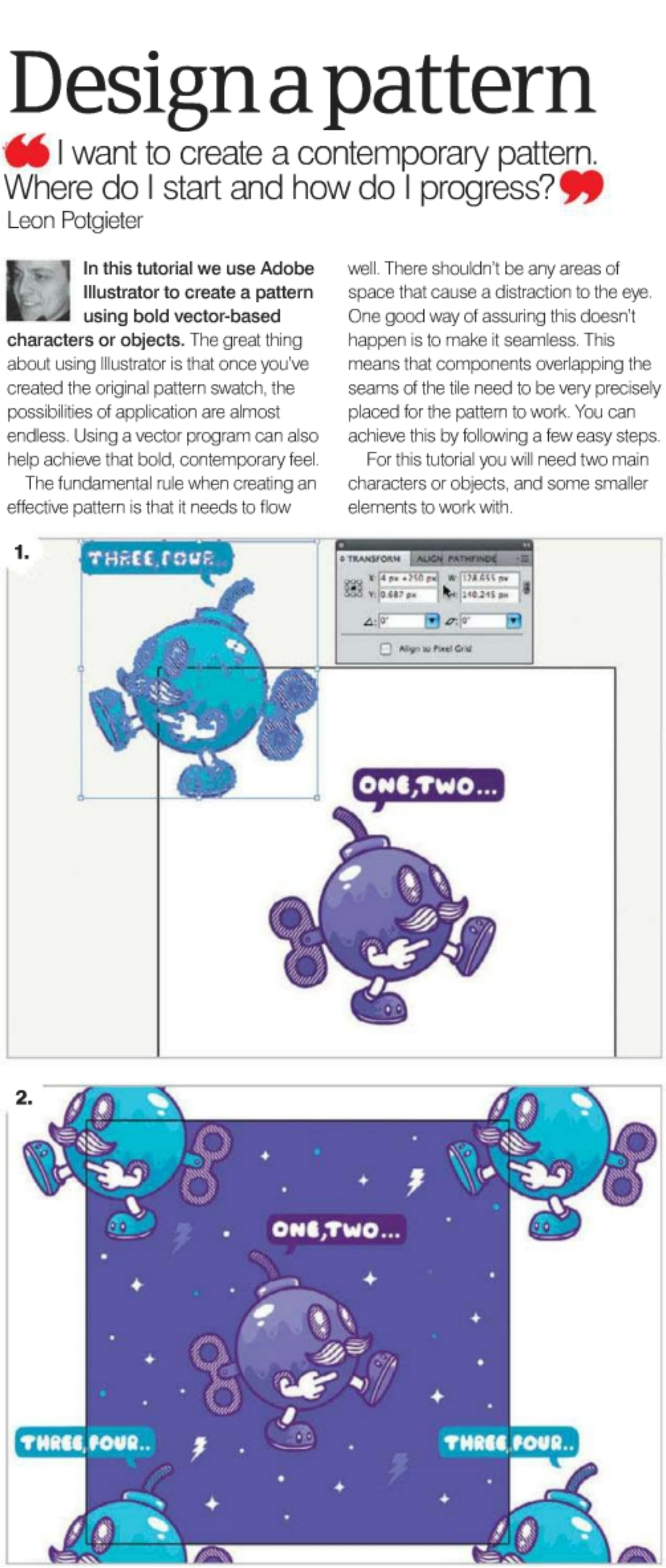
“I want to create a contemporary pattern. Where do I start and how do I progress?”

Leon Potgieter

In this tutorial we use Adobe Illustrator to create a pattern using bold vector-based characters or objects. The great thing about using Illustrator is that once you've created the original pattern swatch, the possibilities of application are almost endless. Using a vector program can also help achieve that bold, contemporary feel.

The fundamental rule when creating an effective pattern is that it needs to flow well. There shouldn't be any areas of space that cause a distraction to the eye. One good way of assuring this doesn't happen is to make it seamless. This means that components overlapping the seams of the tile need to be very precisely placed for the pattern to work. You can achieve this by following a few easy steps.

For this tutorial you will need two main characters or objects, and some smaller elements to work with.



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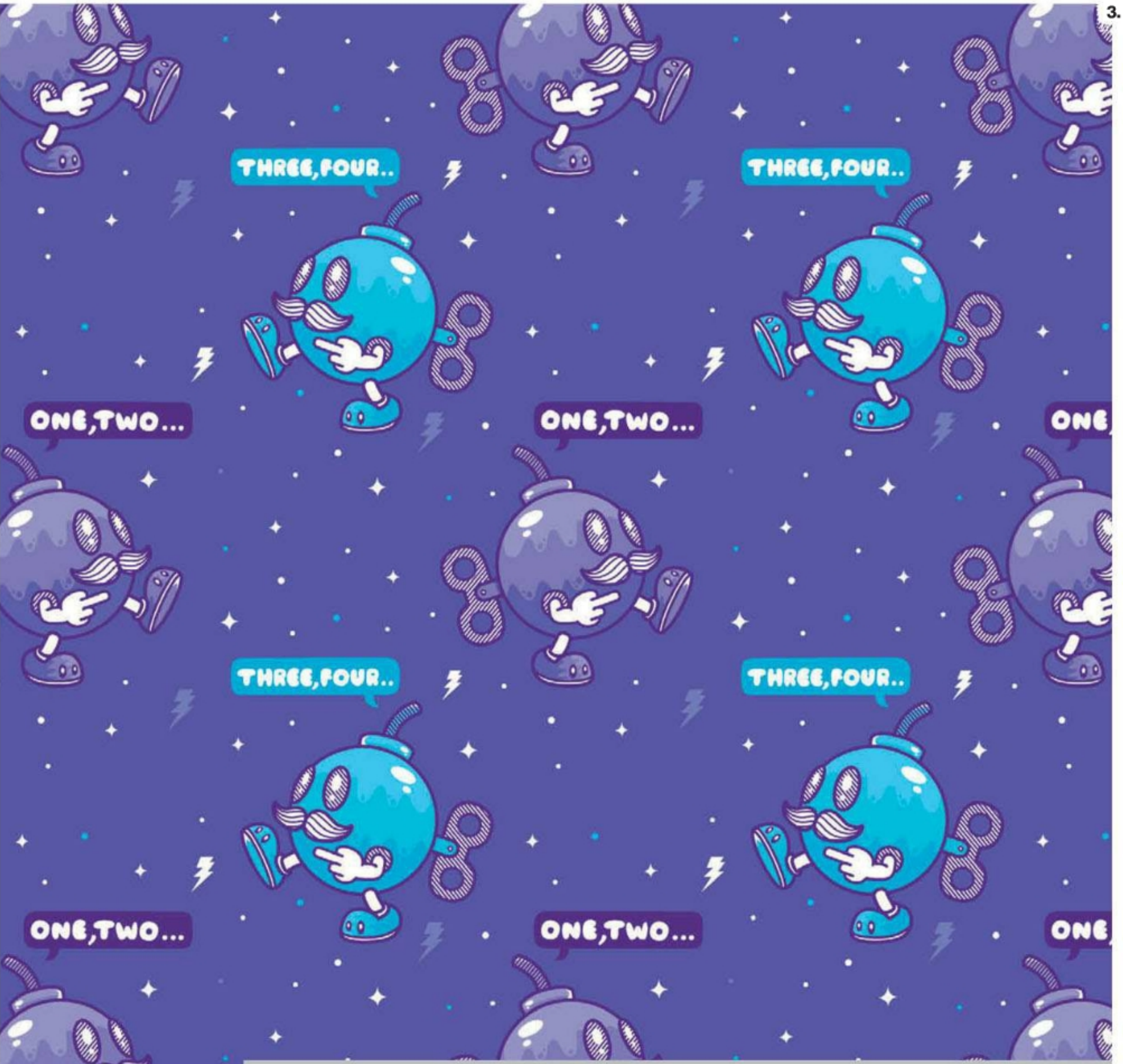


1. Place the main elements Create a new 250 x 250px document. Next, place one of your main components in the centre of the canvas and the other at the top left so that it overlaps the corner. Copy the corner element (Edit>Copy), and paste in front (Edit>Paste In Front). With the copy selected, type '+250 px' after the X value in the Transform panel. Now hit Return in order to shift the object to the opposite side.

2. Add a background and smaller elements Select both corner elements, copy and then paste in front. With the copies still selected type '+250 px' after the Y value in the Transform panel. Hit Return to move the objects to the bottom of the canvas. Fill some of the remaining space with smaller elements. Make a 250 x 250px square, centre it on the canvas and send it to the back (Object>Arrange>Send to Back). Fill with a background colour.

3. Create the swatch Select the square you just created, copy and paste it in the back (Edit>Paste In Back). With the copy still selected, remove the fill. Select everything and group together (Object>Group). Drag the artwork into the Swatches palette and draw a large rectangle. Fill the shape with your new swatch to test the pattern. You might want to revisit earlier steps and resize elements to achieve the best result.

Add perspective

“I’m struggling with atmospheric perspective. What colours do I use to suggest a distant horizon?”

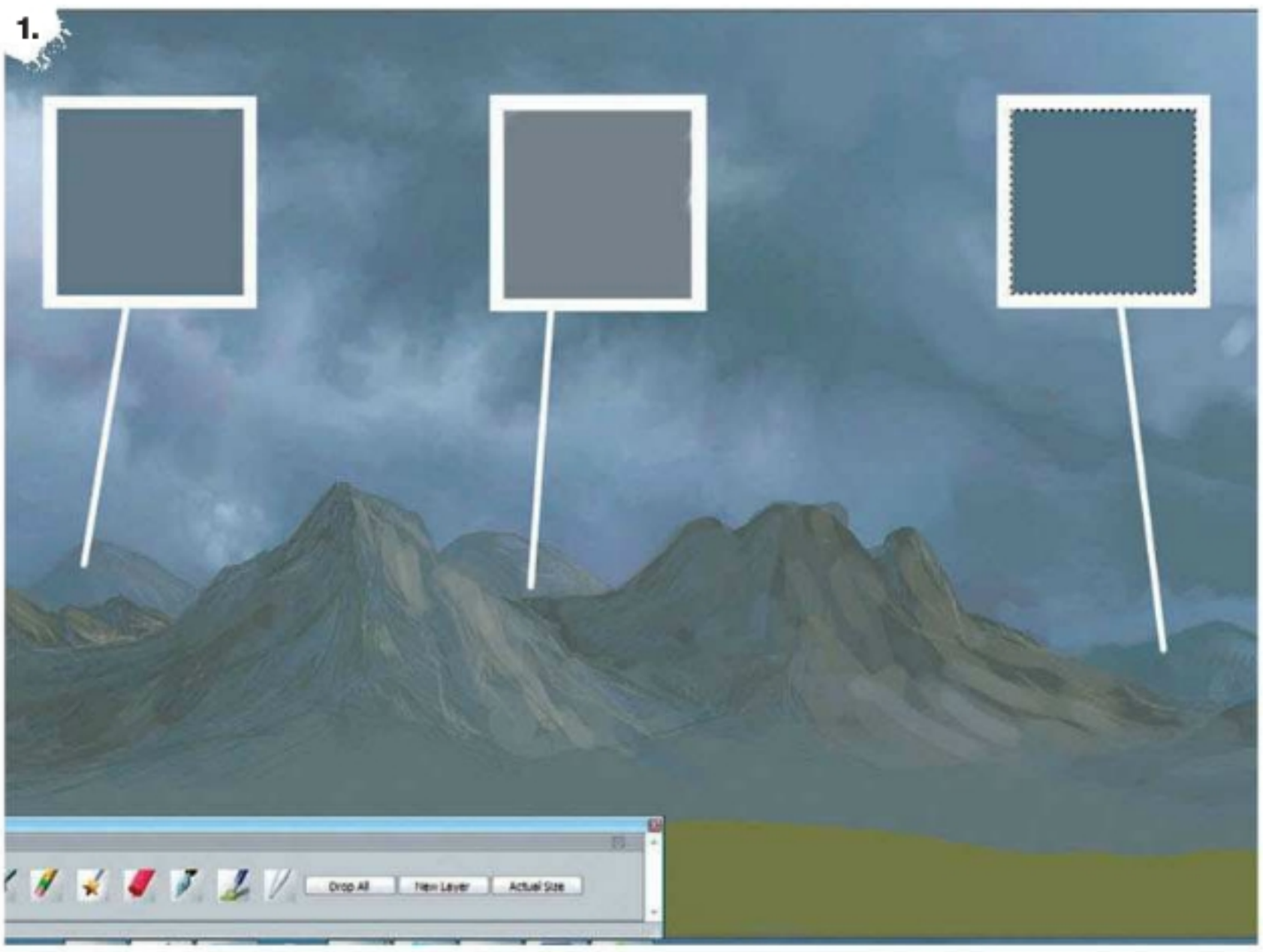
Nigel Ferreira

Desaturated blues. That’s the short cheeky answer. The proper one’s a bit more involved.

Atmospheric perspective (sometimes called aerial perspective) is a way of showing what happens when we observe distant objects through the atmosphere.

I start with a mid value from my sky. This could be anything from bright blue, a dark, heavy and stormy grey, to a deep orange or red in a sunrise or sunset scene. I then open my colour picker and shift this colour slightly towards the greys. There are various ways of laying this colour down onto distant objects (see step two).

Picking a colour is just part of suggesting far away objects. Besides picking up a bit of colour from the atmosphere, colours tend to be less saturated. Far objects also have less contrast and detail than nearer ones or foreground features. If we combine these things we can suggest a distant horizon.



“Atmospheric perspective is a way of showing what happens when we observe distant objects through the atmosphere”

1. Observation and analysis It's useful to examine images (or photographs) that use atmospheric perspective and get your colour picker out to analyse the colours used. It can sometimes be surprising to notice how blue or grey distant objects actually are, and their lack of contrast or detail. Also keep your eyes open in the real world. Every day I get a great view over the Clyde of the mountains and hills of the Cowal Peninsula.

2. Getting the right colours This image demonstrates two methods I use. The first step of each simply shows the rough sketch and values. In step two of the first example I have used the 2B Pencil in Painter on a new layer to lightly hatch in some colour over the object. In the other example I have used an Airbrush tool to lightly dust the objects with the colour. The final stage of each shows the results after blending.

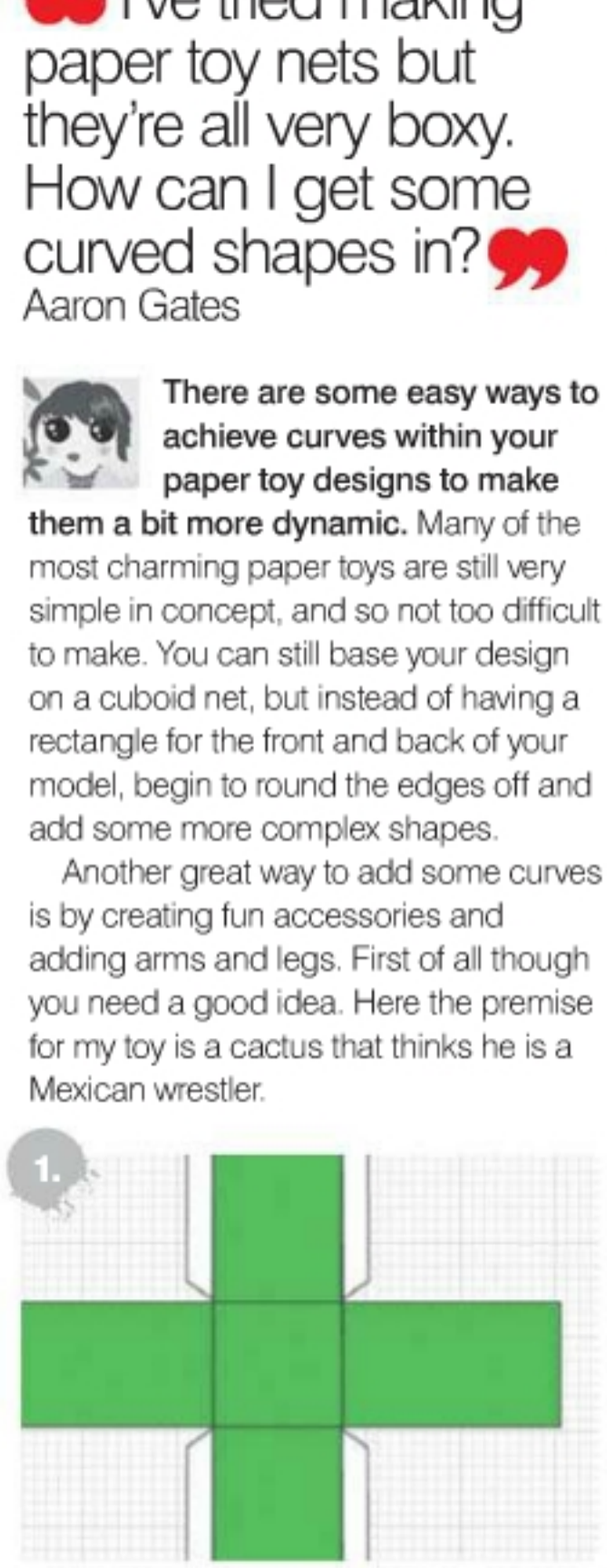
3. Put it all together Here you can see the results. One of the great things about using atmospheric perspective is how much it enables foreground elements to 'pop' in an image. Note that atmospheric perspective isn't simply used for the distant mountains. The same techniques and principles have been applied to distant grass. Another atmospheric effect shown is that upward facing objects on a cloudy day tend to get a bit of lighter sky colour as well.

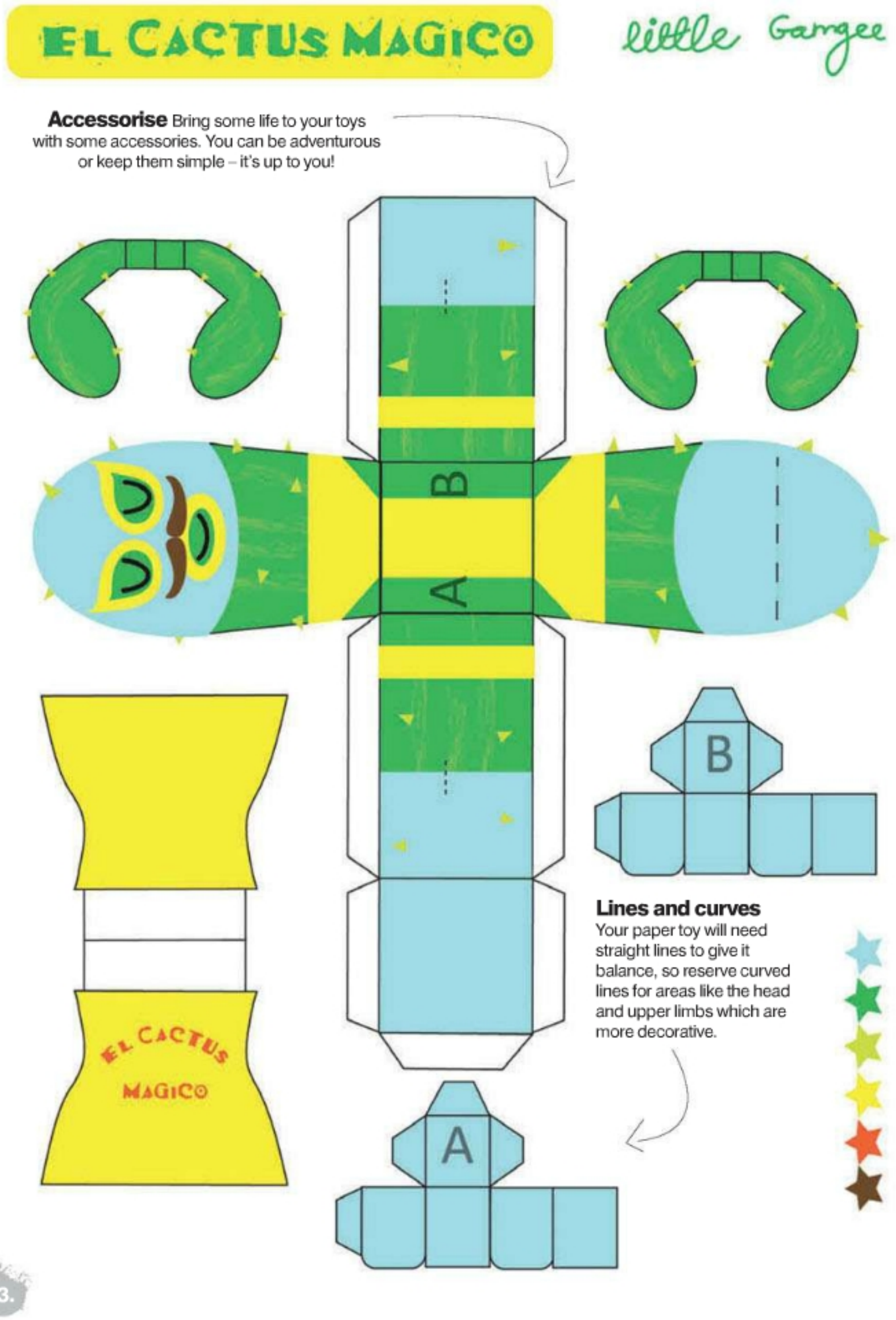
Box nets

"I've tried making paper toy nets but they're all very boxy. How can I get some curved shapes in?"
Aaron Gates

There are some easy ways to achieve curves within your paper toy designs to make them a bit more dynamic. Many of the most charming paper toys are still very simple in concept, and so not too difficult to make. You can still base your design on a cuboid net, but instead of having a rectangle for the front and back of your model, begin to round the edges off and add some more complex shapes.

Another great way to add some curves is by creating fun accessories and adding arms and legs. First of all though you need a good idea. Here the premise for my toy is a cactus that thinks he is a Mexican wrestler.





1. Create a basic net I sometimes find it useful to start this process by showing the grid (View>Show Grid). When designing, this will help you line up your net more effectively. Once this is in place, you can begin creating a square at the middle of your design; this will eventually be the base of the model. From this simple square the rest of your paper toy can grow.

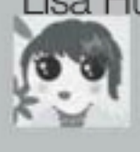
2. Introduce the curves Start off with a rectangle and think of the front and back almost as illustrations rather than as part of a net. Obviously the bottom of the rectangle is connected to the initial square you drew and that can't be changed, but the rest of the shape can be altered. For it to work as a net, just make sure the shape doesn't become any thinner than the original rectangle.

3. Don't forget the accessories
To add more interest and some more varied shapes, think about the accessories which could be included with your model. Here I have added a cape and, of course, arms and legs. The legs need a sense of stability so will be a bit boxy, but the arms can be really curvy. These additions will make your finished model look a lot less boxy.

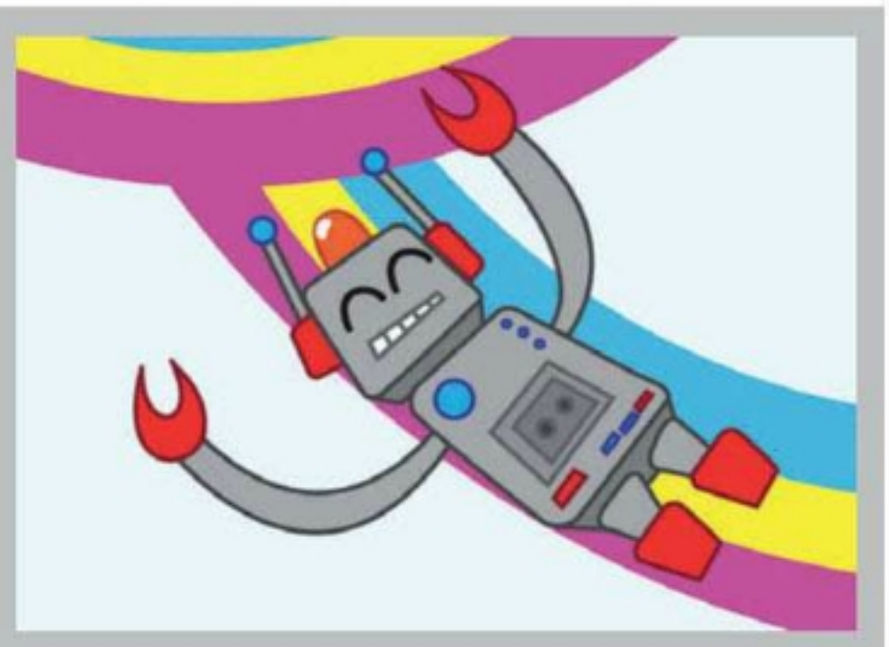
Quick fix question

“Can you offer any general advice for drawing robot characters?”

Lisa Hutton



Robots are great to draw to get over creative block, as you can create them very quickly. In Illustrator use the shapes as building blocks to develop the basic form; you can go back and tweak these to make them more interesting. To give it more personality, add buttons, aerials, screens, etc, and bring in some more human elements for the face.



Package design

“What kind of things should I consider for packaging design?”

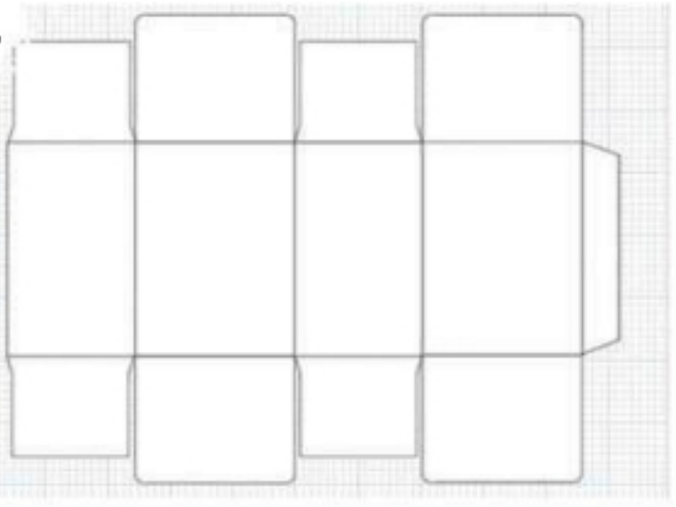
Tom Anderson

When creating packaging, remember that it can be just as important as the product within. In the world of collectable toys, the boxes can often become collectable items in themselves!

Think whether or not you want to include a window to allow the product to be viewed. Often with art toy series, it is left out, which gives the product a sense of mystery, like opening a present. This allows you to wrap artwork around the whole box uninterrupted.

The packaging should be an extension of your toy rather than just a holder for it. Key points to think about are size, use of colour and text, ensuring fonts are readable, and reflects the product. Also use your imagination and research; it doesn't always have to be a plain box, it could be a carton, a rocket or more.

1.



2.

3.

1. Create the net First of all you need a base on which to put your design, so create a net. In most cases this will be a cuboid, but this doesn't have to be the case (see the previous question). Have a think about what other shapes might reflect your product better. Do a bit of research first. Obviously when designing the net, make sure your toy will fit inside comfortably.

2. Pick your colour scheme Lock your net on its layer and create a new layer for your artwork. Before you start, pick the colours you want to use wisely, making sure they reflect your toy. Don't just throw as many bright colours on your packaging as possible in order to try and grab someone's attention. Illustrate the faces of the net with images that promote the product.

3. Text placement Finally you need to bring in your text. Create a new layer and pick two/three fonts – any more and the design will look confused. This text needs to communicate any relevant information, advertise you, and include any restrictions and warnings. Your main font should reflect your toy, eg I've used a Mexican-style font, but make sure it's readable.

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About the mag

Boost your design and illustration

Expert tutorials

In-depth guides written by digital pros, showing you how to copy the latest trends

Inspirational features

Industry-led advice and insightful interviews with today's biggest digital artists

Free CD!

Each issue comes with a resource-packed disc

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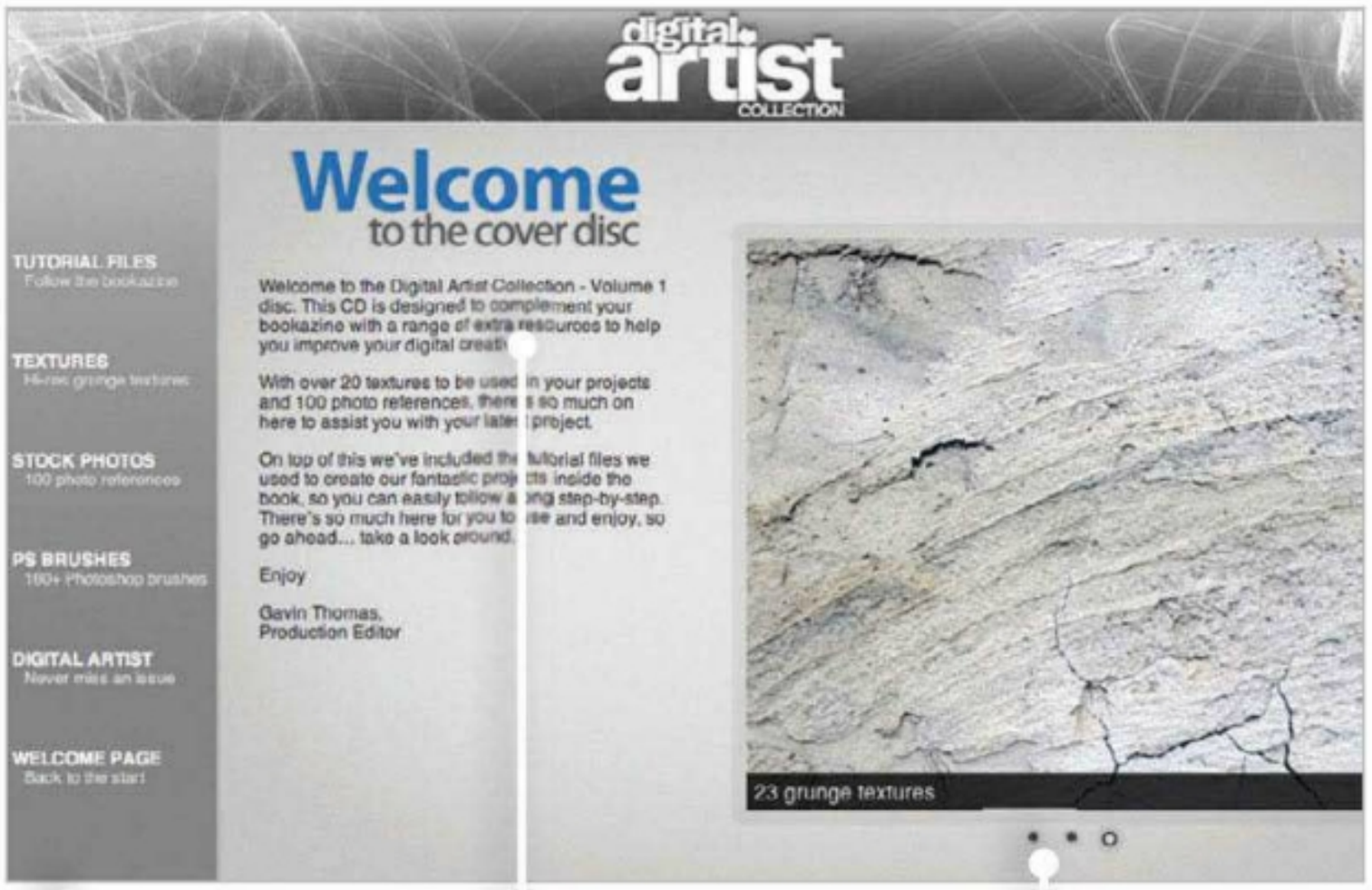
On the Disc

Follow the tutorials in this collection with the files on the free disc

To help you follow the detailed tutorials in this bookazine, and then take them further by experimenting with your own design ideas, we have provided you with a cover disc absolutely full of useful resources. The tutorial files section of the cover disc contains resource packs for our in-depth tutorials (see the 'Source files available' boxes for more detail), allowing you to produce exactly the same piece of amazing digital art that is featured. Then there are the free textures, brushes and stock photos, to help you get inspired and create something new. Finally, there is the Digital Artist magazine section, where you can find links to all of our back issues and subscribe to our latest. Have fun, and enjoy this collection!



Navigation bar: All the content on this disc can be quickly and easily accessed by clicking on the navigation bar links.

Main window: From the tutorial resource packs to the free project matreials, everything you need is shown in the main window.

Display panel: When browsing through the sections of this disc, the display panel will show you a preview of the content you are about to download.

> "Everything you need to complete the tutorials or start experimenting with your own designs is on the disc"

Free textures

Whether you're laying them over solid colour fills, adding depth to a painted scene or roughing up a 3D model, textures are indispensable when it comes to creating interesting pieces. This disc features 23 high resolution 'grunge' textures, absolutely free.

HOW TO USE THE DIGITAL ARTIST CD

Running the discs
These discs have been compiled to run on Windows XP and Vista and Mac OS X.

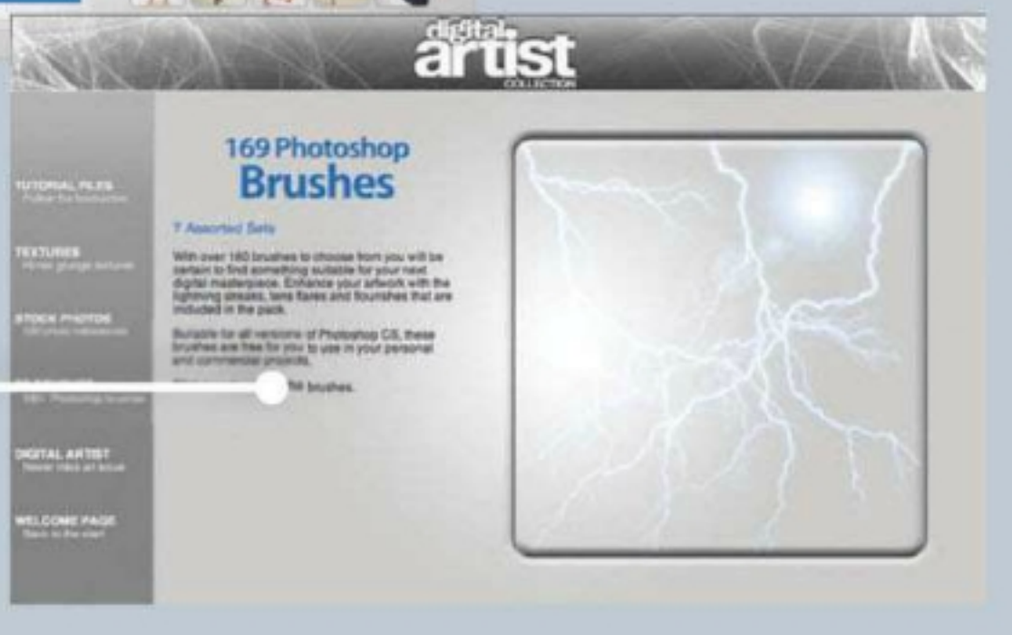
Windows users
The CD-ROM should autorun once placed into your disc drive. If not, follow the instructions below.

1. Browse to My Computer.
2. Right-click on your CD drive and select Open from the drop-down list.
3. Double-click the launch_disc.html file or open with FireFox or Google Chromer in order to run the CD interface.

Apple mac users
We support OS X 10.3 and higher unless otherwise stated.
This CD-ROM interface will NOT autorun when placed into your CD drive. Instead:

1. Double-click the CD icon on your desktop.
2. Double-click the launch_disc.html file or open with FireFox or Google Chromer in order to run the CD interface.

Licensing
Some software on this disc is shareware, which means that if you continue to use the program, you should register it with the author and in some cases pay. Freeware programs that may be included can be used free of charge indefinitely. Trial versions of software are either time-limited (eg, they will stop working after 30 days) or have some features disabled.



Brushes and photos

With 100 free stock photos on this disc, there is plenty of material to work with when practising techniques and toying with ideas. Plus, the 169 Photoshop brushes we put on there too means that there are plenty of fresh tools to experiment with.

digital artist COLLECTION

Inside
Photoshop
Corel Painter
ArtRage 3.5
Illustrator

Work with Photoshop

Combine photos, effects and brushes for stunning artwork

Design and Illustrate

Compose your own style with vectors, textures and palette tools

Paint a masterpiece

Create lifelike paintings using vibrant oils and watercolours

Art on the move

Paint wherever you are using the best iPhone and iPad apps

On the disc

- Resources for tutorials
- High resolution textures
- 100 photo references
- Over 160 free brushes for Photoshop

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