3dtotal.com

# 2d ARTIST

Concept Art, Digital & Matte Painting Magazine
Issue 047 November 2009

# GIVE YOUR ENVIRONMENTS ATMOSPHERE

with our Steampunk Scene Creation and Cloud Custom Brush Tutorials

## Editorial

In this November issue of 2DArtist Magazine we go atmosphere crazy with a fantastic steampunk tutorial by **Ioan Dumitrescu**, who shows us how to use Google SketchUp to create a 3D base to get some interesting structures established for a 2D illustration (paintover) in Photoshop, and we have **Darren Yeow** showing us how to make custom brushes for clouds – perfect for adding some extra oomph to our environments and giving rockets a good kick off the Earth! These two tutorials illustrate just how a bit of extra attention to creating atmosphere in your paintings can go a long way to improving the overall quality of your artwork. So follow Ioan and Darren on **p.52** and **p.40**, and see what their techniques can do for you!

We have a character-filled tutorial on **p.62** for you this month, as our Dynamic Characters series draws to a close. **David Smit** speaks openly and honestly about his theory of good camera placement, framing, and fore-shortening in digital painting. Confidently accepting this tutorial for 2DArtist, David soon realized what a huge subject he'd let himself in for, and the result of this is a fun article filled with genuine discussion about what works, what doesn't, and where you should pay close attention and further develop your understanding of the subject. This is a really enjoyable article for those who are brushing up their skills and want to further their knowledge on the topic of camera placement and framing, to give their character illustrations that extra bite! And stay tuned to 2DArtist as we'll be interviewing David Smit in the next issue.

**Nykolai Aleksander** brings us the penultimate chapter in our Beginner's Guide to Digital Painting tutorial series this month **(p.78)**, looking at using photos to give texture to your paintings, and discussing various selection techniques which are handy when it comes to incorporating photos in your work – be it photo manipulation or matte painting. With the tutorial now in its final stages, Nykolai will be back next month to wrap up the series and will bring us her final version of the painting, complete with finishing touches and tweaks, as well as some lessons on how to save our work for various uses.

In the spirit of Halloween last month we featured a zombie-inspired illustration by **James Wolfe Strehle** … This month, he's back and he's brought the zombies with him! We asked James to write a making of article for this issue, discussing the creation of his nightmarish image, painted in Photoshop. Feeling rather hungry at the time he was putting the article together for us, he has taken a unique approach to his making of – one which I've never come across before – and takes us through the painting process using the analogy of … a sandwich! I'll leave you on your seat edge there and let you read the article for yourself to find out what I mean – it's a really quirky article that I'm sure you'll love, so hop on over to **p90** to find out more.

Our Sketchbook article takes a step away from the usual pencil grays of our past issues this month, as **Lois van Baarle** shows us how she uses blocks of color to sketch her ideas down and warm up for her paintings.

**Free Stuff!**
Wherever you see this symbol, click it to download resources, extras!

**DOWNLOAD RESOURCES**

This is a beautiful and colorful article with some behind-the-scenes notes touching on a variety of sketching styles and techniques, so please stop by **p.16** to enjoy Lois's sketchbook, and be sure to check out her "sketchblog" (http://sketchblog.loish.net) for more from this talented artist!

To wrap up this issue, we interview **Feng Zhu** on **p.6** – who needs no introduction! As director of his own company and school, we were simply privileged that he could spare us some precious moments to talk to 2DArtist about his latest endeavors. We have a stunning selection of his work published in his interview article to accompany the fantastic answers to our probing questions. And talking of great artwork, stop by the Gallery on **p.30** to see new work by **Arnaud Valette**, **Jason Seiler**, and **George Patsouras** before you get back to your digital canvases and paint those evenings away. Enjoy this issue, and we'll see you back here for another next month! **Ed.**

Look for this button inside

**DOWNLOAD RESOURCES**

• Free! Custom Brushes
• Free! Base Image

3dtotal.com

# 2d ARTIST

Concept Art, Digital & Matte Painting Magazine
Issue 047 November 2009

**Interview**
Feng Zhu

**Articles**
Sketchbook of Lois van Baarle

**The Gallery**
Jason Seiler, Arnaud Valette,
and more!

## GIVE YOUR ENVIRONMENTS
## ATMOSPHERE
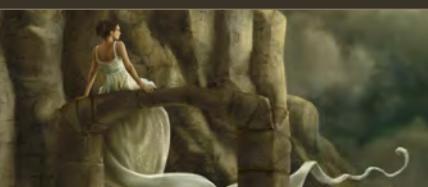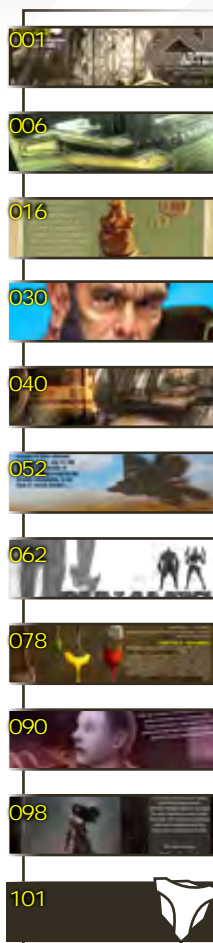with our Steampunk Scene Creation and Cloud Custom Brush Tutorials
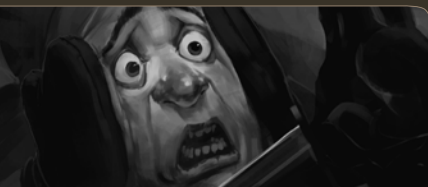
**Dynamic Characters: Enhancing your Character Concepts**
David Smit teaches us the importance of good camera placement and framing in the final chapter of this tutorial series

**Custom Brushes: Clouds, Fog and Directional Smoke Effects**
Darren Yeow shows us how to create a set of custom brushes which can be used to create airbone particles, such as clouds, fog, mist, contrails and directional smoke

**Beginner's Guide to Digital Painting**
Nykolai Aleksander looks at photo textures and how to use Quick Masks, the Wand Tool, the Liquify Filter and Layer Masks, in the penultimate chapter of this tutorial series

**Steampunk Train Depot**
Ioan Dumitrescu transforms a simple Google SketchUp scene into a steampunk train depot in our Using 3D as a Base for 2D Painting tutorial series

# Get the most out of your
# Magazine!

If you're having problems viewing the double-page spreads that we feature in this magazine, follow this handy little guide on how to set up your PDF reader!

## Setting up your PDF reader

For optimum viewing of the magazine it is recommended that you have the latest Acrobat Reader installed.
You can download it for free here: DOWNLOAD!

To view the many double-page spreads featured in 2DArtist magazine, you can set the reader to display 'two-up', which will show double-page spreads as one large landscape image:

1. Open the magazine in Reader;
2. Go to the View menu, then Page display;
3. Select Two-up Continuous, making sure that Show Cover Page is also selected.

# Contributing Artists

Every month many artists around the world contribute to **3DCreative** and **2DArtist** magazines. Here you can find out more about them. If you would like to be a part of **3DCreative** or **2DArtist** magazine, please contact:

lynette@3dtotal.com
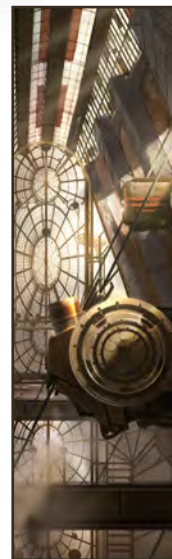
## Ioan Dumitrescu

20 year old architecture student and self-taught concept designer. He loves drawing the things he imagines in his head, and trying to convey a story to the viewer through them. He is currently working freelance.
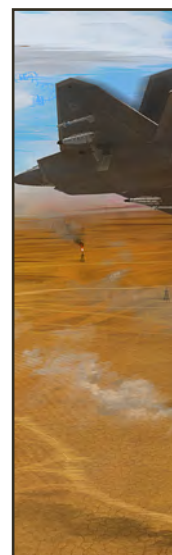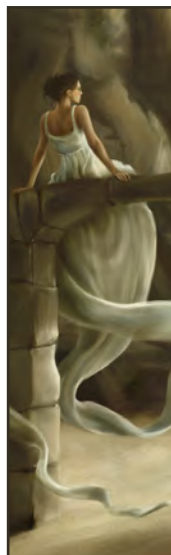
jononespo@yahoo.com

## Nykolai Aleksander

Born in Germany in 1978, she moved to England in 1999, and currently lives in South Africa with her husband. She's been painting digitally since 2002, and works as a freelance illustrator for both private clients and companies.

http://www.admemento.com

x@admemento.com

## Darren Yeow

27-year old self-taught illustrator, originally hailing from Adelaide, has worked as a concept artist, user interface designer and art director in video game companies for the past four years, and currently lives in Melbourne. Outside his full-time role as an in-house concept artist working on next-gen games, he tutors hopeful young artists, works on commissioned freelance projects, and is writing a book for those wishing to pursue a career in concept art.

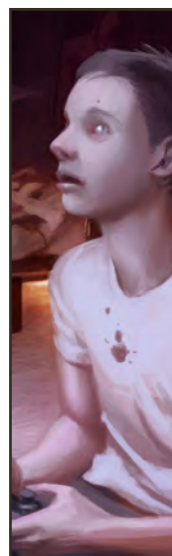http://stylusmonkey.carbonmade.com

## David Smit

When not traveling or working overseas, David resides in Amsterdam, freelancing in concept art, illustration and art direction jobs. It's only when he sleeps that he's not busy! He is always on the search for great projects, opportunities, stories, good music, and a nice cold beer.

http://www.davidsmit.com

david@davidsmit.com

## James Wolf Strehle

A passionate freelance illustrator working in New York who spends 100% of his time painting – 70% learning and 30% making fun of animals. He claims to be terrible at math, he has a beard to keep his hair in place, and he's always looking for new work and opportunities to pursue. If you would like to learn more about this odd fellow, you can do so through his website and blog.

http://jameswolfart.blogspot.com/

www.jamiestrehle.com

"When I first got a call from the ranch, it was definitely quite - what's the best way to put it? - exciting, I guess. To be able to work in the place where all the films I love had been created..."

# FENG ZHU

Feng is a guy that needs very little introduction. He's one of the most influential artist around to date. He's worked for the likes of Lucas Arts and Blur Studios, and he's contributed his talents to countless high profile movies. Currently the director of his own design company and also his new school, we chat with this extremely busy artist in our latest *2DArtist* interview.

# Interview with Feng Zhu

Hi Feng, it's a real pleasure chatting with you today. Being an artist who needs little introduction we will skip the normal opener and plum for a more unique starting question: Could you describe what fascinates you about drawing, what the lure is?

I think for me it's more about the design versus the drawing. Because for me, where the fascination comes from is creating something that never existed before. To always see that design come out in either the form of a video game, film or toy, that's the part that pays off. Guess that's what makes me happy when that stuff comes out. As for the drawing part, I don't care too much about it as I was never really an artist. When I was growing up, I was always thinking about new designs and how to get all these ideas in my head out onto paper. So drawing, for me, is actually just a tool or I guess a communication method. I really wasn't involved in colours or different type of stylings and rendering techniques so I really cannot get my designs to come out there. The fact that somebody else or a team can make it into a project or product, that's the fascination for me.

**What first drew you to art and what schools/ colleges did you attend, to develop your skill?**

What got me started in this is, again, design. I actually went into architecture originally because I didn't know about the whole entertainment design industry. Actually at that time, which was about the mid-nineties, there wasn't a big push in that field. Right now it is very popular to have all those "behind the scenes", "art of ..." features and concept art on DVDs and almost all major films now offer them. But back then, there were only VHS tapes and no "behind the scenes" features. It was very hard for someone like myself to find out how to get into the industry and so I chose the closest thing: architecture at UC Berkeley. I went there for about a year and I found out that architecture was really different from what I wanted to do. At that point, I started asking my friends how I get into the entertainment industry or the games industry as an entertainment designer. That's when I found out about CalArts and Art Center. I went to visit both schools and just by looking at the students' gallery I immediately knew that Art Center was

the school to attend. They were doing stuff way ahead of the industry. Most of their projects took place in either weird, really strange worlds or very much in the future. So I dropped out of Berkeley and went straight to Art Center and I never looked back. It was a really cool place.

Looking over your bio on your website you've definitely had a career that any up-and-coming artist would dream of. Not only have you worked for some of the top games companies around, you've also had the opportunity to work with the man that bought *Star Wars* to life. What was it like working for Mr Lucas and what was your role in the production of Episode III?

Well, it was fun and I think like any job, the first two weeks were partially professional and partially filled with fan boy moments. These IPs we touch existed even when I was a kid. I grew up, of course, watching *Star Wars* and I'd always wanted to work on a film like that. When

I first got a call from the ranch, it was definitely quite - what's the best way to put it? - exciting, I guess. To be able to work in the place where all the films I love had been created, like *Indiana Jones* etc ...

The first week there was very magical. George has this Skywalker Ranch in the middle of pretty much nowhere. It's a very nice, huge Victorian house; there's no work environment like that in all the film industry. And all the original stuff from *Star Wars* and *Indiana Jones* and other IPs are still in the house. So you are surrounded by

FENG ZHU DESIGN

a lot of history, history that molded my career. It's definitely an experience that is very hard to explain unless you have been there.

And then, of course, there was meeting Mr George Lucas. I was kind of nervous, I guess, for the first week or two because normally it's hard for anyone to meet George and there he was, working one on one with us in these meetings. But then after a two to three week period, everything settled down and everyone turned professional. It was just another job, to make the movie happen and make the clients - in this case, George - happy. So we just worked week by week, designing things we needed for the film.

The other part that I really liked about working at the ranch were all my friends. Most of them were people I went to school with at Art Center. So it was kind of like a class reunion of some sorts. Everyone was working in the same place, a very small art department with about six people. We had a lot of fun times there since the work was quite hard. So we were there for

C&C3 | GDI Drop Ship
FENG ZHU DESIGN

many late nights, pulling all-nighters and doing all these things. But yeah, it was lots of fun!

Your portfolio has to be one of the most interesting that I've seen; I could have spent hours flicking through your work. Your concepts for EA's *Battle for Middle Earth II* game are truly inspirational. The one piece that brings a smile to my face is the little Tutenstein character you've done. Could you tell us a bit about this character and how he came about?

Wow, Tutenstein! That was back when I worked at Blur Studios. So Blur is one of those houses that take on many different kinds of projects at once. Often we worked on something we called bid projects, which is when the studios have a script idea but don't know what it is going to look like. Until they do, it is very hard to get that project made. So they go to a studio like Blur to visualize the concept and the first person that this kind of job lands on is the concept guy.

For the Tutenstein project I read the pitch and it was about a little kid that had died a long time ago in Egypt and who is being shown in

· LOADER TRUCK ·
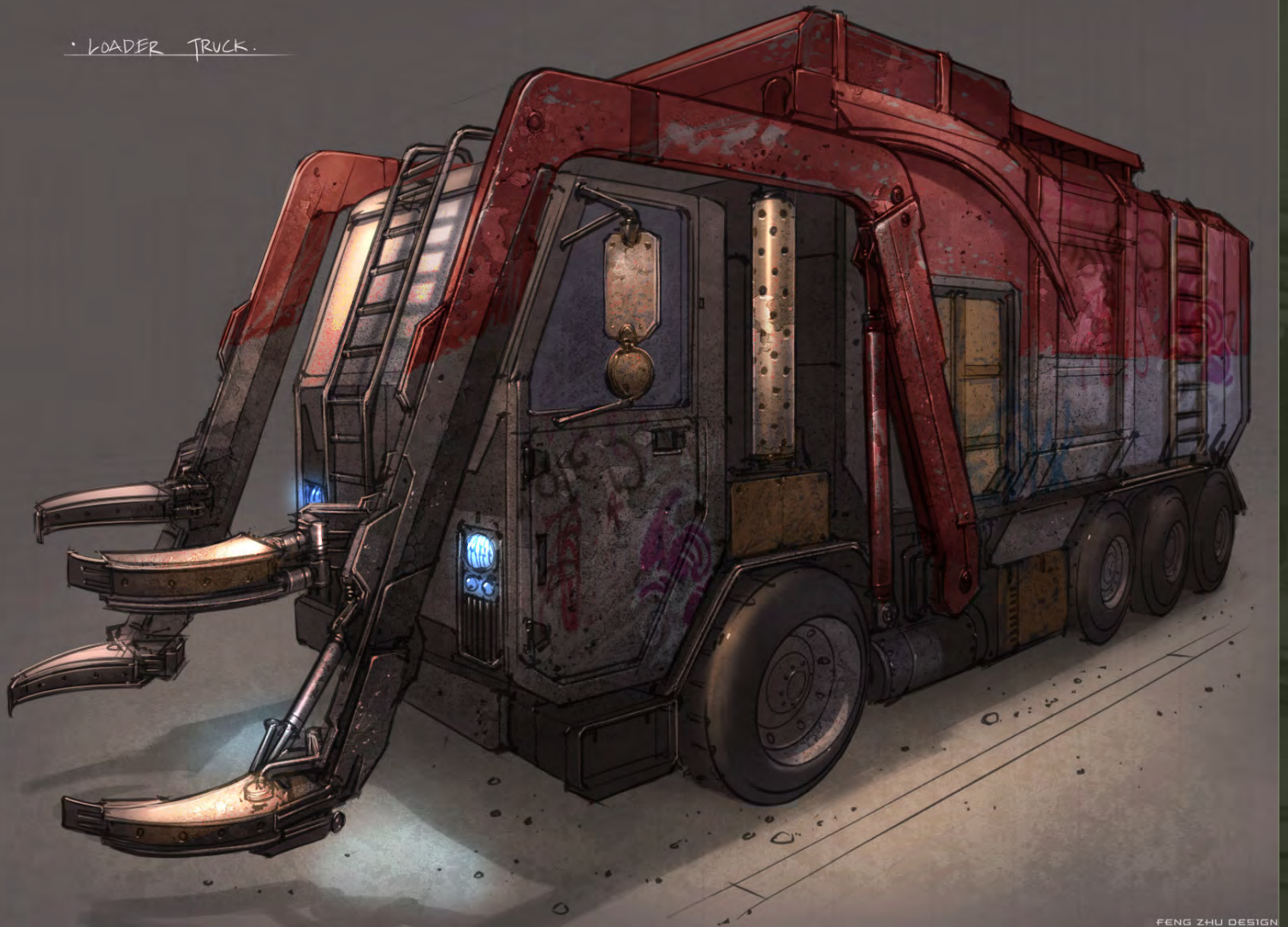
FENG ZHU DESIGN

## "If you can deliver something fast that also looks good then you can make more income that way."

a museum. Somehow at night, he wakes up and he's got little cat with him, and they control everything in the museum. It sounded like a very cool idea for a kids' show and reminded me a little bit of Calvin and Hobbes, because Calvin also has a cat or tiger and they do imaginary friends stuff. So I liked that because Calvin and the Hobbes is my favourite comic.

The original concept for this project was actually going to be in 3D, I believe, but the real show ended up being done in flash or 2D. When I designed it, I added a lot of details to make sure that it was very iconic and would appeal to kids.

But there was also a bit of evilness in there for the older generation. It was quite fun, but I think the final product strayed a little bit away from the original idea, mostly, I believe, due to budget. But still, it was very cool and I was glad to be a part of it.

So what's the standard process for you when you come to do a concept? Do you start off traditionally then move to the computer or do you hit the Wacom first?
I guess it's both. When I started from about '97 all the way to 2003, I was working traditionally, meaning I was drawing on paper and finishing stuff on paper. But in about June or July of 2003, I made the decision to completely switch over to digital. This was mainly for efficiency reasons because in our industry, the saying that "time is money" is very, very true. If you

can deliver something fast that also looks good then you can make more income that way. Working on a computer increases your speed tremendously because you have things like the ability to texture, to undo and all these brushes so you don't have to carry around equipment. It was very hard at first, but after about three months I felt like paper was no longer necessary. So I actually haven't drawn a single thing on paper for professional reasons since, I guess, '03. For the past six years, it has been all digital and everything, including the rough thumbnails, has been done on a Wacom.

That's the beauty of digital art. It's something I call the "first generation pass", which means a thumbnail to a rough to a final image can actually take place in the exact same drawing. You can start something very rough, clean it up

a little bit, paint on it and turn into a painting, all from the initial sketch. Whereas when using traditional methods that cannot happen because we do a little tiny thumbnail, then blow it up and do a photocopy, and it becomes second generation. And then if you overlay it or copy it, that becomes third generation. Rendering on top of that copy becomes fourth generation already. So by the time you get to the fifth or sixth generation, you've actually lost quite a bit of the energy that the designer put in.

I like the computer because it makes the works feel more alive. You can feel the personality of the designer inside the piece and that's how I like to work these days. As far as how I do the design, there's no difference. Every designer, I believe, does the same thing. You start by brainstorming on paper, producing a bunch of

thumbnails, getting the ideas out and trying to find as many interesting shapes as possible. Being an entertainment designer, the number one thing I have to focus on is that it has to be very cool. Things like functionality and all that stuff still have to be taken into consideration, but because my stuff doesn't have to exist in the real world, I have the luxury of being able to focus on making it look cool.

Teaching is a big part of your life right now with you setting up a design school, but how did this all start? What is it about teaching that has made you devote so much of your time to it?
Well, it's true - right now I devote about half of my time to teaching. This actually started a while ago, just in L.A. I was asked by a school to be a kind of TA; to substitute for a teacher. I'd never taught prior to that. I showed up and

**"I was like, 'Wow, all the stuff I have been teaching them is going into these huge films!' "**

the cool thing is that all the students in my class at that school were professionals. I had professional comic book guys and professional film guys and all these really, really talented people and that really changed my concept of teaching. Especially that class, because a lot of those guys actually became my friends and we were able to share ideas and help each other produce better work. And I saw the direct translation of my teaching into the projects they were working on. For example, I have a couple of guys who were taking my class to learn how to do concepts for designing the *Matrix* film. Afterwards, they showed me how the work they

were doing for the film and I was like, "Wow, all the stuff I have been teaching them is going into these huge films!" It was pretty interesting.

After that, I taught at Gnomon for a long time. And then Art Center finally invited me to teach over there and that was a huge honour for me because they take their staff very seriously. All their teachers are very high caliber; it's almost like getting a job at a very high-end studio. So the fact that they asked me to teach not only their regular class, but their very, very advanced entertainment courses, was quite a real honour.

I have been addicted to teaching ever since because you see a lot of people. When they are in school, they are called students but when they get out, they become your peers. They become the people you sit next to, the people you work on projects with and you help each other find jobs. So by teaching, you're essentially building your own network of designers. A lot of these guys will stick very close to you because often times, you helped them find their first job or helped them get into the industry - I have lots of stories like that. It's

always great for me when someone has taken one of my classes in a subject they didn't know much about before and then after a few years, they are out there making all these cool projects and cool video games I am playing. Like when you see the credits at the end of a video game and you are like, "Wow, that was a student of mine" or "I remember teaching that guy this thing and now he's doing this thing" - that's a great feeling.

It's all about sharing as many things as possible. That's what makes our school quite different. We give out everything we know. If I find some new technique or something for Photoshop, we'll teach it right away. We don't follow any kind of curriculum in that sense, like you have to teach this, that and this. We cover the fundamentals and anything else that is going to help the students get a job or advance their careers. We definitely don't hold back any kinds of secrets.

**You've got your design studio, your new school ... so what's the next mile stone for you?**
For me, right now, I think getting the school up and running is definitely the highest priority. The next is trying to develop some new IPs because in the past, I worked on a lot, I guess, but they all belonged to somebody else. I think it's the

dream of every designer to start doing stuff for themselves. But I also know the reality of things, which is that creating new IPs is very difficult to do from scratch. If you are a designer, there are thousands and thousands of IPs out there. They are all pretty cool, but how many of them actually make it somewhere? So knowing that reality and with my experience from running the games company, I've partnered up with some key people to help bring everything together. We'll be announcing how we're actually going to do that a couple of months from now. Basically, the partnership enables myself and my partner to take IPs and realize them much more effectively than just having pieces of paper covered in concepts. So that's what I am working on next and hopefully it will make a big splash next year, at somewhere like E3 and Comic Con or something like that.

Alright, that's it. Thanks guys and talk to you again soon!

## Feng Zhu

For more work by this artist please visit:
http://www.fengzhudesign.com
http://www.fzdschool.com

Interviewed by: Christopher Perrins

"WORKING WITH BLOCKS OF COLOR HELPS ME TO GET THIS KIND OF THING OUT OF MY SYSTEM QUICKLY WHILST RETAINING THE GESTURE AND PERSONALITY IN IT THAT I WANTED TO ACHIEVE INITIALLY."

$E=Mc^2$

# SKETCHBOOK
## OF LOIS VAN BAARLE

This month we delve into the sketchbook of digital illustrator and painter Lois Van Baarle.

## SKETCHBOOK OF LOIS VAN BAARLE

## CITY

I drew these sketches as a warming up exercise to start the day – at the time I was making an animated short, so I had to get ready for lots of drawing each morning (**Fig.01**). The sketches include a number of caricatures of some people who live in my neighborhood in Utrecht. I drew them in Photoshop after discovering a more chalky kind of brush, which inspired me to draw using blocks of color rather than lines. This helped me to experiment with shapes and forms more than I would usually. Although the final result is not exactly detailed, it's a really great way to make quick character sketches!

## DOGS

Again, I used the same tools as with City to create these images, trying to capture the different personalities of each dog using primarily shapes and color (**Fig.02**). I was also trying to think like an animator, using simple forms and minimal detail that could be translated into animated characters if need be.



Fig.01



Fig.02

## NO GIRL

This is a rough sketch that never made it into anything, not even a post in my sketch blog (**Fig.03**). I abandoned it because I felt like the colors weren't working out. In this image you can see the techniques that I usually use when sketching digitally in Photoshop: painting over a darker background (I started with a maroon base layer which you can see through the blue background in some areas), using the Warp tool to get the figure looking just right, and using very rough brushstrokes before going into more detail.

## BUBBLEGUM

This is a rough sketch I did which ended up being the starting point for a finished digital painting (**Fig.04a – b**). In this case, I sketched using lines instead of blocks of color or rough brushstrokes. In the sketch you can see two layers of sketched lines – the lighter red lines which form the original sketch, and the darker lines which I sketched on top of the original. When sketching with lines, I tend to start really rough and work my way towards a more detailed sketch using many different layers. It would probably be less time-consuming to just finish the sketch in one go, but I prefer to work towards detail gradually.


Fig.04a
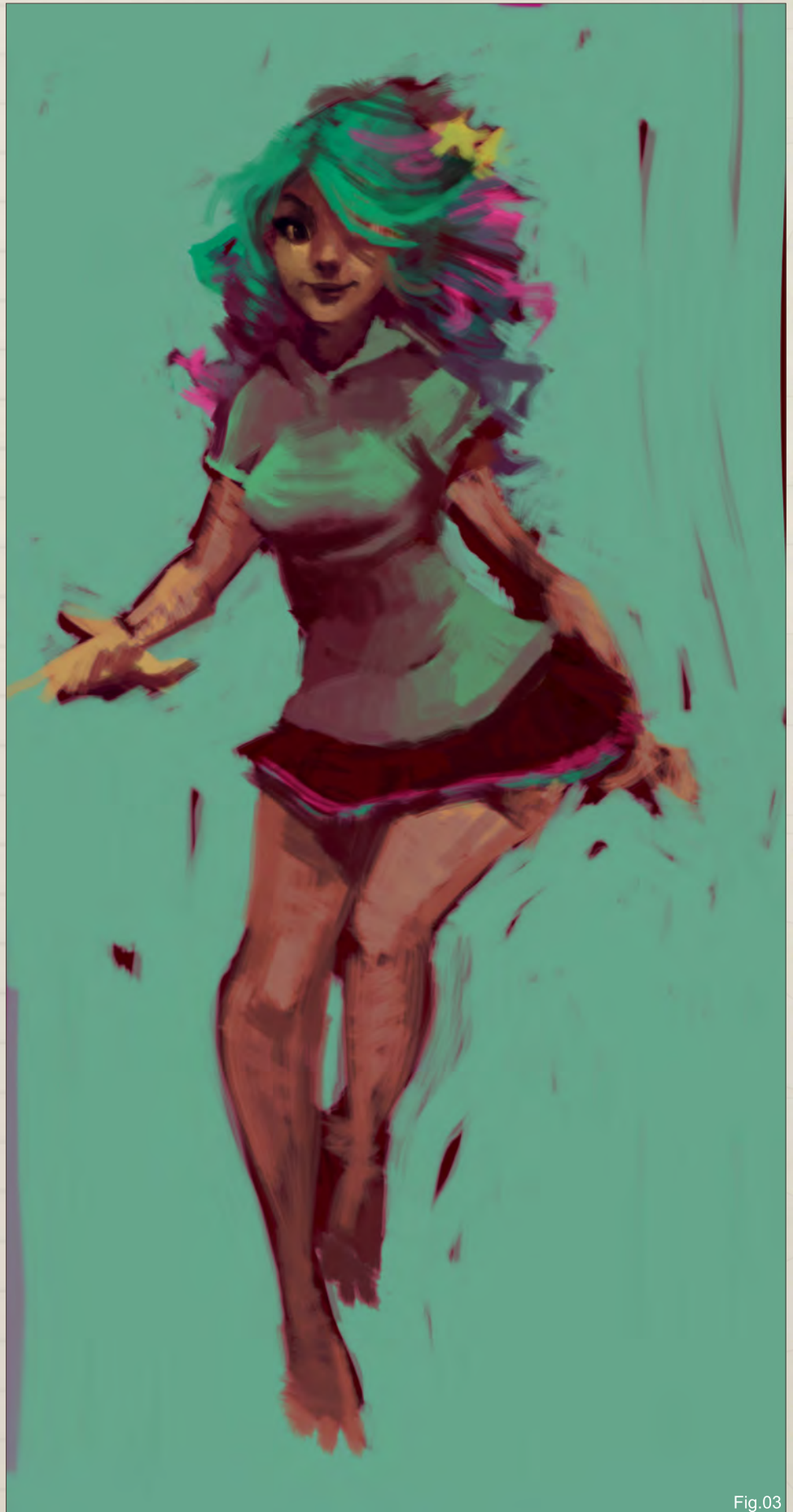

Fig.03

Fig.04b

# RED

This is a very quick sketch – it probably took me about five minutes to do – which I did purely out of the motivation to draw something red (**Fig.05**). Working with blocks of color helps me to get this kind of thing out of my system quickly whilst retaining the gesture and personality in it that I wanted to achieve initially. The style also appeals to me – sometimes more detail does not make a better image!

Fig.05

Fig.06

# CITY II

These are a number of sketches I made in my sketchbook while sitting at a cafe in the city, in front of a large square (**Fig.06**). Since people walked past very quickly I had to draw them as quickly as I could, and usually didn't spend more than a few seconds on each one. After drawing a number of characters with a thin felt-tipped pen, I colored the negative space black with ink to emphasize the shapes and postures of the different people, helping to bring out their personalities. Sketching like this helps me to learn how to draw faster and to try and capture the essence of what I'm seeing, rather than all the details.

Fig.07

## GIRL SKETCHES

This is a collection of sketches from my sketchbook, drawn over a longer period of time (**Fig.07**). My sketchbook is a combination of drawings from life as well as drawings from my imagination – these are from the latter. Most of them are just mindless doodles done for fun or initial concepts for digital paintings I end up finishing later. The tools I like to use for this are thicker, rougher paper and mechanical pencils – by far my favorite kind of pencil to draw with.

# TEACHER

This is a sketch that I did as part of a sketching challenge on a forum (**Fig.08**). Sometimes, when I'm out of ideas, I end up browsing the web in search of ideas, and forums such as these are a great solution. In this case, people were asked to sketch an image of a teacher in 30 minutes. For this image I worked with Photoshop and applied my usual technique of working with shapes and blocks of color, but ended up going into more detail. I had my physics teacher from seventh grade in mind while drawing it.

$$E = Mc^2$$

Fig.08

# TANZANIA

These are a number of sketches from the sketchbook I had with me while in Tanzania (**Fig.09**). I was there for two months and attended the Bagamoyo Arts Festival, in which tribes from all over the country travelled to the festival in order to perform. When traveling, keeping a sketchbook with me is really important because, in a way, it captures more than what photos can. In the future, I would also like to travel and then publish the sketchbooks I create while traveling – something I discovered I wanted to do because of how I sketched in Tanzania.
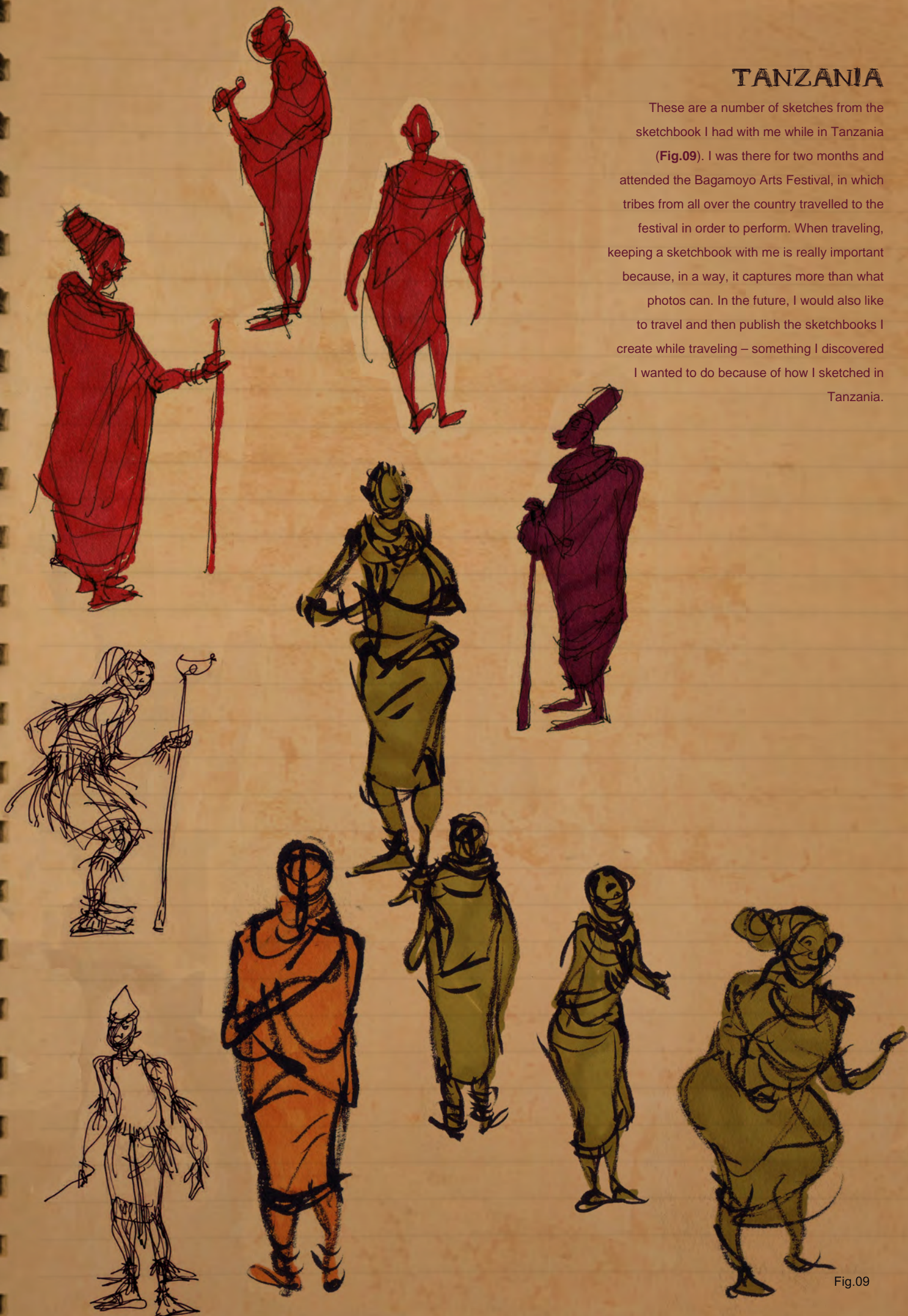
Fig.09

# WILDERS

This is a caricature of the
Dutch politician, Geert Wilders
(**Fig.10**). I really enjoy doing
caricatures, and it's
especially interesting
when drawing one
from a photograph
since there are
so many details
that can be
incorporated into
the drawing. In
this picture I
wanted to capture
Wilders' bitter
expression and
make his head
especially large –
a symbol I found
fitting for this man's
personality!
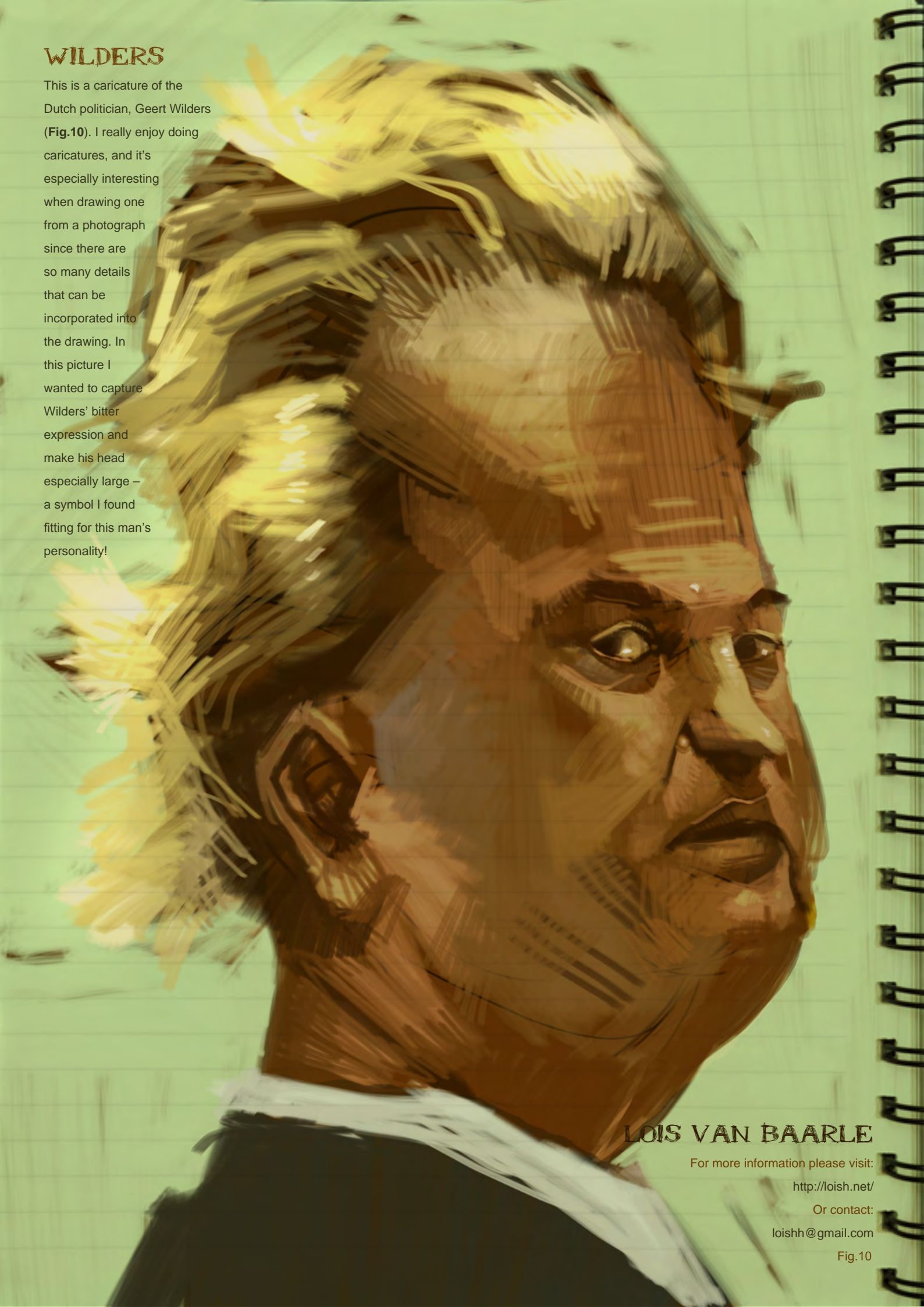


## LOIS VAN BAARLE

For more information please visit:

http://loish.net/

Or contact:

loishh@gmail.com

Fig.10

# ARE YOU SERIOUS ABOUT
# BECOMING AN
# ANIMATOR?

Whether you are just starting your journey, or want to get to your dream job faster, **Animation Mentor** is the online character animation school that can help you get there in 18 months.

## What you need to know

- Learn from *professional working animators*
- Learn *workflow and production techniques*
- Create a *demo reel by program completion*
- Join our *community of students, alumni and mentors*
- Get *help finding a job from our career placement center*
- Learn from the *convenience of home*

Learn more at **http://www.AnimationMentor.com/success**

**ANIMATIONMENTOR.COM**

*The Online Animation School* ®

The GALLERY

## Burnette

**Stephen Molyneaux**

http://www.old-boy.co.uk

stevemolyneaux@hotmail.com

(Right)

## The Lost World

**Pavel Cucka**

http://www.pavelcucka.com

pavel@pavelcucka.com

(Below)





Image created for CGTantra Matte Painting Challenge, 'The Lost World'

# Female Dwarf

**Joe Slucher**

http://joeslucher.daportfolio.com/

slucherj@yahoo.com

(Right)

# The Resurrectionist

**George Patsouras & Abbas Saleem Khan**

http://cgaddict.blogspot.com/

http://www.bakatron.com/

cgaddict@live.com

(Below)

**Slumscraper**

Duc. Truong Huyen

http://fxevo.cgsociety.org/gallery/

truong.huyenduc@gmail.com

# Bad side of the city

**James Wolf Strehle**

http://jamiestrehle.com/

jameswolfstrehle@yahoo.com

# Vertigo

**Steven DiNozzi (CGTantra Username: sdinozzi)**

http://www.stevedinozzi.com

steve@stevedinozzi.com

(Above)

Winner of the CGTantra August 2009 Matte Painting Challenge,

sponsored by 2DArtist Magazine

# The White Star

**Arnaud Valette**

http://www.arnaudvalette.com

arnovalette@gmail.com

(Below)

# Games in Boxes

**Alex Andreyev**

http://www.behance.net/alexandreev

http://alexandreev.com

andreevbox@gmail.com

Village Voice

**Jason Seiler**

http://www.jasonseiler.com

jseiler@jpusa.org

"I love scattering human figures around an image: doing the dirty jobs like cleaning pipes or the furnace of a locomotive, or perhaps directing passengers into a building."

# USING 3D
## AS A BASE FOR 2D PAINTING

This tutorial series will revolve around the use of 3d as a starting point for digital painting. In particular we will explore the value of Google SketchUp, a free program enabling users to quickly build 3d environments using a set of intuitive tools.

This technique is used by many contemporary artists and is used as a quick and effective way of establishing correct perspective as well as offering a moveable camera in order to experiment with compositions.

As a 3d package SketchUp is easy to learn and does not require hours of training and as an artist wishing to draw complicated scenes, this approach can prove a valuable starting point for producing a template on which to paint over.

## Using Google SketchUp as a base for Digital Painting

### Why use SketchUp?

Google SketchUp is a free programme enabling users to quickly and effectively build 3D environments using a number of intuitive tools. Unlike most 3D packages it is very easy to learn and does not require hours of training before decent results are achievable. It is very versatile and with regards to digital painting can prove an invaluable tool in swiftly establishing a correct perspective, as well as offering a moveable camera in order to experiment with alternative viewpoints and compositions.

An object can be made and then duplicated any number of times, so if a structural element is repeated throughout your concept then this package can quickly and accurately create such arrays. It also has a simple-to-use lighting system that enables placement of the sun according to the month and time of day by way of slider bars, thus determining physically correct shadows that can be turned on or off at the click of a button. These functions mean that as an artist wishing to draw detailed or tricky scenes, one can use SketchUp as a valuable starting point to establish a "guide template" on which to paint over.

### Installation

In order to install SketchUp, click on the link below and go to Downloads on the left hand menu. Select the free version which is currently


Fig.05
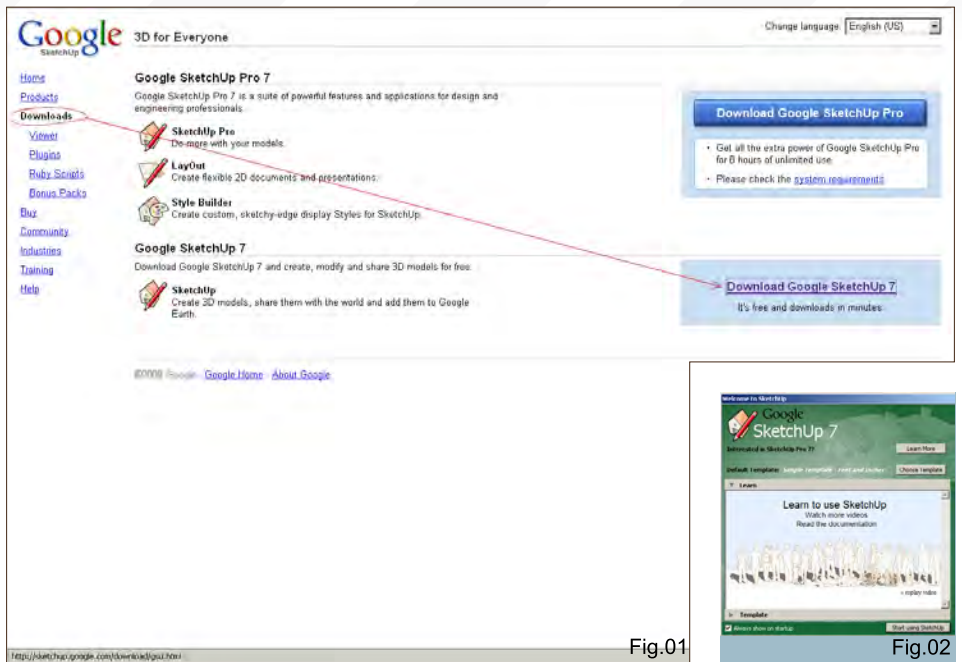

Fig.01


Fig.02
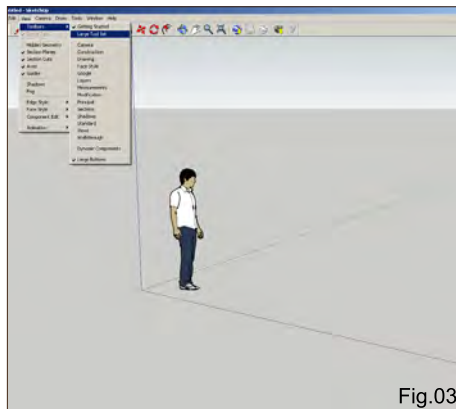

Fig.03
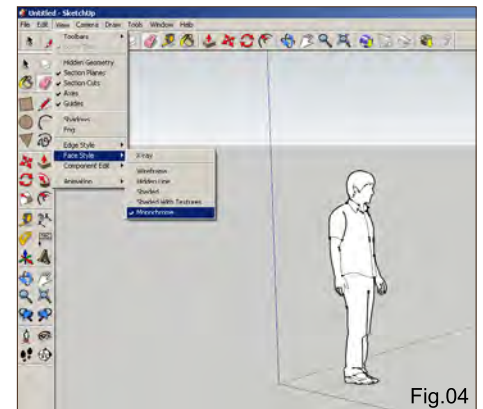

Fig.04

version 7 (**Fig.01**). Choose your operating system and then follow the instructions.

**http://sketchup.google.com/**

Once installed, click on the application shortcut and you will be prompted with the following dialogue box in which you are asked to choose a template (**Fig.02**). The scale and type of your scene will determine which you choose, but for the purposes of this tutorial we will select **Architectural Design – Feet and Inches.**

### Toolbars and Menus

When SketchUp starts you will see a screen resembling **Fig.03**. From the main menu click on View > Toolbars > Large Tool Set; this will access more tools which will appear down the left margin. To change the display mode of the

objects in the scene click on View > Face Style; this will show a number of options, as seen in **Fig.04**.

If you also check Views under View > Toolbars you will see six small house icons appear below your toolbar (**Fig.05**). These will provide quick access to orthographic views, as well as isometric. You will notice that I have also checked Face Style in the list (highlighted in green), which has added some cube icons to represent the display modes.

This is basically where you can customise your workspace and add toolsets to speed up your workflow. For additional help go to Window > Instructor; this will open a window providing useful information on whichever tool you have currently selected.
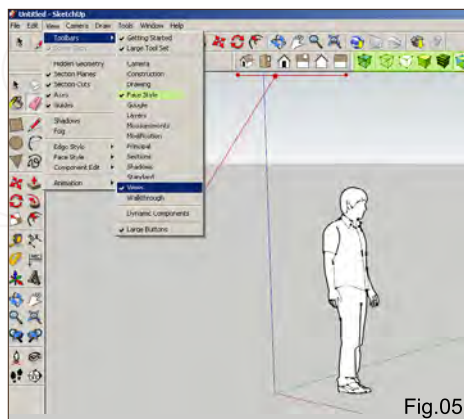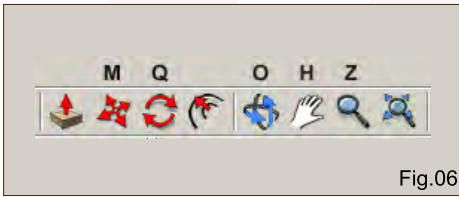
Fig.06

## Basic Navigation

The key orientation tools you will use to navigate in your scene are Orbit, Pan and Zoom, which you will find on the top toolbar and whose shortcut keys are represented by O (Orbit), H (Pan) and Z (zoom). These can be seen in **Fig.06**.

The main tools used to directly manipulate your objects are Move (M), Rotate (Q) and Scale (S). The Scale tool appears on the left hand toolbar which you will see highlighted if you press S on your keyboard.
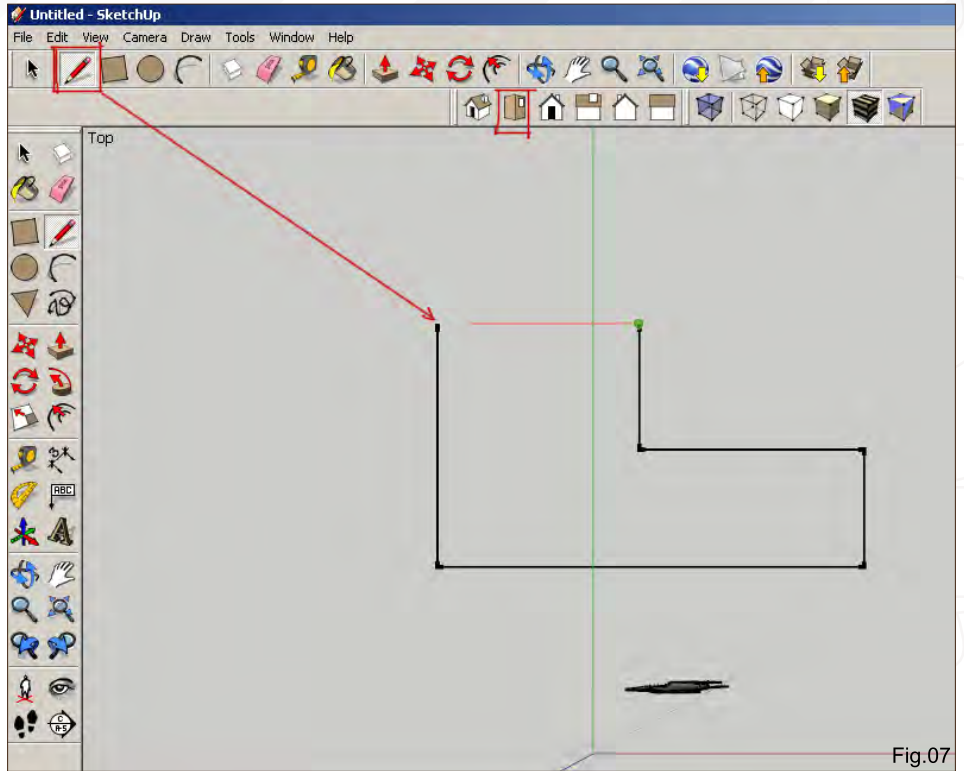
## Drawing Shapes

One way of using SketchUp is to create two-dimensional shapes from which you can extrude three-dimensional objects. Select the top view and then the Line tool (**Fig.07**) and left-click in the viewport to begin drawing. You will notice that as you do so, the points will snap to the


Fig.07

green and red axes, thus easily enabling the creation of right-angled structures.

When you finally close the shape by clicking on the initial point you will notice the shape turns blue, indicating a surface has been made; once a shape has become closed you can still edit

it, however. Using the Line tool, add an internal rectangle (see top diagram in **Fig.08**). To now make this edge become part of the exterior shape click on the Eraser tool and then on the outside edge shown in red.
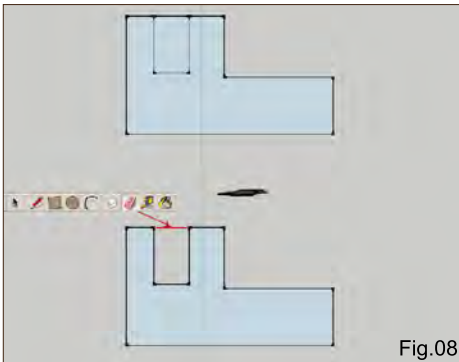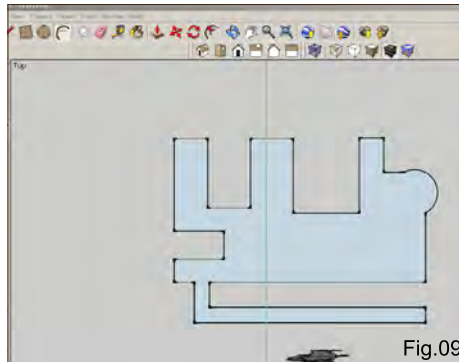
You can continue to cut into your shape or alternatively extend it outwards and then erase the necessary lines by using the Line tool (**Fig.09**). Here I have added a walkway and also a curved section using the Arc tool. You can also draw more organic shapes using the Freehand tool (**Fig.10**).
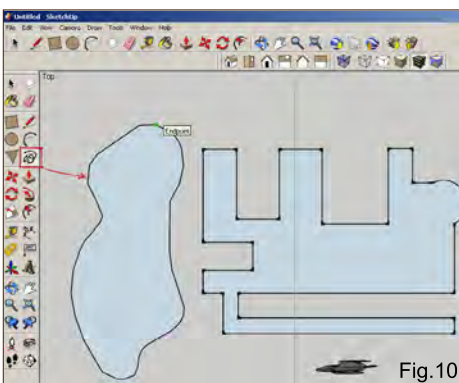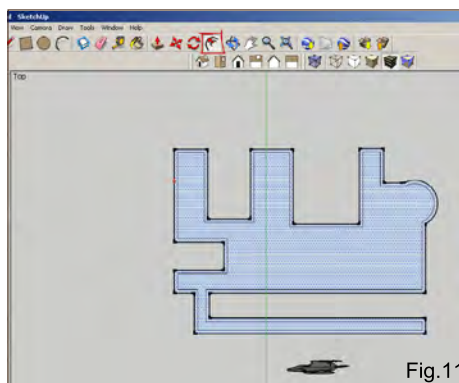
One other useful function, especially for architectural structures, is the Offset tool which is situated next to the Rotate tool. This enables a shape to be duplicated in order to create depth – perfect for drawing walls in a building, for example (**Fig.11**).

With an exterior wall depth, click on the large internal shape using the Select tool (black arrow on Toolbar) and hit delete. You can then select the Push/Pull tool and then click on the wall and raise it vertically (**Fig.12**). You will notice I have edited the section where the walkway adjoins


Fig.08


Fig.09


Fig.10


Fig.11

the building using the Line and Eraser tools so that this was not raised along with the outer wall.

## Three Dimensions

When a shape has been converted into 3D it can be edited further by using a combination of the Line and Push/Pull tools. If you move the Line tool along an edge it will snap to the midpoint between opposing edges (**Fig.13**). You can then make equally spaced cuts, as shown. These new shapes can be pushed inward or pulled outward, or alternatively a new shape can be drawn and this can then be manipulated.

In **Fig.14** I have used the Offset tool to create a window shape in the far left rectangle. To create the same proportioned window in the other sections simply select the Offset tool and double-click in each rectangle. To create the arches use the Arc tool and then erase the horizontal join shown by the dotted line. To create windows use the Push/Pull tool to move the shapes inwards beyond the inner wall surface or until they disappear.

Using a combination of the tools mentioned so far you will have the means through which to create and edit a wide range of forms and design detailed scenes.

## Atmospherics & Lighting

You can add atmospheric perspective in the form of fog to your scene. Go to View and check Fog, as seen in **Fig.15**. You will notice that the edges on my building have also been switched off, which you can control in the menu under Edge Style > Display Edges.
To add lighting effects check Shadows which
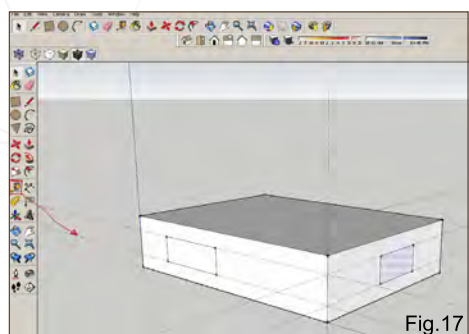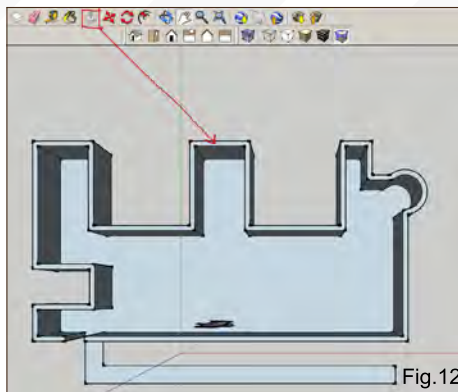

Fig.12
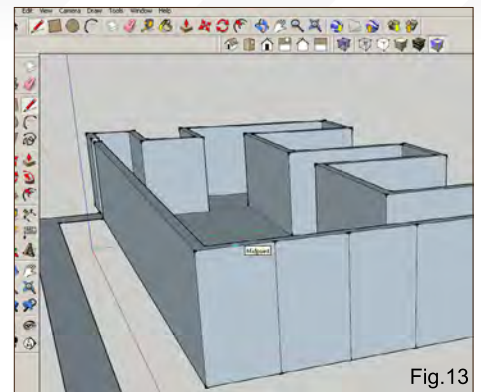

Fig.13


Fig.14


Fig.15


Fig.16


Fig.17
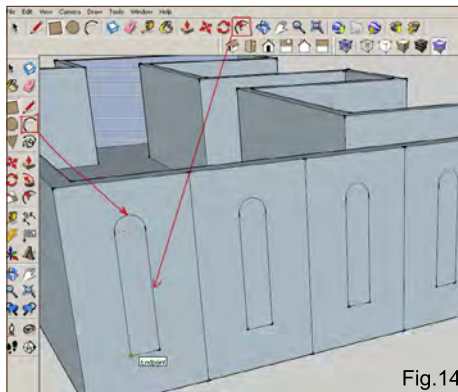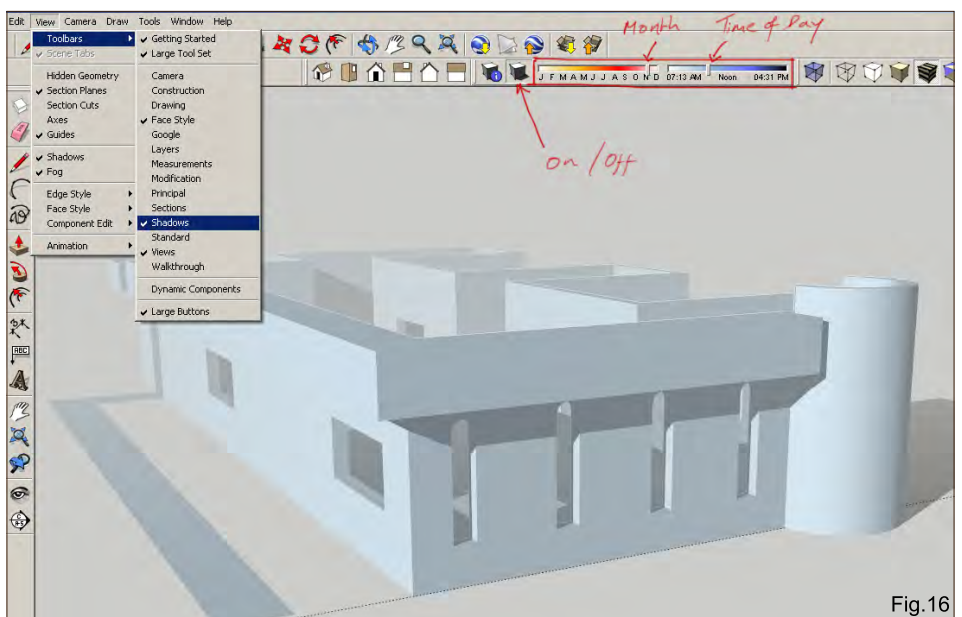
is above the Fog label, and to get more control over this function go to View > Toolbars > Shadows. This will place two slider bars on your toolbar which denote the month and time of day. By adjusting these you can control the position of the sun and direction of the shadows (**Fig.16**). There is a little icon to switch the lighting on or off, and besides this there is also another icon which opens up some extra parameters that alter the tonal range of the shading. You can

also control whether this affects just the object itself or the ground along with it and vice versa.

## Additional Tools

A few other useful tools worth mentioning are the Tape Measure, Protractor and Dimension. The Tape Measure is used to draw guidelines which can then be traced over with the Line tool. In **Fig.17** you can see that the tape measure has created the dotted lines which can be

used as a guide to draw the windows an equal distance from the top and bottom of the block. To delete the lines simply use the Eraser tool. The Protractor is used to create accurate angles. Move the tool to the point at which you wish to start the angle and you will see how it snaps to the three axes. Click to establish the correct plane and then click to begin the angle along the appropriate edge. Now you can set the angle using the guideline. In **Fig.18** I have used the near corner as the starting point, which I will mirror on the opposite corner.

Once the guidelines are drawn, trace them using the Line tool, as with the Tape Measure. In **Fig.19** you can see that the two angles have been drawn and then the Push/Pull tool was used to extrude a roof shape across the base block.

The Dimension tool simply adds a label to your scene, showing the distance between two points. Click and drag from A to B and then drag up or down to set your dimensions, once again using the Eraser tool to delete when necessary (F**ig.20**).

# Cameras

The camera in SketchUp is initially placed at an average eye level height, so for example when you click on the Position Camera tool it will zoom in and appear around head height from the ground. In this sense scale is an important factor in your scene.

In **Fig.21** you can see a cross where I intend to position the camera, after which the viewpoint will resemble the inset image. The character has been placed in the scene to demonstrate the relationship between the scale of a character and the initial camera height. To adjust your camera, use the Look Around tool represented by the eye icon.

One final tool which may prove useful is the Section Plane tool which allows a view of a cross-section of your object. To use this click


Fig.18


Fig.19


Fig.20


Fig.21
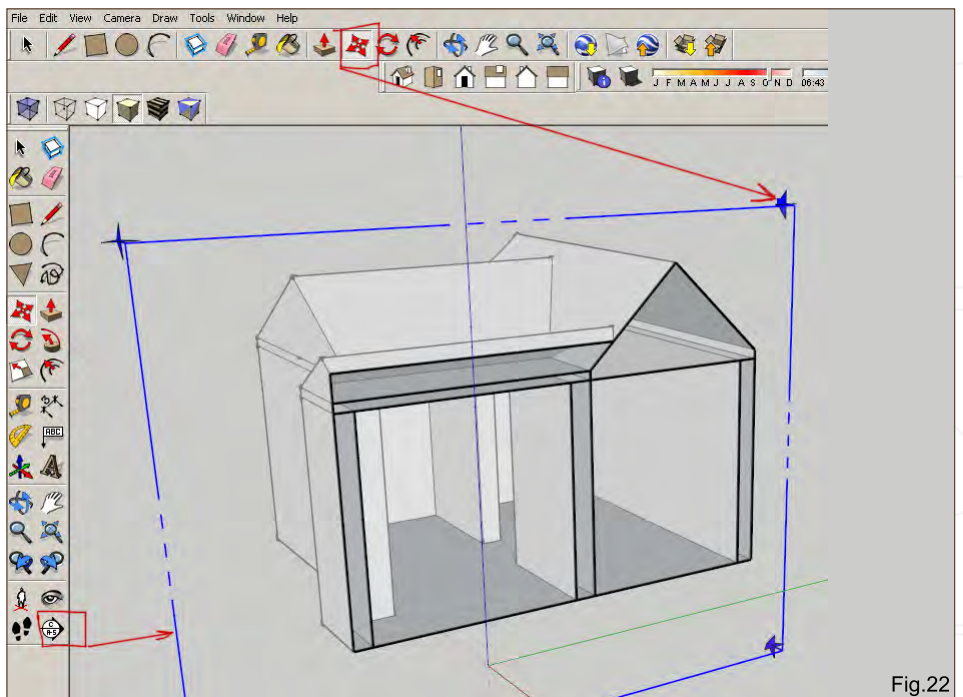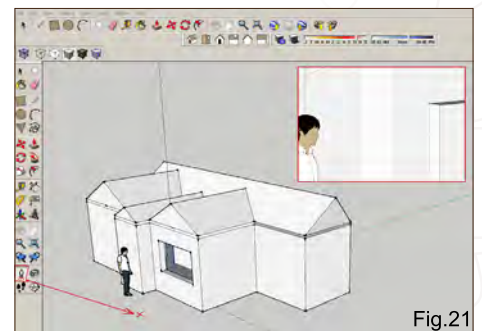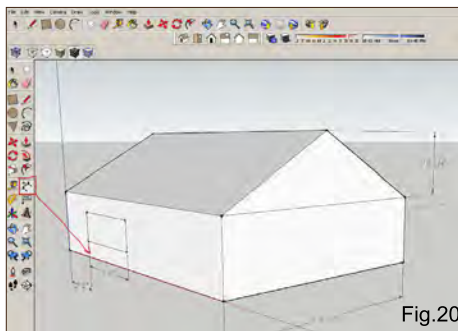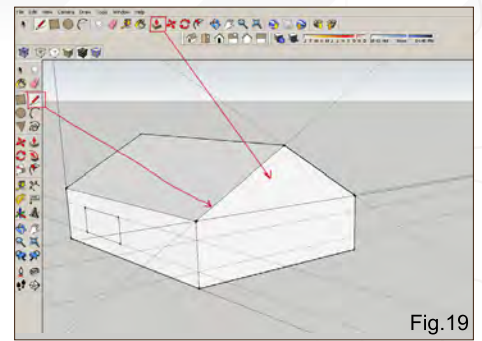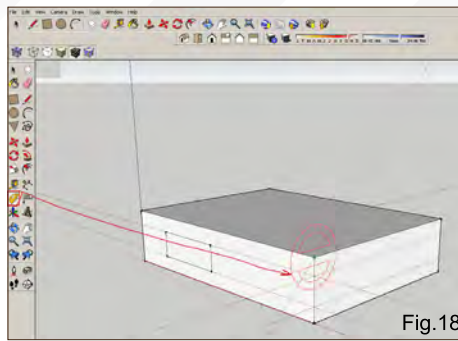

Fig.22

on the tool and then align the green icon to the corresponding plane or angle you wish to view. Then select the Move tool and click on one of the corner arrows and drag in the relevant direction (**Fig.22**).

This concludes our overview which I hope has at least introduced the main tools and their functions. There are of course further lessons to learn along with other tools and techniques, such as applying materials, but the main aim

here is to introduce the interface and value of the software in terms of building a simple 3D environment which can then be used in digital painting.

# Richard Tilbury

For more from this artist visit:

http://www.richardtilburyart.com/

Or contact them at:

rich@3dtotal.com

# Using 3D as a base for 2D Painting

**Software Used:** Google SketchUp and Photoshop

## Introduction

It's always a good idea when creating concept art or illustrations for games, movies and the like, to use whatever means and methods necessary to make your artwork quickly and easily. In the case of this tutorial I will be using a simple 3D base which I'll create in Google SketchUp as a mockup for a Photoshop painting.

## Google SketchUp

I start with a simple idea in the back of my mind of a sort of train depot where locomotives are traveling in and out, loading cargo, and transporting people. So to get things moving, in Google SketchUp I begin by building some simple platforms as a starting point (**Fig.01**). I choose a simple profile shape and then extrude it outwards. I copy the profile section and mirror it so that it's not too far away from the first


Fig.03


Fig.01
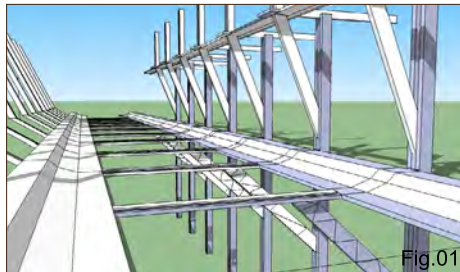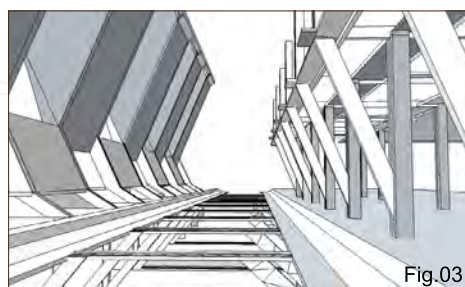
one. I can then create the intersections, which I imagine to look like strong beams which the locomotives might use to get across to the other side.

I use the Rectangle tool and start making lapped boxes which I will then extrude with the Push tool. After making one section of the beam, I multiply it and move it on the first mirrored deck. I then make double pillars with a diagonal metal element for the structure above, in-between them, so that I can give my future painting a believable, industrial look. Other diagonal beams coming from these pillars will sustain the bridged sections. All shapes are created with the Rectangle tool or the Line tool, which can create planes and volumes if used in three-dimension.

On the left side I want to mirror the diagonal feeling from the right side, so I firstly make some pillars, and then create walls for each pair of pillars (**Fig.02**). I play around a bit here with the silhouette of the structure, just to spice things up a little. When happy, I go on to create a series of open and closed spaces between each wall, for the locomotives, people, and cargo to all


Fig.02
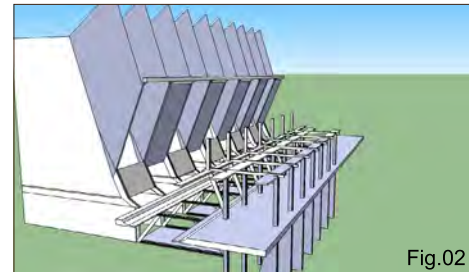
pass through – all done using the Rectangle tool. I also create a low ceiling above each of the passageways and close the middle part of the three sections of the wall. On the right part I pull the pillars up to the next floor and add decks for potential people passing through. I also make some intersecting platforms between the left and right structures whilst thinking about accommodating possible functions within a train depot.

To finish off the 3D part of the work in Google SketchUp, I make sure I enable the three-colored Axes under the View menu, select Face Style > Monochrome, and go to the Window menu where I select Styles > Default Styles > Engineering Style. For the Camera setup I choose Perspective from the drop-down menu. I then rotate the scene, searching for some cool viewpoints. When ready I can then export my chosen view by going to File > Export > 2D Graphic (**Fig.03**).

The cool thing about this 3D scene is that you I can always go back and add new levels or find new points of view if I want to make some

Fig.04


Fig.05


Fig.06


Fig.07
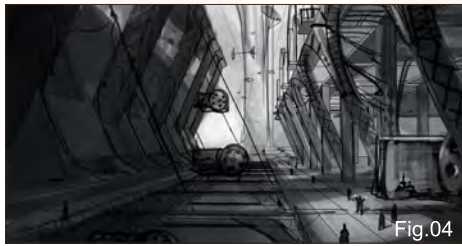
changes! For a more detailed introduction to building structures in Google SketchUp, please refer to the first part of this tutorial where Richard Tilbury takes you through the basics.

I export about 10 scenes from Google SketchUp so I can choose my favorite from those. I decide on a somewhat central perspective for its balance, strong diagonal line and perspective, and good focus (**Fig.03**). You can download this scene with

## Photoshop

I take the Google SketchUp scene into Photoshop now where I can start sketching on top of it, on a new layer, to try out some ideas (**Fig.04**). While I was making the 3D image I was already thinking about locomotives, metal arches, cables, glass facades and so on, so here I can start to build these ideas on top of the 3D render. I also decide to widen the frame to give the scene the more cinematic look that I'm feeling for this image.

I never repeat the same process in my images, and it was no different for this image. I start out in black and white to establish my general values, and then add color to the image with
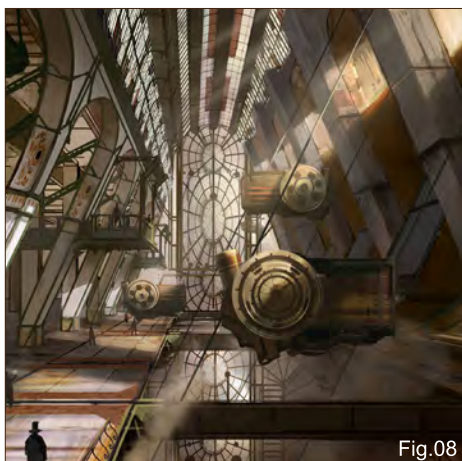

Fig.08

Overlay and Color layers (**Fig.05**). From this point on I start to define the arches and pillars. For contrast I use a white wood material for the pillars and arches on the right-hand side, with a green metal to achieve a more industrial, steampunk look to them (**Fig.06**).

Right now I'm pretty sure of where I'm heading with this image, so I bring in a couple of textures now for the huge stone pillars on the left and for the locomotive in the foreground. I make a few Levels and Color Balance tweaks to get them into place, and then start painting on top of them. It's good to have as much texture as possible from the start which matches the kind of look you want, just to give you a good base to build upon. It's also important to decide on your lighting scheme from the start, too. I want a dramatic sunset lighting scenario, coming in from the left of the scene, to get that gold, steampunk feeling across. I knew from the beginning that this kind of lighting would define the space better between the pillars and give some interesting shadows that fall upon the bottom deck and on the locomotives.

I keep refining the shapes on the right-hand side and bring in some of the white from the left-hand side just to encourage the eye to travel from one

to the other. The space at the top of the image is a little disturbing for me though as it's allowing the eye to slip from the frame, so I'm going to go with a classic steampunk/industrial theme here and add a glass and metal rooftop to my station scene. To do this I paint lots of straight lines on a separate layer and then simply put them in the correct perspective. To stop the eye getting tired from all those lines, I add some colored patches of glass for contrast and interest (**Fig.07**).

Remember to flip your image from time to time to help you spot mistakes or disturbing areas. People often make fun of me, saying, "You rotated it *again!*" But that's just because, composition-wise, I only decide just before the final save as to which way it looks best.

I add some balconies between the pillars to give it a more familiar look and to add some depth. This also makes the viewer wonder about what actually happens there; whether there are offices or just passageways up there.

The next step is to finish the background (which is bugging me). I decide to go for look similar to old train stations and create a huge, intricate façade of metal and glass, which fills a great space within the frame (**Fig.08**).

To give some atmosphere to the image, I do this at about halfway through the painting process – any earlier and it would have distracted me, and I wouldn't want to leave it any later just in case it doesn't fit as well as I imagine it to.

With all these steam-driven machines it was easy to add atmosphere into the scene. It also helps with the depth and the overall way in which the image is read. To add smoke and steam, I usually use a standard soft brush with texture applied, or alternatively the Chalk brush. Generally in my artwork, I use a round brush, the Chalk brush and a soft brush, alongside a few texture brushes which I've collected over the years.

Those huge wheels attached to the locomotives which are pulling the locomotives along those cables (think in terms of cable cars) were under-detailed. So to bring them up to par with the scene, I paint them in whilst thinking of the mechanics of a clock or watch. I found using a Dodge layer very useful to get some stronger highlights on the metal and in highlighted areas.

For the interior of the arched structure I've already decided on a glass roof and walls, so I paint those in, keeping in mind the saturation levels and making sure everything is nice and atmospheric. This helps to punch the image



Fig.09

away from the dullness it was currently in before, before going on and adding the final details and making everything more cohesive (**Fig.09**).

It's not our prerogative to stick to the 3D image that we started with, which is the beauty of experimentation. I haven't followed the original base scene with the pillars on the right; now, between two stone pillars stand some kind of hangars – or perhaps they're just spaces for cargo to be deposited and such? Between those and the pillar are passages for people to pass through. The pillars where a little too plain and so I add some sort of engraved pattern to them to further define them. I also paint some graphics on the cargo bay areas between the pillars to help them "pop out" more (**Fig.10**).

Because of the lighting scheme I am able to show where the locomotives are going to pass between the pillars and out of the depot; this gives more functionality to the space.

I love scattering human figures around an image: doing the dirty jobs like cleaning pipes or the furnace of a locomotive, or perhaps directing passengers into a building; maybe they're just standing around chatting or laughing about something we have no idea about … They are also great for giving scale to a scene. When people look at an image they will look for human figures to give them a sense of scale of the space.

With a few more smoke trails and steam, some light fixtures on the front of the locomotives, and some more detail on the foreground decks – all those rivets, slabs, stains, etc. – the image can be called "done" (**Fig.11 – Final**).

I hope I have been able to get the main ideas behind this image across to you, as well as the techniques involved, and that it will all be useful for your own art creation in the future. Thanks for reading!



Fig.10

## Ioan Dumitrescu
## aka 'Jonone

For more from this artist contact them at:

jononespo@yahoo.com

Fig.11

"...the main focus of this tutorial is to make the creation of these airborne particles easier, and yet still deliver a high quality of work. We will accomplish this through automation, in the form of custom brushes ..."

- Free Brushes
- Free PSD showing brush creation process in layers

# CUSTOM BRUSHES

An artist's brushes have always been a vital part of any painter's set of tools, and remain the single asset that links paint with canvas. As such, they are crucial to how we view and interpret an artwork, and they afford the artist with a means through which to convey an idea or feeling. This has always been true throughout the history of art, and is no less important within a digital context. Software such as Photoshop and Painter essentially combine and fuse paint, canvas and brushes into a single tool. However, within this complex set of "tools", brushes retain certain autonomy with their own, distinct set of parameters and presets, offering artists the freedom to affect and vary the way paint is applied. This principle of customizing brushes forms the focus of this set of tutorials, and aims to show how individual artists exploit these techniques to achieve some interesting results!

# Custom Brushes - Cloud Brushes

**Software Used:** Photoshop

## Introduction

Designing, rendering and ultimately realizing an environment or dramatic backdrop is a very different undertaking from that of creating a character, despite many of the technical and observational skills being pretty much the same.

One of the major differences is the creation of atmosphere in an environment. This can be achieved through numerous means, such as the design of the environment's elements, the type of lighting used to illuminate the scene, and other phenomena that comes somewhere in between. One of these "in between" elements is a collective group I like to think of as "persistent airborne particles"; things like smoke, fog, mist, cloud and smog. This group is incredibly varied and very useful in the composition of the image. They help to lead the eye, subvert high density detail to a lesser importance and reduce visual confusion, and when applied appropriately they can dramatically change the mood of an environment. Some very powerful uses, I'm sure you'd agree!

If you have ever rendered any member of this group by hand, you will know that it can be a very time-consuming undertaking. There so many tiny details and so much randomness that it can take a long time to accomplish painting these manually, and when the clock is ticking, spending too long on any one area of an image is a recipe for stress, stretched deadlines, lots of teeth grinding, not to mention a plummeting reputation!

Sounds rather dire, doesn't it? But fear not! With this in mind, the main focus of this tutorial is to make the creation of these airborne particles easier, and yet still deliver a high quality of work. We will accomplish this through automation, in the form of custom brushes, showing you the

step-by-step nature of creating a base brush image to work with, altering brush settings to expedite the creation of these elements, and then giving a couple of step-by-step examples of how to use these brushes which you can follow along with to grow your skills and confidence.

So with all that out of the way, let's get started!

## Before you get started...

If you know me, or have read any of my prior tutorials, then you'll know what I am going to begin with: Do your research! Whether you know or understand the subject matter intimately or not, you need to fill your consciousness with new information on a consistent basis in order to provide fresh ideas/reminders for your images, or you'll risk growing stale and end up creating highly derivative art!

What does this mean in a practical sense? Well, in today's age of blogs, online articles, image archives, forums and the like, this essentially means jumping on the internet and using your favorite search engine to source out some visuals to kick start your engine. Some of my favorites are listed below – it certainly isn't exhaustive, but these are typically all I need to find good references:

**http://www.google.com**
**http://www.ConceptArt.org**
**http://www.flickr.com**

3DTotal has also launched a new free texture and reference library which you may find useful for your practice – it's filled with royalty free images that you can use in, or as inspiration for, your artwork: **http://freetextures.3dtotal.com/**

If you don't have the internet then it means a little more leg work: going to your local library; picking up a newspaper, magazine, trade journal; or watching a movie and stock piling your mental arsenal from there. Whichever resources you choose to draw upon, just make sure you use it as inspiration only and don't plagiarize work! That would be unscrupulous and doesn't help your skills level to grow; it will more likely lower your confidence in your own abilities above all else.

## Clouds, Fog and Mist

So we begin with clouds, fog and mist, which are naturally occurring phenomena in the atmosphere that happen as a result of water particles being frozen and suspended in the atmosphere. It's important to keep this in mind when you're rendering any of these, as it affects the way light reacts when it comes in contact with clouds, fog or mist.

For artistic purposes there is little practical difference between each: clouds are moisture particles that are suspended in the air above ground; fog is cloud that is in contact with the ground; and mist is a less dense form of fog. Yes, you can get very technical with types of

cloud formation and whatnot, but for general art creation I tend to run with the mindset of whatever compliments the image in order to help reach the outcome I am aiming for.

Cloud brushes of this kind can also be used for the creation of smoke resulting from fire and explosions, so they are very flexible and multi-purposeful brushes. Let's make one!

### Brush Creation

**Step 1:** Create a new square ratio canvas in Photoshop. I like to create a fairly large canvas then downsize it later on so that more details are captured in the brush. The image in this case is about 700 by 700 pixels. Once you have your canvas, using a Soft Round Brush start by creating a circular area of tone. This is to set the background of a fairly low contrast brush (**Fig.01**).

**Step 2:** Within the tone, start creating some rough cloud particles. Keep the edges irregular and accentuate them with some rim lighting (**Fig.02**).

**Step 3:** Create some tone which splays outwards from the epicenter; this will be used to give cloud formations some degree of high density information in their outer extremities. This information will be used to also give scale to the large masses (**Fig.03**).

**Step 4:** Using a more grayish tone now, reduce the overall contrast by brushing a few wide


Fig.01


Fig.02


Fig.03


Fig.04


Fig.05


Fig.06
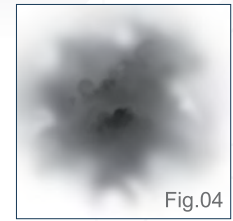
strokes over the information, and knocking back the details (**Fig.04**).

**Step 5:** Work more cloud detail back into the image using a darker tone. It isn't a huge issue if it is all rendered to perfection or not; when the brush image is reduced in dimension, it will become much crisper and the imperfections will add to the charm of the image (**Fig.05**).

**Step 6:** Ctrl-I to invert the image to check for tone that is bleeding to the canvas edge (**Fig.06**).

**Step 7:** Use a black brush to paint it out any white/gray that has bled into the canvas edge (**Fig.07**).

**Step 8:** Invert the canvas again. This image will serve as the basis for the cloud brush (**Fig.08**).

**Step 9:** Resize the image down to a more appropriate size so as to not take up too much precious memory. In this case, I've reduced the image to around 140 by 140 pixels, because in some cases I will need to use the brush at a relatively large size. Once you're happy with the size, define the brush preset through Edit > Define Brush Preset > Name Your Brush > OK (**Fig.09**).

**Step 10:** Make sure you have the Brush Tool selected (if not press B) and now access the brush attributes window through Windows > Brushes (or press F5) (**Fig.10**).
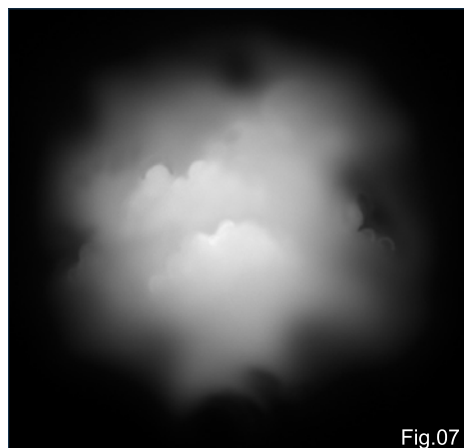

Fig.07
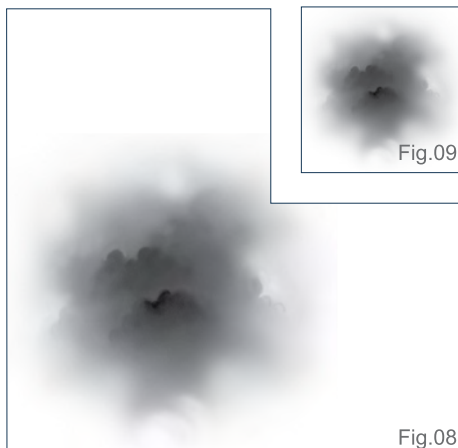

Fig.08


Fig.09
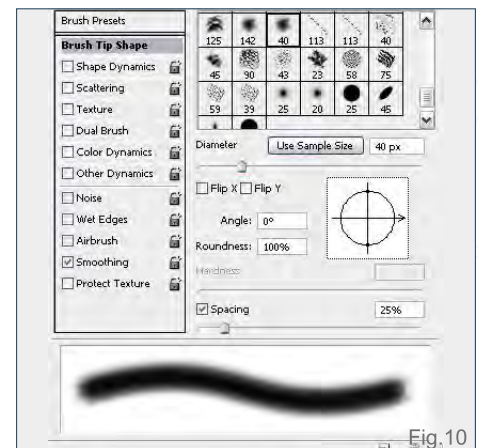

Fig.10

**Step 11:** Tick the Shape Dynamic checkbox and access those attributes. Alter the Size Jitter to 12% to provide some random sizing to the cloud elements. Set the Control option to Pen Pressure and specify the minimum Diameter as 55%. Change the Angle Jitter Control option to Direction (**Fig.11**).
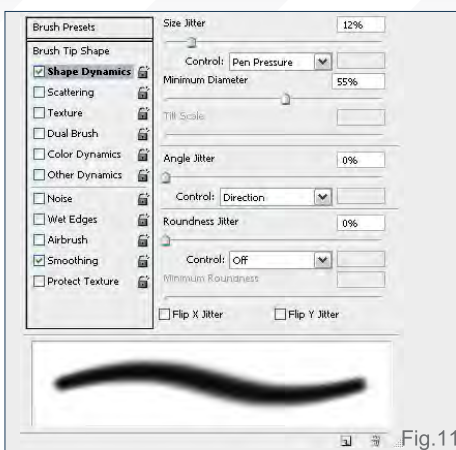
**Step 12:** Tick the Scattering checkbox, make sure Both Axes is checked, and alter the percentage to 13%. Increase Count to 1 and set the Count Jitter to 24%. This Control is to provide more built-in random placement of cloud particles (**Fig.12**).
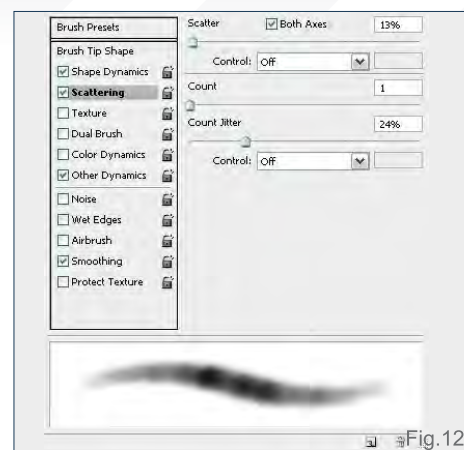
**Step 13:** Tick the Other Dynamics checkbox. Set the Opacity Jitter to 12% and change the Control option to Pen Pressure for Flow Jitter (**Fig.13**).
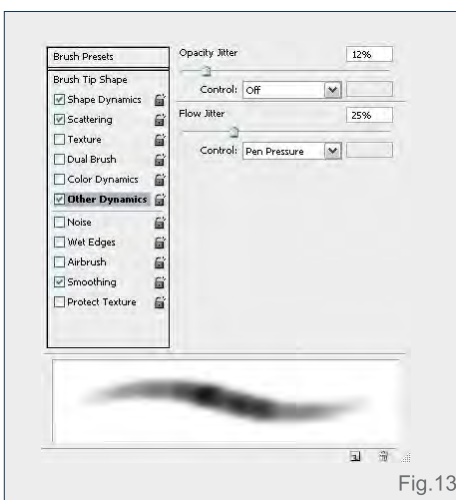
**Step 14:** Test out your brush. There are lots of different types of strokes you can do with it. We'll now go through a worked example to see how you would use the brush in a typical scenario (**Fig.14**).


Fig.11


Fig.12


Fig.13


Fig.14
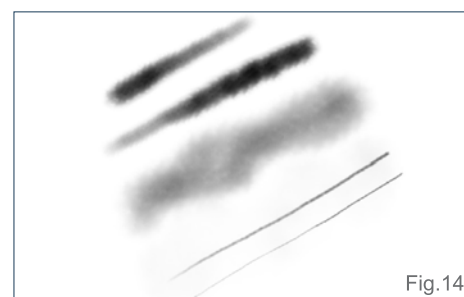
### Step-by-Step Example

**Step 1:** Using the cloud brush we have just created, start roughing in the shape of the cloud you want. I typically start off with a middle tone so that it doesn't overpower the image and it's equally easy to pull into the dark and the light areas (**Fig.15**).

**Step 2:** Work the silhouette a little more, adding in more detail (**Fig.16**).

**Step 3:** Begin to add form by casting lighting onto the clouds (**Fig.17**).

**Step 4:** More of the same: add light to form and push the dark areas into darker tone (**Fig.18**).

**Step 5:** More pushing and pulling: light areas lighter; dark areas darker; silhouette more defined, making sure not to over-render the outline of the clouds and keeping a lot of it soft like cotton wool (**Fig.19**).

**Step 6:** Push back some parts of the image that stick out, add a cast shadow, and then darken some of the underside form into shadow as it receives the least light (**Fig.20**).


Fig.15


Fig.16


Fig.17


Fig.18


Fig.19


Fig.20
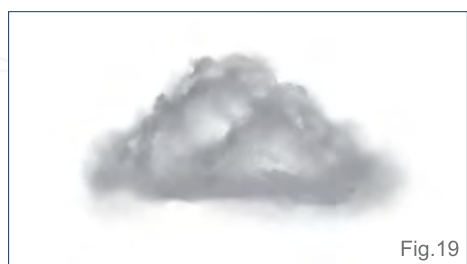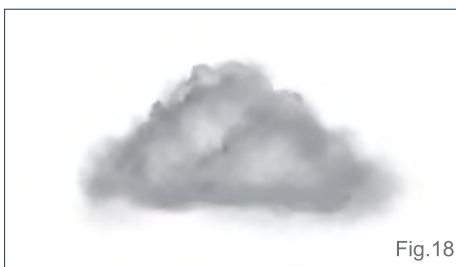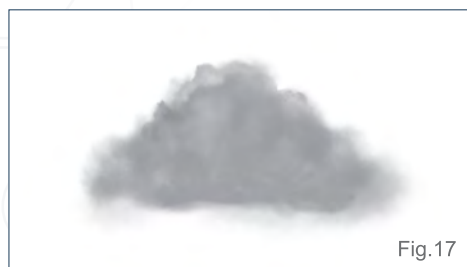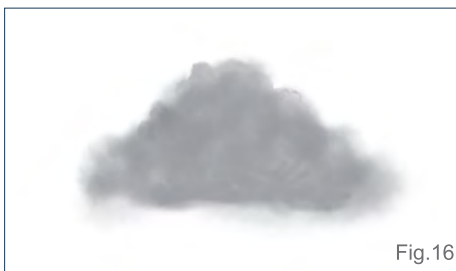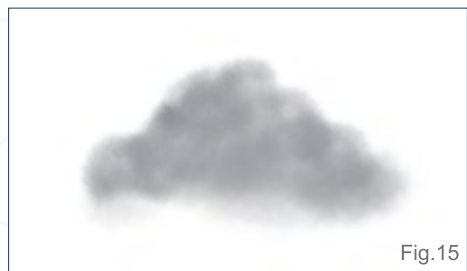
**Step 7:** Alter the Brightness/Contrast and tweak the Levels, and we're done! Our first cloud is finished, using our newly created cloud brush exclusively (**Fig.21**).

# Contrails and Directional Smoke

Another type of airborne particle is directional smoke or cloud, which has an originating source that is dynamic, such as a missile or meteor. Contrails are condensation trails of aircraft and the same brushes can effectively be used for portraying this. The main difference between these types of brushes and the regular cloud brushes is that these generally need to be directional, so the information plotted by the brush alludes to direction. This will become clearer as we work through the brush creation process.

### Brush Creation

**Step 1:** Create a new square ratio canvas in Photoshop, and then, using a Soft Round Brush, start by creating some large arcs. These are essentially the smallest components of a contrail or directional smoke. All arcs should face the same direction as this is will be important later on (**Fig.22**).

**Step 2:** Add more tone to give the arcs volume and shape. Think of them as balls that are placed behind each other, and assume a light source coming from the front and below the image plane to help you render the image. Don't be too worried about where the image sits right now as you'll eventually crop it later on (**Fig.23**).
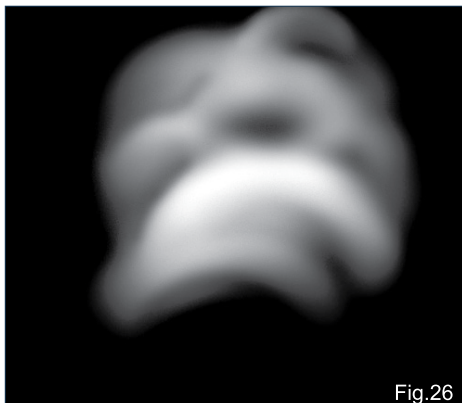

Fig.21


Fig.22


Fig.23


Fig.24


Fig.25

**Step 3:** Using the Soft Round brush, feather over the extremities of the black strokes to blend it a little more into the background. This will help reduce any harsh lines due to black tonal bleeding to the edge of the canvas (**Fig.24**).

**Step 4:** Increase the contrast slightly (**Fig.25**).

**Step 5:** Ctrl-I to invert the image to check for tone that is bleeding to the canvas edge. If there is any, use a black brush to paint it out (**Fig.26**).

**Step 6:** Invert the canvas again; this will be the basis of our smoke trails (**Fig.27**).

**Step 7:** Resize the image down to a more appropriate size so as to not take up too much precious memory. In this case I've reduced

the image to 98 by 98 pixels, because in some cases I will need to use the brush at a relatively large size. Once you're happy with the size, define the brush preset through Edit > Define Brush Preset > Name Your Brush > OK (**Fig.28**).

**Step 8:** Make sure you have the Brush Tool selected (if not press B) then access the brush attributes window through Windows > Brushes (or press F5) > Brush Tip Shape. Alter the Spacing to 35% as it is not essential for a continuous flow and speeds up the brush action (**Fig.29**).

**Step 9:** Alter the Angle of the brush to -94°. This is important as the brush is a directional one,


Fig.26
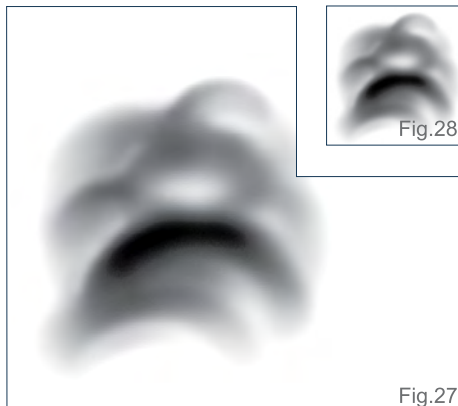

Fig.27


Fig.28
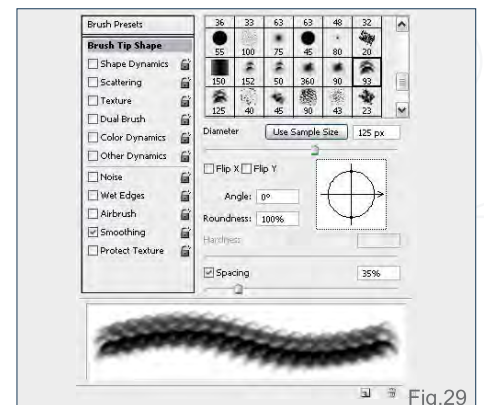

Fig.29

meaning that as you create a stroke the brush will constantly align to whichever direction your stylus is travelling (**Fig.30**).

**Step 10:** Tick the Shape Dynamic checkbox and access those attributes. Alter the Size Jitter to 56% to provide some random sizing to the smoke trail. Change the Angle Jitter to 5% and set Direction as the Control option (**Fig.31**).

**Step 11:** Tick the Scattering checkbox. Make sure Both Axes is checked and alter the percentage to 56%. Increase the Count to 2 and set the Count Jitter to 24%. This Control is to provide more built-in random placement of smoke particles (**Fig.32**).

**Step 12:** Tick the Other Dynamics checkbox. Set the Opacity Jitter to 84% and alter the Control option to Pen Pressure for both Opacity and Flow Jitter (**Fig.33**).
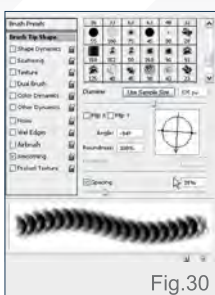

Fig.30


Fig.31
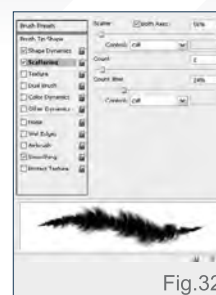

Fig.32
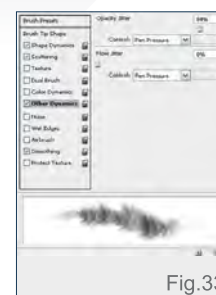

Fig.33

**Step 13:** Test out your brush! As you can see again, there are lots of different types of strokes you make do with it. We'll go through another worked example now to show you how you can use the brush in a typical scenario (**Fig.34**).

**Step-by-Step Example**

**Step 1:** Using our newly created directional smoke brush and a light tone, brush in some exhaust smoke around the base of the launch area, and some additional smoke to allude to the dust and smoke being kicked up. If you want to ground the smoke, make sure you also


Fig.34

place a cast shadow underneath the blast area (**Fig.35**).

**Step 2:** Using a slightly darker tone, paint in more details and reduce the white areas between the particles. Make sure to give some non-uniform wisps of smoke to make it look more natural (**Fig.36**).

**Step 3:** Alter the Brightness/Contrast to darken the smoke (**Fig.37**).

**Step 4:** Using a Soft Round Brush, color-pick the darker tone and lightly brush over the image to unify the tonal range (**Fig.38**).

**Step 5:** Alter the Brightness/Contrast once more to bring out the dark smoke, and we're done! This is just a simple example of how to use your new directional smoke brush (**Fig.39**).

Hopefully you've enjoyed my little tutorial and picked up one or two pointers. To finish up, here is an illustration which shows our new brushes in use to add some cloud and smoke to set the scene being portrayed (**Fig.40**).

Thanks for reading! If you have any questions or comments, please feel free to contact me. Until next time, keep painting!


Fig.35


Fig.36


Fig.37


Fig.38


Fig.39

**Darren Yeow**

For more from this artist visit:

http://stylusmonkey.carbonmade.com

Or contact them at:

darren@stylus-monkey.com

Fig.40

Luxology®

modo

modo is for artists

# DYNAMIC CHARACTERS

## ENHANCING YOUR CHARACTER CONCEPTS

This series of tutorials aims to show some of the methods and processes used to design and develop characters from initial thumbnail sketches through to a final concept. The series will be divided into five parts and will focus on the general design methods commonly used by character artists. It will begin with quick sketching techniques used to suggest ideas and develop a theme before moving onto creating variations once a subject is established. The third instalment will culminate in a finished concept design, after which we will move onto the importance of posing your character and the impact this has on their personality. The series will conclude with a chapter dedicated to choosing suitable eye levels and camera views to best convey an emotional state or emphasise a storyline.

**Chapter 1** | Thumbs & Silhouettes

**Chapter 2** | Visual Brainstorming – Variations on a Theme

**Chapter 3** | Speed Painting & Concept Design

**Chapter 4** | Dynamic And Exaggerated Poses

**Chapter 5 | Camera Placement, Framing, Fore-shortening & Distortion**

The concluding chapter will deal with the notion of framing and the viewer's eye level to emphasize the intent behind a character and how such devices can allude to the storyline. Themes such as fore-shortening, lighting and perspective are all key issues that are discussed and the bearing these have on the way we interpret characters in context.

Fig.01

## Part 5 Camera Placement, Framing, Fore-shortening & Distortion

A perfect character design – a brilliant idea, just brilliant! If people could see this you would be the God of all forums, an instant 5-star wonder!

You've worked for weeks on your character; every detail fits perfectly and you know exactly what kind of environment to put your character in. All that remains is to make the final shot, after days (and days) of hard labor, getting everything exactly right. You – you hero, you! – have just created a masterpiece! You upload it to the forums … Here you go: you're on the fast track to fame now. You refresh your browser … and again. No replies yet. Ah, but it's only been there for a few seconds, everybody is probably

still sleeping – it is 5am, after all. You go to bed, and wake up in the morning all excited because you just know you've hit the jackpot. You turn on your computer, go straight to the forums to check your thread, and there you have it: a grand total of absolutely no replies at all. It stays quiet all day, and the next day. You start getting nervous. Five days later someone replies, "Hey, nice work. Took me a few minutes to figure out what you meant but cool idea." That's it, that's all you get for your hard, intense work! Can nobody see the brilliance? What went wrong…?

We've all been there, I guess (or at least I've been there plenty of times). You messed up the final composition: you didn't place the camera right and it suggests the wrong thing for the wrong character. Instead of people being impressed by your dark, über giant with a

glowing sword, they actually think it's a cute little character with tiny dots on the ground scattered all around him. So what did go wrong?

This is something I'll try to shine a little light on in this tutorial about camera placement, framing and other things to keep in mind to convey the right things for your image.

## Introduction

When I was first asked to write this tutorial I immediately agreed. What a great opportunity to write something about a part of image creation that I really like, and also a good exercise for me to structure the knowledge I have about this topic? So I sent the email back, saying I agreed with it and I would be more than happy to write something. Not too long after I wrote that email though, I thought and realized what it

actually meant: writing about camera positioning and framing. In a way, you can just talk about overlay tricks, positioning and what it does to the subject, but the basics – or the fundamentals – of those theories and tricks are basic rules of composition.

Now, composition is a slightly different story. People study composition for years, and most artists never really completely figure composition out perfectly. It's a fascinating topic as well as a frustrating one. It's an important topic, but a difficult one. And most of all, it's a humongous, ridiculously over-the-top big topic! I've only just started to explore the world of composition and definitely haven't figured it out yet. So this tutorial has become a bit of both, I guess. I focus on a quite specific element of composition and try to give lots of examples and tricks on improving dynamic framing, but there is no escaping composition theory. So I've also included some of that in here, too. Of course it's short, cut down to fit into the story and it's not by far a complete view on composition or dynamic framing and camera position, but hopefully it will become a small guide for you into the wondrous world of it all!

## Composition

So let's kick off with a little bit about the fundamental background of the whole thing: Composition. When you say "composition", most people will think about the placement of dark and light elements on a canvas or the Golden Rule of Thirds, etc., which of course is true. But there is much more to composition than that! Composition is basically how you arrange your scene for the viewer. This can be purely down to aesthetics, or to tell a story; it can be 2D or 3D; it can be the design of an outfit or a landscape – anything and everything is or can been seen as composition (yep, it's that big).

The thing with composition is that you can learn everything there is to know about it from text books, completely understand it, and still not be able to do it. It takes

years of experience to even get the basics; to truly understand them and be able to apply them. I have to cut the whole thing down a bit in order for me to finish this tutorial before I'm 80, so for the sake of this article and to keep it to an acceptable size, I'm going to focus on story driven composition with a special focus on camera placement and framing for dynamic characters. That being said though, I would advise everyone to read up on composition separately to this tutorial (I actually should start re-reading a lot of things myself as I'm sure I've forgotten some of it already).

Official composition rules are a great way to learn how to place things, but most of all they are great analytical tools to help you see what you've done wrong – or right. But I do feel that these formal composition rules, in my opinion, should be considered as guidelines and not laws, for it is always about what you want to tell or show, and any or every rule should be bent or broken for that purpose.

## Camera Placement

Now that we have established that the whole problem with camera placement and framing is composition, where does it leave us? In exactly same place as before, unfortunately! I have included the information though because I think it's important for people to realize that most of these problems are compositional ones. But for the sake of our tutorial, I'll be taking the opposite road

to the solution: not from *how* you want to tell it, but from what you want to tell. First and foremost, you need to know what you *want* to tell. This is the most important thing in a story driven image, and a necessity in order to choose a correct camera angle and a frame.

## Story
### What do you want to tell?

What is the main element of your story? The scared face of your beautiful night elf just seconds before it gets smashed in by the ridiculously big hammer of an orc? Maybe the extreme size of the orc compared to your cute little night elf? Is it the tiny pink rabbits that are trying to flee the site of danger before they get elf blood on their pretty fur? Or maybe it's the army of frustrated worms who have had it with the constant ground shaking, jumping and running of the stupid orc, and have decided to take action by
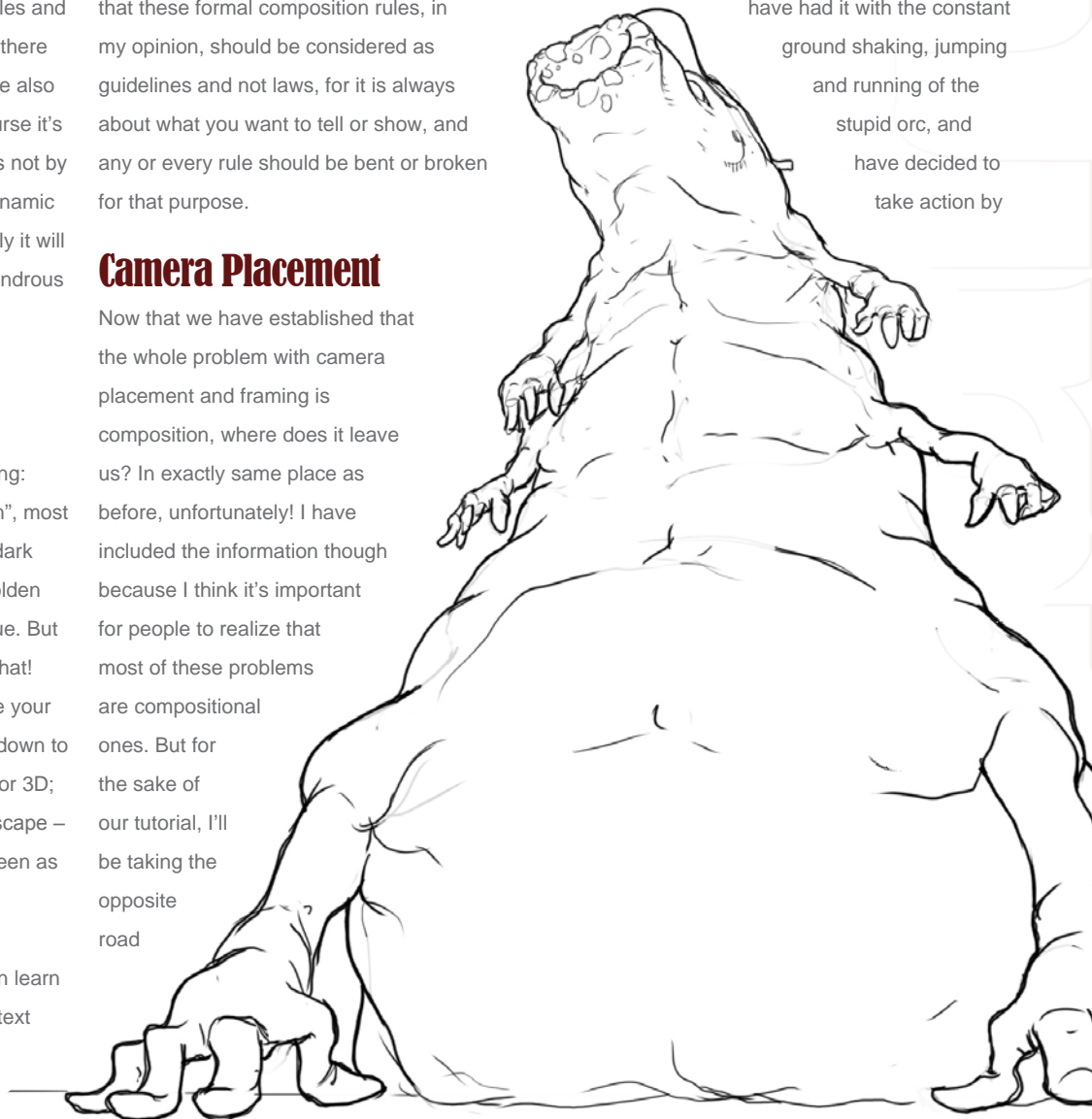
mobilizing the entire worm family, arming themselves with advanced, high-tech nano weapons, and under the command of the most feared worm general in history they stride to battle to take down the orc? All this is one scene?!

The question is: what story do you *want* to tell? For any one of those above, I would pick a different camera angle. If you don't know exactly what you want to tell then go to a cafe, have a drink and try to figure it out. If you don't figure it out before you start then there is a small chance it will work out, but there's a much bigger chance you'll get a grand total of absolutely no replies on the pro art forums and you *won't* be on your fast track to internet fame!

### Getting your story ready

Okay, so how exactly do you get your story ready? One way, as I said before, is to have a drink. Alcohol works for me (most of the time), but let's assume you're not a drinker and want to figure this out in a bit more of a structured and analytical way. So the first thing you should always do is choose your story. I can't really help you with that one; it's your choice if you want to display the elf being smashed by the hammer, or not. I would personally go for the worm family, of course – it's so ridiculous that it should be fun!

The next question is: what elements do you *have* to display in the scene? Which things are fundamental to the story? I'm always in favor of showing as little as possible without compromising the story. First of all, it leaves much more for the viewer to interpret for themselves. Or, to put it in other words, more people are bound to like it since everybody fills in their own details. Some will applaud you for your funny image and nice

Fig.02

rendering skills, whilst the next person will go down on his knees because of your amazing intellectual depth in the image (of course, in reality you have no idea it could even contain "intellectual depth", but whatever, just play along!). Secondly, it usually makes the image a bit calmer, since there are fewer elements to distract the viewer. And last but certainly not least, it's less work. It can save you up to hours (or days), which you can then spend playing videogames or making your next internet famous image.

Something I've learned from game design is a little thing called the "MSCW list" (Moscow-list – easier to remember, which is basically: **M**ust contain; **S**hould contain; **C**ould possibly contain; **W**ould be nice to have. This is a way of creating a hierarchy of importance. Now I can tell you that Could never happens. Pretty much the same thing goes for Would. We can use a similar tactic to organize the information we have. So let's focus on Must and Should. Must in the image with the worms is of course the worms; in particular the worm general with the advanced, high-tech nano weapon. Secondly, since it's an army of worms, we need more worms – at least enough to suggest an army.

So here is our Worm General (**Fig.01**).

We're going to need the orc with a hammer as well. Preferably, we need to see the elf, but a suggestion of her could be enough.

### Keep it simple!

Don't try to solve all the stories and problems in one image. You'll fail! Pick one thing that you want to tell, and leave the rest for a second,
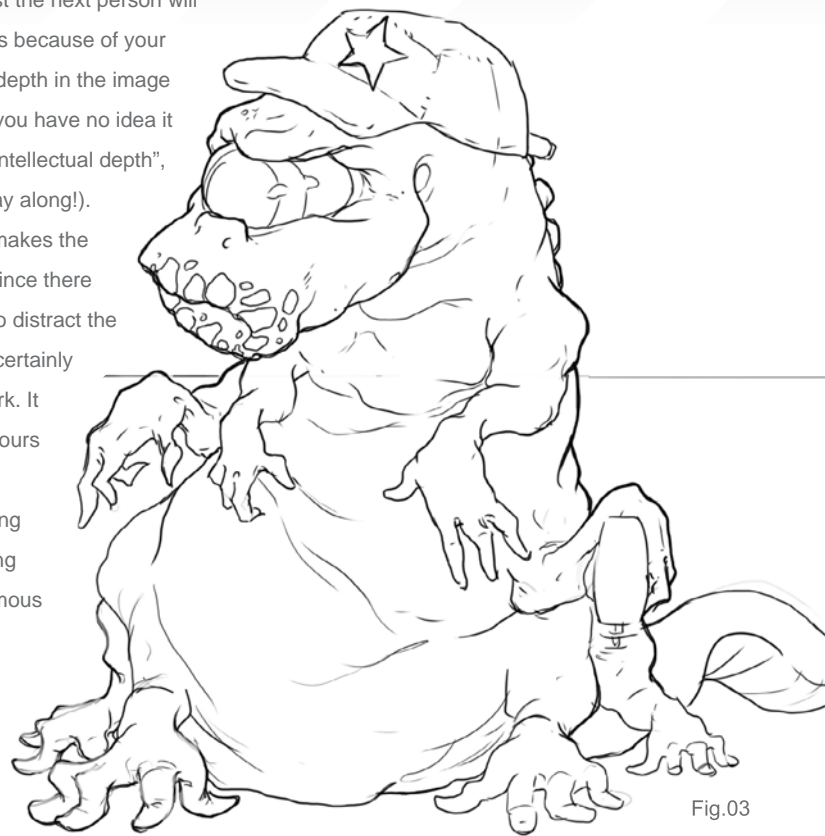

Fig.03

third of whatever image. If you put too much into one scene, the viewer will get lost and confused, and that's the last thing you want with this kind of image.

People in general look at a webpage for about seven seconds. Seven! And that's if it contains a lot of text, etc. If it's just an image, usually surrounded by other images, it's probably less. So let's say four seconds, which is not a lot of time to get a story across. You can't explain everything, so whatever you show must be obvious. No, is must be more than obvious! Make it so that even a mentally challenged monkey looking the other way could get it in four seconds, and you might have a slightly better chance of getting noticed.

### Emphasizing your story

Okay, great. You've got your story down. You know exactly what needs to be shown and what can be left out. Now it's time to think about what elements you can add to increase the drama, movement, humor, or whatever you want to show in your image. This is a very important

step because it is basically where you try to move the camera around in your head to look for the perfect angle of the scene. There are some things to keep in mind though when you're staring into oblivion, trying to figure out where to put the camera:

**Some Basics**

**Kick force perspective, low horizon:** Increases the size of the character, adding a threatening effect; makes the user small and the subject big; great for your giant and dragon illustrations (**Fig.02**).

**Eye level on main subject, horizon in the middle:** Size of main interest is approx. the same size as the viewer (**Fig.03**).

**Bird's eye view on main subject, horizon at the top:** Subject of interest is smaller and/or lower than viewer; subject is dominated or the "underdog" (**Fig.04**).

These are the 3 most basic options. Of course, you can apply them in subtlety or exaggerate them however you want. You can use one of them, or combine them. It just comes down to the question: what works best for your purpose? There is always going to be much more that you can do and play with!

## Additional Supporting Elements

**Composition Disclaimer**
Now the following section is a bit of a dilemma. I want to talk about supporting elements like foreground elements, the direction of lines, and the space around a subject to create certain sense of motion, but those elements will only work if your basic composition allows it. Yes, here we are again: composition. But to fully dive into
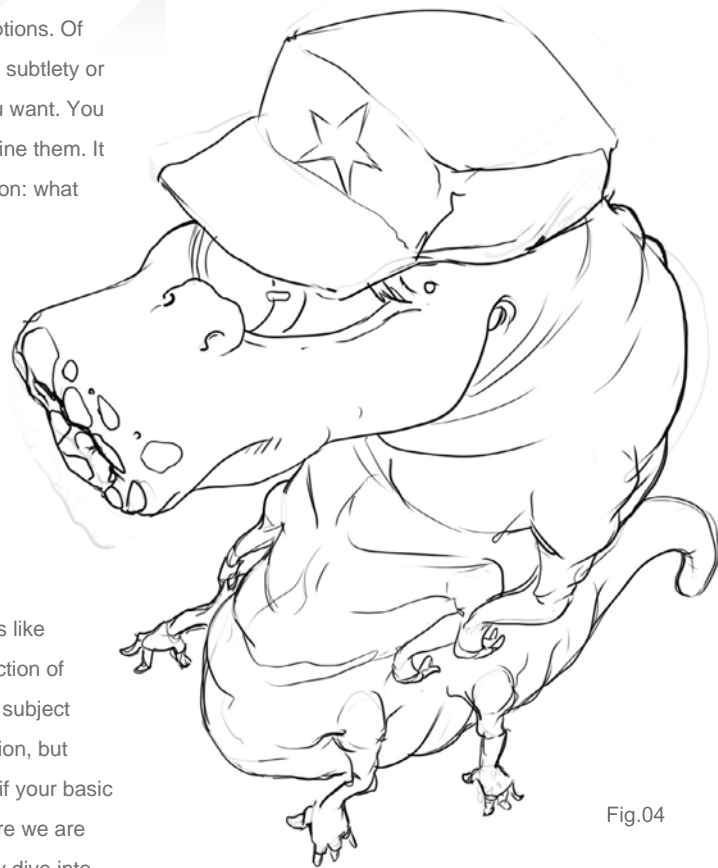


Fig.04

the realm of composition is quite a task, and as mentioned before it would probably require 10,100 magazine pages filled with information written by – not me. I am far from a formal composition master or teacher. So what to do?

I'm going to slap composition in the face by stuffing it into a few basic boxes for this tutorial's sake. Now, don't kill me over this, I also have to go outside sometimes and get some fresh air, as well as eat. Talking too much about this subject will strip me of any form of what (very, very, very little) social life I (pretend to) have.

Ok, so let's get back to it. In general there are two types of composition: Static and Dynamic.

Static Composition is where the overall balance of an image feels solid (I am sure there is a much better way of describing this in one sentence, I just can't think how), and there is no obvious sign of motion. It often uses horizontal and vertical lines in a central orientated layout, using a triangular, round or square composition (this is really putting it into a small box!).



Fig.05
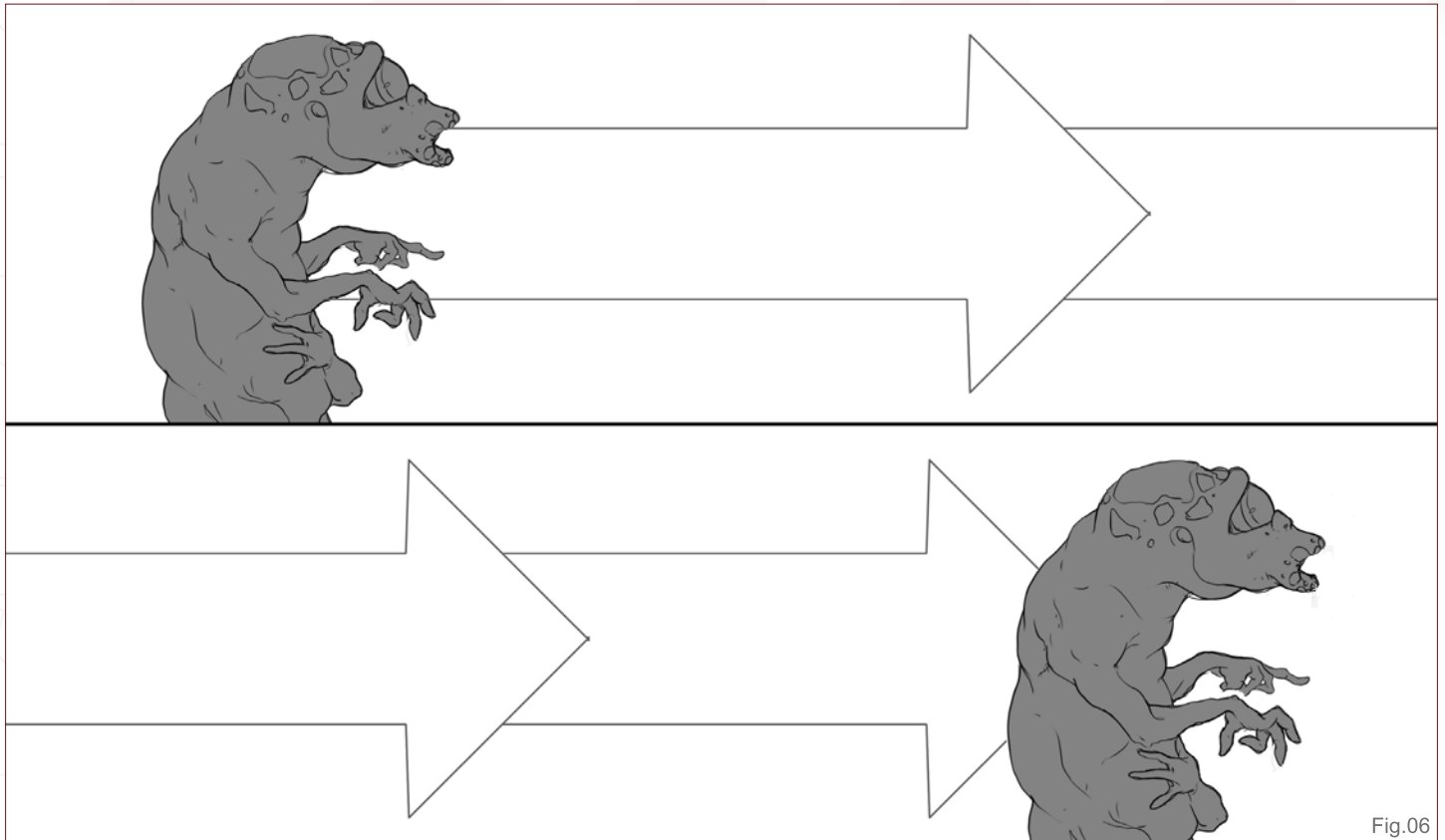
Fig.06

Dynamic Composition is where the image suggests movement, almost like a frame capture from a movie. It often uses curved and diagonal lines in an off-center layout, and often shows an element that suggests that it's going in a certain direction – your brain automatically finishes the movement. Now, if you want to know more about this, please don't email me. Read a book or take some lessons. If you want to complain about my composition blasphemy, you have all the right to, I guess.

**Let's focus on Dynamic Composition**

So you have your important elements clear. You know that you want to show it either big or small, depending on the purpose of your story. Now how do we get this baby moving?

Well first of all: don't put your focus point in the center; don't put it in the horizontal center; and don't put it in the vertical center (**Fig.05**). No center!

**Disclaimer:** there is no absolute rule in a lot of compositional rules. And, of course, you *could*

put it in the center and still make it look dynamic, but you have to know exactly what you're doing (and I'm betting that the chance is really high that you're not reading this tutorial if you do.)

Good, so you put it out of the center. Why does this work? Well it breaks the perfect balance of the whole composition, but also it suggests movement. To put it simply: balance = static; off balance = dynamic. If there is room in front of the character, for example, it suggests an area where the person can move to. If you show a large area behind the character it suggests the character is coming from that direction (putting a big empty space behind a character can also – depending on your context of course – suggest an element of danger) (**Fig.06**).

Secondly, you want to have more than one focus point: let the eye of the viewer wander around the image; let the viewer explore the image; allow eyes to follow lines and areas of contrast – the more the eyes move the more dynamic the image seems. Don't make 100 focus points – that won't work! That will just

frustrate you *and* your viewer. Keep it simple. Just trust me for now.

**Lines**

Diagonal lines work great for a dynamic composition! Why? Because your eye automatically follows lines, and lines have a direction (a line does not have to be an actual drawn line, it can also be a suggested line by light, dark, colored or other elements (**Fig.07**).

A quick note on lines: I was always a big fan of flipping my image in Photoshop. It's great
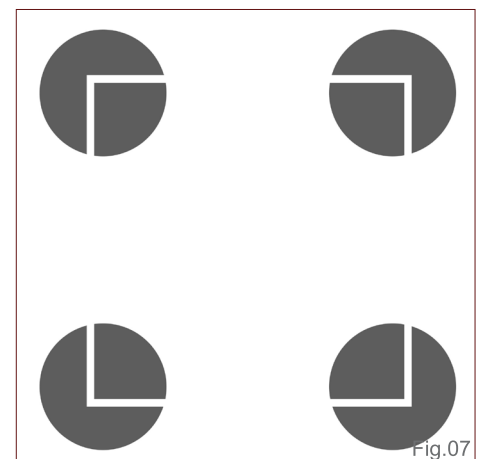


Fig.07

because it makes you look at your image from a new perspective. The old Masters used to hold their images or paintings upside-down in front of a mirror to check for mistakes. But lucky us, we have an option called "Flip"! I've always wanted to make sure an image works in either direction – flipped one way or the other. Later, when I was researching some things about visual storytelling, I came across some information that explained that a line curved upwards from left to right is perceived as going up (**Fig.08**). But if you flip it, it is perceived as going down (**Fig.09**).
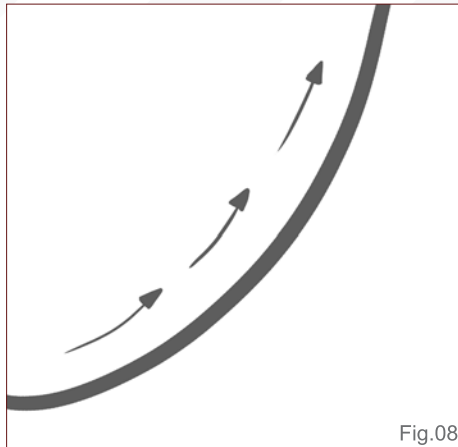


Fig.08
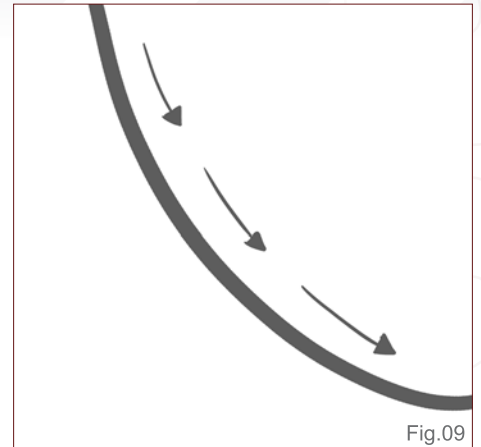


Fig.09

So an image doesn't have to work both ways, because you read the image completely differently either way. It's got something to do with the reading direction. We are used to reading from left to right, which is why we also "read" an image from left to right. This has even more implications than just a line going up and down: things on the right side of the vision have a tendency to be perceived as more threatening (in general); things coming from the right side – let's say a train, for example – are also perceived as going faster than when the train with the same speed is coming from the left side. These are small, unconscious things, and all really dependent upon context and so on. But they are fun to play around with!



Fig.10

### Depth Placement

There is the option of putting the subject anywhere in the distance. So why should you choose one or the other? Well, the safest way is to put your main element in the middle ground, add some foreground and background elements, and you're done. But this is boring and far too easy!

Putting your character in the middle of anything destroys the potential movement it can have towards any direction. It makes it balanced. Putting your character in the foreground suggests importance of the background, and an involvement of the background with your character.



Fig.11

For example, an empty, dried-out plane or desert stretching towards the horizon is much more threatening if your character is in the foreground element (**Fig.10**). This way the plane becomes much bigger, and it suggests that your character has to cross it or at least has some business with the unpleasantly big and empty space.

If you place your character half way along the plane, it also suggests isolation, but the plane becomes much less impressively big (**Fig.11**).

By putting your character in the background of the same plane suggests even more solitude,


Fig.12


Fig.14


Fig.13
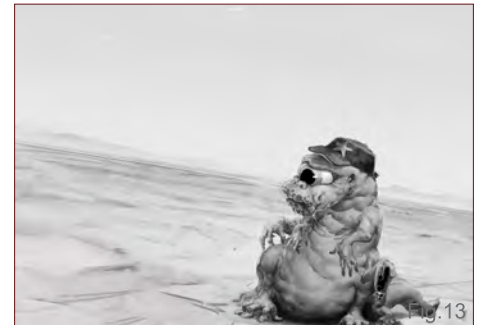
and hints at a traveled distance (**Fig.12**). So to sum up, placement in depth can be considered in the same way as placement on the horizontal or vertical axes.

### Camera Rotation

The simplest way of creating a dynamic composition is to rotate the camera. All naturally static horizontal and vertical lines – the horizon, trees, etc. – become diagonals, and it suggests that the camera or viewer is participating in the scene in a more active way (**Fig.13**).

### Overlay Elements

Suggestion works great for dynamic scenes! Showing a little will make the viewer finish the rest in his or her brain. If you have a character that looks scared at the camera, it works, and it makes people guess a bit about what is happening (**Fig.14**).

If you show exactly why he or she is sacred, it still works a bit, but it's less exciting (**Fig.15**).


Fig.15

Fig.16

If you place an extreme foreground element, like an arm, hand, leg (or whatever) over the camera, it suggests involvement with something more, and the viewer is right in the middle of it **(Fig.16)**.

A great way to learn about these compositional tricks is to analyze movie shots – old black and white movies in particular, like Macbeth, Citizen Cane, etc. (they're worth watching anyway, even if you're not studying them).



Fig.17

### Foreshortening and leaving the frame

Another great trick to suggest more is to have a certain line or element leave the frame – a leg, for example. This draws the eye of the viewer in towards the place where you want it. But it also suggests a world outside of the frame. It makes the frame more like the current view of the onlooker and suggests the potential of something else happening.

You have to be careful with this, though, because it can also make the eyes of a viewer leave the image if not treated right. Remember the direction of lines! If a line is followed by the eye and it goes towards the edge of the canvas, and there is nothing to stop it and pull it back in again, the eyes will leave the canvas.

### Particles, wind, dust and superhero capes

A great way to enhance the dynamic feeling of your scene is to add elements that we know

move, like wind, dust, small particles, falling leaves, and so on. It's a sure shot way to making it dynamic (or at least moving). If we go to the empty desert again, with nothing in there except a character, we can see that it's quite a static, non-moving scene. Why? Because it's a dry, empty plane – nothing is happening **(Fig.17)**.

Now, if we would add some suggestion of really strong wind by adding some sand blowing up from a little ridge, and some particles all going in the same direction (we'll go with right to left, because it's perceived to be a faster movement in this direction) all of a sudden the whole static desert becomes a moving – and even more threatening – plane. You can feel the sand gushing past your face and through your legs; you know you have to move through it but you can see there's nothing to find shelter in **(Fig.18)**.

If you have a character with a nice cape, dress, or other fabric elements that will show wind, you should make use of it! If your character doesn't have it: What's wrong with you? Have you wrapped your character up in latex? It better not be a guy! Just give it something that moves. If you avoid it hanging straight down as though made out of lead, it instantly suggests wind and movement. Such an easy trick, and yet it always works (**Fig.19**).

**Guidelines**

Remember that all these are guidelines. It's much more important to figure out what you want to say and think about how to do it, rather than follow standard rules. Get familiar with the tricks and get to know why they work. And what they exactly enhance, but don't become a slave to them, or to any trick for that matter. Try to keep an open mind and keep thinking on what

you could do to improve what you are doing. Framing

Okay so you figured out your story, you've established your primary and secondary elements. Now let's look at the limitations or possibilities of your frame.

# Framing

Alright! Framing: the package in which you wrap up your little story! The borders for your brilliance; your own little frame of infinite possibilities; the edges that border your deep, intellectual thoughts; your own piece of ... Yeah, OK, I think you get it!

Framing is as versatile as the composition you put in it, and actually, it is an important part of the composition itself. The frame is the first thing you see; it's the work area and it depicts a


Fig.18

lot of the suggestion of the scene even before the image is shown. Do you want your viewer to have an endless visual journey from left to right over a magnificent widescreen landscape? Or do you want to show them a deep and interesting vertical image? What about leaving the traditional frames for what they are, and pushing the limits a bit? What does a round frame do? How about a squared frame with an element leaving it?


Fig.19

## Fixed Frame

Framing offers lots of possibilities – that's if you have the freedom to pick a frame anyway. Often in the commercial world there are certain limitations to the frame you can use. If, for example, you have to create a cover illustration for a book then you'll have to work within the limitations of the format. This can make things a lot harder. When you need to display a lot of information about a landscape, for example, and a very wide horizontal frame would be perfect but the book is standard vertical size … Well, this is where you want to have a good understanding of composition, but more importantly about the most important elements that you need to show in your image. It is in these kinds of illustrations that you often have to sacrifice important things; the trick is to sacrifice the least important one.
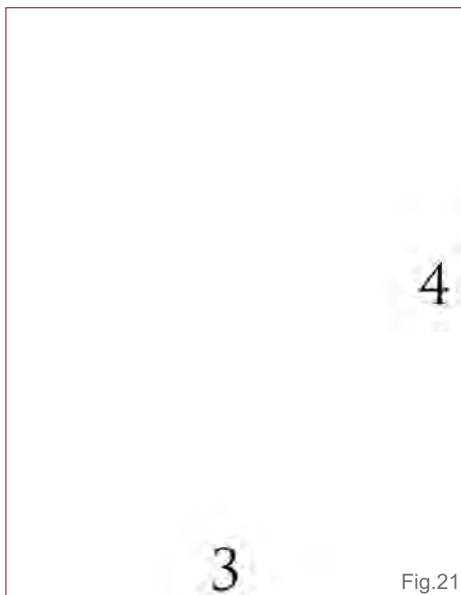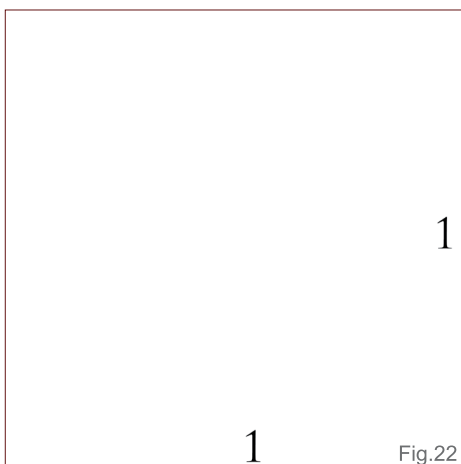

Fig.21


Fig.22


Fig.20

Sketching, thumbnailing and having a camera floating around in your head looking for the best possible angle are vital techniques to employ in these kinds of illustrations. However these kinds of frames are boring, or they're boring to talk about at least because they are set, fixed, and there is nothing you can do about it. You just have to find a way to make it work.

## Free Frame

So I want to dive a bit further into the world of free frames; the place where you have endless possibilities – choice all over! The question is of course: Is more choice better? Choice is great if you can choose (now that makes sense, doesn't it?). Sometimes having no choice is great in the way that if forces you to think about a less than standard solution. It pushes you outside of your own little safe world where everything is great, beautiful and boring. It forces you to get frustrated and start thinking again.

I find that people often choose a frame because, well, just because it's always like that: landscape = wide; portrait = vertical. Of course it works; it always works. There is not necessarily something wrong with it, providing you know why you chose it.

So here we are: we have all the freedom in the world to choose a frame for our dynamic composition. What are the options? Well, infinite actually, but that would make this tutorial extremely long (or extremely short if I just keep it at the word, "infinite"). So let's break it down into a few forced boxes again (I like that: pushing things or people into boxes where they don't quite fit, but with enough force, or at the right angle, they will awkwardly look like they do sort of do).

### Basic Frames

The non-special, what-you-see-all-day-long frames:

**Horizontal:** Your basic screen layout. Comfortable to look at, fits in the view of a person. It's a solid balanced shape. It's great for showing things that require some width, or for images that you plan for people to use as backgrounds. It's often a good choice for something that you want to feel like it has some sense of space, or if the space around an object is important. If you don't know what to choose, go for this one: easy, simple, straight forward (**Fig.20**).

**Vertical:** Again, quite a basic layout (but then I have put them in the basic category, so it does make sense). It has a familiar shape which is great for showing things that are a bit higher than they are wide, such as people. This shape also often shows a bit more depth, since a many elements tend to be overlapping or have foreshortening going on to make them fit in the frame (**Fig.21**). Now, I also find this shape a bit more dynamic. I'm not 100% sure why, but it might be because it's less grounded then a horizontal shape. Maybe it's because your eyes often can't fully see the whole image at once and they have to travel up and down, left to right? Or maybe I just like it? Not sure!

**Squared:** I really don't know what to say about this one (**Fig.22**). It's good for a CD cover, but that's about it in my opinion. I use it sometimes, but that's mainly because I crop the vertical or horizontal image because of a mess up somewhere and then it eventually ends up squared. Squared is boring; it's too solid,
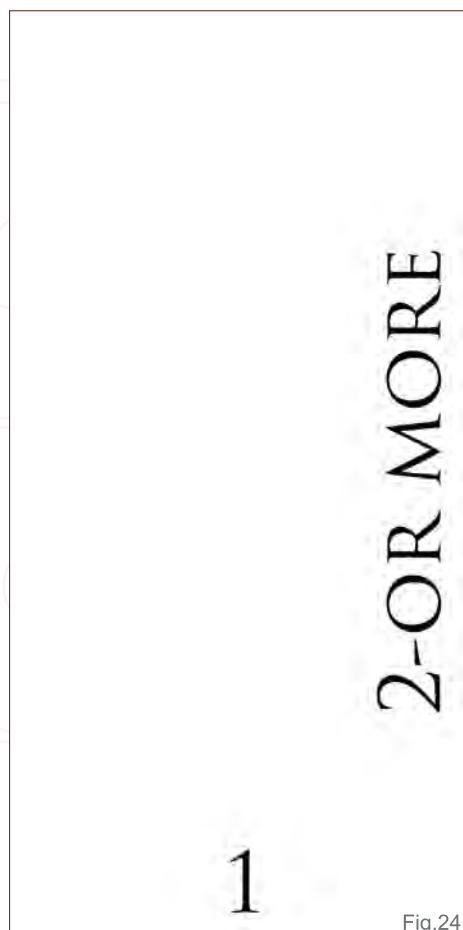


Fig.23



Fig.24

too rigid, too … well, it's just boring. Anyway, since this is not science I am not obligated by objective facts, I can be as subjective as I want to be. And I will be! I think squared sucks! It's just not fun! And there you have it. I don't think anyone will look me up after reading this and punch me in the face because he (or she – I prefer she) is a squared frame fundamentalist.

I just love to tell the whole world something sucks. It's just great! Somehow it's more rewarding than saying you like something. No, you really, truly think something sucks and the whole world can know about it – awesome! Of course, my opinion on things tends to change, so there is a good possibility that in the next year or so I may become an absolute squared frame fundamentalist!

Anyway, enough off-topic nonsense! We are here for information so let's move onto something a bit more interesting.

**Extreme Frames**
Extreme frames! This is basically the same as the basic frames, but exaggerated. Now there should be a note to the usage of extreme and unconventional frames: by using a choice of frame like this, you have got to have a reason. It will stand out if you don't, just because it is such an unconventional frame choice. That means that people expect it to make sense. You have to explain your choice of frame to the viewers. Now, if you choose an extreme widescreen

frame for example, and you put a character in there (vertically), that means that the space around the character is given significant importance. The placement of your character in such a frame requires much more thought than in a regular frame. It can work out brilliantly – only if you place it right and there is a reason to place it there.

Extreme Widescreen: This one is awesome for über epic landscapes, or to show off exactly how long your hero's cape is (**Fig.23**).

Extreme Vertical: This is a great choice for things that are extremely long, or deep. It's a good choice if you want to have a wide angle camera lens and you want to show how big, or deep something is. It's also a good choice for a 3-point perspective (**Fig.24**).

**Unconventional Frames**
"Unconventional" is pretty much anything that hasn't fit into the previous headings. I rarely use them. Why? Well, because I don't often have a reason to use them. They also take a lot of pre-thought since all applications and paper are pretty much always bound to have four 90-degree angles, making them any variation of a square. So, if you want to do something different, you have to plan it, and you have to have a good idea why something like that would be a good idea. And I'm not too good at that – I tend not to plan.

But then, saying that I don't plan would completely discredit the previous text that I wrote before this. I do plan! I don't really like it, but sometimes you just have to. But, if I have a choice – as it is with free choice of frame – I choose not to plan too far ahead.

Still following me? Good. The thing is that there should be a reason for your choices. Are you in an online art competition and you want your space marine to stand out next to all the other squared space marine images? Well then, yes, go to the forum, press Print Screen, get the background color and "fake" the unconventional frame. Give your space marine his gun outside of the frame. Cool!

Ok, so a few conventional variations on unconventional frames. When people use unconventional things to be "original" they tend to choose the most common of uncommon things. Please don't use it for that; use it because it fits the image. If you want to be original like that then go out and paint a bicycle with pizzas. Otherwise, just make an original story and choose a frame that fits it.

**Round:** This is a bit like squared, don't you think? It's solid, but it's better than squared. I wouldn't use it though unless I have to. It's good for an avatar/portrait, I guess, but I'm not sure what else I would do with it. An epic landscape doesn't really work in this one (**Fig.25**).
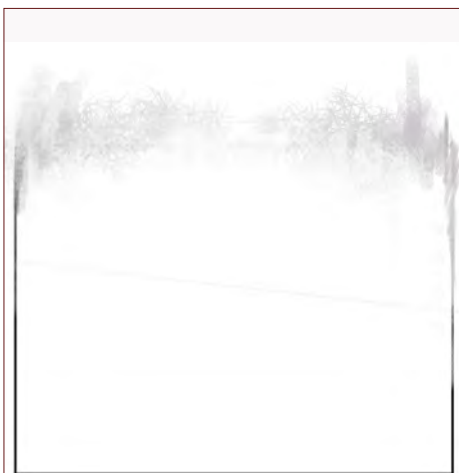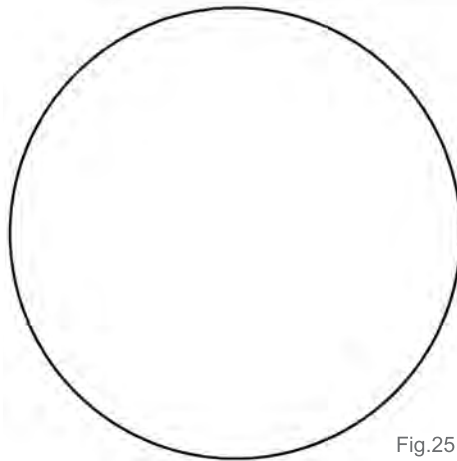

Fig.27

Fig.25


Fig.26

**Outside the Box:** This one is fun (if you can use it properly, that is)! It's a great way to attract attention to your image. It's very good for creating a sense of depth. Have your warlord step out of the image; it really works wonders if well applied. Be careful with it, though, because if you make a digital image, the image is always squared, so you actually have to select the background color in order to fake the effect. This makes it only good for that one specific forum. Of course, it's a bit easier if you make a comic, since you know the background and it's always the same (**Fig.26**).

**Fuzzy Edge:** This one is quite interesting, too, and it's great when combined with one of the above! Again, be careful because the image will only work with certain backgrounds (unless you make the background a specific color and you create a new frame in your big frame). It's hard to say what it is specifically good for since it depends so much on the image. It can also be nice to combine this with a normal sharp edge to create a surrealistic effect (**Fig.27**).

## Creating the Final Image

So you've got your story ready and you've decided on your choice of frame. Now you just have to put it together and make an image. It's that simple!

The main trick here is to know what you want to make. Try out different setups; tryout a vertical frame or a horizontal one. Try adding an Overlay
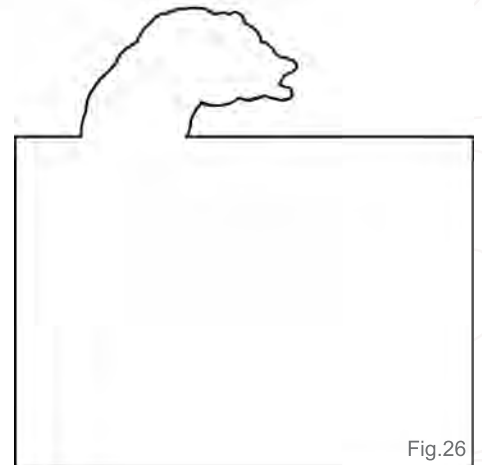
layer to the foreground, or perhaps even a big, empty space in the background. Try, try, try; sketch, sketch, sketch. Never go for the first one.

I could go into detail here on how to make an image exactly and setup your whole composition, but that would be ridiculous. Just try it out for yourself and use some of the elements described previously. I don't want to make a 1, 2, 3 step tutorial on how to create the "perfect" image. I don't want to hand out a sheet with tricks. Just use this as a guide to help you understand composition, camera placement, framing and the dynamics of an image better. Sorry for all those who were expecting a super trick to the solution of life, the universe, and everything under it, including eternal internet fame! It's not here; I'm not your man. If you want to know that, go and read the Hitchhikers guide to the Galaxy (the answer is 42, by the way). But I do hope you've enjoyed reading this as much as I have writing it …

Not that I was drunk while writing this (well, at least not the whole time anyway).

## David Smit

For more from this artist visit
http://www.davidsmit.com
or contact
david@davidsmit.com

# Add **UN**-Natural 3D Environments

Trees, forests, mountains, oceans, skies... **TERMINATED CITIES**
Vue 7 adds entire 3D environments to your scenes.

# TERMINATOR SALVATION

©2009  Whiskytree for Warner Bros Pictures.

*"Vue allows us to create a unique look with the material editor and to combine different materials and play with all sorts of things. It's ideal when you're in the process of developing the look of your shot.*
*Vue gave us instant results, so it was a good solution for our explorations. It just seemed like the right tool!"*

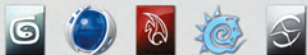*Joe Ceballos, Art Director and Concept Artist, Whiskytree*

| | | |
|---|---|---|
| Ozone 4.0 **$295** | Vue 7.5 Infinite **$895** | Vue 7.5 xStream **$1495** |

xStream & Ozone integrate in:

### Vue 7.5 xStream - The Integrated Solution
Vue 7.5 xStream offers professional CG artists a complete toolset for creating exceptionally rich and realistic natural environments and rendering them in 3ds Max, Maya, XSI, LightWave and Cinema 4D.

### Vue 7.5 Infinite - The Standalone Solution
Vue 7.5 Infinite offers an all-round combination of unequaled scenery creation power, advanced rendering and full-featured animation tools.

### Ozone 4.0 - Hyper Realistic 3D Atmospheres
With Ozone 4.0 create hyper-realistic atmospheres in 3ds Max, Maya, XSI, Lightwave and Cinema4D.
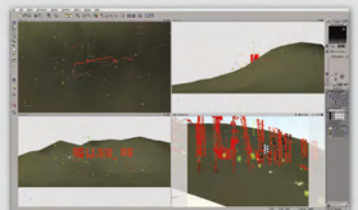
## e-on software

*Experience Vue 7 and Ozone 4.0 for free, http://dt6.e-onsoftware.com*

# 3D
## ANIMATION & GAME DESIGN

## $3,000

## NEW MEDIA CAMPUS

## ONLINE TRAINING

**New Media Campus**, over the past 8 years of operation as a Post-Secondary School, has been providing talent for production companies worldwide. *Electronic Arts* and *Rockstar Games* are just two examples of companies that are employing New Media Campus graduates.

Our online school is designed to make our programs affordable for any budget without sacrificing quality education.

### TUITION INCLUDES:

- Unlimited 12 Month Support from Industry Professionals.
- Personalized Critiques Directly from Instructors.
- Project Based Curriculum.
- Instructor Delivered Assignments for Each Project.

## www.newmediacampus.com

"WE'VE LEARNT THAT PHOTOS CAN BE USEFUL AS THEY ARE IN THE LAST INSTALLMENT BUT THERE IS ANOTHER WAY OF WORKING WITH THEM THAT I PERSONALLY FIND MORE APPEALING..."

### CHAPTER 1 – JULY
Introducing Photoshop's Workspace, Graphics Tablets, Screen Calibration, Color Profiles and the Brush Tool

### CHAPTER 2 – AUGUST
Canvas Settings, Scanning Drawings, Swatches, Colour Pickers, Colour Theory, Layers and Custom Brushes!

### CHAPTER 3 – SEPTEMBER
Composition Rules, Sketching and Perspective, Understanding Light and Blocking-In.

### CHAPTER 4 – OCTOBER
Colouring from Greyscale, Colours beyond Blocking-In, Blending Methods and Using Photos

### CHAPTER 5 – NOVEMBER
**Quick Masks, Using the Wand Tool, Liquify Filter uses, Layer Masks – and Painting!**
Nearing the end in the fifth chapter we shall be looking at adding photo textures to a painting with the use of Custom Brushes, and we'll learn about several tools such as Quick Masks, the Extracting Tool and the Wand Tool, what use the Liquify Filter has, and the greatness of Layer Masks. Of course, we'll also be painting some more

### CHAPTER 6 – DECEMBER
The Final Part: Finishing Touches, Filters, the Unsharpen Mask and Saving your Work

*Beginner's Guide to*

# DIGITAL PAINTING

This Workshop Series will look at, just as the title suggests, all the things that we need to know to get us started with Photoshop – mainly for painting, but also for other things such as matte painting and photo manipulation, which often use the same tools. We will be covering all the technical aspects of the programme, as well as some technical sides of painting that'll help us starting to swing the virtual brush!

## CHAPTER 5 – PHOTO TEXTURES, QUICK MASKS, USING THE WAND TOOL, LIQUIFY FILTER USES, LAYER MASKS – AND PAINTING!

Software Used: Photoshop


Fig.01


Fig.01a

## INTRODUCTION

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

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

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

## FUN WITH PHOTOS AND FILTERS

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

## TEXTURE BRUSHES

They are brushes made from photos – and how to make your own brushes we covered in the second chapter of this workshop, so you shouldn't have any problems making your own at this point, either from your own hand-drawn textures or photos, or from royalty free images you download from the internet (3DTotal has


Fig.02

released a free texture and reference library filled with royalty free photos which is worth a look: http://freetextures.3dtotal.com). There are also websites out there that offer pre-made royalty free texture brushes, but the ones I've encountered so far have left a lot to be desired. But hey, that doesn't mean there aren't any out there that you may like – I'm just *very* picky!

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

Here's a photo I got from CGTextures.com (**Fig.01**). This one we'll be using for the cliffs.

I've turned it into several brushes (**Fig.01a**) ready to be used. Of course, one brush would be perfectly fine, but to get a less "patterned" texture, several brushes are best as they won't form an obvious repeat in the texture.

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

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

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


Fig.03


Fig.04


Fig.05

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

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

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

For now though we repeat the whole procedure for the other side (**Fig.05**), and then move onto the archway. This one I want to look a bit like marble. I'd already made some marble brushes from photos from CGTextures.com a while ago for another painting, so I'll be reusing them here
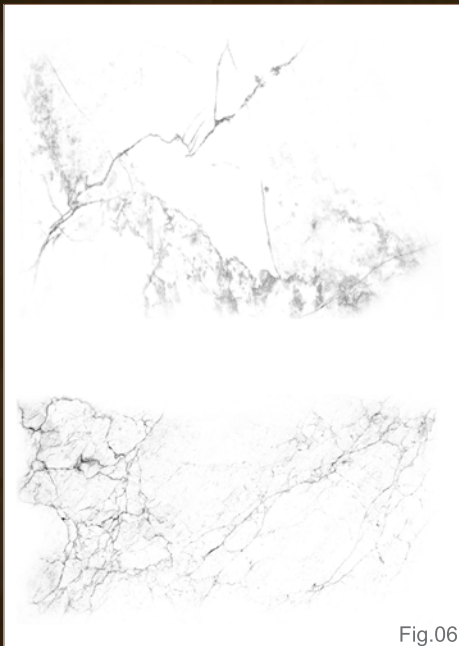
Fig.06


Fig.07


Fig.08

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

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

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

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

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

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

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


Fig.09

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

One way of adding any of the before-mentioned to fabric is to once again paint it by hand. This is a very time consuming process, and may not be to your liking. Another way of doing it is to draw a pattern on a separate document, and then convert it into a brush to be used in the same way as we've used the brushes before. You could also use photos of lace and such to convert into brushes. When making continuous brushes – such as for lace borders – make sure the pattern you are using can be "stitched", meaning that the ends of the pattern match up. Then simply set your brush settings so the spacing of the brush is in keeping with the length of the lace segments (**Fig.10**). This is not necessary for a repeat pattern that uses a standalone image (**Fig.10a**).

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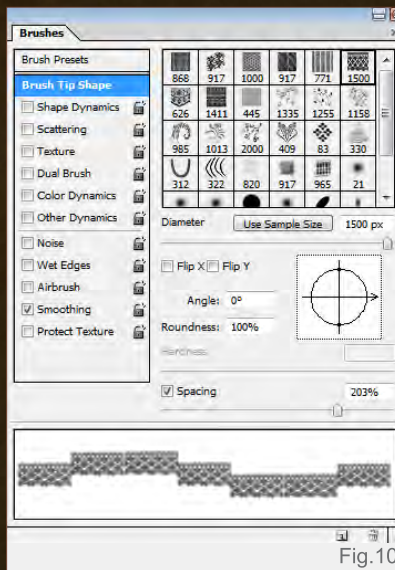

Fig.10
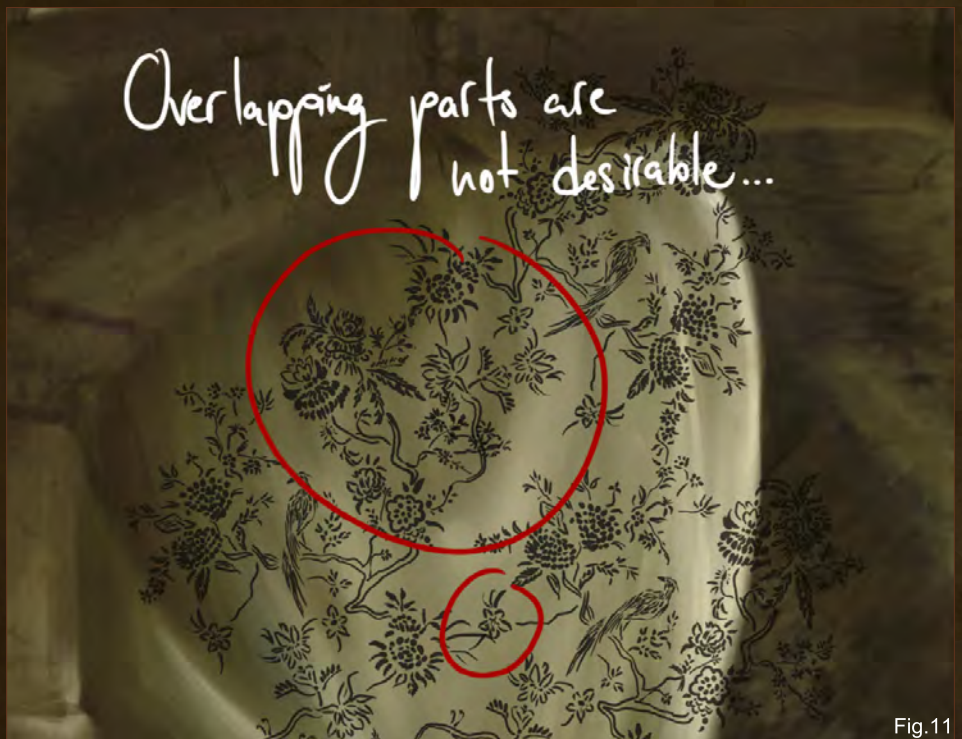

Fig.10a


Overlapping parts are not desirable...
Fig.11


Fig.11a

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

## THE LIQUIFY FILTER

Right now the pattern is flat, looking as if projected onto the dress rather than being part of it. To make it look like it is part of it we need
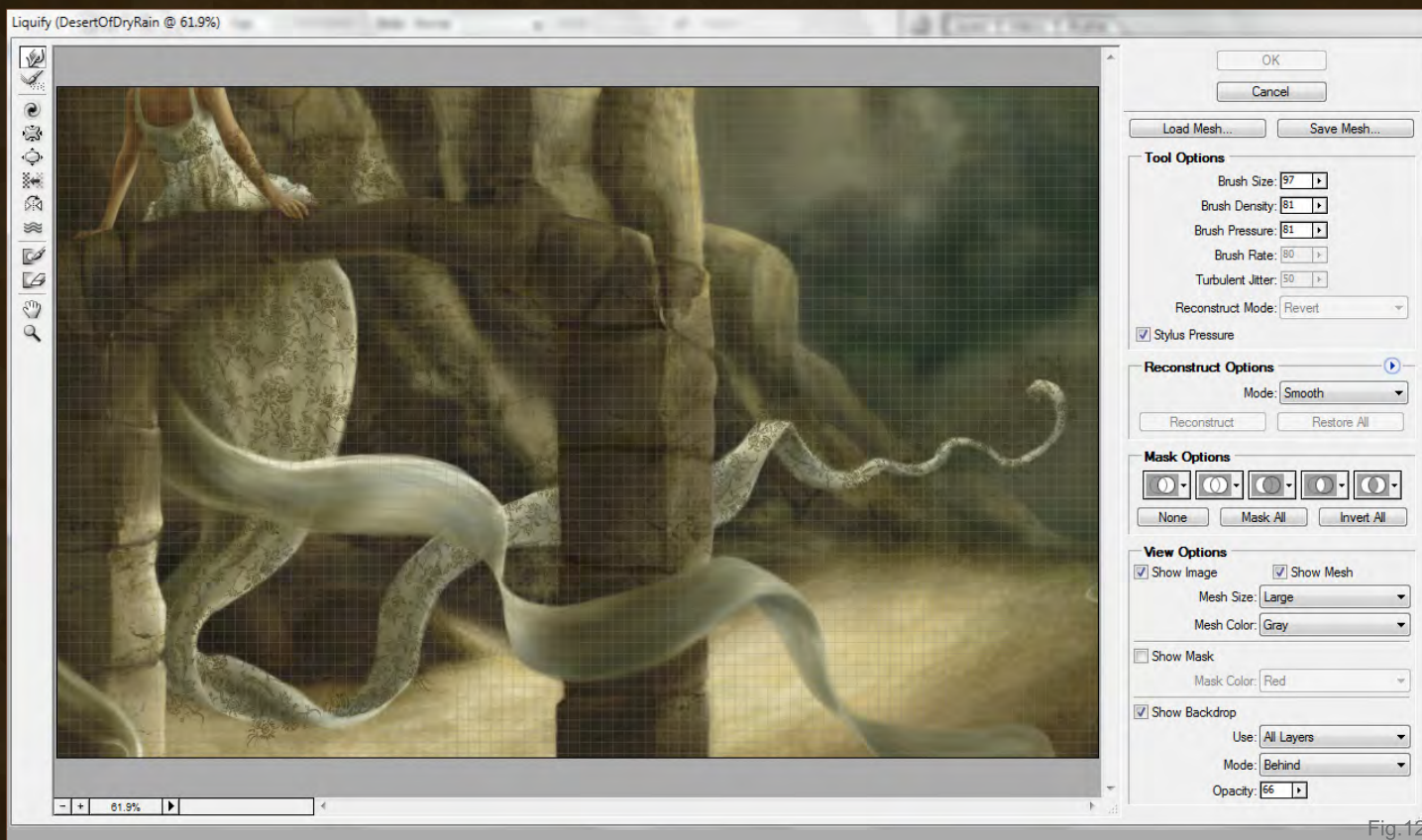
Fig.12

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

This filter is almost a program all by itself, and you can do some seriously fun stuff with it. For now though, let's just concentrate on the task at hand. As the painting is rather big, but we only want to liquefy a small portion of it, the best thing to do is to select the area we want to liquefy using the Marquee Tool. Make sure to get all parts of the pattern into your selection, and also that you have selected the layer the pattern is on. Now open the Liquify Filter (**Fig.12**).

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


Fig.12a

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

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


Fig.12b

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

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

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

Right, that's done then!


Fig.13
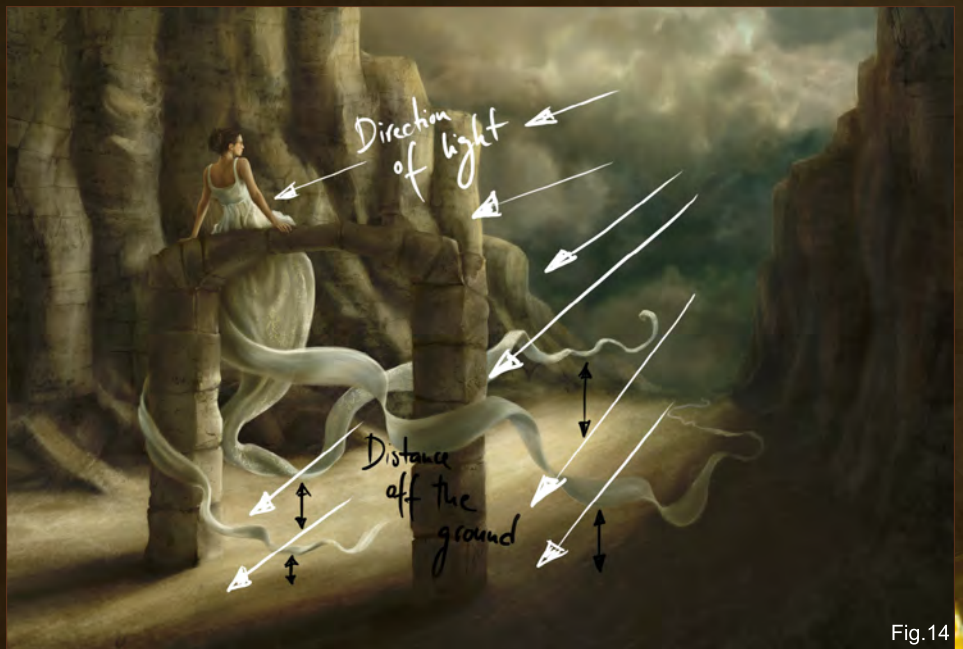

Fig.14


Fig.14a

## PHOTO MANIPULATION AND MATTE PAINTING

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

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

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

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

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

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

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


Fig.15

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

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

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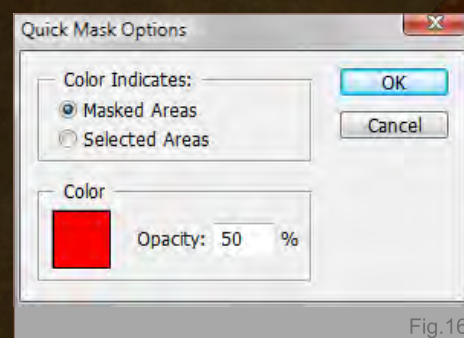

Fig.16

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

So let's try this:

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


Fig.17

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

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

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

### The Wand Tool

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


Fig.17a


Fig.17b


Fig.17c

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

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


Fig.18


Fig.18a

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

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

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

To work with it, simply select the size of your Brush and choose if you want it to be smart highlighting or not, and then trace around the edges of the object you want to extract from the picture, making sure that they are covered (**Fig.19a**). Then select the Paint Bucket Tool and click on the inside of the highlighted area. If your whole picture goes blue, there's a gap in the highlighted line – try to find it,
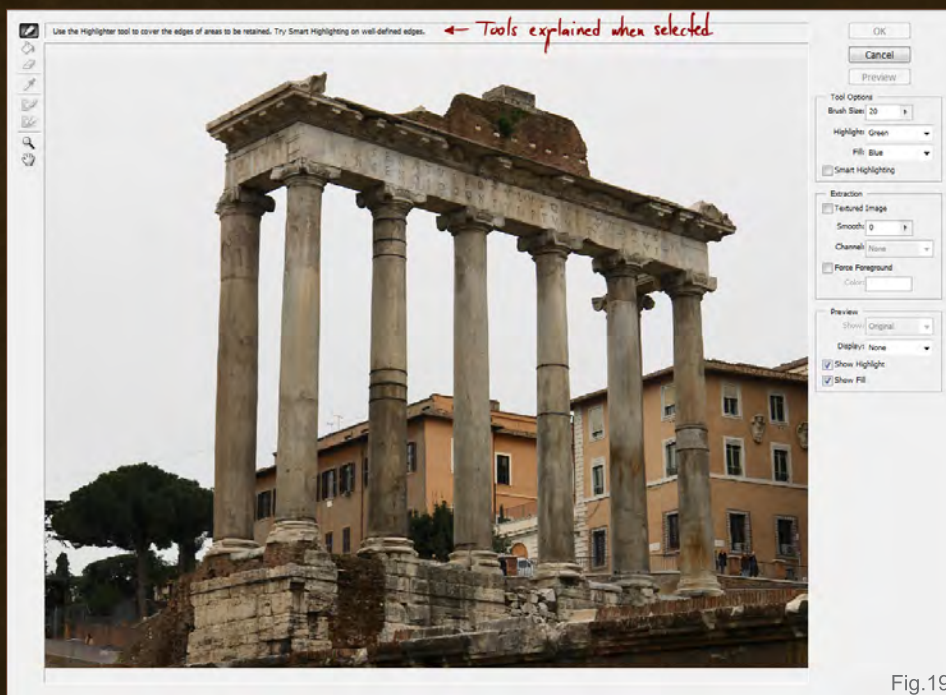
fix it, and fill it again with the Paint Bucket Tool (**Fig.19b**). Once it is filled you can choose to preview your selection. If you are happy with it, hit the OK button and your selection will be extracted (**Fig.19c**). This may need some post work as well, and just because it looks like a faster method of extracting something, it isn't, really. Precision and patience are still needed when using this.
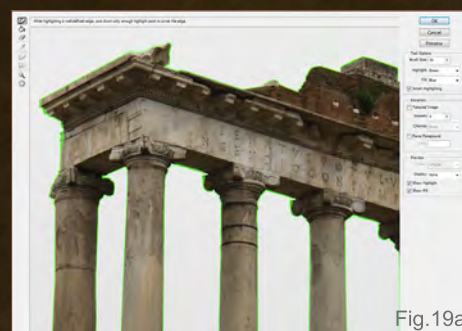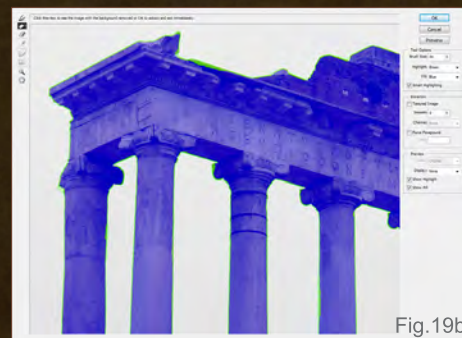

Fig.19


Fig.19a


Fig.19b

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

**Layer Masks**
There is another tool that can be very useful for photo manipulation. Let's assume you want to add glass into your picture – be that a glass


Fig.19c

or just glass, like windows and the like. Glass is generally transparent, which means that whatever is behind it shows through it. The same goes for liquid, or a glass with liquid in it. Sounds tricky, right? – Not quite!

The best method (that I've found) is to use the Layer Mask for tasks like this. You can find this tool at the bottom of your layers palette, and it lets you control the level of transparency much more easily than, let's say, the Eraser would. Essentially it's a bit like those blackboard toys you can get everywhere that are filled with black goop that you can push around to reveal rainbow colors underneath! Or, if you're from my generation, we used to do it with wax pastels – one layer of color, and then another layer of pure black on top. We'd use a scraper to get the black off and reveal the color, if we were good kids. (If we were bad kids, we'd use mum's baking palette knife.) We can do the same thing in Photoshop with the Layer Masks. Of course, the Eraser would work as well to reveal something that is beneath another solid layer, but using the Layer Mask gives you more control, and it's easier to revert and undo any mistakes.
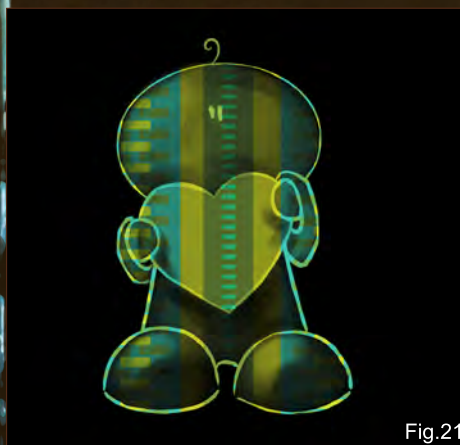

Fig.21
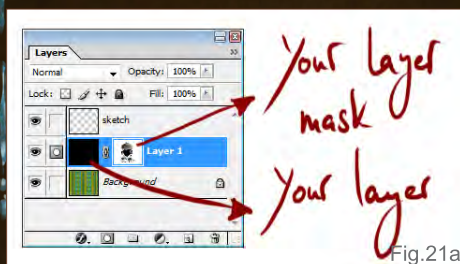

Fig.21a
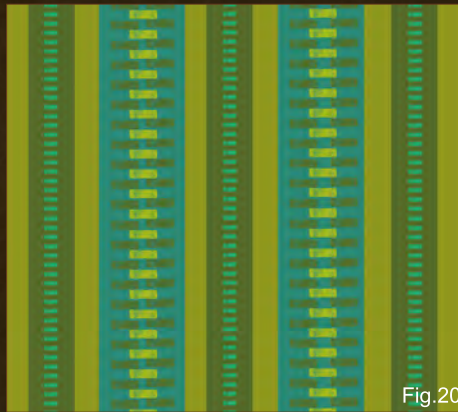

Fig.20

So, let's play:

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

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

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

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

You can also delete the Layer Mask if you are not happy with it, or just don't want to use it in the end. To do this, drag just the Layer Mask


Fig.20a

(**Fig.21a**) into the bin in your layers palette – it will ask you if you would like to "apply mask to layer before removing", and if you don't want to do that, click Discard. If you want do, click Apply, and what was the mask will be imprinted on the actual layer. You can also do this by going to Layer > Remove Layer Mask > Discard/Apply.

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

Right, I believe that is it for this chapter!

## IN CLOSING...

Next month we'll be looking at the last installment of this series, and with it at the finishing touches to the painting we started. We'll be covering some more textures, color and in-depth Levels adjustments, a few more filters, and ways to save your picture for internet use as well as print and other media uses.

## NYKOLAI ALEKSANDER

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

DOWNLOAD RESOURCES

• Free Brushes

# THE
# TWISTED ROOM

## MAKING OF BY JAMES WOLF STREHLE

James Wolf Strehle takes a never-before-seen approach to his making of by presenting it to us in the format of … a sandwich. That's right: a sandwich. One might ask how zombies and digital painting can be referenced to a sandwich, but then James is a rather unique fellow who, when hungry, likes to think of his painting in the same stages of production as a tasty sarnie. So read on for a unique insight into James' workflow. Enjoy!

"For some, it would represent the secluded state that can result in a poor and unchecked gaming habit; for others it would bring back fond memories of the time they stayed up all night finishing their favorite game."

# Making of the twisted room

**Software Used:** Photoshop

## Section Title

For this making of article I would like to take you through the steps I took when creating my image, "*The Twisted Room*". It's an older image, but it is a piece that I had a lot of fun creating and I'd like to share that process with you, from concept to completion. I will be talking about how the image came to be and what steps were taken to create the final piece. Hopefully you'll be able to get something out of it that will aid you in your own artistic endeavors!  Now, for the sake of entertainment and the fact that I'm super hungry, I'm going to present this "making of" in the form of a sandwich! So first let's set out the plate.

The initial spark for this particular image began with the two words: twisted and room. Sometimes when you're stuck and looking for an idea, mixing and matching random words can be a great solution to the problem. I no longer have the time or luxury of getting "stuck", but when I did I had a lot of fun with random word pairings and phrases, such as "valley of the
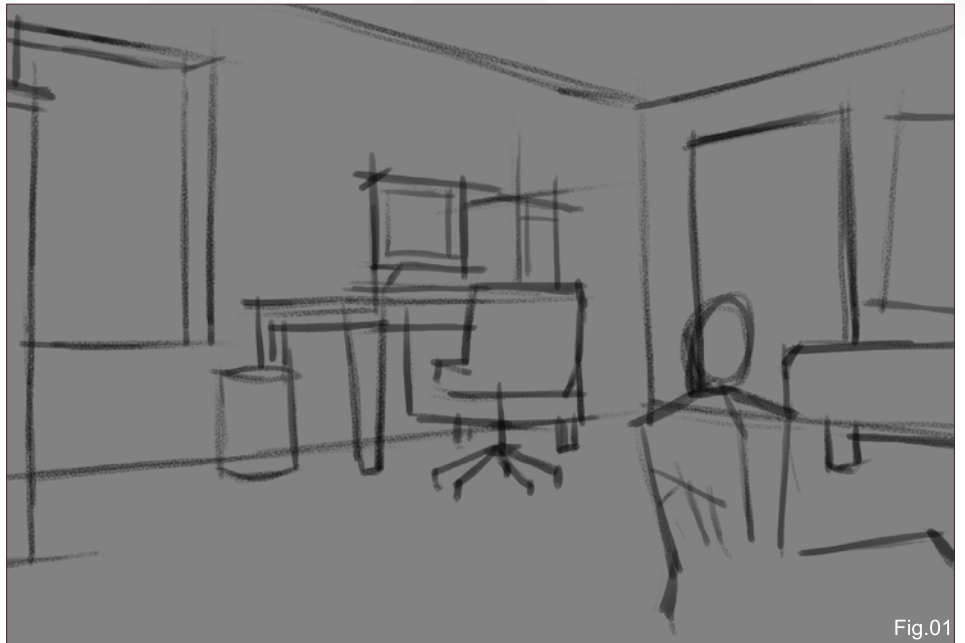

Fig.01

ghost king", "waffle canyon", or "sloppy slayer". So if you're struggling for an idea, give it a shot! You'd be surprised at how many mouth-watering combinations you can come up with!

I had a lot of ideas floating around in my soupy head for this image; some fairly straightforward – bet you can guess what those would be – and some more obscure in concept. Eventually I decided on one that was somewhat in-between. I also wanted to keep it open so the viewers could add in their own interpretations as well.

For some, it would represent the secluded state that can result in a poor and unchecked gaming habit; for others it would bring back fond memories of the time they stayed up all night finishing their favorite game. These thoughts ran through my head as the concept developed. I wanted the viewer to question the motives of the demons outside the window. Are they real? Are they simply part of the boy's imagination? Has the game come to life? Or are they the lost players that the boy is soon to join? Once the concept had simmered a bit it was time to put it to paper!

Let's lay down the first slice of our sure-to-be-delicious sandwich: the sketch. This piece was done in a very short period of time, so the sketch is very simple. Normally I sketch everything out to make it easier for me later on, but the scene was simple and I had a clear vision of how I wanted it to look. In **Fig.01** you can see the resulting simplicity. The perspective was also pretty straightforward, but in more complex setups the Pen Tool can be very helpful in setting up guidelines.

Next up: the meat (or Tofurky, if you prefer). I threw in some values to see how I wanted the focus to present itself (**Fig.02 – 03**). I knew the boy would take the center stage, so I filled the


Fig.02

surrounding area behind where the boy was going to sit with darker values. I also wanted the window to be a point of interest, so I decided to keep it in a midrange value. Once I had the ground work in I could start adding in the details (**Fig.04**). Since the piece had to be completed in a short period of time, I kept with the grayscale for a bit longer so I could focus on one thing at a time and get as much in as I could. Generally I don't spend this much time in the grayscale stage, and depending on the complexity of the colors involved later it can be a waste of time because you are most likely going to paint over it at some point anyway. In this case, however, I knew the colors could be solved fairly easily through various glazes and overlays. I also finalized the boy's positioning in this stage, as he was far too small in the earlier sketch.

**Time for the toppings!** As I mentioned previously, the colors were brought in through multiple Overlays. The palette is fairly simple,


Fig.03

focusing mainly on the colors red and blue (**Fig.05 – 0**6). I felt they could represent the theme quite well: the red could accentuate the dark and twisted elements, while the blue would

set the stage for boy's mental state. These colors also helped greatly in pulling him out from the background.


Fig.04

Now for the last slice of bread! I'm almost finished at this point, but there are a few things that need to be added and adjusted. The bottom right corner was feeling a bit heavy so I decided to flip the image. The reasoning behind this is that the bottom right corner is generally seen as the heaviest, so the quick fix to this was a flip. I also added in the last bits of detail, such as the phrase behind the computer, "Play for H…" (**Fig.07**). What does it say and what does it mean? And why is it backwards?! Is the room playing tricks on the boy or did the artist simply not notice when he flipped the image? It's all part of the mystery! Stepping back I noticed that the corner under the window was a bit dead, so I added some lighting from the window to add direction for the viewers' eyes. Otherwise they may get stuck there, and that's not a good place to be stuck! Last but not least, I finished up the boy, giving him his creepy, spaced-out demeanor, and therefore completing the theme of the painting.



Fig.05

**Finally, it's time to eat and digest!** I hope you've enjoyed the making of my twisted room sandwich. I must say, it's been a pretty tasty experience. Looking back there are a few ingredients that I would have added and changed, but as a whole I feel it still makes for an entertaining and fun painting to enjoy, so I hope you do! I've learned from it, and more importantly I had a great time doing it. Thanks for reading!



Fig.06

Fig.07

# 2DA next month

## Here is what's in the next issue of 2DArtist

visit www.2dartistmag.com for full information and to purchase current and previous issues for only £2.75 each!

# Digital Art Masters
## Volume 4

With the release of 3DTotal's latest book, *Digital Art Masters: Volume 4*, we have some exclusive chapters for you...

This book is more than just an artwork book. Not only does it feature full-colour, full-page images, but each artist has given a detailed description, in their own words, of the creation process behind each piece of published artwork. And they've done it especially for this book!

This month we feature:

## "Warband"
### Kekai Kotaki

The following shots of the "Warband" book pages are featured here in full-resolution and can be read by zooming in...

# WARBAND
## By Kekai Kotaki

SOFTWARE USED: Photoshop CS2

### Introduction
I started Warband as a piece to create in my free time. Doing concept work professionally is fun, but I enjoy painting on my own as well. The original idea for this piece came up while I was reading a fantasy novel. The basic premise was a fantasy creature waging war on mankind. One thing that really stuck out for me was that after these creatures plundered the town, the survivors heard the creatures celebrating and thought that their singing was beautiful. Inspired, an image of a prowling herd of fantasy creatures became the foundation for this piece.

### Getting Started
When starting an image I start very loosely, nothing much more than textures and brushstrokes (Fig.01), but there are some things that I plan on having beforehand. I like to have a main focal point, which in this case is the leader of the pack of creatures. So blocking him out was one of the first things that I did (Fig.02). I worked loosely on this piece, since I was creating it in my free time and didn't have any particular design criteria I had to meet.

As you can see, I work in a very monochromatic fashion. Most of these browns and grays come from me layering different textures whilst I paint, as shown previously in Fig.01. I like to keep my mind focused on designing the main points, which at this stage was the leading character of the image. Hints of other figures also started to appear here since I had a fairly strong sense of what I wanted from the main character (Fig.03). The composition of the overall piece was also being revealed to me at this stage, with the leader of the group surrounded by his many followers.

### Painting...
With a strong sense of what I wanted now, I began rendering the main character (Fig.04). The helmet was loosely based on a deer's skull. I tried to get an antler vibe from the horns on his helmet, too. I started rendering the pieces of the armor and weaponry, picking a mace as his weapon of choice as it just seemed brutal enough for this particular piece. I also used a photograph to help

me with the design on his clothing, still not working on the other characters too much at this stage – just moving pixels around, trying to get a very loose idea of what I wanted to do with them. I like to use the Soft Light layer in Photoshop; this is how I leak colors into a piece, like the yellows shown in Fig.04.

Liking what I'd done with the main character for now, I got started on the rest of the pack. Some loose line drawings gave me a sense of the flow of the piece (Fig.05); and this was followed by me fleshing out the line work (Fig.06). Loosely blocking out figures is something I love to do; it's quick and messy. From here I spent some time trying to pull out the new figures in the painting.

### ...More Painting
One thing I haven't talked about yet is how many times I like to flip my canvas whilst I work. It's a common trick many artists use in order to check whether their composition is working out or not. I like to do this so much that I have made a shortcut for it in Photoshop. Something to think about is making your workspace tailored to you – you will use it a lot, so make it as easy and comfortable to use as possible.

I used another Soft Light layer here to give the entire piece a warmer feel (Fig.07), and I was getting a better idea of what the side characters were going to look like. From here I started detailing out the armor and such, also using some fur references to help me out with the wolves

# DIGITAL ART MASTERS: VOLUME 1, 2, 3 & 4

Now avaliable from the 3DTotal shop:

**http://www.3dtotal.com/books/**

(Note: if a security dialogue box appears, tick 'Remember', then click 'Allow')
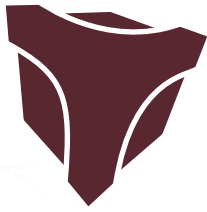
# 3dtotal.com

Is a resource website for the CG community; amongst our growing number of products for CG artists, we produce two monthly downloadable PDF magazines – *2DArtist* and *3DCreative*. We are based in the West Midlands, in the UK, and our intention with our magazines is to make each issue as full of great articles, images, interviews and tutorials as possible. If you would like more information on 3DTotal or our magazines, or if you have a question for one our team, please use the links below.

## Contact Information

http://www.3dtotal.com
http://www.3dcreativemag.com
http://www.2dartistmag.com

Editor & Content Manager > Lynette Clee
lynette@3dtotal.com
Lead Designer > Chris Perrins
chrisp@3dtotal.com
Marketing > Jo Hargreaves
jo@3dtotal.com

## Partners

If you have a CG community website and would like to support *3DCreative* and/or *2DArtist* magazine by showing our banners, please contact Lynette Clee at the email address above