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SCIENCE FICTION ARTIST IN-DEPTH INTERVIEWS

Digital Art LIVE

THE BLENDER ISSUE : 104 PAGES

COLIN MASSON

THOMAS PIEMONTESE

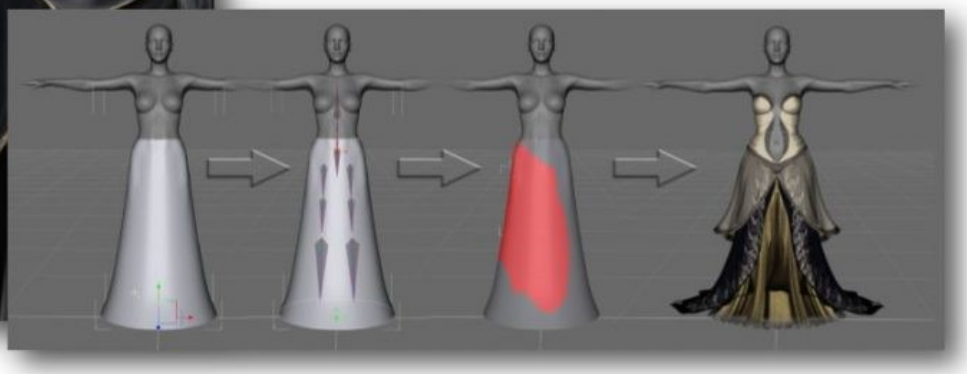
SHANE BEVIN

ISSUE NINE
JUNE 2016

VUE • TERRAGEN • POSER • DAZ STUDIO • REAL-TIME 3D • 2D DIGITAL PAINTING • 2D/3D COMBINATIONS

Rigging

In DAZ Studio



Saturday 9th July : LIVE WEBINAR

20:00 BST/13:00 PDT/15:00 EDT

Presented by Kim Schneider (Arki)

Kim attended the University of Applied Sciences in Münster, North Rhine-Westphalia where she received a Bachelor of Arts degree in Media Design and Illustration.

Over the years Kim has done work in the role-playing game industry applying her illustration skills for RPG games such as Engel for Feder & Schwert, Redaktion Phantastik, and the Pegasus Spiele game—Call of Cthulhu.

Her journey into 3D Digital Art began in 2000 with Poser (yes fourteen years of Poser experience!), then Poser Pro and started vending Poser content in 2006. She's since been now hard at work at creating content for DAZ Studio.

She delves into other packages occasionally including Carrara, Bryce, Terragen and used Hexagon for modelling. She also uses GIMP, Photoshop elements and UV Mapper Pro in her workflow.

Rig Smarter

Want to learn in real time the process of generating bones and weight maps in DAZ Studio for your own 3D objects?

Work **smarter** by learning essential time saving knowledge by rigging with templates. Kim Schneider covers the rigging process by using the example of her new Calla gown for Genesis.

Package includes live webinar event, Q&A session and HD Recording

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Content:

An introduction to rigging in DS

+ Bones and weight mapping

Advanced rigging

+ Skirts or dresses

Introduction to rigging with Templates

+ What is a template?
+ Timesaver – nerve saver
+ Rig smarter, not harder

Creating your own templates

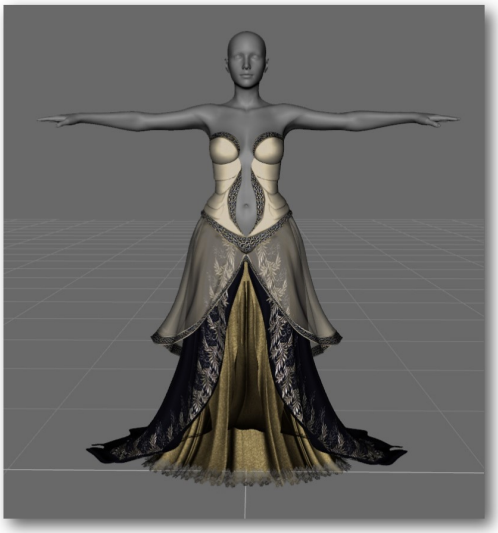
+ What do keep in mind when creating a template mesh
+ Bones, weight maps and morphs
+ Integrating custom sculpted standard morphs

Using and refining template rigs

+ How to use your new template
+ Use the new rig as a base for your final adjustments

Templates – where and when?

+ Examples of where Templates are useful



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For users of Adobe Acrobat Reader:

1. Open Adobe Acrobat Reader. In the top menus, select VIEW and PAGE DISPLAY
2. Make sure that the option for a TWO PAGE VIEW is ticked.
3. Make sure the option to SHOW COVER PAGE IN TWO PAGE VIEW is ticked.

That's it!

For users of the popular Foxit Reader PDF Viewer:

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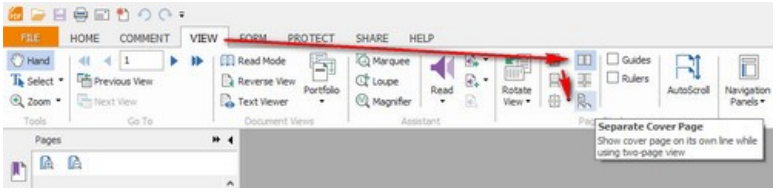
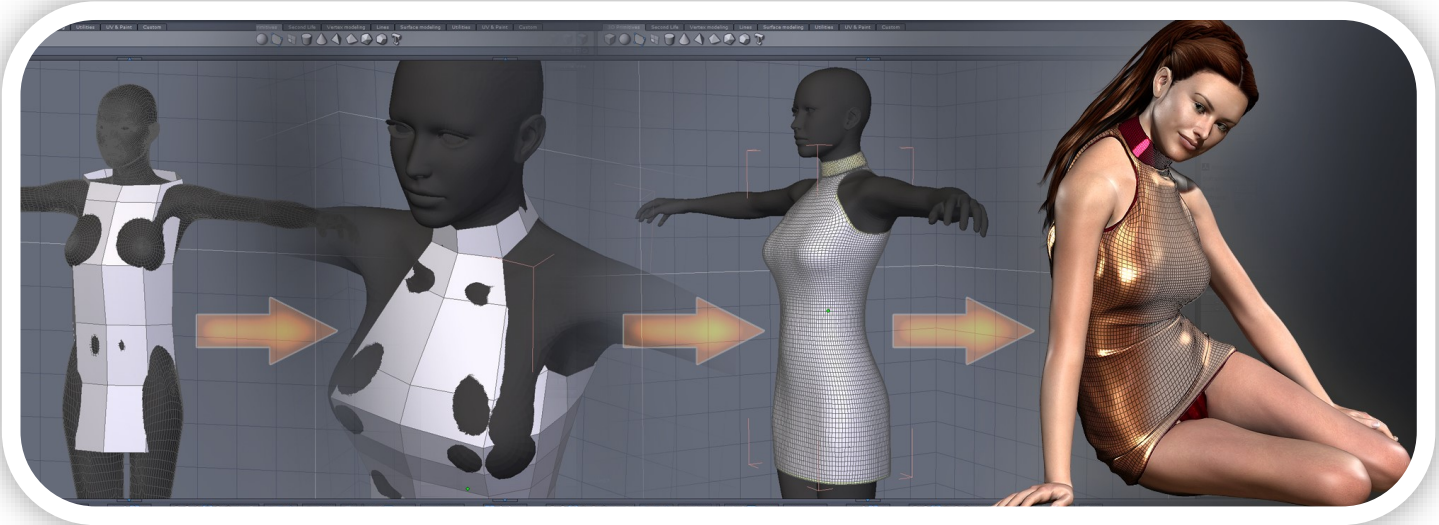


How to Model with Hexagon

See this Hexagon Introductory Tutorial

In the Digital Art Live shop



- Getting started in Hexagon: the basics
- Hexagon's Primitives
- Setting up a workspace/document
- Points, edges and faces
- Scaling and manipulating elements
- Creating edges
- Subdivision
- Soft selection
- Mesh touch-up
- Materials and Shading Domains

Saturday 30th JULY 2016

£25 or $37

Digital Art LIVE

SUMMER MEET-UP EVENT

STAFFORD, UK

Picture: Ian Halsey

MEET THE TEAM, AND YOUR FELLOW ARTISTS! 12.30pm, Sat 30th July 2016.

We have a special opportunity to meet the Digital Art Live team, the magazine's readers and other digital sci-fi artists. All in the comfort of possibly the best traditional independent tea-rooms in England, 'The Soup Kitchen' in Stafford.

Stafford is a pleasant market-town in Staffordshire, in the middle of England, and it benefits from having an inter-city train station on the West Coast Main Line. Stafford is accessible by fast train from cities like London, Birmingham, Stoke, Manchester and more. The Soup Kitchen is just a five-minute stroll across a fine Victorian-era park, from the train station.

The Soup Kitchen venue lacks a certain 'sci-fi futurist' look, we admit — but the venue makes up for it with a swift waitress service with traditional uniforms, plus good food and cakes, free wi-fi, and oodles of ambience. This historic building is rather like *Doctor Who*'s Tardis — it looks small on the outside, but inside it's vast and has 400 seats plus a modern roof garden!

Your event ticket (£25 or $37 US) will give you:-

- Printed copy of Digital Art Live Issue 1
- Lunch provided
- Connect with other artists and share your artwork

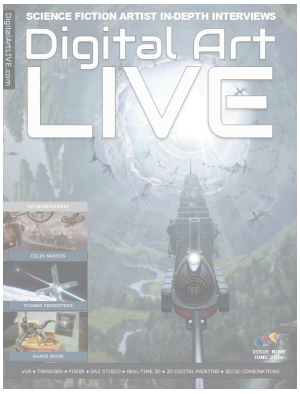
GET YOUR TICKET TODAY!

How to Model with Hexagon

See this Hexagon Intermediate Tutorial

In the Digital Art Live shop

Kim Schneider (Arki) has over 15 years of content creation experience. In these two tutorials she goes over the techniques that she uses to create the "Pentacle" -an eye catching pendent that's sold in her store. This model will be designed with a headband, but could easily be adapted as a shield boss or used as a larger scale decoration. In particular Kim will be going over the line tool in detail, which can be used for extrusions. Join us for some informative and fun sessions!



Front Cover:
"O'Neill's Fantasy Theme Park" by Colin Masson.

THE BLENDER ISSUE

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Credits for backgrounds, from top left: all by **Colin Masson**. Detail from "Reconnaisance to Reichenbach"; detail from "*Norway* Docks at Pellstation"; and detail from "Fleet Manouvers".

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EDITOR'S LETTER

WELCOME...

Blender is a comprehensive and free 3D modelling and animation suite. It has a wide set of functions that allow creation of video games, 3D printed models, excellent still artwork and animated movies. It's installable on many platforms.

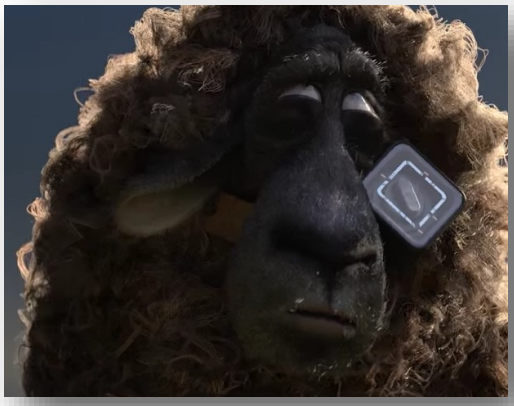
Python scripting allows you to customize Blender to build specific tools for your own projects or to assist others. The license allows you to modify the software.

It has a neat interface with a minimalist theme applied throughout. Customisation is possible allowing you to help set up things for your own environment and speeding up your workflow.

There is fairly steep learning curve for Blender, but with it being free then there's going to be fair return on investment.

Every few years the Blender Foundation announces a creative project to help drive interest and use for the software, which are quite landmark in terms of quality. The most recent animated movie project was "Cosmos Laundromat", where a pilot was released in 2015.

An earlier project, Sintel from 2010 still blows me away when I watch this. it's more than a clever demo animation. The storyline is worked out in detail, including a number of levels. You might see it as a fantasy-action movie, but it also packs a coming-of-age thread and a sobering life-lesson.



Cosmos Laundromat : 2015

Sintel : 2010

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COLIN MASSON

Digital Art Live talks with **Colin Masson about** Blender, Blender modelling and animation, videogame modding, book illustration, music and album covers, and more.

DAL: Colin, welcome to *Digital Art Live*. Many thanks for this in-depth interview.

CM: You are very welcome, I am flattered to have such an interest taken in my work. I have had a look at some of the back copies of your magazine, and am impressed by the standard of the contributions, not to mention recognising the names of quite a few of the artists featured. I suddenly find myself in very august company!

DAL: Thanks. Could you first tell us, please, how you first encountered the visual arts?

CM: I was born in Germany at the end of the 1950s, and my German mother tells me that I started drawing at the age of five. At the time we lived with my grandparents in a small town outside the major city of Hamburg, and she would often take me out to look at the ships sailing up the Kiel Canal — which is a surreal sight as because the canal is held in by huge dykes, it is above the level of surrounding countryside. And so these massive vessels would apparently be 'sailing over' ploughed fields. Drawing ships was my first love. Later when my father, who was on active service with the British Army, returned from a posting to Malaya, and we moved into Army quarters. We were attached to a tank regiment in Paderborn in Germany, so I got to see a lot of the military hardware — which is of course going to be fascinating to a young kid, and this also ended up in a lot of my drawings.

COLIN MASSON

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Picture: "*Norway* Docks at Pellstation".

DAL: Was there anyone special, teaching art?

CM: Yes. My family moved to England in 1967, after my father retired from the Army. I went to a secondary school in the town of Basingstoke, where I was lucky enough to have an inspirational art teacher. I spent a lot of my free time in the art studio, when most of my classmates were playing football or smoking 'behind the bike sheds'. It never seemed like schoolwork, to me.

Also around this time I started reading a lot of sci-fi, Isaac Asimov, Robert Heinlein, Larry Niven, along with the likes of Andre Norton, John Wyndham and Anne McCaffrey. Bearing in mind, that I was a teenager. I also read *The Lord of the Rings* around this time, and of course that is a book that stays with you forever.

DAL: Absolutely. Amazing to think *LOTR* had a very lukewarm critical reception when it was first published, with the poet W.H. Auden serving as the book's only firm champion in the press.

CM: Concerning the sci-fi though, this was the end of the period when the idea of a spacecraft was still something that looked like a V2 rocket on steroids. If you remember the covers of the original Herge's *Adventures of Tintin* book, you will know the type of rocket I mean. The artist who I remember changing all that, in a big way, was Chris Foss. I bought the Isaac Asimov *Foundation* and *Empire* trilogies on the strength of his fantastic — in every sense — British paperback covers. He was very influenced by naval architecture, and you can see it in these wonderful evocations of flying machines the size of battleships. People now take this kind of thing for granted, but at the time it was utterly new and mind-blowing. I remember spending hours on end in my local W.H. Smiths' bookshop, just looking at these amazing book covers.

DAL: Many covers had paintings that have 'stood the test of time', it's true. The UK publisher Panther produced many of the best, along with Sphere. They introduced an entire British generation to the very best of literary sci-fi — giving them the mental tools to think about the future, and teaching their readers to develop their imaginations along the way.

Then you trained in fine art and graphic design in Bristol, an old port city in the west of England, in the early 1980s. That was a heady time to be alive and in England. What are your memories?

CM: It was certainly an eventful time, there was a lot that was good, but also a lot that was not so good. I did my original Foundation [pre-university degree] course at Winchester School of Art, The best thing I can say about it was that the social life was good. It was a fine art school — in the sense that it rose above such mundane considerations as commerce. The lecturers were left over from the 1960s and "art for art's sake" was the mantra. Any learning of technique was considered *passe*. One incident sticks in my mind which sums up that year for me.

One lunchtime with friends I noticed that one third-year student was at the other end of the bar of a pub, with his mates and having something of a party. They were still hard at it when we went back to our classes. I thought nothing more about it, until when I looked out of the window that afternoon and saw the same chap had come out on the roof of the building next door, pursued by two of the school porters. He was throwing small pots of paint secreted on his person, into the car park below. Soon the whole class, including the lecturer where standing at the window, watching this guy's antics. When I looked down, I noticed that there was a large square of canvas laid out in between the cars, and some of the paint had landed on it. Eventually the porters caught the guy, and bundled him through the door. Later there was talk of expulsion, and possible prosecution by the police, for wilful damage, but in the event nothing happened. By the end of the year, he was putting up his degree display, and the centrepiece was *that* canvas. The one that had been in the car-park.

The point of that story? He got a first-class degree. I, on the other hand, was told that I did not have what it takes to be a fine artist and should consider a career in graphic design. You can thus draw your own conclusions on what my views of the art establishment of the 1960s and onwards might be.

Picture: "O'Niell's Fantasy Theme Park".

Picture: "Reconnaisance to Reichenbach".

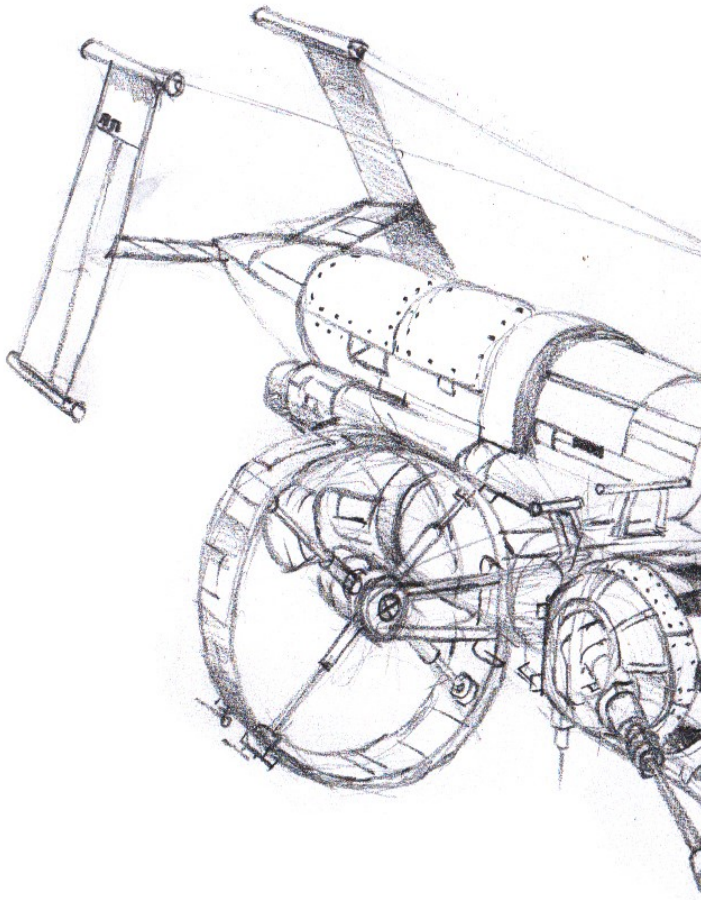
The following year I enrolled for a three-year degree course at Bower Ashton in Bristol. It took me a year or so to find my feet, but the course suited me much better than its predecessor. Bristol at the time was a great seaport in terminal decline. Ships still docked there, but the river was too shallow for the big new ships. So you had the grand Victorian architecture, juxtaposed with real poverty and an industrial centre that was mostly derelict. There was an air of danger about the place, particularly around my lodgings in the infamous St. Pauls area. The campus by contrast was on the other side of the river. So it was a time of contrasts. I made many friends from all kinds of backgrounds, I enjoyed the course, ate a lot, saw a lot of bands and never had any money.

In my second year, the St Paul's riots erupted, I remember looking out of the window of my flat above a clothes shop, and seeing a see a sea of faces, mostly — but not all — black, seething up the streets, smashing everything they could reach, pursued by police with riot shields. I saw petrol bombs being thrown, countered by intense responses on the part of the police. Next day I was back on campus, it was calm and quiet, and I could see deer grazing in the park nearby.

DAL: How and where did you first encounter 3D art? And what were your initial reactions or struggles?

CM: *Star Wars* was having its first flush of fame, also the first version of *Tron* had come out. I was not really a fan of either movie in terms of story — I regard S*tar Wars* as a faery story dressed up as sci-fi —but I loved the special effects. The opening shot from *Star Wars* remains one of the defining moments in movie history. Of course I wanted 'a piece of the action'. I started off by building models of space ships, and photographing them. I saw little encouragement from the teaching staff. At the time the was no special effects industry to speak of. Even Pixar was another ten years away, at that time. So the general consensus was that what I was doing was a bit odd, akin to some kind of hobby like building model railways. But I had decided to ask if I could have access to the university's mainframe computer, to see if I could 'have a go' myself. My tutor thought this might be an interesting idea, and proceeded to get me access.

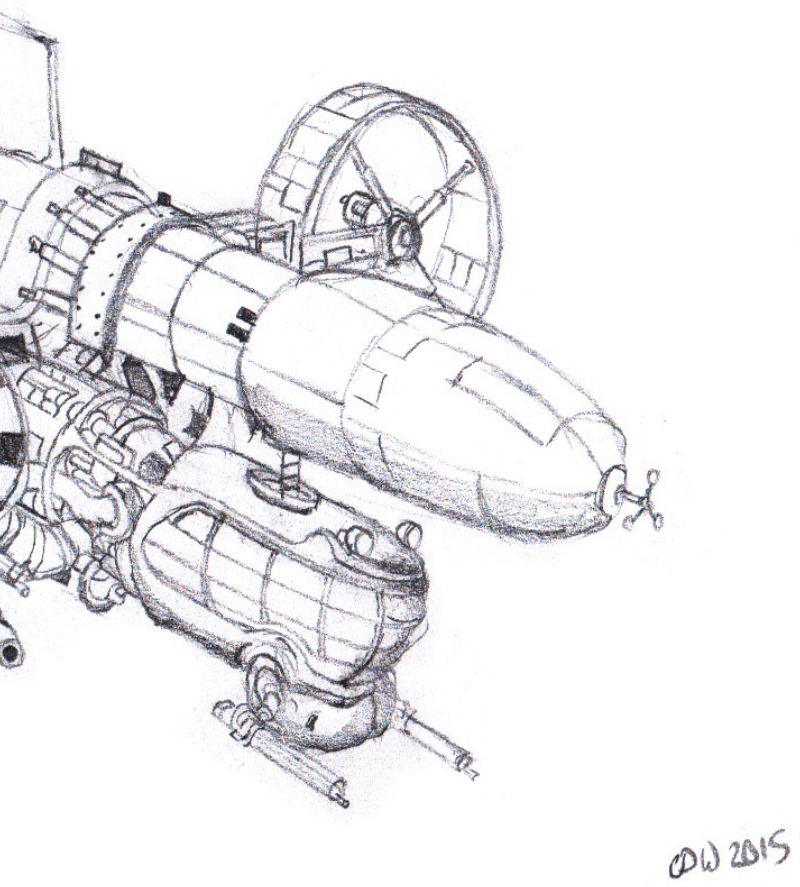
If I thought I was going to do any real CGI I was sadly mistaken. That one computer served about 4,000 students! I was only able to use it by giving instructions to a technician over the phone, so really that idea was 'dead in the water', especially as nobody had *any* idea as to how to put spatial coordinates into the computer in any meaningful way.



Finally I hit on an idea for what my next project would be, I would design a user interface for inputting three dimensional data into the computer! I designed an isometric cube with defined units along each axis, this was silk screened onto a piece of white Perspex. Over the

top of that I made a series of printed cellophane overlays, to work out the coordinates of a simple 3D model spaceship. I then wrote down the coordinate numbers, which I phoned to the technician, and a week later a simple line-print out of my spaceship came through the post. After explaining the procedure to my tutor he was able to produce a model of a spoon, and appeared quite impressed with the process. This formed the core of my final piece for my degree exhibition, and I got a 2.1 classification — which is almost-but-not-quite a first class degree.

Picture: Sketch for a Blender airship model used in "Reconnaisance to Reichenbach".



It still annoys me that the other guy got a first for getting drunk and throwing paint pots in a car park. However after graduating, I made a big mistake, I didn't follow up on the concept, or develop it, because I couldn't then see any direct application for it.

Bear in mind that this was 1983, the only personal computer was the famous ZX Spectrum, and there was no CGI industry outside of the United States. I drifted in and out of various dead end jobs, working as a paste up artist for various small printing firms — real paste-up using paper and scalpel. After ten years I realised that I hated what I was doing, and became a groundsman [garden maintenance and planting] at a nursing home for old people.

I had become very disillusioned with graphics as a career, and switched my interest to music, as I was now playing in some very good bands. For about the next fifteen years I did virtually no art at all, just the occasional CD cover, and even that was with some reluctance.

DAL: Was it a struggle to learn Blender, to the point where you could make superb pictures and even animations?

CM: Short answer, yes! But when I started using it I had a specific goal in mind. If you are focused on a simple goal it can give you a starting point, and that enables you to expand your skills thereafter. I need to give some back-story, before Blender, though. I acquired my first computer around about the year 2000. It was a cast-off from a friend, a Pentium 2 PC with a 10GB hard drive, which at the time I thought was absolutely huge. I also got a copy of Photoshop 4, for simple print jobs, but then realised it had creative potential.

DAL: Yes, Photoshop 3 was the first version with layers, if my memory serves me. That opened up many creative possibilities.

CM: I bought my first computer game, the RPG *Baldur's Gate*, for my wife Cathy who was convalescing after a stay in hospital. Of course I ended up playing the game as well! I found it was brilliant! It ran on a modified version of the *Dungeons & Dragons* ruleset, and I had been an enthusiastic RPG gamer as a teenager. So it felt a bit like coming home. This led on to more powerful computers, and I progressed through RPG games like *Neverwinter Nights*, *Elder Scrolls: Morrowind*, and eventually *Elder Scrolls: Oblivion*.

DAL: Great games. We'll soon be able to play *Morrowind* again, as a total conversion mod in *Skyrim*. There's a long interview with the team in the latest *PC Gamer* magazine, for any readers who might want to work on a big mod that will actually be completed and released.

CM: So I became aware that these games could be modded, and I was hooked to the point where I found that using the free *Elder Scrolls* Construction Set was more fun than playing the games themselves. I ended up as one of the original members of the Unique Landscapes project, producing three mods, Ancient Yews, which is modelled on a yew tree wood a few miles from where I live, Chorrol Hinterlands, and finally the River Ethe.

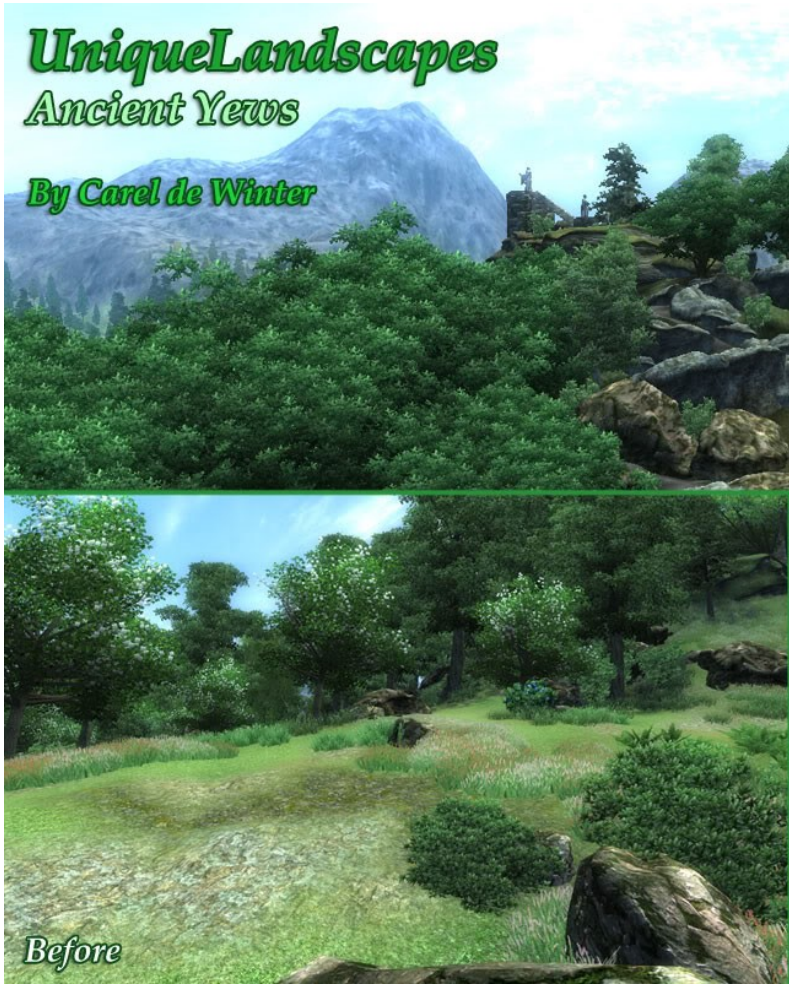
DAL: Wonderful. Issue 45 of our previous title, *3D Art Direct*, had a lead interview and homage to the Unique Landscapes project and its mods.

CM: I was planning a fourth mod, but felt myself hamstrung by the assets the game provided. So I started looking for ways of making my own. And… *that* was where I heard of Blender for the first time, as it was recommended on the forums as being capable of producing models in the correct format. More importantly from my point of view it was free! I certainly couldn't afford the likes of 3DS Max.

What can I say about learning Blender? It *was* hard work! At least, as a relative newbie, I had no preconceptions about how a program should work. I never regarded the right mouse button for selection as odd, I simply accepted it. But there were other aspects of the design that were obscure, difficult or downright bad, and at this time there was far less online documentation to help explain things.

Things have moved on a lot from there however, this was Blender 2.49b and Blender is now on version 2.77a. One of the advantages of open source software, especially in this case, is that it is regularly updated. You don't get the perennial problem of your software being out-of-date. The UI is being improved as a result of user feedback, and new features are added with each new version. There are also a large number of plugins that can enable you to customise the program to suit your own requirements. It can be frustrating at times, but equally I think that Blender has a flexibility that few commercial applications can match. I am finding as I learn more about the animation side particularly, that it is very powerful and subtle.

One other advantage, over commercial applications, is that if you have 'backward compatibility issues' then every previous version of Blender is still available for download. You can run many different versions simultaneously.



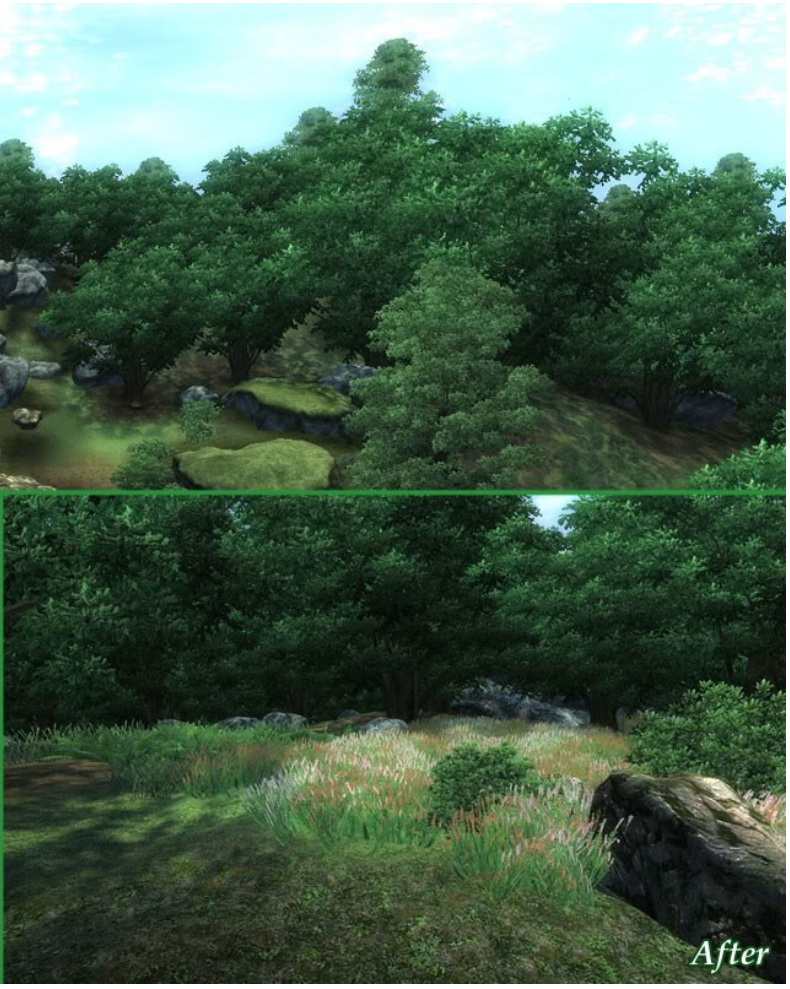
DAL: Thanks. Let's turn to the pictures now. First, could you tell us more about your fine recent steampunk picture "O'Neill's Fantasy Theme Park", please? You're got a sci-fi ring-world, a steampunk train, a monorail, and dragons. Is there a story behind it?

CM: This was a fun project, an entry for an IFX forum competition. Their brief was to fuse both fantasy and sci-fi into a single picture. But the steampunk twist on it was entirely my idea.

I like to work out a back-story to a picture that,

on the face of it, doesn't make sense. And the logic of this one is as follows:

Despite appearances, this picture is actually pure sci-fi. It takes place inside a rotating O'Neill cylinder, nearly two miles in length. Gravity is produced by the cylinder rotating along its main axis. It has been landscaped to resemble a fantasy medieval kingdom, perhaps by Disney? The occupants are re-enacting King Arthur's battles against the Saxons. The dragons circling around the train are in fact drones. They are



able to fly because the gravity along the central axis is practically zero. The train itself is a linear induction monorail that has been constructed to resemble a Victorian-era steam engine.

I started the concept with a pencil drawing, to work out my perspective, which in this case was a simple single point, with lines radiating directly towards the viewer. I used rule-of-thirds, but extended the picture downwards later on to add some extra features. I then scanned the picture and imported it into Photoshop. I used a combination of photomontage and painting on a Wacom tablet to overlay the drawing. As my main reference I used a photograph taken at summit of the Jaunpass in Switzerland, looking into the Simmental valley. The photo is by my wife Cathy, a keen and very capable photographer. The elements of the picture were moulded to the cylinder shape mostly using Photoshop's warp and distort tools. The waterfall is the top of the Reichenbach Falls. The castle was hand-coloured over the original drawing, and the train likewise. I also used layer styles extensively to enhance the details. The final element where I had a bit of fun was the creation of the occupants of the train. I am the driver, the train's boiler stoker is my son, and the occupants of the carriage were composited from a photo made at the UK's famous Glastonbury Festival. If you look really carefully the two ladies dancing are my wife Cathy and our friend Elaine. I made extensive use of Photoshop's adjustment layers to blend the lot together, and that is more or less it.

DAL: Fascinating, thanks. If you could improve Blender, what would you change or tweak?

CM: For me, I think it would be to improve the feedback between the UI and the user, on a real time level. For example, Blender has a very capable video editor, but by preference I use Sony Platinum. In Blender, if you want see the results of effects or colour grading on video, you very often have to render it out. In Sony you can see it as-you-do-it. This problem also applies, I believe, to some of the physics based stuff, although there you can cache your data to improve the performance. This can take a long time though, and if you get it wrong — which I often do — you have to do it again.

As technology improves these things are being addressed, but this can cause its own difficulties. For example, Blender has two render engines that work in very different ways. The first is Blender Internal (usually shortened to BI). It is the original scanline renderer, and is CPU based. This has the advantage of being quite quick and noise free, but it is very hard to get photorealistic results. The other render engine is called Cycles.

DAL: Yes, Cycles was recently ported into Poser 11. It's very easy to use there. You just press Render, basically. It's quite fast too — interested readers should see our in-depth Poser 11 review in our recent Poser issue, for details on that.

CM: Cycles is a ray-trace renderer, with — in Blender — a completely different node-based workflow. It can be GPU accelerated and is capable of great realism, especially when used in conjunction with environment maps. However, it can be noisy and slow. This is bypassed by using a top-flight NVidia video card in your PC. While this might not be such an issue for a commercial organisation, for a small business or self-employed person it could be a problem. A NVidia Titan X costs £1,000 pounds in Britain, which is more than I can afford. By comparison I am using an elderly GTX660 with 3GB of DDR5 — with is OK for single frames, but is usually too slow for animation.

DAL: We may be in luck, on that front, by the end of 2016. NVidia's new card is a third the

Picture: Detail from "Sails of Silver".

price of a Titan, far more powerful, and only draws 90w of power. At least that's what the early reviews say. Sounds like a game-changer.

You've explored and learned the modelling side of Blender, as it seems that you make all your own scene assets? And to extremely fine original designs, I might add.

CM: This, for me, is the real fun! I have occasionally downloaded other people's models in order to see how they are put together, but not many. But 98% of what I use is my own. This also applies to textures — 80%. When modelling I generally start with a pencil sketch. I find that if I just dive straight into Blender it tends to channel me down the path of least resistance, whereas pencil is a medium I am totally at home with and I can give my imagination free rein. Then it is much easier to create, using the drawing as a template. Usually I have the picture blue-tacked up next to the monitor for reference, but occasionally I import a scan as a background image.

I almost exclusively use mesh modelling in edit mode, so my models tend to be relatively low poly. I think that modelling for the *Oblivion* game is responsible for me using this approach. Blender has an excellent Sculpt mode, but I have to admit I never found the need to use it.

DAL: Yes, I've never actually found where that is located in Blender. It's much like ZBrush, by all accounts. But free.

CM: Other people have done amazing stuff with it. Also keeping the poly count low is good when you are animating, which is currently what I am concentrating on. When I have finished the modelling in Blender, I sort out the UV mapping, which I then export. Normally texture editing is done in Photoshop. You can texture paint quite well in Blender but some of the functions are a bit obscure. Blender has a function allowing the use of a specified external editor, so getting to Photoshop is hassle free. Whether I use tiled or custom-made textures, depends on the nature of the model. Sometimes I will use a combination of both. I do use modifiers where appropriate, usually a combination of sub surf, and displacement, especially when working on landscapes, which feature quite strongly in my work. If I render single images I will use Cycles, especially for outdoor scenes. For animations, it is usually Blender Internal, because it is faster with the modest setup that I use.

DAL: I must stay that your 2015 steampunk airships are very fine, and wouldn't look out of place in a Miyazaki film. Am I right in thinking, given the quality, that you're also a professional in some area of paid creativity?

CM: I suppose you could call me professional in a creative area! I actually work as a groundsman at a private school, and have for more than a decade. During the day you will find me walking up and down behind a lawnmower.

DAL: Ah, I see!

CM: It may seem counter intuitive, but I regard this job as my 'ace in the hole'. Firstly I love the work, and gardening can be highly creative. Secondly I am on very good terms with my employers, who know all about my extra-curricular activities. They have taken an interest and as I am a member of an educational establishment, I have been able to buy a lot of software on an educational licence, which has meant that I have been able to keep costs down.

DAL: Wonderful, yes I've had quite a bit of educational priced software in my time. You might want to pick up Keyshot.

CM: The most important thing is that my day job frees me from the constraints of having to take everything that is offered just in order to make ends meet. I can choose what I want to do. Generally speaking the work I have done is for those clients who could not afford to go to a professional studio. The most common thing that I get is requests from bands for CD covers and promotional artwork. Usually I already know who they are — being a musician myself — and they in turn know the kind of work I do. Some of the most interesting ones can have quite specific briefs, but a lot of the time they let me do what I like, and I try to do something appropriate to their music. If I am not interested, or if I feel that I do not have the skills or the resources, I can politely decline. If there is no work around I work on my own projects, both CGI, or music. If I get fed up I can still mod *Oblivion*.

DAL: I see. Have you ever considered selling your 3D model work for Poser/DAZ users, on the likes of the DAZ Store, Renderosity and Hivewire? I could see your steampunk models, since they're your original IP, being quite popular there.

CM: No. Which proves that there are still gaps in my knowledge, I'm certainly going to look into it!

DAL: You live in Salisbury, England. Do you take inspiration from Stonehenge and other ancient sites which are located nearby? Or are they a bit too tourist-y, most days?

CM: In one sense, Stonehenge is just a pile of stones, and can be underwhelming on a wet weekend. Many years ago you could walk all the way from Salisbury right up to and in amongst the stones themselves. It's now surrounded by barbed wire, and you pay a lot of money to get in.

DAL: Yes, it's sad. But I understand that there are plenty of other sites in the district?

CM: Exactly, it is a part of a very ancient landscape. Salisbury Plain stretches for many miles and there are thousands of other monuments, big and small, that are not so well known. If you want to visit a magical henge, visit Avebury. My band The Morrigan did a lot of photo shoots there. Silbury Hill is an ancient burial barrow the size of one of the stepped pyramids in Egypt, and there are thousands of smaller barrows. Salisbury itself is a beautiful medieval city and — though I live in a modern block of flats — I have a grandstand view of what I think is the most graceful cathedral in Europe. Also I don't mind tourists, they come to see something with a sense of wonder and they bolster the local economy.

DAL: You're also inspired by Switzerland?

CM: Now I become the tourist! I was born in Schleswig Holstein, in northern Germany. It has its own kind of beauty, and one of the biggest skies you will ever see. But it is as flat as a pancake. So flat that the North Sea has to be held out by huge dikes. Ever since my mother read me *Kinder und Housemarchen* by the Brothers Grimm and when I was a little older, I read the *Narnia* chronicles by C.S. Lewis and then *The Lord of the Rings* by J.R.R. Tolkien, they all described mountains in their stories and these edifices seem to call to me through my whole life. By my late forties I had seen nothing taller than Mount Snowdon in North Wales and that was beautiful, but only 2,000 feet high.

DAL: Yes, not the most amazing mountain in the world. And a gouging over-crowded tea-shop at the top, the last time I went.

CM: It was not what I had read about in chronicles and fairy tales. Many years later, after my first visit to Switzerland, I discovered a direct connection with Tolkien in that he visited the Berner Oberland and the Valais in 1912. At the time Tolkien was a penniless student, so he and a group of friends hiked up the Grosse Scheidegg, staying at the local farmhouses and sleeping in barns. He acknowledged that the Lauterbrunnen valley inspired his Rivendell. The huge Swiss engineering works then in progress through the mountains might well have inspired the Mines of Moria.

DAL: Ah yes, I've recently become mildly interested in the genesis of *The Lord of the Rings*. Mostly after hearing the fine Trantor audiobook of Robert E. Howard's Conan novel *The Hour of the Dragon* (pub. 1935-36) — which has numerous rather precise similarities.

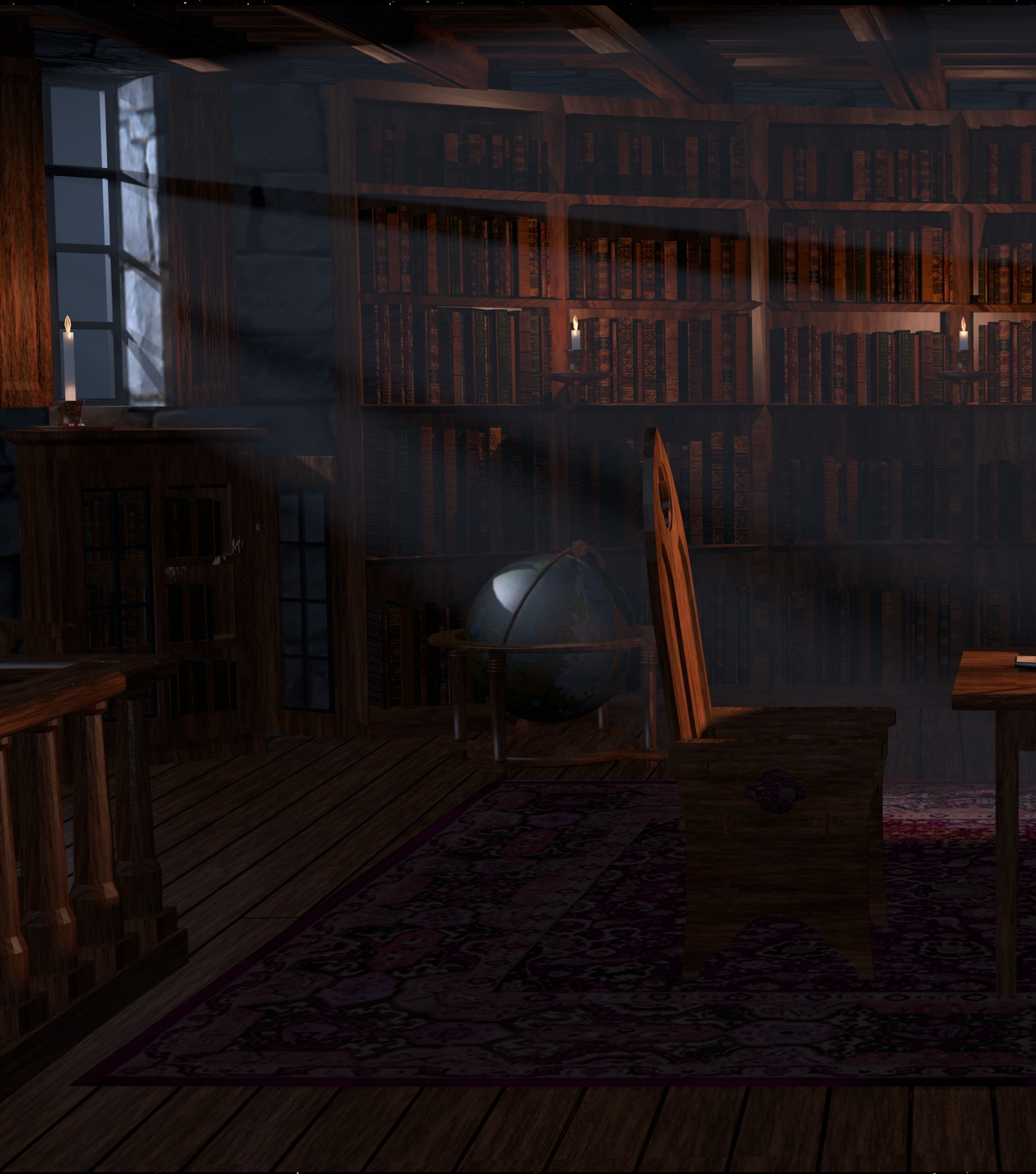
CM: My family first went to Switzerland in 2007, and we have been going ever since. The hundreds of photos that Cathy has taken there can be found, in some form, in almost all my work.

DAL: We also should tell readers that you're a very experienced musician, the lead guitarist with the folk rock band The Morrigan, and have played at Glastonbury — the UK's major outdoor music festival — among other venues. Could you talk about how your artistic work interfaces with your music, please?

CM: Music was my real passion for many years, but sometimes you need a change or you get stale. As I got more interested in Blender I struck on the idea of doing music videos, as the excuse for learning more. It has stood me in great stead — as it is a form that keeps the animation to a manageable length, usually under ten minutes, and the subject and mood of the music and the video can feed into each other in a very satisfactory manner.

My first effort, "Sailing the Rings of Saturn" was based around an instrumental piece, so I took the opportunity to use the title as inspiration and do a short tour of the Solar System in the spaceship equivalent of a Douglas DC3. I also built a rock and roll stage in Blender that was big enough for my ego!

When I started the project the only knowledge I had was what I had learned from making static models for *Oblivion*. By the end I had learned how to animate sequences including using curves to guide objects, use particle systems, greenscreens and compositing, at the same time also learning how to use cameras, and lighting in Blender and also in real life.



Picture: “The Tower Room Library”.

The music is a great tool for focusing what happens in the video, and of course I don't need to worry about copyright — as the material is my own.

DAL: And readers can see Blender-made music videos on your DeviantArt site. How do you find making long-form animation in Blender? I don't mean wrangling the Blender buttons, so much. More… the subtle interweaving of music and visuals, getting the pacing and rhythms of the video to flow right? Does Blender get in the way on that, or help?

CM: That is an interesting question. This takes us back to an earlier part of the interview. Blender takes the brunt of the 3D work and the animation, as it handles these aspects really well, but for a lot of my compositing I am using Blackmagic Fusion 7. For the 'ebb and flow', getting the timing of the editing right, Sony Platinum rules the roost. This is all about the real-time feedback that I mentioned earlier. As a matter of note, I am using the consumer version of the Sony programme. It lacks support for 4K video and there is no facility for rotoscoping or some of the other more esoteric aspects of video editing. However, Fusion deals with all of that, and extremely well. It is a programme I only discovered relatively recently and have only scratched the surface of so far, but I think I will be using it a lot more.

DAL: Tell us, please, about your latest animation work, "Hunter's Moon" (see below).

CM: This is something of a labour of love. Unlike "Sailing the Rings of Saturn" it is a song, and is based on the old folkloric theme of The Wild Hunt. This is found in both Nordic and Celtic mythology. It has appeared recently in the Polish computer game *The Witcher*, which is itself a masterpiece. But I am taking my main inspiration from the novels of Alan Garner, such as *The Weirdstone of Brisingamen* and *The Moon of Gomrath*, which I read many years ago as a teenager.

The animation in "Sailing the Rings of Saturn" was very simple. At the end of the day, spaceships are elaborate boxes that you move from point A to point B. In this project, however, I have tackled figure animation and that is a *completely different* ball-game. But there are tools that you can use that really help. I have to say that without YouTube I would have been totally scuppered. It taught me about IK and FK

rigging, anatomy, and motion capture, all used in this movie, along with greenscreen.

I said that I used mostly my own assets. One honourable exception is a great free program called MakeHuman. It is another open source program that integrates well with Blender, and enables you to produce human figures very quickly, using the kind of technology associated with the character generators in games like *Oblivion* or *Skyrim*. Easy to use and quick — I was able to make models of my wife and my son and export them fully rigged into Blender. The documentation for MakeHuman can be a bit scatty, but in the hands of an expert it can produce very realistic results. For me in this video it has been the biggest time saver. I also used the Carnegie Mellon University motion capture files — free generic BVH mo-cap actions like walking, running, standing up, sitting down, etc. Editing different animations one into the other can be the devil itself. I am making progress though, courtesy of YouTube. Blender also allows the import and export of motion capture files in several different formats.

DAL: Judging by the two screenshots we're showing from "Hunter's Moon" (see below), I sense there's an influence from *Oblivion*?

CM: Yes, *Oblivion* has been a big part of my life in the last ten years. I created three mods. At the time I started I was a total beginner as far as the modding was concerned but what I did know about was gardening and landscape, having worked in it for 20 years. So I found I did quite well. Being a part of the Unique Landscapes team helped a lot, there were other people who fixed my mistakes and there were plenty of those! The mods are still all available on TES Nexus and there is still a UL thread on the Oblivion modding forums with further information.

I did a lot of work on a fourth mod called "The River Strid", but — like a lot of enthusiasts — I took on too much. It was just too big. I abandoned it after I lost about a month's work — due a mistake when I was upgrading my computer. I am in consultation at the moment with someone who will take on what I had done up until then, and try to finish it. I wish them well, because it is almost as big as the Solstheim expansion in *Skyrim*! The funny thing is that when I find myself at a loose end, I do still tinker with modding. It is purely personal entertainment however, so if it will ever see the light of day I'm not sure.

Pictures: Two stills from the forthcoming music video animation "Hunter's Moon".

DAL: What are your current favourite videogames, and why?

CM: Because of the range of stuff that I am involved with right now, I have to restrict myself on the games front. So this year I've only played one game and that is the aforementioned *Witcher 3: The Wild Hunt*. This I think I would rate as one of the best RPGs of all time; it originally caused a stir by being graphically very ambitious but that is one of the least important parts. The standard of the quest designs is the best I've ever seen and the characters seem often like real people. The combat has a tactical element that keeps it fresh and the open world is amazing. It took up in that respect where *Skyrim* left off. But it has a different feel to most American titles. I think this is because it is a product of its own culture, which is Slavic, although it also draws equally from Germanic and Celtic mythologies.

DAL: Yes, that must help. Of course many such nations lived under an ugly domination by Soviet Russia, for decades. But one thing that was apparently positive there is that the system generally helped to preserve *some* folkways as living and rooted things, within certain political limits. It apparently kept archaic ways-of-life and ways-of-feeling alive, that might otherwise have been swept away or become fossilised tourist-traps. So now those people have the chance to re-kindle their cultural embers from something that has a few living sparks. And so, I guess that's partly what we're now seeing in the videogames, music, and other cultural products from the formerly Soviet-occupied countries.

CM: The city of Novigrad is breathtaking in *Witcher 3*. If you have ever seen the architecture of the Hanseatic ports around the Baltic — which include Poland, the Baltic states, Scandinavia and northern Germany — then you will feel a familiarity with the resemblance to medieval parts of Hamburg, Bremen, or even my home town of Salisbury in England. By comparison, the Bethesda or Bioware games that I have played

Picture: "Imaginary Friends", Colin's first upload to DeviantArt in 2010.

in the past always seemed to have a flavour of the American Wild West, or maybe *Conan the Barbarian*. Given my cultural background, as a good North European, I found *Witcher 3* struck a definite chord. Also it evokes very graphically a country that is under occupation and the main protagonist — though a strong character — is not trying to save the world, but merely make a living whilst trying to stay alive.

DAL: Indeed. Let's now turn from videogames and music to talk now about your digital paintings. Am I right that you're using Photoshop and a Wacom tablet, and overpainted background photos? Could you talk the readers through the workflow on a painting, from concept to finished digital painting? Perhaps including any tips on common errors to avoid?

CM: I'm currently on Photoshop CS6 Extended, and the Wacom tablet I'm using is a simple Bamboo Fun. It doesn't have the tilt function of the more expensive models, but it does have pressure sensitivity. It is robust and I find it comfortable to use. I generally start with a pencil sketch, in which I work out my composition, and rough out the perspective. Sometimes I will render out a simple scene in Blender, in order to give me my perspective, but the finished product will be entirely Photoshop. I find composing a picture from scratch in Photoshop quite awkward, and this is one area where 'real media' wins out.

When the sketch is done I scan it into the computer, separate the various components into layers and start working them up, clipping masks being a great help for speeding things up. When appropriate I use photographic elements, but I also make good use of the brushes, selection tools, and the layer styles. To beginners I would say that these tools are essential to learn as they unleash the power of the programme. I also use adjustment layers in conjunction with clipping masks, to adjust the colour balance and levels, to blend the various layers together. And then I add an adjustment layer at the top usually with a colour balance, or even a photo filter to bring the whole thing into the same visual space. I then leave it for a couple of days, to see if I like it or not.

DAL: Thanks for that. And you've also started to explore speed painting, and also overpainting and compositing of a single photo, as seen in your fine evocation of the cross-country journey which happens early in *The Lord of The Rings*. We show that picture overleaf, readers. What have you learned from these two approaches?

CM: Speed painting is a useful exercise if you feel that you are getting 'stuck in a rut'. "Fleet Manoeuvres" took about two hours, if I remember rightly . I drew the central ship in Photoshop using the Wacom tablet. I did it way oversized, to enable me to sketch in the details much as I would in a pencil drawing. Then I reduced it in size to tighten it up. One ship gets cloned and rescaled and you have a fleet! The stars I did by using the star brushes in Photoshop, doing a small area and then cloning it, changing size and rotation over several layers, to avoid tiling. I also kept the colour range tight to avoid complications.

The "Flight to the Ford" picture was slightly different. It used a single photo taken at the end of our first holiday in the Urbachtal in 2011. It was literally the last photograph that Cathy made as we were leaving for the airport, and it was made in a hurry. The light was extraordinary. It was a cloudy day and very hazy, but the sun was hitting certain parts of the valley, and the effect was magical and otherworldly. This remains Cathy's favourite photo, though she has taken thousands since. There were a couple of problems with it though. It was taken using a Fuji Finepix that was already some years old, so the pixel count was quite low.

DAL: Yes, I've always found the better models of Fuji's Finepix to be excellent digital cameras.

CM: It was a bit grainy, though. My intention was that the picture should have a painterly feel. I doubled the resolution and then used the smudge tool at a low strength setting, to go over pretty much the whole thing. I was working with a small brush size, so it took *quite a long time*, but I was happy with the result. The foreground was constructed from scratch, and replaced a line of trees in the original photo.

Picture: “Flight to the Ford”, showing Bill the pony, the halflings and the Ranger, all traversing Middle Earth.

I used a combination of the Wacom, and a few textures, the stonework in the ruined tower being the most notable. I was also experimenting a lot with custom brushes, again of my own manufacture. I find them really useful for doing vegetation all the way from grass to trees. The small Scots pine tree was worked up from a photo made on the high English moor of Dartmoor, a few years before. The rest of the picture still looks pretty much the same as the original photo, even the strange little clouds.

DAL: And you seem to be in demand for commercial book and album covers? Is that occasional, or can/do you make a living from it these days?

CM: Album covers are sort of 'bread and butter work', I have all the templates set up courtesy of The Morrigan's back catalogue, and also my solo albums, in the last few years I've done covers for Blue Drift, Clear Blue Sky, Tantalus, further back for Jade Warrior, and several covers for the record company that our band was attached to.

For book-covers, there was one project that I was excited about, but it ended quite sadly.

I was contacted by an American author called Jeffrey Cotton. He had secured a publishing deal for his first novel and had seen a picture of mine entitled "The Edge" showing a medieval city on the edge of a great waterfall. He wanted to buy the rights to use it. Unfortunately for him I had designed that as the inside cover of my *The Mad Monk and the* Mountain album, so it was already in use. I suggested that I do him a new cover on the same subject. He agreed and this culminated in the picture of "Jemparth'a", the name of the capital city of his novel.

For "Jemparth'a" I used Blender to build the city, using very basic geometry. Then I moved the camera around , rendered loads of shots from many different angles, and I sent these off to him. He mentioned that he had been to Venice, so I used pictures of the famous Doge's palace in Venice and threw in some gothic architectural elements for good measure.

He was delighted with the finished result, to the point where he actually changed the story to include the gardens in the castle on the right of the picture.

Picture: "Jemparth'a", a commercial commission for fantasy author Jeffrey Cotton.

He then asked if I could work on some maps for the novel. Now, I *love* doing maps, it's another part of that whole world-building thing.

So the project continued. As time went on we began to talk more on Skype about the way in which the landscape might affect the plotting of the novel, Jeff recognised that I had a fair bit of experience in this area and we started bouncing ideas off of each other, and as time went on the relationship became more of a collaboration. The whole thing was going in a really positive direction, I remember talking about how a particular area of marshland might prove an obstacle for an army which would give the novel's main character a chance to evade a sticky situation, we should also think about how the culture of the people who lived in the area might affect things. He said something about this giving him considerable food for thought, and that he would get back to me the next day.

When I checked my e-mails the following morning, I saw one from his agent. When I opened it she told me that Jeff had died of a massive heart attack on his way to work. When something like this happens, what can you do? I'd made a new friend, got involved in a project that really played to my best abilities, and suddenly and brutally, it was all gone. Yet because he lived on the other side of the Atlantic, my normal life appeared totally unaffected. It was a very strange feeling.

In the end I got DeviantArt to print the cover picture at the largest size. Their printing service is really good, by the way. I got it framed and it is on the wall at the foot of my bed. I've already decided that I'm going to camera map it, or rebuild it in Blender (the waterfalls will be a challenge) and use it in the next music video, which I'm already doing the preparations for. It is a song about political intrigue and betrayal called "The Skull Beneath The Skin."

DAL: Ah yes, now then… I vaguely seem to remember that's a popular phrase from Elizabethan England, the time of Shakespeare. It indicated the ever-present nearness of death in life, which — since they had a regular plague epidemics back then — they knew more about than we do today. Super, well thanks for all that. To end this in-depth interview, are there any tips you'd like to give to those who are just starting out, either with Blender or digital painting?

CM: I think that with Blender, the best way in is to have a very defined objective. In my case I wanted to build static meshes of landscape features, so that with a defined goal you know the right questions to ask.

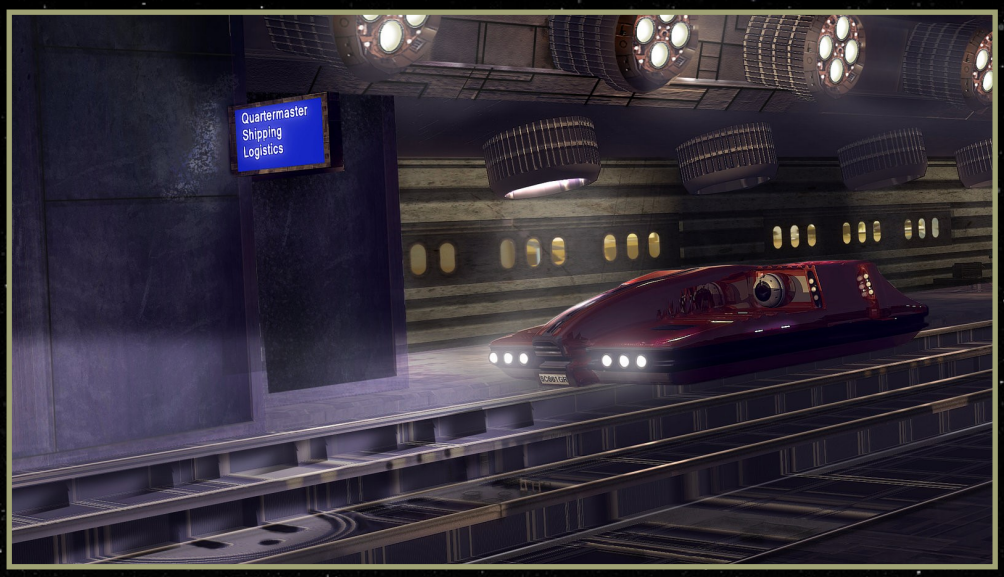
The other advice I would give, and this doesn't only apply to Blender, is that if you need guidance use YouTube. I have learned everything I know about CGI from the internet, but most especially from YouTube. People of all ages can be very generous in imparting their knowledge. I learned how to tile textures from a ten year old!

For digital painting, I will state the obvious and say use a pen tablet. Trying to do graphics without one is really a waste of time. I will also add that using conventional media, my favourite being pencil and paper, can still be the best way to work out ideas. The technology is at least 2,000 years old, so it is safe to say 'it has been road-tested'. You can always scan the results into the computer. But most of all *use your imagination*. Ask yourself, "What if I do *this*?" You can always surprise yourself with the outcome.

Colin Masson is online at http://careldewinter.deviantart.com/

Album cover for Colin's band The Morrigan.

Picture: “Escape Velocity”.



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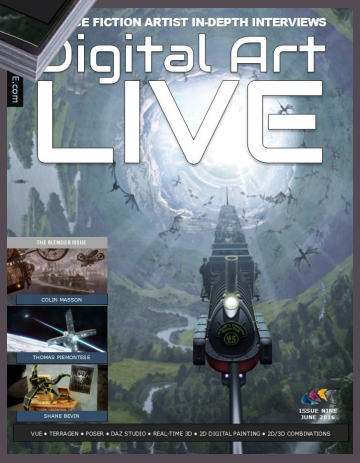

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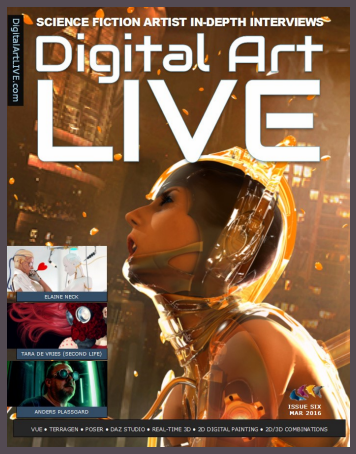

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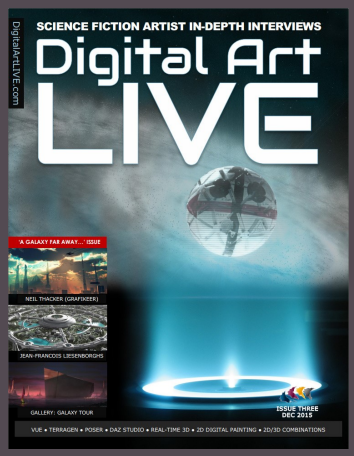

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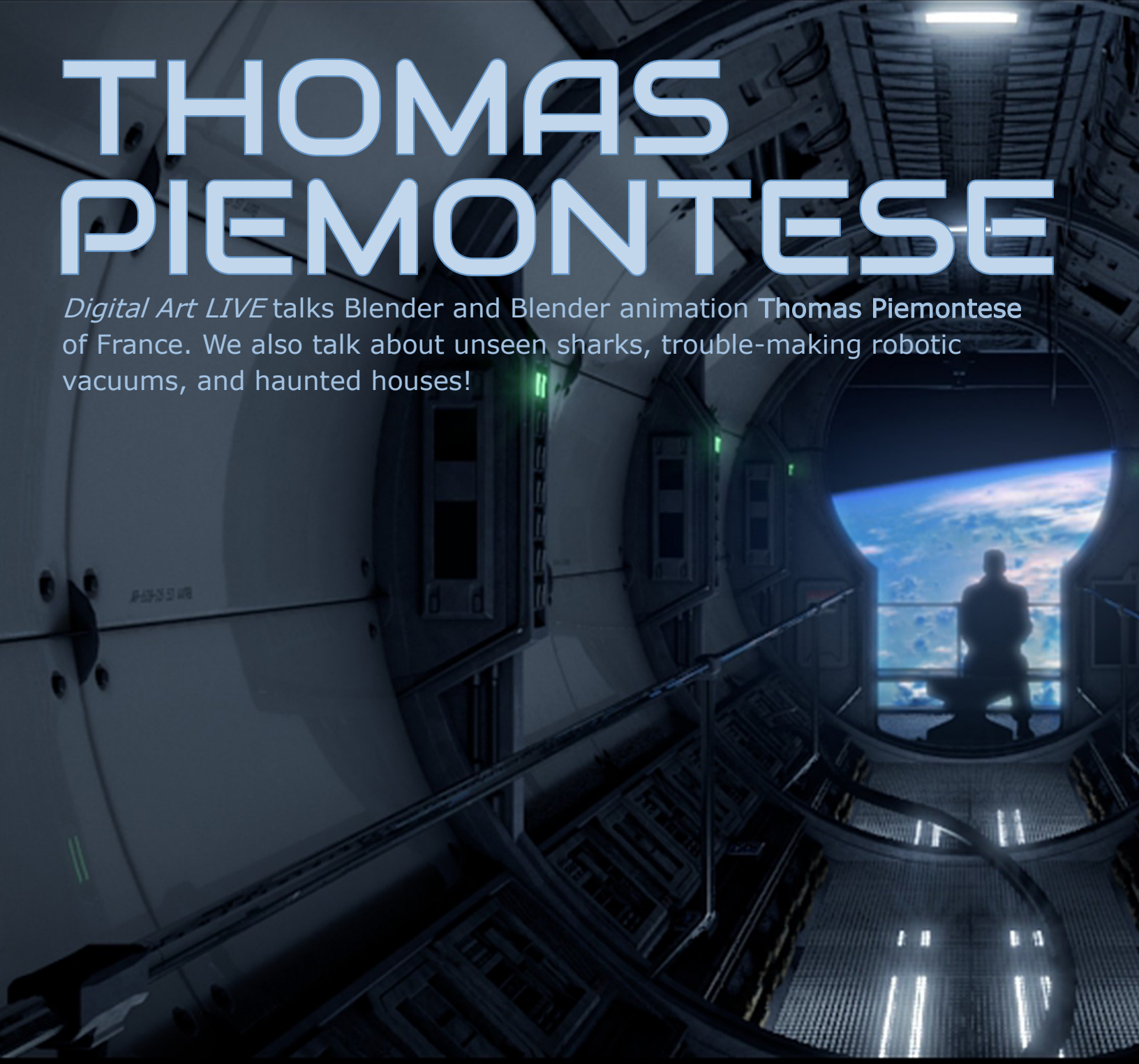
THOMAS PIEMONTESE

Digital Art LIVE talks Blender and Blender animation **Thomas Piemontese** of France. We also talk about unseen sharks, trouble-making robotic vacuums, and haunted houses!



DAL: Thomas, welcome. Many thanks for doing this in-depth interview with *Digital Art Live* magazine. First, tell us about how you got started with Blender, please?

TP: Thank you, even more! Well, as for Blender… I've always been a movie enthusiast for as far as I can remember. As an answer to everything that I used to see on screens, I used to make videos and very short movies with a friend. In that way I slowly learned the many aspects of the world of making special effects. As time passed and our expectations grew, I wanted to go further and learn new skills, especially how to create my own 3D assets and animations. These spaceships wouldn't let us videotape them, no matter who much we pointed the camera at the night sky! So we had to use 3D. The short 'open movie' *Big Buck Bunny* came out, Blender was free and open source, an amazing community was behind it. It was, and is, all what anybody would dream of in that position — an amazing tool filled with tons of features and supported

Picture: “Sereneity”.

THOMAS PIEMONTESE

FRANCE

BLENDER | MAKEHUMAN

WEB

by a whole world of creative and inventive minds. I jumped in face first, because you can only win in such a situation.

DAL: And am I correct in thinking that you also create and texture your own models in Blender? Everything except the base characters?

TP: Yes, I model everything in Blender. I don't think I even ever tried any other modelling software, except for MakeHuman and tree generation software like Arbaro for example.

‘Flexibility is a power-up’ in this sector, so the more you know, the better. Concerning making characters, I actually modelled some from A-to-Z, but it turns out I'm an eternal wanderer of the so called "uncanny valley" [*the phenomena where 3D characters actually become less convincing and more creepy, as their makers try to have them become ever more photoreal*]. That's why I never really linger on characters in general, my creations scare me in some ways!

DAL: And you used MakeHuman for the characters. For readers unaware of this, MakeHuman was, and still is, a sort of offshoot from Blender which is trying to make a full hi-res 'virtual human making' software. As a Poser and iClone user I haven't looked at it for some years now, but I imagine that it's progressed a bit since 2013. Tell us about the workflow you used to take a base MakeHuman model and develop it so that it could be used for your production animation frames.

TP: Yes, MakeHuman not only allows you to generate 3D people on-the-flesh, but also provides you with a very clean mesh in terms of

topology, proportions, texture mapping and materials. You can also automatically generate a rig for it, and modify it later on. It keeps evolving yes, for about the last month or so I think, MakeHuman features better facial expressions and poses. To me it is like a preformatted mesh, a base character set up right from the beginning. Once loaded into Blender, I can start to model around it, clothes, armour, or suchlike — just like as if it was a mannequin. I then work on the textures, adding details to the existing one, "high-res" them, paint directly on the mesh through blender or externally with Photoshop.

Picture: "Space Station", a still frame from a Blender animation.

DAL: Tell us more about your animation work in Blender, as many of the sci-fi pictures we're showing can be seen in animated form on your video "Space Oddity". "Space Oddity" created quite a stir in the Blender community when it was first shown in trailer form, prompting questions such as: "Can a 2-or-3-year-long CG newbie create this type of work without an official training, just by hobbying with Blender?" So how did you make a start on Blender animation, and how did you manage to progress so fast with it?

TP: Like I said earlier, 3D animation started as an extension to a video editing background, and it kept going on until I became an obsessed 3D enthusiast. I totally think "a 2 to 3 year old newbie" can easily fool anyone into thinking he is more advanced than he actually is. If you take a look at my videos, you will notice that almost everything is suggested behind actual simple animations and a mix of camera work and editing. I guess it could refer the *Jaws* method, if you've ever heard about this anecdote from Steven Spielberg. When shooting the movie *Jaws*, there was supposed to be a lot of scenes using a robot shark, but the robot never worked properly or broke all the time, and messed up the whole shooting of the movie. So what they did the only thing left to do: "Ok, we can't show the shark, let's *suggest* the shark". In other words — you can't animate an alien monster attacking in a corridor? Well, then, shoot your scene from its first-person view, then animate your creature leaping in a quarter of a split second scene, just long enough to suggest the attack without seeing anything, and let music and sounds do the rest while your camera seems to find interest in filming a flickering light and falling objects nearby. Tadaaa! You animated your attack! Never underestimate the ability of the spectator's brain to do the work for you. Don't show the shark!

DAL: Exactly. Going back to the pre-1960s Lovecraft mode of suggestive atmospheric horror, instead of gore — "I can't tell you how indescribably abysmal the monster is reader, you'll just have to *imagine* it based on my hints and the creepy environment it's in…". I noticed that you take some obvious inspirations from other films, such as *2001* and *Alien*. But are there also videogame influences in your work, influenced that I might be unaware of (because I've not played the games in question)?

TP: Virtually, pretty much any space movie yes, I'm obsessed! From *Star Wars* and *Star Trek* to *Sunshine*, *Moon*, *Mission to Mars*, and so on...

DAL: *Mission to Mars*. Now there's an under-rated sci-fi film. It's not Tarkovsky, but it's very entertaining and interesting.

TP: In terms of videogames, pretty much anything related to the *Mass Effect* franchise, which I consider as an example of design and what to do if you decide to go full sci-fi with a game. The artistic direction displays a lot of freedom and personality but yet manages to feel right at any time, it's brilliant.

DAL: Yes, although I'd avoid the mostly-dire side -missions and DLC on the first of the series.

TP: The *Dead Space* franchise is also a great source of inspiration in the same spectrum of *Alien*. Environments, ships, effects, feel and creatures looks marvellous to me. In general, videogames *are* a great source of inspiration, from the works of the 3D artists, to the musical scores, and of course the stories and narration that you won't find in any other media.

DAL: Thanks. Let's return to Blender. You used public-domain motion-capture files, from the Carnegie Mellon University Motion Capture Database? I know that most of those have been converted now for most 3D humanoid softwares. How easy did you find it to get those files to work with the MakeHuman figures in Blender?

TP: Yes that's right. At the time I was amazed to see that creatives had free access to actual high-quality motion capture files. That's part of the things you discover during your CGI artist journey! In a video I have explained the way I used motion capture, which I think might be a bit of an unconventional method. I was looking for a way to use a motion capture animated rig as a "second hand puppeteer" for my character.

Pictures: top, “Peace business”, bottom, “Moons Mines”.

Picture: “Beam Sailor — space station concept design”.


TomWalks 2015 // tomwalks.deviantart.com

TP: Since Blender is a true sandbox for experimentations, I started to use bone constraints to make my character mimic the movements of the motion capture, while leaving me the freedom to adapt a predefined looping motion, such as a walk cycle, according to the terrain or implementing new actions. Think: pointing a weapon while still walking. Maybe not the best or cleanest way to do it but well… it worked!

DAL: And you also used your expertise in Adobe After Effects, I understand? You trained in that software for three years. How did After Effects enhance the Blender-made scenes in "Space Oddity"?

TP: I think this post production background allowed me to quickly realize that the fundamentals can export everywhere, from thinking with layers and masks and leaving things for later in a second pass. It's also thinking-by-scenes and allowing yourself to make errors, do several takes, to cheat with angles, and to document yourself. Also using this knowledge — of what I couldn't do or didn't know how to achieve in Blender — I was then able to finalise inside After Effects. Blender can render individual passes as well, that you can combine in any post production software that suits you best, though Blender's compositor is already a first-rate post production tool on its own.

DAL: And how did you feel about the reception of "Space Oddity"? Did it have the success you felt it should have, and has it ever been shown on a big screen at a film festival?

TP: The first "Space Oddity" animation made its way on its own, and was made back in 2011. That was one of my first projects and I didn't imagine that would pop up again. Once again it displayed, from my point of view, all what I *wasn't* able to do. That's how the project was initially born: 'cheating' everything.

I did an animation in space because I wouldn't have to deal with micro gravity and complex technical scenery. I chose a lone astronaut as a character because his body movements would be slow and undeveloped. Then I chose a first person perspective, because the only thing I would have to animate would be his arms and hands inside big gloves. It was built around making things easier, because that is the only thing I could do. The hardest part was modelling the small ISS-like space station, I spent a whole month on this but this station helped me learn a bunch of things.

If I've had to make any other type of animation at that time, it wouldn't have looked as good. This is and stays 'a newbie project' to me, and is nowhere near the quality and intelligence of what you could see being developed for big screens or festivals.

DAL: Tell our readers about your other animations, please.

TP: I have to admit that my whole animation work has always consisted in "trying to", for the time I'll be able to really display a movie like level of quality. Today, I really consider myself far from this goal. That's probably what keeps me going — one day "I'll be one of 'those guys'".

That's why you'll see me posting an animation about tornados, for instance, because at first I wanted to get used to smoke simulations, many fake trailers to see if my models looks somewhat okay in motion. I made another one about hallucinations and learned about camera mapping. Each video grows into something and become a little thing on its own.

I decided at some point that these exercises should keep to the theme of space, and to make a series of videos called *Space Oddities* — featuring 3D events in space, all of them oddities of some kind, each one featuring a new step forward for me and I hope, progress. I think this is a good way to progress as you end up with results and things to show, that can be compared. Plus, the title plays on the great song by David Bowie.

DAL: I read that you're located in a small city in the east of France. Have you taken any inspiration from your local landscape and its traditions?

TP: I actually moved away, for professional reasons, a year ago. But it's definitely right to say that all my progression as a "digital artist" was achieved there. The region has countryside, mountains and rivers, forests and fields. So empty spaces used to be a great source of inspiration for my friend and I when we were making our videos. Silence, time passing slowly, creepy nights! Aliens, ghosts and monsters used to roam these places in our imagination, and still do today. They're hidden, you need to find them. For a moment we thought about a reverse-blockbuster alien invasion short movie, where aliens would somehow think "Let's attack *this* bit of rural France first!" ... yes, I know...

DAL: Well, Lovecraft did it for his own rural and coastal New England… and radically re-invented horror fiction along the way… Of course, the local Tourist Board won't thank one for re-haunting and re-enchanting their district, but they may come round to it, after a few hundred years, if the stories are still around by then!

TP: So, in making such local videos, that's when Blender 'revealed the tip of its nose'. They say 'you are what you eat', but I think you are also where you live. I'm really attached to my home region, for sure.

DAL: Am I right that you've never left your city and trained at a university? Do you resent not being offered that opportunity? And how do you feel about the growing 'credentialism'?

TP: I'm a self-trained digital artist yes, and that self-training began right after high-school while I was doing crappy jobs. I can't really say I resent not being offered that opportunity, because in a way I wasn't aiming for that professional career at first, I just *loved* it. But obviously I agree that anybody with talent should somehow be given the chance to develop and make the best out it. About the tensions between certificates and portfolio, that question is trickier than people think. I think it depends on what kind of career you are aiming for. As far as I'm concerned, I've experienced both ways now. 'I did it my way' first, it took time and still do, and it led me to some interesting opportunities, in a way the portfolio did it but that was clearly aiming towards freelance and a more personal approach that that of the industry.

Last year I became a certified print publication designer, which is nothing to do with CGI at all, and which directly led me to my current job. I'm now a graphic designer working in a leading business school, located in Fontainebleau, near Paris.

DAL: Ah, congratulations! It's not easy to get a good job in France, these days, or so I hear.

TP: Thanks. What the course did for me was setting me into a professional environment, learning the constraints and some inevitable rules of any kind that you can hardly guess by yourself. From the reasons behind file formats, to how teams work, and organising your workflow around it and daily collaboration with others. I wasn't taught about being an artist there, but I was taught how to behave and work inside the industry. There has to be a balance somewhere, a great portfolio doesn't necessarily mean that you know how to work in any team, unless you do work that just repeats the same things over and over again. Nor how to organize you work around any type of constraints you might face every day.

On the other hand, having a certificate doesn't mean *in any way* you have great talent or will be has much productive and passionate as a self trained artist who made his way by himself. In between the two is experience, portfolio or certificate, that's what will 'keep your head up' — but you have to make some work, by one of the two ways.

DAL: Given your skill with modelling, have you considered selling your models on the growing DAZ/Poser market? Or perhaps creating a training course in Blender modelling of sci-fi hardware?

TP: I never really planned on selling 3D models, no. I guess that's due to a naive personal quest for knowledge rather than security. But I did used to give away my source .blend files for people to do whatever they wanted to do, help them use it, and sometimes even have my images when I was asked.

Picture: “Maintainance Team — average day”.

Picture: “Looking for trouble”.


Blender 3D/Gimp 2012 http://tomwalks.deviantart.com/

TP: I also let people use my creation to support their projects, some of my scene appear in short movies, for instance there's this music video "Are you with me?" from Lost Frequencies, that used some of my work. Some of my artworks and videos were used to support crowd funding campaigns like one for a movie script adaptation a classic series of sci-fi books called *Midshipman's Hope*. People re-use my images as covers for their e-books, and I've seen montages and blends used at festivals and suchlike. I just usually ask to be credited somewhere and that's fine. The achievement is seeing you creations live. I was told, way too much, that it is stupid to just let things go, but my vision is different...

About developing my own sci-fi training course… well, I'm not really good at taking that kind of initiative. I prefer somebody asking: "Hey, do you know how to do this?", and I reply "No, but let's find out together!" And then we work on that. Contributing, and getting to discover new things, gets me every time.

DAL: I love the cinematic sense of depth in your picture "Looking for Troubles", the detail, and also the sense of an incipient story about to happen. Is there a story behind this picture? Tell us more about it, please — how it came to be and what the scenario or story is.

TP: Basically this was inspired by passionately observing an autonomous vacuum-cleaner-robot, accomplishing its mission to clean a floor. And to me it looked like it was looking for something, in a world way to big and complicated for it, cruising under tables and chairs, minding its own business. But that business meant everything to it: "I *know* it's there somewhere, I'm *gonna* find it and report it, and everyone will be proud of me, they'll see…". I thought, if it was a little police drone or cute robocop, obsessed by finding drama, and ... 'looking for troubles', even where there might not be any. Will he get himself into trouble, by looking for it too much? Who knows? Like the vacuum cleaner would crash into a plant and then it would make more work to do, cleaning up the spilled soil. The story behind this picture is probably the idea that inspiration happens anywhere at any time, and people should definitely allow themselves more to look around and think: "Mmm that display of showerheads look exactly like a fleet of Boba Fett's ship in *Star Wars*... wait…" */runs home and starts sketching/.* If you know what I mean…

Pictures: "Hover-car" and "Mantis Gunship — work in progress".

DAL: And, finally, we end this interview with your picture “Hell Lighthouse” (seen overleaf). Tell us more, please, about this.

TP: Messing with reality is exciting. It challenges your way of thinking, facing phenomena that nature didn't prepare you for initially, throughout the vast eras of humanity’s Palaeolithic dream-time. This is a human thing, thinking outside of the spectrum of what is plausible. Horror is a feeling, one all of us share, more than one's ability to laugh, love or judge. It triggers your survival instinct without you even knowing. "Hell Lighthouse" is supposed to raise questions that the viewer can't answer with logic. When I was a kid, I remember being terrified by empty houses. A house is for *people*, so if no people inhabit it, what does it then become? There *had* to be something, behind windows and this couldn't be good. The gothic aspect of it is actually a tribute to the Addams Family series, which answered many of my interrogations when I was a child. *Beetlejuice* also had that role for me.

DAL: What imaginative media or story or song have you been most inspired by, in the last eighteen months?

TP: The movie *Interstellar* and its soundtrack is an easy pick. A very powerful film! I keep being faithful to H.R. Giger and have also taken an interest in the dark and tortured art of artists like Zdzisaw Beksinski, Anton Semenov, etc. You'll quickly understand which style I'm talking about when you do a terrifying Google Images search. But, lately, a lady of more sunny disposition has also introduced me to the art of Magritte and Klimt, for which I'm really thankful! More will probably be discovered from that.

DAL: Thank you. To finish, what advice would you give to other artists reading this magazine? Especially those just starting out on the road to mastery in 3D, compositing and animation.

TP: Challenge your interests by looking into things you're not used to. You're not used to classical or metal music? Listen to some for a few moments. Find some good ones, though! The same goes for movies, art, books, comics, games, anything. You can only be missing something great at some point and find whole new sets of inspiration — like Magritte and Klimt!

Ask for advice, challenge yourself by showing your work, even if you're not proud of what you did. That's one the biggest steps you can achieve.

And probably the easiest advice of them all, but I mean it, is to work hard at it. GCI and digital art in general is hard and it takes time, that's a fact. If you really want to, but feel like giving up, just please don't. I personally had two lives using Blender. The first one lasted only a month or so. I gave up and thought "whatever". I can't imagine what would have been my life if I hadn't just jumped in *again* and kept doing this for myself. I let Blender become my videogame, in

some ways. It made me live.

DAL: Thomas, thanks very much for this in-depth interview.

TP: Thank you even more, friend!

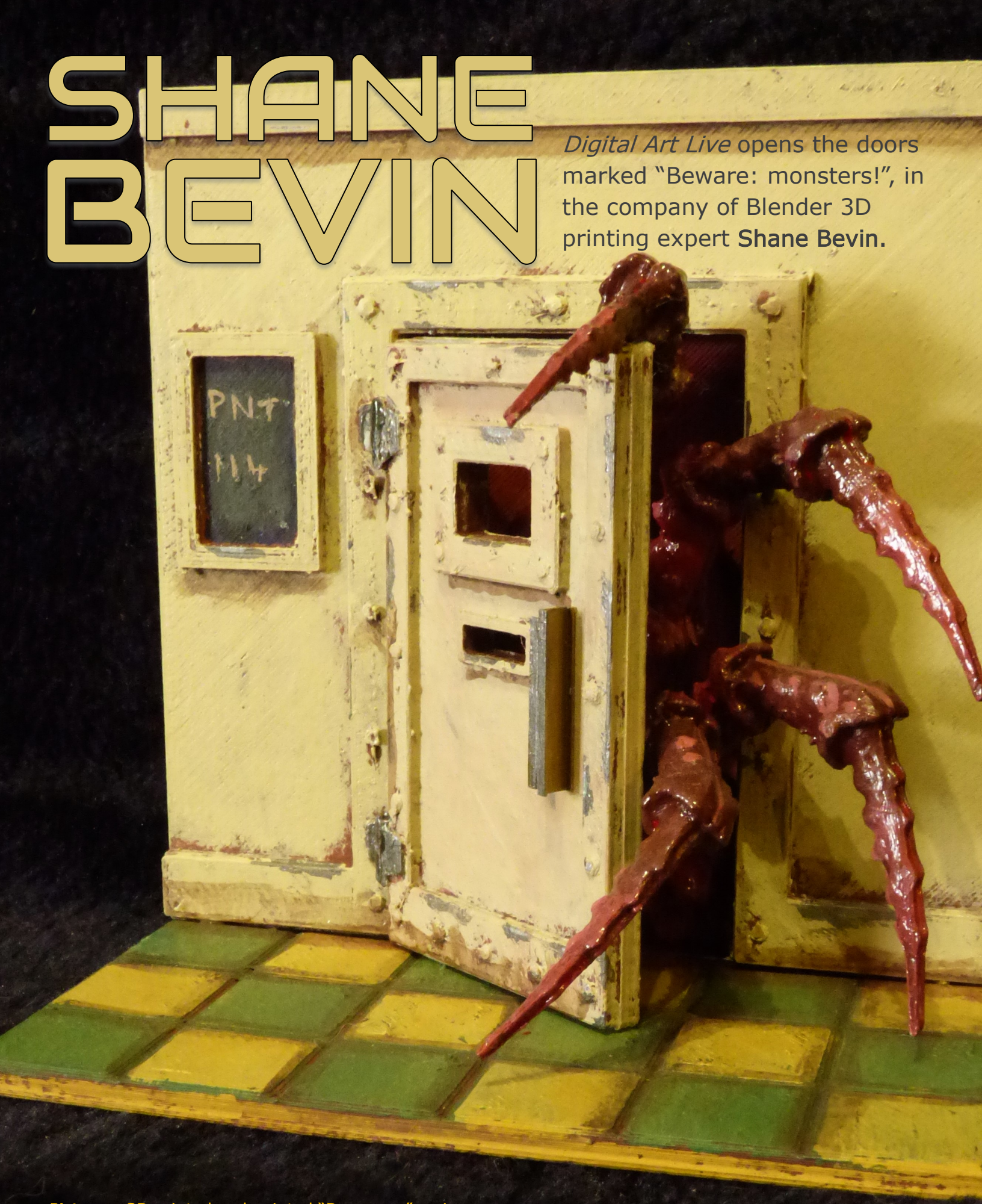
Thomas Piemontese is online at http://tomwalks.deviantart.com/

Thomas's "Space Oddity" video is online, as is his showreel.

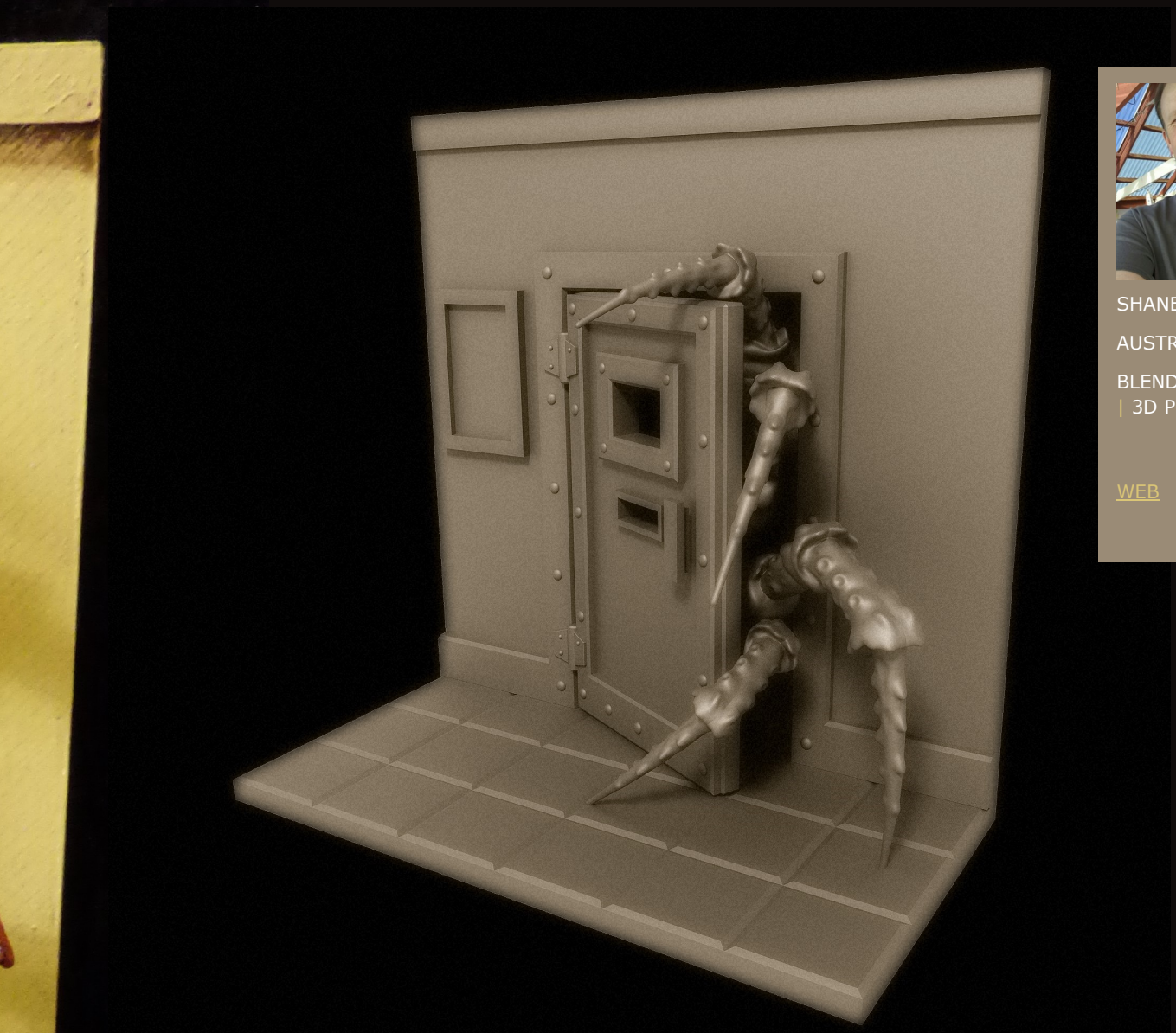
Pictures: "Hell Lighthouse".

SHANE BEVIN

Digital Art Live opens the doors marked "Beware: monsters!", in the company of Blender 3D printing expert **Shane Bevin.**



Pictures: 3D printed and painted "Doorways" series.



SHANE BEVIN

AUSTRALIA

BLENDER | 3DS MAX | 3D PRINTING

WEB

DAL: Shane, welcome. Let's start early on. You were part of the ZX81 generation, I think? The generation that coded in Basic on one of the first affordable home computers. How have things progressed for you, since then?

SB: My first computer was indeed a ZX81. With 1kb of RAM, no sound and any colour you wanted on screen, as long as you wanted black or white… not exactly an art tool. I grew up playing really old-school arcade games like *Space Invaders*, *Xevious* and *Time Pilot* and I loved the artwork and animation. I eventually got my hands on an Amiga 500 and my life changed completely. I finally had a tool that allowed me to pursue the creation of pixel art and animation, and I did exactly that. A friend showed me a copy of a program called Sculpt 3D and my mind was blown by its addition of just one extra dimension. Being able to create in 3D was a pivotal moment in my growth as an artist as it meshed (pardon the pun) perfectly with what I was doing away from the computer. I had been a model-maker throughout my childhood and the 3D workflow was very familiar. I spent a large amount of my childhood with hands covered in plasticine, paint and Airfix model kit glue. So the idea of objects being a construct built of carefully arranged smaller objects helped my work both off and on computer.

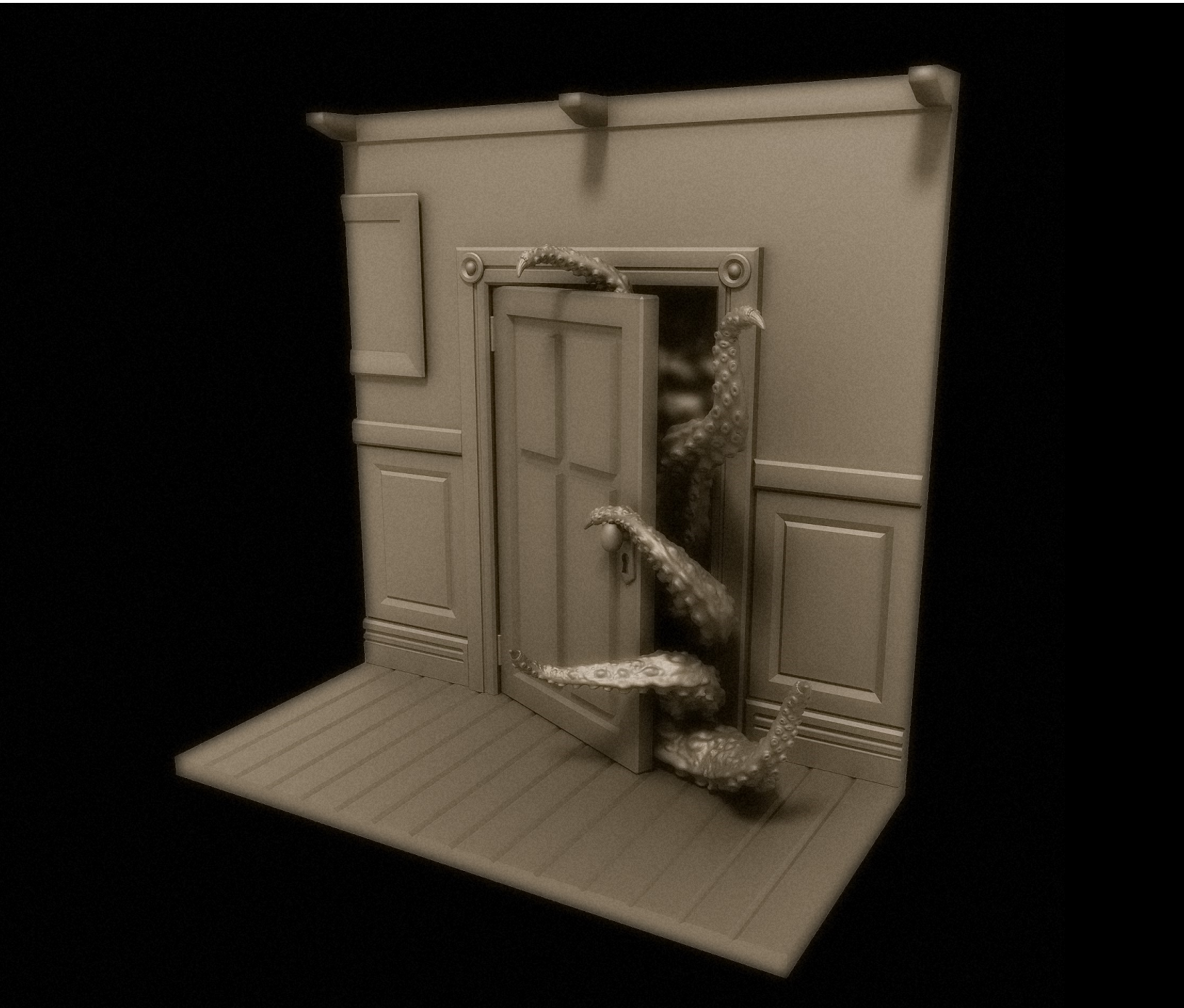
DAL: Yes, I was of 'the Airfix kits and model railways' generation too, in my middle childhood. It provided us all with a very good grounding in 'thinking in 3D', I remember.

Looking back I can see that there was then a whole range of 'spatial training' informally available, not the least of which was being able to very freely roam around the district on bicycles. Much of that freedom has been lost to society today, of course. Since we no longer have that same 'free-range' childhood. And a child's 3D constructions also seem to migrate – and quite early on in childhood – onto flat screens. Lego, *Minecraft*, games and so on.

SB: I eventually trained to teach Junior Primary Education at Flinders University and then graduated to a job market that was hard to enter. While looking for work I undertook a short course in digital media production and at the end of that course I was offered a job teaching Digital Media with adults. I then co-founded an animation and new media studio named Monkeystack. My skillset in digital media really expanded there, while working with a huge range of clients and fellow artists. After over a decade in commercial production I was then able to return to my first love, teaching. I am now a university lecturer in Digital Media at Flinders University, teaching all aspects of the subject.

DAL: Were there any special mentors or helpers you'd like to thank here?

SB: The biggest impact on me as an artist has been feedback from a variety of art forums and communities. Feedback from peers is incredibly



useful, but the best part of belonging to a community is the joy that others show when you post your work. I would like to personally thanks the entire art team at Monkeystack, and in particular my cofounders Justin Wight and Troy Bellchambers who are great artists and even better friends.

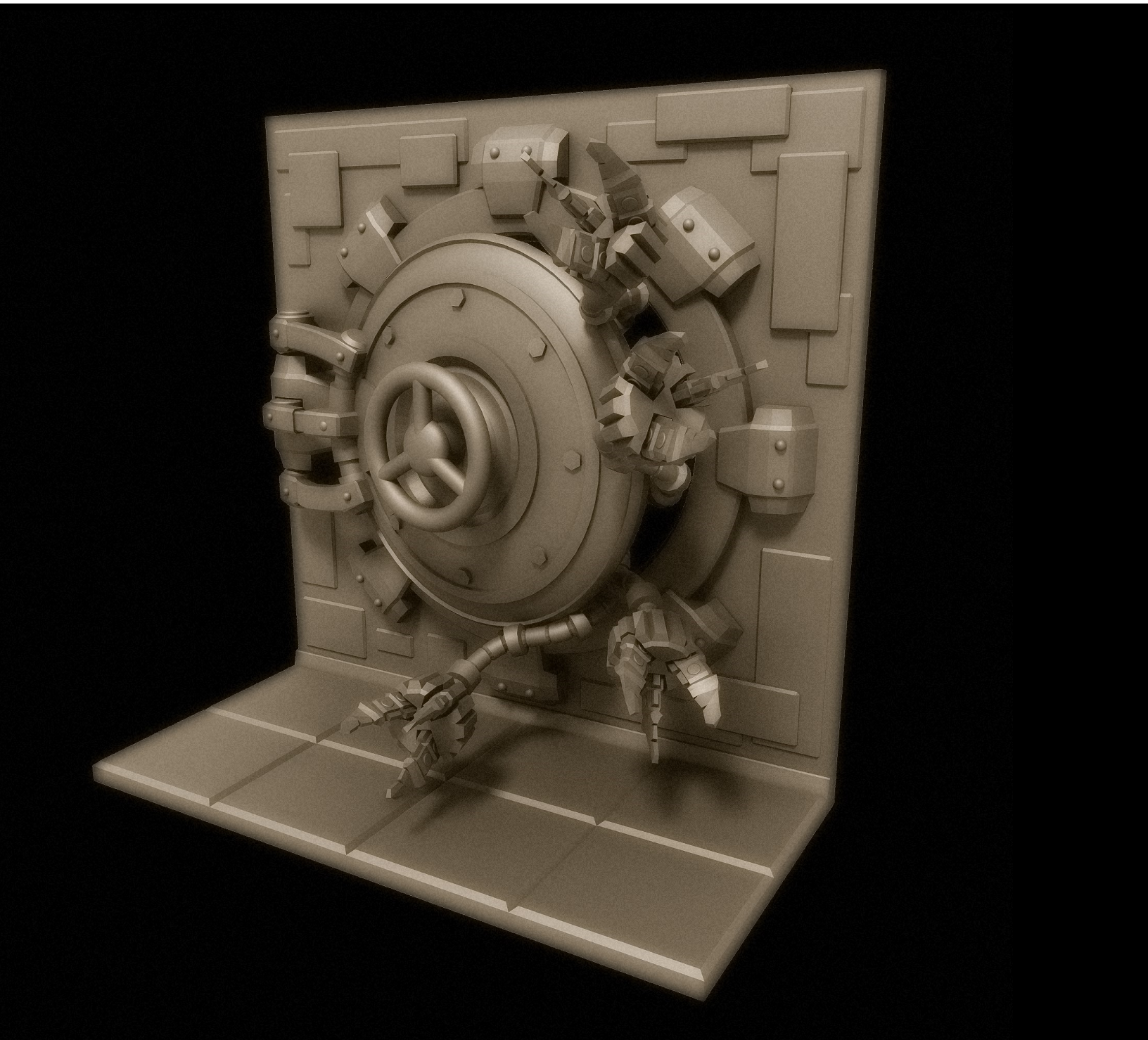
DAL: Thanks. We're very interested in your recent "Doorways" project, not least because the artworks involved the use of Blender in their creation, and this is our special Blender issue. But before we get into the technical details on those, let's first talk about the initial inspirations. What made you choose H.P. Lovecraft as the inspiration for "Doorways"?

SB: I've always been a big fan of classic horror in art, print and film. Authors like Poe and then Lovecraft built the foundation for modern horror, and arguably for a lot of sci-fi and fantasy. Elder gods, secret histories, dark magic and horrific inter-dimensional creatures lurking at the edges of our perception have made their way into many areas of pop culture. Personally I love to see the way artists take these themes and add their own twist. From the films of Guillermo del Toro to plush Cthulhu dolls add to the foundation laid by Lovecraft. Even though some people are less happy about how the Cthulhu mythos is now portrayed, I'm pretty sure that Lovecraft would love to see the impact his work has had on our world.

DAL: Yes, he'd be flabbergasted, but also thrilled I'm sure. And then perhaps he'd be a bit peeved that he had to die an early death of starvation and poverty. While many today — who seem to care absolutely nothing for the Lovecraft-the-man — have built a sprawling commercial empire in his name.

Your work on the "Doorways" certainly does capture some of 'the lurking fear' that Lovecraft's stories seek to evoke. That the monsters are not fully seen is what 'does the trick', I think. It forces the viewer's imagination into play. You hope to exhibit the doors in Australia in early 2017, I understand? Do you envisage them at a larger size, and lit in a cinematic manner, perhaps? Or maybe as some kind of sideshow-like 'peephole' installation?

SB: I have definitely been aiming for these vignettes to happen in Lovecraft's universe, but I've steered away from creating characters from his stories. This is about creeping horrors and the moment in time that they enter our world. The Doorways pieces themselves will be mounted on wooden bases, but apart from that, they will be as you see in the photos. They are actually 4 inches high and were designed to work



best at that scale. I am aiming at having 15-20 pieces exhibited and the presentation will indeed be close to the 'peephole' installation you have suggested. The lighting of the pieces will be incredibly important, as light and dark is a large part of the visual narrative of the project. I also have secret plans, involving augmented and virtual reality, as well as a simultaneous 'virtual exhibition'… but I'll lock those plans behind a closed door for the moment.

DAL: And what kind of message do you hope the audience will take from the "Doorways", when they are lit and exhibited in 2017?

SB: That there are many lurking horrors in our world. Mental illness, violence, racism, terrorism, abuse, advertising… all things that we, as individuals or as a society, often lock away or ignore. Every now and then the doorway opens and the world sees a glimpse of the darkness beyond. Often we slam the door shut and pretend we saw nothing, but sometimes we instead open the door wider to meet the monster face-to-face. Once unmasked, we can choose to fight, or choose to hide… or choose to co-exist.

Should we open the doors?

I think that at the very least a peek through the keyhole is the first step in understanding our demons. Doorways is thus my attempt to show the moment that 'the lurking horror' breaks through into our world. It is a moment in time, and it is then up to the viewer to write the story that is to come. Certain vignettes seem to resonate with certain viewers and I am hoping that this is because each viewer is bringing something of themselves to the piece. I'd also love to see the viewer walk away with a greater understanding of the possibilities of 3D printing and so an important part of the exhibition will be to show some "behind the scenes" of the project.

DAL: I see. Now, let's talk about the behind-the-scenes making of your "Doorways" series. Most of your prior 3D experience has been in 3DS Max, but for the "Doorways" project you devised a complex Max-free pipeline which included Blender. Could you tell us more about how that pipeline was built, please, and how it was refined? You can 'talk techie' here, up to the point where you go to the 3D printer file? Most of our readers are 3D artists and will be conversant with the terms.

SB: The workflow I developed was defined by the commitment to a *free or low cost* pipeline. In many ways it was also defined by the different aspects of construction of the pieces. Most "Doorways" are a combination of hard surface and organic modelling techniques. Initially I began with Wings3D as my hard surface modelling tool, but I eventually transitioned to using Blender more as the project progressed. There was a little bit of Sketchup, TinkerCAD and Fusion360 along the way, but this was a small percentage of the overall project and was also usually related to the 3D printing aspects of the project, rather than the modelling workflow.

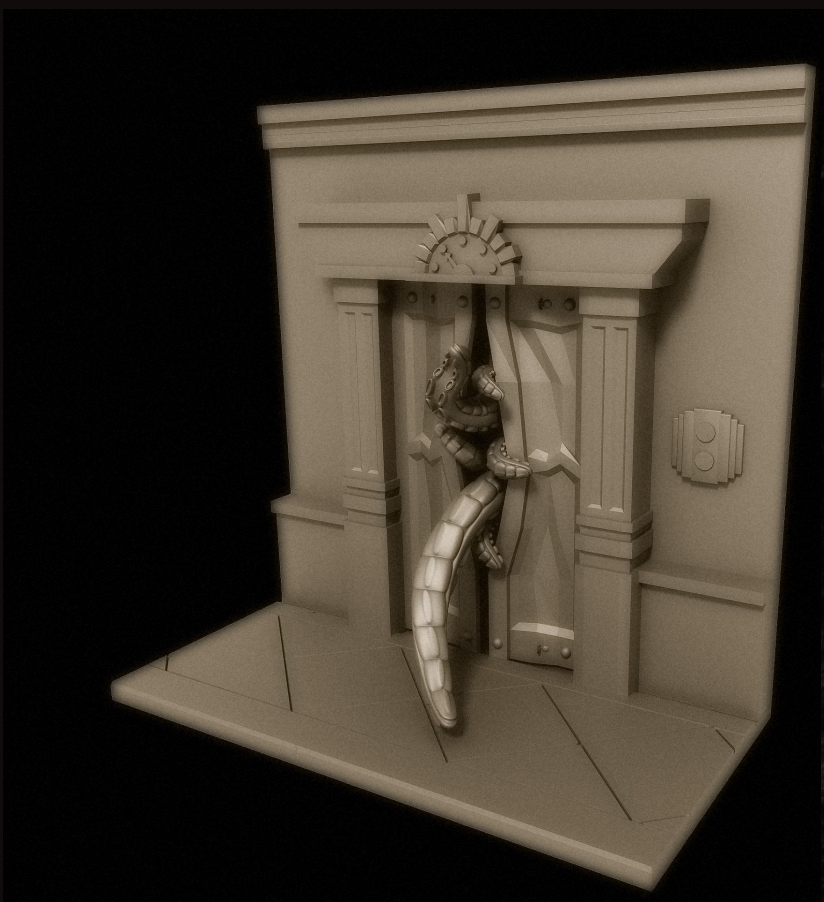
For the organic modelling I primarily used Sculptris, a piece of software that has a digital sculpting workflow. Sculptris allowed me to create highly detailed organic parts and was perfect for the tentacles and other organic creatures. Sculptris also allowed for some posing of static objects and was a stable and flexible tool that routinely handled millions of polys with ease.

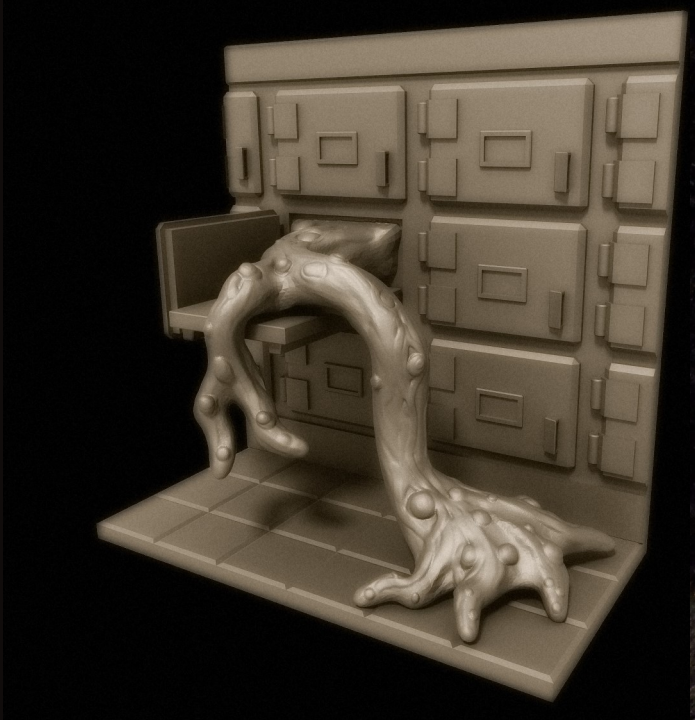
I created a template for the wall and floor in Blender so I could ensure that each Doorway would have exactly the same base footprint. This allowed me to easily bring all of the different assets together to give a model that could be exported for printing. I used a combination of .FBX and .OBJ as the import and export between the various pieces of software and everything went smoothly. Primarily, this was a modelling exercise, but I did do some renders in Blender as a proof-of-concept to share on social media. The Cycles render system in Blender was an efficient and speedy render engine for me, one that happily rendered some pretty high poly scenes within minutes.

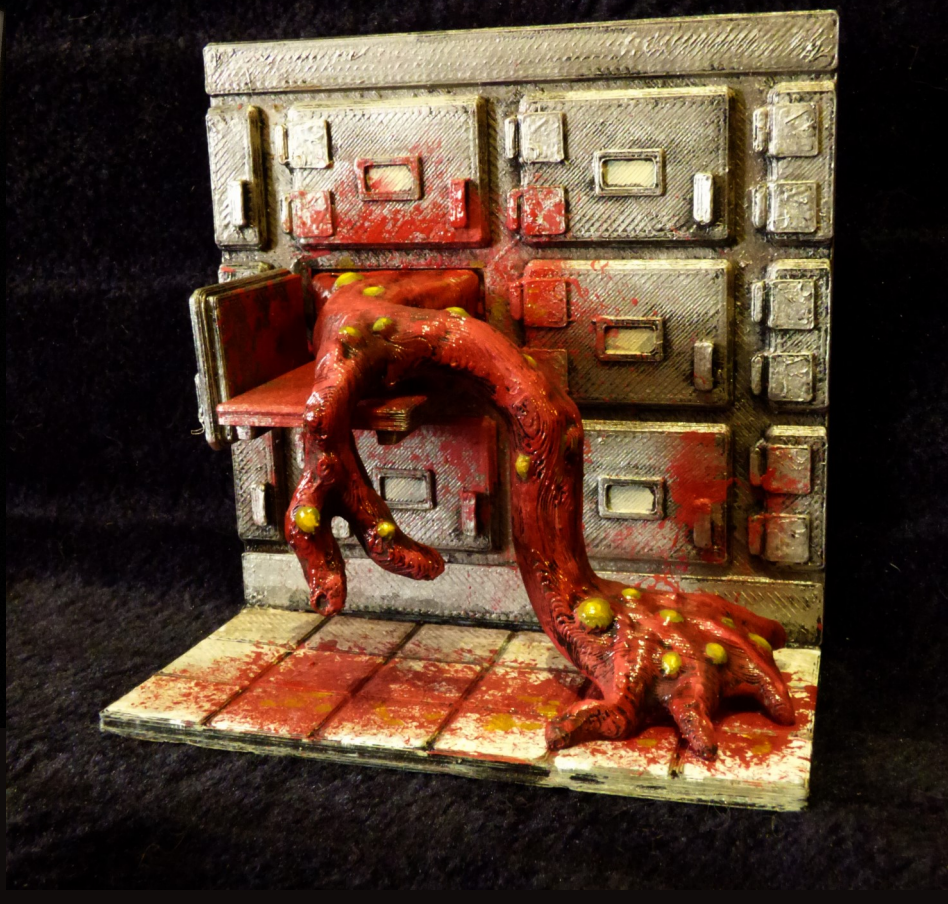
Blender has some excellent tools for parsing 3D print scenes, but on the whole I didn't really need to "fix" many aspects before the transfer to Cura, the software I used for the actual printing. This entire workflow took place on my Surface Pro 3 running Windows 10.

DAL: Impressive. So you choose mostly free and open source software for the "Doorways" project. What was the thinking behind that? Was it purely about cost, being able to then pitch your refined pipeline as a low-cost option to future educational employers, or was there a more intellectual reason?

SB: There are various reasons to choose a free / open source workflow. One aspect is that I am making these pieces for sale and so the cost of licensed commercial software is a factor that I would like to manage. As part of a commercial studio, I had access to a variety of high cost programs, but as an individual artist my resources are more limited. I am also using this project as a chance to push my knowledge of some software that I haven't had the chance to use in the high pressure, tight timeline environment of a commercial studio. This has been a great chance to stretch my knowledge of Blender in particular. Finally, I have also used this project as a chance to gain knowledge in a variety of software and workflows that I can directly pass onto my students and colleagues.








PRIVATE
DETECTIVE


ch'ftaghu


EXIT

SB: Keeping up with the latest aspects of digital media production is very important to me as an educator and there is no better way to gain knowledge than to throw yourself into a project that relies on new knowledge.

DAL: Thanks. Now, what our readers won't necessarily be conversant with is the 3D printing and painting aspect of the "Doorways". Could you give them some tips, from your own pipeline, on things to avoid, the materials and paints that work best? Perhaps tips that our readers won't necessarily find in the basic guides such as the *Dummies' Guide to 3D Printing* etc?

SB: I held off on getting my own 3D printer until quite recently and I really feel like my timing has been just right. Both the hardware and software aspects of 3D printing have matured, with solid options for printing at home at a reasonable cost and time commitment. The Printrbot Simple Metal that I have worked well straight out of the box and I was making prints of my own 3D files within hours.

The thing that I immediately noticed was how useful my years of 3D have been. If you have a strong flexible workflow in 3D software and a good understanding of modelling and topology, you have a great headstart in 3D printing. Much of the bad press I see about the difficulties of 3D printing can be directly attributed to a lack of understanding of the 3D workflow. Being able to break a model down, print in different orientations and tweaking existing models will give an artist a great entry point into the 3D printing workflow. Another great thing about 3D printing is the strong sense of community on the Internet. This, along with the strong communities for software like Blender, means that help is often just a keyword search away.

My pipeline involves constructing 3D models as I always have. I tend to create a lot of individual parts to bring together as a whole. This means that you already have a good breakdown of individually printed parts that can then come together with glue (superglue works well), pinning or friction fitting. I have primarily printed in PLA and have found it to be a forgiving material to both 3D print in and construct with. PLA doesn't have a strong odour when you print and is easy to sand, fill and paint. I tend to just use simple acrylic paints and as long as you *use a good primer* on the parts, they tend to work well. For the Doorways project I want a rough and unpolished finish with a lot of weathering and so post production on the printed parts has been limited to a quick sand down and the addition of some primer. I am happy for these pieces to have evidence of the layers and other

3D printing artefacts, as part of the message of this exhibition is partly about the process itself. The best part of 3d printing is the chance to use a really experimental and iterative workflow. If a print fails, you can just tweak the model before printing again. As an iterative process and you learn as much from the failures as you do from the successes.

DAL: How would you say the current version of Blender stacks up against 3DS Max? Still worth investing in, when Blender is free?

PB: Blender is an amazingly flexible piece of software and I feel that it stacks up well against all of the large commercial 3D packages out there. My experience over the last decade has been mostly in 3DSMax, but I've dipped into Maya, Houdini, Cinema 4D and others along the way. All 'have their pros and cons' and, for me, a lot comes down to personal preference and the resources you collect to add to your chosen workflow. As the technical director of a studio I used 3DSMax primarily because of the years' worth of knowledge in the workflow and the huge collection of scripts, plugins and other resources at hand. Many studios are in the same boat and will continue to use the software they are most comfortable with. Obviously price is a big factor in the decision of which software is right for you as an individual or small studio and obviously Blender's price is right. Gaining a strong understanding of the 3D workflow means that your skillset will transfer well between packages and my advice is to dip into as many packages as you can while pushing the understanding of one primary package. Blender can sometimes be a bumpy ride as the software is evolving so quickly, it is definitely worth the ride though.

"Being able to break a model down, print in different orientations and tweaking existing models will give an artist a great entry point into the 3D printing workflow."

DAL: Tell us about your other steampunk, horror, and fantasy 3D models, please? What led you up to the "Doorways" series?

PB: I have been a big fan of the steampunk aesthetic for many years. The mix of sci-fi, fantasy, gothic horror, narrative and engineering speaks to me in many ways and the aspects of weathering, antiquing and ad-hoc tinkering construction suits my sensibilities as an artist. I've spent a lot of time in the stories of such genres and I love to exist at the crossover points of all three.

As an artist I struggle to make 'truly dark' works, but I do tend to inject a level of quirkiness into everything I do. My work tends toward strange artefacts and quirky characters, with a nod to existing pop culture.

My sculptural workflow often includes Super Sculpey (a polymer clay) and found objects, such that my work is truly mixed media. 3D printing has allowed me to gain a little more control of designing a foundation that I can add to, or creating details that I can't find.

DAL: What are your all-time genre favourites, in that regard? Artists, or works or both.

SB: I have broad tastes and so any list will be incomplete but some of my favourites are Poe, Lovecraft, Iain M. Banks, del Toro, Giger, Clive Barker, Tolkien, Dali, Escher, Ridley Scott… the list goes on. For me, it is all about how a piece makes me feel, what emotions the piece drags from me. Some of my favourite work disturbs me rather than making me happy. For me, art is about reaction, positive or negative.

DAL: And where do you see your work going in the future? I can perhaps imagine a series that explores and slightly mutates 'the weird' within the exotic flora and fauna of your own Australia, for instance?

PB: Australian flora and fauna is already a good inspiration for alien concepts. We have some *pretty weird* creatures and environments — and there are artists, writers and filmmakers out there who have made use of the bizarre nature of our island. I'm sure it will play a part in my future work in some way. The future of my work, I think, will mostly be defined by my adventures at the boundary of software, technology and storytelling.

DAL: Incidentally, do you know if anyone has actually seriously explored the fictional potential of an imagined steampunk Australia? I don't think I've ever read or seen anything in that line, which seems a little surprising. Imagine *Dune* crossed with solarpunk and steampunk, with Queen Victoria on the throne. Could be fabulous.

SB: I like your thinking! I feel like the designs in the *Mad Max* movies, which made use of the upcycling of existing machinery in really interesting ways. Making steampunk engineering work for our harsh environment would open the way for some really interesting narrative options both visually and in story. Solarpunk sounds like a great direction for a post-apocalyptic property.

DAL: Yes, it could freshen up the tired and gloomy post-apocalyptic genre. There's little glory in telling stories of defeat and retreat. Imagine a frontier steampunk Australia moving from can-do steampunk over to an even more optimistic eco-friendly solarpunk. There would conflict between the two technologies, like there were for the old Wild West — where all those heroic and poignant stories came out of the radical tensions between the clash of the dying past and the inevitable future, all set within a vast unforgiving landscape. What if a third set of protagonists then arrived, to radically re-wild and terraform the Australian desert, as a test-bed for terraforming Mars? Would steampunkers and solarpunkers band together against them?

Going back to Blender, what's your general opinion of the long-term sustainability of static sculptural 3D printing? Will it 'run-and-run', or is it something that may 'run out of steam'? Perhaps be overtaken by things like augmented reality, DIY interactive/robotic/drone devices?

SB: I think the joy an artist gets from the first time they 3D print an object that has only existed virtually tells the story of the future of 3D printing. I am a big fan of augmented and virtual reality and my personal gadget collection is pretty high, but the simple joy of *holding an object* from my imagination in my hand is still a powerful thing. As an example, the steady growth of the board games industry is proof for me that people still like physical objects that they can pick up and hold. My feeling is 3D printing will eventually be an invisible part of the workflow of many artists and art purchasers. I see a bumpy ride, but the future looks bright.

DAL: As you've said, you're now a lecturer in digital media at Flinders University in Adelaide in Australia. What advice would you give to our younger readers, who are perhaps considering with whether or not to go to university, and who may be thinking instead of taking an apprenticeship or setting up a small business?

SB: My advice is to find something you love to do, surround yourself with others who also like to do it and then make art… *lots* of art. Studying will expose you to other artists and a variety of workflows and techniques. Whether it is at an educational institution or an online pathway, surrounding yourself with art and artists is the fastest way to success. As far as setting up a small business, I'd say one pathway is doing what you love as a hobby *until it becomes a job*. The best business owners I know got into art because they love it and eventually became successful enough for it to pay the bills.

DAL: Shane, many thanks for this in-depth interview. We wish you all the best with your "Doorways" exhibit in 2017.

SB: Thanks for the opportunity to speak to your readers. I hope readers have gained some insight into my process and love of art. Feel free to contact me at anytime.

Shane Bevin is online at:

http://spacebovine.weebly.com/


Cyclopteus 1826


FEISTY BARNACLE


Cyclaptopus 1876

TUTORIAL

The **Blender** community kindly shares free 3D models inside .blend files and under Creative Commons licences. Our simple 10-step tutorial **extracts an .OBJ** from such files.

Many 3D artists don't wish to use Blender, even though it's free — pointing to its bafflingly complex interface, its hogging of system resources while rendering, and its usually slow rendering speed (compared to, say, Keyshot) without GPU assistance. But those people should not overlook the many free resources and assets that have arisen from Blender community's open source and Creative Commons ethos, which still lives on at sites such as Blendswap. Blendswap has plenty of good 3D models distributed inside .blend files. These models and scenes are placed under a Creative Commons licence, allowing for re-use within certain limits. But... how exactly to extract them as clean .obj files with textures?

1. First join Blendswap so that you can download the free .blend files there. Note that users have a weekly cap on download bandwidth. There are also occasional .blend files under Creative Commons, floating around in the wild and on DeviantArt.

2. Now install the latest Blender. A few old .blend files won't work in newer versions of Blender, and a few may rely on newer versions for their VFX. It's possible to go get any older version of Blender, though, and install it right alongside your latest version.

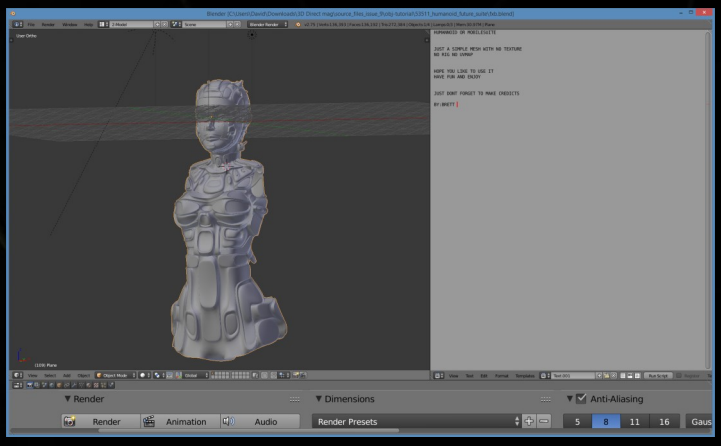
3. Select, download and open your chosen .blend from Blendswap. The Search facility allows you to remove FanArt.

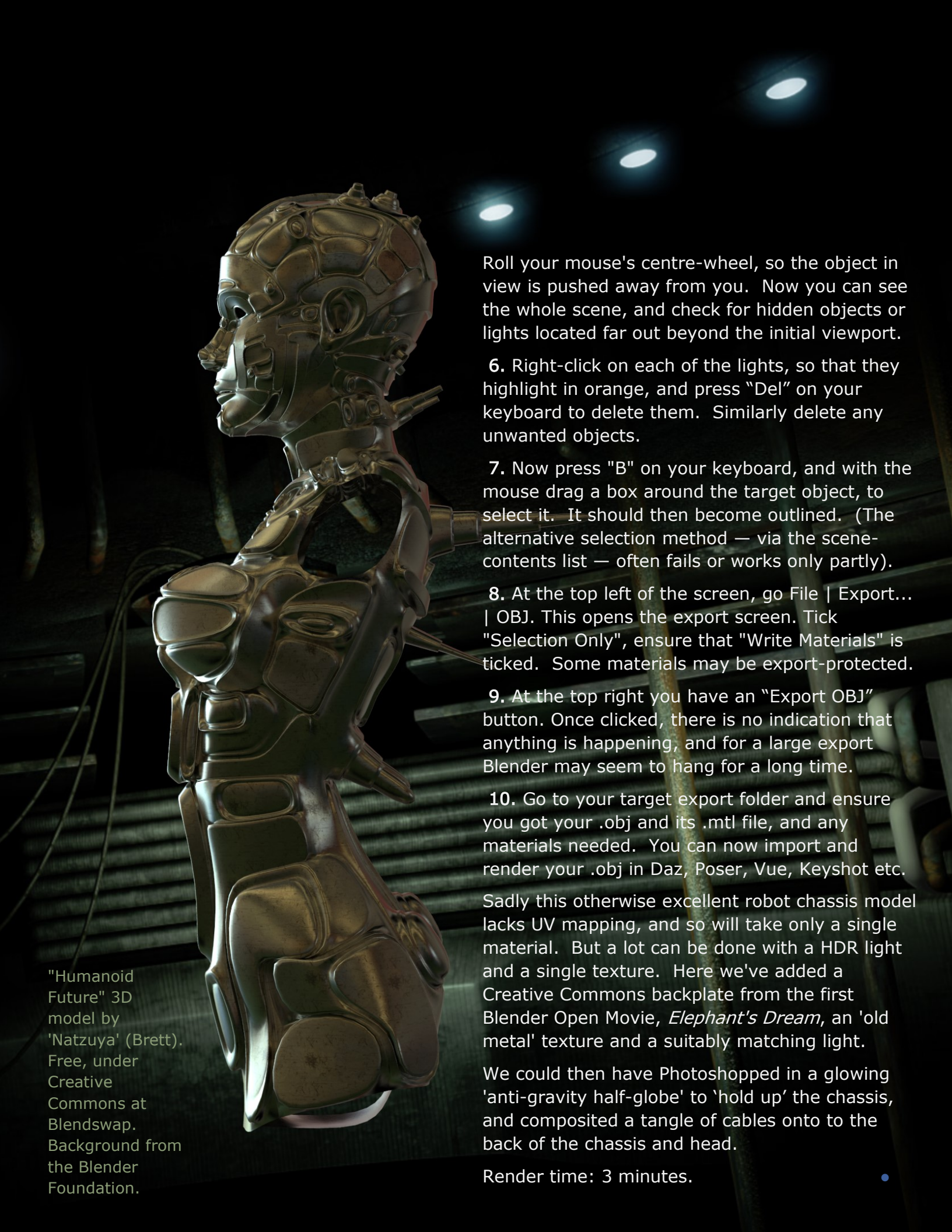
Blendswap's search-engine is not ideal, though. For instance, input "humanoid" or "Natzuya" and it can't even find the test object we used for this tutorial (seen right).

Many of the characters will lack the rigging that enable them to be posed or do facial expressions. Some models are untextured, or lack UV mapping, and others only look like their preview pictures when they have with Blender's internal post VFX added to them.

4. One of the aspects of Blender is its radically re-configurable user interface. This means one never quite knows what UI one will get in a saved Blender file. For this tutorial we will use "Humanoid Future" by 'Natzuya'. Seen below is his self-configured UI, with which his .blend file opens. Even this small peek at part of the vast Blender UI is going to baffle newcomers, but it's still fairly easy to get the .obj out of his file.

5. First, remove any camera frame that may be blocking your ability to select your object.





"Humanoid Future" 3D model by 'Natzuya' (Brett). Free, under Creative Commons at Blendswap. Background from the Blender Foundation.

Roll your mouse's centre-wheel, so the object in view is pushed away from you. Now you can see the whole scene, and check for hidden objects or lights located far out beyond the initial viewport.

6. Right-click on each of the lights, so that they highlight in orange, and press “Del” on your keyboard to delete them. Similarly delete any unwanted objects.

7. Now press "B" on your keyboard, and with the mouse drag a box around the target object, to select it. It should then become outlined. (The alternative selection method — via the scene-contents list — often fails or works only partly).

8. At the top left of the screen, go File | Export... | OBJ. This opens the export screen. Tick "Selection Only", ensure that "Write Materials" is ticked. Some materials may be export-protected.

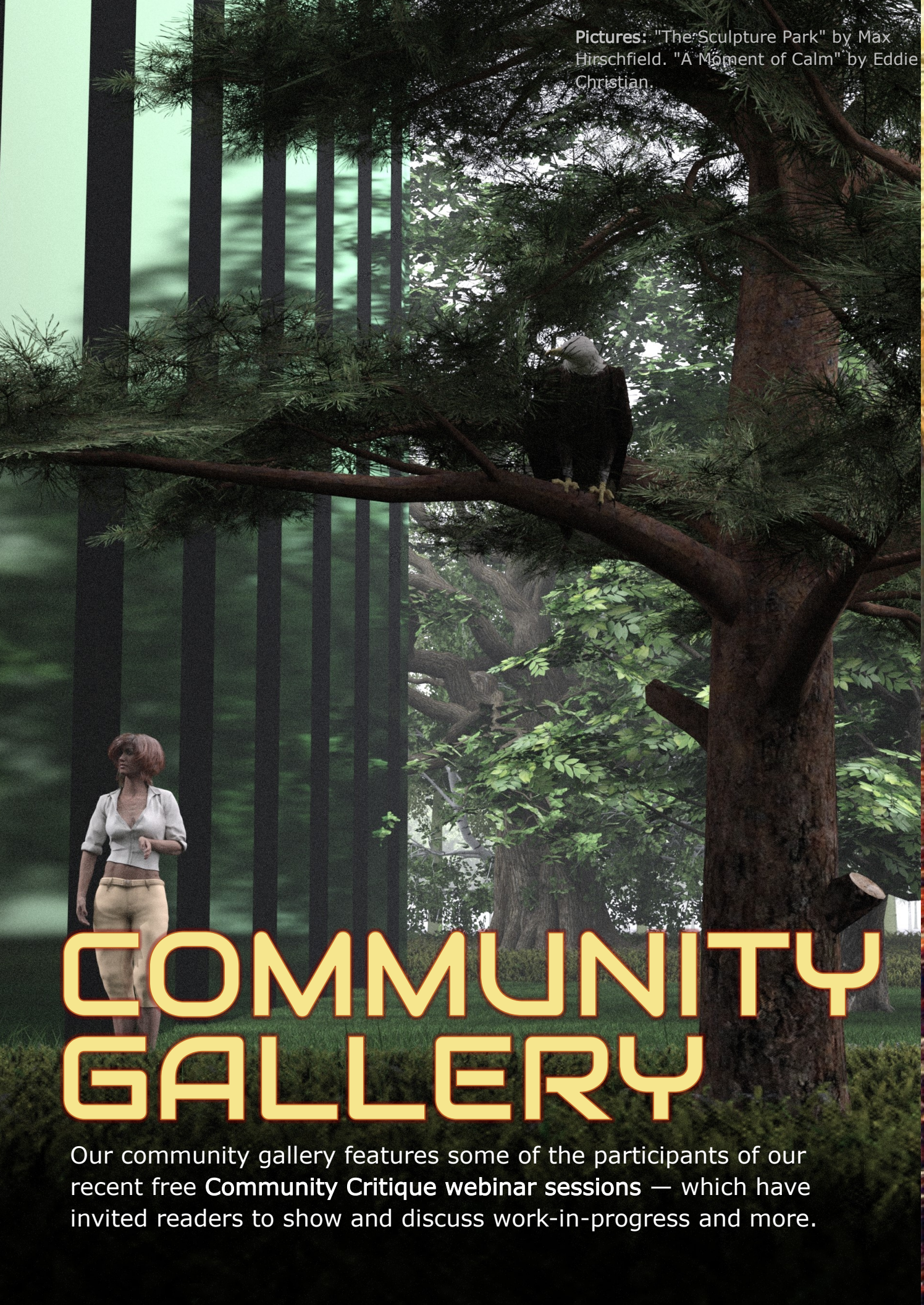
9. At the top right you have an “Export OBJ” button. Once clicked, there is no indication that anything is happening, and for a large export Blender may seem to hang for a long time.

10. Go to your target export folder and ensure you got your .obj and its .mtl file, and any materials needed. You can now import and render your .obj in Daz, Poser, Vue, Keyshot etc.

Sadly this otherwise excellent robot chassis model lacks UV mapping, and so will take only a single material. But a lot can be done with a HDR light and a single texture. Here we've added a Creative Commons backplate from the first Blender Open Movie, *Elephant's Dream*, an 'old metal' texture and a suitably matching light.

We could then have Photoshopped in a glowing 'anti-gravity half-globe' to ‘hold up’ the chassis, and composited a tangle of cables onto to the back of the chassis and head.

Render time: 3 minutes.



Pictures: "The Sculpture Park" by Max Hirschfield. "A Moment of Calm" by Eddie Christian.

COMMUNITY GALLERY

Our community gallery features some of the participants of our recent free **Community Critique webinar sessions** — which have invited readers to show and discuss work-in-progress and more.

Pictures: "Still Life with Chocolates III" by Max Hirschfield. "Decension Protocol" by Esther Mann .

Pictures: Opposite page, "Dalinar Witnessing Sadinar's Betrayal" by Esther Mann. This page "Under Siege promo", by Eddie Christian; "Morriane" by Seaghan Hancocks; and "Until I Rest" by Esther Mann.

BLENDER GALLERY

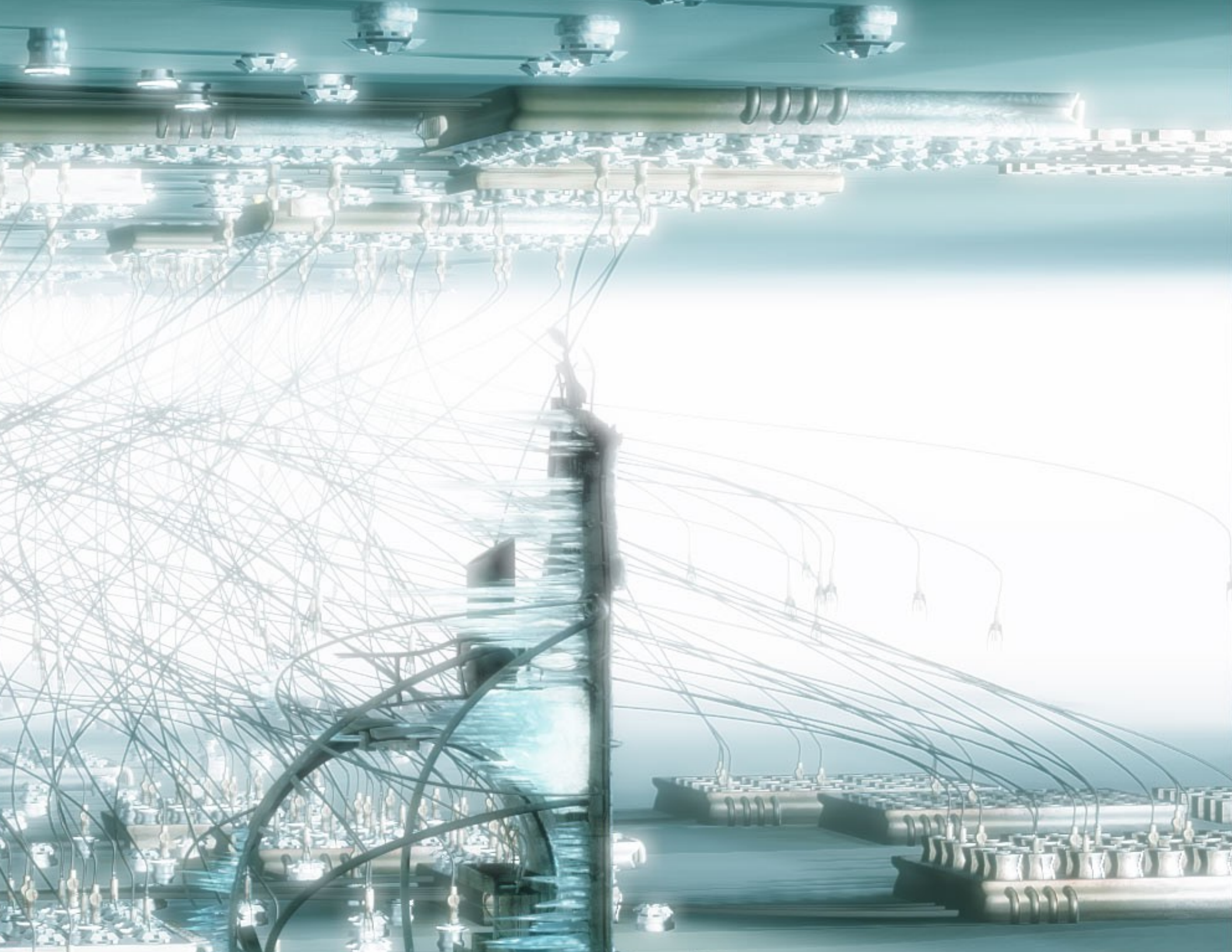
This issue's main gallery continues our **Blender** theme. All the pictures shown here are made with the free Blender software, although some may also use Photoshop or stock photos.

Picture: "Orbital Sunset" by Capt. Damo.

Picture: "International Space Station" by Capt. Damo.

Picture: Still frame from the animation “The Moon Man Chronicles”, by FlojoArt.

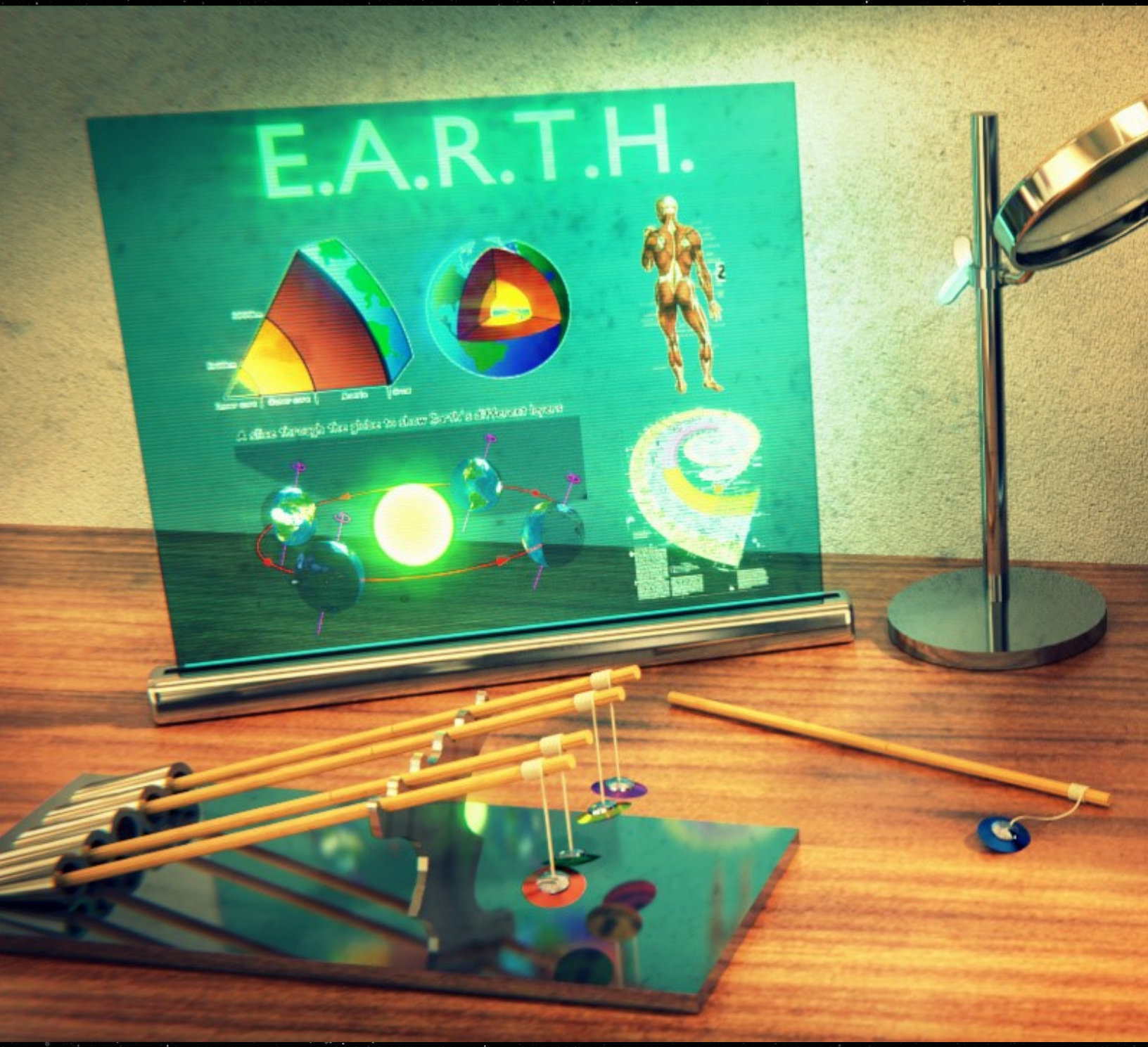

TAKE
RE
VENGE!
WAR
ON
THE
PALA
CES



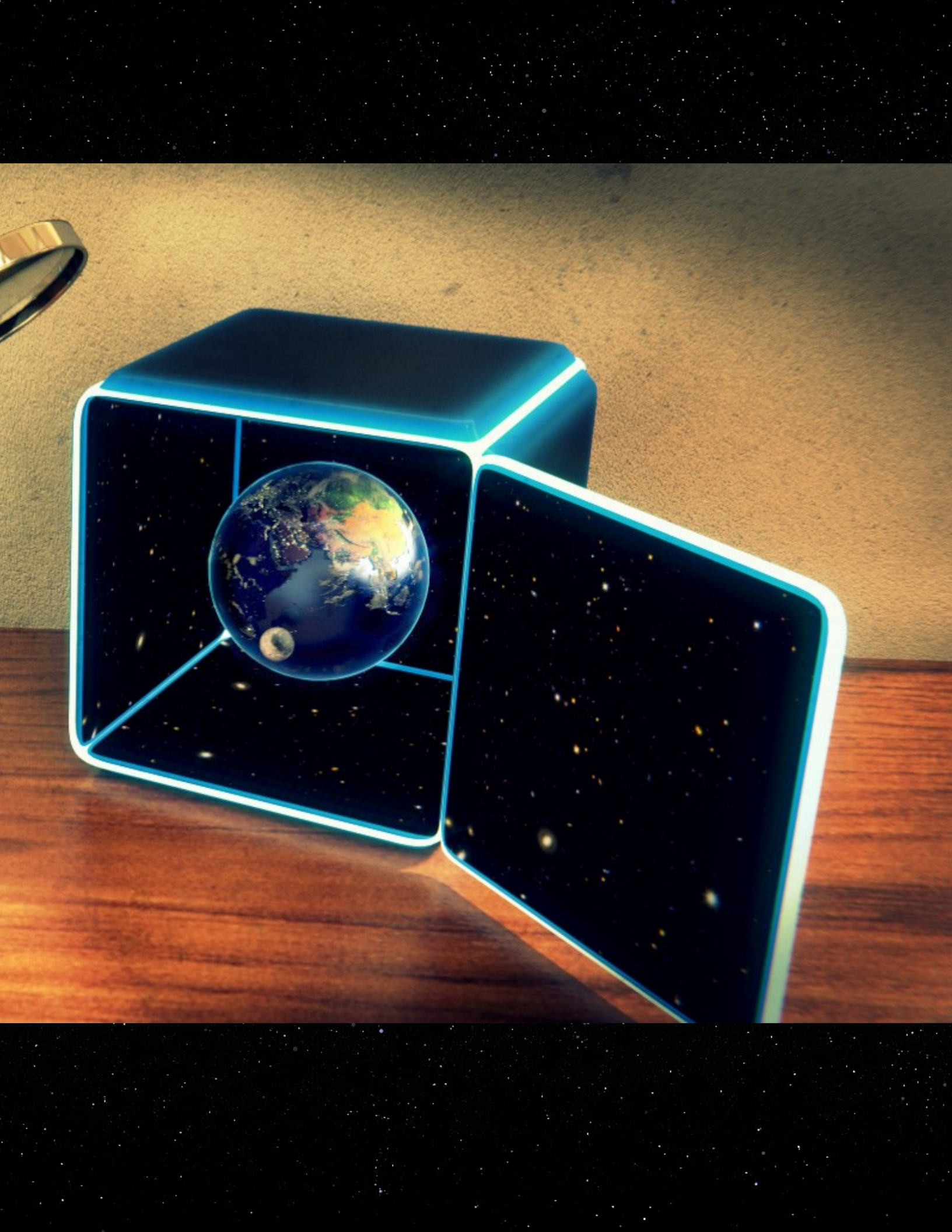
Picture: Still frame from the animated open movie "Elephant's Dream", courtesy of The Blender Foundation.

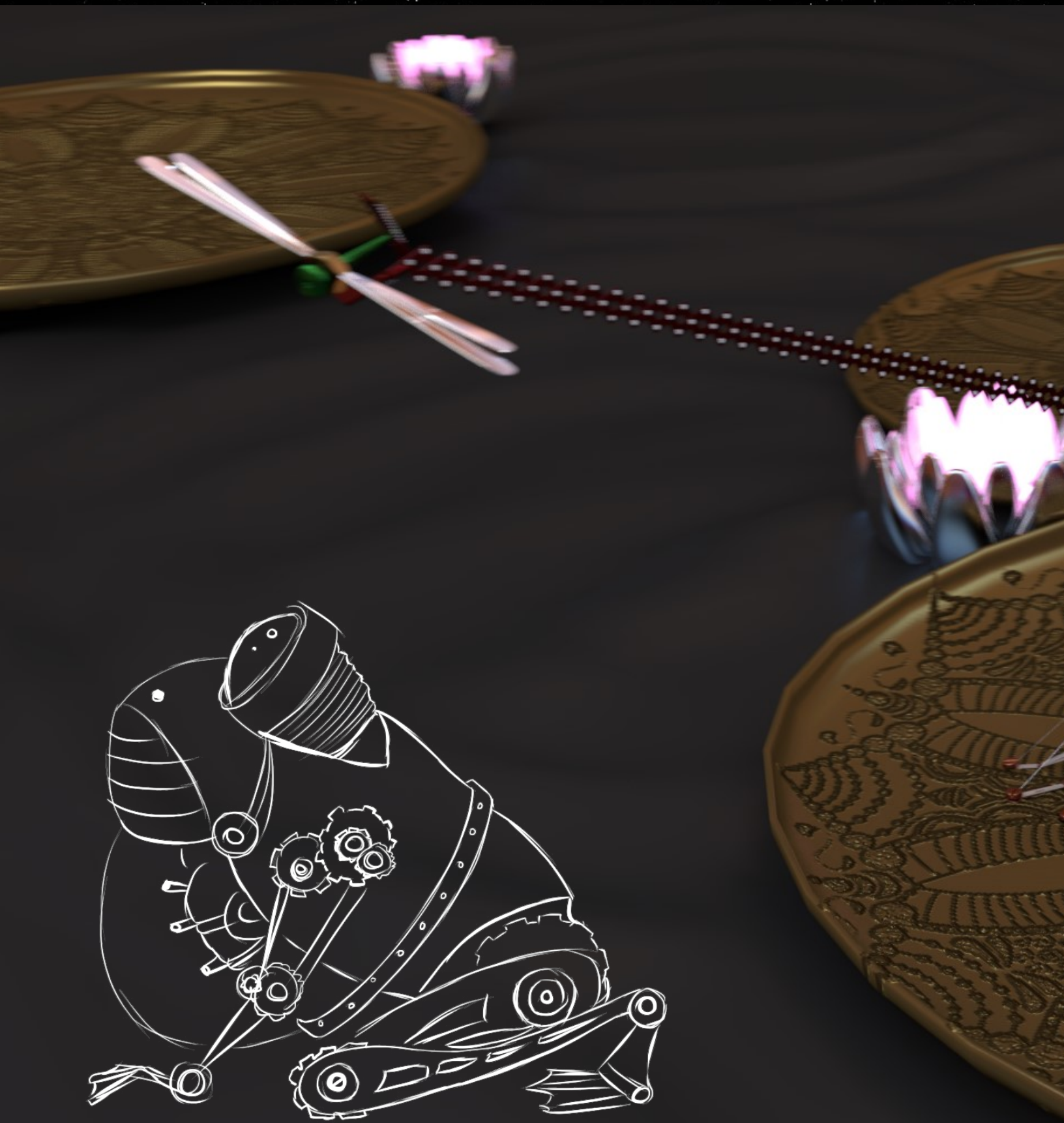
Picture: Ladybird inspired car modelling and render, “Spektrum 2014”, by Rosdi Haji Osman.


code name
Spektrum
2014
Blender 2.72b Cycles Render
3d Model Design by Rosdi Haji Osman.



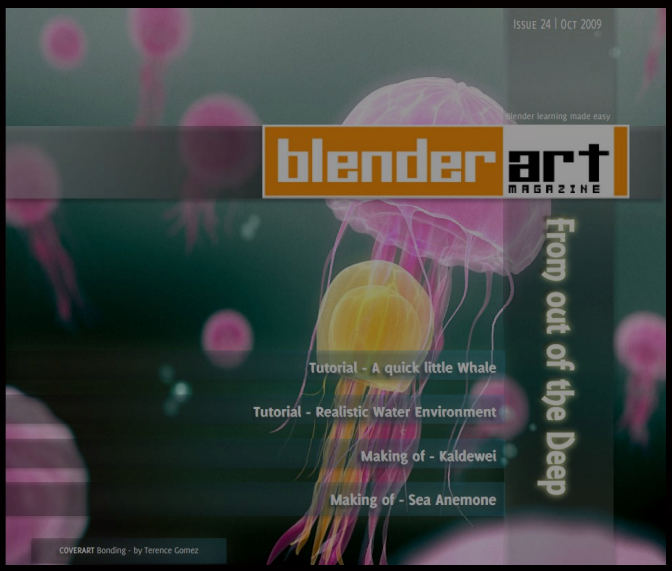
Picture: "Project Earth" (an alien child's homework project), by Dear Graudher (Adam).





Picture: "Steam Frog" by Luis Fernando Pienda Mahecha, plus one of the initial sketches.

Picture: “TI:ME” by Herr Olsen.



Want to learn more about Blender? There are plenty of free learning materials and videos online, including the free *blender.art* magazine.

The magazine seems to have come to an end in late 2015, after ten years — but its issues, tutorials and files are all still online and free.


Issue 20 | Feb 2009
Blender learning made easy
blender art
MAGAZINE
Make it! Bake it! Fake it!
COVERART -Moth Biter - by Derek Watts


Issue 12 | Sep 2007 | Blenderart Magazine
blender art
MAGAZINE
Blender learning made easy
Texturing
special!
Multi Layered Plastic Shaders
Tangent Space Normal Maps
Creating Realistic Flame
Blender to Kerkythea
Texture Seam Removal
Roof Tops - Making Of
Coverart - Cristian Mihaescu - 'Eggland'

Digital Art LIVE

ENGINES ROARING : GRAVITY DEFYING : WORLD EXPLORING : MISSION FLYING

THRUST

A CONCEPT SPACESHIP DESIGN COMPETITION

IMAGIN

Our pick of the hottest inspirational art & science. Make your imagination LIVE!

THRUST — ART CHALLENGE

The CGSociety has announced their **15th-year Anniversary Challenge: Thrust.**

- **Best fighter ship**

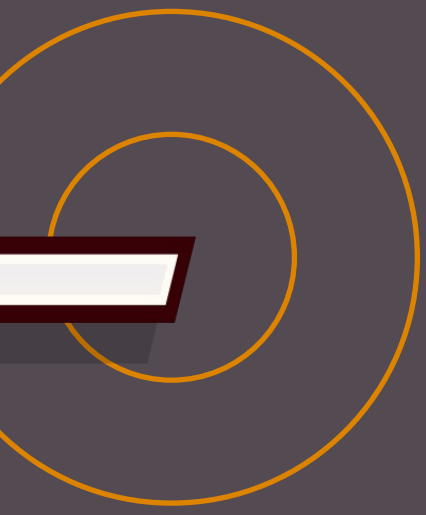
"Design the baddest fighter ship this side of the galaxy. Think speed, maneuverability, and guns... lotsa guns. We want to see some thought and plausibility here. Think about getting in and out of the ship, and use space creatively for weapons and details. Throw in a pilot or two to show the scale of your ship."

- **Best mothership**

"We love giant hulks wandering space in search of science and adventure. Think *U.S.S. Enterprise*, *Battlestar Galactica*, *Sulaco* or the *SDF-1*. We are looking for scale here. Large ships with plenty of construction to give a sense of purpose and wonder. Details such as lights, hangar bays and smaller craft will aid in scale. Compose your render in a way that tells a story and captivates the viewer. We know it's outer space, but add some atmosphere! Think 'contrasting surface properties' and 'color values', to break up your ship for maximum visual readability."

- **Best pilot + mechanic + crew**

"Design a pilot and crew, and show them on a space mission. Think NASA or sci-fi. This is a character / fashion design exercise. We want to see cohesive design elements tying the crew together. Human or alien, design for the spaceport runway to the fashion runway. Bonus points for characters in an architecture that conveys your overall design aesthetics and direction."



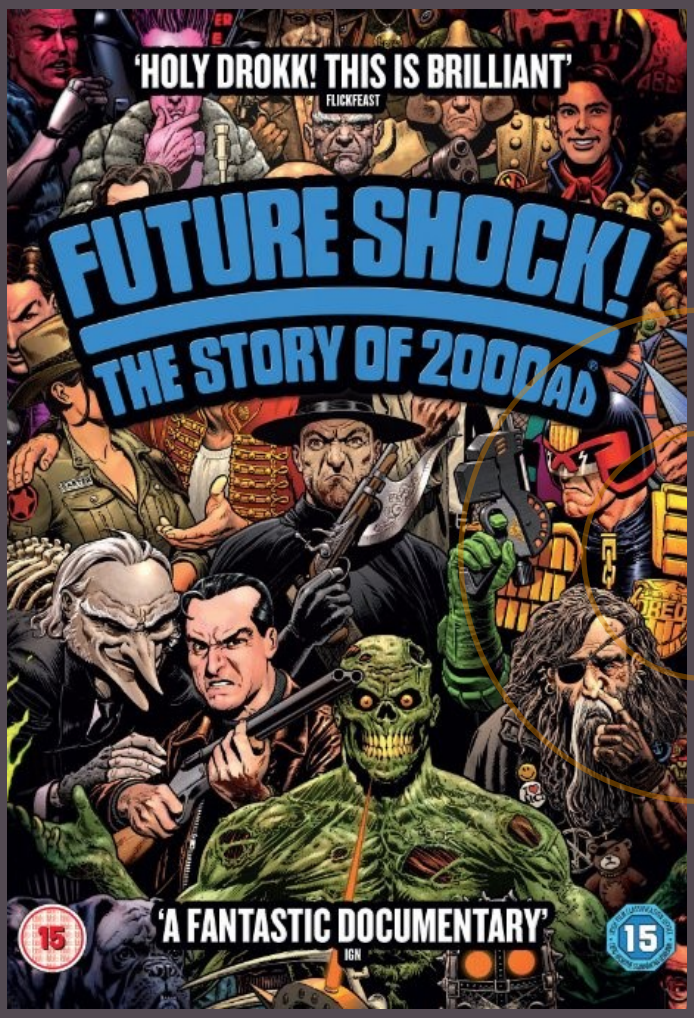
To enter, artists need to register with both the CGSociety and The CGSociety Challenge site (apparently it's "a single click with Facebook"), agree to the rules, terms and agreement, then join the right forum threads. So far as we can tell, there's no actual CGSociety membership fee required to enter this content — though please don't hold us to that. The Thrust contest winners get lots and lots of very luscious digital art-related prizes, and the final entry deadline is currently set for **19th July 2016**.

The CGSociety supports artists at every level by offering a range of services to connect, inform, educate and promote digital artists worldwide.

http://www.phantomworks.xyz/ and http://www.cgsociety.org/

ARIUM

Promotional press picture courtesy of The CGSociety and Mathias Verhassett.



FutureShock! on DVD & download

This new documentary tells the story of one of Britain's best-loved weekly comics for boys. *2000AD* is famous for Judge Dredd, Strontium Dog, Rogue Trooper, Robo-hunter, Halo Jones, and many other edgy and anarchic sci-fi characters. The film whisks us from the punk and agitprop years (1977-87, #1-499), through the poaching of key talent by DC Comics, the creative doldrums of the 1990s, and then into the title's revival (roughly from 2007, #1526, onwards). There are several moments when the film or its interviewees egregiously scramble political chronologies, and the wider effects of *2000AD*'s satirical undertones too often seem aggrandised or over-stated — but the film is otherwise a frank and deep look at a great British cultural success story.

http://futureshock2000ad.com/

Anomaly 2 : The Rubicon

The major graphic novel *Anomaly* will be remembered by any 3D artists, especially those who are Poser users. Brian Haberlin's best-selling sci-fi masterwork *Anomaly* was famously made with the Poser software and off-the-shelf royalty-free assets. A sequel to *Anomaly* has long been promised and now it seems to be set for release in February 2017, under the title of *Anomaly 2: The Rubicon*. Apparently, according to interviews with Bryan… "The sequel picks up right where *Anomaly* ended." According to old interviews and the website, the title was originally set for a Q2 2016 release — but it seems to have slipped by a year. However, Amazon is definitely now taking pre-orders for a "February 2017" release, so someone somewhere must be fairly sure that the book's art is moving toward being ready for the printers!

http://www.experienceanomaly.com/

Everybody's Gone to the Rapture

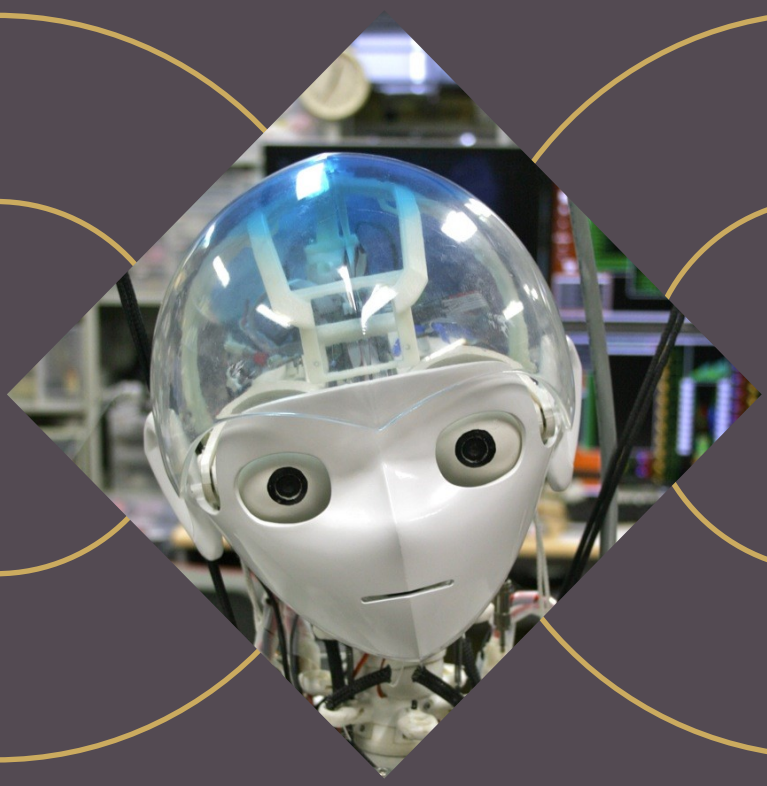
In British literary and screen sci-fi there's a post-apocalyptic tradition that makes the countryside an integral part of the story — it stretches from Shelley's "The Last Man" (1826) through *Wild England* (1888), and far beyond. It was at its strongest between 1970-1983, when it mingled with panic about the economic collapse, and saw book sales bolstered by post-apocalyptic TV series such as *Survivors*. Now the tradition has been expertly put into a videogame. The player is a scientist investigating a 'quarantined' Shropshire village, in the fateful summer of 1984. Published by Sony, the game had a solid 79% score in a review in the latest *PC Gamer* magazine, and won a BAFTA (a British Oscar) plus many other awards. **Warning:** the reviews have plot spoilers!

http://www.thechineseroom.co.uk/

Avril et le Monde Truque

It can't be long before the French animated feature *April and the Extraordinary World* (*Avril et le Monde Truque*, 2015) is available in English. It's known to have been dubbed into English, but is still seeking a distributor. *April* is based on the work of French graphic novelist Jacques Tardi (*Adele Blanc-Sec*), a pioneer of steampunk. April lives in an alternate steampunk world of 1941, in a polluted Paris. Many decades before, all the geniuses of the civilised world mysteriously vanished. In their absense the once-vibrant cities of the 1910s have become intellectually and technologically stagnant, filled with elegant but antiquated machines. Although the character animation is not up to Studio Ghibli standards, it is quite servicable and the film's sumptious backdrops and settings make up for such imperfections. The film is a refreshing antidote to demographics-driven formula Hollywood movies.

https://www.avriletlemondetruque.fr/



DARPA: Redefining Possible

Until 5th Sept, Chicago, USA.

DARPA, the U.S. Defense Advanced Research Projects Agency, is presenting a major exhibition of their first 60 years of innovative work in making science fiction a reality via drones, robots, communications and space-based craft. $-for-$ the secretive defence agency is the most advanced and effective in the world, and today we all use their technologies — from the Internet to mobile phones and more. The show is on at the Chicago Museum of Science and Industry, until 5th September 2016.

http://www.msichicago.org/explore/whats-here/exhibits/darpa-redefining-possible/

Pictures, from left, across double-page spread:

Artist's concept of DARPA's planned 'Gremlins' — recoverable and re-usable EMP drones.

'Kojiro' humanoid robot. Picture courtesy of the University of Tokyo's JSK Robotics Lab.

Detail from the cover of *Weird Fantasy* #21, cover art by Al Williamson and Frank Frazetta.

Detail from the SIGGRAPH 2016 poster.

Robots!

8th Feb—3rd Sept 2017, London.

The Robots is a major exhibition that will open in February 2017 at The Science Museum in London. It will explore the history and reality of our humanoid robots and machines. Over 100 robots will be on show, ranging from a walking iron manikin of the 1500s through 17th century clockwork and steam automata, to a large selection of the latest in advanced humanoid robotics from around the world. The exhibition will include twelve working interactive humanoid robots! The Science Museum will also run a £35,000 Kickstarter campaign to make a replica of ERIC, the first British humanoid robot.

The exhibition opens in London on 8th February 2017 and runs until 3rd September 2017. Given the prestigious venue and the likely demand, especially during holiday weeks, it is probably advisable to book your tickets as early as possible.

http://www.sciencemuseum.org.uk/visitmuseum/plan_your_visit/exhibitions/robots

Aliens, Monsters and Madmen

Until 10th July, Oregon, USA.

Aliens, Monsters and Madmen: The Art of EC Comics is a major art exhibition, showing at the University of Oregon through 10th July. Alongside it are roundtable discussions and tours, and special guest lectures. EC was a big American publisher prior to the rise of DC and Marvel Comics, and had major artists such as Frank Frazetta on the payroll. All major EC artists and titles are represented, often by original art pages. The EC comics were made notorious by the infamous anti-comics campaign of Fredric Wertham from 1948-54, culminating in his sensationalist book *The Seduction of the Innocent* (1954) which ignited a firestorm of public hate against comic-books. Now that Wertham's research materials have been released we can see his methods were seriously flawed — that he wilfully distorted and conflated what his respondents said, and that his research sample was intrinsically biased — it consisted largely of the worst juvenile delinquents from the worst slums of Harlem in New York City.

http://jsma.uoregon.edu/

SIGGRAPH

24th-28th July, California, USA.

The Art Gallery at the major SIGGRAPH 2016 expo in California will present "Data Materialities: Render the Possibilities", a special gallery-quality collection of 10 highly interactive and large installations of digital art, thus providing a retrospective on the best such large-scale art created between 2003 and 2016.

SIGGRAPH will also showcase, as always, the latest in cutting-edge computer graphics, alongside a major conference presenting highly technical papers.

Highlights of the 2016 event are likely to be: demos of the amazing new NVIDIA GeForce GTX 1080 card (far faster than a Titan X, a third of the Titan's price, and with only a 90w power draw during even the most demanding videogames); human motion-capture data drawn purely from a series of silhouettes; fully automatic 3D hair modeling from a single head-and-shoulders photo, and much more.

http://s2016.siggraph.org/

Back cover: "The Plan-book for Von Norrt's *Lithe Springer* Air Dirigible, 1798" by David Haden. Drawing done in Poser 11's new comic-book mode.

Are you interested in being interviewed in a future issue of the magazine? Or presenting a webinar for our series? Please send us the Web address of your gallery or store, and we'll visit and take a look!

paul@digitalartlive.com

NEXT ISSUE: JULY 2016

STEAMPUNK!