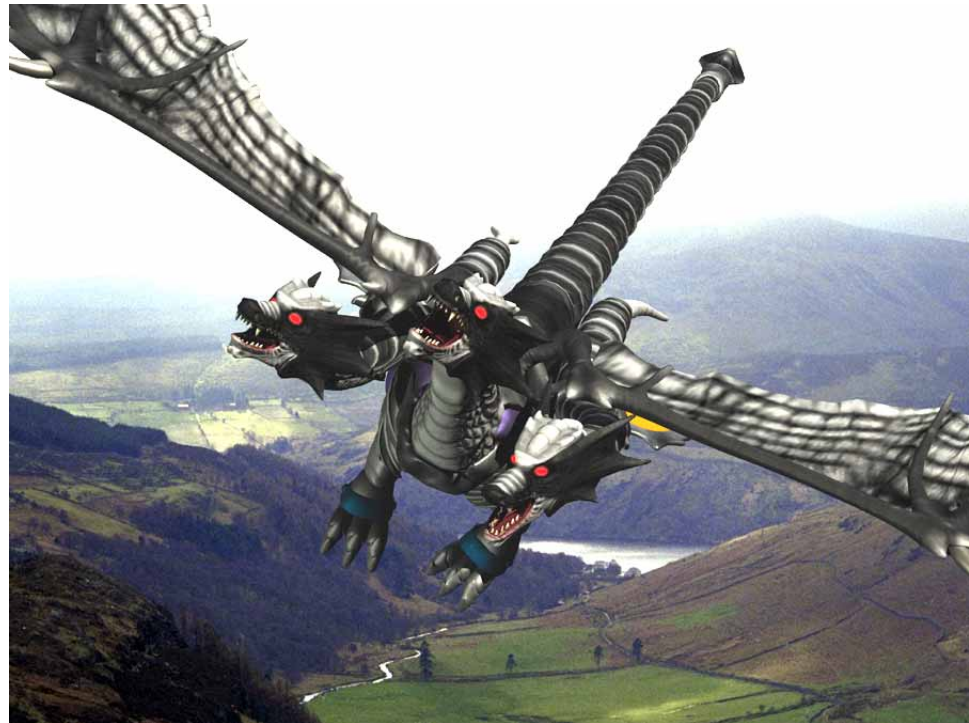


Mastering 3D Graphics newsletter

Mastering 3D Graphics ~ issue #1

R. Shamms Mortier



The Web

In this issue's Web related page, we'll take a look at another way to think of 3D. For most of us, 3D means creating and animating objects in a virtual 3D space. There is a separate 3D virtual dimension, however, that we might perhaps call 2½ D, since it does not involve creating anything in 3D applications at all, but stitching together 2D images in a way that emulates aspects of the 3D experience. Apple started the ball rolling with its QuickTime VR format. QuickTime VR is like standing in the center of a hemispherical room whose walls and ceiling are mapped with a seamless 2D image. You can turn in any direction, so that the illusion of moving in a 3D space is evoked. Some of the latest games use VR technology for things like the decks of spaceships, or panoramas of the natural world. A number of professional 3D packages contain special cameras and rendering features that allow you to create VR panoramas from your own 3D environments. These applications save out QuickTime VR files, or panoramas in their own prioritized formats.

One such application, which we'll look at in the next M3G Newsletter is **Reality Studio** from Live Picture. Yet, until now there has never been a way to alter the panorama files after they have been generated. Enter SkyPaint...

SkyPaint

Sky Paint is a Windows 95/98/NT only application. I found it one day, completely by accident, while meandering around the Web. It exists in two flavors, Pro and Lite (GE). You can download each from the following sites:

<http://www.wasabisoft.com/SkyPaint/Download/>

<http://www.wasabisoft.com/SkyPaintGE/Download/>

They each weigh about 1.7 MB, so make sure you have enough hard disk space before downloading, and that you're operating with at least a 28.8 modem. Don't expect to have all of the features enabled immediately. For that, you have to pay to unlock it with a key code, provided by the developer. The key code to unlock it changes every day,



Figure 1: The SkyPaint Interface has interactive controls for traveling in any direction over the image.

and since purchases are done online, when you purchase it you receive the latest key. This then immediately and permanently unlocks SkyPaint (until your hard disk crashes or you upgrade to a different machine, and when that happens, they'll immediately send you a replacement key code). Contact Gavin Bell gavin@wasabisoft.com (608 231-0282) for purchasing info on SkyPaint and SkyPaint GE.

<http://www.wasabisoft.com/>

How SkyPaint Works

SkyPaint comes with a special plug-in that can be installed in any Photoshop compatible paint application. The process is as follows. First, a cubic or spherical VR file is loaded into SkyPaint. This can be a VRML file, a special VR save from 3D Studio or LivePicture, or another suitable source that can save out VR files. Once loaded, you select to paint on the file. Immediately, SkyPaint starts the application where the plug-in was installed, and loads in that section of the VR file that was displayed in SkyPaint.



Figure 2: Here, the file is shown as altered in PaintShop Pro, where any of the painting effects or filters in that application could have been used to alter the image before transport back to SkyPaint.

From there, you can use any of the applications painting or f/x tools you want to alter that section of the image. You can also select to rotate the image from SkyPaint's list of options which now reside in the paint application's effects menu. When you're through, you select to start SkyPaint again from the effects menu, and when SkyPaint pops up, the painted file is loaded in for 360 degree interactive viewing.

Project Ideas for SkyPaint

There's a special tutorial on the SkyPaint site that walks you through the process of creating a cubic panorama in Bryce 3D. This means that any and all of your Bryce 3D creations can now be translated for full interactive 3D viewing. Since panorama sites are very popular on the web, this opens up whole new vistas for 3D artists and animators for displaying their work, and also for offering new options to clients for Web display. Once back in SkyPaint, the customized file can be saved in any of eleven different interactive VR display modes.

Boxtop Software's Mizer

If you are placing your 3D gems on your Web site, you absolutely have to get Mizer from Boxtop software! Mizer saves space and increases speed when you run your page through it.

1: Since the source file is smaller, the server reads and sends it faster so the browser starts receiving the information sooner.

2: The browser is able to parse the arriving data much faster because all unnecessary data has been eliminated. This allows the browser to make http requests for images faster and allows text information to be rendered much more quickly by the browser. This helps hold the attention spans of viewers because text elements appear almost immediately in most cases, and the text "snaps" onto the page.

3: Since the browser was able to render the text portions of the page more quickly, rendering images is also faster because there is less conflict for CPU power between rendering the

text and rendering the images. Images also arrive sooner to be rendered because they were requested sooner.

4: Because everything involved in retrieving a page is sped up, overall server performance and connection performance are increased as well. Page retrievals take less time to complete so the average number of concurrent connections is reduced meaning more server CPU time and more connection bandwidth are available to satisfy each individual page request. <http://www.antimonysoftware.com>

2D Painting Tools

3D artists and animators require the best in 2D painting tools for developing backgrounds and textures for their 3D masterpieces. We will be covering many of the new and upgraded paint applications available in this newsletter from time to time.

NewTek's Aura

Mac users would rather forget the Amiga, and most PC owners have no idea what it is. The Amiga is the computer that started the digital

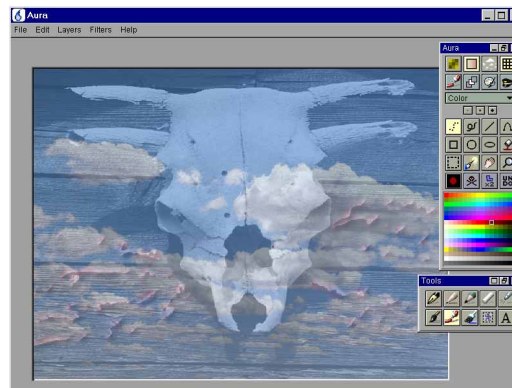


Figure 3: Aura's interface design makes it look much more like a 3D program than a painting application, and purposely targets NewTek LightWave users.

videographics revolution, and was the system that NewTek designed the Video Toaster and Flyer for. GateWay now owns the Amiga, and threatens to bring it back in a year or so, outfitted with the new Copper Chip technology (Copper Chips will supposedly run at a blazing 700 MHz and higher). I am mentioning the Amiga because a vintage Amiga paint application, that existed under a few named guises (like Retina paint for the Retina board), has now been completely retooled for the PC and Mac. NewTek calls it Aura, and it has loads of unique features.

An Aura of Distinction

Originally developed to handle effects for video like very few other products, Aura is now a reborn alternative, or at least a must have add-on, to your 2D painting and animation toolkit. As a hint of its ancestry, you can save your work as an ILBM (Amiga bitmap format), and as a NewTek Video Flyer clip. The worst part of Aura is that as far as Photoshop users are concerned, very little will be familiar. The best part outweighs the worst however, since it can do many things Photoshop sim-

ply can't or just does them far quicker. A case in point is the Magic Wand, a tool most 2D paint users are familiar with. In Aura, the Magic Wand can instantly pick up any color area you click on as a brush you can immediately paint with or stamp down.

In general, the interfaces of painting applications meant for paper output are usually less crisp and compact than those meant for video use. Aura is extremely well designed, but offers less bells and whistles than MetaCreations Painter. But then again, video artists and animators require less extreme options, or in some cases, different options. Video painting requires a less cluttered work area, for instance, than DTP painting applications can get by with.

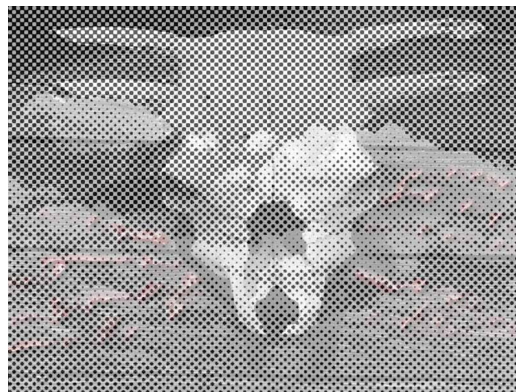


Figure 4: Aura does a nice job when the dot filter is applied to an image, making it look like a halftoned masterpiece. The image on the top was a layered and blended composite before the filter was applied.



Figure 5: Here, the George scripts "Glass1 and 2", and a star filter, were applied several times to an image.

Aura has a set of its own filters called “George.” There are far fewer than the native filters offered by other applications, but they can be edited and customized. My favorite is the one called Glass1, which creates a glass-like object over the selected image area, complete with a 3D shadow. It also supports SGI, Softimage, and SunRaster format saves, something few other applications offer. Aura does support layering, but in a way more familiar to video paint users than to DTP folks. Because Aura is a video tool, which is meant to load in image sequences as well as single images, it also features its own set of Alpha filters, including Chroma, Luma and Color keying with range and smoothing controls. As a long time Toaster owner and user, I would say that Aura is a great substitute for ToasterPaint.

The 3D Horizon

3D is us! We all have a collection of 3D applications in our library, using whatever one we need to address a specific task. In this edition of the newsletter, we’d like to highlight two applications, each of which features its own unique tool and effects list along with potentials for creativity.

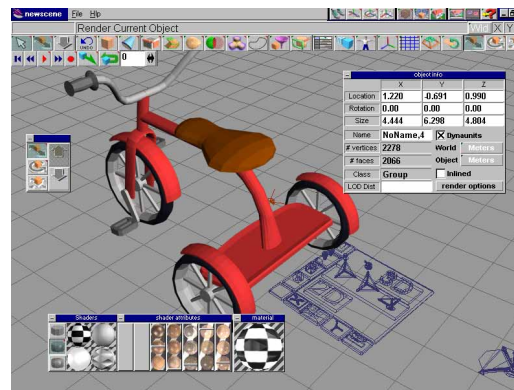


Figure 6: The new trueSpace 4 interface displays a Widget on the lower right.

trueSpace 4

As far as trueSpace goes, my experience with it started quite a while ago. At that time, it was called “Caligari”, and was from Octree Corporation. It was also only for the Amiga. My issue was 001, the very first copy to ever be released. That was a long time ago. I’ve kept up ever since, and have always said that what is now trueSpace possesses the most alluring interface of any 3D application. Now we’re at version 4, and it ranks up there with all the best 3D applications around, no matter on what criteria you judge it. Interestingly, Bill Fleming (Owner, Author and Publisher of M3G) had a lot to do with making it what it is today... so thanks Bill.

What s New

This is the most revised issue of trueSpace released yet, especially in the new and upgraded features area. trueSpace 4 offers brand new and upgraded interface enhancements, rendering options, and creative tools.

New Interface

Enhancements trueSpace 4’s virtual reality design space has come at a

cost, since the toolbars had to be configured to hold an often confusing array of tools. In trueSpace 4, a fix of this conflict has been attempted by adding new interactive tool devices that appear with each selected object on the screen as floating icons organized in Widgets. trueSpace Widgets are 3D toolbars and tool environments that can be resized to your needs, actually an interface within the interface. Once you learn to navigate with the 3D tools on the Widgets, repetitive movements back and forth to the standard toolbars can be cut 90% of the time. This decreases creative development time, while increasing your ability to intuitively interact with the tools you need quickly.

New Rendering Options

The new trueSpace 4 radiosity renderer is a “hybrid” system, allowing you to combine radiosity benefits with Phong shaded raytracing all in one image or frame. Radiosity includes settings for volumetric rendering (so you can do things like fly through fog), projector lighting (cast shadow masks on a scene), sky lights, anisotropic

reflectance shaders for metallics, layered materials, lens flare generation, and depth of field effects. Since initial radiosity calculations take time to configure, you’ll also appreciate the trueSpace support for multiple processors.

New TS4 Tools

trueSpace 4 now features the most intuitive approach around for working with Bones. In a few simple steps, you will be able to bend any object realistically, deforming surfaces as if they were connected as organic appendages. Multilevel voxel-based collision is also on board (great for game developers), in addition to box and mesh level collision. A new addition to the keyframe editor, requested by many trueSpace users, are function curves for acceleration/deceleration.



Figure 7: Animating figures with Boned structures is made simple in trueSpace 4.

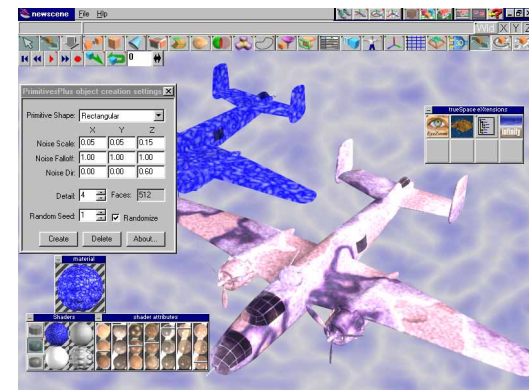


Figure 8: Access to plug-ins remains very straightforward in trueSpace 4.

Plug-ins

Look for a new plug-ins CD-ROM soon. Meanwhile, there are about two dozen available through their Web site <http://www.caligari.com>. Though most have not been updated for version 4, I had no problems running any of them in their present state. Each plug-in offers something unique and valuable, especially if you plan to use trueSpace as your core modeling, rendering, and animation engine. trueSpace 4 requires a minimum of a Windows 95/98/NT4 Pentium 120 MHz system, CD-ROM, 32MB of RAM, 20 MB free disk space, and a VGA graphics card to run. Although I already have my wish list started for version 5, this current edition has already proven to be an awesome design and animation tool.

Strata StudioPro 2.5

If you are a Studio Pro user, then this upgrade is exactly what you've been waiting for. Bugs are cleansed, and new features are added and stabilized. This is definitely the best Strata Studio Pro since "Blitz" (version 1.75).

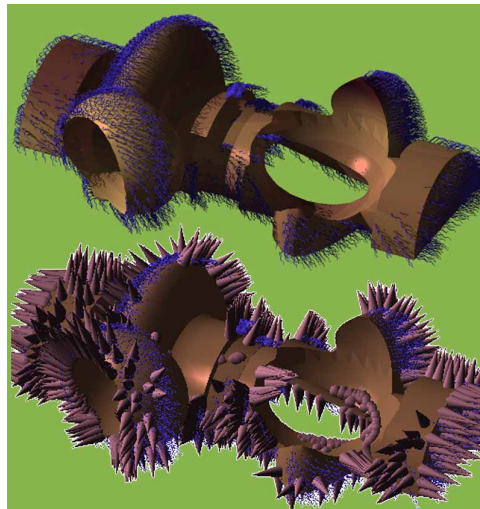


Figure 9: With its Hair f/x, Strata Studio makes things like these hairy and spiked machine parts possible.

Version 2.5 has an Enhanced Lathe tool. You can now automatically lathe an object 360 degrees by single-clicking on any of your lathe template's rotation handles. StudioPro boasts one of the best intuitive latheing and extrusion capabilities around. Just grab a handle and rotate a drawing around an axis. StudioPro now supports copying and pasting bitmaps into a model, further enhancing its already extensive texturing feature.

In version 2.5, you can proportionally increase or decrease the space between event markers on a timeline in the Project window by selecting and dragging with the right mouse button. This allows you instant access to all of your frames, making editing much quicker.

On the Macintosh platform, enabling the new checkbox, "Save with file type suffix," will automatically add the appropriate three-letter suffix to your file names. Why is this valuable? Mac users often have Windows machines as well, and Windows demands suffixes added to file names. This also allows you to share your StudioPro

work with either Mac or Windows users, and to send files to them via e-mail without worrying about their ability to read them. All suspended renderings are now automatically saved in a cross-platform format, with the suffix “.rdf”. Using the Open As command, you can select Suspended Rendering as the file type.

Version 2.5 features much faster selection and movement in large models. Selecting objects or changing tools in large models is now instantaneous. When moving an object in a large model, you will see a 3-D “ghost” image. The object you’re moving displays normally. This feature works only with OpenGL (which is included for Mac users). You access it by going to the Spooling tab of the Preferences dialog (Edit menu) and enabling the “Reserve memory for interactive rendering buffers” checkbox. In the General tab, make sure only Open GL is enabled in the “Enable interactive renderers” pop-up (which is usually the default). Using this feature requires additional memory.

Cut, copy, paste, undo, and delete now work in the

Project window in version 2.5. There’s also a new checkbox on the Spooling tab: “Cache geometry”. Enabling this feature tells the program to cache certain types of geometry for quicker performance when using OpenGL and/or the Scanline renderer. On a Mac G3 system, OpenGL rendering is instantaneous.

Rendering shadows with Scanline is very memory intensive. To avoid excessive rendering times, don’t use shadows on objects unless you need them to achieve the desired effect. In the Project window, you can click the Shadows icon next to the name of the object to toggle shadows ON or OFF. To obtain soft shadows in version 2.5 (Raydiosity and Scanline renderers only), you can use points or spotlights. The rays of light from a global light

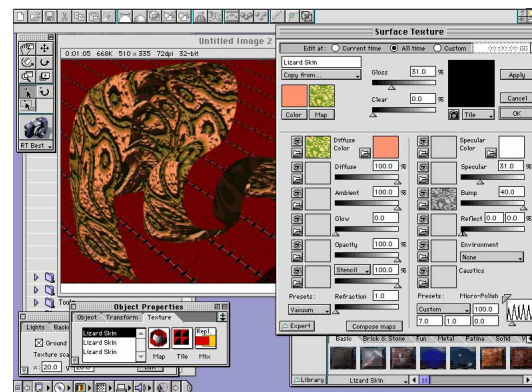


Figure 10: One of Strata Studio’s finest features is the variability and strength of its texture modification tools.

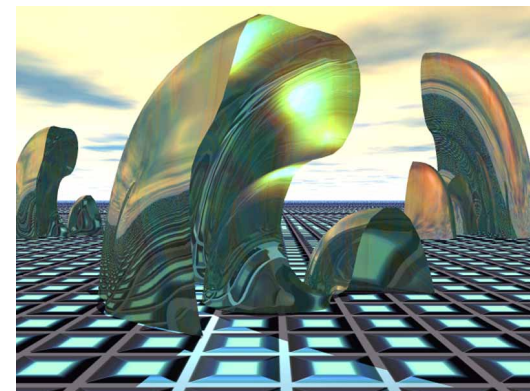


Figure 11: Here, the object created in Strata Studio is ported to Bryce 3D, mapped with the Oil Slick material, and rendered.

are parallel and therefore cannot cast soft shadows. Here's a new feature that modelers will appreciate in this version. Using the Convert command, you can group the selected polygons before converting to create a single mesh. In previous versions, multiple selected polygons became one mesh. If you're using a graphics acceleration board and are experiencing problems, you can disable the "Reserve memory for interactive rendering buffers" option on the Spooling tab of the Preferences dialog. This fixes the problem 90% of the time.

There's a new Power Module IK Vertex tool. The IK hotkeys (Ctrl and Alt) can now be used in both normal modeling mode AND reshape mode. StudioPro's f/x offer a number of enhancements that no other 3D software contains. My favorite is the Hair effect. Hair is a post rendering effect, and does not really add to or alter the geometry of the selected object. Hair can be used for grass, fuzz, and other applications in addition to giving your life form models that virile look. There are a number of Hair presets in the Hair f/x library that can be drag-dropped on a selected model, or used for customized looks.



Figure 12: The fully articulated Raptor model is a favorite of most Poser 3 users.

The Meta Page

MetaCreations is a constant presence in the art and animation industry. With Painter, Ray Dream, Infini-D, Bryce 3D, Poser, Power Goo, Power Show, Final Effects Complete, Kai's Power Tools and more, it's a safe bet that you use at least one of MetaCreations' products every day. In order to keep you informed about what's going on at MetaCreations, we offer one page of the newsletter for this purpose. This is where you'll find upgrade information, application overviews, and even some hints and tips.

Poser 3

Poser 3 is being called one of the best computer graphics applications ever created, and I think it deserves the plaudits. It certainly is addictive, and very hard to put away. The interface in Poser 3 has a brand new Bryce 3D look. For Poser 1 and 2 users, many of the same tools and functions are carried over, but mastering their usage forces you to start over again. All interface compo-

nents can be repositioned, so customizing the workspace to your liking is no problem. Poser 3 has enough new features to be called Poser 4.

Animated Hands

I was one of the thousands of users who objected to the poor rendering of hands in Poser 2, This is no longer a problem. Poser 3 hands, in fact, are super high definition sculpted photorealistic models, thanks to the high-end modeling of the Zygote Media Group. There are controls for keyframe animating each finger joint, as well as adjusting both spread and grasp. The result is animated left and right hands that would do justice to a Balinese dancer's intricate ritual hand movements. With careful attention to sizing, the parts of the hand can be elongated or stunted, creating unique hand types. There are several new Hand Libraries in Poser 3, and two detailed modeled hands that can be customized and saved out on their own. Selecting a hand pose as a keyframe, and repeating this process the next keyframe, animates the hands quite effectively. Animated Heads Poser 3's new models have super functional animated heads. Eyebrows can be raised and lowered, eyes turn

and bulge, and the mouth and lips (with teeth displayed inside) can be shaped in a number of expressive ways, including phoneme modeling. This is real deformation geometry, so along with the reshaping of a feature comes the stretching and compressing of surrounding tissue. The nose has nostrils, and the ears can be flared like Mr. Spock's, by adding your own deformation targets in Ray Dream Studio. The figures are much more realistic than those of Poser 1 or 2 thanks to the Zygote Media Group models. With the animation controls and a little exploration, as well as the ability to create your own collection of morph targets, you can develop thousands of unique characters.

The Walk Designer

One of the most celebrated features of Poser 3 is its Walk Designer. If you have ever tried to create a walk sequence

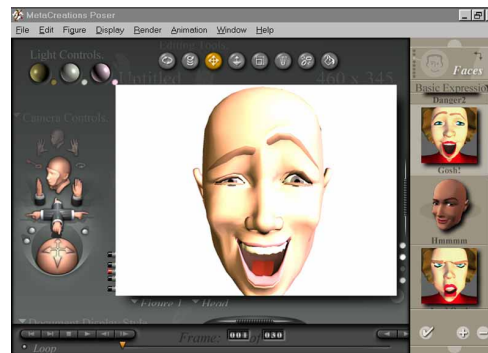


Figure 13: Complex facial expressions can be created in seconds in Poser3.



Figure 14: You can create highly complex composite scenes in Poser 3.

by hand, you've probably got the prescriptions for tranquilizers to show for it. Poser 3's Walk Design module is absolutely first rate and simple to master. Just create a walk path, select the Blend Styles to set up the larger walk motions, and finish by using the Tweaking controls to fine tune everything. From marches to stumbling to limping, everything is at your fingertips in a snap. For walks that need to be more specific, load in and assign one of the included BVH motion files (my favorite is the drunk walk, which I applied to a skeleton). In fact, a whole set of motion capture files ships with the CD, and more are available from the Zygote Media Group Poser Sampler collection (sold separately). These are high quality motion captures that add super-realism to your Poser 3 figures, just as they did to the characters that ran across the deck of the ship in the movie Titanic. With a click of the mouse, they can be assigned to any Poser 3 figure in your scene, though assigning them to an animal leads to unpredictable and often hilarious results.

The Zygote Media Group

Poser 3 would not be anywhere near what it has become without the detailed and qualitative participation of Zygote Media Group. The Zygote Media Group did all of the new internal Poser 3 models, and also offers an accompanying Sampler CD of accessories for about \$10.00. On the same CD are four other collections that can be

opened once you purchase appropriate key codes, ranging from humans and animals to props and Motion capture files. Each of these collections enriches the use of Poser 3, as a high end and great fun professional tool.

<http://www.metacreations.com>

<http://www.zygote.com>

The poser list on-line: poser@lists.metacreations.com

Plug-ins Parade

This section of the newsletter is devoted to plug-ins, both 2D and 3D. 3D artists need both for different reasons. 3D plug-ins add new 3D capabilities to 3D art and animation applications, while 2D plug-ins can open the way to new methods for developing textures and backgrounds.

Digimation's daVinci

All 3D Studio Max users recognize the name Digimation, since it equates with the most varied plug-ins available for either application. Digimation's plug-ins range from modeling to effects and more. One of the newest 3DS plug-ins to hit the streets from Digimation is daVinci 3D. daVinci 3D gives 3DS users modeling capabilities that go beyond what the software itself provides. Digimation calls the technology used in daVinci 3D the creation of "minimal" surfaces. The surface is treated as a membrane or a

rubber sheet that can be pushed and pulled and drilled. The surface can be deformed any way the user requires by selecting points that can be dragged to new locations. In some ways, daVinci resembles a more powerful version of MetaCreations' Ray Dream Mesh Form Modeler. Ray Dream users might think of it as Mesh Form Modeler on steroids. While the surface of a daVinci 3D object is being modified, the software calculates the smallest and smoothest surface that passes between the adjusted points. The resulting modifications produce surfaces that are perfect for organic modeling. daVinci is available for 3DS max R2 and above on either W95/98 or NT. New Technologies, Inc. developed this new modeling technique, a surface representation they call TEMS (Triangular Elastic membrane Surface), which behaves differently from either Polymesh or NURB surfaces.

daVinci and the technology it represents requires the price of the learning curve (what software worth its weight doesn't?).

daVinci's learning curve, at the start, is rather steep, but once mastered, daVinci can help you create complex animatable organic models. The Points, Curves, and Forces on a daVinci 3D model can be considered as sub-objects to the actual membrane surface, so extremely complex animation controls can be developed for the

model by adjusting these items once the model itself is completed. Any of these items can be inserted and modified at any point during the model making process. One of the more useful (yet a bit difficult to learn) aspects of daVinci 3D is the use of Forces. Forces are sub-objects which are used to deform all membrane elements within a given sphere of influence with a specified magnitude. The result can be a distortion curve very hard to model in any other way. By selecting points along any part of the surface, holes with any shape you can imagine can be instantly drilled out. The documentation has two tutorials, one basic and one complex to get you going.



Figure 15: daVinci's models respond superbly to texture mapping, as these two alternate models demonstrate.

Sisyphus Software's Mjolnir

What pyro effect is most often requested? Lightning has to be at the head of the list. All 3D software these days, or plug-ins for it, features a lightning generator. Lightning has become so common an effect, that it has to be used sparsely so as not to bore the viewer. What happens however when you want to evoke lightning bolts that go from one object to another, even when one or both objects is moving? That's the time to call on Sisyphus Software's Mjolnir. Mjolnir is really half of a two plug-in package, the other half being Thor, a quality lightning generator for more standard uses.

Mjolnir creates arcs of customizable lightning between any two selected objects in a 3DS Max scene. You control the timing, size, and shape of the lightning. You can also make the lightning flash as many times as needed during the animation. Lightning can also arc in reverse, from object 2 to 1. You could create an interesting animation that first

shows the lightning sparking from object 1 to 2, and then in reverse. There are tutorials and sample files included with this Sisyphus plug-in.

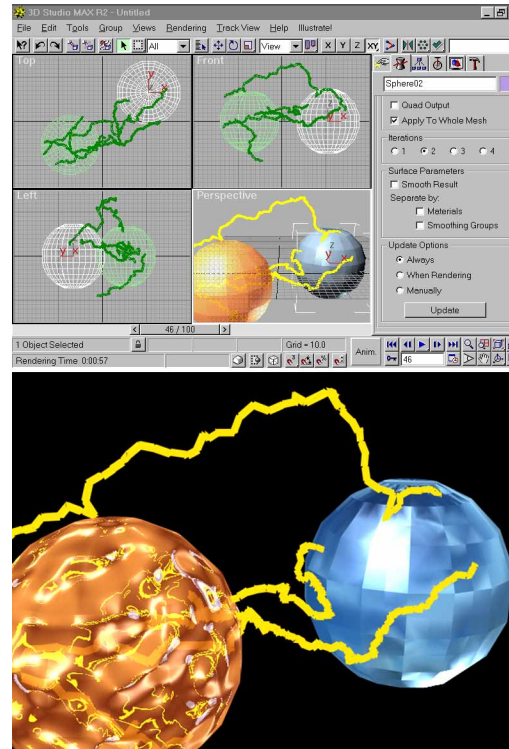


Figure 16: Mjolnir creates just the right looks when you need lightning jumping from one object to another.

Post Production

Discreet's Effect

Adobe After Effects is not the only application that addresses effects for image sequences. Discreet Logic's Effect accomplishes much the same thing, but with a whole array of its own bells and whistles. Most of the plug-ins that target After Effects can also be folded into Discreet's Effect application, so the differences between the two are based upon their internal capabilities and the design of their interfaces.

Effect offers some startling differences and capabilities that challenge After Effects domination in the market. The first is that all Effect compositions can be created as either a 2D or a 3D environment. Ef-

fect 3D compositions may use the same 2D content, images and animations, as the 2D environment, but in 3D you can fly a camera around and also apply animated 3D lights to the composition, and also render real 3D shadows and reflections. To be fair, After Effects offers this in some cases, but only through a few plug-ins (like Hollywood Effects).

When it comes to reading in content formats, and writing out broadcast formats, Effect far exceeds those found in After Effects. It can read/write NTSC, Full NTSC, PAL, D-1 NTSC and PAL, HDTV 1 and 2, Motion Picture, and any customized setting you need. Effect can render out a number of diverse image formats including: MOV, AVI, FLM, EI, VPB (Quantel), GIF, JPEG, PSD, PNG, RLA, TGA, and TIF.

Though you can add lights to After Effects compositions by selecting a

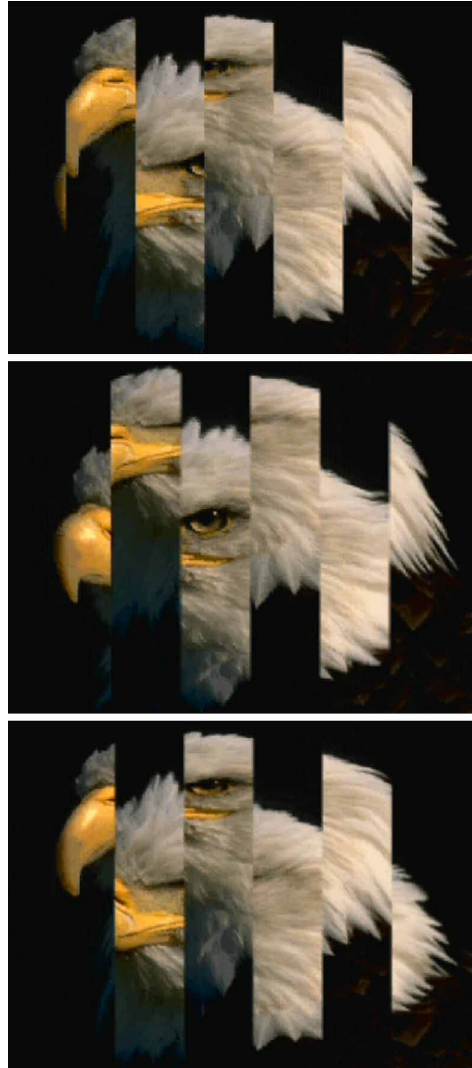


Figure 17: Here, a plug-in filter creates an animated blind effect.

handful of plug-ins, Discreet Effect has a whole light environment built in. It's similar to the way lights are handled in a 3D application, so 3D pros will have an easier time understanding how to customize the Effect light sources. All lights can be either Distant, Point, or Spot, nomenclature already familiar to the 3D artist and animator. You can control Color, Intensity, Cone Angle, and Soft Edge Angle; all of these can be animated as well.

Effect has all of the standard internal filters you would expect, but also adds four spectacular 3D Post filters: 3D Glow, 3D Lens Flare, 3D Depth of Field, and 3D Fog. 3D Fog is neat, because you can create compositions that show elements appearing from or disappearing into it. All of these filters are internal, and require no external plug-ins. Added to all of this is the capacity to play back your animations in real time from RAM.

Side Note

DigiEffects has released CineMotion for After Effects and applications that can accept the After Effects plug-in formats, an excellent companion to DigiEffects' flagship product CineLook, which makes your video look like film. CineLook relies on the built in 3:2 pulldown built into After Effects. CineMotion will focus on significantly enhancing the motion that gives film its characteristic look.

“When the two are brought together the color and grain are handled by CineLook and the filmic motion is handled by CineMotion to give an amazingly realistic cinematic appearance. DigiEffects is the market leader in filmic effects, and it is the company in the best position to release a plug-in that is designed to simulate cinematic motion for video footage.”

The Film Motion plug-in in CineMotion will be a major advance for anyone who wants more than the 3:2 pulldown solution built into After Effects. For those who want to use it in conjunction with CineLook, DigiEffects will be offering it at an excellent price.

<http://www.digieffects.com>

CD Treasures

As a 3D artist and animator, from beginning to professional, you are no doubt always on the lookout for adding quality CD ROM content libraries to your creative environment. CD ROM libraries useful to 3D work ranges from images useful for backgrounds to animated sequences useful for compositing in the post-production phase. This section of the newsletter is devoted to keeping you informed about the CD treasures available to you.

ArtBeat's REEL Collections

If your 3D work calls out from time to time for naturalistic animated sequences for use as composited backdrops in applications like After Effects or Discreet Logic's Effects, or if you need this type of content for animated textures in your 3D application, then here's a CD ROM collection you will die for. It's from ArtBeats, a world leader in both texture component and animated sequence CD ROMs. The solid quality, as well as the variability, of ArtBeats' libraries are unsurpassed. Their content can be seen in every media possible, from major Hollywood films, to ads on broadcast TV, to multimedia CD ROMs. I own more than a dozen of their CD ROM libraries, and find

them especially valuable for use when I need to composite an effect in the background of an animation.

The REEL collections are a subset of the ArtBeats' CD ROMs. REEL libraries are animated sequences and animations that dwell for the most part on elemental effects and topics. These include moving clouds, explosions and fire, flowing water, and related animated subjects of interest.

<http://www.artbeats.com>

Foundation Imaging

I am an unabashed Ron Thornton fan, and have been for years. The 3D environment he creates for the Babylon 5 series is spectacular, and he is certainly a star amongst his peers. He is also the central figure behind Foundation Imaging, one of the world's leading digital effects and animation houses. This fall, another show debuted on the Fox



Figure 18: ArtBeat's REEL series of CD-ROM libraries are a must for animated backgrounds and textures in your editing application. These are a few examples.

Kids Network that displays more of Ron's influence: The Mystic Knights of Tir Na Nog, replete with a boat-load of his 3D animated beings. Mystic Knights is shot on location in Ireland, and promises to draw a diverse audience of elder children as well as its targeted audience. Stay tuned in Mastering 3D Graphics for a lot more on foundation imaging, including an interview with Ron Thornton in an upcoming issue of the Mastering 3D Graphics Newsletter.

Other Matters of Interest

Here are a few additional items for Mastering 3D Graphics Newsletter readers.

YouCanZing

The new YouCanZing channel will carry two different themes every month. Users are invited to submit

their fabulous photos, in GIF or JPEG format, directly to Zing via its Web site at <http://www.zing.com/youcanzing>. Zing editors will select 25 new submissions a week to highlight on the channel. For more information on the current theme or submission guidelines, check out the site.

Earlier this summer, Zing Network introduced a unique solution to the boredom of the World-Wide-Wait: the Zing Player, a free product, available at: <http://www.zing.com>.

Zing works alone or as a companion to Netscape and Microsoft Web browsers to display compelling entertainment whenever a user clicks on a Web link and waits for a page to load. Zing immediately minimizes when the new page appears, so the program entertains users without ever slowing down or interrupting the browsing experience. Zing spots are displayed as high-quality, full-screen images with animation and sound, using Macromedia's Flash technology. Users can customize the content they view by selecting from a variety of different channels.

Feedback

Mastering 3D Graphics and the M3G Newsletter are both reader driven as far as content. Your feedback is extremely

important, and helps us to shape both the magazine and the newsletter to fit your needs. There are some things we are considering for the newsletter that we would invite your feedback on. Here they are

Plans for game material in the newsletter

Since computer games have always played such an important role in 3D work, both as an employment opportunity for artists and animators, as well as just plain fun, we are thinking about newsletter coverage that incorporates 3D games. We don't want to do game reviews as such, but instead, want to feature a game or two each newsletter that displays the best 3D game artwork. Then what we'd like to do is to interview the best 3D game artists and animators around, so they can talk about what applications they use, and how they approach their work. Is this something you'd like to see?

Ads

We are also thinking about devoting one page of the newsletter to ads from smaller but important developers who don't need full color ad space, but whose products you should be aware of. How would you feel about that?

Contact

If you have some feedback on these questions, or other content concerns for the Mastering 3D Graphics newsletter, please respond. Your voice will be heard.
rshamms@together.net

Take care and enjoy!

See you in ROMulan space...

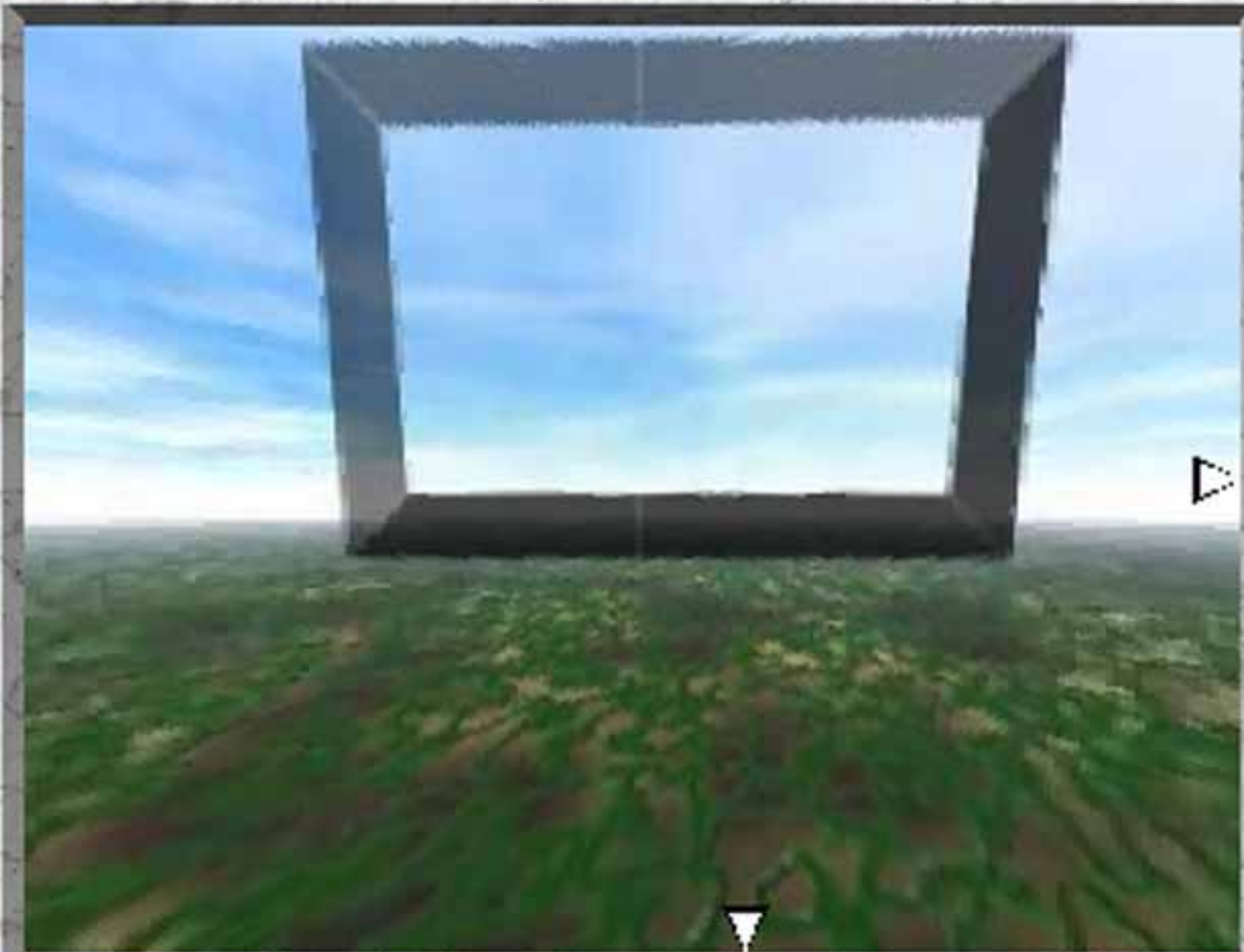


SkyPaint





SkyPaint





Aura



File Edit Layers Filters Help



Aura

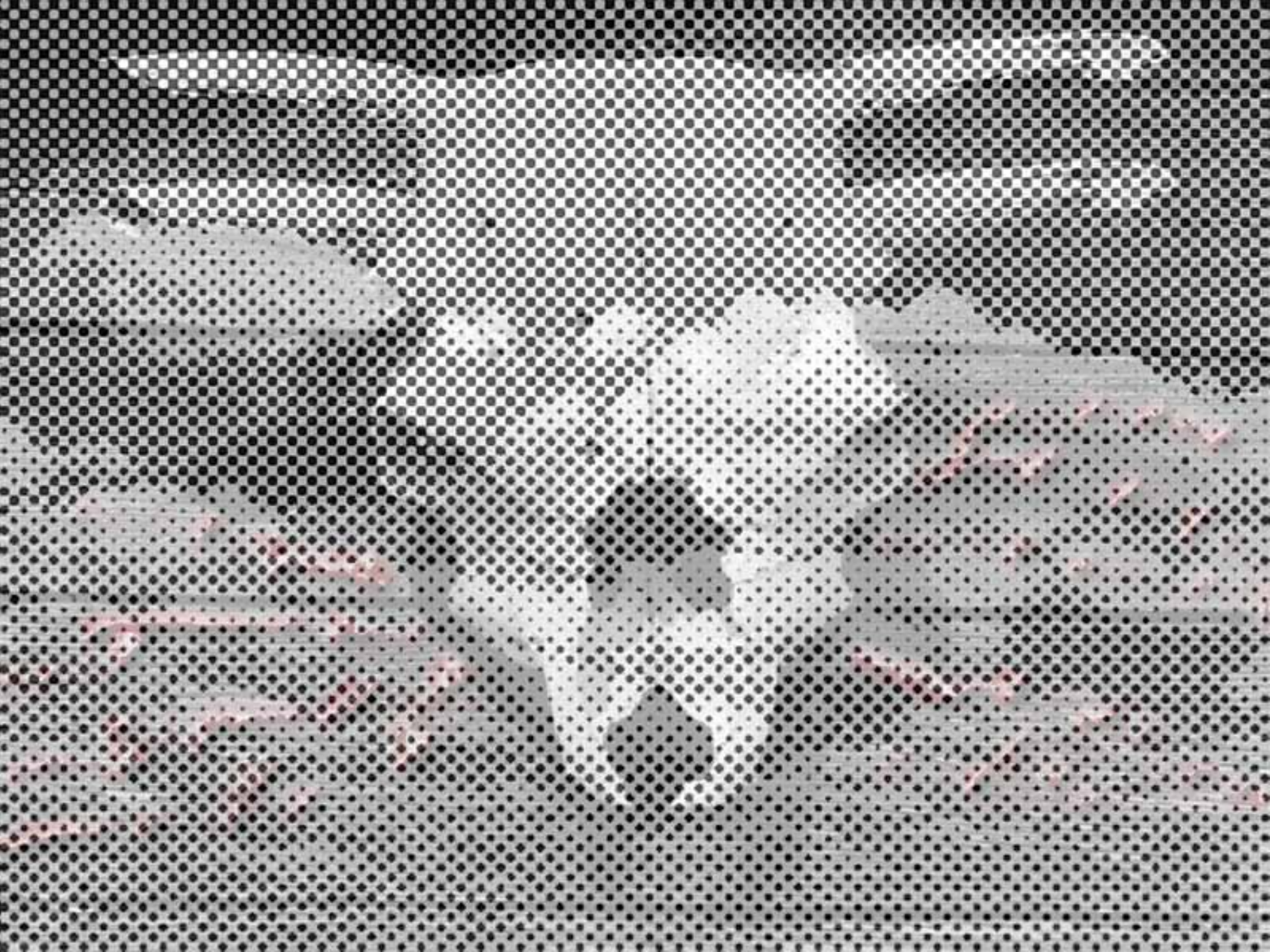


Color



Tools







Render Current Object

Wld X Y Z



object info			
	X	Y	Z
Location	1.220	-0.691	0.990
Rotation	0.00	0.00	0.00
Size	4.444	6.298	4.804
Name	NoName,4		☒ Dynaunits
# vertices	2278		World Meters
# faces	2066		Object Meters
Class	Group		☐ Inlined
LOD Dist			render options







PrimitivesPlus object creation settings

Primitive Shape: Rectangular

	X	Y	Z
Noise Scale:	0.05	0.05	0.15
Noise Falloff:	1.00	1.00	1.00
Noise Dir:	0.00	0.00	0.60

Detail: 4 Faces: 512

Random Seed: 1 ☒ Randomize

Create Delete About...

trueSpace eXtensions

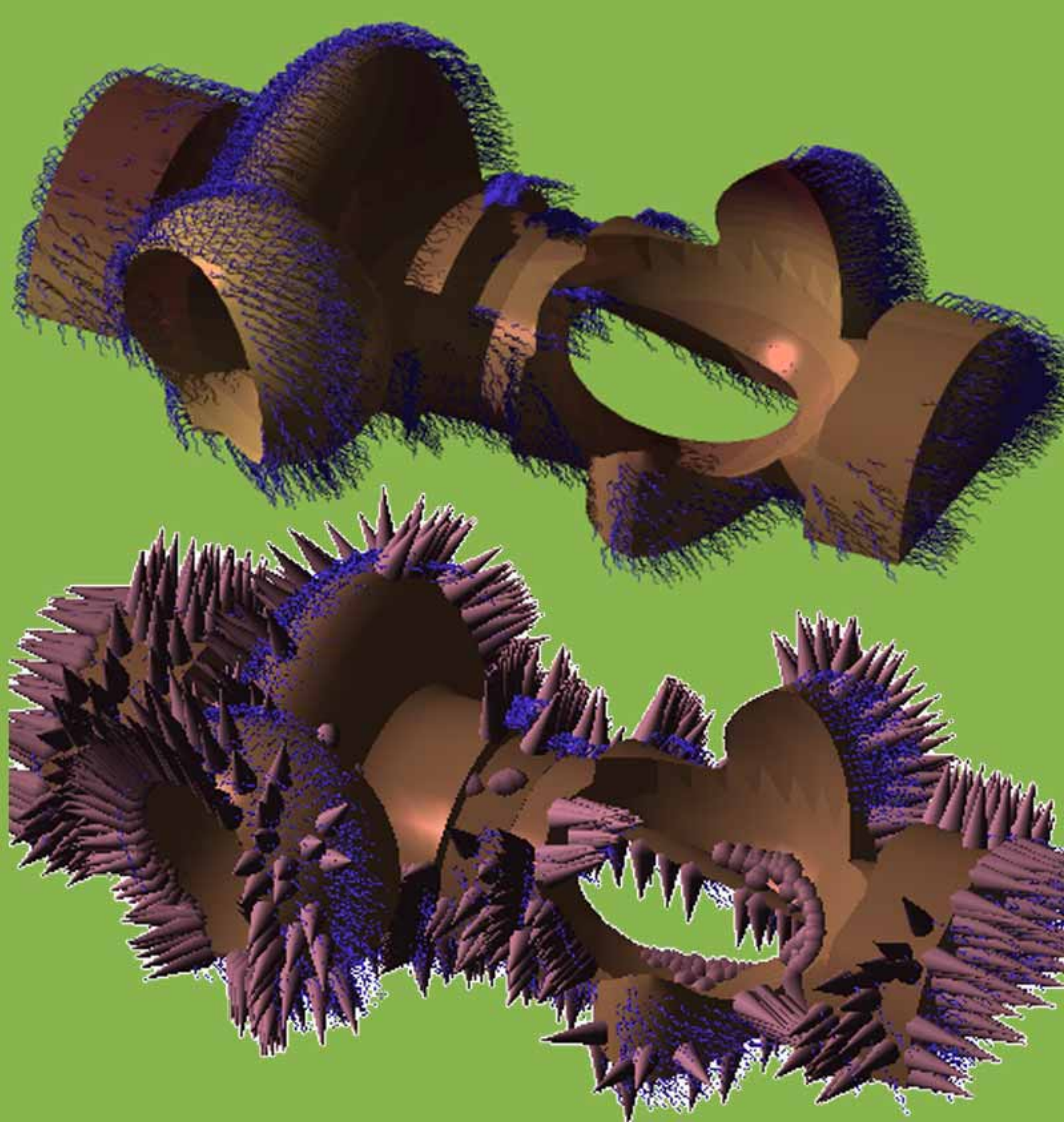
EyeZoom			Infinity

material

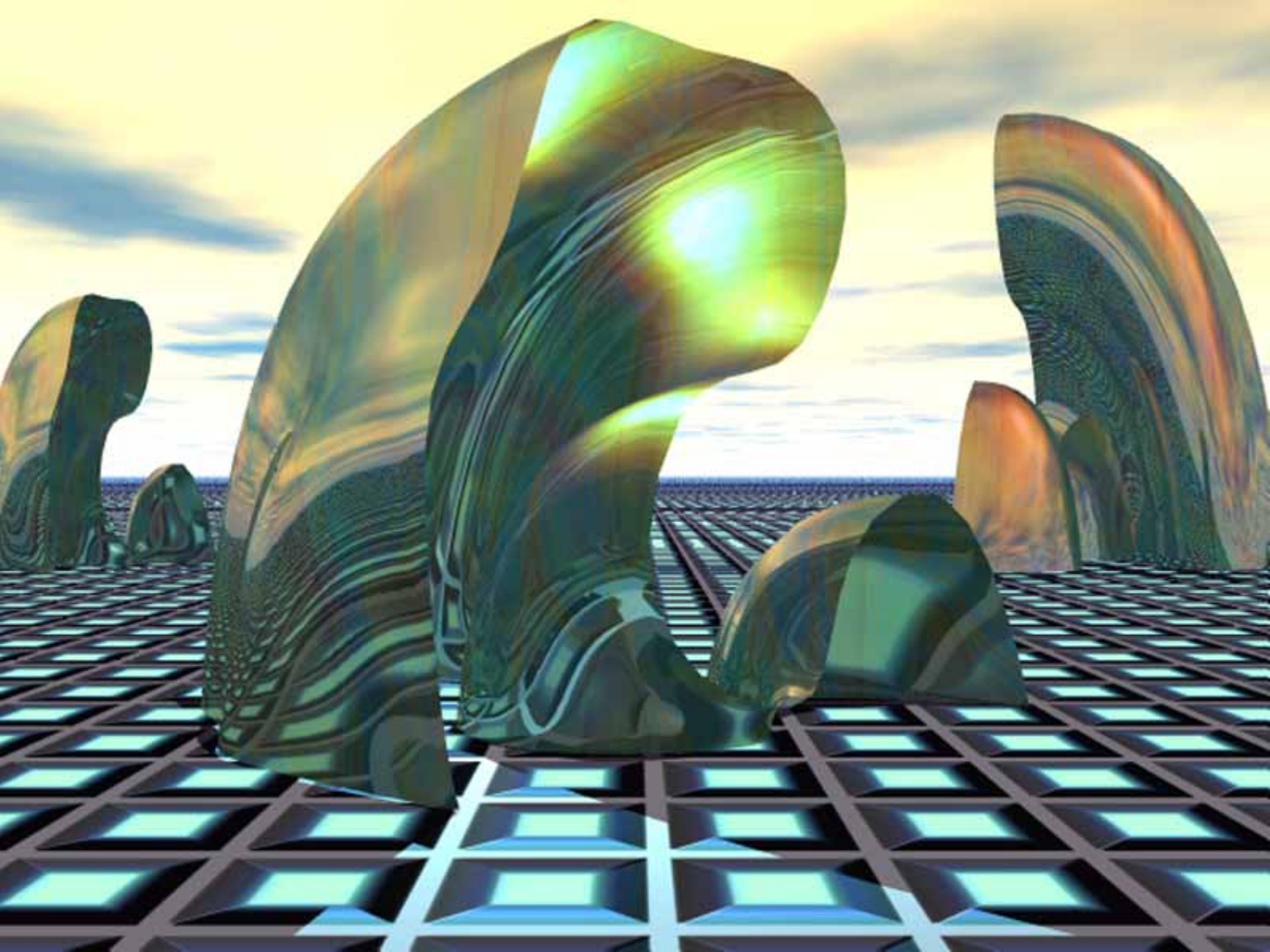
Shaders

shader attributes









Light Controls



Editing Tools



Head

Jaw 0.000

Mouth 0.519

Taper 0 %

Scale 100 %

xScale 100 %

yScale 100 %

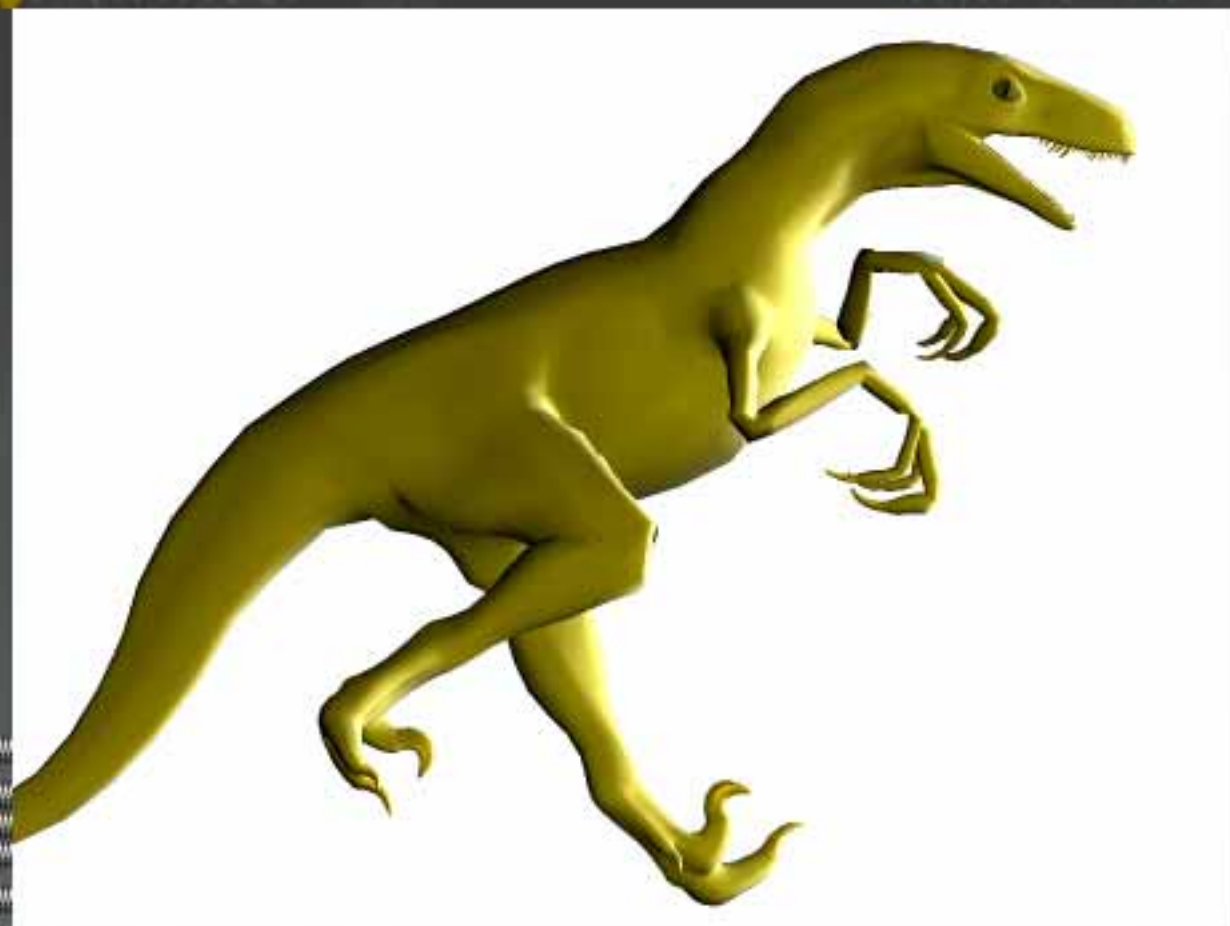
zScale 100 %

Twist 0

Side-Side 0

Bend -30

Select Camera



▼ Figure 1 ▼ Head

▼ Document Display Style



Frame: 001 of 030



Loop

Skip Frames

Light Controls.



Untitled

460 x 345

Camera Controls.



▼ Figure 1 ▼ Head

▼ Document Display Style



Frame: 001 of 030

• Loop



Faces

Basic Expressions

Danger2



Gosh!



Hmmm







