5-1-1999

Outdone

Daniel Pejril

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OUTDONE
BY
DANIEL PEJRIL

Submitted in Partial Fulfillment of the
Requirements for the Degree
MASTER OF FINE ARTS

MFA Imaging Arts/ Computer Animation
SCHOOL OF PHOTOGRAPHIC ART AND SCIENCES
ROCHESTER INSTITUTE OF TECHNOLOGY
ROCHESTER, NEW YORK
May, 1999

Skip Battaglia, Chair
Professor

Marla Schwepppe
Associate Professor

Adrienne Carageorge
Associate Professor
TITLE OF THESIS: Outdone

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[6/1/79]
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“Outdone”

A year is a long time in a person’s life. In the past year, I have been working on the film “Outdone”; also known as “a warped version of the Three Little Pigs meets Red Hot Riding Hood”. This paper discusses all the elements needed to create this film, from pre-production to post-production. Every aspect of the production process is an integral part of the finished film. Beginning with the story conception, the look and design of the characters and sets, the animation and music all combine to create an alternate and stylized universe with a strange life-like quality.

The Story

In the beginning I was having trouble creating a story for my thesis. The more I thought about it, the fewer ideas I was able to generate. I became confused and distraught. I read through volumes of fairy tales, short stories and books of strange but true occurrences, but with no avail. I decided to sit back and relax.

I then thought of an old idea I had about fusing fairy tales together. I had grown up watching Bullwinkle and loved the shorts “Fractured Fairy Tales” and “Aesop and Son”. I liked the idea of altering fairy tales to a ridiculous degree and was curious what would happen if characters from different tales should happen to meet. If by chance, the “Gingerbread Man” did not meet the fox by the riverside, he would have run rampant in the land of Fairy Tales disrupting all the other stories (we all know no one can catch the “Gingerbread Man”). After developing the “Gingerbread Man” into an obnoxiously overbearing and confident character, he stumbles upon the Master Book of fairy tales. He then proceeds to rewrite the stories at his whim. After speaking with my committee chairperson, Skip, I realized that documenting these fairy tales in a Master
book would be a bad thing. There are too many versions of fairy tales. Documenting a particular version into a Master Book would jeopardize the film’s appeal with anyone who was familiar with a different version. I decided to leave the Fairy Tale idea and explore elsewhere.

I then spoke with Skip about my next idea during a brief phase of dementia. The film would be a post-apocalyptic world where the sole survivor of the human race would come to grips with his loneliness and humanity through a huge arsenal of trashy flicks at a drive-in movie theater. Needless to say the idea was rejected. Although I still have endearing feelings toward the basic premise, I realize that it would not work as animation; it would be a better live action piece. Skip’s suggestion was to make a movie about construction, not destruction.

I pondered this new suggestion while I was driving home on 390. Instead of destroying the world, I thought of the exact opposite; immersing the earth in senseless construction (like the half-filled shopping mini-malls that litter continental America). I then suddenly envisioned two characters frantically building huge skyscrapers beside one another in the effort to have a better building than his neighbor did. And then it happened. I thought of two of the “Three Little Pigs” trying to outdo each other by creating numerous luxurious items. But why? Going back to my idea about fusing Fairy Tales I thought, “what would happen if the three little pigs were to meet Red Riding Hood”? and “Outdone” was fully formed in the next few minutes. The loose ends were tied up and production began after meeting with Skip and the rest of my committee members, Marla Schwerppe and Adrianne Carageorge.
The Set Design

I wanted the look of the film to be a realistic cartoon. If cartoons really existed, this is what they would look like. I created the set using realistic and stylized textures with highly stylized edifices.

Both the Wood and the Straw pigs’ homes are the ones that the wolf was able to blow over in the fairy tale. I wanted to maintain this feeling with their homes. I tried constructing their homes so the bases were smaller that the tops of the buildings; they flared from the bottom up. I made them in this manner to create an unstable appearance. Conversely, the Brick house has a wide bottom and a smaller top to convey the sturdiness and unbreakability of it. I tried to make the items in the set look as if they were constructed of the materials that are in their world. The wood house has tree stumps surrounding it. The poker table and chairs are made out of cut trees.

I needed to create the illusion of an entire world considering the majority of the movie takes place outdoors. While driving back from SIGGRAPH through the Carolinas I realized I had found a perfect way to construct my environment. I immediately began sketching the landscape. The Carolinas have wonderful grassy mountain plateaus. They almost look like buildings made of rock topped off with a grass roof. Trees were scattered around on the ground and on the mini-mountains. This was perfect. The mountainous terrain would be able to conceal the fact that there really was no world beyond that of the pigs’ dwellings. Once the set was modeled, a great circular stage was created where all the action took place. I was able to set up my environment in one file and change the camera angles to match up with any scene I was working on for the background image (See Appendix D for technical information).
Characterizations

Creating this movie was a great joy for me. I was able to watch hours of cartoons and say that it was all for research. I tried to get my hands on as many versions of the “Three Little Pigs” as I could. The most popular version is Walt Disney’s, which was made in 1933. This film is most noted for its finely crafted character animation. Up until this point, animation and characterization consisted of merely moving the character. The character’s design determined his characterization. However, Disney’s “Three Little Pigs” had three characters that all looked the same (with the exception of their clothing). The only thing that distinguished the characters from each other was their individually unique acting.

As in the Disney film, my pigs all look alike, except for their hats. Unlike in the Disney film, one gets a depraved feeling about the pigs in “Outdone”. Probably because of their disgusting behavior depicted on the screen.

In order for my film to work, I truly needed to make these pigs, pigs! But in the same respect they need to have some endearing quality to them or the audience would not care what happens to them. I decided to play the Straw Pig and Wood Pig against the Brick Pig in the beginning of the film, in keeping with the original story, but then immediately switch to the two Pigs against each other when Red enters the scene. In order for this rivalry, Red needed to be a sexual conquest; less of a Bo-Peep and more of a Russ Meyer Super Vixen.

I equipped the pigs with insatiable shit-eating grins that are able to transcend them from their boorish behavior. The pigs gamble, spit, drink, and even offer excessive sexual experience and free pornography to vie for Red’s affection. The nakedness of the pigs gives the film a strange sexuality. Although it is a cartoon, seeing the characters acting so crudely and being naked makes them seem much more depraved. Many people asked me why they were naked, where was the genitalia? The lack of genitalia on
the pigs was done purposefully so as not to distract the viewer. If the members were too small then the audience’s attention would be diverted to their puniness and if they were too big, then the opposite. Animating a penis was not the focus of this film. There are plenty of other examples of independent action in the film. Much of the sexuality of the film is lost because of the missing genitalia. However, the relationship between Red and the Wolf, an “after the fact” realization, reinstates whatever may have been lost.

When I began to animate I studied excerpts from “The Little Rascals” to the “Price Is Right” models to uphold the personalities I wanted for the pigs. Red’s entrance was animated using a video reference of Bo Derek running on the beach, from “10”. Probably, the most help I had in the animation of the characters was seeing “A Bug’s Life”. I had watched this film numerous times at the point I was just beginning my animation. It was great to study the subtle shifts in weight, gestures and life-like movements in Pixar’s characters. I think the subtle animation techniques were more apparent watching a CG character than analyzing a real person. I feel that much of the motion is taken for granted when watching a person. Much of the action also needs to be exaggerated. I noticed that I needed to add more exaggeration to some shots where the actions weren’t translating well. One of the most humorous elements of animation is how much of yourself is translated into the characters. On viewing animations of the pigs and the wolf, many people commented on their actions being reminiscent of myself. Most notably was the similarities between the wolf’s posture and walking style to my own.

I wanted to make sure the characters moved enough to convey life. Incorporating the basic principles of animation as described by Frank Thomas and Ollie Johnston, in “The Illusion of Life” into the movie, gave the characters a life-like appearance. Although these principles were created for 2D animation, they still apply to 3D animation as well. I utilized squash and stretch, and anticipation and follow through for the spinning pigs. I also equipped each character with independently moving
appendages. The wolf and the pigs had bouncing ears, nose and a swinging tail. Red was equipped with independently bouncing breasts. As soon as animated motion tests were complete, there was a buzz around the SGI lab about Red’s bouncing breasts. Many people approached me asking to see the motion test. I knew that this was an important feature of her character. Having no dialog, it is through her body that she is able to pit the pigs against each other.

“Outdone” Analysis

Making “Outdone” a completely original movie was not so easy. There are so many versions of the “Three Little Pigs” out there. Most notably is the Disney version. There are also many Warner Brothers films as well. “The Three Little Be-Bops” (1957) was a jazzy version and “The Blitz Wolf” (1942) where the wolf was an Adolph Hitler characterization and the pigs represented nations that had treaties with Germany. The Disney version, released during the Depression, quickly became a moral code, “the pig who exhibits old-fashioned virtues, hard work, self-reliance, self-denial, is the successful one”. The song “Who’s Afraid of the Big Bad Wolf” became a nation-wide hit and anthem of the age. (Sklar 1975)

Although there may be many interpretations of “Outdone”, as was with Disney’s “Three Little Pigs”, my intention was to make a film about excessive materialistic competitive nature and how it pulls people (or pigs) down an unstoppable spiral to their demise. In the beginning of the film, we see the comradery of the Wood pig and the Straw pig; playing cards and having fun at the expense of the Brick pig. When Red enters, the competition begins. Both want Red for themselves and will do anything to get her. They will violate their own friendship in order to gain this woman who they see as a trophy. They try to entice her with possessions such as pools, hot tubs and commercial
comforts. At this stage the pigs eventually forget what they are fighting for and are more consumed with trying to make sure the other is considered classless. They are too far-gone to realize that their excesses will cause their own demise. The Brick pig fails to realize that Red is really using the pigs. Like the others, the Brick pig seizes the moment to screw over the other two pigs, grabs Red and brings her inside his house. When the wolf stops beating on his house, he immediately thinks he had beaten the wolf. He then cockily dances into the fire. In the last scene we see the wolf and Red sitting at the table enjoying the cooked Brick pig. As the camera pulls back we realize that the Brick house is sitting on a fault line in an earthquake zone. In each instance the characters lose themselves in the expectation of reaching some materialistic gain and fail to foresee the consequence of their actions. Although some people may see the film as fatalistic, the characters did have it coming to them. They were just unable to see the signs. It is amazing how every character dies but yet the film maintains its comedic elements.

**Soundtrack and Effects**

The sound for “Outdone” needs to be rich and cartoony, as is the character and set design and characterizations. I had Vicente Avella, an Eastman School of Music student, compose an original score for the film. I felt that the score should be played with natural sounding instruments, such as percussion, bass, xylophone, etc. I felt this arrangement would work well with the natural setting and set design of natural materials. The music truly ties the film together, enhances gags and helps to give each character their own identity.

The opening theme sets the tone for the film. From just hearing the music over the opening credits, the audience knows they are in for a cartoony film. The music progresses with the action. When the pigs battle over Red, the music becomes more
frenetic and the instrumentation fills with more instruments. This culminates with the explosion, where the music cuts out completely. The drastic cessation of the music helps create an uneasy feeling and enhances the collapse of the buildings. The music then helps to create an uneasy feeling for the rest of the film. Although we can see that the wolf cannot get inside the brick house, the music lets us know that all is still not right.

Throughout the film little themes are played at various times that either strengthen jokes or define characters. When the Straw pig is seen with the coconut drink, Caribbean type music is heard and when the two pigs are showing off their homes the music evokes a game show sound. The wolf’s entrance has a theme that is played when Red draws the wolf on the chalkboard. I got together with Vicente and explained what feelings I had in mind when I envisioned certain shots. For “the homes show off” shots I used the Price Is Right models as a reference. In return Vicente incorporated these various styles beautifully into the film. He did have a difficult time making the switch between styles seem seamless, but the end result is wonderful.

I also wove together a soundtrack to accompany the musical score using real sounds. There are environmental sounds such as wind, earth shaking and insects as well as reactivated sounds; poker chips shuffling and the sound of glass knocking when a beer mug is placed on the table. Some of the sounds the wolf makes were my voice recorded into the computer and altered in SoundEdit to resemble an animal. Although there is no dialog in this film, I have strategically placed communicative sounds at appropriate places. I decided to use real pig grunts and squeals for the pigs for the shockingly humorous yet disturbing quality it adds to the film. I was careful not to add too many sounds to overwhelm the film and render it annoying.
Organization

I had to make sure that I kept detailed records of each shot in order to maintain consistency throughout the film. The shots were most outdoor shots and needed a directional light (the sun) that needs to keep the same position during the scope of the movie. I also generated two sets of files for each shot, the foreground with character and a background (see Appendix D for technical information). I created a sheet for each shot that comprised of camera placement positions, lighting positions and details (intensity, spread, etc.). Also included were the names of the files and SDLs used to generate the animation. (See Appendix D for a sample Data Sheet).

I also kept a journal of frequently used character animation positions. The pigs, Red and the wolf all had the positions of their eye when they are open and closed documented in this book to speed up the process of making their eyes blink. An actual manila folder was kept for each shot containing detailed information about it. There was information about the animated character’s keyframes, notes and facial animation as well as some additional lighting, camera and render information. My CD burner was one of my best friends during the animation process. Anytime I completed a shot I made sure to burn it immediately to disk to ensure it wouldn’t be lost. I also made backups of the wire files, SDLs and Avid editing files as well.

Although some of these procedures took a little extra time, they were invaluable to keep the project moving smoothly. I always had the information I needed at hand and didn’t have to waste time searching through files or papers to find it.
**Conclusion**

Making “Outdone” was an amazing experience. At no time did I become bored with the film or characters. The solid story line and character design maintained my interest and enthusiasm for the project. I would chuckle everyday when I would first open my files to work and get a glimpse of one of the pigs. All the elements combined to create this movie took approximately a year to complete, from pre-production to post-production.

I hope the joy the film has given me during its creation is transfers to the audience.
Appendix A
Proposal for an MFA Thesis Project

"OUT-DONE"
BY
Daniel Pejril

MFA Imaging Arts/ Computer Animation
SCHOOL OF PHOTOGRAPHIC ART AND SCIENCES
ROCHESTER INSTITUTE OF TECHNOLOGY
ROCHESTER, NEW YORK
April, 1998

Skip Battaglia, Chair
Associate Professor
School of Photographic Arts & Sciences

Marla Schwepppe
Associate Professor
School of Photographic Arts & Sciences

Adrienne Carageorge
Assistant Professor
School of Photographic Arts & Sciences
"OUTDONE"

Two pigs with cigars in their mouths and whiskey bottles in front of them, play poker. Behind them are two dwellings: a straw house (which resembles an island hut) and a wooden house (which looks like a Swiss chalet). A short distance away, another pig is laying bricks for the staircase of his brick house. On the outside of the Brick House is a sign that reads "Brick Pig's Home". The Brick Pig looks at the other two pigs and frowns. The two pigs look at the brick pig, toast their drinks together and laugh. The two pigs swill their drinks.

The sounds of rustling leaves and bushes are heard. The Brick Pig looks up. Little Red Riding Hood bursts from the woods and runs to where the pigs are. Seeing Red, dressed in a short red skirt, the two pigs spray their drinks out of their mouths, drop their jaws and let their tongues hang out, panting. Red points to the woods and quickly draws in the air with her fingers. Smoke trails them, creating the image of a wolf, which quickly dissipates.

Immediately the Straw Pig leaps from the table toward Red who is standing in-between the Straw house and the Wood house. The Wooden Pig is knocked off his stool. The Straw Pig points to his house and then proudly to himself as Red watches. The Wood Pig runs by grabbing Red’s hand and whisking her off to the house next door, the Wood House. Here the Wood Pig points to his house and motions for her to enter. He shines up the door knob. The Brick Pig walks over and as he gets Red’s attention, the Straw Pig drags her in-between the Straw House and the Wood House. Standing in front of the Straw House, the Straw Pig presents his house like one of the “Price is Right” Girls. He then spins quickly into a tornado-like funnel. When he stops he is wearing a grass skirt and a lei and holding two tropical drinks (in a coconut shell with umbrellas). Hawaiian music is playing and he raises a glass to Red. The Wood Pig takes Red’s hand and spins her, when she stops she is pointed toward the Wood House. Standing in front of the Wood House, the Wood Pig yodels and extends a giant Swiss Chocolate Bar (he is wearing a green Swiss cap with a red feather). The Brick Pig once again waves for Red’s attention but the Straw pig spins her around to his house. With a cloud of smoke the Straw Pig begins building frantically. When Red stops spinning, the smoke clears and a large pool sits beside the Straw House. The Straw Pig floats in the pool on an inflatable raft. The Wooden Pig spins Red around and frantically builds an enormous Hot Tub. (The Wood Pig is wearing a towel around his waist). The Straw Pig gives the Wood Pig a scowl and spins Red toward the Straw House again, where he builds a large neon sign over his house that reads, "Straw Pig's Place". The Wood Pig builds, with a cloud of smoke, a neon sign also which reads "Wood Pig's Palace". The two pigs the begin adding structures to their homes: fast-food chains, skyscrapers, amusement rides, etc. Red stands there watching the building take place. The Brick Pig walks over and watches with her. Ignoring Red, the two pigs continue to build. The structures are built so high, they are unable to support their weight and begin to crumble. Seeing pieces of the buildings fall, the Brick Pig grabs Red’s hand and runs to the Brick House. The buildings collapse on top of the Straw and Wood pigs, crushing them.

Brick Pig and Red stand in the brick house looking out the window at the piles of rubble next door. The wolf runs out of the woods toward the brick house. Inside, the Brick Pig and Red hear the Wolf hit the front door and continue to howl and bang against it. The Brick Pig thumbs his nose at the door and laughs to Red. Red walks over to the dinner table and pulls out a chair for the Brick Pig. The Brick Pig sticks out his chest and moseys over to the seat. Red pushes him in and walks off to the kitchen. Fade in, Red walks out of
the kitchen carrying a large silver serving tray and places it on the table. Red lifts the cover to reveal the roasted Brick Pig (complete with apple in his mouth). Red sits at the table across from the wolf, who wears a bib with a decorative pig. The sign on the outside of the Brick House which once read “Brick Pig’s Home” is covered up with one that reads, “Wolf and Red’s Home”. A long-shot of the Brick House reveals a small crack in the ground extending from the side of the house into a gaping crevice a few yards away. A sign is planted by the crevice that reads, “San Andreas Fault”.

This film will be 3D computer animated, using Alias|Wavefront 8.5 and Maya (when it comes in). The feel of the film will be cartoony with lots of exaggeration. The pace will escalate as the two pigs try to out-do one another culminating with the destruction of their structures. I intend to have the dueling Pigs sabotage each others buildings as they compete for Red’s affection. This will heighten the level of competition which consumes the Pigs. There are many special effects such as smoke, water and fire which I am currently testing (in a “Particles” class this quarter). The final edit of the film will be done on the Avid editing systems.
**BUDGET**

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TIMELINE

April & May
- Thesis approved, character design, modeling of sets, testing animation techniques (particles).

June & July
- Finish modeling sets and characters, and testing Maya.

August - November
- Animating and rough edit.

December - February
- Polish animation, rendering, sound and final edit.

Credits

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Total $148.00
Appendix C
Appendix D

Technical Details

Raytracing

In making this film I encountered many technical difficulties. One of which was the way the Pig’s world was created. Most of the story takes place in the outdoors. The time setting I chose was roughly noon on a bright clear day. I originally planned on raycasting my frames to cut down on render times (anticipated because of the numerous particle effects in the film). Unfortunately, I wasn’t getting the shadows I had wanted with raytracing. The shadows were too light, too soft and in most shots, made the characters appear to float in the scene. I could not handle having the characters look as if they did not belong in the environment. The lack of anchoring shadows is a big problem with 3D work, a problem I did not want to perpetuate. My only option was to raytrace my images.

Raytracing brought on another host of problems. Although I was able to generate the type of shadows I wanted for the film, I inadvertently lost the ability to motion blur. I had alot of trouble making objects fade into existence. Raytracing also drastically increased my render times in some files. In order to cut down my render times I kept my reflections to a minimum (nothing above a .2 reflectivity (high reflectivity in 3D animation is so clichéd anyway!)) I deleted any unseen geometry in the files; I only had one light casting shadows (my Sun) and kept the soft shadows option as low as possible (2). The average render time per frame took somewhere between seven – thirteen minutes. I also had the extreme. The shots that only comprised of a character surrounded by blackness (see Compositing) had render time of 56
seconds per frame. Conversely, the shot where the pool appears in the cloud of smoke had render times over two hours (see *Particles*).

**Compositing**

I had created a file in Alias that was solely background material (trees, land plateaus and sky). I needed to utilize the Depth of Field blur function in Alias to give the illusion that this land is quite spacious. The background images were rendered with the depth of field blur and then imported into my individual animation files as environmental image maps. The background image and the animated scenes have a common ground plane that must match to create a seamless environment. However, the depth of field blur that was being generated in the animated files was placing a blur on the environmental image map that already had a blur on it. This doubled the blur on the background image breaking the seamless ground plane. I fixed this by compositing the background image with the foreground animation with Adobe After Effects. This worked beautifully to create a seamless plane. It generated shots where the ground plane in both the background and the foreground matched perfectly with the same level of blur applied to the shot as a whole. Not only that, but the lack of repetitive geometry in each frame kept my render times down.

After Effects was also used to create the motion blur effects, used primarily during the spinning pig sequences. I was not able to render the motion blur directly into my shots because Alias does not support motion blur on raytraced images. Instead I made my characters’ geometry invisible, leaving only the skeleton active in the scene. Then the shot was rendered with the *invisible objects cast shadows* option turned on in the render globals. This was to generate a series of images that had the character’s shadow animated in the set. I then rendered the shot with just the character, floating in blackness, with the *mask* option turned on in the render globals to generate an alpha channel. These images were rendered as Tiff’s; they have the capability to fuse the alpha
channel and the rendered image into one file. The shadow and the character files were then imported into After Effects, layered on top of one another and the level of motion blur applied to the character layer.

**Particles**

Being a naive youth, I created a story line for my thesis using many particle effects. The spinning, smoke, water and fire (notice there is none in the actual film) were all intended to be particle based. Needless to say, after working out my first particle effect I decided to use particles only where it was absolutely necessary. Particles have a mind of their own. They need lots of time to devote to them in order to achieve a usable result. The focus of my film was animation, not particles.

The main particle shot in the film is the pool appearing in the smoke shot. After getting render times of over two hours per frame I realized I could have no more particle smoke shots like that and finish my thesis in a respectable time. I resorted to cut aways, fading images and creative use of geometry. This was particularly exhibited in the shot where the pigs are frantically erecting the buildings. I originally envisioned a cloud of smoke rising in the air and being replaced by the skyscrapers. Instead I tried animating a series of pigs surrounding each building with the attempt to motion blur them to cover the tips of the rising buildings. This failed. I then tried creating a motion blur effect using geometry (using a simple revolve with a stretched texture) reminiscent of the Rankin/ Bass Christmas specials. I was pleased by the effect when I was able to see how it played in context with the other shots of the movie. Although it is particularly different from the particle smoke, I think it works.

The hot tub shot was another that helped the development of my ulcer. Stubbornly, I kept trying to create the hot tub bubbling water by using particles. Instead of a nice, inviting bath, it looked more like a tub of woolite on crack. I solved this problem by placing geometry at the level I wanted the water, and animating an S-Fractal
through the geometry with a displacement map. This worked like a charm, and rendered in 1/5 of the time it was taking the particles. I still used particles for the hot tub steam and the small bubbles of water shooting up. However, the number of particles were so slight that it barely brought the render times up at all.