

Student animators make the grade on their short-film projects

By Jenny Donelan

Lessons in Filmmaking

If these student films—sampled from among those that had the honor of appearing in the SIGGRAPH 2006 Electronic Theater and Animation Theater—have any common thread, it is their sense of playfulness and humor. That playfulness is apparent even when the theme is potentially dark or deep.

“Noggin” takes a clever and fanciful look at the evolution of man and the Great Flood. In “My Date from Hell,” the devil is a genuinely nice guy. “Our main aim was to make a funny film that the audience would enjoy,” says Tom Bracht, co-director and animator of “Hell.” “Profound melancholic short animations are great, but attending festivals, we always like to see films that make us laugh.”

The film “ToyArtist:papa&baby” looks at play head-on and its importance relative to work. Ironically, the darkest film of them all is based on a children’s nursery rhyme, “Solomon Grundy.”

Although the film points out how “sometimes life can just be a series of rituals that go by,” according to the film’s animation director, Chris Myers, it still has elements of lightheartedness, notably the comic reactions of its main character as life spins him around. “We tried to put a little bit of humor into it as well,” says Myers.

These films, produced at schools and universities, have a common element of playfulness, but their unseen commonality is that they required a lot of work to produce. Creating films like these is how student animators preparing to enter the workforce learn about late hours, teamwork, schedules, pipelines, and trial and error. For example, although it took a year and 10 months to make “Noggin,” says director Alex Cannon, “if we were to do it again, it would probably take four months.” But he concedes, “Part of doing it was learning the process.”

My Date From Hell | Electronic Theater

Four years in the making and 12 minutes long, “My Date from Hell” is a fully realized narrative—a sort of mini-feature film—with nine characters, detailed sets, and plenty of fire and smoke effects (we’re talking hell, after all). The premise is simple: The devil, like anyone else, is lonely and would like to settle down with a mate. And, like anyone else, he faces some roadblocks on the way to true love.

“The story was inspired by a German radio show about the devil,” says Tom Bracht, who directed and animated the film along with Tim Weimann. Though the radio devil had his comic aspects, he was still bad, explains Bracht. “We wanted to change his character. We wanted our devil to be an absolutely good and nice guy.”

The film was an ambitious graduation project for the team of Bracht and Weimann at Filmakademie Baden Württemberg’s Institute of Animation, Visual Effects, and Digital Postproduction in Ludwigsburg, Germany. Three years before the duo even began animating, they wrote a script and storyboarded every shot. They then loaded the storyboard into Adobe’s After Effects to test the timing and montage.

After modeling rough versions of sets and characters, the students created a 3D animatic that helped them determine camera moves. A third member of the team, Patrick Wachowiak, built a camera rig modeled after a physical camera so that camera moves later on would be believable. (Wachowiak also did the effects animation for the film.)

Avid’s Softimage 3D and Autodesk’s Maya were both used at various stages to model the characters, and Photoshop provided painted and photographed textures. Bracht then created the rigs for the movie’s three main characters and six sub-characters. He decided to generate a master rig for a lot of them, since they were all basically two-legged humanoid characters anyway, then just tweaked the rigs as necessary, as was required for Wilber, the devil’s surly minion, who has wings.

Before the animation proceeded, the team also recorded all the voices for the characters in German. Later they recorded an English dub for the finished version; however, because of the translation, the English version is not always lip-synched perfectly.

Bracht and Weimann keyframed all the character animation in the film, aiming for a “cartoony” style of movement, as Bracht puts it. “We used simulations for some secondary animations, like the jiggle of the devil’s belly, for example,” he says. “But the simulation was always just a starting point. We then baked it out and tweaked the curves by hand, to exaggerate the movement.”

Effects in the film were generated by Wachowiak using Maya’s Fluid system for fire, smoke, dust, and fog. Particles were used for certain twinkling effects such as stars.

For music, the team used a temporary soundtrack that consisted of commercial songs they liked. Later in production, their producer hooked them up with student composer Andreas Kersting, who wrote and produced the soundtrack for the film. Though the students had hoped to use the Elvis Presley song *Devil in Disguise* for a dancing scene, they encountered rights issues and ended up using



The devil fares no better than mere mortals when it comes to the dating scene in the short film “Hell.” The characters were modeled with an emphasis on emotional expression.

a local Elvis impersonator who sang two songs in the movie.

If a couple of characters in “Hell” look familiar, it’s because Filmakademie Baden-Württemberg animator Johannes Weiland, whose “Annie & Boo” showed in the 2005 SIGGRAPH Electronic Theater, animated several shots. Weimann, on the other hand, modeled one of the characters in “Annie & Boo.” So perhaps there is a Filmakademie Baden-Württemberg style. Certainly both films have some of the same sweet whimsy and a similar interplay between a bumbling ogre type and a lovely female.

Bracht says that in general he and Weimann are very satisfied with their creation. If they had it to do over again, they wouldn’t change anything: “One of the reasons it took us so long to complete the movie,” says Bracht, “was that we *did* do over things until we were satisfied.” As a result, he says, people appreciate the work. “They say that this short film has a feature-film quality. They like the moods, the settings, and the characters.” Certainly the film has a sense of humor, and heart. “I think you can really feel for the devil in his endeavor to find a girl,” says Bracht.

Noggin | Electronic Theater

Director Alex Cannon's senior project at Brigham Young University in Utah began with an idea that another team had pitched the previous year, only to have it shot down. That idea concerned a hypothetical conflict between early humans and another, heretofore unknown species, the belly faces, which lack heads and necks and have their faces in the middle of their bodies.

"We decided to resurrect the belly-face idea," says Cannon. "And we also wanted to attack something technical involving humans. We didn't want to do fuzzy little animals."

The basic story involves the struggle between the prehistoric belly faces and film's sole human character, who is appealingly gangly and vulnerable. There are lots of sight gags, a bit of pathos, and a dramatic and revealing final scene. Putting all those elements together was one of the hardest parts of creating the film, according to Cannon. "We kind of went back and forth and sideways narrative-wise," he says. "A lot of people wanted to make it just funny. Others wanted it dark and quirky. I wanted it to just be itself. So it's a mixture of things."

The team also decided to go with a series of gag vignettes—each building on the next but also capable of standing alone.

The project proceeded through storyboards, scripts, and 2D animatics in Adobe's After Effects, and from there, to modeling and animating in Autodesk's Maya. At that juncture, says Cannon, the project spread out laterally, with people working simultaneously on modeling, rigging, testing, and so forth. He estimates that about 40 people were involved in the film all told, with perhaps 12 working on it at any one time. With all those people, "the hard part was trying to get everything to work together and get the story told so it was coherent," he says.

One of Cannon's goals in making the film was achieving a certain illustrated type of look that involves a hatching technique (for shading) on the boulders, the tools, and even the characters themselves. "It's a look we hadn't seen before in 3D environments," says Cannon. Certainly "Noggin" looks like it could have been drawn by a talented children's book illustrator: The

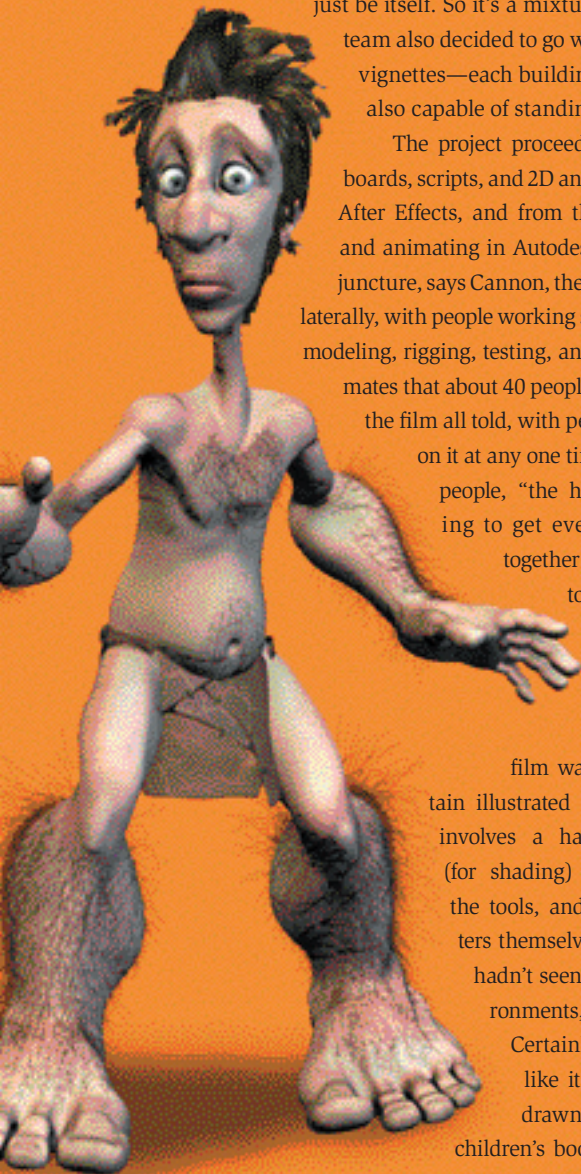


The director of "Noggin" created a lush, almost realistic natural environment (top) for his decidedly unrealistic "belly-face" characters (center and bottom) and human protagonist (far left).

scenery is lush, soft, and the sky grows ever darker. Rain falls throughout much of the film.

In terms of character movement, Cannon says the team was aiming for something a bit more realistic than that of ordinary cartoon characters, but not so realistic that they would have to worry about exactitude. People have since expressed admiration for the way the characters move in "Noggin," he relays, but there is no great secret to that. "We just started animating," Cannon says. "We would get on the computer and mess with the rig and get it happening. The animation part of the film felt pretty natural."

Cannon says he is most pleased with the final scene of the film. While the sequence of events was set, how to unveil them took a lot of thought. "I like how we paced the ending. And it's what we spent the most time on," he explains. Though the film has been well received at film festivals, Cannon says he hasn't had time to watch the film in the company of others. "I'd really like to see [others' reactions] when it plays," he notes. "I'm always trying figure out people's triggers and how to pace things."



Solomon Grundy | Animation Theater

Many student films suffer from grand plans—it's hard to gauge what's too elaborate before you have a few projects under your belt. But graduate students Ken Seward and Chris Myers came up with a simple concept for their 3D Collaborative class at The Savannah College of Art and Design—and stuck with it. Their idea was to animate a nursery rhyme: “Simple and short, but open to interpretation,” as Seward, the art director, puts it. The film is about one minute long, and takes place entirely on a stage, which Myers thought would be a good way to further streamline the production.

The nursery rhyme they settled on was “Solomon Grundy:”

*Solomon Grundy,
Born on a Monday,
Christened on Tuesday,
Married on Wednesday,
Took ill on Thursday,
Grew worse on Friday,
Died on Saturday,
Buried on Sunday.
That was the end of
Solomon Grundy.*

“I grew up with that nursery rhyme and always liked its gruesome but playful outlook on life,” says Seward. “It’s a bit bleak, very Victorian.” In fact, both filmmakers say they were inspired by another writer, author, and illustrator: Edward Gorey, himself inspired by things a bit bleak and Victorian.

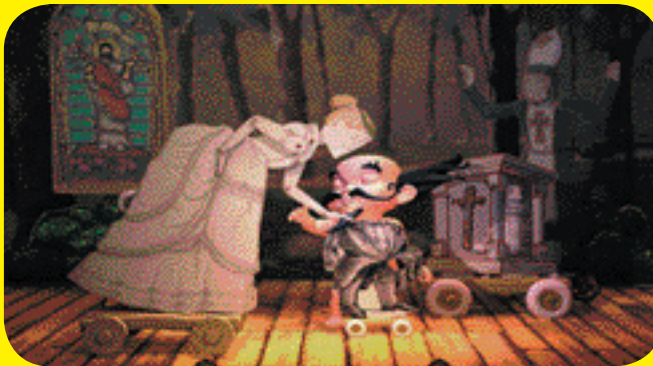
The short film “Solomon Grundy” opens with an image of a whirring clock and placard that lets you know it’s Monday. Solomon, a baby with a mustache and a goatee, literally hits the stage face down. His parents and all the other characters and objects in the movie are Victorian cardboard-like cutouts mounted on wheels—movable stage sets that speed past Solomon in each day or phase of his life. A priest wheels past and christens him with a slap. A nurse pushes him round and round in a wheelchair. Everything happens very quickly—no one day’s scene lasts more than 10 seconds. There is no background music, just a narrator intoning the rhyme, and the sounds of gears and ticking clocks. The very brevity of the film reflects the brevity of life—and how both are humorous and poignant by turns.

Since Seward and Myers had only a brief time themselves (10 weeks of class) to make “Solomon Grundy,” they started brainstorming six weeks beforehand, creating a fairly elaborate animatic in Adobe’s After Effects and Photoshop. Student producer

and director Natalie Moore researched the piece, coming up with many of the Victorian-era art pieces and motifs in the film.

Solomon, with his baby fat and facial hair, was designed as a sort of man-child to reflect the short nature of his life. Fellow student Jen-Feng Tsai modeled Solomon in Autodesk’s Maya, and before animation began, Seward and Myers videotaped each other acting out the character’s movements to help keep the action under 10 seconds per shot. “Solomon Grundy” is keyframe animated, except for the wheels of the pull toys and stage sets, which were done using MEL scripts. Having Solomon as a “living,” fully modeled character surrounded by flat characters and objects, says Seward, shows that he is a kind of “everyman” dumped into a machine.

The setting was made to resemble an old Victorian theater, right down to the lighting. “As best we could,” says Seward, “we wanted to have a warm look that might have come from the open-flame gas lamps that such a stage might have had.” Though the team researched Victorian stages, the ultimate inspiration came from an unexpected place: the movie *Lemony Snicket’s Series of Unfortunate Events*, according to animation director Myers. Somehow the scene in that movie in which a play takes place outdoors conveyed the right look and feel, and provided needed direction, he says.



Victorian-inspired toys and stage settings provided the proper ambiance for the directors’ animated short-film take on the classic nursery rhyme “Solomon Grundy.”

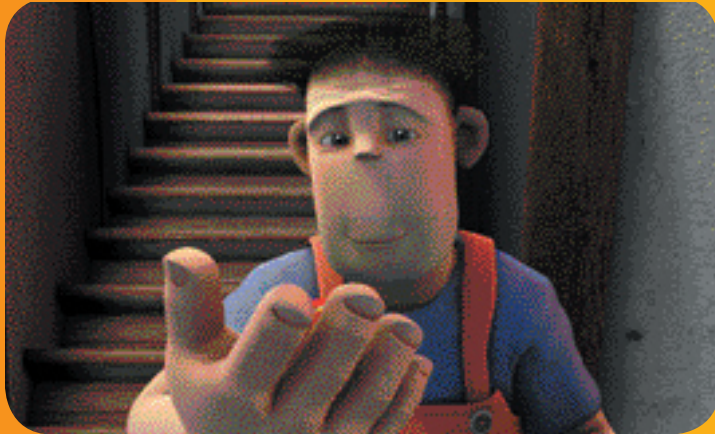
The film’s color palette had an even more unlikely source. “Oddly enough, I was at my sister’s house, and there was this decorative box with an illustration of a chef on it,” says Myers. The warm reds of the box were just what he was looking for. “And we stuck with this color palette through the entire project,” he says.

The end result is a piece that some viewers think was made with stop motion, which pleases Myers. “It shows that it doesn’t matter what the medium is,” he says. Lots of viewers have never heard the nursery rhyme either, and think the film’s creators wrote it. That doesn’t matter either. The point, according to Seward, is that “Solomon is born into a world that pre-exists him and will continue after he is gone. This was my interpretation of the rhyme and how I feel about a lot of moments in life that involve formalities you never voted for. They just come at you and you are expected to go along with them.”

ToyArtist:papa&baby | Animation Theater

Color is definitely one of the principal characters in “ToyArtist:papa&baby.” In every frame, the bright yet soft primary colors catch your eye. In fact, says Wooksang Chang, co-director and supervising producer of the film, “color is a significant and essential storytelling tool for me. Warmth and play were key concepts for the color collection of ‘ToyArtist.’ I chose yellow and red as the main colors and several supporting colors, as well.”

Of course, the seven-minute film has other characters, too—



The simple but expressive characters in “ToyArtist:papa&baby” play nearly secondary roles to the film’s rich color palette, itself a part of the story, according to the budding director.

a hardworking inventor and toymaker along with his baby son, stationed behind a lovely and impractically low fence of painted wooden tulips in the corner of the workroom. The toymaker is obviously a genius. He makes a cunning little robot dog, for example, that seems to have a life of its own. But he’s so involved in his work that he doesn’t see the simple things his little son really needs, and he also fails to notice when the baby gets into some serious trouble.

Chang, an assistant professor at Chung-Ang University in Seoul, directed the film along with a crew that includes his wife, Hyejin Kim, and four other students: Jaemin Lee, Younghee Choi, Donghyuk Choi, and Chigon Park. He got the idea for the film during his wife’s pregnancy. “I was forced to think of myself as a future father,” he says, “a busy filmmaking father who does not have enough time to play with his kid.”

The filmmaker became a toymaker for the movie and a workaholic dad; “a baby full of curiosity and various toys were all vividly there in my head,” he adds. From there, Chang was able to create sketches and sculptures of his characters before filmmaking commenced.

After storyboards, the modeling and animation were done in Autodesk’s Maya, and the cloth simulation with Qualoth software from FXGear. Animating clothing proved to be one of the toughest parts of making “ToyArtist,” says Chang. When he wasn’t satisfied with the wrinkling of the pants and shirt, Chang worked with Dr. Kwangjin Choi, the developer of Qualoth, to upgrade the program. “Qualoth enabled us to achieve a very accurate simulation effect,” says Chang.

When it came to animating the characters, Park worked on the father and the toys, and Kim on the baby. The baby’s reactions and facial expressions in the film will seem very realistic to anyone who has ever spent time with an infant, and are among the major technological achievements of the movie. “Animating the baby was one of our most difficult jobs,” says Chang. “We are not babies, so obviously no one can act out the role quite correctly. Therefore, we had to rely on videos and, of course, our imagination.” Also, the team learned some interesting facts, such as how babies fall because their sense of center of gravity is still developing, and how their emotions change extremely rapidly.

Chang says that no particular part of the film stands out as a favorite: “Every single part of the work was precious and meaningful to me.” Not as precious as his young son, however: He had to cut short his CGW interview to go play with him. ❖

Jenny Donelan is a contributing editor for Computer Graphics World. She can be reached at jdonelan@adelphia.net.

