Short Cuts
The best new animated shorts from outside the major studios

▶ Given Gus's icy locale, fur was a necessary – albeit time-consuming and frustrating – element to add

Winds of change

Gus is a short packed with difficult effects and unconventional characters. <u>Kerrie Hughes</u> talks to director Andrew Martin about its production

The occasional spot of flatulence in film is always good for a laugh. Blazing Saddles' campfire scene and every episode ever of South Park are among a long list of films and TV featuring fart jokes in the hope of a light-hearted giggle. Gus is a cheeky new short that follows in their footsteps: its smelly antics are intended to raise a smile or two – but, more importantly, its fart-fuelled message is about standing by the people you love, warts and all.

Written, directed and animated by Andrew Martin, Gus is named after the short's main character, a Neanderthal cave boy who lives with his father, Don. High up in the Swiss Alps, they endure terrible weather conditions after being banished by their tribe due to Gus's uncontrollable flatus. One day, freezing and tired, Don's patience finally runs out, and he sends his son out into the cold: a decision that changes both of their lives.

Going it alone
The idea for Gus first came about when the director was studying animation and visual effects at the Queensland University of Technology. Brainstorming for his final-year project led him to prehistory, a subject that he has always been interested in, and flatulence. "It's a somewhat disturbing thought, but I guess we draw from inspiration we know," laughs Martin.

The eight-minute short was almost entirely a solo project, so a simple but effective pipeline and capable tools were vital. Every decision in early production was taken with careful consideration, right down to the choice of 3D software used. "It was important to me to have a single package that could do it all, even if it became frustrating at times," says Martin. "Maya seems to be the most prevalent for animation: it can tackle almost anything."

During a long and sometimes frustrating project, Martin became well aware that it could not be completed totally alone, and recruited assistance for background mattes, hair simulations and the musical score. "I did almost everything you see myself," he says. "I do know my limitations, however, and handed both the sound design and music composition over to some very aurally gifted people."

With the idea established, Martin began working on his character designs. Influenced by claymation and Pixar, Martin aimed to

keep them simple: to him, animation is about caricature, not realism.

Giving the characters long arms and short legs to accentuate the Neanderthal look meant they couldn't move in the way real humans do. The rigs that had been designed early on weren't complex enough for the final models, so Martin had to compensate for this by correcting individual frames. "The basic rigs were designed for a different story to what Gus is now, but rather than starting again, I just made modifications on a shot-by-shot basis," he explains.

Overcoming the elements
The many effects in this short meant that overcoming one hurdle only meant another was just ahead. One of the biggest was Maya's fur system. Martin felt that it was a necessary element in the film, but getting it right was a frustrating process. "You have the ability to paint greyscale maps for different attributes as well as the direction, and this is a problem," he says. "Maya interprets 50% grey as one direction, with shades of black rotating it one way and shades of white the other. Consequently, both black and white are interpreted as the same direction - 180 degrees from 50% grey – and when they get together, grey is born and fur gets messy."

▶ Director Andrew Martin was heavily influenced by claymation and Pixar animations in his simple character designs
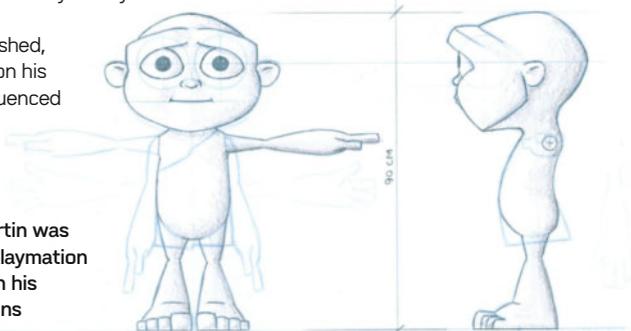
VITAL STATISTICS
Title Gus
Duration 8:00
Directors Andrew Martin
Production time 5 years (part-time)
Software Maya, After Effects, Photoshop
Synopsis A young boy born with chronic flatulence is thrown out by his father: a decision that changes both of their lives
If you like this, watch… Boundin' (Bud Luckey/ Pixar, 2003)

◀ Gus's father Don bears a striking resemblance to his son: he's simply a more angular, older version with hair
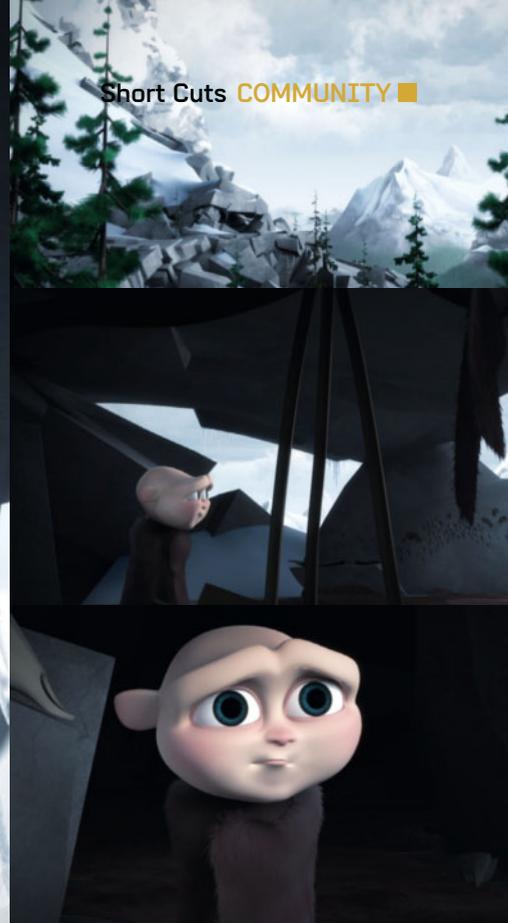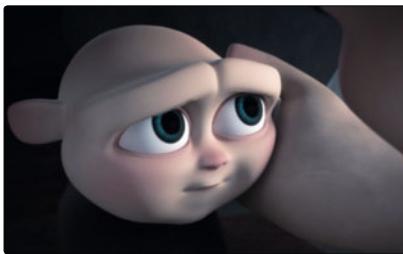
The problem with fur was not so much solved as managed by fine-tuning in Photoshop.

The creation of ice was also a job that the director admits was a case of trial and error to get right. The opening scenes feature a tray of frozen meat, which is a difficult enough look to achieve, but Martin had the added complication of having to animate the ice particles when the meat is moved. Using Photoshop, he applied a frost texture directly to it, then used Maya's dynamic systems and instance geometry to turn the particles into ice crystals. A time-consuming scene was finally completed with a few tweaks. "I tried all sorts of things," he says. "I added a glass-like shader and rendered the particles as a separate pass. With a few compositing tricks in After Effects, I got the result I needed."

Now that Gus is finished, Martin is pursuing a career as an animator on feature films. "My focus now is animation and story development," he explains. "But having done it all on this project should help me as a writer, director and producer." ●

*Gus is currently on the festival circuit. See an exclusive clip at 3dworldmag.com/gus*

KEY TECHNOLOGY
As in many animations, one of the most frustrating parts of Gus was rendering time; the many effects meant this was higher than usual. In an attempt to relieve this, Martin had to think of alternative software solutions to aid him in production. Using the ReelSmart Motion Blur plug-in for After Effects provided a solution to one of the necessary features of the film. "To render motion blur straight out of Maya would have taken forever," says Martin. "The plug-in allowed me to render a separate vector pass and achieve nice motion blur in post. It has its flaws, but it's better than having no motion blur at all."
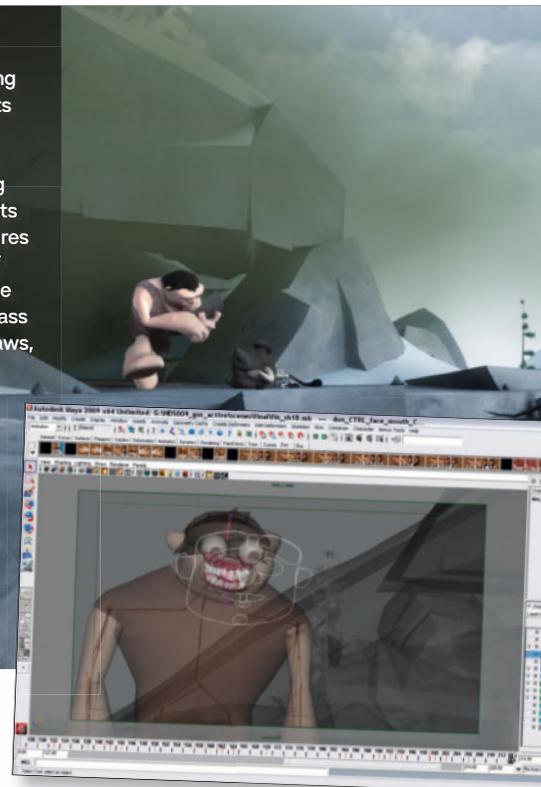
◀ Both Neanderthal characters were designed specifically with long arms and short legs

◢ Early rigs were not always complex enough to provide all necessary movement: modifications were made frame by frame

WATCH THE TRAILER
You can catch the trailer for Gus at the short's official website gusthefilm.com

Send us your shorts
To submit work for inclusion in Short Cuts, contact us at the address below, attaching a brief synopsis and at least three stills
enquiries@3dworldmag.com