More bang for your Buck

FILM FOCUS The arty Elephants Dream brought its software to a worldwide audience. But for Big Buck Bunny, its second open-source movie, The Blender Foundation is heading firmly into Pixar territory **BY ROY SPENCER**

Amsterdam's Blender Foundation has been busy, slaving over its new open-source film. *Big Buck Bunny* features the central character of a huge rabbit, loosely based on the oafish everyman roles of John Candy. "He always played a lovable goofy guy with a big heart," says Sacha Goedegebure, who's responsible for story and direction. "But if needed, he could easily put teenagers in the trunk of his car and play golf with their head as a target, like in *Uncle Buck*. It's that kind of contrast I wanted to give the main character and put into the story – and then exaggerate it."

Codenamed 'Peach' during production, the movie is pure revenge fantasy: "A big rabbit is being bullied by three rodents," says Goedegebure. "When they take it too far, he comes up with a plan to get even. It's packed [with so many elements], with a lot of contrast with characters, mood and story, that it just becomes silly."

The style of *Big Buck Bunny* is miles away from the team's first open-source feature. *Elephants Dream* had characters that were more scary and bald than funny and furry. "We are trying to aim for a wider audience this time," says Goedegebure. "Young and old, boys and girls. There are a few moments in the movie that might be a bit too much, or too cruel, for very young children, but nothing that will damage their fragile little minds... I hope."

Besides the odd brain-warping and subversive element, *Big Buck Bunny* is, on the whole, a more mainstream movie than its defiantly arthouse predecessor. "Studios like Pixar have proven many times that a 'cute' style can still reach both a young and old audience," says Goedegebure. "From the perspective of [the Foundation's open-source 3D application] *Blender* and its development, it's pretty clear that we need to show what else the software is capable of. Making something completely different from *Elephants Dream* was pretty obvious."

A HERD OF DVDS

The production budget is similar to that of *Elephants Dream*, clocking in at roughly €150,000. "This is excluding sponsoring 'in kind', for example for the rendering, or for music and sound," says Foundation chairman and lead *Blender* developer Ton Roosendaal. "For me personally, the main difference between the two projects is the fact we do this as an independent production company now. Previously, almost all of the production back office was organised by our partner, the Netherlands Media Art Institute. Setting up the Blender Institute and turning it into a working studio was a lot of extra work. The next projects will benefit from that a lot, though."

Elephants Dream clocked up 2,800 DVD sales. Roosendaal says that he stopped counting the downloads of the movie after half a
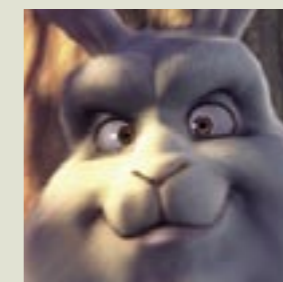
million. Although he has faith that *Big Buck Bunny* will surpass the its predecessor's commercial and critical success, Roosendaal is hoping this project will mimic the way the first movie placed *Blender* in a no-compromise production environment. "Perhaps the biggest success of *Elephants Dream* was that it proved to be an efficient development model for improving *Blender* as an application," he says. "It put artists together with an ambitious content target, which helped us to find the focus to get the technology and tools coded. We want to copy that model several times in the next few years, each time centred around specific aspects of CG creation."

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All the improvements this time around will filter down to *Blender 2.46*, an update to the software that has a release target of the end of April and will be bundled on the *Big Buck Bunny* DVD. A key change is the new hair system, part of a broader particle system overhaul in *Blender 2.46*. "There are tools available for combing, growing, shrinking and cutting individual hairs," says technical director Brecht van Lommel. "The grooming typically consists of a few thousand hairs. At render time, millions of child hairs are grown, driven by those manually edited hairs. The hair system can be adjusted with textures or painted vertex weights. For the bunny,

● Showing off *Blender's* new hair system, three rodents aim to make Big Buck miserable. "We use level of detail to automatically reduce the number of child hairs as the characters get further away from the camera," says TD Brecht van Lommel