

AIVFX
(www.aivfx.com)
Toronto, Canada

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Autodesk® Mudbox™
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—Jean Cabrera
Animation Lead
AIVFX

The True Gift

Canada's Authentic Illusion (AIVFX Inc), China's Guangxi Lan Hai Centry Media Ltd and Beijing Da He Jin Bang International Media Ltd collaborate to create *The Birthday Gift* using Autodesk software.



Image courtesy of AIVFX INC.

Summary

It is a tale of thoughtful generosity in the midst of tremendous want; a simple story of the strength of family ties in the face of formidable challenges; and it is the first fully computer-animated film from the People's Republic of China.

The filmmakers situate their story after the Great Proletarian Cultural Revolution, a national program instituted by Chairman Mao Tse-Tung from 1966 to 1976. Designed to curb the influence of capitalism, the Cultural Revolution brought tectonic change to an ancient culture and great economic hardship to the vast Chinese populace.

In a time when China is prospering, *The Birthday Gift*, a mesmerizing 3D animated short film co-created by China's Guangxi Lan Hai Centry Media Ltd and Beijing Da He Jin Bang International Media Ltd, revisits that nation's tumultuous past as personified in a young boy, his grandmother, and a simple shopkeeper. Through innovative use of Autodesk® Maya® software, Autodesk® Mudbox™ software, and Autodesk® 3ds Max® software, AIVFX tells a poignant story of history, heritage, and the human heart.

The Challenge

The production of "*The Birthday Gift*" begins, like the film itself, in China. After hearing the Director and writer, Pan Li's rendition of the story, Production Supervisor and Director Di He believed it was one for the ages and yearned to create an animated film.

"I knew the story had all the right elements for a beautiful film," he says. "Within a couple of months, we had developed a 2D storyboard. 3D animation, however, remains a relatively new discipline in China. That was when we got involved with the talented people in Toronto."

One of those talents was AIVFX's Jean Cabrera, who would serve as animation lead on the project. It quickly became apparent to Cabrera that achieving an appropriate look and feel for the film would require a careful combination of artistic emotion and technological precision.

"Using the 2D storyboard, we had everything translated into English and worked closely with Di and the Chinese team to ensure we understood the story properly," says Cabrera. "Once we understood the depth of generosity in the boy and the shopkeeper, and the unerring kindness in the grandmother, we were about really putting ourselves into those characters. We gave each character a uniquely stylized motion to convey the correct emotion."

As the team worked to translate the 2D cel animation into a fully realized 3D film, however, it became clear that certain elements would be significant challenges to re-create.

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Image courtesy of AIVFX INC.

The Solution

“What we created in 2D often didn’t work in 3D space, particularly when it came to capturing the visual depth of a scene,” says Brock Lafond, modeling supervisor at AIVFX. “We needed to animate our characters to act and respond to a lifelike and evocative 3D environment. The powerful particle system in Autodesk 3ds Max helped us generate terrifically realistic snow, fog, and smoke effects that set the tone for the film. Everything was modeled in 3ds Max. We used the power of Reactor dynamics in 3ds Max to help give each environment a more realistic, yet highly stylized feel. The dynamic environment in 3ds Max enabled me to experiment with and capture elements, then bring them back into the viewport in their preserved states. That was an extremely valuable tool.”

From modeling in 3ds Max, scenes were transferred to Mudbox, where displacement maps and more precise detailing were applied to environments and characters, before being transferred again to Maya, where the team made great use of the mental ray® rendering engine, the Maya Trax nonlinear animation editor, and Maya nCloth.

“Using the Maya Trax nonlinear animation editor helped us create believable blending animations quickly,” says Scott Glynn, animation director on the project. “That saved us a great deal of time, which we could then apply to creating more and more complex animations for the film. Using Maya nCloth was a great experience, and we were able to create fabrics that appeared to be made of very thick, yet flexible, denim. Maya nCloth gave us the flexibility to create believable, dynamic movement in all our characters.”

“All three of the Autodesk software packages were hugely beneficial on this project, not least because they are so easy to learn,” says Cabrera. “All of the systems work seamlessly together, and I was able to teach even relative newcomers to Maya how to use the system in less than a day. They could pick it up that easily.”

The Results

Released in September 2009, *The Birthday Party* has met with positive reaction, both for its moving message, evocative environments, and technological mastery.

“This is definitely not a commercial film,” says Di He emphatically. “More important to us is conveying a sense of Chinese tradition and culture, and putting a more human face on my country. Today’s China is growing more prosperous every day, but some people seem to be forgetting about our history and traditions. And those who forget the past are condemned to repeat it.”

Using the most modern technology, *The Birthday Gift* offers everyone the true gift of past experience.

For more information about Autodesk Media & Entertainment software, visit www.autodesk.com/me.

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