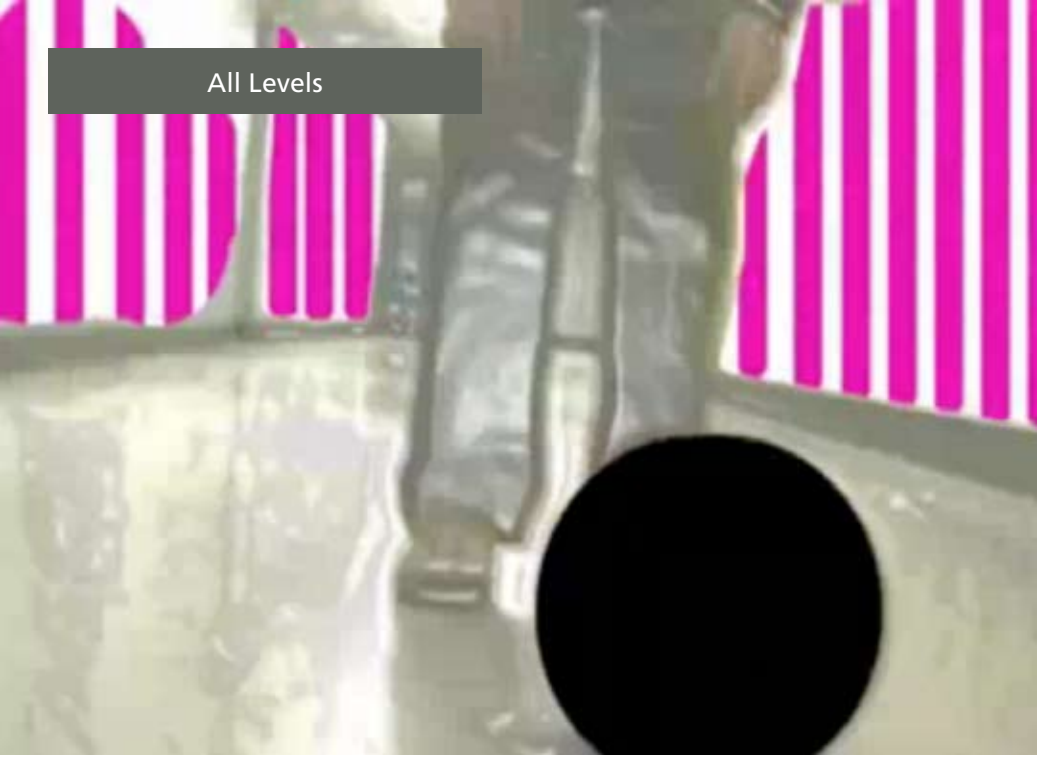
All Levels



THE ROTOBALL Project

David Gran

The Rotoball Project began in 2005 at Huntington High School in New York as a spin-off from a lesson on animation. It quickly got out of control. In the context of watching clips of various forms of animation, our Digital Video II class got caught up in discussing the techniques used in Richard Linklater's 2001 film, *Waking Life*. The subtle expressions and realistic movement of animated characters that fascinated the class were made possible through the process of rotoscoping.

Rotoscoping

Rotoscoping involves a process of animating over a filmed image, using the filmed image as a template to capture realistic movement. Initially developed by Max Fleischer to create realistic movements for his cartoons, the process was adapted by Disney for films like *Snow White* and Ralph Bakshi's animated version of *The Lord of the Rings*.

Students were dying to give rotoscoping a try, but animating anything frame-by-frame can be a time-consuming and labor-intensive process. We needed a simple idea that could be done in a reasonable amount of time. Thus was born the Rotoball Project, which totally failed on that second point.

The Project

The *idea* was simple: students would create a fifteen-second animation of themselves receiving a ball, transforming it, and passing it onto the next person. The animations would all be "spliced" together to create the story of a ball that becomes different things for different people. The results could not have been better. The ball became a fish, a friend, a magic marker (literally magic—it created doorways that opened and flowers that bloomed), a destructive glowing force of darkness, and a skateboard.

The process was not as simple. What was originally intended to be a two-week project dragged into four, and then six. Students became frustrated with the amount of frames they had drawn, and how many more remained. However, students were learning to master the animation program, Adobe Flash. In addition to their frame-by-frame animations, students learned how to do "tweens."

Tweening

Tweened animations allow animators to set the first and last frames and then let the computer figure out what goes in between. Using shape tweens

allowed students to transform the ball into whatever they wanted, and motion tweens allowed them to create moving backgrounds and objects. Despite their frustrations, students were excited to have participated in the project and find out how their segments fit into the bigger picture.

Progression

In its second year, students were keen to add their segments to the ball's story. This time, we started the project early in the year, and it became a background project throughout the year. When students finished early, or were in between projects, they could work on their rotoball project.

Art Ed 2.0

In 2006, I left Huntington High School to teach at the Shanghai American School in China. The video program at Huntington was picked up by Heather Swan, who continued the rotoball project. This was the beginning of the project as an international collaboration. We got the word out about the project on various websites and blogs, but none were so instrumental in building a community of interest around this project as Art Education 2.0 (arted20.ning.com).

In our first year on Art Ed 2.0, we had almost 150 students participating from eleven schools around the world. In 2009, we doubled our numbers to twenty-two schools from seven countries, including Japan, China, Taiwan, the United States, and England. In the three years that the project has run as an international collaboration, we have had participation from almost forty schools in nine countries and more than 400 students.

Current Parameters

This year, we changed the project parameters so that any kind of animation would be accepted. The only rules were that the ball comes in from the left side of the screen, transforms, and exits through the right side. In addition to rotoscoped video, this year the project featured pixilation (live action video shot frame-by-frame), cut paper animations, and three-dimensional animations. Not only did this open up the project to new possibilities, but it also gave various teachers the opportunity to adapt the project to the culture of their classrooms.

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The ball rolls again in 2011. To join the project, see previous editions of the video, or get more information, please visit carrotrevolution.com/rotoball.

David Gran teaches high school art at Shanghai American School in China, Puxi Campus. David.Gran@aschina.org

WEB LINK

carrotrevolution.com/rotoball