



Behind Disney's *Chicken Little*

By Jake Friedman, reporter at large

On December 5th, four people from Disney feature animation came to the Fashion Institute of Technology as sponsored by Siggraph (nyc.siggraph.org). Perhaps in light of critics panning the script of *Chicken Little*, Disney chose to create its own positive press with this seminar. Nonetheless, the visiting department heads each spent a nice chunk of time reviewing techniques on art direction, character animation and special effects animation. Accompanying their lecture was a screen projecting a digital slide show that represented visual guides they give their artists. Their talk was incredibly informative, so for those who could not be there, here's a very brief rundown.

Dan Cooper and Ian Gooding, the two art directors of the films, were the first to get up and speak about what their job entailed. Simply, they said, their two goals were "establishing mood and the look of things." As their style-guide said, "The first task is always to figure out what each scene is about, and find a way to make that subject the center of interest." Cooper and Gooding emphasized that scenes have to read quickly for each shot, so it is essential to limit clutter around the subject and not have it compete for attention. Still images were shown of scenes from classic Disney films of the early '50's, and admitting to the influence of Mary Blair, the designers for *Chicken Little* emphasized one key word: Contrast.

Three types of contrasts were used: warm colors versus cool, monochrome versus polychrome, and saturation versus washed-out color. From the Blair-inspired scenes, the artists saw how boldly old designers darkened the backgrounds -- even for scenes in broad daylight -- in order to make the characters stand out. Take a good look; you'll see that Peter Pan's mermaids and Wonderland's Alice are all well lit, even when their settings are draped in shadow. Interestingly, Cooper and Gooding said they approached *Chicken Little* with the intention of making an entire color script, or a visual reference shot-by-shot with roughly designed, chromatically correct scenes to see how the color would play out. However, this idea was abandoned when scenes were trashed as the script was re-worked. ... Hold that thought as we move to the next speaker.

Mark Austin, supervising animator for Foxy Loxy and Goosey Loosey, said that the unifying animation style was to be "snappy," and "punchy" a la Chuck Jones. "The more quirky," he said, "the more befitting the characters," and no matter how askew the physics, everything had to adhere to them and thereby belong in the same world. For his character animators, Austin had them ask themselves three things: what does the character believe, how do they work individually (independent of outside influence) and given their physical limitations (like flightless wings or stubby fox arms), how do they overcome day-to-day challenges? Once the personality becomes evident, the different characters can react off each other. That, said Austin, is the recipe for humor. Sans screenplay, it's the characters' individualism that provides "comedy for free." Apparently, the classic Disney artists working on an 80-minute feature would storyboard a film to fit in 60 minutes. The time left was saved for character interaction.

Austin then showed a CG Maya model on how the characters like Foxy and Goosey were constructed. The animators used what's called a "broken rig hierarchy," as opposed to the traditional standard CG skeleton that your mama used to make. Instead of having the head parented to the neck, the neck to the spine, etc., these characters' bones were not parented to any part of the rig at all. When an animator would move the "waist" control, only the waist would move, leaving the knees and shoulders resting where they were. This made the characters resemble

silly putty in no time, but having body parts that move independently of each other brought out the “snappy” quality of the animation.

Speaking of which, Foxy’s tail had its own model sheet, dictating its behavior by Foxy’s mood. When Foxy was a good girl, the tail was more snappy; when she was a bad girl, it was more slinky and snake-like. The only body part instructed not to be “snappy” or “punchy” was the eyes. The goal of the eyes was simply to convey emotion and thereby bring the character to life, so realistic animation on the eyes would help sell the believability of the character. As Austin himself said, “The golden word is believability.”

Last on the panel was Dale Mayeda, the special effects (or “tech”) supervisor, who gave a broad description of what was done to create things like corn fields and water splashes on the Maya and Renderman programs. Mayeda insisted that if liquid was to be believed, it had to feel cartoony and not at all biological. For maximum appeal, he had his animators stick to stylized “umbrella splashes.” To make the water spill in the arc of an umbrella, he started out with particles and turned them into ribbons to direct the flow. For big spills, the artists actually drew a two-dimensional guideline on the CG animation. Then they blocked in the modeled water geometry before adding animated displacement maps to create a ripple effect.

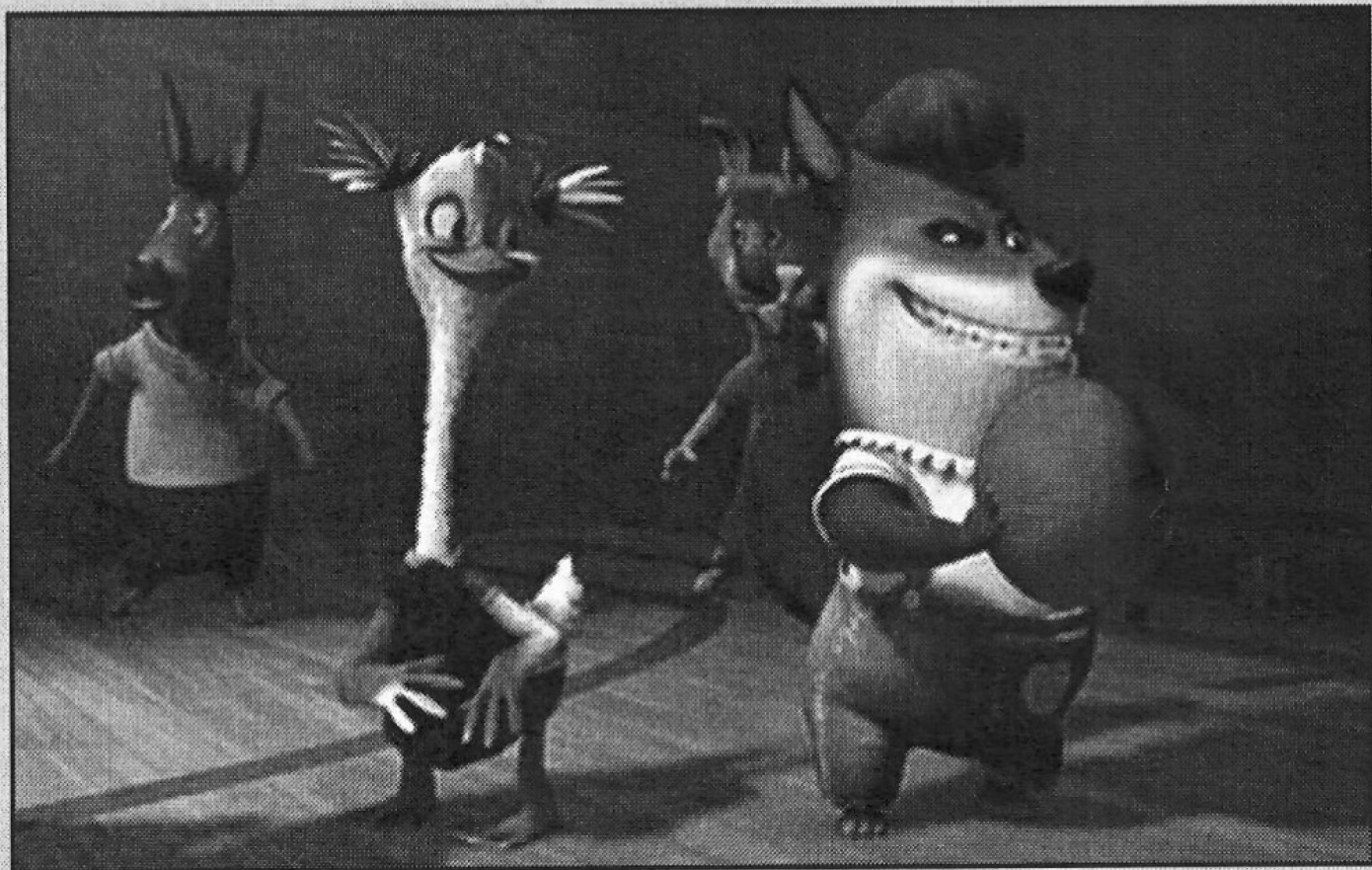
For the corn stalks, Mayeda tagged different types of stalks based on their different functions (to be chopped, at rest, and disturbed by outside forces). For his own team, Mayeda mapped out the field of different corn stalks depending on what was happening where. For instance, the corn at rest was always in the background, and could therefore be rendered at a low resolution. For the “disturbed” corn, clusters were put on the stalks to keyframe certain actions, such as swaying in a specific direction. When our heroes barreled through the stalks forcing the corn to react to their shapes, soft-bodies were applied to drive the cornstalks. When a clump of corn had to be blown to the ground by the influence of atomic-like pressure, the animators used field-dynamics. To create the crop-circle effect for the birds-eye-view shots, proxy painting was used: a control directed a given motion-path over the corn (a design that was drawn on Maya and applied to the corn field), and following it, viola! Crop circles. Each of these different corn systems was scripted together in the end to make a visually seamless cornfield that sways, bends, chops, reshapes, collapses, and forms alien images.

Now, remember that thought you held? Recently I talked with Dan Lund, ex-Disney animator (as of the 2002 layoffs) who can remember seeing a very different film in pre-production. Once upon a time, the angst-ridden girl Chicken Little is taken to Camp Courage to quell her neuroses, and when wolves in sheep’s clothing pass as counselors and threaten the camp, Chicken Little and her imperfect friends must overcome their weaknesses to save the day. Sweet, no?

Mark Austin has this to say about the story of the final film:

“I think the movie turned out better than we all hoped. With story changes and executive notes late, late in the movie, there is a period of disjointedness as those changes are first given placeholders, and later are massaged into the final footage. This can be (and often is) hard to get right, since by its very nature it is ‘an afterthought.’ But as it turned out, with all the sacrifices in finished scenes and trimming and more trimming, the movie runs smoothly and keeps a good pace.”

Perhaps. It’s just a pity that a studio like this – one that entrusts at least four uber-talented artists with a multi-million dollar project – cannot foster the same respect for solid storytelling. Still, it was great hearing the techniques of people at the top of their field, and with folks like that at the helm, Disney is bound to come up with a homerun sometime soon.



A Gripping Scene from Disney's "Chicken Little"
