Cel Animation in Projection Design

Using an old-fashioned technology to create a distinctive look

by Wendall K. Harrington



The new play *Drowning Crow*, produced last season on Broadway by Manhattan Theatre Club, opens with a bang. C-Trip, the Constantine of Regina Taylor's retelling of Chekhov's *The Seagull*, puts a gun into his open mouth and pulls the trigger. The rest of the play takes place in that moment—it's his last moment, first

moment, every moment. Hmmm...how delicious. Okay, forgive me; it's a tragedy but, for a designer it's thrilling with possibility.

Projections are written into Taylor's script, which resets the action of Chekhov's play among a group of African-American artists staying at a summer house on an island off the coast of South Carolina. A previous production in Chicago had them. And any play that takes place inside a character's head can claim the right to need them. For our production, Dave Gallo designed a sleek set of silhouettes all in white, but the dimensions of the Biltmore Theatre did not allow for the use of RP screen, which would have kept the imagery tight, focused, and undisturbed by stage lights. We ended up with two digital video projectors (Christie Digital units from Scharff Weisberg) that we put on the balcony rail. We would double them for brightness or separate them to accommodate the depth-of-field issues created by two separate screen surfaces, a downstage white scrim, and an upstage plastic screen with a black scrim on top of it. We ran the show on the Dataton Watchout system, and used a pair of G4 Macs to keep up with the changes.

That's the tech stuff.

In addition to blowing his brains out, C-Trip performs in a play-within-the play, in a futile attempt to get his mother's attention. It was also conceived as utilizing video to display his talent as a performance artist. Getting inside his head to create the play- within-the-play was compelling enough—but, being able to blow his brains out it, I have to admit, was the reason I took the gig.

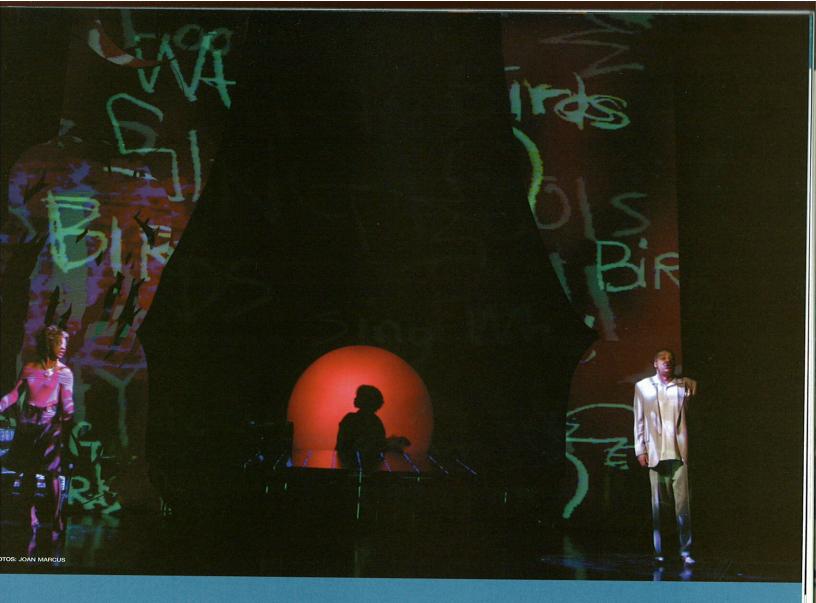
The first issue to settle was the visual style. Early on, I determined that whatever we saw had to feel as though it was something that C-Trip had made himself. How would he express himself?

First, I spoke to a couple of digital animators, the guys who do effects for movies. I realized, after some conversa-

tion and review, that the digital community has a need for realism. They strive to create worlds with algorithms. They change digital dust into blood. There was a lot of talk about how C-Trip's head exploded. What surface did the skull hit? I was more concerned with what was in his head, and getting this made within the confines of the MTC budget. I could only dream of being able to hire one of those guys at their normal rates.

Cel animation has fallen on hard times, and the truth is, there are fewer and fewer people who can actually use a pencil. But as anyone who saw The Triplets of Belleville can attest, the art form is far from dead. I was fortunate to find Nadia Roden, a gifted animator who shares her small Soho loft with an Oxberry camera, which is used to shoot animation sequences, cel by cel. Nadia and I did a lot of talking about the character, imagining in his final scream a sound that would penetrate to his mother. Our medium was photocopies. We shared research—Malcolm X, Tupac Shakur, Jim Crow, Heckle and Jeckle, Charlie Parker, and Josephine Baker. Images of screaming and singing. We talked about of flying crows of transfiguration, and the relationships we had with our own mothers. I encouraged her to be bold and frightening. It had to be fascinating, but terrible, or we would fail. Nadia dropped a bundle at the copier store—Xeroxing images over and over, changing their sizes, and cutting them into moveable pieces. Combining drawings and manipulated copies, she created one sequence where Josephine Baker, dressed as a bird, lays an egg; the egg hatches and out crawls a pickaninny who turns into a man who becomes a bird who flies away.

Hundreds of frames, little cut-outs moved incrementally around a field, shot frame by frame. Nadia showed up at the transfer house with a small reel of 16mm film stock. When was the last time you saw that? The work was so extraordinary and dense-we actually transferred at two separate slower speeds for fear the audience would be incapable of apprehending it. It is safe to assume that the eye can see more things that are 30" wide than 30'. The film was transferred to mini-DV and Paul Vershbow and I edited various segments together, looking for the right length and combination of images. It was literally the first thing in the show, so it carried a lot of dramaturgical freight on its little 90-second back. Fortunately, sound designer Dan Schreier created a soundscape that riffed off the various visual references, supporting the weirdness perfectly and making it seem somehow reasonable. Funny how two



departments working in sync can make such a difference.

From the first, the look of the opening wowed them at tech rehearsal, but other aspects of the play remained difficult to reconcile. Creating a play which takes place inside someone's head as "the bullet caresses my brain" has many challenges. My solution was to run the explosion film in the opening moments, then let it run again from the beginning, this time ticking off slowly, relentlessly, frame by frame until arriving, in Act IV at the precise moment he puts the gun in his mouth again. Wiser heads prevailed, but we saw the sense of using a piece of the film again as a transition between Acts III and IV. With its slowed motion locked to the long shadows of the actors lit from behind the cyc, it provided the ideal bookend I was hoping for.

Making things by hand. It's always surprising—every hand is different, personal. We lose touch with that, no pun intended. We are often so sure that the computer is better, cheaper, and more efficient. Not in this case. The render times and the size of the computer graphics files would have sunk us. Mainly, though, I wanted to feel the possibility of C-Trip's hand in C-Trip's head. It's not that his character couldn't have been a digital artist. It's just my notion that a digital animator is more likely to go postal and kill

My play ain't life
like it's supposed to be
but the visions
in my head
as the bullet enters
my open mouth

me than himself. But a person with restless scissors and the concentration to push tiny pieces of paper a fraction of an inch, click the shutter and do it again, again, again, now that person....maybe I'd better call Nadia Roden, make sure she's okay!

Harrington used cel animation to create projections that evoked a character's suicde in Drowning Crow. **Projections** were also used for the scene in which the character, C-Trip, presented a performance piece, in an attempt to get his mother's attention (above and left).