

# WIRED

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## How Henson Makes Pixels of Puppets



### 1 MOTION CAPTURE

On the Henson studio's soundstage, cameras record the "suit performers" executing characters' body movements (above). The actions are rendered in real time onto an animated background.

### 2 MECHANICAL CONTROL

Meanwhile, puppeteers manipulate each character's facial expressions using a two-handed mechanical remote — one hand for the eyes and eyebrows, the other for the mouth and additional features — and speak the dialog, similar to operating a marionette.

### 3 PREVISUALIZATION

Director Brian Henson sees all the action as a cohesive, animated scene. Once the take is over, the footage is saved, rendered, and sent for touch-ups.

## LIFE AFTER THE MUPPETS

Directors strive to get animated performances from their actors, but Brian Henson, son of Muppetmaster Jim Henson, takes the pursuit literally. For *Frances*, his upcoming children's show about a family of badgers, he filmed puppet-actors like a live-action, three-camera sitcom and animated them in real time. Unlike a typical animated production — in which voice actors speak their lines and then animators draw to match the dialog — Henson did both simultaneously using Jim Henson Company's new digital performance system. This real-time 3-D animation process is quicker than other forms of CG animation and, Henson says, produces much livelier performances than the walking lobotomies in many CG shows. "Often the very best stuff happens almost accidentally as a dynamic of the on-set process," Henson explains. "With our approach, that Muppet spontaneity comes back into animated characters." — **Tim Grierson**