

NEW MEDIA

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CHILD WELFARE AGENCIES CAN RELAX. THOSE SCREAMING NEWBORNS SEEN ON *ER* AREN'T BEING MALTREATED — THEY'RE NOT EVEN REAL. They're animatronic creatures, distant and much more sophisticated cousins of Disneyland's robotic Abe Lincoln, who first wooed audiences in the 1960s.

While computer-generated figures have become common in television and film production, there are times when only a practical — rather than a digital — object will do.

"When we make a baby for *ER*, we only get one week to construct it," says Andrew Clement, owner of Creative Character Engineering. "If we needed to create a digital one, it could take several man-years of work."



The company's fourteen employees create animatronic babies, creatures, torsos and body parts, as well as computer-based special effects. A former special effects makeup artist for such shows as *Saturday Night Live*, Clement founded the company in the early 1990s. Based in the L.A. suburb of Van Nuys, the firm supplies animatronic babies and other characters to dramas such as *ER*, *NYPD Blue*, *Strong Medicine* and *Law & Order: SVU* as well as comedies like *Malcolm in the Middle*.

Typically, an animatronic infant is powered by six small battery-operated motors, giving the character a fluidity of motion. Movement is controlled by off-the-shelf computers fitted with motion-control boards.



When the script calls for an actor to simply hold a baby, motors are not used. The translucent silicone — used for the skin rather than traditional latex — "is so supple that it imparts a life without

motors," Clement says. In a tight shot, however, facial motors control the mouth and eyes.

In operations, *ER* uses artificial torsos made by Creative Character to illustrate surgical procedures. To create an effective illusion, anatomically accurate torsos and organs are fitted with invisible tubes that fill the cavities with blood-colored fluid.

To make sure that the bodies and body parts replicate the real thing, Clement's employees regularly refer to anatomy books and clippings of photographs that line his office shelves.

"We have a close relationship with *ER*'s medical advisors," he says. They often stop by to examine the company's work, as do reps of medical instrument companies, who check that their tools fit in the bodies. "Doctors tell us that our body parts are exactly like the real thing."

Creative Character rents rather than sells its twenty models of robotic babies, which typically last for about a year. The exception is *ER*, which has a continual need for product.

About 80 percent of the company's work involves creating practical, rather than digital, artificial beings. While it takes longer to create a digital human, much more subtle movements can be achieved through the computer than can be created practically, using even a large number of motors.

"Ideally, people will just ask us to create something," Clement says, "and then we'll figure out how best to do it. I've always been interested in making something that would fool people into thinking it was alive." —Eric Taub