

# Sound, fury reverberate

Plasticene Theater uses noise to look at how we respond to boundaries

By **Nina Metz**  
Special to the Tribune

The next time you walk into a supermarket, consider the technology that operates the automatic doors. Step on the rubberized mat, an unseen pressure sensor sends a signal to a mechanism at the hinge and the door opens reflexively.

For its newest performance piece, "The Perimeter" (opening Thursday), the experimental ensemble known as Plasticene Physical Theater Company explores the creative possibilities that occur when actors activate pressure sensors and infrared sensors — essentially, laser beam tripwires — to trigger sounds and video projections.

"There's a whole history of artists using someone's physicality to trigger sounds," says Eric Leonardson who, along with Robb Drinkwater, is responsible for the show's sound design. "[The musician] John Cage and [the artist] Marcel Duchamp did this thing where they were playing chess and the board was wired so that whenever someone moved a chess piece, it would trip an electrical circuit and a corresponding sound."

Leonardson says adapting the idea to theater "has been on my drawing board in an embryonic phase for a while. And I came to the conclusion that I didn't have enough experience with the technology, so I asked Robb to come on board, and he has actually built all the sensors we're using."

During a recent rehearsal, Drinkwater popped open the back of one of his homemade step sensors to reveal a surprisingly simple gadget: a rectangular piece of conductive foam, two spring coils and a length of copper wire. "The technology is incredibly cheap — 5- and 10-cent pieces," director Sharon Göpfert says.

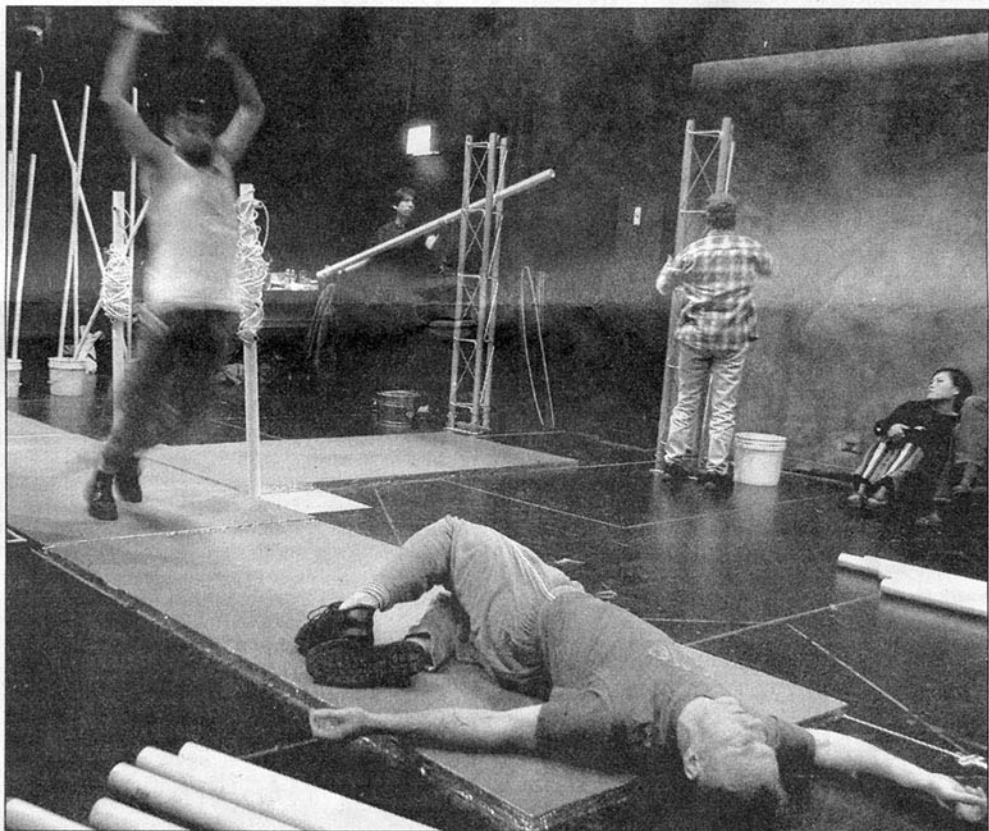
For the new show, Göpfert and her cast are focusing on an issues relating to centralized power and how it can affect people on the edges and fringes — the so-called perimeter — and the role of technology in this equation.

The ensemble was influenced by, among other things, the 1971 Stanford Prison Experiment. In that notorious psychology study, the participants (college students) who were assigned as "guards" subjected their "prisoners" to a series of humiliations and abuses.

At its core, the Plasticene show deals with the issue of boundaries — territorial, moral or otherwise — and what kind of stimulus might prompt a person to cross those borders. As interpreted by Göpfert and her ensemble, the problem is treated as an abstraction. But the technological cause-and-effect aspect is spelled out clearly.

"We're going to have a game in the beginning," Göpfert says, "so that people understand that when an actor steps on one of the floor panels [where the pressure sensors are located], it's going to trigger a piece of audio." And, Drinkwater explains, "one sensor can be triggering a sound while another sensor might be affecting the pitch of that sound."

The sounds themselves have an otherworldly, synthetic quality that is hard to identify. Some bring to mind an Australian didgeridoo, an effect Leonardson achieved by recording the



Tribune photos by Phil Velasquez

The Plasticene Physical Theater Company is exploring the creative possibilities in sound triggered by the movements of actors, such as Mark Comiskey (left) and Brian Shaw.

## The Springboard: 'So rich, so strange'

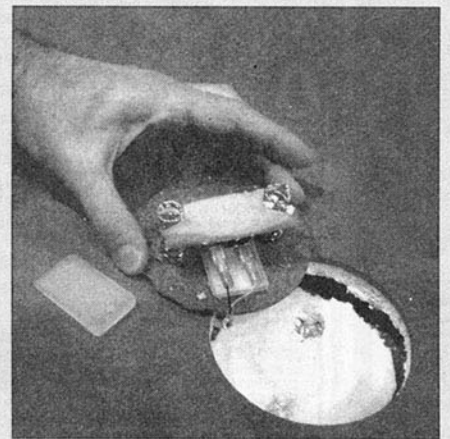
About 10 years ago, the composer and Plasticene co-founder **Eric Leonardson** invented an "electro-acoustic percussion instrument" made from found objects.

The Springboard — a wooden board, some springs and a contact microphone — is bolted to an old metal walker Leonardson found in a thrift store. "You ever bump into a garage door, with those big, giant coil springs? That's the kind of eerie sound the Springboard makes. It's big and so rich, so strange."

Unlike traditional melodic instruments, "sometimes the Springboard conforms to notes, sometimes it doesn't. There are these everyday, inharmonic sounds that we tend to think of as noises. But really, they're just complex sounds, and it doesn't make them any less musical just because they don't form a chord."

Leonardson plays the Springboard using cello bows (stroked across the coil springs) for a sustained sound. Sometimes he'll attach large rubber bands across the instrument and use chopsticks to play the rubber "strings."

"The idea of patenting or trademarking



Eric Leonardson's Springboard, an "electro-acoustic percussion" invention made of wood, springs and a microphone.

this instrument doesn't sit well with me," he says. "I think it would be great if people realized that they can make one of these themselves."

voice of an actor as he spoke into one end of a long PVC pipe.

A rumbling, underwater whooshing sound was created when Leonardson recorded the sound of plastic buckets being dragged across a concrete floor. An actor hitting the end of a PVC pipe generated a sound similar to the thump of a bass guitar. Leonardson then took these raw audio samples, slowed them down and added reverb effects.

Other sensors located around the performance space will trigger recorded video — designed by Stephan Mazurek — and live surveil-

lance cameras.

"I've been thinking a lot about security and interrogation and crossing borders," Göpfert says.

And it would appear Plasticene has chosen a design concept that fits with these issues. "Remember," Leonardson says, "all this sensor technology was developed, in large part, by the military."

"The Perimeter" runs Thursday through Nov. 21 at the Viaduct Theatre, 3111 N. Western Ave. Tickets: \$15-\$20; 312-409-0400.