

BY BEAN

Techno-Taiko with a Twist

MAKING THE PILGRIMAGE FROM acoustic to electronic instrumentation is a journey not every musician is prepared to take. For those who do, there is a chance some may have disappointing encounters with MIDI controllers along the way. Of course, if we change the standards by which we

judge the world of MIDI gadgets, reality might not be such a slap in the face. Once we accept the fact that MIDI controllers are a breed apart, we can breathe new life into the implementation of our musical compositions.

After nearly a decade of building electronic MIDI controller instruments with my band D'CüCKOO—including 5-foot glowing marimbas, turtle drums, foot triggers, and bamboo stick triggers called D'Koostix—the time was ripe for a fresh addition. An introduction to Japanese taiko drumming, with its graceful martial arts drumming movement, inspired me to build giant MIDI controllers.

Taiko means "big drum" in Japanese. The impressive technical and physical maneuvers of taiko drummers, combined with the explosive timbre of their colossal drums, were all it took to get my brain stimulated with building custom electronic taiko triggers.

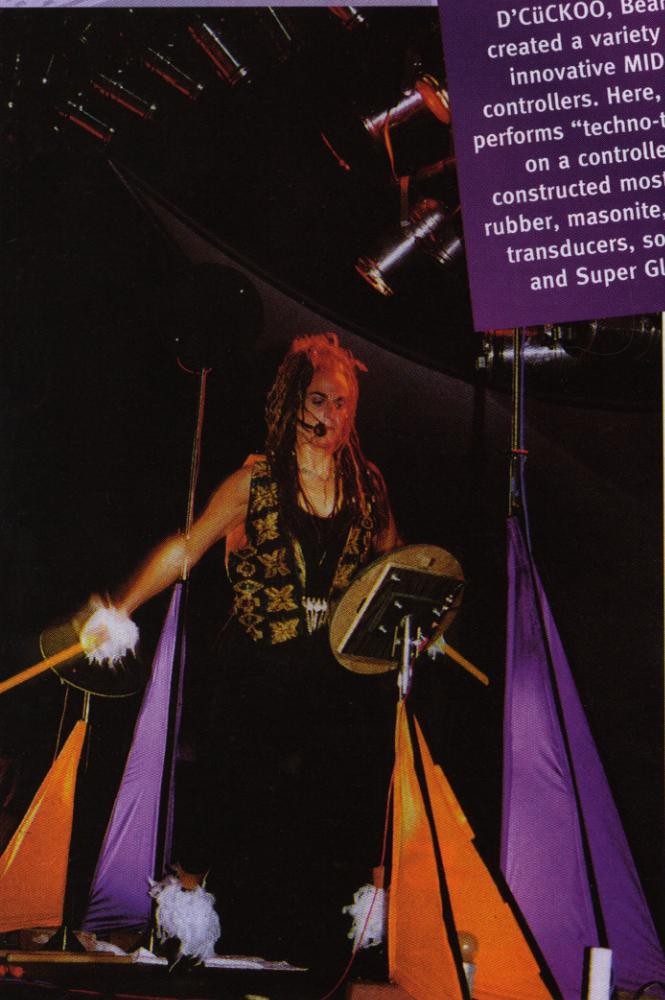
Techno scavengers on the loose. The first step was to call in Janet Koike, former choreographer and drummer with San Jose Taiko and cofounder of Rhythmix, a percussion trio that specializes in world-drumming programs for young people. Koike has been fraying the edges of "traditional" taiko drumming for years, developing her dynamic playing style. Because she is not fond of things that need to be plugged in to be played, it took a bit of arm twisting to get her interested in a "techno-taiko" project. Fortunately, the lure of being able to trigger melodies from custom taiko devices was stronger than Koike's passive resistance to electronic instruments.

We amassed a pile of rubber, masonite, piezo transducers, solder, and Super Glue at D'CüCKOO's studio and got to work. Before too long, we had working prototypes that looked something like skeletal creatures: the "heads" were 13-inch trigger pads mounted on triangular steel stands that expanded from approximately four to six feet high.

In addition to building controllers with highly sensitive trigger pads, it was necessary to design the stands with adjustable height and angle allowances to integrate the executions of taiko form. We made three custom setups, each with two 4-foot and two 6-foot adjustable stands, and then set about composing and choreographing our movements to make the performance look as interesting as we hoped it would sound.

Tweaking the triggers. Each trigger's parameters were programmed individually to take into account the range of samples being deployed and each person's playing style. Although the pads were all made of the same material and were based on the same design, the

As a member of D'CüCKOO, Bean created a variety of innovative MIDI controllers. Here, she performs "techno-taiko" on a controller constructed mostly of rubber, masonite, piezo transducers, solder, and Super Glue.



sensitivity of each trigger's input was slightly different.

We found that the steel bases weren't heavy enough to stop the stands from vibrating when the pads were struck, so we experimented with Velocity curves, eliminating double triggering, and fiddled with gain adjustments. Luckily, crosstalk did not present much of a problem, and it was an easy fix to add more weight to the stands.

Going public. The band was asked to participate in two unusual events that would highlight the percussive possibilities of these new instruments. One project was a collaboration with the folks at SeaWorld and the Cleveland Bicentennial Commission as part of a celebration to mark the city's 200th birthday. We jumped at the opportunity to drum like mad women on a floating stage, sending fireworks high into the sky via MIDI information from our taiko triggers in front of half of a million people. The second proposal was an AIDS fundraiser in collaboration with Cirque du Soleil's choreographer, Debra Brown, and former Cirque members known as Apogee. Not only would we get to debut the instruments for a righteous cause but we'd have acrobats flying over our heads in the process!

For the critical sound design, Candice Pacheco, known as the Duchess of Tweak, coordinated the sampling of everything from raw, unadulterated sounds of real taiko drums to deconstructed snippets of Mahler's Eighth Symphony. Layering the taiko drum sounds with a cross-cultural fertilization of toms, timpani, and African drums boosted the overall sonic range to match the powerful movements associated with each strike of the trigger pads. A variety of highly processed wave sequences, quasi-industrial samples, and pentatonic scales thrown into the mix inspired new explorations of musicality and choreography. We were excited by the creative process that evolved as our physical approach to our instruments changed.

Coda. If you want to develop your own alternative approach to using controllers, try hooking up an Alesis D4 or other drum module to some drum pads or customize your own. Rather than expressively twisting knobs, pressing keys, and manipulating mod wheels, experiment with configurations of your setup that physically require a different way of playing than you're used to and see what develops. You just might find yourself feeling trigger happy and making controllers of your own. ◆