MIT exhibits let the body hum in a vocal meditation

Composer-inventor Tod Machover has an accompanying work in the exhibit.

By Cate McQuaid | GLOBE CORRESPONDENT  NOVEMBER 06, 2014

Hum, and sound buzzes through your lips. Sing, and it vibrates through your head and body.
Sing at “Vocal Vibrations,” the musical installation and inaugural exhibit at Le Laboratoire Cambridge, a new art and design center, and those vibrations will thrum through a round device you hold in your hands, called an oRb. More than that, as you vary your tone, your pitch, and your timbre, those vibrations will alter, skitter, and slide up and down the oRb, just as they do in your own body.

“Vocal Vibrations” showcases works by composer and inventor Tod Machover and designer and architect Neri Oxman, professors at the MIT Media Lab. In this musical installation, you can sit in an area called the Chapel, and listen to a vocal composition by Machover piped through 10 speakers. It sounds like contemporary sacred music, layered and haunting. Guides in the installation will encourage you to put headphones on and sing — nothing fancy, just a note, and quietly to yourself, if you like.

From there, you proceed through a spiraling hallway veiled in white translucent fabric to the Cocoon. It’s a more private area, where only one person, relaxed in a recliner and equipped with headphones and a microphone, can sing along with a second, similar Machover piece, and “listen” to your voice pulsing through the oRb.

“We’re used to going into spaces where you’re blasted by music,” says Machover. “I was interested in a space where the music and the environment is very soft. To allow the general public to be directly involved in making music.”

**Vocal Vibrations**

Le Laboratoire Cambridge, 650 East Kendall St., Cambridge 617-262-4969.  
http://www.lelaboratoirecambridge.com

**Closing date:** through March 22
Machover was curious about the health implications of people controlling vibrations in their own bodies. He consulted with the Venerable Tenzin Priyadarshi, a Buddhist monk and founder and director of the Dalai Lama Center for Ethics and Transformative Values at MIT.

“I realized this had to do with inventing a new kind of meditation,” says Machover. He asked Priyadarshi whether traditional chanting meditations had been studied scientifically. According to Priyadarshi, Machover says, the scientific evidence is slight.

Singing’s potential to have healing effects, however, is within the realm of possibility. Rebecca Kleinberger, one of Machover’s research assistants, recently completed a master’s thesis at MIT on using the voice as a tool for self-reflection. In it, she writes that vibration therapies in the human vocal range have effects on chronic pain, tooth pain, circulation, and more.

David Edwards, founder of Le Laboratoire Cambridge (and the original Le Lab in Paris in 2007), sees “Vocal Vibrations” as an experiment. “Vibrations have a lot of impact on cellular life, on cellular disease, on cartilage,” he says. “So presumably, while health influences voice, voice probably influences health.”

The music, in recordings by the Blue Heron choir and soprano Sara Heaton, blends elements of early Renaissance music and Tuvan throat singing. Always, there’s a D note to anchor a listener, and that D — a pitch easily accessible to just about any voice — is where Machover invites singers to enter.

“If it’s low in your range, the lower you go, the more your body vibrates,” he says.

Less an art installation than a means of self-reflection through sound, “Vocal Vibrations” aims to help visitors heighten perceptions of vibration in their bodies.

But then there’s Oxman’s Gemini chaise, which sits on a plinth in the Chapel. It’s a sight to behold.

The shell, which scoops above the head of its occupant, is crafted from milled wood. The upholstery — if it’s fair to call it that — is made with a 3-D printer, using 44 materials in a variety of combinations of softness, opacity, and color. It looks almost reptilian, like a skin of glowing nodules of different sizes, sweeping from orange to yellow.
Edwards says the MIT team originally set out to make a chair that would resound with your voice, as the oRb does. But hands are more sensitive to delicate quivers and shimmies than other parts of the body. So Oxman went in the opposite direction, working with materials that absorb sound.

“It’s a womblike environment that would hold your body and your voice, and quiet the thinking mind,” says Oxman.

Unfortunately, sitting in the chaise is forbidden. It’s one of a kind, and art collectors are showing interest. “Ideally, we’ll find a manufacturer willing to invest to make many copies of the chaise for the public,” says Oxman.

For the moment, it sits on its platform, looking like an altar at which visitors might worship from their perches on the floor.

Ideally, “Vocal Vibrations” would have the Gemini chaise set up in the Cocoon, so visitors could recline in it as they listen, sing along with the voices in their headphones, and play with their own internal reverberations. Activities in the Cocoon are visible from the Chapel; the chaise would heighten a singer’s sense of privacy.

On the other hand, Machover’s compositions can be downloaded for a small fee, and the oRb can be ordered at Le Lab’s Café ArtScience for $300. If you’re the shy type.

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