



Composers Inside Electronics performing David Tudor's *Rainforest IV* (1973), The Kitchen, New York, 2007. Photo: Stephen Vitiello.

FOR ITS TWO PERFORMANCES of postwar avant-gardist David Tudor's *Rainforest IV* last fall at The Kitchen in New York, the group Composers Inside Electronics suspended a single wire object in the passageway between lobby and theater. Passing under this birdcagelike construction, entrants heard a burst of electronic noise—a jolt announcing entrance into a space where ears, rather than eyes, would better guide one's path.

Indeed, *Rainforest IV* is an exercise in audio wandering—navigating a thicket of objects, each of which, on closer examination, reveals itself to be resonating with sound. A sheet of metal, a block of wood, bamboo sticks, PVC pipe, household objects from pans to toilet floats—all resonate to some degree, and in this work, all resonate sufficiently to register with our senses. Some signals require touch as well as hearing, their vibrations perceptible only when in contact with our skin and bones. At these moments, our bodies too reveal themselves as resonators, joining with the objects, and with the other participants in the room, in what composer Gordon Mumma once described as the “ecologically balanced sound system” of *Rainforest*.

The composition exists in four distinct (and numbered) versions, and perhaps it is this idea of mutual resonance that unites them. The original piece was created in 1968 to accompany Merce Cunningham's dance of the same name—a performance many art audiences know from photographs of the set, which featured Andy Warhol's floating *Silver Clouds*, 1966. This first *Rainforest* was one of Tudor's early “input-free” creations, in which a circuit designed for feedback begins to generate its own signals without any outside source. In this instance, Tudor sent the resulting sounds out to various objects (the score calls for eight), on which he placed contact microphones, so that they too became part of the feedback circuit. A fascinating recording exists of this version, as realized by Tudor and Mumma in the orchestra pit during a Cunningham company performance in Rio de Janeiro that year. At times it is so quiet, the sounds of the dancers' feet are audible above the music. This first *Rainforest* is a shuffling, knocking, rattling world of half-heard electronic creatures, somewhere out there in the dark.

By 1969, Tudor had developed *Rainforest* into a work that he saw fit to perform in concert, independent of the Cunningham dance. He added recorded

sounds of insects and birds to the previously designed self-generated inputs. Oddly, the result—as documented in a recording of a Tudor/Mumma concert at Cornell University—was a more industrial-sounding set of noises. Rhythmic repetitions make for a metallic forest of sound, filled with squeaks and brittle bursts more reminiscent of a city street than of a wood. Subsequent versions of *Rainforest* added further possible inputs, incorporating the voice, notably John Cage's—version three was a simultaneous performance with Cage's Thoreau-inspired composition *Mureau* (1970).

In 1973, Tudor converted *Rainforest* into a collaborative piece, *Rainforest IV*—a final step, one might say, in opening the piece up to the greatest number of possible inputs. “Very little instruction is necessary for the piece,” he explained in a 1988 interview. “It can be a large group piece actually, any number of people can participate in it. It's important that each person makes their own sculpture, decides how to program it, and performs it themselves. . . . I've found it to be almost self-teaching because you discover how to program the devices by seeing what they like to accept.” This openness was characteristic of Tudor; it is representative of the aspect of his thought that once led Cage to credit him with having “invited the whole thing of indeterminacy.” And it is the type of thinking that inspired the participants in a *Rainforest* workshop Tudor was conducting at the time to form the group Composers Inside Electronics, which continues to perform the piece today.

While Tudor, who died in 1996, may have reached the end of the development of *Rainforest's* composition in 1973, the development of its performances continues. At The Kitchen in 2007, where it was presented in conjunction with the exhibition “Between Thought and Sound: Graphic Notation in Contemporary Music,” nearly all the participating composers (original CIE members John Driscoll and Phil Edelstein as well as “special guests” Ian Driscoll, Matt Rogalsky, and Stephen Vitiello) now had iPods at their sides—Tudor's tape and voice inputs had been supplanted by MP3 playlists. But if the iPods jolted this performance into the present, the audience's reaction was a throwback; the curiosity, playfulness, and unguarded behavior in the room felt like a historical reenactment of a scene from the early 1970s (in fact, the work was last performed at The Kitchen in 1975). After all, *Rainforest IV* is a reversal of our contemporary aural anomie. In place of iPods wired to individual resonating heads, participants in the event at The Kitchen found themselves wired together by these resonating objects in a communal space. As the hours-long performance unfolded, people smiled, laughed, and talked, both to one another and to the musicians. The group succeeded in achieving what must have been David Tudor's ultimate compositional goal in *Rainforest*: a forest of people, listening carefully and joyfully to the world around them . . . and thus to one another. □

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