

The Pendulum Choir uses hydraulic pistons to sway with the music

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Nine singers fixed rigidly to platforms, each mounted on two hydraulic pistons and leaning at 45 degrees in opposing directions, the Pendulum Choir prepares to perform. The result of three years of development, the choir is the work of André and Michel Décosterd. Since 1997, the Swiss brothers have worked under the name Cod.Act (<http://codact.ch>), creating artistic projects which combine the former's background in electronic music and the latter's in engineering.

"Up to now, we've always used sensors to detect movements and used the result to control the sound," says André. "The idea behind the Pendulum Choir was to find a direct physical relationship between sound and movement, where the bodies of the singers replace the sensors. We also wanted the parameters of speed, acceleration and movement to physically influence the voices of the singers."

The finished machinery was built after the brothers created several prototypes, in order "to optimise the movements and their fluidity", according to André. The piece itself is intended to represent breathing. The composition uses this theme to depict the transition between life and death, the final note characterising the last breath. However, constructing the narrative was not the most challenging part of the composition, says André.

"It took a long time to complete because when I was writing this piece, it was essential to keep in mind that the choir would not be conducted, and that the singers would not see each other very well," he explains. "Above all, I needed to keep in mind the possible effects of the movements on the vocal capacity of the singers."

The Pendulum Choir's next performance is at the Jardins Musicaux festival in Cernier, Switzerland, on 25 August



The singers' platforms are computer-controlled and pre-programmed to move in sync with their voices *Xavier Voirol*