## Sisters

for two dancers and computer (1998) Music and programming by Wayne Siegel Choreography by Marie Brolin-Tani

Pernille Fynne and Sophie Konning performing Sisters

see video here: <a href="http://vimeo.com/13756682">http://vimeo.com/13756682</a>



Sisters is a music composition for two dancers and interactive computer music system. Both dancers wear a DIEM Digital Dance Interface, a hardware interface developed especially for interactive dance by Wayne Siegel and Jens Jacobsen at DIEM as part of a research project. The system measures the angles of various limbs on a dancer's body and converts this data to standard MIDI controller values. The computer uses the data to control synthesis parameters. Software was designed by the composer using the MAX MSP digital synthesis programming environment. About fifty sound files are contained in the computer's RAM and these sound files are played back and altered in real time using comb filter and resonance filter algorithms. The dancers control playback and filter parameters in various ways during the course of the piece, but there are no prerecorded sequences or tracks. All of the sounds heard in the piece are produced as a direct reaction to the dancer's movements.

Each dancers controls four different sounds with her elbows and knees at any given time. In some cases, the samples are looped and activity levels of the elbows and knees are used to increases the volumes of the sounds: the more the dancer moves, the more sound is heard. In other cases the elbows and knees are used to control "scrub" functions in much the same way that a tape can be slowly scrubbed forward and backward over a tape head to create fast and slow playback both forward and backward. For example, when a dancer moves her arm from straight to bent a short sample will be played back. When the dancer moves the same elbow from the bent position to straight, the same sound will be played back backwards. Which sounds will be controlled by the dancers elbows and knees and how they are controlled changes during the course of the piece. In addition, the sounds are processed in real time by the computer to create tonal material out of recorded noise-like sounds such as water, fire, wind, breaking stones and wood, scraping gravel, etc.

The choreography for Sisters was created by Marie Brolin-Tani first, and the music was created to fit the choreography. Marie Brolin-Tani's idea for the choreography was a work based on the life of the Mexican artist Frida Kahlo. The two dancers represent two apects of the artist, which might be described as the contrast between the masculine and the feminine, or between physcial beauty and a sick and fragile body dependent on "machines" to keep it alive. One of the costumes is inspired by the corsette worn by Frida Kahlo, and the wires of the interface are exagerated and made visible to the audience. The other costume is more feminine and the interface is hidden. The composer's task was to create software that would produce sounds to accompany the choreography. When rehearsals began, both the music and the choreography were gradually developed and changed. Sisters was awarded the Finalist Prize at the 1999 International Bourges Festival.