Jonathan Impett: *Spoken* – metatrumpet and computers

Bill Viola observed some time ago that wave phenomena provide the natural models for time-based art; Tim Ingold points out that sound is a medium of illumination rather than a series of objects. In the computer-extended metatrumpet, sensors and internal microphones are used to fold its physical and sonic behaviours back into the compositional process. In *Spoken*, the uncertain moment of emission of a sound - its coming-into-resonance or "speaking" – is the source of energy for patterns of reflection, refraction, diffraction, interference and resonance. The dynamics and architecture of this space self-organise using data from the physical actions on the instrument and the sound of the system itself. Wave simulation and acoustic feedback relate the unfolding composition to the space of its performance. These dynamics are propelled by the interaction of three modes of activity: "sound-space" (the sound in the room), "wave-space" (a virtual wave model) and "symbol-space" (a categorizing, reductive representation). The form of the piece is the product of their mutual non-satisfiability. The piece is a simulation of both an abstract dynamical system and the unfolding physical-sonic reality in its performance: a 'space of possibilities' in Manuel Delanda's terms.