

THRESHOLDS

Transcription of the Documentary

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<http://reverso.org/Umbrales.htm>

Thresholds is a set of interactive dance installations in which the public generates complex visual and sound environments through full body motion. The movement of the public is captured through a video camera and analysed in real time for the production of video, electroacoustics and three dimensional image. Thresholds consist of three different installations that can be presented separately or combined in a variety of different ways. They are derived from the interactive dance performance Morphogenesis in which the dancer generates the environment with his movements.

In the first one, called the dissolution of the multiple body, the life image and voice of the interactors is captured, analysed and transformed in real time through the parameters of their own movement, thus becoming a complex visual and sound composition.

Thresholds explores the nature of the interface: the body is a threshold of light and sound, a threshold of presence and excess, of dissolution and formation; also perhaps a threshold of representation. We no longer have the surface of the screen, the transparent screens and the oblique projections distort the perspective, the total screen fails and the line between spectator and performer has dissolved in different ways. This paradoxical or apparent disembodiment of the interface, the threshold of light, is actually producing an embodiment of space, and redefining embodiment altogether. The spatialised sound merges with the holographic like appearance of the image, projected onto several layers of four to twelve transparent screens.

The visual trail is related to the sound trail in different ways. The environment is thus like a projection of the body, a liquid space of the body, a presence that exceeds the body itself, as a multidimensional sedimentation, a multiple body in constant formation and dissolution.

On every occasion the installation has a different variation of the setup, adapting to different sizes and spaces, as well as variations of the composition. This added to the unpredictable aspects of the interactive, generative composition, and the many levels of contingency involved, makes every different setup entirely unique. The variations in the composition programming that are introduced on each occasion have to do with the interaction design and the visual and sound composition. Different movement parameters are used in different ways, thus proposing different interplays between the users and between these and the environment. The installation could thus be seen as an **instrument** that can be played in different ways, a complex hyperinstrument or body, a metabody; the core

of which might be in the software, in the more subtle levels of technology, but which extends to the hardware, the space and the interactors themselves.

The core of the instrument is composed of three netconnected computers, that analyse the image of the interactors in order to extract the movement parameters, process the image, and process and spatialise the sound in four independent channels.

The voice of the interactors is captured through a wireless microphone and processed. The granulation, delay and sampling of the voice generates an everchanging sound trail, a fragmented chorus of dissolving voices, that are sometimes recognisable and sometimes not. This threshold of concreteness is the territory explored in the installation.

The public is interactor and performer, but also the raw material of the image and the sound he transforms. There are different levels of interactivity. The system analyses 14 different parameters of the movement of the interactors. These are mapped in a variety of different ways to the evolving visual and sound composition.

The everchanging forms of the video image produce an everchanging abstract film. Every five seconds the computer registers an image. This means that in a normal exhibition venue some 8.000 images are generated throughout a ten hour session. The following images were produced between 11 and 12 in the morning on monday 29th november 2004 in the exhibition in Estampa, in Madrid. They are in fact a record of the day's activity but take on a life of their own, either as a film or separately in the form of small digital prints. Some of the are shown on the internet, where the person who produced the could recognise them. Some, like these, are printed out and exhibited during the exhibition.

In the second installation, called Reverse Landscapes, prerecorded abstract films and "body landscapes", so called *microdances* are interactively processed, together with prerecorded body sounds, as a kind of interactive and expanded cinema.

In the third installation, called the dissolution of the body-space three dimensional abstract structures are generated and transformed interactively, like organic spaces, body fragments perhaps, that evolve into a liquid generative architecture, where space and form dissolve in different ways.

The different installations can be presented separately or in various combinations. The installation can be setup in exhibition venues or in public open spaces. In the future several developments are contemplated, such as the telematic connection of several installations and the use of onbody sensors, biofeedback and tactile feedback devices.