



swarm presents individuals with an evolving audio visual environment in which the audience themselves are drawn in as fragments in an ever changing mediascape.

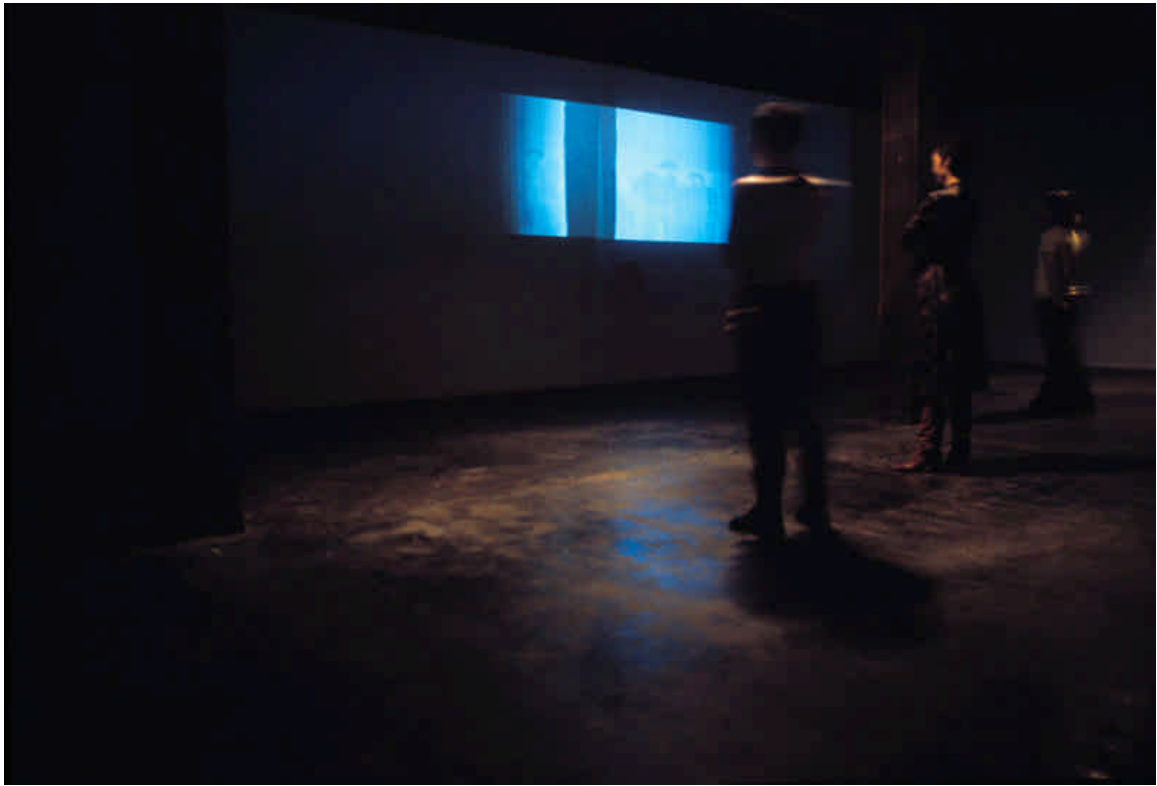
The work focuses on the dynamics of the live surrounding environment as a basis for subsequent acquisition and manipulation of data. Individuals are tracked as they move within the space and are subsequently sucked into the image plane.

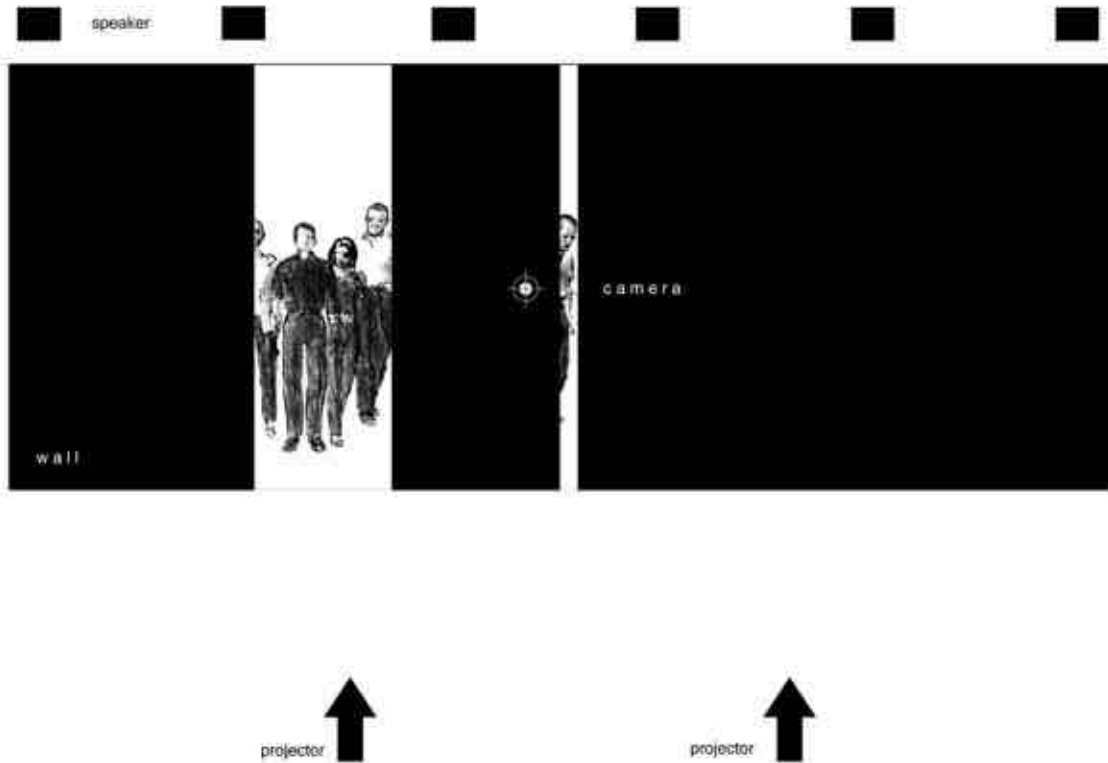
The behavior of the increasing database of phantoms shifts from swarms of activity to lingering solitary movements. Sounds swell and recede in unison with the ebb and flow of the imagescape.

Although individuals only inhabit the physical space for a transient period, their presence echo's temporally as they re-appear in the environment as neurotic shifting fragments in space.

As an individual enters the gallery space they are captured via video and tracked within the environment. If an individual is identified as being present in the space they are captured on video. As the video database grows random fragments are recompiled and rendered in the image plane. Fleeting glimpses are revealed by a shifting window that drifts across the image plane. As this window scans across the length of the projection surface the sound sweeps in unison, synchronized to the image, spatialising and triggering different fragments of audio depending on the revealed location. The dynamically changing width of the window fluidly alters the subtle character of the audio by filtering the sound and manipulating the duration of the audio fragments triggered.







The diagram above shows the basic technical setup that is installed in the public space. The combined surface of the 2 video projections should be 8 meters or greater. The speaker array is mounted in a linear manner above the projection surface. The sub speakers are concealed behind the wall or some other suitable location. The camera is embedded in the wall and measures approximately 30 mm squared. There should be control over the light intensity in the presentation space.

Technical Requirements

Following are the hardware requirements for a standard presentation. These can be modified depending on resource availability. I can provide the majority of the required equipment if need be. Assistance with computer(s) and data projector(s) would be required. Installation would take on average 2 days depending on the configuration. The primarily installation schedule is taken up by rigging projectors, speakers and mounting/configuring the camera. A installation crew of one or more additional individual(s) will be required.

Computers:

Minimum Computer Requirements:

Apple Dual 1Ghz G4, 1 GB RAM- Image System

Apple Single 500 Mhz G4, 512 MB RAM- Audio System

Computer Monitors x 2 - 15 inch or >

Audio:***Minimum Audio Requirements:***

- 2 X Sub Woofers
- 1 X Active Crossover
- 1 X AudioWerk Audio I/O
- 4 X Monitor Speakers
- 2 X Stereo Power Amplifiers.

Video:

- 1 X Miro DC 30+ Video Card
- 1 X CCTV Video Camera
- 2 X Data Projector (1000 ANSI Lumen or greater)

Other:

- 1 X 100 Mbit 4 Port Network Switch
- 2 X Long VGA cables
- 1 X Long BNC Cable
- 3 X Cat 5 Ethernet Cables
- 8 X Speaker Cables

Technical Description

As the viewer enters the space they are presented with a projection surface comprised of 2 synchronized data projectors configured in a linear manner. Concealed in the projection plane is a video camera. Live video from the environment is split and sent to both the motion tracker computer and the primary video system.

The motion tracking system is responsible for locating inhabitants in the environment in order to identify whether to start the image capture process. In this way the system acquires new image data only when people are present.

This data is transmitted over an ethernet network to the main image presentation system.

If an individual (s) is present in the space the system commences recording video fragments to disk. These fragments are added to an expanding database.

After the recording process takes place the last recorded video is reloaded and rendered to the image plane, whilst dynamically manipulating both the motion and temporal properties of the footage. After the previous recording is loaded a random fragment is subsequently loaded from the database.

The image plane consists of 3 layers of video. The first layer is comprised of the live video input from the environment.

The second layer consists of the last recorded fragment (or a random fragment if nothing has been captured recently) and the third layer consists of a random fragment from the database. The video system shifts between these layers at a rapid rate providing a shimmering ghostly visual aesthetic. By the end of the initial three week presentation of the work, the video system had acquired nearly 5000 human video fragments.

Above these shifting layers of video is a moving mask (or window) that dynamically sweeps along the projection surface only ever revealing discreet portions of the image. The mask shifts in both its linear location and also its width. The location and width of the moving mask are sent over ethernet to the audio system.

The audio system ascertains the location of the window and spatially locates sound across the speaker array, which runs the length of the projection surface. The audio fluidly moves in conjunction with the image mask in several ways. Changes in the width of the mask produces subtle effects on the audio content such a low pass and high pass filtering. For example, if the window increases in size the filter sweeps open in unison with the image. The location and width of the mask are also mapped to a sound file. As the mask sweeps along the wall it revealing people, it also plays fragments of sound in the same location. If the window shrinks in that particular location the loop length of the soundfile being played also diminishes, fragmenting not only the image but also the sonic environment.

This close interaction between sound and image creates a dynamic fluid environment in which subtle changes in one system affect the other....

Further Information:

Artspace, Sydney Swarm Presentation. June 2003

http://www.artspace.org.au/2003/06/Alex_Davies.html

Swarm Site (Video Documentation of Swarm is Available)

<http://schizophrenia.com/installation/swarm/>