

Title: The Theater of Hybrid Automata  
Status: Spring 1991

This installation is an ongoing project which provides a continuously evolving playground populated by various electronic devices. These are able to "respond" to certain communication protocols through microprocessors imbedded in each device. While our ambition is to continuously intercept and exercise a variety of machine to machine and machine to human communications through underlining system of codes, this activity also promises to articulate the possibility of a new aesthetic structuring: the automated theater where an aesthetic/experimental confrontation between a physycal space and its synthetic model can be composed.

"The Theater of Hybrid Automata" is a computer based interactive environment, incorporating video, electronic sounds and robotics under realtime control of voice, music and text tgrough various software programs. The software takes an active responsibility for the management of a robotic camera (on three basic axes), voice recognition box, optical disc, loudspeakers and lights.

Incorporated into installatinn's circular design is a matrix of video monitors as the principal image display. Sound design utilizes "The Cube", a structural frame supporting six loudspeakers which provide positional reference to a microphone mounted on the computerized Pan/Tilt/Rotate video head (robotic camera). The resultant visual and acoustic results are then distributed further: the video signal to the video matrix display and the audio into four outer loudspeakers which provide the overall acoustic environment.

The Theater of Hybrid Automata consist of and operates in two dialectic spaces, the actual and the virtual. The actual is the physical stage which supports the robotic and space calibrating hardware while the virtual is present in the form of data based media.

Acoustic and visual relationships, generated or organized by computer are then placed into the absolute coordinates of the stage whose dimentions are determined by a set of physical visual targets. Once the space is calibrated and mapped into computer memory, each element acquires its virtual/actual space coordinates. Hopefully the viewer can participate in the blurring of distinctions between the actual and the virtual through an extention of the human senses into new perceptional modes latent within the technological resources.

The basic design and the physical outlook of the instalation does not lead to the literary interpretation. There is no singular selection of narrative vectors, no significant moments. The certain effort was made to disconnect the physicality of stage from its well established traditional purpose and thus point towards more

abstract digital space void of meaning, interpretation and iconic artifacts.

The environment will include four different operational modalities:

- 1) Preprogrammed Audio by David Dunn\*
- 2) Preprogrammed Video by Steina\*
- 3) Autonomous interactive and continuous performance
- 4) Scheduled lecture/demonstrations by the authors which will include a display of the environment's interactive behaviour through a short performance.

\*) List of Titles (?)

In Santa Fe, March 18, 1991

Woody Vasulka and David Dunn

Title: **The Theater of Hybrid Automata**

Status: Spring 1991

This installation is an ongoing project which provides a continuously evolving playground populated by various electronic devices. These are able to "respond" to certain communication protocols through microprocessors imbedded in each device. While our ambition is to continuously intercept and exercise a variety of machine to machine and machine to human communications through an underlying system of codes, this activity also promises to articulate the possibility of a new aesthetic structuring: the specification through software design and hardware integration of an automated theater where an aesthetic/experiential confrontation between a physical space and its synthetic model can be composed.

Fundamentally **The Theater of Hybrid Automata** is a computer based interactive environment, incorporating video, electronic sounds and robotics under realtime control of voice, music, and text through various software programs. The software takes an active responsibility for the management of a robotic camera (on three basic axes), voice recognition box, optical disc, loudspeakers and lights.

Incorporated into the installation's circular design is a matrix of video monitors as the principal image display. The sound design utilizes "The Cube", a structural frame supporting six loudspeakers which provide positional reference to a microphone mounted on the computerized Pan/Tilt/Rotate video head (robotic camera). The resultant visual and acoustic results are then distributed further: the video signal to the video matrix display and the audio into four outer loudspeakers which provide the overall acoustic environment.

**The Theater of Hybrid Automata** consists of and operates in two dialectical spaces: the actual and the virtual. The actual is the physical stage which supports the robotic and space calibrating hardware while the virtual is present in the form of data based media.

Acoustic and visual relationships, generated or organized by computer, are then placed into the absolute coordinates of the stage whose dimensions are determined by a set of physical visual targets. Once the space is calibrated and mapped into computer memory, each element acquires its virtual/actual space coordinates. In actuality the viewer may participate in the blurring of distinctions between the actual and the virtual through an extension of the human senses into new perceptual modes latent within the technological resources.

The basic design and physical outlook of the installation does not lead to a literary interpretation. There is no singular selection of narrative vectors or precious moments. An intentional effort was made to disconnect the physicality of the stage from its well established traditional purpose and thus point towards a more abstract digital space void of meaning, interpretation and iconic artifacts.

The environment will include four different operational modalities: