

H.2 Technical Description: Inquiry Theatre Interactive Voice Installation by Stephen Wilson, 1991

The program to control the installation was written by the artist in HyperCard 2.0. This program controls the display of image, the recording and generation of sound, the sensing of viewers, and the interactive voice recognition. The equipment setup consists of a MacII computer connected to various peripherals.

Image Control: The image on the projection screen is a composite of the computer graphics generated by the MacII and video from a computer controlled videodisc player. The videodisc is a custom disc created by the artist. Many of the computer images are processed versions of digitized images from historical sources. The RGB computer output is played through a professional RGB projector such that the image fills the wall in front of viewers. The RasterOps 364 display board allows the video to be part of the computer image by digitizing in real time at 30 frames a second. The relative balance of image between video and computer graphic is dynamically controlled by HyperCard XCMDs from RasterOps and incorporated into the artist's control program. The videodisc is similarly controlled by HyperCard XCMD's adapted from those provided by the Voyager company.

Voice Recognition: Voice recognition is controlled by the Voice Navigator unit from Articulate Systems. This speaker-dependent system requires a viewer to speak words or phrases to be recognized during a training sequence. The program then compares any later spoken word with the templates stored during the training and can be made to seem to understand the spoken command. The artist has adapted HyperCard XCMDs so that this training is poetically incorporated into the normal interactive interchange with viewers. What they say to the computer becomes their control phrases for further interactions.

Sound Recording: Spoken utterances also become part of the on going sound repertoire. The artist has written routines that digitally record the voices of viewers responding to questions about themes of the installation. These are digitized by the Voice Navigator unit and stored on hard disk for the duration of the installation. They become part of the information that subsequent viewers can explore by their own voice.

Viewer Sensing The presence of a viewer is sensed by an analog to digital converter (A/D) reading changes in light levels. The A/D converter is an A-Bus device connected to a HyperBoard microcontroller connected to the Macintosh through the serial port.