In conjunction with its move to new facilities, the IRC has expanded its research efforts in real-time immersive environments and their use by artists and media designers. Professor Alan Price directed the IRC Fellows class in the development of a sound sensitive immersive environment. This was one of two pilot projects for a low-cost flexible CAVE system that can utilize 1-3 stereoscopic screens in a variety of configurations.

**Syrinx: A Sonic Garden** allows the user to act as a “composer of nature.” A computer analyzes the sounds produced by the user and generates a 3D virtual garden of surreal plants in response. Just as in nature, each plant will grow in its own way and no two plants will be exactly alike. The piece mirrors human traits in the way that we try to control nature and make it fit our desires, but when we are neglectful of its needs it deteriorates. The fact that even a slight change in the sound can have a drastic and unpredictable effect on the environment is also similar to the real world, in which we frequently fail to realize how our smallest actions affect nature in significant ways. The piece gives the user a unique opportunity to participate in the decay and regeneration cycles of the virtual environment.

**Syrinx: A Sonic Garden** is an installation utilizing a network of computers in a real-time cluster-based rendering system. Rear projection screens surround the viewer, each displaying a 3D stereo image of the virtual environment. The participant wears a head-tracking device that calculates the orientation and position of the viewer’s perspective point for a realistic immersive experience. Using a flute, or making any sound, the system senses volume and pitch to control the growth of a variety of plant-like forms in an ever-changing environment.

Professor Alan Price and IRC Fellows Ryan Zuber and Chun-Shan Lin presented **Syrinx** at the Utah University Arts and Technology Symposium: Poetic Inquires in Time Space and Motion.

**Production Notes**

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