

## Biographical Sketch: Michael Girard and Susan Amkraut

Michael Girard was born in Los Angeles, California. He studied mathematics and computer science at the University of California and received Bachelor of Science degrees in each field. For his graduate studies, Girard joined the Advanced Computer Center for the Arts and Design at the Ohio State University. Girard's academic studies focused on the problem of attaining expressive motion qualities, particularly with regard to the computer animation and simulation of articulated animals. Aside from the technical problems associated with the complex dynamics and control of movement, Girard is acutely interested in building computational metaphors which capture the tension, grace, weight, and intelligence we perceive in human and animal motion. His Ph.D. dissertation in computer and information science, completed in 1989, is entitled "The Computer Animation of Legged Animals: Simulation, Design, and Control."

Susan Amkraut was born in San Francisco, California. She received a bachelor's degree in fine art from the University of California at Santa Cruz, where she focused on intaglio and lithographic printmaking. When her art studies were finished, she remained at the University of California to complete a bachelor's degree in computer and information science. Amkraut pursued her graduate studies in the computer art program at the Advanced Computing Center for the Arts and Design at the Ohio State University. Drawn by an interest in complex behavioral patterns, she focused her research on the behavioral simulation of flocking motion. Her Master's thesis, completed in 1989, is entitled "FLOCK: A Behavioral Model for Computer Animation."

Susan Amkraut and Michael Girard's collaboration began with "The Hidden Agenda," a computer animation which won second place in the experimental film category of the American Film Institute contest in 1984. Their "Motion Studies," made in 1985 for the Siggraph Film Show, appeared in the Venice Bienalle in 1986. "Eurhythmy," completed in 1989, won many prizes including ones at Ars Electronica in Austria, Imagina in Monaco, the Geneva Film Festival, and Paris Cite.

Amkraut and Girard spent two years as associate professors at the National Institute for Computer Animation (Stichting Computeranimatie) in the Netherlands. There they helped to found an interdisciplinary educational program for the research, development and artistic expression of computer graphics and animation.

In 1991, Amkraut and Girard founded Unreal Pictures in Palo Alto, California. They produced a computer animation for a multimedia event entitled "Memory Palace" which was presented at the Art Futura 1992 festival in Barcelona, Spain. In collaboration with Scott Fisher of Telepresence Research and Fake Space Labs, they created an interactive virtual reality installation called "Menagerie." The installation allowed the viewer to interact with simulated herds of animals and flocks of birds. It was presented within the Revue Virtual series at the Centre Georges Pompidou in Paris in 1993. Unreal Pictures collaborated with Telepresence Research, Magic Box Productions, and Fake Space Labs to create a more elaborate SGI "reality engine" version of "Menagerie" for Siggraph 1994. Unreal Pictures is currently developing a novel approach to 3D character animation.