

# The Hallucinarium : Non-Linear Imagery Creation and Presentation in a Generative Arts Performance

Michael 'Mika' Pontecorvo, Bsc.  
Independent Artist/Musician/Scientist  
San Francisco, California, USA  
mikapontecorvo,edgebuzz.tv  
e-mail: [mika.pontecorvor@gmail.com](mailto:mika.pontecorvor@gmail.com)



## Abstract

In this system, a generative engine manipulates a set of images creating a non-linear visual experience: a representation of machine dreaming. The stimulation provided by this system-induced experience is aimed at the observer's emotive memories.

## Description:

Presented in this sample performance are two main stylistic visual themes:

ONE: *Echo* – a set of images culled from the visual art of Beatriz Sampiano . With a live polytropic performance from members of the Electro-acoustic

---

improvisation ensemble Diaspora Focii Collective.

followed by

TWO: *River of Shadows* – an abstract shadowplay based on images from a set of pencil sketches of Arctic scenes by Kersti Abrams and palimpsestic collages of ink drawings juxtaposing Renaissance artists' work against a contemporary artist's neo-Renaissance pen work of Margret Schoerke. This yields a textural density eliciting the emotive nature of presentation.

(The sonic underpinnings of this piece comprise a complex computer-based electronic process applied to the physical manipulation of a set of seven or eight ocean-washed stones, capturing their surface texture and the chime-like resonance of them striking or scraping against each other during a simple act of picking up and dropping the stones together.)

## Technique/Technical Approach:

A Complex Adaptive Systems (CAS) approach is followed in the technology implementation for this effort, where in a simple set of 2D images serves as the primitives of the Generative Engine system, and a small set of operations for combining (layering) and modifying

(affine transforms) these primitives facilitates the juxtaposition of elements within a set of transparent layers from background 'ground' images to increasingly transparent 'mask' images, forming a gauze-like quality over the overall solid 'Ground' forms.

The Chaotic nature of the motion and geometries of the overlaid primitives is accomplished by utilizing a set of sinusoidal waves of various frequency and amplitude as parameters for the operators, this is a good compromise between random numbers and more predictable regimented values.

**Conclusion:**

One of the most important elements of this system is the 'mind's-eye' of the observer. It is the rapid and chaotic juxtaposition of imagery that works on the viewer's mind to elicit thoughts, memories, and fleeting glimpses of an emotive nature, appending a non-linear narrative quality to the work.