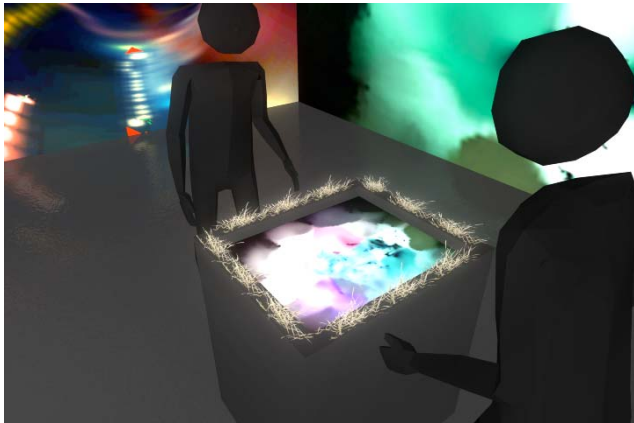


## Artificial Nature as an Infinite Game

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<http://www.mat.ucsb.edu/~wakefield/artificialnature/>

**Abstract:** A virtual embodiment of an auto-creative world: generative, interactive transmodal media art installation bringing forth an ecosystem of creativity through a meshwork of strata (geo-, chemo-, bio-, sono-), re-questioning the meanings and relationships of nature, culture, life and beauty.



You may remember experiences from your childhood, such as playing with your fingers in the flow of a river, or in the path of small marching insects, to alter the emerging patterns.

Such play is a direct interaction with complex systems, provoking deep insights and aesthetically fascinating natural patterns; such ludic investigation may be considered as an infinite game. We approach this subject as cross-disciplinary research through the development of a media-art project: "Artificial Nature."

The project is an audio-visual art installation bringing forth a world of aesthetic play through the embodiment of complex multilayered and inter-modulating systems. The installation consists of a projection of a virtual world, with touch-screen and additional sensor interfaces. The virtual world is a visualization of information flow in open dynamical and dissipative systems, interweaving geological, physico-chemical and biological strata. Within this world, evolutionary developmental ('evo-devo') growth is modeled to evoke truly autopoietic virtual lifeforms.

Spectators can witness, control and create beautiful, complex and generative patterns evolving from the

behaviors of the species, while the organisms in turn interact with their open dynamic environment. As a spectator gives his/her input through the touch screen or other sensors, he/she may change local fields of the environment, landscape or physical laws, and actively observe how the feedback systems produce new behavioural patterns.

Artificial Nature is an evolving research project; each instantiation and installation may offer distinct visual representations of the underlying system.

As an endlessly generative system of abstract images and sound, the locus of artistic authorship (the artist, the participant, the system) is not easy to place; we consider this to be but one aspect of its nature as an infinite game. Our installation explores the numerous layers of this notion, expressing its ludic features and artistic, technical and philosophical potentials.



Images from various instantiations of Artificial Natures as an Infinite Game © Haru Ji & Graham Wakefield, 2007-2008.