

Rebecca Allen

Short Biography

Rebecca Allen is an internationally recognized artist inspired by the aesthetics of motion, the study of perception and behavior and the potential of advanced technology. Her artwork, which spans four decades and takes the form of experimental video, large-scale performances, live simulations and virtual and augmented reality art installations, addresses issues of gender, identity and what it means to be human as technology redefines our sense of reality.

With degrees from Rhode Island School of Design and Massachusetts Institute of Technology, Rebecca moves fluidly between artist studio and research lab, using her research to inform her art. Her early interest in utilizing the computer as an artistic tool led to her pioneering art involving human motion simulation, artificial life algorithms and other generative techniques for art creation. Allen's work is exhibited internationally and is part of the permanent collection of Centre Georges Pompidou, Whitney Museum of American Art and NY Museum of Modern Art.

Artist Statement

I have always worked on notions of the self within computer technologies. The sense of having a self – or self-hood – as being that which is the source of consciousness. The quintessential **that** which encompasses an individual's thoughts and actions. The nature of personhood which endures and unifies consciousness over time.

I see our understanding of the self change with time; sometimes rapidly. My understanding of how to translate this strange language of 0s and 1s into colors and shapes and sounds grew into knowledge about how to shape sensory worlds which tug on feelings. With my early involvement in modelling human motion, artificial intelligence, dynamic artificial life forms, I always tried to keep something palpable in these rather sterile environments, some kind of "humanity"; such as making sure the AI characters had conflicting desires. I have never understood the self as purely abstract or through a philosophy of principles, nor would I want to.

ARTIST STATEMENT *(written 1999 and still holds true)*

Vision

I received the calling in 1973. While struggling for direction and inspiration in art school, two things became clear. My work must move away from static media and become dynamic, involving the dimensions of motion, time, sound and rhythm.

The second issue involved a growing conviction that artists must grapple with the latest technology; the computer. I was drawn to artists of the early 20th century who recognized the powerful impact of the Industrial Revolution on all of society. During that time, the machine and the process of

mechanization formed the theme of many art works while providing artists with new art-making tools and techniques.

In the early 1970's it was apparent that the computer, the intelligent machine, would profoundly affect many facets of our lives. I was determined to participate in the computer revolution, to explore the potential of the computer as an extension of the human mind and body. I, too, wanted to present society with a vision, one that would question our relationship with emerging technology and with each other. As technology permeated our lives I wanted to insert more humanity into the machine (and more femininity).

In 1974 I created one of the earliest works of computer animated art. From that point on advanced technology became an integral part of my work and has often provided inspiration for the content. Today, as an internationally recognized media artist and pioneer of "digital art", I continue to push the boundaries of art into uncomfortable territory.

A number of my works involve the study of human motion as a form of expression and communication. Through the abstraction of motion, I can reveal the subtle language of body movement and create dynamic works that are abstract yet deeply familiar. This interest extends to a more general study of organic motion.

Until very recently, fluid "natural" motion and organic forms have been particularly difficult to simulate using the computer. This added challenge further convinced me to infiltrate the world of computer engineers; to turn the "cold, hard, unemotional" computer into something sensual that would provide new directions for the arts. I found that in order to give birth to a number of my ideas, new art making tools were required. Very often, my creative studio had to be a computer research laboratory.

My work addresses issues of gender, behavior, cultural identity and artificial life, often through the metaphors of popular culture. These areas are undergoing dramatic transformation and prove to be fertile subjects for artistic exploration. Drawing from current discourse concerning our lives in cyberspace, it is clear that we are reexamining the fundamental definition of reality as well as the relationship between the body and the soul. My most recent work, titled *The Bush Soul*, includes a series of interactive art installations that explore issues of human presence and emerging behavior in a world of artificial life.

Through this series issues of control come to the foreground. By creating art installations that are interactive, the artist no longer creates a finished work, untouched by the viewer. In fact the viewer/participant is a required component of the piece.

When describing the behaviors of artificial life forms, the relationship between artist and artwork is altered. One cannot predict the precise movement or behaviors of objects. In addition, the viewer/participant enters the world, not to control or dominate it, but to learn about the environment and understand its life forms.

Two Works by Rebecca Allen

The Observer (1999-2019) *Projected Video Loop*

Followed by a description of the new work with the working title “Life Rhythms”

The Observer is a moving painting that takes us through rich and vibrant digital landscapes, observing strange new lifeforms as we go. Created using *Emergence*: an AI (artificial intelligence) computer system that Allen developed in the late 1990s as an art tool to build virtual worlds alive inhabited by artificial life - where abstract forms with life-like behaviors are brought to life through programs that define their behaviors – their likes and dislikes, their personalities.

The Observer provides a contemplative environment that feels both natural and synthetic, familiar and strange. It draws the audience into a world of moving abstract forms with their own rules of behavior. And we as observers can see new ways of being.

Re-Emergence (working title)

Allen is continuing her exploration of the evolving relationship between humans and increasingly sophisticated forms of artificial life in our digital age. She envisions the models that generate the behaviors, the personalities, of virtual lifeforms and the social constructs that emerge in a virtual world. As in real life, a complex social environment can be achieved from the interaction of simple individual behaviors. And she considers what it means for an artist to bring these forms to life.

A recent award from Google’s Artists + Machine Learning group allows her to go deeper into this exploration by designing a new system that will enable her to create more sophisticated behavior. Using the AI technique of machine learning, virtual lifeforms can learn over time to expand or change their behaviors as circumstances require, resulting in actions that appear to be more human.

To create a living abstract virtual world, Allen is working with an AI programmer to build a new system that can learn and generate behaviors expressed thought movement. In her approach, Allen creates rules to inform these creatures’ behaviors - their personalities, likes and dislikes, desires, fears and actions - and then watches as the creatures interact with the environment and each other, making their own decisions based on her rules.

She begins with the movement. The design qualities of the abstract lifeforms and other environmental objects are then derived from their behaviors and their style of movement. As the imagery is created towards the end of the work process, I’ve included images from my works *The Observer* and *The Tangle of Mind and Matter* to give a sense of the visual style.

The pioneering anthropologist Edward T. Hall, discovered what he called “The Dance of Life” – rhythms that occur when people interact with each other through subtle body movements that forms the deepest level of human communication and expression.

With this new work, the artificial life – the AI, will learn about human body rhythms, how to express them and their importance for effective relationships. This work addresses the issue that as AI tries to learn like humans it has no personality and no sense of what it means to be embodied.

Expanded text about *The Observer* with gallery input:

The Observer is a moving painting created using *Emergence*: a computer system that Allen developed in the late 1990's, able to generate artificial life - an AI system that simulates life-like behaviours of animated artificial lifeforms. Immersed in a virtual world we're taken on a journey through rich and vibrant digital landscapes, observing strange new lifeforms as we go. The artificial life system allows Allen to create rules to inform these creatures' behaviours - their personalities, attitudes and actions - and watch as the creatures interact with the environment and each other, making their own decisions based on her rules.

From the late 1970's, Allen was a rare female artist working in the early stages of computer design and digital technology. Her artworks are often built using the same technology as many video games, but Allen was clear that she wanted to make something different from the often violent and destructive content we see in the industry. In *The Observer*, she moves us through a vast computer generated landscape inhabited by artificial life, creating an alternative world that focuses on subtle behaviours and interactions - rather than base actions stemming from conflict and anger - so we as observers can see new ways of being, whilst immersed in a utopic digital landscape.