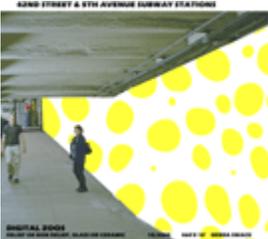


The Duality of Art and Science

Curated by [Lara Vogel](#)
Opened on Nov 30, 2009

'The Duality of Art and Science' includes five artists who fill the criteria and engage the viewer with both art and science mediums. The progression of the 21st century acknowledges that both belong together and from the beginning, artists have recognized that their digital medium can produce new scientific approaches employing different methods relating to science. Artists today are able to either pose questions, demonstrate potential risks or assist scientists with a visual medium to better interpret their research. The artists chosen for 'The Duality of Art and Science' are not merely artists who render digital imaging of scientific categories instead these artists have chosen to take a stand on particular experimentation or are directly related to their field collaborating to articulate a particular science through the medium of digital art.



Animal Patterning Project

By [DEBRA SWACK](#)

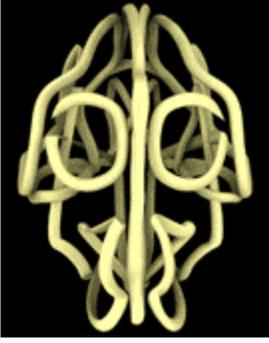
'Animal Patterning Project' takes the patterns of various animals and genetically by using a hybridization of cell-chemotactic and reaction-diffusion methods to create morphogenetic patterns that can be produced in animal species. Morphological color changes can occur during an organism's development from immaturity to maturity due to increases in either pigment deposits or in the actual number of pigment cells.



Green Streamlines

By [Mark Stock](#)

'Green Streamlines' The streamlines depicted in this image represent traces through vortex-dominated flow. Though the vortices in the underlying flow pictured are not visible they affect the character of the motion of any object within them. The visible tubes flowing in the foreground are rendered with a physically-validated lighting simulator, making them look a realistic. The streamlines float in space, and do not crash to the ground or bend under their own weight as real objects would. Their shapes are also formed by a very accurate computational methods.



dataProjections

By Rob O'Neill

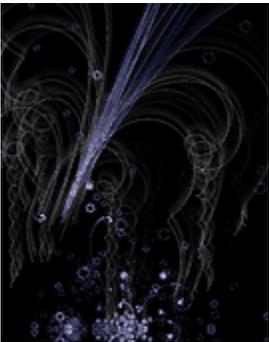
'dataProjections' is a print series depicting 3D structures generated procedurally from morphometric data collected in the process of research by a biological anthropologist on a series of gorilla crania.



The Lifecycle of Trees

By DEBRA SWACK

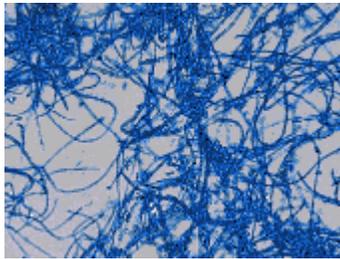
Scientists have discovered that the CO and FT genes that cause trees to stop growing and go dormant in the fall are also responsible for producing flowers and seeds. By manipulating these genes through genetic engineering, can produce trees that flower and reproduce at will. This will affect the seasons, birds and animals reliant upon them. also the effect of consuming transgenically altered food.



alloverrelativity_rev

By Carter Hodgkin

These are drawings of imaginary atomic particle reactions. Approaching the modification of code as a drawing tool, I model particle collisions, selecting interesting behaviors to produce a drawing. The collisions are composed into a complex image which describes the paths of particles as they move through space. A unique microscopic landscape is created where form is neither organic nor inorganic.



Bio-tracking

By Anna Dumitriu

Anna Dumitriu has sampled and cultured various locations for normal flora bacteria and moulds, revealing this incredible, unseen and sublime world to us through a series of beautifully enhanced digital micrographs.

• s **Biological and Technological Transformations of Living Forms in Art**

Curated by [Lauren Brada](#)

Opened on Nov 05, 2007

Introduction to Curatorial Exhibit: Humans have always been fascinated with the biological aspects of the world. People are constantly trying to figure out how living things function, why they do what they do, and more importantly what purpose they serve as a living thing on this Earth. Many contemporary artists have asked themselves these same questions and have used their own forms of creativity to express how they feel about all kinds of biological forms. Artists also use their own creative prowess's to try and alter the natural aspects of the world and see if they can somehow present these forms in a new type of way. The artists I have chosen for my curate exhibit all have one thing in common, despite how different each of their projects are. They all deal with some aspect of certain biological forms and or senses that all living things possess. Whether its Debra Swack's piece that deals with the biological makeup that produces animal patterns, or Mattia Casalegno's work that tries to actually produce life through his images that seem to express some sort of sense related to the body where, "you don't create the art piece, you are the art piece." Many of the bodies of work I have chosen force the viewer to interact with the piece, giving their art a whole new aspect of life. Many of the artists have combined scientific logic with their own personal artistic twist in order morph technology with living things. Quite a bit of research has been done in many scientific fields within these pieces in order to not only create art, but manipulate the very forms of life we are all familiar with. In the first body of work I have chosen by Debra Swack entitled Animal Patterning Project, Swack explores the world of animal patterns and how fascinated we humans are with the different shapes and colors that certain animals produce. Swack goes quite deep into the biological aspects of how certain animal patterns are produced, and then she herself tries to reproduce that pattern in her own artwork. She is interested in how to genetically alter an animals' skin/fur pattern in order to make them easily commercialized for designers alike. Swack goes on to describe how she would go about doing this in an extensive genetic altering process that she shows through her artwork. Swack, who combines art and technology, also has another body of work in this exhibit entitled, "My Perfect Child." In this work, she goes even further into realms of genetic alteration and explores the on-going fascination with cloning. Through digital imagery and photo installation, Swack shows how genetic altering can affect someone's life through a completely neutral view on the subject she has explored. The third body of work was done by man named Daniel Desiderio Paez Castillo. His work is entitled, "idades// multi-local, multi-user, realtime interactive installation." His work combines the interaction of the human form with a technologically based system that is designed to copy certain a human figure in what ever position they are on a

• s Biological and Technological Transformations of Living Forms in Art

room, and then project that image digitally onto a wall or screen. These images are placed with an image of virtual "ball" that has been programmed into the system so that the piece not only becomes interactive, but is also a game that the viewer can manipulate. With each projection of the person's figure and movements they can see where they are relative to the "ball" and can move themselves around accordingly. The "ball" allows for others who are circulating throughout the piece to communicate with one another in order to link them all in an otherwise neutral space. This piece allows the viewer to also become the creator which forms a creative bond with the artist themselves. In Mattia Casalengo's work, "X-Scape," he too explores the worlds of the virtual and biological and attempts to combine them through his own artistry. This body of work tries to create sound and the ability to listen through images alone. His work is a, "hybridization of space with bodies and sensations." Casalengo conveys emotion, feelings, senses, and forms in how work so that the viewer becomes so engaged in the pieces that they actually become the work themselves. This happens because one is forced to interact with the images in order to truly experience what he has created. Fourthly, in this exhibit that combines life with technology, I have placed Chris Sugrue's work; entitled "Delicate Boundaries," into the mix as one of the most profound ways a person has been able to combine art with the scientific world. Sugrue's art consists of an interactive installation where the human form and human touch enable one to break the barriers the lie between humans and machine. Very life-like digital images emerge from the confines of their digital world and move to the skin of a hand or arm when it comes in contact with the computer screen. A person's body becomes a "host: or a canvas for these digital images to thrive on. This body of work truly encompasses what it means to completely break down the barriers between virtual reality and actual living forms. I feel that this work is very influential and is a major break through, not only in the art world, but in the science world as well. Lastly, but certainly not least, is the work done by Chris Joseph entitled "Eisenstein's Monster." This form of art allows one to create biological life forms by the wonderful use of digital technology. The user gets to create their own "creature" by digitally moving certain pieces of biological forms; one essentially gets to play God. This piece is intended to be a little more light-hearted and fun for its audience, however it still reflects people's fear of science playing God. This is quite similar to Swack's bodies of work where she explores the ideas of cloning and genetic alteration that our society seems to be fearful of, yet be so fascinated with. Each body of work in this exhibit explores and intertwines the use of science and technology with biological forms of the body and other living beings. They all explore how certain things function in the world and how they can all be altered or manipulated in order to be formed into something completely new and innovative. That is why I believe this work is so important because it not only expresses the creative thoughts and ideas from different artists, but they also seem to take a

• **Biological and Technological Transformations of Living Forms in Art**

step forward in terms of technological and scientific advances. I feel that this is something important and useful in our society, and perhaps all artists should try and do the same, not just create art for the sake of making art, but making it so that it has some sort of significant impact on the world around us.



Animal Patterning Project

By **DEBRA SWACK**



My Perfect Child

By **DEBRA SWACK**

idades // multi-local, multi-user, realtime interactive installation

By **Daniel Desiderio Paez Castillo**



X-Scape

By **Mattia Casalegno**



Delicate Boundaries

By **Chris**



Eisenstein's Monster

By **Chris Joseph**

Interactive Art 1

Thursday, September 20, 2007

Blog Archive

Web Art Trends

Over the past several weeks that I've been exploring the contents of Rhizome.org, I've noticed some trends that seem to be fairly common areas of interest in the present Web Art scene. Since I am talking about art for the internet, I wanted to select one trend, actually a "tag", that I have seen on many of the artworks on rhizome.org and that "tag" is "Artificial life". The artworks that have been tagged with Artificial life seem to deal with modifying genetics or transforming biological life into a digital world. The digital setting almost seems to let the artist take on the roll of God, without actually causing any real damage or harm to biological beings. A few artworks that follow this trend are:

Debra Swack's "My Perfect Child"

<http://rhizome.org/object.php?47075>

and her "Animal Patterning Project"

<http://rhizome.org/object.php?47081>

Chris Joseph's "Eisenstein's Monster"

<http://rhizome.org/object.php?47030>

Another trend that I've noticed in digital art or web art, is Interactive art. Artwork that the viewer can become part of or change an aspect

- ▼ 2007 (14)
 - • December (1)
 - • November (1)
 - • October (6)
 - ▼ September (5)
 - Web Art Trends
 - Net Art
 - Wandering the internet and exploring Derive
 - Taxonomy, Folksonomy, and Web 2.0
 - Hypertext: The Garden of Forking Paths
 - • August (1)

About Me

Corey Richardson

[View my complete profile](#)