

Animal Lover: Aria

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The artist's projects under the category of practice *Animal Lover* converge on questions and critiques addressing modern relationships with animals, and how humans regard animals. The objectives of *Animal Lover* are to creatively investigate how the use of image and sound, might offer engaged experiences thereby questioning millennia worth of representations contributing to detrimental relationships with animals. The goal of *Animal Lover* is to find and follow a more experiential path for practicing improved and more ethical relationships with animals. *Aria*, one project within the practice of *Animal Lover*, recognizes the animals' own agency of being by depicting their emotional connection to the natural world.

John Berger argues that the rise of industrialization in the 19th century brought the "disappearance" of animals from the common culture of the everyday.[†] Today our relationship to animals is reduced to forms of consumption – meat, milk, honey, wax, etc. – and of production. The disappearance of animals since industrialization can be traced by examining modes of representation, from zoos which serve to "frame" the animal within human systems of power, to children's books such as those by Beatrix Potter, which use animal imagery as metaphors for human behavior. In popular cultural productions, such as television and film, animals are generically depicted anthropomorphically by attributing human characteristics to them. These types of representations do not contribute to knowledge about the animal as a distinct being, but are inevitably human-centered metaphors. Beginning in the 19th century with the illustrations of Grandville and continuing with the animations of Disney and Pixar, the "metaphorical animal" serves to extend the distance between humans and the real animal. Berger argues here that "animals are not being used as reminders of origin... they are being used en masse to 'people' situations."

Within *Animal Lover* the goal is to move away from an

emphasis on a metaphorical animal to an experiential inquiry, leaving behind cultural metaphors and symbols and representing the animal directly as a figure in its own right. The ways animals are portrayed in image and text has a crucial influence on how animals in human cultures are treated. More importantly, ways of representing animals influence what form future trajectories of treatment will take.



Aria is an 11 min. high-definition video to be installed in a gallery setting as a large-scale projection with stereo sound. It shows the artist's companion dogs, Sugi and Tom, exploring the natural world; a journey through archetypal Canadian landscapes culminating with Tom's emotional vocalizations as an "aria." The recognition of animals' unique way of being is the key in *Aria* which seeks to represent the dogs' emotional connection to the natural world.

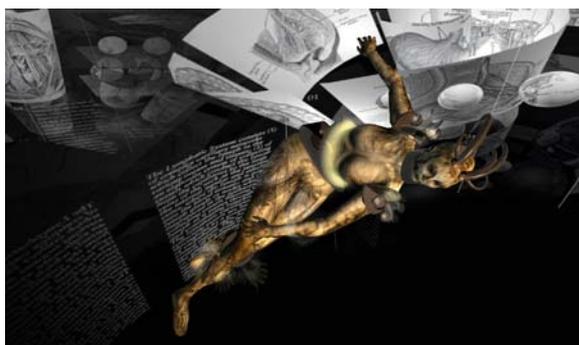
Aria, the operatic form, is defined as a long accompanied song by a solo voice, with origins in 18th century Italian music. The form of the aria and the imagery and harmonic structure in *Aria* recall historical romanticism in art which emphasized personal inspiration and subjectivity. *Aria* uses the musical structure of "call and response" to depict an emotional dialogue between Tom and the landscape. Tom is shown singing three song phrases (unaltered recordings of his voice) which form the basis for the "responses" from the landscape. All harmonics and ambient sounds – birds, insects, wind – are constructed from these phrases, thereby offering a representation of his subjective experience of the world.

[†] J. Berger – *About Looking*. Pantheon Books, New York, NY., 1980.

Anatomia: Artist's Statement

E. Ayiter

Anatomia is a three dimensional artistic installation which can be visited on the island of Syncretia in Second Life. The inspiration for Anatomia has been derived from the Anatomical Drawings of Henry Gray, used in the creation of an avatar, upon whose body a number of the drawings of Henry Gray have been mapped in loose conformity to their body positions. This skin has also been supplemented with attachments, again primarily inspired by the inner workings of the human body, but in such a way that the body parts and drawings were also used in a manner reminiscent of other biological and particularly, botanical elements: Drawings of hands were arranged to imply the structuring of flora and 3D bones were placed to give a feeling of botanical growth, although care was taken that the human references were always foregrounded. Thus the avatar is clearly recognizable as a human being – albeit one with “adornments” of a non human nature alongside the human attributes. The visitor of the work can clothe themselves in this avatar described above and venture forth into an environment which has been designed in an emulation of museum displays of the kind found at Science Museums – clean, shiny and pristine



Henry Gray's drawings project our very innards outwardly. However, with an implication of immortality embedded into the experience. While our bodies are convoluted labyrinths filled with all kinds of fluids which give us joy as well as make us suffer pain; the drawings are reassuring in that the body is elevated to the clean precision of a perfectly working scientific diagram. No longer human, no longer smelly, no longer emotional. What seems to be im-

plied in Gray's anatomy is that the imperfect conglomeration which our bodies are could maybe have been a perfect machine, incapable of malfunction, incapable of decay.

What I aim for is to create a sense of split, of ultimate distastiation between the visitor, clothed in the avatar provided at the installation's location and the surroundings in which he/she find themselves. I do not know if we attain this sense of our own fragility, the messiness of our innards, the thin line between a working and a malfunctioning organic mechanism; the fluids coursing through our system when we visit the places where such anatomical drawings are displayed in Real Life. My hunch is that our Real Life persona, clothed in its everyday attire, more often than not in the company of others, keeps the wolf of self-perception from our door; enabling us to hide behind the security of intellectual appreciation. It is hoped that the Anatomical Avatar make us perceive the difference between our flesh and blood bodies and the schematic, precise depictions of an idealized mechanism.

Winterscape

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“Winterscape” is an ambient video poem, exploring the relationship between form, content and visual flow in the context of the landscape of the Canadian Rockies. It includes studies of snow, ice, water, sky and mountains that play out across a range of scales – from the wide expanses of the mountain landscapes to the equally rich visual pleasures of the finer details of snow, rock, ice and water. However, this work goes beyond concepts of beauty, examining the heart of the medium itself. At its core, “Winterscape” is a repudiation of the logic of film and video construction. The moving image has historically relied on the hard cut as the dominant vehicle for changing shots. “Winterscape” rejects this limitation, abandoning the hard cut and its reductionist illusion of instant and invisible transition. “Winterscape” never hides transition – rather it celebrates it.

In doing so, it erases the borders - both spatial and temporal – that have traditionally bound the moving image. The spatial borders within the frame are broken, as image is first deconstructed into component parts, and then rebuilt within a recombinant visual aesthetic. The temporal borders between the frames disappear within an ongoing cycle of flow, metamorphosis and transformation. Each shot change is in fact a subtle series of cumulative morphs. Fresh individual visual elements from the new shot gradually layer in over the existing shot. This process continues in stages until the transition is complete and the new shot fills the frame. As soon as the new composition is visually complete, the cycle begins again as a newer shot gradually supplants this one.

This is an evolution in the fundamental treatment of the moving image. A combination of spatial montage and visual transformation has replaced the standard cinematic conventions of temporal montage. Combined with the natural imagery, the visual flow creates its own momentum. Subject and technique mutually support a dialectic of change and connection. Landscape, detail, and form are visually deconstructed and then fused together within an organic unity of space and time.

Time itself is treated as plastic. Water is slowed down and clouds are sped up to bring out the sensuous nature of motion

and time in our environment. The pace of change, though constant, is leisurely. Images are held on the screen long enough that detail can be examined, texture revealed, and composition experienced.



Because of the treatment of time, space, and image, the piece is as much a video painting, or a living photograph as it is a traditional moving image work. In the spirit of intermedia, it traverses media boundaries and merges aesthetic forms and viewer reception practices. This form of ambient video draws on a range of artistic practices: a photographer’s eye for landscape, detail, composition, and light; a painter’s sense of color and shape, a filmmaker’s concern about time and interval; and a video artist’s ability to combine moving imagery into a dynamic collage that flows within the frame. As an ambient video work, “Winterscape” rejects the imperative to seize viewer attention, and then to hold it unrelentingly. Instead, like a painting or a photograph, the choice of when and how long to interact with the piece is owned by the viewer. This moving image art doesn’t command, it first seduces, and then rewards our attention. subjective experience of the world.

A_B_ peace & terror etc. The computational aesthetics of love & hate

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A_B_ peace & terror etc. The computational aesthetics of love & hate, blends world politics with the aesthetics of computational data to create a powerful, pertinent and spellbinding view of the modern world. As an intriguing collection of data, A_B_... reveals the quantitative contribution each of the 192 member states of the United Nations has made towards peace and terror in the world. The project is a dual-sided poster where the A_ side displays measures of peace, while the B_ side, measures of terror. For each of the A_B_ measures, the graph is divided into 3 rings (3 separate indexes for peace and 3 separate indexes for terror) that are themselves composite quantitative measures obtained from researchers working in the field of geopolitics. The quantitative degree of peace and terror is represented as continuous variation in line thickness: thin=low value, thick=high value.

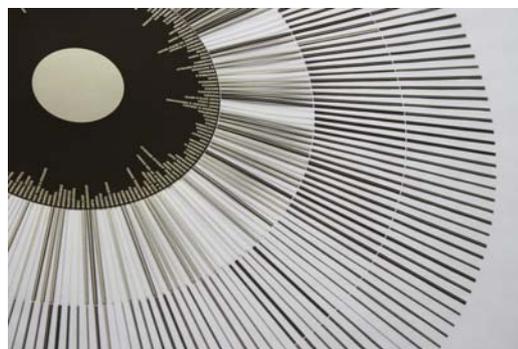
A_B_... is a functional information design piece that uses computational aesthetic principles to compare complex and socially relevant data. The dual-sided overlay of the two graphs allows for a direct visual comparison of the peace and terror measures. The functional nature of the poster becomes poignantly relevant when one makes detailed comparisons across nations for the various measures – many of the results are quite surprising and stand in contrast to prevailing norms of collective national perception.

Dimensions: 618mm x 1000mm dual-sided print.

Date: June 2008.

Keywords: politics, peace, terror, social perception, collective norms.

Format: dual-sided silk-screen print poster on 350 micron plastic. A_ side printed verso graphite metallic black ink; B_ side printed recto pearlescent white ink.



Detailed description of the specific peace and terror measures:

A_ peace etc. (black):

INNER RING: The Global Peace Index, ranks countries by their absence of violence, using metrics that combine both internal and external factors that contribute to peace.

MIDDLE RING: The Happy Planet Index, is a measure that quantifies the ecological efficiency with which human well-being is delivered.

OUTER RING: The Subjective Well-Being Index, is a measure of the overall underlying state of happiness and sense of satisfaction with one's life, both in general and in specific terms.

B_ terror etc. (white):

INNER RING: The Political Terror Scale, represents a numerical measure of each state's political violence and human rights violations.

MIDDLE RING: Weapon Holdings Per Capita, estimates the national per capita holdings of light and heavy military, paramilitary, law enforcement and civilian weapons.

OUTER RING: Military Expenditures Per Capita, represent all current and capital expenditures on the armed forces.

Drawing Machine (Output = Screen)

B. Forster

Drawing Machine (Output = Screen) is one manifestation of my Drawing Machine project. This project can be summarised as an investigation of drawing using a specific system-based methodology. From the outset this project has had two concurrent aims: firstly to explore ideas about drawing, and secondly to raise questions about the validity of the specific method that I have employed.

This is not an investigation of any specific style of drawing, but simply drawing as the act of making marks on a surface; how these marks are made in relation to one another and, most importantly, what knowledge is necessary in order to make such marks. This centres around my attempt to program a computer to draw in a way that is distinctly human, rather than stylistically digital or mechanistic. It is important that my program simulates the human characteristics of drawing because it is exactly the human quality of drawing that I am attempting to understand.



Any logical system is closed and sanitised until it is manifested in a physical medium. Particular mediums offer extensions to the expressed logical system. An LCD screen is simply a field of individually addressable lights, and as such the perceived mark is an illusion. It is actually a mark without a surface. This medium allows for the concept of drawing to be extended, to exclude the surface as a necessary component of drawing. Drawing becomes a truly endless process unconstrained by the surface as a limit.

The Process

Step 1: Look at my own drawings.

Step 2: Formulate formal procedures that encapsulate my ideas about drawing.

Step 3: Express formal procedures in computer code.

Step 4: Compare the resulting machine drawings with my own drawings.

Step 5: If machine drawings = my drawings then STOP, else continue to step 6.

Step 6: Refine formal procedures.

Step 7: Goto step 3.

Note: This machine will never produce the same drawing twice.

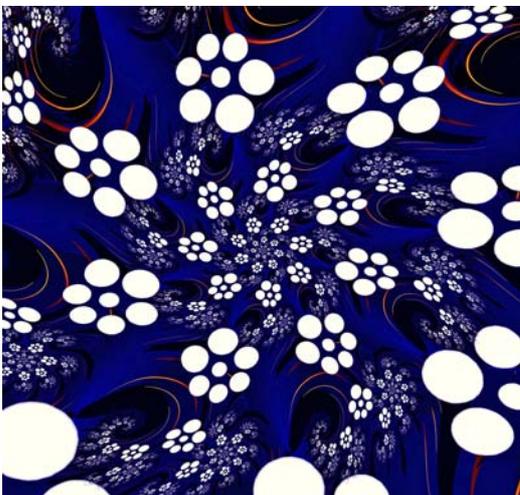
Dancing Flowers

M. Garousi¹

¹Freelance fractal artist, painter and photographer, Hamadan, Iran

The Dancing Flowers work of art is an unending fractal animation continually going on. This animation, from creation to display, is completely done in modern fractal mathematics and by help of professional computational technologies.

The still image of the animation consists of two separate patterns, one of which is the big dark blue star behind white flowers, continuing toward the central point of the screen and playing role as background. This star is a spiral fractal pattern. The other main pattern of the still image is the group of all white flowers. They are either elements of the main great spiral going toward the center of the page or the main and first elements of the other small fractal sets transmitted in different places of the image.



In the animation, each of the flowers, even the smallest one, will play role as a separately moving object. Thereupon, we can see that all the flowers even the smallest ones, turn round of themselves with a varied speed. We can only see the turn of a limit number of flowers in the animation due to the limitation of the pixel number in the screen. But in the builder mathematical program the number of the flowers

has no ending, so infinite number of white flowers in infinite places of the image revolve to the infinity.

But the important phenomenon is how the flowers spin. If we focus on rotation of one of them that is rotating clockwise, when it makes its speed slower we will find out that it is rotating anticlockwise, and this continues. This phenomenon is exactly similar to the rotation of car wheels in high speeds. Therefore, I have used the astigmatic technique provided with high speed rotations.

All the time, all the flowers have a unidirectional turn, and rotate only in one direction with a changeless speed and never have any veer. The number of rotations of the flowers is 15 times per second. Just like the real world, in which our eyes can only catch random selected frames of a high speed move, here computer randomly has selected only a few frames of the rotation of flowers. So our eyes make mistake in understanding the direction and the speed of the rotations. Another element that intensifies this action is the asymmetrical form of flowers.

Chronophotography

M. Germen

Time, as known to many, is an indispensable component of photography. Period(s) included in “single” photographs are usually and naturally much shorter than periods documented in video works. Yet, when it comes to combining photos taken at different times on one photographic surface, it becomes possible to see remnants of longer periods of time.

Whatever method you use, the many traces left by different moments, lead to the positive notion of timelessness (lack of time dependence) due to the plural presences of time at once. This concept of timelessness sometimes carries the content of the photo to anonymity, the substance becomes multi-layered and hierarchy disappears.



Included work titled “Homo vs. Machina #02” is created in 2008 for a book project titled “G.D Technology & Art / A story of innovation narrated by eighteen contemporary artists” that is published by Electa, the major Italian publisher for arts books, to celebrate the 85th year anniversary of an important Italian company, G.D. Work is composed of tens of images of two workers taken in about half-an-hour on a tripod, then superimposed in Photoshop in order to show the need for human presence in the mechanized fabrication world.

Exploding, Plastic & Inevitable Redux

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“Exploding, Plastic & Inevitable Redux utilizes multiple projectors, a barrage of laptop computers, custom software, live vocals, keyboards and live video processing to create an immersive audio-visual experience which mimics the psychedelic atmosphere of the original EPI event, while at the same time updating the audio-visual language to the 21st Century.” *Luc Meier, Swissnex San Francisco.*



Exploding, Plastic & Inevitable Redux is re-imagining of the psychedelic classic *The Exploding Plastic Inevitable*, created by Andy Warhol with the Velvet Underground in the late 1960s. Rather than literally interpreting the original Warhol event, *Exploding, Plastic & Inevitable Redux* seeks to update psychedelia for the new millennium. Using an excess of technology, including a multitude of projectors, computers, MIDI and other human-computer interaction controllers, the project immerses viewers in an overload of the senses and in a *Gesamtkunstwerk* where sound, vision, space and time coincide.

The core concept behind *Exploding, Plastic and Inevitable* resides in both its communal nature and in its long-form. The piece has been performed by as few as two performers and as many as eleven. Its duration has varied from three hours to seven hours. As all the performers are relatively expert in

their chosen mediums this reconfiguration allows for considerable amount of spontaneity while at the same time calling on the performers to apply their analytical skills in real-time. The modularity of the piece similarly allows it to take several forms and keeps the content both loose and ever-evolving. In this way the Redux is similar in its underpinnings to the Warhol original, even as it veers dramatically from the sound and visual world of the late 60s.

The visuals in *Exploding, Plastic & Inevitable* make use of live cameras, generative programming, virtual environments and motion graphics – as well as a smattering of sampled material from classic and contemporary culture. The mashup of visuals evolves throughout each performance and incorporates images and feedback from the performance environment.

Technically, the work is realized by using standard tools such as *Ableton Live* (for both experimental and dance-oriented music) or *Modul8* (for visuals), and also by including custom software tools, some of which have their origins in different domains. For instance, *Soundium* evolved as a multimedia analysis and authoring research tool and was then extended to become usable in live-visuals performance. As a premiere at the Computational Aesthetics 09 event, we will employ an experimentally adapted version of Procedural’s *CityEngine*, a generative design and modeling tool, normally used in architectural design and urban planning.

Engendered by synchronized audio and video, *Exploding, Plastic & Inevitable Redux* explores the notion of collective ecstasy. Synchronization takes place at several levels: multi-modal low-level synchronization, such as sound levels, beats, bars and visual flashing and moving is accomplished automatically by the software machinery. Synchronization at higher levels, such as content, context and narration takes place through expressive control of the individual performers: They respond live to the actions of the others, from visuals to music and vice versa, becoming improvisers in the manner of jazz musicians.

Informal Stains: Gestural Painting

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“Informal Stains” is an interactive application aimed to live performance, it explores the captured motion, featuring fluid dynamics (based on Jos Stam algorithms) and MIDI sound. We explore the effects of two live processing systems working simultaneously in performance. The first, transforms the captured movements into forces that are applied in order to express intensity and energy in the canvas composed by digital fluid. The second one triggers synthesized vibraphone chords synchronized with the movement.

The original inspiration of the work came from the Hans Hartung’s painting style. He creates his pieces with simple but strong movements that he records with ink on canvas. To allow this empathy between motion and picture, we developed proprietary software that detects the most significant areas of each captured image using image-processing algorithms (using the OpenCv Library). This data is interpreted and applied to the canvas of digital fluid as forces or ink. Thus, the captured movement causes perturbations to the fluid of the canvas, transforming the depicted image. This image can come from various sources, e.g. live video signal, pre-recorded movies, static imagery. There is also the possibility of adding ink to the canvas. There are two types of interface, explicit and invisible. The explicit interaction allows the user to set and adjust parameters through a standard GUI; the mouse can also be used to perturb the fluid. The visible interface relies on motion detection to capture movement and apply forces to the fluid. These interfaces can be simultaneously used, allowing a dialog between performer, tool and operator.

Through the tool the user can emphasize the physical act of motion on canvas and sound. Each captured movement’s position provides a different vibraphone sound. Therefore elevated motions lead to high octaves and vice-versa. To give rhythm, the sound is accompanied with a Harp, played as a Bass instrument with predefined chords. In order to provide variation, these chords are randomly played in different octaves.

The motion itself is an essential aspect of our work. Under the virtual canvas it will be described multiple commo-

tion lines emphasized with sound. This ability of immediate response to the presence of motion, converge to an intimate relation between the live performance and the fluid canvas. Thus, the performer can entice the application in order to amplify and resonate her/his expressions.

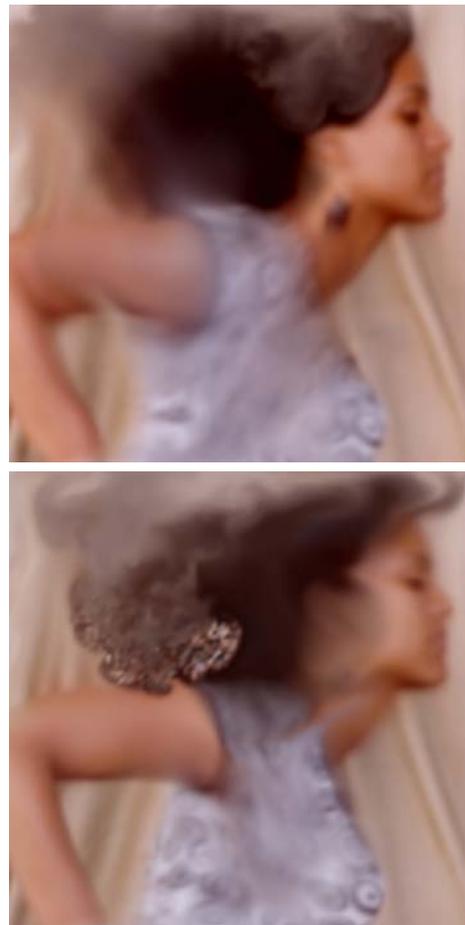


Figure 1: Captured frames from the fluid canvas animation.

Speed vs. Color vs. Form

Motion Gestalt Grouping Principles for the Creative Process of Motion Graphics

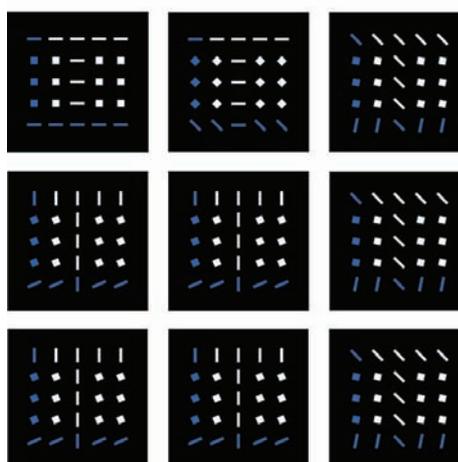
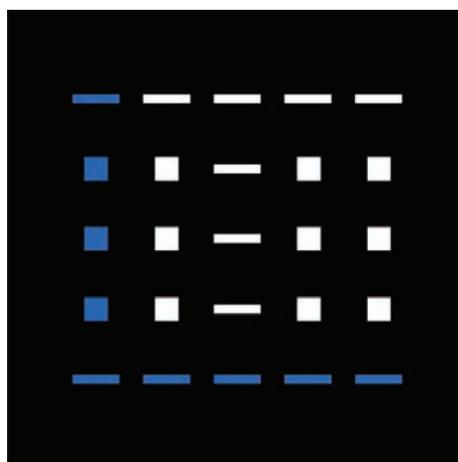
J. Kim¹

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Gestalt means the “act” of simplicity and interpretation. Motion Gestalt means the “act” of simplicity and interpretation of visual motion for emphasis resulting in structural meaning. The act of grouping for simplicity in motion means “grouping frequent movement” as Motion Proximity, “grouping similar directional movement” as Motion Similarity by Direction, “grouping similar speed” as Motion Similarity by Speed, “grouping parallel movements in repetitive manner” as Motion Common-fate, “grouping movements in causative logic” as Motion Good-continuation and “grouping passages by semantic summary” as Motion Closure as well as “grouping by domination or meaningful emphasis” (Kim, 2007, 121)[†].

Motion Similarity by Speed on screen concerns grouping of events by speed such that multiple directions or events can be grouped by the same speed in space and time while two-dimensional similarity binds similar appearance in space (74).

The motion represents Motion Similarity by Speed competing for form and color. Three identical stimuli – an oblong I, a color L and another speed T (see Figure) are represented with motion. All twenty-five squares are rotating themselves at the same time, but the nine oblongs configuring T have different speed than other squares. In the motion, dominance among the three visual principles; grouping by speed, grouping by color and grouping by form is examined. The representation considers the possibility of visual attention for meaningful emphasis of information using grouping of events by speed in complex motion patterns on screen. What do you see in the motion?



[†] Kim, Jinsook. Motion Gestalt for Screen Design: Applied Theory of Grouping Principles for Visual Motion Integrity. Dissertation. Illinois Institute of Technology, Chicago, Illinois, USA. May 2007. <http://www.motiongestalt.com/dissertation.pdf>

Stroem

F. Gruber, N. Hartmann, T. Lorenz & C. Simmel

www.ambientartlab.at

‘Stroem’ is an electronic installation, inviting the visitor to become part of an ever-flowing space that is seeping through the physical boundaries of the room it occupies. Its ambition is to create an environment that extends a given location by visual and acoustic elements, adding to its atmosphere and disposition. But it is not complete without the space it resides in; it remembers and re-contextualizes the emotions, events and specific qualities of a place and its vicinity. Becoming a second skin it fills the room with anticipation of yet another – virtual – place, coexisting with this space at the same time and the same place.

Visiting stroem means to dispute, to explore and to insert oneself into its flow. If let alone, stroem talks to itself, evolving along its own lines of perception, meandering through a landscape of light and sound, shifting between different states, listening to its own sound. By bodily presence as well as by using voice, a visitor can become part of this process, switching places with some parts of stroem and controlling its flow. When entering the installation the visitor will be able to perceive the work in several different ways. He may choose to stay outside the projection, watching the series of unfolding visual and acoustic events without taking part. By triggering different sensors that are distributed in the room he will switch between the different modes of the work, that is, manipulate several parameters responsible for the way stroem operates. In addition the visitor can decide to use a microphone and provide acoustic input to the installation. In that case the sound of stroem will fade, letting the visitor become part of the process. The visitor will have to experiment with his voice in order to communicate and to push his own limits to discover stroem’s potential. How much he will see or hear, how far he will reach into the depths of stroem depends on his will to engage with it alone.

Being related to the field of generative art, the project focuses on different aspects that we consider relevant for our work. Being based on a simple particle system, it is the particular combination of visual aesthetics, interaction design, acoustic modulations and the perception of the project as an architectural space that create an environment of immersive nature. Stroem adapts itself to each place it encounters by ne-



Images by Ali Vatansever

gotiating its architectural qualities in depth, rather than projecting the visual output on a rectangular screen. Being an art piece that relies on a computational approach, this strategy extends to quite every aspect of the project. The spatial setup, the visual modes, the methods and combinations of interaction and the audio composition will vary not only throughout a given installation period but each time stroem moves on to another environment, assimilating the different cultural and spatial conditions of its new surroundings. It is a capability of adaptiveness that goes beyond ‘mere’ interaction design that we feel is one of the major strengths of a computationally driven piece of art.

Losing System Signature

P. Machado¹ & J. Romero²

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²Faculty of Computer Science, University of Coruña, Coruña, Spain

“NEvAr” (Neuro Evolutionary Art) is an ongoing research project being developed by Penousal Machado and Juan Romero at University of Coimbra and of A Coruña. The ultimate goal of the project is to build an Artificial Artist (a computer application able to generate artworks autonomously). NEvAr follows an evolutionary paradigm; in other words, it tries to mimic the mechanisms underlying natural selection, namely: survival of the fittest, recombination of their genetic material, and slight and random modification (mutation). Currently, NEvAr allows three different modes of operation: Interactive, semi-autonomous and autonomous.

The images presented herein were created in autonomous mode. In this case the evolutionary engine is guided by a set of neural networks that assign fitness to the evolve images. These networks were trained by exposing them to a set of positive examples composed by artworks of famous authors, and by a set of negative examples composed by images generated randomly by the system. The goal is twofold: (i) to evolve images that relate to the aesthetic reference provided by the positive examples, which can be considered an inspiring set; (ii) to evolve images that are novel in relation to the imagery typically produced by the system. Thus, more than trying to replicate a given style, the goal is to break away from the traditional style of the system. Once novel imagery is found, i.e. when NEvAr is able to find images that the Artificial Neural Networks fail to classify as being created by NEvAr, these images are added to the negative set of examples, the neural networks and a new evolutionary cycle begins. This process is iteratively repeated and, by these means, a permanent search for novelty and deviation from previously explored paths is enforced.

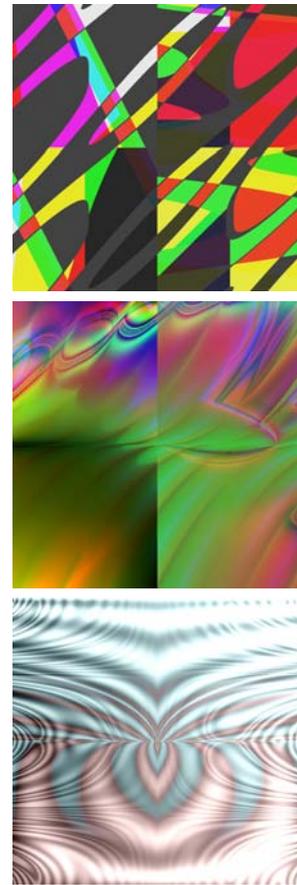


Figure 1: Each image belongs to a different iteration. The images were randomly chosen among the ones that were most valued by the Artificial Neural Networks.

HOL

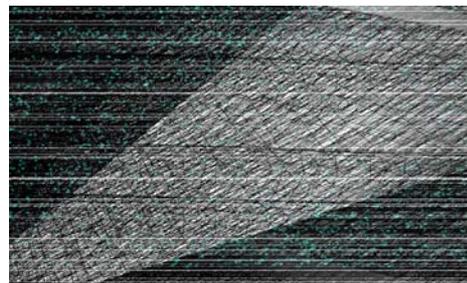
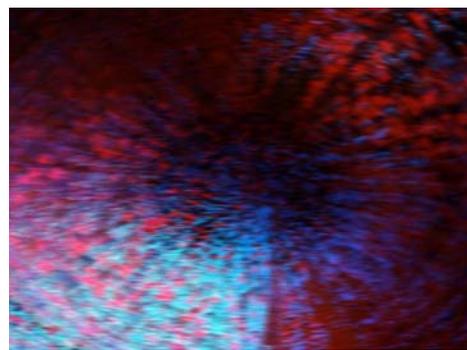
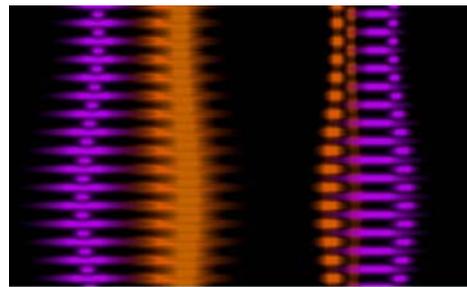
H. Roscoe

HOL is a generative conceptual audiovisual project created by the multimedia artist Henrique Roscoe. All the compositions have a correspondence between audio and video, and they are both played live, in real time performances. The project is based on the idea of synesthesia. Colors, shapes and movements of each element are synchronized with notes, harmonies and rhythm. Both music and image have the same importance and they are frequently generated together as the artist plays a note on the keyboard.

A new and unique software instrument is created for each composition, so that the concept of each theme can be developed in its full possibilities.

There is also a conceptual approach in all compositions, so that each one represents emotions and feelings about each theme that is being developed. Every note, scale, colour, form, rhythm, has its meaning inside the composition and has its reason to be there. Each work is the result of an idea that will be materialized afterwards in sound and image.

Generative forms of creation have an important role in the project. Although the artist has total control over many parameters, some are generated in a completely random way. Thus, the compositions are never played exactly the same way in each performance, making them unique and always new.



The Art Machine

A. Wanner¹

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The Art Machine (Kunstautomat) is a standalone computer-installation that draws portrait-pictures of users and sells them as miniature printouts. Users watch the image develop and contribute to the composition through their motions or by standing still, and can decide on the specific moment they want the picture to be printed out.

With the Art Machine, Andres Wanner searches for an intermediate form between drawing and photography. The installation imitates the skills of an artistic portrait painter. The display which provides feedback on the composition as it occurs creates a colorful moving image by emphasizing edges between figure and ground, focusing certain areas of the image and leaving others undefined.

Context: Machine Art and Authorship

Machine Art and Software Art redefine the concept of authorship. The artwork does not only embody the creative expression of the artist, but is also influenced by the inherent properties (German "Eigensinn") of the software. Machines and programs can simultaneously be artistic creations and create artworks themselves.

The widespread increase of interactive media since 1990s has redefined the role of the viewer of digital art, who now is a user, and thus often participates in the art making process.

With such work, the traditional triangle of artist, artwork and viewer has to be redefined, as all of the three take part in the production. Today, digital artists are challenged to define individual and balanced roles for art-programmers, art-software and users.

The Art Machine: Programmer, Software and User

With the Art Machine, Wanner refers to a traditional portrait-painting situation. His role as an artist and programmer consists in setting boundaries for the drawing software. He decides on the aesthetic parameters of the outcome, targeting a visual language between impressionist painting and pixelated computer-generated images.



His software is drawing the images within these boundaries, fed by the live-image of the camera, performing different routines in order to analyze colours, emphasize contours, and interpret motions.

The user standing in front of the Art Machine is able to watch how his portrait is progressing. By moving around he has a substantial influence on the artwork. The user also decides when the artwork is finished by depositing a coin and obtains a printed copy of his portrait.

This concept results in an installation that continuously generates images that never look the same way twice. The option of stopping the process and buying a unique printed copy is a way of re-establishing the concept of an Original in the context of digital reproducibility.

Weblinks, Shows and Exhibits

Documentation with image slideshow on artist's Website: <http://tinyurl.com/at7y5o>

Dec 21st 07 - Jan 6th 2008 at Kunstszene Zürich, Switzerland.

Oct 3rd 08 - March 20th 2009: Permanent exhibition at the dock18, Zürich, Switzerland.

May 28th 2009: Computational Aesthetics Conference, Victoria, Canada.

Expected or Unexpected

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1. Introduction

This work is about computational aesthetics by not only human, but also computer. Most of the time, artists use computer as an assistant tool. However, this work lets computer have an opportunity to participate in an art work with its particular characteristics: exactness and randomness.

In the title, 'EXPECTED' stands for human's work, drawing algorithms, which define abstract shape of scenes. On the contrary, 'UNEXPECTED' indicates the variant use of drawing algorithms with computer's random number, which will determine the final scene. Therefore, by the combination of expected and unexpected aspects, we can imagine abstract shape of scenes, but not the exact final scene. Also, this work is aimed to escape from typical and iterative graphic scenes such as Fractal Art; the result would not have uniform shape adopting human's algorithm. This work pursues harmony between human and computer.



2. Concepts and Techniques

This work was inspired by a few questions such as “what if machine copies Picasso’s drawing, is it still art?”, “how do people recognize art?,” even “can computers do art?,” and so on. After, we came to an assumption that computer can do art by incomplete experiments in history (e.g. Meta-matic[†], Computer Cantata[‡]). So we decided to keep experimenting it, step by step. In this work, two items are implemented: an

[†] Jean Tinguely, 1959, Meta-matic

[‡] Lejaren Hiller and Leonard Isaacson, 1963, Computer Cantata

application that tests drawing algorithms, and a movie as the final output of whole process. The application employs Microsoft Windows Graphic API for primitive drawings such as circle, line, and point and supportive effects such as inversion and time delay. It also contains drawing algorithms that are focused on three main concepts of this work: (a) sharp shape, (b) expected pattern, and (c) varied scene. The movie is successive screen images, captured with a software ‘Camtasia,’ with background music, BT(Brian Transeau)’s ‘godspeed.’ The intro of movie uses DirectX for better visual effects.

3. The Result

The movie comprises a series of scenes, harmonizing three elements: human’s algorithm, computer’s random number, and the music. They are working on their own parts in the art work.

4. Conclusions and Further Work

Although this work is about performing computer art, it was almost impossible to bring a perfect solution at one time. Therefore, specific conditions were required. First, drawing algorithms adopted primitive shapes like point and line due to two reasons; computer itself cannot draw complex shapes and also we considered basic shapes would rather fit into the concept of computer art. Secondly, the background music is outsourced in spite of computer’s beep sounds that may be more appropriate for computer art because we pursued movie’s better harmonized quality. And, we configured the scenes only in black and white color under the purpose of considering color itself as another aesthetics and concentrating more on the concept, art done by computer.

This work seems successful for achieving varied and unpatterned scenes comparing to Fractal Art. However, it also brings a new challenge to lack of computer’s own message, which is essential for art. Also computer should decide what scene to make, not like this time that human indeed provides it.