Brief New Media Art History

“New media” is just about any art technique developed in the 20th century: electronics, computers, lights, internet art, video art, sound art, performance art, time-based art.
Michael Rush’s categories
Author of “New Media in Art”, 2005

- Media and performance – performance art involving audio/video (Fluxus – present)
- Video Art- talking back to television - videos that are made for provocation, media exploration, or goals not in line with Hollywood style entertainment
- Video Installation Art – videos that transform a space or involve sculptural elements
- Digital Art – work made with the computer
Digital Art

- Interactive art: the internet & computer games
- Interactive art: audience participant installation
- Robotic art (see later lecture)
- Digital work: Art made via computer interface and/or using computer code- check out the Spalter collection at the Decordova. Generally 2d output, now some 3-d, Photoshop/Illustrator, pen plotter art, 3-d rapid prototyping, 3-D films
Commissioned in 2004 by Rhizome.org, Misplaced Reliquary is a handheld curiosity cabinet containing the holy relics collected by an eccentric curator. The relics are contained within a virtual repository taking the form of a gameboy advance ROM that can be "played" online and/or downloaded to any gameboy advance (with the correct transfer hardware). An artist's edition of five game cartridges has also been created.

Rhizome.org announced a call for commission proposals to examine the nature of "game" art in 2004. In response to that call, I offered that I would be interested in examining the meaning of game as it relates to the hunt. Thus, I spent my time in the field, walking off-trail looking, searching, hunting for lost bits of bone, fragments of fur and other forgotten animal relics which are incorporated within this piece that exists both online and as a physical installation.
"Welcome to the Arena, where high-ranking philosophers are transformed into spineless mush. Abandoning every ounce of common sense and any trace of doubt, you lunge onto a stage of harrowing landscapes and veiled abysses. Your new environment rejects you with ontological uncertainties and existential angst as legions of foes surround you, testing the gut reaction that brought you here in the first place. Your new mantra: Out-argue or be finished."

Philosopher DeathMatch is a complete game based on the Quake III Arena engine, where players argue to the death against the great thinkers of history.
Jason Rohrer

- Passage, 2007
- Passage, a tiny game that takes 5 minutes or an entire lifetime to play. It's much better if you play it once and then read the creator's statement. I didn't know a game (and such a tiny one at that) could be so poignant.
ANNA Anthropy

GAME OF PEDESTRIAN REVENGE
"jaywalker is a unique and fun little puzzle-bent action game from ancil anthropy....a near-perfect blend of timing, reflexes, and strategy is necessary to get good scores. all in all, an enjoyable and addictive coffee break gem that should delight fans of reflex-based puzzlers or unique action titles. thumbs up!"

home of the underdogs
2009, JeffuBurger is an interactive video installation that playfully explores the fragmentation of identity in the fast-food age using semiotics and deep-fryer fat. The viewer selects menu items on a touch-screen kiosk, triggering the life-sized video Jeffu (as fry cook) to leap into action.
Karl Sims: **Galapagos**, 1997

- Galápagos is an interactive Darwinian evolution of virtual "organisms." Twelve computers simulate the growth and behaviors of a population of abstract animated forms and display them on twelve screens arranged in an arc. The viewers participate in this exhibit by selecting which organisms they find most aesthetically interesting and standing on step sensors in front of those displays. The selected organisms survive, mate, mutate and reproduce. Those not selected are removed, and their computers are inhabited by new offspring from the survivors. The offspring are copies and combinations of their parents, but their genes are altered by random mutations. Sometimes a mutation is favorable, the new organism is more interesting than its ancestors, and is then selected by the viewers. As this evolutionary cycle of reproduction and selection continues, more and more interesting organisms can emerge.
Super Mario Clouds is an old Mario Brothers cartridge which I modified to erase everything but the clouds. This project was very much in the line of the stuff various BEIGE (aka Beige aka Beige Programming Ensemble, etc, etc) representatives Paul, Joe, + Joe were doing then.
John Baldessari iphone app

- The app cost $35,000 and was produced by For Your Art. The whole project is in conjunction with Baldessari’s show, Pure Beauty, at LACMA, 2009. The painting featured in the app is the 1667 oil Banquet Still Life by Dutch master, Abraham van Beyeren, which is part of LACMA’s collection. This is Baldessari’s second foray into computer-re-arrangement of art.
Stonehenge (With Two Persons), Mixografia
Falling Girl is an immersive interactive narrative installation that allows the viewer to participate in the story of a young girl falling from a skyscraper. During her miraculously slow descent, the girl reacts to the people and events in each window. Daylight fades, night falls and passes, and at dawn, when the falling girl finally lands on the sidewalk, she is an aged woman bearing no resemblance to the young girl who started her fall minutes before.

2008
Ian Bogostiphone app

• JetSet, 2009.
  A game for the frazzled globetrotter in all of us. Keep up with the changing rules of airport security on your iPhone or iPod touch. Play in airports to earn unique souvenirs to keep, give to friends, or redeem for prizes.

• The iPhone game connects to the JetsetFacebook App, where gifts and redemptions are handled. As Kotaku put it, now you can take an airport security game through airport security.
Bill Viola/ Tracy Fullerton

- It is based on the universal story of an individual mystic's journey toward enlightenment. The source content is derived from the lives and writings of the great historical figures who inspired the creators of the illuminated manuscripts.
- The Night Journey, ~2008
Coined in 1984 by sociobiologist Edward O. Wilson, "biophilia" refers to the need of living things to connect with others, even those of different species.

The shadow of the participant, reduced to a two-dimensional image, begins to merge with other organisms in the same screen space without consent nor care for the sovereignty of the user’s concept of self and space. Biophilia attempts to absorb and synthesize users and their contexts, producing unpredictable patterns of propagation and hybridity.
Interactive art: audience participant installation
Interactive Hallucination
Dimensions Variable. Black and white video, camera, television, VCR, custom electronics. This installation consists of a living room environment (a couch, chairs, a table, plants, a television, etc.). Next to the television is a small video camera that is pointed toward the viewer. When the viewer sees herself on screen, she appears to be on fire. The sound of flames accompanies the image of the flames visible on the television screen.
Jim Campbell

- Recent public art work, 2010 Madison Scattered Lights

http://www.jimcampbell.tv/portfolio/public_art/madison_square_park/scattered_light/
Lynn Hershman, Synthia, 2001

- Synthia is a virtual character who represents fluctuations in the stock market online. Her behavior is triggered by the most recent information on stock prices from NASDAQ, Dow Jones and Russel 2000, and her mood depends on the atmosphere at the stock exchange. If prices go up, Synthia dances about; if they drop, she sits anxiously at her desk.
Brian Knep

- Healing 1, 2003, interactive video installation, size variable
- computer, video projector, video camera, custom software, foam floor
- Healing 1 looks like a glowing carpet or mat with a unique organic pattern. When it encounters a foreign body, such as a gallery visitor, the pattern on it pulls away, creating a wound. When the foreign body leaves, the pattern heals itself and the wound closes but the sides of the wound never actually touch.
Janet Cardiff

- **To Touch**, 1993, The action of passing your hands over the surface of an old carpenter’s table elicits an aural response from audio speakers around the small room.
Liz Phillips, sound artist

- Graphite Ground, 1988
- The Whitney Museum, Capp Street Project, San Francisco, CA

- A dry rock garden with natural copper conductors radiating fields, Sounds shift and distribute themselves time-sharing and orienting themselves to the presence and activity of the viewers.
Daniel Rozin

- Wooden Mirror
- 1,500 wooden pixels and motors, camera, custom software.
Tim Hawkinson: Überorgan

- Uberorgan was a new work by Los-Angeles based artist Tim Hawkinson, 2001 commissioned by MASS MoCA for its Building 5 Gallery, which is nearly 300' long. Possibly the largest indoor sculpture ever created, Uberorgan was a massive musical instrument, a Brobdingnagian bastard cousin of the bagpipe, the player piano and the pipe organ. It consisted of thirteen bus-sized inflated bags, one for each of the twelve tones in the musical scale and one udder-shaped bag that fed air to the other twelve by long tubular ducts.
Peter Vogel, b. 1937, Germany.

Rhythmic Sounds, 1999
speaker, photocells, circuits, iron wire, light emitting diodes
8 x 200" / 20 x 508 cm
Peter Vogel

Circular Structure, 1979
speaker, photo cell, circuits, iron wire
27 x 17.75 x 7” / 69 x 45 x 18 cm
Camille Utterback

- Digital artist Camille Utterback makes installations that combine cameras, projectors and custom software to create interactive, playful paintings.
- Macarthur Fellow 2009
Hyun Ju Kim

- Uri (2007)
- Interactive public installation (Southwick building at UMass Lowell, MA, USA), microcontrollers, servo motors, LED lights, acrylic parts, wood panels (96'x24'x6' for each panel)
- It is an interactive, kinetic sculpture based on the nano-carbon structure. Korean word “Uri” translates as “we” or “community”. The hexagonal or honeycomb shapes within the sculpture represent the elemental structure of all carbon-based life forms. The two-part sculpture is composed of custom-designed acrylic parts mounted on two oak panels. The mechanical components include Super Cricket microcontrollers, LED lights, servo motors and infrared proximity sensors. The sensors and motors are programmed to respond to the movement of passersby by opening and closing individual arms within the structure. Through their gestures, the viewers transform the sculpture creating different patterns each time. The interaction of the sculpture and the viewer suggests the mutual and transformative nature of life in all its forms.
Ben Chang, Silvia Ruzanka, Dmitry Strakovsky

- (In)Security Camera
- bcchang.com / art / (In)Security Camera

- Interactive installation with camera, computer, robotics, 2003

- The (In)Security Camera is a robotic surveillance camera with advanced computer-vision software that can track, zoom, and follow subjects walking through its field of view. Deploying sophisticated artificial intelligence algorithms in use today by the U.S. military and Homeland Security forces, it can assess threat levels in real time and respond accordingly.

- However, the camera is, in fact, a little insecure. Easily startled by sudden movements, it is shy around strangers and tends to avoid direct eye contact. This reversal of the relationship between the surveillance system and its subjects gives the machine an element of human personality and fallibility that is by turns endearing, tragic, and slightly disturbing.
• sketching device #1 July 12th, 2006

• Sketching Device #1 is a moody art machine for which expression is more important than precision. Its bad temper turns simple instructions (back, left, down, right, repeat) into unpredictable swirls and snarls.

• Based on research by Dan Reznik at the University of California, and inspired by a remark by Ed Stastny, Sketching Device #1 sends low-frequency vibrations through a sheet of paper to guide objects—such as pens—in any direction, without direct contact. The principle is similar to the way you scoot yourself around in a rolling office chair without touching the floor: jerk back quickly to make the chair move forward, and relax more slowly to get centered again without pulling the chair back. Sketching Device #1 does this about thirty times per second—too fast to see—and the pen in its plastic “boat” appears to float around the page by itself. In this primitive implementation, the process is not very reliable or predictable, and that is what makes the resulting sketches interesting.
Machine Therapy investigates these engagements. The machines (some made by me, some found) have expressive engaging behaviors, strength of character, negotiative egos and neurotic propensities.

Blendy, 2004
Rafael Lozano-Hemmer

• Rafael Lozano-Hemmer also asks museum visitors to perform. His interactive installation **Microphones** (2008) uses modified 1930s Shure microphones that contain hidden speakers and circuit boards connected to a network of computers invisible to the participant.

• A participant who speaks into the microphone is illuminated and audio-recorded. Immediately afterward, the microphone plays a recording of a previous participant.
Rafael Lozano-Hemmer

Last Breath is an installation designed to store and circulate the breath of a person forever. The piece consists of a small brown paper bag which inflates and deflates automatically thanks to motorized bellows similar to those found in artificial respirators in hospitals.
Kenneth Rinaldo: **Autopoeisis**, 2000

- Autopoiesis, is a robotic sculpture installation commissioned by the Kiasma Museum in Helsinki, Finland as part of Outoaly, the Alien Intelligence Exhibition curated by ErkkiHuhtamo, 2000. It consists of fifteen robotic sound sculptures that interact with the public and modify their behaviors over time. These behaviors change based on feedback from infrared sensors, the presence of the participant/viewers in the exhibition and the communication between each separate sculpture.
"Sinking Feeling" is a single head, quite convinced of its own existence, but desperate to know "Why don’t I have a body like everyone else?" or "How did I get here, what am I doing here?" The "cognition" of this figure is made visible in a projection - the ones who speak with it literally see both their own words as they are heard by this figure, and in the formulation of a reply, something

Turing Test Robot
Lynn Hershman: Tillie, 1998

• Tillie, the Telerobotic Doll 1995-1998
• With Tillie, first deployed in 1995, Hershman continues her experimentation with technology and exploration of issues of identity but with a telematic twist. Via the Internet, participants can direct Tillie's gaze and view images of what she is seeing. Our seeing is extended via the network, and this vision prosthesis, in Hershman's words, makes us cyborg-wetware with machine augmentation.
• Issues of identity are further hybridized because through one eye Tillie sees what is in the physical world, while through the other, she captures images from the Internet, an equally real environment for we cyborgs.
David Rokeby, *a very nervous system*, 1983 - 2009

- As the user moves in front of the video interface, the musical tones and composition shift to follow his movements, (max/msp)
Digitally enhanced / constructed 3-d art
Helmick and Schechter

- **JURISPRUDENTS**
- Using traditional methods, the artists sculpted twelve life-size portraits of ordinary American citizens representing the twelve members of a jury. The heads were then laser-scanned, rapid-prototyped at small scale, cast in pewter in large quantities, finished with a hand-rubbed patina, and precisely affixed to hundreds of suspended cables.

- Collectively, the 3,000+ small sculptures coalesce into two monumental heads facing each other across the skylit courthouse atrium.
Helmick and Schechter

- Sculpture changes over time to represent different heads/portraits of people. Small motors re-position the elements in the grid. It can even email home when it has a repair problem.
CLAUDIA HART

Mortification01, 2007-2008
Rapid-Prototype printed sculpture,
ABS plastic
7.5 x 2.75 x 2.75 inches / 19 x 7 x 7 cm

Mortification01 is the first in a series of sculptures output from a Rapid Prototype machine using 3D models that are also used as the basis of a separate series of 3D photo-integrations. In the Mortifications series, a realistic, computer model of a nude is digitally "mutilated" and subjected to irregular and apparently organic deformations.
Michael Rees

- 2004
- 12' x 7' 3" x 11' 6"
- Luminore iron on Fiberglas over Styrofoam with steel tube armature
- @ Decordova, Michael Rees describes himself as a new media sculptor. His outdoor sculpture, **Putto 4 over 4**, was created using multiple new technologies to both manufacture and give meaning to the work. The process for this sculpture started with an original computer model, designed with a variety of sophisticated software: Cinema 4D™, Maya® 3D and Studio Max®.
u-ram choe

• OpertusLunula Umbra (Hidden Shadow of Moon), 2008

• Scientific name: Anmopialpennatusl unulauram

• Wood, plastic, encaustic, motors, stainless steel, microprocessor
Janet Zweig

- Everything in the World
- 1997 with Laura Bergman
- Computer, printer, paper, pastel
- 11' X 9' X 3'

- The computer is programmed to permute every possible combination of binary code in ever increasing places to infinity. The roll upon which a landscape is painted, grows smaller and smaller, turning the world into code.
TristenPerich

- 1-Bit Music (2004-2005), a project by composer and artist Tristan Perich, probes the foundations of digital sound.

- An electronic circuit is assembled inside a CD case with a headphone jack on the side. The device plays back 40 minutes of low-fi 1-bit electronic music—the lowest possible digital representation of audio.
Tristan Perich

- The machine—a pen, suspended horizontally by fishing line connected to two motors mounted on a wall and held taught by gravity—is overwhelmingly simple, and this simplicity allows me to make the process used to create the drawings transparent. The two motors, each allowing winding and unwinding of the fishing line, suggest four possible movements of the pen. The machine is echoed in the drawings: there are no straight lines, only the partial arcs of giant circles, centered around each motor, formed by one motor rotating at a time. At all times, the pen is either moving continuously or randomly changing direction.

- All of this is controlled by a microchip. I program the composition for each drawing: how large it is and which regions of it will consist of random or ordered movement of the pen. This is my role as the artist. Then I let go and let the system and its indeterminacy take over.
Mathieu Briand

• A-M, inhuman sculpture
Evan Perry

On the Walls in Miami Beach

Art commerce is alive and well at Art Basel Miami Beach — the biggest, craziest art bazaar in the world. Contemporary art in all shapes and sizes took over the Miami Beach Convention Center (and surrounding venues) last weekend.

Canadian artist Evan Perry fashioned this three-dimensional, perspective-shattering work from aluminum, silicone, pigment and hair.

Hans Deryk - Reuters

Related Content:
• Camera Works Front
• Washington Post Photo Store
• More on the Scene at Art Basel
• "Forcefield". By interacting with the electromagnetic "force field" that surrounds the theremin, Lee activates and controls a series of kinetic sound machines, creating music and movement from the ether.
Classic computer based art

• Nancy Burson
• Manfred Mohr
• Jean-Pierre Hébert
• Ben F. Laposky
• Vera Molnar
• Lillian F. Schwartz
• Stan VanDerBeek
Nancy Burson

- Warhead I, 1982 (55% Reagan, 45% Brezhnev, less than 1% each of Thatcher, Mitterand, and Deng),
Jean-Pierre Hébert

- Untitled, 2001
- pen and ink (plotter)
Manfred Mohr

- P-10, "random walk", plotter drawings ink on paper, (2x) 50cm x 35cm, 1969
• Oscillons, My work in computer art is a form of oscillography, the results of which I have called 'Oscillons' or 'Electronic Abstractions.' These are composed of combinations of basic electronic wave forms as displayed on a cathode ray oscilloscope and photographed. Color compositions are achieved by means of special filter arrangements.
Using a computer with terminals like a plotter or/and a CRT screen, I have been able to minimize the effort required for this stepwise method of generating pictures. The samples of my work I give here in illustration were made interactively on a CRT screen with a program I call RESEAUTO. This program permits the production of drawings starting from an initial square array of like sets of concentric squares. The available variables are: the number of sets, the number of concentric squares within a set, the displacement of individual squares, the deformation of squares by changing angles and length of sides, the elimination of lines or entire figures, and the replacement of straight lines by segments of circles, parabolas, hyperbolas and sine curves. Thus, from the initial grid an enormous variety of different images can be obtained.
Lillian F. Schwartz

• She then expanded her work into the computer area, becoming a consultant at the AT&T Bell Laboratories, IBM's Thomas J. Watson Research Laboratory and at Lucent Technologies Bell Labs Innovations. Early work included animations
Resources

- Tate Immedia
- DAM
- MOCA
- Rhizome
- ArsElectronica
- Stephen Wilson’s List
- Siggraph
Stan VanDerBeek

January 6, 1927 - September 19, 1984

• Still from A La Mode c. Stan VanDerBeek 1957. filmmaker,
Steve Hollinger, Butterfly, 2000. Mixed media, responds to sunlight, 13 x 9 x 8 in