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           |  CONTENTS  |
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            |                |
            |  INTRODUCTION  |
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< This Issue >

Craig Harris

Leonardo Electronic Almanac formally launches its Pioneers and Pathbreakers project with LEA Volume 7, Number 9. The exhibition "Electronic Rituals" - a 2-D and multimedia exhibition in the Minnesota-based Intermedia Arts Cafe Gallery - is curated by artist Joan Truckenbrod, and includes work by Dan Sandin, Muriel Magenta, Rebecca Allen, Joan Truckenbrod, Ken Knowlton, Herbert Franke, and Barbara Nessim. The theme "Electronic Rituals" explores the artworks in a context that encourages the exploration of the time period in which the work was created, and recognizes the influences that the works and the artists have on each other. Pioneers and Pathbreakers also includes ongoing work by L'Observatoire Leonardo des Arts et des Techno-Science (OLATS), currently presenting areas that explore the work of Nicolas Schoffer and Frank J. Malina. The OLATS material is predominantly in French. The Pioneers and Pathbreakers project is made possible through a grant from the Malina Trust and from Al Smith. The Frank Malina web site has received a grant from the French Ministry of Culture, Fine Arts Department, FIACRE. The Electronic Rituals exhibition will be on view at Intermedia Arts until December 12, 1999. Intermedia Arts is at 2822 Lyndale Avenue South, Minneapolis, MN 55408. (URL: <http://www.IntermediaArts.org>)

Also this month LEA presents a profile of Nolemon/Nomelon, a new multimedia creation by composer/artist Carei Thomas' collaborative team, including Grady Appleton, Steve Goldstein, and Stefan Kren. This project was underwritten by the American Composers Forum, with funds provided by the Jerome Foundation. These combination of these two grants comprises Leonardo Electronic Almanac's participation in the annual Sonic Circuits Festival, a new media art festival cosponsored by LEA, the American Composers Forum, the Walker Art Center and Intermedia Arts. For more information about the festival see <http://www.SonicCircuits.com>.

Leonardo Electronic Almanac and Intermedia Arts will host a reception on November 4, 1999 at 6:30 PM. Composer/artist Carei Thomas' collaborative team will perform Nolemon/Nomelon, and there will be a presentation of New York-based Annie Gosfield's new industrial video, another American Composers Forum/Jerome Foundation commission.

Michael Punt revisits the debates that revisionist histories of science have forced upon scientific enquiry in the collection of reviews presented in this month's Leonardo Digital Reviews.

We have been receiving very positive feedback so far from our most recent changes at the LEA web site. The new system provides significantly enhanced resources to maneuver in the massive database

that we have collected during 7 years of publication. Look next month
for the next step: the implementation of the hardcopy journal Leonardo
in electronic form.

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             |   FEATURE ARTICLES    |
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< Pioneers and Pathbreakers: Electronic Rituals Curator's
  Statement >
                        Joan Truckenbrod

Joan Truckenbrod
Email: <truckenbrod@physics.niu.edu>

Curator's Statement

Using the computer and the internet is radically ritualistic. Point
and clicking our way through images and documents, surfing the net, we
experience temporal distortions, transformations of identity and
disruption of social patterns, all analogous to experiences with
ritual in indigenous cultures such as the Aboriginal and African
cultures. Using the computer opens up a portal to virtual realms of
experience and creates a conduit to cybermythology. In indigenous
ritual ceremonies the perception of time is distorted, social
hierarchical patterns are disrupted, and identities hidden or
transformed. Ritual in indigenous cultures are encoded with symbolic
meanings. Electronic rituals, as in indigenous rituals, open portals
to other realms of experience, creating dialogues with unknown
contacts, and mythical, spiritual worlds. The internet reverberates
with the spirituality of the Aboriginal experience in which individual
identity is built on symbolic multiple connections to the environment.

The electronic ritual imagery in this exhibition creates portals
between the everyday, the virtual and the spiritual, linking the
viewer with these other realms of experience. Pioneering digital
artists embody the spirit of creativity on the cyber-frontier. These
artists create transformative dialogs in their work that embodies the
ritualistic behavior of the computer. This artwork conveys the
personal mythology of each artist, acting out intimate rituals that
integrate the resonance of the electronic / virtual realm. As in
Aboriginal Dreamtime mythology "the image is the vehicle of the
fertilizing power of the Ancestors on earth - the body and the
presence. The positive ambiguity of the image allows it to capture the
spirit of invisible transformative power by inciting transformation in
the thought and awareness of viewers." (Robert Lawlor, Voices of the
First Day, Awakening in the Aboriginal Dreamtime, Inner Traditions,
1991.)

... [Content omitted: Ed.] ...

[Ed. note: the complete content of this article is available at the
LEA website: <http://mitpress.mit.edu/e-journals/LEA/>.]

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< OLATS Pioneers and Pathbreakers News >
                              Annick Bureaud

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New on Frank J. Malina Website :
- The construction of the company Aerojet from the Ph.D Thesis of Ben
  Zibit
- The complete list of Frank J. Malina's articles and essays in the
  domain of aeronautics.
- "Homage to Frank J. Malina : Kinetic Artist, Editor, Research
  Engineer and Humanist", a tribute by his son Roger F. Malina

New on Nicolas Schoffer web site: AEPart : Atelier Experimental de
Pedagogie Artistique

****
1 - New on Frank J. Malina Website:

1.1 - Ben Zibit, in the chapter 13 of his Ph.D. thesis about the
construction of Aerojet, relates the fascinating story of the WAC
Corporal, a revolutionary sounding rocket created in 1945 by Frank J.
Malina and his " Wac Team " whose key names were Stewart and Mark
Mills. The Corporal was to be the first operational ballistic missile
in the US Army's arsenal.
<http://www.olats.org/OLATS/pionniers/aerojet.shtml>

1.2 - A complete list of Frank J. Malina's articles and essays in the
domain of aeronautics.
<http://www.olats.org/OLATS/pionniers/publications_scientifiques_de_.shtml>

1.3 - "Homage to Frank J. Malina : Kinetic Artist, Editor, Research
Engineer and Humanist", a tribute by his son Roger F. Malina who
singles out the amplitude of Frank Malina's work. The versatility of
his thought, his interest both in arts and sciences makes of Frank
Malina a man in the Renaissance tradition.
<http://www.olats.org/OLATS/pionniers/homage_to_frank_j__malina.shtml>

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2 - New on Nicolas Schoffer web site:

AEPart: Atelier Experimental de Pedagogie Artistique is a creative
workshop for children between 7 and 10 years old and 10 and 12 years
old proposed by the International Association of Nicolas Schoffer's
friends under the leadership of Eleonore Schoffer. All details at :
<http://www.olats.org/schoffer/aepart01.htm>

... [Content omitted: Ed.] ...

[Ed. note: the complete content of this article is available at the
LEA website: <http://mitpress.mit.edu/e-journals/LEA/>.]

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                   |  PROFILES         |
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< Pioneers and Pathbreakers: List of Works and Artist Biographies >

Sonic Circuits / Electronic Rituals Exhibition:

List of Works

Dan Sandin
Compilation of early work, video.

Muriel Magenta
" Token City", video.

Rebecca Allen
"Bush Soul", video.

Joan Truckenbrod
3 prints

" Thresholding", Giclee Print, 56" H x 40" W, Limited Edition Print,
  1999.

" Contrapuntal", Giclee Print, 56" H x 40" W, Limited Edition Print,
  1999.

" Veil of Secrecy", Giclee Print, 56" H x 40" W, Limited Edition
  Print, 1999.

Ken Knowlton
4 pieces

" Eleanor", Seashell Mosaic, 32" H X 26" W, 1997.

" Statue of Liberty", Four Specially Designed Fonts,   Laserprint,
  20"H x 16"W, 1986.

" Retrieved Icon", Contructed from 491 fragments from an
  archeological site somewhere in Utah, believed to represent 99
  percent recovery of one teapot, 1998.

"I shall never believe that God plays dice with the World", Albert
 Einstein, 33"H x 27"W, 1999.

Herbert Franke
4 prints

" Spiralnebel", Herbert Franke & Horst Holberg, Digital Print,
  31.5" H x 23.5" W, 1980-1997.

" Farbkugel", Herbert Franke & Horst Holberg, Digital Print,
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31.5" H x 23.5" W, 1980-1997.

" Auge", Herbert Franke & Horst Holberg, Digital Print,
   31.5" H x 23.5" W, 1980-1997.

" Somenkreis", Herbert Franke & Horst Holberg, Digital Print,
   31.5" H x 23.5" W, 1980-1997.

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Barbara Nessim
Computer-based installation: 2 prints & 1 3D work


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Artist Statements and Biographies
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Rebecca  Allen
Email: <rallen@arts.ucla.edu>


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Statement
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The Bush Soul

The Bush Soul is an art work that explores the role of avatars in a
world of artificial life. IN a virtual world, the avatar becomes our
other body. But what part of "us " is in our avatar?

Certain West African believe that a person has more than one soul and
that there is a certain type of soul, called the "bush soul", that
dwells within a wild animal of the bush. A person's bush soul resides
in an animal though that animal also has a life of its own.

An avatar can serve as a place for the bush soul, following the
guidance of the person attached to it, but "alive" with its own set of
behaviors. In this work every object in the environment, including the
avatar, is instilled with some form of artificial life. Relationships
can be formed between all elements. Activities and events emerge
depending on relationships and interactions. These include
experimental performances, narratives and music that is non-linear in
structure.

The Bush Soul experiments with forms of communication that relay on
symbolic gestures and movements. With a focus on the "life" of the
virtual environment.

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Emergence Team:
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Loren McQuade
Eitan Mendelowitz
Daniel Shiplacoff
Jino Ok
John Northan
Jack Lin


*****************
Herbert W. Franke
Email: <franke@zi.biologie.umi-muenchen.de>

Statement

The artistic use of computer graphics is not the most important, but the most interesting purpose of digital systems. Here is the field to prove new ideas and to introduce new methods. The occupation with the new instrument in an experimental way opens possibilities of expression in an unconventional manner, and the results are of high value both in art as well as in more practically orientated regions. This is one of the facets of digital graphics: a bridge between art, technology, science - and daily life.

When I started my first attempts with computer graphic systems to discover the unknown territory of its artistic utilization, I had to deal with geometric elements and arithmetic curves, and the results seemed simple and primitive. It was more the new way of approach than the results themselves, that let hope for an evolution running in the direction for becoming a general tool of visual arts - and arts in general.

Nowadays, it is easy to see the straight progress, and in this situation the negative criticism coming from conventionally orientated art historians, being a strong obstacle in these old days, has become past.

Bio

I was working with programmed and instrumental, visual art, beginning in the fifties, and I was going the way from analogous to digital computing, from mechanical plotters to the screen with high resolution and a large colour palette, from two to three dimensions and even to animation; but still today I am feeling the fascination for the new type of visual art. The perfection of a technique during a period of only forty years seems incredible, but taking a look at my several hundreds of pictures from 1956 until 1998 gives the impression not only of an artistical but also of a scientific progress. Still nobody should forget that also now the development of computer systems is not finished, and that means, that also the visual computer art is staying in a process of exploring and expanding. Exactly this situation lets computer graphic activities stay as much a challenge for creativity, as in all the years before.

As science fiction writer I am interested also for visions of strange scenarios and landscapes. So I have tried to visualize same of my ideas with help of the program BRYCE in combination with the program MATHEMATICA.

As cave explorer, also engaged on the scientific base of the evolution of caves and the morphology of dripstones, I am occupied in this days with the simulation of corrosion and sedimentation processes. So I have tried to visualize same of the cave formations with help of the graphical software BRYCE in combination with the program system MATHEMATICA. Please give mind the remarkable difference between the formations of stalactites on the ceiling and of stalagmites an the floor.

Pictures of Herbert Franke's work are on his website
URL: <http://www.zi.biologie.uni-muenchen.de/~franke/>

******************
Ken Knowlton
Email: <kcknowlton@aol.com>

Statement

Mosaics and similarly fragmented pictures are to me superb examples of artworks that demand serious effort from the viewer - first to "see" various things, then to find some personal or shared meanings.  These images offer a variety of visual games, and need to be viewed in many ways so that the viewer, building on past and present experience, comes  at least to ask "Why do I see what I think I see"?  Perhaps this question will then carry over to life in general.

The "Teapot" is a retrieved Icon  from the first experiments with computer graphics modeling involving a teapot.  This mosaic reconstructs the teapot using "491 fragments from an archaeological site somewhere in Utah, believed to represent 99 percent recovery of one teapot".

In the Seashell Mosaics there are enduring remnants of creatures once alive. Appearing in a grand variety of sizes, shapes and colors, they range from drab to ornate.  They are for me a vehicle for expressing thoughts and moods about people who likewise have lived, struggled and died, and who have left their own imprints, shabby to inspiring, on our own time.

Mosaics are particularly appropriate for alluding to the past, present or future because they appear so differently from a variety of physical, psychological and personal viewpoints.  True of all art, but especially of seashell mosaics;  what you see, and how much visual play you find here, depend largely on who you were and who you are.

Bio

Ken Knowlton is widely known as an innovator and developer of techniques and languages for computer graphics.  He has authored several computer languages for the computer depiction of scientific phenomena and for artistic expression. His work has included the development of a number of techniques for person-machine interaction. In 1963 Knowlton developed one of the earliest systems for movie-making by computer.

Ken Knowlton's artwork in the 1990's has consisted for the most part of computer-assisted mosaics, intriguing works whose appearance varies strikingly with distance - from far away, most of them are portraits, but at close range each is a vast array of actual seashells, or dominoes, pottery shards, puzzle pieces, or other small objects.  They raise the question:  Why do you "see" what you think you see?  In recent years, the seashell mosaics have won many awards in national art shows and competitions.


****************
Muriel Magenta
Email: <muriel.magenta@asu.edu>

Statement

"TOKEN CITY"

Muriel Magenta, Visual Artist
Michael Udow, Composer
Color, Sound, 4 Minutes

The subway becomes the location for a 3-D animation transforming the everyday commute into an experience that merges reality with the extraordinary. Viewers sense the action and emotions of an unpredictable subway excursion via the manipulation of computer-generated imagery, video, and a mixed soundtrack of

electronic music and digital sound effects. The content is a portrait of energy, both mechanical and human, where the animated architecture of the subway and trains is contrasted with New Yorkers videotaped in transit.

A sense of digital time-travel is accomplished as the scenario begins with rows of heavy riveted columns, iron staircases, and old mosaic tiled walls, coexisting with today's streamlined subway cars, flashy moving billboards, and an array of commuters. The grand finale of the piece alludes to the future -- the scene is removed from its historic context and placed in a reinvisioned mode -- a world of saturated digital color overlaid with schematic electronic "blueprint" lines (wireframes).

"Token City" is a collaborative piece by visual artist Muriel Magenta and composer percussionist Michael Udow whose artistic histories have been influenced by subway iconography and sounds. The work was sponsored by the Institute for Studies in the Arts at Arizona State University.

Bio

Muriel Magenta is a "new genre" artist working in computer imaging, video, and sculpture. In her current work she explores the interface between various electronic media, while continuing her investigation of the installation format as a means of interrelating electronic images with free standing objects. Her larger objective is to create a visual experience in a 3D digital space, and then transform it into a physical environment. In "Token City", she is pursuing this approach to creative research. See
<http://asuam.fa.asu.edu/tokencity/token.htm>

Since 1991, Magenta has been a Resident Artist at the Institute for Studies in the Arts, a unit in the College of Fine Arts at Arizona State University which focuses on creative research in the area of art and technology. The "Token City" project was established as a collaboration between visual artist, Magenta and composer, Michael Udow (University of Michigan.)

Solo exhibitions of her installations have been presented at: LACE, Los Angeles; University of Southern California; Kansas City Art Institute; Gallery 10, Washington, DC; Scottsdale Center for the Arts, Scottsdale, AZ; Marian Locks Gallery, Philadelphia; City Bank (57th and Park Avenue), New York; and Arizona State University Art Museum, Tempe, Arizona.

Magenta's video works have been screened internationally and throughout the U.S. including: "Internationaler Videokunstpreis 1998", ZKM, Karlsruhe, Germany; "14th International Hamburg Short Film Festival" (Digital Video), Germany; 2nd Microwave Festival," Hong Kong; "Brussels International Film Festival"; "New Cinema: 33rd Pesaro Film Festival," Rome; "Medien Operative Berlin"; "European Media Art Festival," Osnabruck, Germany; SIGGRAPH T98, Orlando, FL; "Downtown Arts Festival," Chelsea Sculpture Garden, New York; "Director's Series," Tisch School of the Arts, NYU; "Santa Barbara International Film Festival", Santa Barbara Museum of Art, Santa Barbara, CA; and Knitting Factory, New York. Her current video distributor is V Tape, Toronto.

Magenta received her art training at Queens College, New York City; Johns Hopkins University, Baltimore, MD; and Arizona State University, Tempe, AZ. She is a native of New York City.

*****************

Barbara Nessim
Email: <nessimb@newschool.edu>

Bio

Barbara Nessim's paintings and drawings are part of numerous public
and private collections and have been shown in  museums and galleries
worldwide. Her work is in the permanent collection of The Museum of
Modern Art in Sweden, The Smithsonian Institute and The Hungarian
National Gallery in Budapest. Nessim's work was also exhibited in the
Kunst Museum in Dusseldorf and The Louvre in Paris.  Nessim's work can
be viewed on line at the Williams Gallery website
<http://www.wmgallery.com>

Her last solo exhibition was at the Centro Colombo Americano's main
gallery in Bogota, Colombia in May of 1995.  She is currently
exhibiting her artwork at The Selby Gallery in the Ringing School of
Art in Sarasota, Florida.

Nessim is an internationally known artist, illustrator and educator.
In July of  1992 she was appointed Chairperson of the Illustration
Department at Parson School of Design in New York.  She has also
taught in the MFA Computer Arts Program at the School of Visual Arts
in New York.  Sine  1980 she has been doing electronic art created on
the computer, and has lectured widely on the subject.

*****************
Dan Sandine
Email: <dan@uic.edu>

Statement

Description of Computer Animation
"Video Compilation for New Art Examiner"

The Image Processor (IP) and the Graphic Symbiosis System (GRASS). 4
computer video works from the 70s, with introductions.
Compiled and edited by Dan Sandin,
Electronic Visualization Laboratory
The University of Illinois at Chicago


" 5 Minute Romp through the Image Processor ", 1973 (excerpt) Dan
  Sandin, Phil Morton

" Wandawega Waters, 1979 ( complete) Dan Sandin

" Poop for the NCC", 1974 ( excerpt) Tom DeFanti, Dan Sandin

" Spiral 5 PTL ,1980 ( complete) Dan Sandin, Tom Defanti, Mimi Shevitz


Bio

Daniel J. Sandin is an internationally recognized pioneer of
electronic art and visualization. He is director of EVL and a
professor in the School of Art and Design at the University of
Illinois at Chicago. As an artist, he has exhibited worldwide, and has
received grants in support of his work from the Rockefeller
Foundation, the Guggenheim Foundation, the National Science Foundation
and the National Endowment for the Arts. His video animation "Spiral
PTL" is in the inaugural collection of video art at the Museum of
Contemporary Art in New York. In 1969, Sandin developed a
computer-controlled light and sound environment called "Glow Flow" at

the Smithsonian Institution and was invited to join the art faculty at the University of Illinois the same year. By 1973, he had developed the Sandin Image Processor, a highly-programmable analog computer for processing video images in real time. He then worked with DeFanti to combine the Image Processor with real-time computer graphics and performed visual concerts, the Electronic Visualization Events, with synthesized musical accompaniment. In 1991, Sandin and DeFanti conceived and developed, in collaboration with graduate students, the CAVE virtual reality (VR) theater. In recent years, Sandin has been concentrating on perfecting the design of the CAVE and its derivatives, the ImmersaDesk and the Infinity Wall. He has also continued to collaborate with other faculty and students on VR applications, animated visualizations and educational museum installations about abstract mathematics, such as "Quaternion Julia Sets in Virtual Reality", "Getting Physical in Four Dimensions", "Air on the Dirac Strings", "A Volume of 2D Stacked Julia Sets," "Fractals: Complex Images from Simple Rules".

The analog Image Processor (IP) developed by Dan Sandin and the GraphicSymbiosis systems (GRASS) developed by Tom DeFanti were among the most advanced computer video interments available to artists in the 70s. The copying and sharing of these instruments was a important part of the development of the Chicago video art community. This compilation Includes works describing these instruments and art works created with these instruments.


****************
Joan Truckenbrod
Email: <truckenbrod@physics.niu.edu>

Statement

"Voices of Fire"

My images are the site of paradox. Beauty on the surface is pitted by the turmoil underneath that bubbles up serendipitously through the thin surface of the image. Secrecy is a paradoxically dual strategy of concealment and revelation, with coded messages embodied in the forms in the imagery. This work originates on the other side of the mask, like looking out through the car windshield on a dark rainy night. The world outside is distorted through the streaks of rain. As a shadowy reflection on that distorted image, I see my own face, and I feel that I am looking at the inside of the mask. The facial image is torn by shreds of the outside world flowing down the windshield with the pouring rain. This is not a crisp, bright image in a mirror, but hints of a image that pulsates with the sheets of rain. It appears to be the animating force peering out from behind the shadows of the streetlights, even more variegated with the strikes of lightening. The image as spirit has been summoned up by the ritual pounding of the rain and the cover of the darkness.

The light of a campfire protects the secrecy of symbolic forms painted on the nude bodies of Aboriginal ceremonial dancers. In my imagery I create a tension of secrecy through the concealment vs. revelation of personal symbolic marks analogous to glimpses of painted symbols on the body, made visible by undulating firelight. The body is a conduit to other worlds, a vehicle of connection with the natural environment, embodying the reverberations of memory and the resonance of the spiritual future.

Bio

My early artwork extended my vision into the invisible realm of

experience. Surrounded by natural forces that create physiological sensations locating us in the natural world, phenomena that brush the skin or perhaps enter the body, phenomena that resonate and reverberate in the interstitial spaces around us, cloaking us as resonant beings that have an intimate connection to the natural world - but all of which are invisible to the naked eye. Envisioning, as well as feeling, these invisible phenomena provoked me to image them.

Examples of these phenomena are light waves reflecting off of irregular, chaotic surface, magnetic fields with undulating boundaries of attracting and repulsing forces, wind currents that shape and reshape materials in their path, or the vibration of electricity with a theatrical play of electrons. The simultaneous sensations of this complex multitude sensually perceptible experience gave rise to my imagemaking. My interest in capturing the resonance of these invisible experiential phenomena led me to computer imaging, because it was a vehicle for combinational synthesis of the analytical, mathematical description of these natural phenomena with the kinaesthetic, physiological, sense perception of experience.

Working with the computer in the mid 1970's necessitated the development of Fortran computer programs that incorporated mathematical formulas describing various phenomena with a personal interpretation, to visually image these sensations. Initially I created a series of line drawings that were exhibited in a one person exhibition in 1976. The distance of these drawings from the natural phenomena was troubling to me as I wanted to create a synthesis, even a symbiosis with the natural world. Textile is a material that would connect with the natural world through its history, and by responding radically to light patterns and wind currents in an environments. I received a grant from Apple Computer in 1978 in the form of an Apple IIe to pursue this work. My algorithmic images extended into color and transformative patterns. Using the Apple IIe I created sequential series of patterns representing the invisible phenomena in motion, and transferred them to fabric using heat transfer xerography. The computer monitor was positioned upside down on a 3M Color-in-Color copier with back light capability to create individual pattern frames that were then heat transferred to fabric by hand. These electronic patchwork textiles were exhibited in a number of galleries including the IBM Gallery in New York city. This traveling exhibition wasdocumented in the book Digital Visions by Cynthia Goodman in 1987.

I received an equipment grant from Tektronix for further development of transformative natural patterning systems in the context of progressive color fields. I created large canvas tapestries using 3M's Scan-a-Mural process. I also received an Illinois Arts Council Project Completion Grant in 1994 to further investigate large format printing. My artwork led me to recombing the abstracted with the real- the synthesis of the abstracted model with images sculpted with time and light via a video digitizer. This work was exhibited in a one person exhibition in Chicago in 1987. I published a book titled Creative Computer Imaging in 1989 with Prentice Hall.

My work developed towards more narrative realms with the use of natural objects and phenomena directly in the work, in order to map processes from the natural world onto the artificiality of contemporary social constructs of motherhood and family. This work extended into computer-based interactive installations which were exhibited in Montreal and in Chicago. I created a computer-based interactive photo album for this project. In this electronic ritual the viewers were costumed in a set of behaviors familiar to them that they acted out during their involvement with the artwork. This activated a collective memory of the traditional construction of the

family, confronted by issues questioned by the artwork. In the recent installation, Torn Touch, visceral materials of barbed wire and old fence posts, with torn cloth caught on the barbed wire were used in conjunction with three computers and monitors placed in black cages, with animations activated by the viewer's presence at the fence. Participants were asked to pin a personal item onto the cloth, depositing a personal contact with the work. The objective was to point out the disparity between the synthetic experience of the virtual world and the physicality of everyday experience - the material world, and the necessity to reconcile these ways of being in the world. In 1994 I received a Scandinavian-American Foundation Fellowship to work on issues of interactive multimedia in Denmark.

I have been invited as a Visiting Artist to numerous universities, colleges and conferences, including a conference at the Institute of Contemporary Art in London, International Society of Electronic Arts conferences in Helsinki and Utrecht as well as in the US. Recently the Ohio Arts council has invited me as a visiting artist at their Summer Media Institutes. In 1997 I received a Fulbright Fellowship, Research Scholar's award.

In 1998 I was invited to be Chair of the SIGGRAPH 98 Electronic Art Show. I created the theme of touchware in which artists were invited to create work that reconciled the virtual experience with the material world. A catalog was produced of this exhibition. My artwork is included Frank Popper's book Art in the Electronic Age, and The Computer in the Visual Arts by A. M. Spalter, as well as other books. My work is also discussed in an article by Annick Bureaud titled Computer Art @ Chicago in art press # 246, May 1999. Current and future activities include an invitation to be the keynote speaker at a conference on Virtual Art at Beloit College. In addition I have been invited to be a participant at a symposium at the University of Chicago, and in the Digital Secrets: New Collaborations in Visual Art and Technology at Arizona State University in November 2000.

My digital imaging will be on exhibition in a one person show in the Neese Gallery of the Wright Art Center at Beloit College during November 1999. My work is also on exhibition in group exhibition at the Beacon Street Gallery in Chicago during October 1999, and at Intermedia Arts Gallery in Minneapolis during November 1999. Future exhibitions will be at Colville Place Gallery in London and at Galerie der Gegenwart in Wiesbaden, Germany. I am a Professor in the Art and Technology Department at The School of the Art Institute of Chicago. I am currently teaching a course titled Electronic Ritual and Ceremony that I have developed in relationship to my own electronic artwork.


... [Content omitted: Ed.] ...

[Ed. note: the complete content of this article is available at the LEA website: <http://mitpress.mit.edu/e-journals/LEA/>.]

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<  Sonic Circuits VII: Nolemon|Nomelon; Poemmetry & Phononomalies
   (Brief Realities)  >
                         Carei Thomas


Nolemon|Nomelon

This work is a collaboration among a group of artists working in new media, incorporating music, poemmetry and video.

Carei Thomas, Composer, Poemmetry & Brief Realities

Grady Appleton, Video
Steve Goldstein, Sound Design
Stefan Kren, Sound Design

Performing with:
Mike Dayton, english horn/oboe
Wendy Ultan, violin
Michael O'Brien and Adam Linz, contrabass
Kay Nygaard, voice

Poemmetry is a spatial-kinetic-music-word concept. It uses words, phrases and onomatopoetic expressions in conjunction with larger developed works (visual, sound or word). Poemmetry utilizes poetry and the audience to make the compositional fabric work. This is similar to the way fragments of written musical material hold 'brief realities' together, like a kind of skin or connective tissue.

Brief Realities are efflorescence of controlled improvisational concepts. They are an ever changing series of purely invented music, often spiced with cells or fragments of written material acting as connective tissue. I feel that this improvisational concept gives performers a structure that defines and focuses content for offering a broad choice of source material harmonically, temporally, dynamically and culturally. Within this tonal order, invenion/improvisation ignites the developmental process that creates the true composition (and allows it to remain ever changingly fresh).

The challenge is to find ways to utilize the elements to trigger each other into development of a totally new form. Visual images will trigger sounds or words in the Poemmetry, and sounds/words will trigger visual imagery, influencing each other into development of a totally new form.. Visual imagery is taken from the world around us and also from Poemmetry sketches, playing on the palendromic nature of the concept - night and day - creating new relationships between sonic and visual material.

The artists will present a 15-20 minute version of the work at Intermedia Arts on November 4, 1999, as part of the opening event for Sonic Circuits VII. They will also create versions of the work for presentation at the Sonic Circuits VII Landmark Center event. The artists will perform the live performance version perhaps in 2 sets, and there will be a programmed environment that could be experienced by visitors to the presentation space.

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Artist Biographies
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Carei Thomas

Carei Thomas, a 1999 McKnight Composer Fellow, has been associated for a number of years with the literary, visual arts, dance, music, recovery, neighborhood, and Buddhist communities of the Twin Cities. Thomas is a 1993 Bush Fellowship recipient known throughout the arts community for his creative improvisational music, spiritual energy and interdisciplinary vision. His compositions are multifaceted. They encompass an historic range of musical styles, always expressing social and personal experiences and observations.

During the last 20 years, Carei has been moving through various disciplines towards a performance arts/multi-media arena. In so doing, his compositional concepts have been transforming diversely to accommodate and fuse with dance, poetry, visual art in process, video, motion pictures, and audience involvement. He has become quite

interested in addressing the 'smoke and mirrors' of acoustical and electronic music combinations.

He has recently written a cycle of compositions for T.E.O.T.W.A.W.K.I. (The End Of The World As We Know It), an ensemble which performed at the Strange Attracters II: Second International Festival of Experimental Intermedia Arts on April 23, 1999. His first appearance into this electronic arena was November 9, 1996 with his composition 'Connective, Collective Eye' at the Sonic Circuits IV: Electronic Musical Festival.

## Grady Appleton

Grady Appleton is experiencing life and immersing himself in its creative force through a variety of expressions. He is a painter of spirits; of souls that emerge, wander, experiment, and some that lose their way. He is also a photographer, giving expression and energy to life that has been rendered still by mechanical and chemical invention. He has had both his paintings and photographs on display and in print at various locations in the Twin Cities. At the cellular level, Grady is first and foremost a musician. He plays both bass and percussion and has performed in a variety of original ensembles, from jazz to punk, moody soundscapes to purging grunge, over the course of fifteen years. He has recently started to combine all of his experiences and experimentations into his work with video and film. He blends the visual sensations of painting and photography with his innate sense of rhythm and sound to produce curious montages of consciousness. He has collaborated with other artists to produce two videoscapes, "Rubella" and "Brilliance" a work in progress. He is currently working on another collaborative project entitled "no melon, no lemon."

## Stefan Kren

Although a research scientist by vocation, I have always appreciated music as an art form. As a listener in this era, most of what we hear is recorded music. This functions as a model of reality, in much the same way experiments serve in the laboratory. Having listened to models (recordings) generated by others for years, I started to produce my own. My long term association with musicians in the community, from singer/songwriter Tim Gadban to twelve-string guitar legend Dave Ray, and others led to a series of successful commercial recordings which were positively endorsed by such publications as The Rolling Stone and Art Forum.

At the same time I was becoming adept at recording acoustic sound for standard commercial presentation, I was also pursuing an interest in electronic music, and synthesis in general. The idea of creating sounds which have no direct physical correlates has always appealed to me. In my view this type of audio composition has seldom been exploited to the degree that synthsis technology permits. Having started this pursuit in the early 1970s, I began by studying analog synthesis. As the digital revolution evolved, I moved into digital synthesis models and signal processing algorithms, which have broadened the creative palette considerably.

My sound designs typically involve recorded acoustic wave forms which are transmuted into new compositional elements in the digital domain. Recently this type of sound design was integrated into Carei Thomas's "Sound Windows" presentation at the Landmark Center in 1998.

Stephen Goldstein
4332 Colfax Avenue South
Minneapolis, Minnesota 55409

(612) 823-2871
Email: <ghatam@prodigy.net>

Acoustic & Electronic Percussion

For over 30 years, electronic and acoustic percussionist Stephen Goldstein has performed professionally throughout the United States, Canada, and the Caribbean in the musical genres and idioms of experimental, jazz, funk, South Indian classical, commercial, and numerous others. Goldstein has performed or recorded with a wide array of artists including: Douglas Ewart, Nirmala Rajagopal, Jan Gilbert, David Means, Carei Thomas, Ranee Ramaswamy, Gary Schulte, Marcus Wise, Jocelyn Gorham, Gerry Mulligan, Allan Eager, Jerry Coker, Carmen Lundy, Pat Metheny, Will Lee, Dan Gottlieb, Narada Michael Walden, Ira Sullivan, Joe Diorio, Carole Kaye, Mark Egan, Gil Goldstein, Jaco Pastorious, Clifford Carter, Steve Morse, Mixashawn and others.

Goldstein received a thorough grounding in Western music in the University of Miami's critically-acclaimed Studio and Jazz program where he was the percussionist with the award-winning Concert Jazz Ensemble (1970 - 1974). After college, Goldstein performed on drum set and percussion nightly for 50 weeks out of each year throughout the Western Hemisphere in a wide array of musical situations ranging from small big bands to duos. In 1981, due to health reasons, Goldstein left the road and moved to Minneapolis, Minnesota. In 1989, Goldstein began extensive studies in the application and theory of South Indian rhythmic structures with world-renowned ghatam (tuned clay pot percussion instrument) master Sri T.H. Subash Chandran. In addition, Goldstein received lessons with T.H. "Vikku" Vinayakram, Selva Ganesh, Kumar, T.K. Ramakrishnan, N. Venkataraman, and K. Shekar. Goldstein also credits hand drum virtuoso John Bergamo for his invaluable lessons, advice, and friendship throughout the years.

In 1997, Goldstein was awarded a Minnesota State Arts Board Fellowship. Currently, Goldstein is studying sound arts under the tutlelage of Dr. Stephen Solum.

... [Content omitted: Ed.] ...

[Ed. note: the complete content of this article is available at the LEA website: <http://mitpress.mit.edu/e-journals/LEA/>.]

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      |    LEONARDO DIGITAL REVIEWS    |
      |            1999.09             |
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Editor-in Chief: Michael Punt
Executive Editor: Roger Malina
Managing Editor: Kasey Rios Asberry

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Michael Punt
<http://mitpress.mit.edu/e-journals/Leonardo/ldr.html>

This month in Leonardo Digital Reviews David Topper revisits the debates that revisionist histories of science have forced upon scientific enquiry. Whilst on the one hand hard empiricists have shown little affection the self-reflexive interventions of philosophers and cultural analysts, science has had to acknowledged that the cultural

bias of 'old science' closed off many avenues of enquiry. This closure
is also evident in the arts, and as Robert Pepperell points out in his
review of "Africa: The Art of a Continent" perhaps greater effort is
required to overcome a Eurocenticism when considering art from beyond
the borders of our own discourse. Ironically, as the pieces by Robert
Coburn and Rhama Khazan make clear, in the most putatively
conservative of art forms, music, cultural boundaries and the orthodox
are constantly under scrutiny form a revisionist history and
contemporary musical practice. Kasey Asberry's review of
"design+undesign" covers an exhibition in which cultural subversion
has its own pleasures and creative resonance, not evident, according
to Wilfred Arnold, in the intellectual organisation of John Wood's
"America and the Daguerreotype". Finally Yvonne Spielmann's extensive
review of Margaret Morse's "Virtualities" makes clear that the
trans-disciplinary approach of the Leonardo project is not merely a
generic convenience, but essential in a period of technological
transition when the boundaries between the real and the virtual are
not simply dissolving, but the terms themselves appear to have little
useful meaning.

Michael Punt
Editor in Chief
Leonardo Digital Reviews
<http://mitpress.mit.edu/e-journals/Leonardo/ldr.html>

Journal Review: Perspectives on Science: Historical, Philosophical,
                Social
Edited by Joseph C. Pitt
Volume 6, Number 3 (Fall, 1998)
Cambridge, Mass: MIT Press
ISSN: 1063-6145

Reviewed by David Topper

Book Review : Les Sculptures Sonores - The Sound Sculptures of Bernard
              and Francois Baschet
Written By Francois Baschet
Soundworld Publishers
10 Baddow Road, Chelmsford CM2 ODG, UK, 1999.
Email: <ttaylor228@aol.com>
153 pp. including CD.
ISBN 1-902440-02-1

Reviewed by Rahma Khazam

Exhibition Review: design+undesign, Tibor Kalman, 1979-1999
SFMOMA Fall, 1999

Reviewed by Kasey Asberry

The Music of Herbert Brun:
EMF CD 00614 language, message, drummage
Compositions for Tape and for Instruments
EMF CD 00624 Wayfaring Sounds
Compositions for Instruments and Tape
EMF CD 00634 mutatis mutandis
Compositions for Solo Instruments and Ensembles
EMF CD 00644 SAWDUST Computer Music Project
Electronic Music Foundation, Albany, New York, 1998

Reviewed by Robert Coburn

Book Review: America & the Daguerreotype
edited by John Wood.
Iowa City: University of Iowa Press
paperback, 274 pp.
28 color photos, 72 duotones, 109 halftones
$37.95.
ISBN 0-87745-675-5

Reviewed by Wilfred Niels Arnold

Africa: The Art of a Continent
Tom Phillips, ed.
Prestel, New York, NY, U.S.A. 1999. 600 pp, illus. Paper.
ISBN: 3-791-32004-1. (Rcvd: 5/14/99).

Reviewed by Robert Pepperell

Book Review: Virtualities. Television, Media Art, and Cyberculture
by Margaret Morse
Indiana University Press, Bloomington and Indianapolis, 1998
304 pages, ISBN: O-253-33382-2, $ 39.95 cloth;
ISBN: 0-253-21177-8, $ 19.95 paper

Reviewed by Yvonne Spielmann

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Visit Leonardo Digital Reviews online to read these reviews in full
together with the latest postings in LDR Raw as they come in.
<http://mitpress.mit.edu/e-journals/Leonardo/ldr.html> Your comments
are welcome at <kasberry@humanorigins.org>

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            |  OPPORTUNITIES   |
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< Faculty, Electronic Media, University of Illinois at Chicago >

Chair, Electronic Media Search
School of Art and Design (M/C 036)
The University of Illinois at Chicago
929 West Harrison Street
Chicago, Illinois 60607-7038

Position Announcement:

One full-time, tenure-track position in Electronic Media and
Electronic Visualization. Appointment begins Fall Semester 2000.

Salary and Rank:

Assistant Professor, Associate Professor or Full Professor depending
upon qualifications. Salary commensurate with experience and
qualifications and dependent on Board of Trustees approval.

Qualifications:

MFA or equivalent preferred. College level teaching experience desired with demonstrated commitment to undergraduate and graduate education. The candidate should have experience in programming languages such as JAVA and C++, and graphics libraries such as Open GL, Performer and Open Inventor, and must have a strong exhibition record in the arts with emphasis on real-time interactive graphics and/or virtual reality.

Description:

The School of Art and Design seeks a candidate to teach 3D modeling, real-time computer graphics programming, interactive design and virtual reality. The candidate would have the opportunity to participate in internet based collaborative environments in art and design visualization with applications in architecture and industrial design, and would be encouraged to participate as a team member in research and media creation at the Electronic Visualization Laboratory (EVL).

General:

The School of Art and Design at the University of Illinois at Chicago (UIC) Information is one of four units in the College of Architecture and the Arts. The computer art experience in both the undergraduate Electronic Media program and the graduate Electronic Visualization program focuses on real-time and interactive computer graphics, utilizing both programming languages and software packages. The Electronic Media program combines computer graphics with video, film and photography. The graduate program operates out of the world renowned Electronic Visualization Laboratory, which is a shared facility of the School of Art and Design and the Department of Electrical Engineering and Computer Science. See the URL <http://www.evl.uic.edu> for more information on EVL. See URL <http://www.uic.edu/aa/artd/> for more information on the School of Art and Design.

Application Procedure:

Complete applications must include a letter of intent, resume with exhibition record, list of 3 references, and documentation of visual work preferably on VHS video tape and/or HTML on CD ROM. An index of the visual documentation with project descriptions and applicant's role in any collaborations should accompany the application. Work will be returned if a stamped, addressed envelope is enclosed with the application.

Deadline:

Screening of applications begins January 17, 2000 and continues until position is filled.

The University of Illinois is an Affirmative Action/Equal Opportunity employer.

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< Composer, Department of Music at Stanford University >

Annie Dolber, Secretary
Composer Search Committee
Department of Music
Stanford University

Stanford, CA 94305-3076

The Department of Music at Stanford University is inviting
applications for the position of tenure-track composer at the rank of
Assistant Professor. The initial term of appointment will be for four
years, with the possibility of renewal for three years before the
candidate is considered for tenure. The envisaged starting date for
the initial term is September 1, 2000.

Teaching responsibilities will include courses in analysis and
composition, at both undergraduate and graduate levels. A strong
commitment to teaching undergraduate theory and musicianship is also
expected. Knowledge of computer music is an asset.

Letters of application, together with a curriculum vitae, list of
works and performances, and three letters of reference, should be sent
by November 15, 1999, to the above address.

Other supporting materials will be requested at a later date. Please
do NOT send scores or recordings at this stage of the search.

Stanford University is an affirmative-action, equal-opportunity
employer, and actively seeks applications from women and minority
candidates.

****

<   Assistant Professor, Digital Animation and Multimedia Studies,
    University of Michigan >

Chair, Assistant Professor, Digital Animation and Multimedia Studies
c/o Ms. Julie Smigielski
School of Music
University of Michigan
1100 Baits Drive
Ann Arbor, MI 48109-2085

The Program in Film and Video Studies and the Department of Media and
Music Technology at the University of Michigan invite applications for
a tenure-track Assistant Professor position in Digital Animation and
Multimedia Studies beginning Fall, 2000. Responsibilities include
teaching courses in creative expression through digital animation and
computer-based integration of sound, music, and moving image.

Qualifications include understanding of contemporary aesthetic theory
and its application to multimedia; theoretical and practical
experience with interactive multi-dimensional computer-based animation
and multimedia authoring systems; theoretical and practical experience
with digital video including capture, transfer, editing, and lighting;
theoretical and practical experience with MIDI and digital audio
systems; demonstrated commitment to creative expression through
digital media within the context of an arts education; ability to work
as a member of an interdisciplinary team; and successful teaching
experience at that college level. Terminal degree required. Doctorate
preferred.

Submit a curriculum vita and the names and phone numbers of three
references by December 1, 1999 to:

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     |   ANNOUNCEMENTS   |
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< E-Motion >

Shelley Pellegrin
Tel: (912)231-9874
Email: <Shelley_Pellegrin@hotmail.com>

I am the assistant Art Director for an exciting performance that will
be happening in Savannah, GA on November 8, 1999. The project is
called E-Motion, and it will utilize motion capture technology,
bodycams, interactive laser beams, computer art projections, real-time
remote digital painting, real-time Houdini 3-D improvisation, RT
footage of live audience interaction, and a professionally
choreographed modern dance performance.

This project will involve computer scientists from Georgia Tech in
Atlanta, dancers from Atlanta, and computer art students at the
Savannah College of Art and Design. It is a highlight of the Delphi
Conference.

ARTIST STATEMENT

This piece uses as its starting point nine movements and gestures that
are the building blocks of dance. These nine terms; Rise, Collapse,
Bend, Stretch, Circle, Twist, Swing, Sway and Shake were used both as
a way of generating the movement that constitutes this piece but also
as a starting point for the generation of computer images and
interactivity. Sometimes these links are almost self apparent for
example: 'Circle' linking to ideas of a global network. 'Rise' linking
to the ongoing evolution and development of digital technologies or
'Collapse' linking to doomsday scenarios similar to the Y2K scare.
However sometimes the links are not so obvious and in these cases
these terms were used as a starting point for brainstorming and
improvisation of ideas and issues. Whether imediately apparent or more
abstract central to this piece is the linking of dance to technology,
of the flow of the human body in motion to the flow of digital
information. Both dance and technology are means of communication and
both can be said to be international languages or mediums.
Increasingly humans and computers are drawn together in an ever closer
relationship. As artists an sceintists collaborating together we hope
to explore both the advantages and constraints of this relationship
specifically in relation to creativity. In addition we hope through
this piece to open up a dialogue about the potential for
human-computer interaction in the arts.

SCAD invites you to this event at the Trustees Theater, 206 E.
Broughton St. Savannah, GA Nov.8 at 8:00p.m. as it is a cutting-edge
collaboration fit for your enjoyment.

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< ARTSCI'99: Nurturing Collaborations for the Next Century >

Cynthia Pannucci
Founder/Director of ASCI
(11 yrs.of service to field of art/sci/technology)
New York City (718) 816-9796

URL: <http://www.asci.org>
Email: <asci@asci.org>

ARTSCI' 99: NURTURING COLLABORATIONS FOR THE NEXT CENTURY;
a symposium produced by Art and Science Collaborations, Inc.

November 13-14, 1999
(Saturday - Sunday)
The Great Hall, Cooper Union
New York, NY
9:00 AM - 6:15 PM

Program Details & Registration:
<http://www.asci.org>

The turn of this millennium finds a will to integrate, merge, and
collaborate - to bring unity to the various expressions of life -
including art, science, and the humanities. But how do people find
oneanother?

SCIENTISTS: Have you ever wanted to collaborate with a musician,
visual artist, writer, etc. on a project of shared inspiration? Some
artists are making music from DNA code, creating 3-D digital
visualizations of protein molecules, writing plays about AIDS, etc.
With over 50,000 professional artists, New York City is the right
place for such an event! 1/3 of our Event Program has been
specifically designed to enhance personal meeting (including small
Break-Out Sessions and Breakfast Socials).

ARTISTS: Have you ever wanted to collaborate with a geophysicist on
an underwater environmental art project, a bio-ethicist on a Broadway
play of socio-political import, have the opportunity to meet people
like an Emmy Award-winning science producer of shows like NOVA, hear a
neuro-scientist speak about switching back and forth between careers
in both art and science, hear about the development of a unique
art-sci curriculum for model educational programs, or be there as
directors of new multi-disciplinary research programs at universities
"search" for new talent for their group?

HUMANITIES: ArtSci99 will inspire, inform, and provide the opportunity
to make new contacts for facilitating your next art-sci book, article,
play, public art project, interdisciplinary educational cirriculum, TV
documentary, or help in your search for outstanding new talent for an
up-coming conference, your corporation or university.

The mission of ARTSCI' 99 is to create a formal vehicle that will
nurture art-science collaborations for the next century. Models of
"modern-day Leonardos", the new paradigm of *artist-scientist research
teams*, panels on timely issues, and small group Break-Out Sessions
posing provocative questions will be presented. Keynotes are by: Dr.
Laurence Smaje, the Director of the "Sci-Art" progam of the Wellcome
Trust (London), one of the few institutions commissioning such
collaborations <http://www.welcome.org>, and Dr. France Cordova, the
first woman to hold the position of Chief Scientist at NASA, and now
is the Vice Chancellor for Research at the University of California at
Santa Barbara... and mastermind of their "Research Across Disciplines"
Program. <http://research.ucsb.edu>

Pre-Registration ended October 15th.

If you or your professional organization/institution would like to
become a *Sponsor*, *Partner* or purchase a *Resource Table* (for your
promo materials), visit the event web-segment for details or call 718
816-9796.

This 2nd annual ARTSCI Symposium is co-produced by the Adult Education
Program of The Cooper Union and is sponsored by LEONARDO Journal,
ARTBYTE Magazine, and PROXIMA/ Theatrical Supplies & Services. For 11
yrs, ASCI has been creating innovative public programming that
highlights the intersection of art & science and has become an
important locus for outstanding art-sci talent.

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< The Leonardo Award for Excellence >

Leonardo/ISAST
425 Market Street, 2nd Floor
San Francisco, CA 94105 U.S.A.
Tel: 415-405-6988
Fax: 415-405-7758
Email: <isast@sfsu.edu>

THE LEONARDO AWARD FOR EXCELLENCE

The Leonardo Award for Excellence is presented to Hubert Duprat and
Christian Besson for their innovative article on the manufacturing of
jeweler casing using the larvae of the Aquatic caddis larva. By
removing the cadddis fly larvae from their natural habitat and
providing them with precious materials, the artist prompts the larvae
to manufacture cases that resemble jeweler's creations.

The Leonardo Award for Excellence recognizes excellence in an article
published in the journal Leonardo. Excellence is defined as
originality, rigor of thought, clarity of expression and effective
presentation. The Leonardo Award for Excellence was originally
established by chemist and inventor Myron Coler and publisher Robert
Maxwell. Leonardo/ISAST has continued the tradition.

Recipients include Rudolf Arnheim, Otto Piene, Charles Ames, Frieda
Stahl, Donna Cox, George Gessert, Janet Saad- Cook, Alvin Curran and
Karen O' Rourke.

For more information about the Leonardo Awards Program, contact
Leonardo/ISAST At the address above.

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< L' immagine leggera >

L' IMMAGINE LEGGERA
Palermo International Videoart, Film and Media Festival
Casella Postale 136 (P.O.Box)
I-90133 Palermo, Italy
Tel: +39-091-696.17.40
Fax: +39-091-696.15.57
Email: <info@leggera.it>
URL: <http://www.leggera.it>

Festival staff:
     Alessandro Rais (festival director: rais@leggera.it),
     Marcello Alajmo, Ignazio Plaia, Maurizio Spadaro (info@leggera.it)

Radio Plays section coordination:
     Alessandro Aiello (tel+fax 0039 095 533876; <dogmact@hotmail.com>)

CD-Rom section coordination:
     Damiano Paternostro <info@leggera.it>

1) We are forced to change the dates of the festival that will not
   take place in October but in December 1999/February 2000. We will
   communicate you the exact days as soon as possible and anyway you
   will soon find the dates in our web site.

2) This year we are preparing a reduced edition of the festival, but
   THE THREE COMPETITIONS ARE CONFIRMED.

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Member of the European Coordination of Film Festivals (EEIG)
Membre de la Coordination Europenne des Festivals de Cinema (GEIE)
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< End of Leonardo Electronic Almanac 7(9) >
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