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< This Issue >

                        Craig Harris

Welcome to Leonardo Electronic Almanac (LEA), and to a new phase in
our evolution. Beginning with Leonardo Electronic Almanac (LEA) Vol. 7
the LEA web site benefits from a heightened degree of convergence with
the hard copy journal Leonardo. This year electronic copies of
Leonardo will become available in the LEA Archive, and the LEA Archive
will be enhanced with new content and improved navigation systems. LEA
will continue to publish monthly issues with its own editorial focus,
exploring the work of contemporary artists, scientists, developers of
new media resources, and other practitioners working at the
intersection of art, science and technology.

Access to the full depth of content at this site is available by
subscription. (See the subscription information for details.)
Subscribers to Volume 32 (1999) of the hard copy journal Leonardo
(individual, student, or institution) have full access to LEA as a
benefit of their subscription. Electronic versions of Leonardo will
become available in the LEA archive via the Online Computer Library
Center, Inc. (OCLC) system beginning in April of 1999. Material from
all Leonardo/ISAST web sites will propagate to the LEA archive, and
the complete archive of past issues of Leonardo are expected to be
integrated into the system later in 1999. Non-Leonardo individual
subscribers to LEA are offered free access to the electronic version
of Leonardo on a one-year trial basis.

LEA Volume 7 launches with a keynote address presented by Roy Ascott
at MASS '98, the Media Art Symposium Stockholm held in Stockholm on
December 7-11, 1998. In "Strategies of Media Art" Roy Ascott explores
the question "What exactly is media art today?" He continues to probe
the implications of key issues that will forge the direction of human
endeavor in the new millenium, and the impact on the nature of new
media art. MASS '98 organizer Janet Colletti provides us with a
profile of the event to present in LEA. We will receive abstracts and

bios of presenters that will be published in a future issue of LEA.

Ken Rinaldo provides a Profile about his work dis-M-body, a
multisensory, interactive installation exploring the disembodied
nature of information and messages as they dislocate and fracture
one's sense of self, while simultaneously expanding one's sense of
connection.

Jocelyne Rotily, Curator of the Virtual Africa exhibition on the
OLATS/Leonardo Observatory for the Arts and Techno-Sciences web site,
presents a profile "What's new in Virtual Africa," where we learn
about current activities in this ongoing project. Jocelyne writes
"Virtual Africa was launched a year ago with the intention to
encourage dialogues and cultural exchanges between artists and scholars
from Africa and from the other continents. We also wanted to explore
the boundaries between arts and sciences within the African context."

Leonardo Digital Reviews contains 3 book reviews, an exhibit review
and a Doug Rosenberg Editorial exploring the nature of VideoDance. The
reviews include perspectives on "The Future of Software," edited by
Derek Leebaert, "Unpacking Duchamp: Art in Transit, " by Dalia
Judovitz, "In the Eye of the Beholder: the Science of Face
Perception," by Vicki Bruce and Andy Young, and a Rauchenberg
Retrospective. As usual, we also present a group of opportunities and
announcements for our readers.

We look forward to an exciting year with many new developments. This
is the ideal time to subscribe to LEA. MIT Press is offering a special
deal for LEA subscribers for 1999. Paid subscribers will also have
access to the electronic versions of the hard copy journal Leonardo
for 1 year, encompassing 5 issues of Volume 32, Volume 9 of Leonardo
Music Journal, and access to the Leonardo Monograph Series.

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< MASS '98 Keynote - Strategies of Media Art. (excerpts) >
                         Roy Ascott

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What exactly is media art today? Is it a part of art or apart from
art? If it is a part of art, some will say, where are its
masterpieces, what is its market share? If it is apart from art where
intellectually and culturally is it located? Can media art now be
anything but interactive? In cyberspace, can the viewer now be
anything less than actively involved in the creation of meaning and
the fulfillment of personal experience? Is the computer just a new kind
of tool, and the Net just anew kind of medium? Or are we becoming
immersed in a wholly new environment, eliciting new behaviors, new
relationships and new ambitions, perhaps with profound ontological
implications? Certainly our systems of perception and cognition are
changing. We see further and deeper, into space and into matter. We

think more associatively, communicate more quickly, remember more extensively. Consciousness itself may be re-framed. Artificial life, biotechnology and complexity, which have most recently attracted the creative mind, make manifest the principles of emergence and the virtue of bottom up construction. How are these principles to be applied imaginatively to art?

Interactive media, immaterial or re-materialised, however conceived and however implemented, support an art which is essentially transformative. In the flux of the Net and the ambiguities of cyberspace, our own identity and sense of self are challenged, as are many of the previous assumptions about the nature of art, the nature of meaning and the nature of Nature itself. In this paper, which I am honoured to give as the keynote to MASS' 98, I shall attempt to sketch out the parameters of this new, emerging field of art, highlighting its divergence from previous practices, indicating its affinities to past cultures, and pointing to future ambitions.

Art is the search for new language, for new ways of constructing reality and for the means of re-defining ourselves. It is language embodied in forms and behaviors, texts and structures. It is language involving all the senses when it is embodied in digital media, in computer-mediated systems and structures. Digital media are transformative media; digital systems are the agencies of change. The computer is essentially a dynamic environment, which involves artificial and human intelligence in non-linear processes of emergence, construction and transformation.

Through the languages it creates, art serves to reframe consciousness, to engender new behaviours, to re-invent the world. Art can only be evaluated and defined by the new language it produces. For the artist simply to re-iterate and maintain received and established language, uncreatively and uncritically, is to renounce the idea that we can rethink ourselves and our world, and to accede to the notion that in matters of reality our minds are made up for us.

(c) Roy Ascott 1998

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

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

[Ed. note: reprinted with permission from MASS' 98]

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< LEA New Design >
                            Patrick Maun

Patrick Maun
LEA Gallery Editor/Curator
Email: <butoh@well.com>

Leonardo Electronic Almanac Volume 7, Number 1 introduces the first phase of the 1999 LEA re-design. This is the second phase of the overall redesign initiated in 1997. The goal of the re-design is to aid in the navigation within the Almanac, as well as in the larger family of Leonardo websites. This will become especially pertinent with the addition of the electronic versions of current and back issues of the hard copy journal, via the Online Computer Library Center, Inc. (OCLC) system and the 30-Year Leonardo archives.

The current changes are primarily cosmetic. Over the next several

months you will see the major changes including a new navigational system and the addition of several new areas including those mentioned above. A new indexing system will be implemented within Articles, Profiles and Leonardo Digital Reviews. More refined searching functions will also be introduced throughout the site.

Technologically the Almanac will remain very basic, on the surface at least, allowing users with very minimal systems to access the site. In contrast, the Leonardo Electronic Almanac Gallery will continue to push and explore the boundaries of technologies. 1999 promises to be a very exciting and continually evolving year for the Almanac.

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         |  PROFILE          |
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< MASS '98 – Media Art Symposium Stockholm (excerpts) >
                         Janet Colletti

Janet Colletti
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MASS '98 – Media Art Symposium Stockholm was programmed by Helene Bostrom and Janet Colletti and produced in collaboration with Konstfack – University College of Arts, Crafts and Design and Stockholm – Cultural Capital of Europe 1998. MASS '98 took place 7-11 December 1998 and consisted of a three-day international symposium organised under the themes Media, Distribution, and Reception.

Day One, Media, addressed the practices and developments of media art. Day Two, Distribution, addressed the challenges media art places on the traditional institutions and distribution channels of art. Day Three, Reception, addressed the effects new media technology has on aesthetics, vision, politics, architecture, gender and science.

The Keynote address for the symposium was delivered by Roy Ascott ("Strategies of Media Art"). The Keynote for Day 2, Distribution, was delivered by Timothy Druckrey ("Event/Transformation/Information: Enacting the Image") and for Day 3, Reception, the Keynote address was delivered by Martin Jay ("Astronomical Hindsight: The Discovery of the Speed of Light and Virtual Reality").

The day sessions were followed by presentations, open to the public, of leading media art centres and museums and included: ZKM Media Museum presented by Hans Peter Schwarz, Ars Electronica presented by Gerfried Stocker, CAiiA – Centre for Advanced Inquiry in the Interactive Arts presented by Roy Ascott and ICC - Intercommunication Center presented by Takuo Komatsuzaki.

The symposium was followed by two days of workshops in Radio Art on the Internet conducted by Heidi Grundmann, Curating Media Art conducted by Timothy Druckrey and Non-Linear Storytelling conducted by Robert Coover and Robert Arellano .

The symposium was attended by a mixed audience of artists, students, curators, museum professionals, media professionals and journalists.

Background

In 1994 we organised the international academic symposium CYBERPSHERE
in Stockholm. Our intention then was to present some of the
interdisciplinary discourses on information technology that were
awakening interest at universities, symposiums and festivals around
the world at the time. MASS '98 - Media Art Symposium Stockholm is in
many ways a follow-up to CYBERSPHERE, with the emphasis now on the
artistic, aesthetics, art institutional and media political issues we
see as important at the end of the 90s.

Our hope is to organise Media Art Symposium Stockholm again in the
year 2000. Sweden, as a leader in telecommunications and
high-technology industry and with its long commitment to equality,
social welfare, and democratic design seems the ideal place to host an
event examining the interdisciplinary issues surrounding new media
technology.

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

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

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< DIS-M-BODY (excerpts) >
                                Kenneth E. Rinaldo and Amy Youngs

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Dis-M-Body is a multisensory, interactive installation exploring the
disembodied nature of information and messages as they dislocate and
fracture one's sense of self, while simultaneously expanding one's
sense of connection. Our sense of self is no longer created through
direct experiences but instead through mediated and simulated
experience. Fictive fluid worlds. Our senses continue to extend far
beyond the physical limits of our bodies; virtual spaces and ideas are
brought to us not by our fingers, ears or eyes but by video cameras,
satellites, and digital wires. It is difficult to know where the
individual body begins and our extended senses end.

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

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

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< What's new in Virtual Africa (excerpts) >
                                    Jocelyne Rotily, Curator

Jocelyne Rotily, Curator
Email: <jocelyne@cybermedias.com>

URL: <http://www.cyberworkers.com/Leonardo>

Virtual Africa was launched a year ago with the intention to encourage
dialogues and cultural exchanges between artists and scholars from
Africa and from the other continents. We also wanted to explore the
boundaries between arts and sciences within the African context. The
final objective being to contribute to a better understanding of
African cultures and to the promotion of contemporary and traditional
arts from Africa. The project is now offering :

- a selection of articles related to the theme of the African mask.
- a section devoted to contemporary artists working under the
  inspiration of African art.
- a section designed for common projects of creation between artists
  from Africa and from the other continents.
- A free virtual gallery opened to artists of African origin.
- A music section dedicated to traditional and contemporary musics of
  Africa.

What's New?

A group of African artists (painters, sculptors) from Burkina Faso :
Claude-Marie Kabre, Sama, Fernand Nonkouni, Beybson, Blanche Ouedrago,
Jean-Didier Yanogo, Suzanne Ouedraogo, Ali Kere, Sokey Edorh,
Namsiguigna Samandoulougou, Adama Sawadogo, Boly Sambo. Also presented
in the gallery, the work of the painter Abdelkader Badaoui (From
N'Djamena, Tchad); the sculptures and robots of Unisa Kargbo (from
Sierra Leone); the sculptures of Aboudramane (from Ivory Coast); the
paintings and sculptures of Godefroy Kouassi (Togo).

To be discovered : the original work of Iba Ndiaye, a painter of
Senegalese origin. His paintings explore the syncopated rhythms of jazz
(eg. his series "Jazz and Blues), recall his youth in Dakar and his
Muslim education. But, Iba Ndiaye also finds his inspiration in the
Western great masters' works (such as Poussin), and appropriates their
forms to express his own vision of Africa and describes, for example,
black man's condition in a world dominated by whites. "To Iba Ndiaye,
the essential aspect of modernity consists in its crossed culture. He
claims the right to take over the techniques of Western art without
imitating them".

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

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

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       |     LEONARDO DIGITAL REVIEWS   |
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< Book Review: The Future of Software by Derek Leebaert(ed.) >

The Future of Software
Written by Derek Leebaert(ed.),
Cambridge, Mass.: MIT, 1995

Reviewed by Kevin Murray
E-mail: <kmurray@mira.net>

The Future of Software is a collection of papers concerned with the
trends in programming from a variety of authors, mostly managers of
large corporations concerned with information flow. The uneven quality
of the writing makes it seem like conference proceedings, but it does
offer a glimpse of how men in power would like to present themselves
to potential software consumers.

In terms of writing, the introductory chapter by editor Derek Leebaert
and the H.G.Well's like future trip by D.K. Louis & L.A. Morrow stand
out. Many of the others fall into the trap of dressing old ideas in
new acronyms. Leebaert uses a number of engaging figures to evoke the
mind-change he anticipates in the future phases of the digital
revolution. My favourite is: Knowledge is the air and light of
civilisation. Transform it and you transform all else. A child born
today arrives in the costume drama of his old age, and dies amid the
science fiction of his babyhood. The greatest voyage has begun. We
will soon enough be out of sight of the land we have lived in for all
our recorded history. (p. 14)

This apocalyptic tone is typical of the new breed of management
re-engineers, whose big boots are made for walking all over
traditional organisations until their chains of commands are flattened
out.

D.K. Louis & L.A. Morrow evoke a time machine for examining the
different ways decisions might be made in real and virtual
environments. Not only are the obvious efficiencies of remote meetings
celebrated, but also the collaborative nature of software development,
rooted in the rural virtues of 'The Prairie School'. The chapter ends
with the monologue framed as a computer game, gently easing its heroic
victor out into the peaceful streets:

His two-year-old toddled by and asked, 'Daddy get COMDEX 2005?'
'Yup', said John, 'finally won, honey.'
'Good', she said, 'let's take a walk'. And they did. (p. 125)

That very much typifies the continuing message of the book, in the
future, software gets softer.
==
< Exhibit Review: Rauchenberg Retrospective >

Robert Rauschenberg; A Retrospective
Location: Guggenheim Museum, Bilbao, Spain
Dates: Nov 1998 - 7 March 1999

Reviewed by: Roger F. Malina
Email: <rmalina@alum.mit.edu>

If, as Gaston Bachelard asserted, the true destiny of a great artist is a lifetime of hard work - then surely Robert Rauschenberg's retrospective is a prime illustration.

Almost 50 years of hard work are represented in this large show, a show that fills two thirds of the spacious galleries of the new Guggenheim in Bilbao, on the northern coast of Spain. Caddis like, the artist has digested much of the art making of the last half century, with supreme craftsmanship, experimented with technological and social issues and succeeds in presenting a single artists' vision of what it was all about.

It could be claimed, perhaps unfairly, that here again is a new museum where the architect wins. Frank O. Gehry's splendid creation, generously funded by the people of Bilbao, is a soaring, passionate declaration that skillfully mixes the idioms of modernism and postmodernism. It is a building that is too easily classified in the new category of "gorgeous mausoleums" that are beginning to dot the new urban landscape - from the new "imperial" Getty Museum in Los Angeles, new MOMA, in San Francisco, to I.M.Pei's "new" Louvre in Paris. I guess my main issue is that these institutions that proclaim themselves institutions of the "modern" and the "contemporary" are resolutely backward looking not only in the content of their exhibitions, but also the nature of their historiography and in their curatorship. If Roy Ascott is right and we are entering a century that must prize apparition over appearance, and emergence over representation, then this new museum is surely more akin to an archeological museum than one belonging to the liquid architecture of the future. But then again just as the Taj Mahal left an indelible impression on my memory, so did Frank O Gehry's Guggenheim in Bilbao.

Gehry's building is above all a successful building. We came to Bilbao to see it, and we left impressed ready to recommend the visit to our friends. Subtly drawing on its river side location in a port city, it neighbors a railway freight yard and sits in easy symbiosis with the elegant bridges of the city and the bourgeois architecture at the city center. The tops of the titanium coated "sails" that crown the building do not dominate the cityscape but rather emerge at the ends of the roads that lead to the museum plaza. The building is generously surrounded by water, plazas and further a park, and is intriguing in the complexity , variety and novelty of its architectural flourishes.. The inside and outside of the building merge seamlessly, feeding the visitors into the tall light atrium that looks onto the river. One gigantic gallery , shaped like the inside hull of a ship, housed Rauschenberg's 1/4 mile long "Two Furlong Piece" and Richard Serra's "Snake". Both pieces of art work exceptionally well in the room, as testified by the many Spaniards parading up and down the gallery as if it were an extension of the city avenues along which they stroll every night.

For readers of Leonardo, Robert Rauschenberg's name is unavoidably linked to the influential work of E.A.T. (Experiments in Art and Technology) which he co- founded in the 1960s with Billy Kluver (among others). The retrospective includes a number of works from the E.A T period including a number of pieces in the "Oracle" and "Soundings" series. The pieces are shown as free standing sculptures or installations, regrettably divorced from the context of the "Nine Evenings" and other works of the E.A.T. collaborators. The pieces include motorised and electrical mechanisms, and sound generating devices. "Soundings", a large mural of mirrored plexiglass, displays

its contents in response to sound actuated interior lights.. Other works, with plexiglass disks, can be manipulated. Divorced from their context, these artworks seem rather tame - in the Tinguely school of humour in art and technology. Later in the exhibit some of Rauschenberg's work that make use of Iris printers to create digital color prints applied to a variety of surfaces, including screen printed reflecting metal surfaces . Within the large collection of this retrospectives, Rauschenberg's experimentation with materials, with performance and technology are swamped by the acres of lithography and silkscreening for which he is better known. It would be hard to identify any "key works' in the history of art and technology in this exhibit.

It is also perhaps not sensible to present work that came out of the collaboration of a large group of person in E.A.T. within a retrospective of the work of only one of those participants. This will be a more and more common dilemma as the new media work that arise from a collaborative esthetic are digested by the museology establishment. Museums (an collectors) need artists in the romantic mould, and are often uncomfortable with group work.

This exhibition reveals another basic conundrum faced by modern art museums As they seek to incorporate the work of artists such as those involved with science and technology into the twentieth century canon; the basic curatorial structure of these museums is largely incompatible with art making that has as its heart experimentation with new media or formats, interactivity, performance, accident and emergence. The large exhibit of Fluxus work which is touring internationally, the exhibit of Group Zero work shown in Nice last year, or indeed many of the recent museum shows of web-art, all fail to find a way to display the work in any way that makes much artistic sense. Reduced to dessicated vestiges that can be displayed under glass cases as "Objects", (surely displaying PC computers is the ultimate absurdity for Internet based work) the works lose almost all their individual interest and the method of display creates a false mystery around the nature of the artistic meaning. Perhaps ironically the gallery which displays the work of your favourite post-modernists is a cul-de-sac on the top floor. One might get the impression that one had entered a "museum of useless things" or perhaps more likely leave with the impression that "it is all shopping, after all".

And yet it must be admitted that Rauschenberg succeeds in doing much more than just decorating the insides of Gehry's building; or perhaps it is a tribute to the success of Gehry's design that the artist gets to have his say in the architect's gorgeous mausoleum. When this Retrospective reaches your area, it is worth the visit even without the context of the Gehry building.
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< Book Review: Duchamp Unpacked by Dalia Judovitz >

UNPACKING DUCHAMP: Art in Transit
by Dalia Judovitz
University of California Press, Berkeley
pp ed. 1998 (first published 1995)
308pp.

Reviewed by Molly Hankwitz
Email: <mollybh@wenet.net>

Judovitz's book brings this artist into the limelight of a post-modern interpretation which focuses on Duchamp's underlying with, sense of chance and movement as a 'mechanical' metaphor for 20thc. art making. She seems to understand clearly the almost preposterous assumptions which make Duchamp's work so clever and eloquently places

his puzzling works within his 'historic' reputation for altering the foundations of modern art -- the death of painting, to say the least.

From Duchamp's rejection of painting to Clement Greenberg's writings on the artist, the author offers insightful analysis of the major works including 'The Large Glass', 'Fountain', and 'The Bride Stripped Bare by Her Bachelors, Even' and their placement within art history. Her emphasis is on movement, epiphanies, chance, interstices, materiality/non-materiality, theory and non-art. This effort to recontextualize Duchamps' trajectory within postmodernity is underscored by the book's subtitle: 'art in transit' -- transit, transitional, transitory. Non-permanent. Duchamp is portrayed as a witty problem-solver ever preoccupied with issues of genre, gender, and representation.

Incorporated into the discussion are many lesser works and an ample chapter on 'Ready-mades'. From within this context, Duchamp is once again viewed as having opened up modernism to broader categories and the author moves on to show how the activity of redefinition of artistic production helped to create ground for the era of appropriation at the core of postmodernity. What is original and what is not? Her complex arguments offer detail and finely-woven interpretations.

Dalia Judowitz is also the author of 'Subjectivity and Representation in Descartes: The Origins of Modernity' (1988), coeditor of 'Dialectic and Narrative' (1993).

More reproductions, some in color in this new paperback edition would have better illustrated the art and made long texts more compelling. Though a bit linear in terms of approach, 'Unpacking Duchamp: Art in Transit' is a high-minded read for the dialectically- predisposed. Another text for Duchamp's canon.

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< Book Review: In the Eye of the Beholder by Vicki Bruce and Andy
   Young >

In the Eye of the Beholder: the Science of Face Perception
Vicki Bruce and Andy Young.
Oxford University Press,
New York, 1998. 352 pp., 189 illustrations, $39.95.
ISBN: 0-19-852440-4.

Reviewed by Wilfred Niels Arnold
Email: <warnold@kumc.edu>

Those of us who labor at the interface of the hard sciences and the visual arts cringe when we hear unorganized criticism of the work of some extraordinary painter, sculptor, or architect. Countering such diatribes with golden ratios, color theory and so forth is to no avail. All too often you will lose the battle of comparisons with the modest efforts of "Uncle Jack" or "our little Jill" because, they say, it all depends on, "the eye(s) of the beholder."

The intention of Professors Bruce and Young is quite different, namely to explain the science of recognition, with particular emphasis on the human face. In short, there are rules that are followed and working hypotheses that abound; and these not only hold water but have a remarkable span of age and ethnic background. They explain all of this in masterful fashion. Accordingly, I believe the authors would have been better served by just the second part of their title or something akin to "The Science of the Face," the exhibition at the Scottish National Portrait Gallery to which this book was timed.

On almost every page there are photographs, reproductions of art work, computer-manipulated studies, or graphics, which are nicely located with respect to the narrative. Many are in color and a good quality paper has been used throughout the volume. References to the original literature are far from encyclopedic but the 225 selections will probably be adequate for most of the wide and unspecialized audience intended. The subject index works and is generous enough to include some helpful double listings; for example 'dark and light patterns' is found under both 'dark' and 'light.' We always appreciate a separate name index, but the reference utility in this one would have been improved by including the years on each entry.

Each of the seven chapters follows a more or less graded development so that readers can go as far as they wish. I imagine that most people who pick up this attractive book will find themselves scanning the graphics and being pleasantly drawn into the theme. For instance, chapter 2 on the science of vision is rich in visual exercises which exemplify the huge contribution of the brain in interpreting signals beyond the relatively meagre ability of a camera, and the examples borrowed from Nicholas Wade, Salvador Dali and others are both profound and entertaining.

The authors seem to have had a little trouble in reaching a stopping point. A section entitled "perception of faces by newborn babies" turns out to be the last. Herein we encounter a geodesic hair net of current sensors being demonstrated on a baby. Everybody is smiling. Suddenly, in the final paragraph, the authors attempt a hundred word summary for the whole book. It seems to have been added as an afterthought, as if a deadline were looming. This will probably be corrected in a subsequent edition. Overall, the book has much of interest for a first encounter and will also be revisited.

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< Guest Editorial: VideoDance >

Written by Doug Rosenberg
Email: <rosend@mail.soemadison.wisc.edu>

Video space as a site for choreography is a malleable space for the exploration of dance as subject, object and metaphor, a meeting place for ideas about time, space and movement. The practice of articulating this site is one in which, through experimentation with camera angles, shot composition, location and post production techniques, the very nature of choreography and the action of dance may be questioned, deconstructed and re-presented as an entirely new and viable construct. The result of this activity is what has come to be known as Video Dance, the practice of creating choreography for the camera, recorded in the medium of videotape. Video Dance is a site-specific practice, that site being "video" itself. The term video serves as a kind of shorthand for a much broader system, a spatial construction which includes electronic recording devices, satellite transmission and reception and viewer decoding. As with any socially constructed site, it is beneficial to begin with an understanding of the language and history common to the form. The contemporary practice of video dance has as its genesis, a short film by Thomas Edison made as early as 1894-95 called Annabelle The Dancer. The film, shot in one long take, features a young woman doing a sort of Loie Fuller impression for the camera, her swirling, flowing dress in constant motion. The arc of dance for the camera continues through Hollywood musicals and the Busby Berkeley spectacles of the 1930's, primarily as a form of escapist, popular entertainment. There are some exceptions to this trajectory, most notably Maya Deren's seminal cine-dance from 1946, A Study in Choreography For The Camera made in collaboration with Talley Beatty, which is the precursor to contemporary Video Dance. While

there was (and continues to be) considerable overlap, the transition
from film (Cine Dance) to video (Video Dance) in the late 1960's as
the common method of fixing autonomous dance images, reflected a
rapidly changing culture and concretized McLuhan's theory of a global
village through the application and appropriation of media practices.
Choreographers, especially those born in the age of media, and aware
of its power, have appropriated the language of media while continuing
to create work for the theater.

Contemporary dance has been greatly influenced by the language of
video, television and the cinema. This is evident in contemporary
choreographic practices which mimic the non-linear deconstructionist
tendencies of media and the cinematic jump cut. This is remarkably
clear in regard to video dance. There are myriad and distinct
differences between dance made or re-made for television and the
collaborative work of video artists and choreographers created with
other ends in mind. As with any history, there are specific works
created for the camera that have come to be regarded as "classics" of
the form, such as Merce Cunningham's Blue Studio, and the
aforementioned work by Deren. The importance of these works, can be
found in their use of the camera in creating an architecturally and or
geographically specific site which contextualizes the choreographer's
vision in a way not possible in the theater. There was a flurry of
activity in video dance in the United States in the late 1970's
through the late 1980's as funding sources including the National
Endowment for the Arts, state agencies and PBS affiliates like WNET in
New York and KQED in San Francisco began to recognize dance for the
camera. However, that funding, (along with much of the funding for the
arts in the US) has disappeared. Coincidentally, with the decrease in
funding and the increase in cultural media literacy and the
availability of consumer format video equipment, the number of artists
creating dance for the camera has increased exponentially, giving
voice to and empowering dance makers around the globe to participate
in defining a site that is particular to dance for the camera.

Dance is, by its very nature, an ephemeral art form. It is also one
that is constantly defining and re-defining itself in relation to the
culture and to contemporary life. As technology has advanced with
increasing rapidity since the late 1960's, dance-makers have found new
and often ground-breaking methods for using technology to achieve
their choreographic visions. Grounded in this marriage of dance and
technology is the creation of dances made specifically for the camera.

Editor's note: This article is excerpted here. Please see
<http://mitpress.mit.edu/e-journals/Leonardo/reviews
/editorial/rosvid.html> for the full version.

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The editors of Leonardo Digital Reviews welcome your comments. Contact
us via email at <ldr@msp.sfsu.edu>. These editorials and reviews may
be found online at
<http://mitpress.mit.edu/e-journals/Leonardo/ldr.html>

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        |   OPPORTUNITIES     |
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< Artist in 3D Studies/Digital Design - Duluth, Minnesota >

Gloria DeFilipps Brush

Head, Department of Art
University of Minnesota, Duluth
317 Humanities Bldg., 10 University Drive
Duluth, Minnesota 55812
Tel: (218) 726-8580
Fax: (218) 726-6532
Email: <gbrush@d.umn.edu>

Artist in 3D Studies/Digital Design

Assistant Professor, tenure track

Salary: negotiable.
Start Sept. 1, 1999.
Term of contract: 9/1/1999 - 5/31/2001; renewable.

Teach sculpture, 3D design, 3D digital design. Possible assignments in
computer studio and/or 2D digital design. Contribute to aspects of the
M.F.A. program in graphic design. Occasional assignment in other areas
of expertise possible. Manage 3D studio facility. Creative
activity/research, advising, and service responsibilities.

Essential qualifications: M.F.A. in art by 7/1/1999. Experience with a
range of 3D object-making processes and construction options.
Familiarity with current and emerging electronic technologies and
historical and critical issues. Active national exhibition record.
Mac-based visual arts computer experience. Communication skills
appropriate to a faculty position.

Preferred qualifications: Two years college level teaching experience
preferred. (Graduate Teaching Assistant experience acceptable.)
Experience with photographic processes desired.

UMD is the second largest campus of the University of Minnesota
system. The Art department, within the School of Fine Arts, has over
250 undergraduate majors in studio art, graphic design, art education,
art history, and art and technology, and an M.F.A. program in Graphic
Design. Duluth is a scenic port city within proximity to the Boundary
Waters Canoe Area Wilderness, and has extensive cultural, educational
and recreational opportunities.

Completed applications must be postmarked by March 10, 1999. Submit:
Letter of application reflecting philosophy of teaching and skills and
experience as they relate to the position; curriculum vitae;
unofficial transcripts (official transcripts required if finalist); 20
slides of work or commensurate material on videotape or CD; 10 slides
of students work invited, if available; names, addresses and phone
numbers of three professional references (letters of reference will be
required for finalists; SASE, to: Gloria DeFilipps Brush, Chair, 3D
Search Committee, Art Department, University of Minnesota Duluth, 317
Humanities Building, 10 University Drive, Duluth, MN. 55812. For
questions concerning the position, contact Gloria D. Brush, (218)
726-8580 (e-mail: <gbrush@d.umn.edu>) The University of Minnesota is
an equal opportunity educator and employer.

****
< Music Notation Software Position in Philadelphia >

John Strawn, Ph.D. (recruiter)
S Systems Inc.,
15 Willow Avenue, Larkspur California 94939
Tel: 415 927 8856
Fax: 415 927 2935
Email: <ssys@netcom.com>

Job Announcement: Music Notation Software Position in Philadelphia

Normally S Systems Inc. is a DSP consulting firm; as a sideline we also work as a recruiter. We are now searching to fill full-time employment positions at a small company on the East Coast. If you are a team player and are interested in this or other hardware and software positions related to DSP around the country, please send a resume (email ASCII preferred) to the address below.

Location: Philadelphia

Company: 8-year-old well-established startup specializing in music performance, music education, computers, especially guitars --- I'll point you at their interesting web site if we send your resume to this company. There are about 2 dozen people there now, the company is growing; several new products and product lines are in the works. I have placed 3 people there so far since the beginning of 1998.

Position title: Senior Applications Programmer (music notation)

Description:

This person will be responsible for:

- Organization, upkeep and modernization of legacy music notation code in the company's well-respected applications.
- Periodic updates of existing notation software.
- Creating and updating graphic user interfaces for notation and MIDI sequencing software.
- Creating and updating functionality for notation and sequencing software. By creating/updating functionality I mean the addition of functionality to notation software that may not exist in the commercial market currently, such as the ability for the user to embed/edit performance information (MIDI and otherwise) in a graphic element of notation such as a tenuto mark.
- providing technical management to guide one or two junior programmers working on the same project.

Requirements:

Be a team player.
Be willing to relocate to and work full-time in Philadelphia area.
Experience in writing music notation software, ideally on Wintel platform, but experience on other platforms is acceptable.
We don't care so much which language
you did this in, but you need to have coded up music notation before.
5+ years experience with C/C++/Obj-C.
5+ years experience using MSVC.
5+ years applications experience.
Some experience as technical lead or project manager.
Win95 experience.

Other desired skills:

Mac experience will be helpful.
Some experience with MFC.

****
< Ohio University School of Music Electronic Music Graduate
  Assistantships: 1999-2000 >

Mark Phillips
Professor of Music

School of Music, Ohio University
Athens, OH 45701
Tel: 740/593-4244
Fax: 740/593-1429
Email: <mphillips3@ohiou.edu>
URL: <http://ouvaxa.cats.ohiou.edu/~phillipsm/>

Ohio University School of Music Electronic Music Graduate
Assistantships: 1999-2000

Availability:
It is anticipated that one or two awards will be given in Electronic
and Computer Music for the 1999-2000 academic year. Assistantships are
limited in number and awarded competitively.

Deadline: March 26,1999.

Compensation package (including tuition waiver):
 In-State $ 6915 - $ 9465
 Out-of-state $11916 - $14466

Duties:
Specific duties will vary depending on the qualifications and
experience of the candidates. Duties may include the following: help
supervise Macintosh-based MIDI lab, teach undergraduate and lower
level classes in MIDI applications for musicians, routine maintenance,
and help create instructional materials. Time commitment is from 5 to
15 hours per week, depending upon the specific assignment and the
amount of the award.

Degrees Offered:
Master of Music (M.M.) in Composition, History and Literature,
Performance, Music Education, Music Therapy. Additional program of
interest: Master of Arts (M.A.) degree combining Electronic Music
with two other related fields, such as Audio (or Video) Production and
Film - available through the Independent Instructional Program (IIP).

Admission:
Admission is by application to the Graduate School and the School of
Music. Applicants for the M.M. in Composition or the M.A. through the
Independent Instructional Program (IIP) must submit a portfolio of
their creative work. A personal interview is recommended for those
seeking a Graduate Assistantship in Electronic Music.

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                      |   ANNOUNCEMENTS   |
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< Leonardo Music Journal Relaunch >

Andrea Blum
Leonardo Music Journal
Tel: 415-904-6988
Email: <isast@well.com>
URL: <http://www-mitpress.mit.edu/Leonardo/home.html>

Leonardo Music Journal Relaunch (Issue #8 Launch)

On Saturday, February 13 at 7:30 P.M. Leonardo celebrates the
publication of Volume 8 of Leonardo Music Journal with a concert and

reception at the historic Berkeley Piano Club. Baritone Thomas Buckner, accompanied by pianist Joseph Kubera, will present "Ghosts and Monsters -- Songs from 1680 to the Cusp of the Millennium." This program will include:

"An Evening Hymn" (Henry Purcell)
"General William Booth Enters into Heaven" (Charles Ives)
"What if Some Little Pain" (Ned Rorem)
"Music for Two" (John Cage)
"Ode Machine" (Cornelius Cardew)
"Music for Baritone and Slow Sweep Pure Wave Oscillators"
 (Alvin Lucier)
"Somewhere in Arizona 1970" ("Blue" Gene Tyranny)

This concert is keyed to the themes and authors of this year's Leonardo Music Journal (available for sale at the event), which originate from Cornelius Cardew's infamous 1972 essay "John Cage -- Ghost or Monster?" Inspired by Mao Tse-tung, Cardew surveys the state of new music for signs of what Mao called "ghosts" ("myth, madness, magic and mysticism") and "monsters" ("anti people ideas" having to do with technological futurism and political fascism). The avant-garde does not fare well under Cardew's hand, but if his histrionics seem quaintly dated today, those two nightmarish pillars -- slightly adjusted -- still have relevance: ghosts and monsters still play critical, if often covert, roles in the creation of an individual composition, in the evolution of the body of a composer's work, or in the development of musical "schools" and scenes.

The "cult of personality" surrounding three such schools is represented here by composers at distinct aesthetic odds with one another: Cage, Cardew and Rorem. The inclusion of Purcell, a ghost from the distant past, relates to an essay in the journal that questions whether "authentic" performance of early music is practical today. The ascension of the founder of the Salvation Army, as accounted by Ives, contrasts with kidnapping by aliens according to Tyranny. Lucier conjures up acoustic phantoms.

This is a very unusual concert program by one of the most distinguished performers of modern vocal music, and not to be missed.

Tom Buckner has achieved notable success as an innovative performer of some of the most adventurous music of the 20th century. Buckner continues to be a pioneer in a wide range of musical contexts, mixing genres and breaking barriers in his continuing pursuit of the yet-to-be imagined.

Joe Kubera, pianist, has gained international recognition as a major interpreter of contemporary music. A leading proponent of the music of John Cage, he has performed many of the composer's works. His recent recording of Cage's monumental "Music of Changes" is available on the Lovely music label.

The concert will take place at the historic Berkeley Piano Club located at 2724 Haste Street in Berkeley, California. Exit the Bay Bridge going on I-80 to the University Ave.exit. Stay on University Ave. until it ends. Turn right on Oxford. Turn left on Dwight Way until Piedmont. Left on Piedmont until Haste (1 Block). Haste is a one-way street. The club is behind a house on the south side of the street.

The concert will begin at 7:30 P.M. Tickets are on a sliding scale: $5.00 to $10.00 suggested donation.

For more information and ticket reservation, contact Andrea Blum at

Leonardo, 415-904-6988 or via email at <isast@well.com>.

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< ACADIA'99 Conference >

Dr. Julio Bermudez
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Graduate School of Architecture
AAC 235 University of Utah
Salt Lake City, UT 84112
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Fax: 801.581.8217
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ACADIA'99 DIGITAL MEDIA & DESIGN CONFERENCE (OCT.99)

This year ACADIA (Association for Computer Aided Design in
Architecture) conference will be held at the University of Utah
Graduate School of Architecture (Salt Lake City) on October 14-17
1999. The topic for the 1999 conference is "Media & Design Process".
This means that we will look at the broader aspects of design and not
just architectural related process. Design thinking and making in
general will be our focus.

Possible themes for submissions are empirical research that provides
evidences on the relationship between media and design decision
making, critiques/evaluations of reported experiences; experimental
work that opens new areas of media research and design; and
theoretical studies of the relationship between media and the
architectural design process

Paper abstract of 500 words are due on March 1, 1999 followed by full
papers due on March 15, 1999. Workshop/Panel proposals as well as
"Work in Progress" abstracts are due on March 15, 1999. Notification
of acceptance will be available by May 15, 1999. Detailed information
concerning this call for submissions and the ACADIA'99 conference may
be obtained at

<http://www.arch.utah.edu/Acadia99/index.html>

or by email to Osman Ataman & Julio Bermudez (technical chairs) at
<acadia99@arch.utah.edu>.

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< Creativity & Cognition 3 >

Linda Candy
Creativity and Cognition 1999 International Workshop
LUTCHI Research Centre, Loughborough University,
Ashby Road, Loughborough, Leicestershire, LE11 3TU. UK
Direct line: + 44 1509 222328
LUTCHI Office: + 44 1509 222789
Fax: + 44 1509 610815
Email: <L.Candy@lboro.ac.uk>
URL: <http://bashful.lut.ac.uk/cc99/>

CREATIVITY & COGNITION 3, 1999

Intersections and Collaborations: Art, Music, Technology and Science

An ACM SIGCHI International Workshop

CALL FOR PARTICIPATION

PLEASE NOTE REVISED SUBMISSION DATE

In October 1999, Creativity and Cognition 3, an ACM SIGCHI
International Workshop, will take place at Burleigh Court,
Loughborough University in Loughborough, England. Proposals for the
presentation and demonstration of collaborative ventures between
artists, composers, scientists and technologists are invited. The aim
is to explore how the different viewpoints and languages of art, music
and science have influenced or informed one another. Collaborative
explorations which have, in some way, moved beyond the existing
technology and led to new ways of working are especially welcome.

IMPORTANT DATES
The event : October 11-13th, 1999

Deadline date for submissions : March 26th 1999 - 5 pm local time

Notification of Acceptance : May 28th, 1999

Final Copy Date for Proceedings: June 25th, 1999 - 5 pm local time

There will be an ACM publication which documents the papers presented
and the events that take place. All submissions should be in the
SIGCHI standard format.

Topics and themes:

Theories and studies of creativity and cognition

Computers as creativity machines

Computers as catalysts for human creativity

Initiatives in fostering creativity in the community

Intersections and correspondences between art, music, science and
technology

Interactions between artists, musicians and scientists

Impact of new technology on thinking and action in art, music and
science

Scenarios for the future in the creative arts

Event proposals and paper submissions should be sent to the Program
Chair, at the above location.

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<   2nd International Workshop on Strategic Knowledge and Concept
    Formation >

Professor Koichi Hori
RCAST, University of Tokyo
4-6-1 Komaba, Meguro-ku
Tokyo 153-8904 Japan
Fax: +81 3 3481 4585
Email: <hori@ai.rcast.u-tokyo.ac.jp>
URL: <http://www.hamid2.soft.iwate-pu.ac.jp/skwshop>

Announcement and Call for Papers

2nd International Workshop on Strategic Knowledge and Concept

Formation

October 20-22, 1999

Venue:Iwate Prefectural University, Japan.

The theme of the workshop will be strategic knowledge and concept
formation in design. The emphasis will be on relevant issues in
computer-based design support. This is the continuation of the SKW'97
workshop held in Loughborough UK in 1997.

DATES

Deadline for papers :   April 1st 1999
Notice of acceptance :   June 1st 1999
Send Final copy :   August 1st 1999

****
< 12th European Media Art Festival >

European Media Art Festival
Lohstr.45a
PO Box 1861
D-49074 Osnabrueck
Tel: +49/541/21658/25779
Fax: +49/541/28327
Email: <info@emaf.de>
URL: <http://www.emaf.de>

EUROPEAN MEDIA ART FESTIVAL - OSNABRUECK
MAY 5-9 1999

We cordially invite you to attend the 12th European Media Art
Festival. Dedicated to artistic experiment, the festival has an open
policy with room for projects ranging from process-based experiments
and technological innovation to dexterous crossovers between the media
and genres.

For five stimulating days, this international forum for contemporary
media art brings together filmmakers, multimedia and performance
artists, theorists, journalists and the interested public.

METROPOLIZED
Spaces under Pressure - Bodies in Excess

This project is being advanced with the support of the E.C.F.F.
(European Coordination of Film Festivals) in collaboration with the
Biennale film+arc.graz, Festival die Populi, Florence, and the EMAF.

The content of this focal programme is the reciprocity resulting from
interaction between urban structures and the human psyche.

RETROSPECTIVE
Planned is a retrospective featuring films and TV productions by the
US filmmaker Gregory Markopoulos. In the course of his creative
career, he developed a refined montage technique involving in-camera
editing further heightened by double exposure and dissolves. Orbiting
around the director's own homosexuality, the subjects of his films are
persuasively integrated into adaptations of ancient Greek tragedies.

ELECTRONIC CAFE'
"To me, it seems there's no way round contributing to the design of
one's own times using modern means." (Lazlo Moholy Nagy)

The Internet, CD-ROM and multimedia networks are the contemporary media for inter-media undertakings. At the same time, they act as interfaces between social processes and artistic activity. The festival presents works and projects implemented on, or originally conceived for, these platforms.

EXHIBITION, 5-30 May 1999

The "Kunsthalle Dominikanerkirche" is the central venue for the Electronic Cafe along with an exhibition of international film, video and computer installations. The space offered by this historic building is ideal for implementing artistic concepts encompassing sculpture, projection and interactive systems.

INTERNATIONAL STUDENT FORUM

This festival section is dedicated to students attending colleges in Germany and abroad, and their current output. A focal point is the exhibition with video and computer installations. The festival invites the submission of new productions by students working in media- and AV-related fields.

MEDIA MINDS
Congress on Culture and Multimedia in Europe

On the occasion of Germany's EU presidency in 1999, the EMAF is staging an interdisciplinary congress devoted to culture and multimedia in Europe. Under discussion will be the perspectives for arts and multimedia promotion in the ever more closely linked countries of Europe, against the background of the new EU framework programme for cultural promotion in 2000-2004.

The global interaction of art, culture, technology, science and business has led to new structures that raise questions about society's cultural self-image. The transformation into a mediatized society, and the radical changes and progressive dissolution of traditional social and economic structures this process involves, poses the major cultural challenge we must face as the millennium draws to a close. The goal of the conference is to discuss the problems and perspectives of European cultural subvention at the crossroads between a future policy of centralized or regional decision-making.

European politicians specializing in arts and media, cultural philosophers, as well as artists and academics in various disciplines will come together to discuss the role of new technologies in the transformation processes affecting arts and society, and present their blueprints and projects.

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< New on the Pioneers and Pathbreakers Project: Nicolas Schoffer
   site >

URL: <http://www.cyberworkers.org/olats/schoffer>

As part of the Leonardo "Pioneers and Pathbreakers" Art History Project, a web site on the work of techological artist Nicolas Schoffer is being hosted. Recently added to the site are statements by M. Marc Saltet, M. Georges Patrix et M. Claude Parent; new visuals of the digital artwork Microtemps 9. (1962) and also statements on collaborators including Maurice Bejart and Pierre Schaeffer. If you have documents or visuals relating to the work of Schoffer that could be added to this web site please send email to <leo@mitpress.mit.edu>.

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