



Leonardo Electronic Almanac

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|
| CONTENTS |
|

INTRODUCTION

< This Issue >

Craig Harris

FEATURE ARTICLE

< Blinded... and the new LEA Gallery >

Carl DiSalvo and Patrick Maun

PROFILE

< CAIIA+STAR >

Roy Ascott

LEONARDO DIGITAL REVIEWS

Roger Malina et al

< Audio CD Review: Mouse Trap Music by Mark Applebaum >

Reviewed by Axel Mulder

< Book Review: Painting the Heavens by Eileen Reeves >

Reviewed by David Topper

< Book Review: Le Ton bon de Marot by Douglas R. Hofstadter >

Reviewed by Richard Kade

< Book Review: Microcosmos by Margulis & Sagan >

Reviewed by Kasey Asberry

< Conference Review: The Artist and Philosophy of Colour >

Reviewed by Mikhail S. Zalivadny

< Book Review: Design Literacy >

Reviewed by Roy Behrens

< Digital Review Notes >

OPPORTUNITIES

< Dartmouth College - Bregman Electronic Music Studio >

< Brown University Department of Music >

< University of Wisconsin-Milwaukee School of Fine Arts >

< Pratt Institute, Brooklyn - Computer Graphics Faculty Positions >

ANNOUNCEMENTS

< Scripted Spaces: An ITA Conference >

< XII Colloquium on Musical Informatics >

< Call for papers: SCI '98 >

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INTRODUCTION

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< This Issue >

Craig Harris

This month we are pleased to launch the newly-reconstructed Leonardo Electronic Almanac Gallery. LEA Gallery Curator Patrick Maun provides us with a statement about the new Gallery, and introduces the first work to be presented: Carl DiSalvo's creative perspective on the work of Georges Bataille. We can look forward to many new works that will appear in the Gallery in the coming months. We also introduce a new integrated international research platform - CAiiA+STAR - an ambitious collaborative research program that brings Roy Ascott's Centre for Advanced Inquiry in the Interactive Arts with the newly established centre for Science, Technology and Art Research, in a joint research program.

Next month we will launch a new topic thread exploring Art and Artificial Life. Ken Rinaldo has taken on the task of compiling an ambitious collection of articles and art works, and will be providing us with a context for navigating in this rich and complex realm. Also next month we introduce Mike Punt, the new Editor in Chief of Leonardo Digital Reviews. Mike is taking LDR in a new direction, representing another area of growth for the journal.

1998 is the year that LEA will be establishing a more formal subscription process. Up until now we have operated on the honor system for our subscriptions, and the web version of LEA has remained accessible by any who visit. The text version was distributed to the paid subscription list, and that has been the model for our operation since 1995. MIT Press has now implemented a viable system for handling subscriptions for their electronic journals, and our financial status requires that we move to a more formal mechanism for creating our earned income. We expect that the text version of LEA will not be created and distributed as we have done in the past, and visitors to the site will be expected to subscribe to LEA in order to gain access to the full depth of the content. Several full length articles are already being prepared for publication in the coming months, a feature that is easier to present on the web than it has been in the email-distributed text format, and the duplication of activities has become problematic as we work towards expanding the depth and quality of the journal. We will continue to offer some content on a gratis basis, and will provide people with information about what will be available to those who are full subscribers to the journal. We hope that the community will recognize the value of Leonardo Electronic Almanac, and will be willing to pay what is a rather small subscription price. Join us as we evolve in 1998 and beyond!

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< Blinded... and the new LEA Gallery >
Carl DiSalvo and Patrick Maun

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Philosophy and Visualization : Imaging The Impossible
by Carl Francis DiSalvo
Forthcoming in Leonardo

Curator's Introduction:

Georges Bataille burst onto the French scene with the 1928 release of "The Story of the Eye" - a vivid work of eroticism and desire following the lead of de Sade. Bataille's thoughts and actions were thoroughly ensconced in the surrealist tradition. His relentless examinations into the sacred and profane set him apart from, and often at odds with, his fellow surrealists. This eventually led to his denunciation by Andr  Breton in his Second Manifesto of Surrealism of 1929.

Later theoretical works such as "On Nietzsche" (1945), "The Impossible" (1952), "The Inner Experience" (1954), and "Guilty" (1961) as well as his work with the journals Documents, Ac phale and Critique solidified his place as one of the more influential thinkers of post-structuralist France. His influence can be found in the thinking of such heavyweights as Derrida, Foucault, Kristeva and Baudrillard. Though known primarily for his works dealing with eroticism and self, his importance and contribution has been recognized in areas as diverse as economics, sociology, anthropology and philosophy.

Carl DiSalvo's piece "Blinded... as I stared into the Heavens" concerns itself primarily with Bataille's notion of "The Impossible" - the indefinite reality of actions taken to the extreme: sacrifice, pornography, death.

DiSalvo creates visualizations of these highly metaphysical acts; such as that of staring into the sun, that fall into the alchemical paradigm of materials (ideas) transmuted into (virtual) artifacts that move beyond the physical excesses and banality of the gnostic Demiurge. This virtual exploration acts as a hermetic interpretation of humanistic theories, much in the same way Mandelbrot's fractal discoveries illuminated mathematical and physical theorems, providing a sensory manner of understanding complexity.

DiSalvo asks us, the viewer, how we can become engaged with these difficult theories of the humanities through technological mediation, most importantly, that of the internet. For DiSalvo, it is through these new technologies that the impossible, the abstract, the divine spark of light of these aesthetic experiences can be attained. The video screen allows us to stare at the sun, the nebulous web of the Internet forces us to question the totality of the real, thus the pixel becomes that obscure object of desire.

Carl Francis DiSalvo is an artist, designer, and theorist interested in technological mediation of identity and being. He was a featured presenter at the 1997 ISEA where he delivered a paper entitled "VRML: Writing The Space Of Identity on The WWW". He is currently working as a Senior Designer and Consultant for Bitstream Underground, Inc., in Minneapolis.

Carl can be reached at <disalvo@bitstream.net>. His paper "Philosophy and Visualization: Imaging The Impossible" is forthcoming in Leonardo.

Abstract of the Paper:

Visualization techniques as are being used in the science and the arts for the advanced analysis of information and theories can and should be used in the humanities in a likewise fashion. Within the discipline of philosophy there is both the possibility and necessity to examine and present ideas using visualization techniques. A CD-ROM entitled "Blinded..." was created by the author/artist as an attempt to use visualization techniques to analyze and represent a metaphysical action proposed by the French philosopher George Bataille. This paper discusses the creation of that work and the theories involved in conjunction of philosophy and visualization.

Artist's Statement:

I began spending time with the writings of Bataille about the time that I began engaging technology and was soon drawn into attempts to represent not Bataille's work itself, but rather its meaning through this medium. It seemed appropriate. As Bataille spoke of metaphysical acts of consumption which transcended our normal states of being, I thought the protean nature of computationally technologies provided possibilities for both the expression and perhaps the experience of these acts. Thus "Blinded...as I stared into the heavens."

This project, which existed before this incarnation as digital images, a CD-ROM and a paper forthcoming in Leonardo, attempted to model an experience of "The Impossible:" a metaphysical action which negates product for the sake of profound experience.

I chose to attempt to model the act of staring at the sun, an act Bataille wrote of in several of his texts. My goal was to use video/imaging and 3-D modeling technologies to simulate this act, and in doing so question the nature of the act, the nature of simulation, and my personal historical placement to the act via simulation. This piece presents sketches of the process, not as a report, but as fragments of that investigation in an attempt for understanding the process itself.

LEA Gallery Design Statement:

The redesign the Leonardo Electronic Almanac Gallery represents phase II of the overall Almanac redesign initiated last year. The world wide web is rife with "virtual galleries," and one of the main challenges faced in our redesign is the exploration of where exactly the Leonardo Electronic Almanac Gallery fits into the larger picture of web-based, new media work. The gallery is conceived to be ever-changing -- adapting itself to both complement new projects as well as offering a framework for the archival of older works.

While the Leonardo Electronic Almanac is designed to accommodate a wide variety of users -- those on the bleeding edge of technology as well as those relying on dial-in modems and older browser -- the gallery has been designed to take advantage of some of the newer technological developments. As the gallery evolves and adapts, so will the technology it uses, and by keeping the gallery open to technological exploration, we allow the possibility for projects investigating and utilizing animation, sound, VRML and Java.

To achieve our goal of providing a valuable and needed resource, we need to hear from our visitors. If you have comments, ideas or would like to propose a project for the gallery, please contact Patrick Maun at <butoh@well.com>.

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PROFILE
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< CAIIA+STAR >

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Announcing a new integrated international research platform:

CAiiA+STAR
integrated research
online/onsite

CAiiA-STAR is a research platform that integrates two centres of

doctoral research: CAiiA, the Centre for Advanced Inquiry in the Interactive Arts, at the University of Wales College, Newport, and STAR, the centre for Science, Technology and Art Research, in the School of Computing, University of Plymouth. CAiiA was established in 1994 as an outcome of the success of the first Interactive Arts honours degree. STAR was formed in 1997, building on the School of Computing's research achievements in the domain of Interactive Multimedia and the associated fields of Artificial Life, Robotics and Cognitive Science. Together CAiiA+STAR provide a powerful base for research in the new field of practice, theory and application which is emerging from the creative convergence of art, science, technology and consciousness research.

Led by Roy Ascott, the doctoral research programme is innovative, enabling supervision to be conducted both online and onsite. Onsite students are based at one of the centres as full time or part time post-graduate students. Online students are supervised largely through the Internet and are required to have access to adequate technological resources at their home base, committing an average of 30 hrs per week to their research, and joining with the onsite students in intensive ten-day "Composite Sessions" of seminars, workshops and conferences, at least three times a year. All students participate in the annual International Research Conference "Consciousness Reframed: art and consciousness in the post-biological era" which takes place in the summer.

Enrolment into the CAiiA+STAR programmes and registration for the MPhil/PhD degree may be undertaken at either the University of Plymouth or the University of Wales College, Newport, the enrolling institution examining and awarding its own Doctorate. Researchers have access to the resources of both centres. Joint seminars are regularly scheduled. Research supervision and research teams draw on CAiiA+STAR's collective expertise.

CAiiA+STAR offer MPhil/PhD programmes which may combine practice and theory, the precise formulation being the product of negotiation between the candidate, supervisors and research boards. In broad terms, research by thesis should result in a dissertation of up to 40,000 words for the MPhil and 80,000 words for the PhD. Research through practice requires to be supported by a linked narrative of up to 5,000 words for MPhil and between 25,000 and 40,000 words for the PhD. Doctoral candidates, in order to be eligible for examination within three years of registration, must have undertaken 30 hours per week of research over a continuous three year period either online or onsite. Attendance at all Composite Sessions during that period is also a requirement.

Research standards of CAiiA+STAR are high and the processes of selection, supervision and examination are rigorous. A premium is put upon excellence of research method, cognitive skills, technological expertise, creative practice and the eventual production of new knowledge.

Current CAiiA+STAR doctoral candidates: Jon Bedworth (UK) Char Davies (Canada) Dew Harrison (UK) Gillian Hunt (UK) Eduardo Kac (USA/Brazil) Kepa Landa (Spain) Joe Lewis (USA) Miroslaw Rogala (USA) Joseph Nechvatal (France/USA) Tom Rogers (UK) Jill Scott (Switzerland/Australia) Bill Seaman (USA) Christa Sommerer (Japan/Austria) Debbie Garcia Tobin (UK) Victoria Vesna (USA)

For Application forms and details of fees for online and onsite programmes:

STAR: email Carole Watson <carole@soc.plym.ac.uk> to enrol through

STAR at the University of Plymouth

CAiiA: email Richard Jeans <r.g.jeans@newport.ac.uk> to enrol through CAiiA at the University of Wales, Newport (no openings available during 1998).

There are currently no funded studentships available.

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LEONARDO DIGITAL REVIEWS
January 1998

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< Audio CD Review: Mousetrap Music >

Mousetrap Music
Mark Applebaum
Innova recordings,
St. Paul MN, USA, 1996
time: 69:01
#26708 65112

Reviewed by: Axel Mulder
Email: <amulder@sfu.ca>

Mark Applebaum is a composer, jazz pianist and instrument builder. He uses live electronics to modify the sounds generated by plucking shoehorns, spun caster wheels, bowed bronze rods, massaged astroturf and combed combs for his compositions. When I listen to this CD I hear original sounds, but no music. On this CD, Applebaum avoids (traditional) structures, although he uses some rhythmical forms. For me, music is a reflection of people communicating in the here-and-now through the sounds of physical objects with each other, and not so much with themselves only. Applebaum's CD focuses primarily on the creation of sounds by himself.

There is some primate-like exploration of the material world on this CD, a search for identity within a new realm of the sounds that the physical reality can provide us. And there is an open-mindedness in Applebaum to be able to perform such exploration. In fact, the live aspect of this CD is easy to hear, but it sounds somewhat "cerebral", i.e. not coming from the heart, to me. Perhaps it is the use of many sharp and articulated sounds that makes me formulate this observation.

Due to this exploratory nature of this CD, I am unable to

contextualize the sounds - I cannot easily relate them to other sound styles. From the titles of the tracks, which use words like "scrape", "bow", "pluck", "strike", "stroke" and the sounds, Applebaum appears to be exploring the relation between the physical gesture and the resulting sound. But what are the semantics of these sounds? If some interesting relation between excitation of matter through physical gesture and sound was found, what is it? I have a hard time discovering what Applebaum communicates with this CD. Leaving this deeper questioning aside, the CD is full of sounds that stretch the ear and make one wonder how they came about. It is perhaps Applebaum's aim to point the listener back to the physical origins of sound - matter made to vibrate through human gesture - in a world crowded with the artificial, the synthetic.

[see <<http://mitpress.mit.edu/e-journals/Leonardo/ldr.html>>, Choose Issues/January 1998 for review in entirety]

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< Book Review: Painting the Heavens >

Painting the Heavens:
Art and Science in the Age of Galileo
by Eileen Reeves
Princeton University Press
Princeton, N.J. USA
1997, 303pp.
ISBN: 0-691-04398-1

Reviewed by: David Topper
Email: <topper@UWinnipeg.ca>

This splendid book on the interrelationship between Galileo's astronomical observations and some artistic depictions of the heavens in the early 17th century provides a thorough historical analysis of several key scientific issues, some of which have not been studied this way before. As well, the study shows how a scientific-theological controversy was played out in the world of art.

A major portion Reeves' book is devoted to the impact of Galileo's discovery of what was called "secondary light" or "ashen light" (i.e., the reflection of sunlight from the earth back to the moon); today it is usually called "earthshine." Coupled with this was the question of the substance of the moon. Also attention is given to the new star of 1604 and the aurora borealis. In all, Reeves studies seven paintings by four artists. Four of the paintings are by Galileo's friend Lodovico Cigoli; the others are by Peter Paul Rubens, Diego Velazquez, and Francisco Pacheco.

But her detailed scholarship certainly comes to fruition in the analyses of the paintings of Cigoli: Reeves has written a masterful study of the impact of Galileo's science on Cigoli's art. She confirms the connection of the painting of the Virgin to Galileo's discoveries and shows how Cigoli responded to the controversy over the substance of the moon, a dispute that was theological at the core. Although the concept of the Immaculate Conception of Mary was not made dogma in the Catholic Church until 1854, the idea was planted much earlier and was believed by many in Galileo's time - primarily, it seems, by those opposed to his assertions about the substance of the moon. Since the moon was a symbol of the Virgin, it too must be and remain "pure." Hence Galileo's discovery contradicted not only an ancient Aristotelian (scientific) belief about the moon; it also came up against a present (theological) belief about the nature of Mary.

Now it comes as no surprise to this historian of science and art to

see again that in the 17th century theological matters were intertwined with scientific ones. But even accustomed as I am to this, I was still surprised to see the extent to which some theologians would go to preserve their belief system in reaction to Galileo's assertion. Thus, e.g., they played a word game (which goes back at least to the 14th century) relating "mare" to "Mary": mare (plural, maria) is Latin for the dark areas of the moon, and Maria is Spanish for Mary. Of course, this was not wordplay for them but serious symbolism. Yet it was symbolism at variance with the contemporary intellectual context of naturalism in art, whereby a distinction was made between symbolism and reality.

One rather amusing twist to this controversy involves the interaction of art and science. Although Galileo's skill as an artist aided him in portraying the opaque and rough moon, some critics turned this around by asserting that the seemingly 3-D mountains and valleys on the moon "seen" by Galileo were merely illusions on a smooth surface - like the 3-D illusions on a flat Renaissance painting!

Reeves' fascinating study is confined to the early 17th century. For a longer view, I look forward to the publication of Scott Montgomery's forthcoming, *Expanding the Earth: The Moon and Western Imagination*, a book on the history of the conception and depiction of the moon since ancient times. I have read the manuscript and can assert that it will be as important to the "big picture," as Reeves' splendid book is for the important era she has explored in such detail.

[see <<http://mitpress.mit.edu/e-journals/Leonardo/ldr.html>>, Choose Issues/January 1998 for review in entirety]

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< Book Review: Le Ton bon de Marot >

Le Ton bon de Marot : in Praise of the Music of Language
by Douglas R. Hofstadter
<<http://www.psych.indiana.edu/cogsci/hofstadter.html>>.
New York, Basic Books, 1997.

Reviewed by Richard Kade
Email: <kade@parc.xerox.com>

Just as Professor Hofstadter's classic, "Güdel, Escher, Bach..." is aptly subtitled a "metaphorical fugue on minds and machines" so, too, is this present work which attains universality of expression on so many levels. While the 1997 classic peers into the concept of thought, we now have a quest for that which is considered the soul.

Constructed with many familiar strands of Bach , Turing , the "crab canon," etc., we now find interwoven a rich tapestry including diversity of brilliance including Ravel, Chopin, Pushkin, Nabokov, Horace, Aesop, the essence of humor and so much more. Above all else, the genius of "Le Ton bon de Marot..." is the way in which this "tour de force" simultaneously is analytical and emotional.

If the frequency of references to "Güdel, Escher, Bach..." over the past two decades in so many other great works is adumbrative of what can be expected with this newest creation, think of what we can anxiously anticipate reading by the 50th anniversary of "Leonardo."

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< Book Review: Microcosmos >

Microcosmos: Four Billion Years of Evolution from our
Microbial Ancestors

By Lynn Margulis & Dorian Sagan
University of California Press
Berkeley, CA
1st: 1986, rev: 1997

Reviewed by Kasey Asberry
Email: <kasberry@humanorigins.org>

At once both reverent narrative (as much of a "page turner" as many a suspense novel) and detailed chronology of the evolution of life on earth, the deepest strength of *Microcosmos* is in its revelation of scale: it is a cosmology based upon understanding of the very small, the wide-spread and the very old. This edition carries an impassioned foreword by the late Lewis Thomas of Memorial Sloan-Kettering Cancer Center. Four clear tables (Geological Time, Human Classification, Acceleration in Food Production and a Hierarchy Chart of relative sizes) illuminate the book's primary thesis—the immense scale and scope of life on earth. Creationists will find the positioning of humans along this continuum troubling (at least), others may find our relatively humble, newcomer status liberating.

The most revolutionary notion is that at the microbial level collaboration has supported life more than aggression. The authors provide convincing evidence drawn from recent, solid research in paleontology, microbiology and evolutionary biology that in times of scarcity or stress selection favors cooperation—the creatures that could share resources in complementary fashion set in motion the cyclical engines of the ecosystem which run today to the benefit of animals and plants.

For me a more startling idea is that there was a time when carbon dioxide breathing animals who produced oxygen as waste were so successful that they actually poisoned themselves. This "holocaust" killed most living creatures and drove others underground or underwater. Balance was restored in the biosphere by the growth of populations of microbes which used great quantities of oxygen (and whose waste was carbon dioxide). This entire saga unfolded somewhere around 2,000 million years ago, way before complex animals emerged. The stories of the evolution of self-organization, reproduction and communication—processes which laid the foundation for complex life forms to emerge all make fascinating, sometimes breathtaking, reading.

Microcosmos is an important offering from the prolific mother-and-son team of Margulis and Sagan. Not so technical as their beautifully illustrated field guide of subvisible life, *Garden of Microbial Delights*, or as popular in tone as *The Mystery Dance*; neither depth nor detail are sacrificed for readability in *Microcosmos*. In it designers, engineers, artists as well as scientists will find food for thought and probably inspiration.

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< Conference Review: The Artist and Philosophy of Colour in Art >

Art, Colour, Philosophy: Research News from St.Petersburg.
State Hermitage Museum
St.Petersburg
November 26-29, 1997

Reviewed by Mikhail S. Zalivadny
Email: <galeyev@ksu.ru> (Bulat Galeyev)

The international conference Artist and Philosophy of Colour in Art called together a number of specialists in philosophy, psychology,

art criticism and pedagogics from Russia, Armenia, Finland, Germany, Great Britain, Italy, Japan and Switzerland.

The first day of the conference sessions was devoted to exploring the aesthetic ideas of Rudolf Steiner (the founder of anthroposophy) and their applications to painting, graphic art and architecture. During the next days, the participants in the conference discussed the philosophical and psychological problems of color perception and interpretation, the role and significance of colour in creative work and theories of outstanding 20th century painters (from Wassily Kandinsky and Paul Klee to Martiros Saryan and Minas Avetisian). They also discussed parallels between characteristic mythological and philosophical concepts in ancient times and symptomatic tendencies of research in contemporary philosophy and art. There was also consideration of other related topics such as the phenomena of synaesthesia in art and aspects of light-and-music synthesis in Skriabin's Prometheus. The conference adopted its concluding resolution which proposes the arrangement of an international congress on philosophy of colour in St.Petersburg.

The main events of the conference's practicum were the personal exhibition of the Swiss painter Gerard Wagner (a disciple of Rudolf Steiner) and a master class study for children in painting and graphic art conducted by one of the Hermitage research specialists, Boris Kravchiunas. Unfortunately, there was no eurhythmic performance included in the conference. However, not long ago the Leningrad - St.Petersburg audience saw a very remarkable eurhythmic performance by an ensemble from Goetheanum, the anthroposophic centre founded by Steiner in Dornach, Switzerland. It was presented on the stage of the former Opera Studio, the Rimsky-Korsakov State Conservatoire Music Theater.

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< Book Review: Design Literacy >

Design Literacy: Understanding Graphic Design
Steven Heller and Karen Pomeroy,
New York: Allworth Press, 1997.
ISBN 1-880559-76-5.

Reviewed by Roy Behrens
Email: <ballast@netins.net>
Reprinted with permission from Ballast Newsletter.

In the past several decades, various authors have objected to approaches to graphic design history that focus on individual masters, movements, and styles; that analyze the structural attributes of a work (derided in this book as 'eye candy'); or that feature highbrow examples while leaving out simpler, more popular works. This volume, which is one of the more inventive and thought-provoking books on design history in recent years, offers a plausible alternative: It consists of 93 'object lessons' in the form of engaging short essays about a wide variety of graphic icons, from the late 19th century to the present, ranging from the ubiquitous (shooting targets, the swastika, Joe Camel) to the esoteric (Emigre magazine, the Cranbrook posters, or April Greiman's self-portrait). Organized somewhat chronologically but in eight thematic categories (Persuasion, Media, Language, Identity, Information, Iconography, Style, and Commerce), the essays form readable 'stories' about the objects, the designers' thought processes, and the social and political circumstances from which they emerged.

< Digital Review Notes >

Leonardo Digital Reviews is review journal published regularly as a section of the Leonardo Electronic Almanac. Leonardo Digital Reviews covers publications, conferences, events and publicly presented performances and exhibits. The focus is the work of artists, scientists, technologists and scholars dealing with the interaction of the arts, sciences and technology. Topics covered include the work of visual artists, composers and multimedia artists using new media and technologies in their work, artists dealing with issues and concepts from contemporary science, the cultural dimensions of science and technology and the work of scholars and historians in related fields.

Specifically, we publish:

- a) Reviews of publications in electronic formats (CD, CD-ROM, CDI, on-line, diskette, WWW, etc ...).
- b) Reviews of print publications, events, conferences, and exhibits dealing with art, science and technology.

Accepted reviews will be published in Leonardo Digital Reviews. Reviews of key works will also be considered for publication in the Leonardo Journal and Leonardo Music Journal published in print by MIT Press. Selected reviews will also be republished in the Leonardo Almanac book published by the MIT Press.

Authors, artists and others interested in having their (physical) publications considered for review in Leonardo Digital Reviews should mail a copy of the publication to:

Leonardo
425 Market Street
San Francisco, CA 94107, USA.

Event and exhibit organizers, and authors of virtual/electronic publications and events interested in having their event reviewed should send information in advance electronically (only) to:

<ldr@msp.sfsu.edu>

Individuals interested in being added to the Leonardo Digital Reviews review panel should email (only) their curriculum vitae to:

<leo@mitpress.mit.edu>

We are particularly seeking reviewers who can review material in other languages than English.

Unsolicited reviews are not accepted by LDR.

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OPPORTUNITIES

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< Dartmouth College - Bregman Electronic Music Studio >

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Post-Doctoral Fellowship in Computer Music
Bregman Electronic Music Studio
Music Department
Dartmouth College

Two-year, terminal post-doctoral fellowship in computer music. Responsibilities include working with faculty to supervise the design, activities and maintenance of the Bregman computer music facilities; teaching one undergraduate studio course in electro-acoustic music; working collaboratively with faculty, graduate and undergraduate students in research and composition projects in electro-acoustic music; pursuing an active research profile in the field; and participating fully in the intellectual and artistic community of the Dartmouth graduate program in electro-acoustic music.

Applicants should have a strong technical, creative, and research record in computer music, with demonstrable advanced skills and experience in computer programming for music, studio and computer music system administration (Unix, Macintosh, and MIDI), and excellent teaching recommendations.

Send c.v, letter of interest, and list of three references by February 15th.

< Brown University Department of Music >

Professor Gerald Shapiro
Chair, Search Committee
Department of Music
Brown University
Box 1924
Providence, RI 02912

Visiting Assistant Professor

The Department of Music at Brown University announces a position at the level of visiting assistant professor. The term of this appointment, which begins in September 1998, will be for one year. The contract is not renewable. We seek a composer with a strong specialization in computer music capable of teaching courses in composition and theory with distinction and enhancing the intellectual life of the department. The responsibilities for this position include teaching two courses each semester, directing undergraduate independent studies projects, and taking an active role in the administration of the MacColl Studio for Electronic Music. Applicants must have completed an advanced degree (M.A., M.F.A., Ph.D., or D.M.A.) in composition and demonstrate successful teaching experience at the university level.

Deadline for receipt of applications and all supporting materials is March 1, 1998. Applicants should send a letter describing their experience and interests together with a curriculum vitae, samples of compositions, graduate school transcripts, and five letters of recommendation to the Search Committee Chair.

Brown offers the B.A. in music, the M.A. in music (with concentrations in composition and ethnomusicology), and the Ph.D. in music (with a concentration in ethnomusicology). The Department of Music, with a faculty of eleven supported by professional library and technical staff as well as some twenty instructors in applied music, enrolls

about a dozen graduate students, thirty undergraduate majors, and more than a thousand general students annually. It supports an Appalachian string band, Balinese gamelan angklung, chamber music groups, chorus, Ghanaian drumming group, jazz bands, orchestra, Trinidadian steel band, wind symphony, and a resident string quartet. Its technical resources include the MacColl Studio for Electronic Music and a University Multimedia Lab. The Orwig Music Library houses the Koetting Ethnomusicology Archive and the Neiman Archive of Sound Recordings. Among the Special Collections of the John Hay Library are the Harris Collection of American Poetry and Plays, which includes over 17,000 musical works from the 17th century to the present, and a collection of more than 500,000 pieces of sheet music.

Brown University is an Affirmative Action/Equal Employment Opportunity employer.

< University of Wisconsin-Milwaukee School of Fine Arts >

LeRoy Stoner
Chair of the Search and Screen Committee
Office of the Dean, School of Fine Arts
Sabin Hall 123, PO Box 413
Milwaukee, WI 53201

Mary McCoy
Dean's Assistant
Tel: (414) 229-4706
Email: <mamccoy@csd.uwm.edu>

ARTS TECHNOLOGY MANAGER

The University of Wisconsin-Milwaukee School of Fine Arts is seeking candidates for the position of Information Processing Consultant. The working title of this position is "Arts Technology Manager," and it is a full-time academic staff position.

Application Procedures and Deadline: Send letter of application, resume, and applicable supporting documents, names, titles, and addresses, and telephone numbers of at least three references to the Chair of the Search and Screen Committee. To be considered, application must be postmarked no later than February 15, 1998.

Any questions about position or application procedures can be directed to <mamccoy@csd.uwm.edu> or you can call (414) 229-4706.

Principal Duties: Provide technical advice and support to Fine Arts faculty, staff, researchers, and students in one or more of the following areas: using Macintosh and PC computer facilities and systems, modifying existing computer systems, and selecting microcomputer hardware and software for curricular, research, and administrative functions. Supervise specification and installation of Fine Arts instructional microcomputer laboratories and Novell local area networks. Direct departmental faculty and staff on the development of WWW home pages. May develop and present short courses and workshops in computer technology and appropriate computer applications.

Minimum Qualifications: Bachelor's degree in computer science or related media arts field preferred and two years employment in the area of computer technology. Should be knowledgeable in graphic layout and design software, audio composition and editing software, video editing and media presentation software, network software,

drafting software, HTML editing and document processing software as well as database and spreadsheet applications.

Salary: Actual salary and rank commensurate with qualifications.

UWM is an Equal Opportunity/Affirmative Action Employer and encourages minority, female, and handicapped applicants because a diverse campus environment is desirable and important to the educational process. The names of those nominees and applicants who have not requested that their identities be withheld and the names of all finalists will be released upon request.

< Pratt Institute, Brooklyn - Computer Graphics Faculty Positions >

[2D] [3D] [Interactive] Search Committee

CGIM Dept.

Pratt Institute

200 Willoughby Ave., ARC F-10

Brooklyn, NY 11205

Full-Time Computer Graphics Faculty Positions - Pratt Institute

The Department of Computer Graphics & Interactive Media seeks to fill the following three full-time, tenure-track Assistant/Associate Professor positions:

POSITION 1 -- 3D MODELING AND ANIMATION

We require substantial experience in 3D computer animation and familiarity with at least two of the following applications: SoftImage, Alias, 3D Studio Max. Experience in traditional animation techniques is a plus. (Refer to CGIM 3D Search Committee*)

POSITION 2 -- 2D IMAGING AND PREPRESS

We require substantial experience with 2D imaging, all major raster and vector imaging tools and techniques, broad knowledge of digital output options and theoretical and practical knowledge of electronic prepress. (Refer to CGIM 2D Search Committee*)

POSITION 3 -- INTERACTIVE MULTIMEDIA

We require substantial experience in interactive media, proficiency with Macromedia Director and major content-creation packages. In addition to scripting (Lingo, HTML, JavaScript), an ability to teach programming (C, Java, Visual Basic) is a plus. (Refer to CGIM Interactive Search Committee*)

Responsibilities include teaching on both the undergraduate and graduate levels, student advisement, and committee work. All positions require an MFA or equivalent, college level teaching experience, and the ability to teach a variety of courses in the digital arts. Both technical expertise and artistic excellence are crucial.

The Search Committee will begin reviewing applications immediately, and continue until the positions are filled. Salary and rank commensurate with background, education and experience.

Please submit CV, cover letter indicating area of interest and experience, slides and/or VHS tape of your work and your students' work (other forms of documentation will not be considered), and names and contact information for three (3) references and SASE to the appropriate Search Committee at the above address.

Pratt is an EOE.

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ANNOUNCEMENTS

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< Scripted Spaces: An ITA Conference >

For reservations contact:
Scripted Spaces c/o Peter Lunenfeld
Art Center College of Design
1700 Lida Street Pasadena, CA 91103
Tel: 626.568.4710
Email: <peterl@artcenter.edu>
URL: <<http://www.artcenter.edu/scriptedspaces.html/>>

SCRIPTED SPACES

An ITA Conference on Entertainment Design, Narrative Architecture, and
Virtual Environments

Saturday, April 18th, 1998 - 9:30 AM to 6:30 PM
Ahmanson Auditorium
Art Center College of Design
1700 Lida Street Pasadena, CA 91103

Art Center's Institute for Technology and Aesthetics (ITA) hosts
SCRIPTED SPACES, a discussion about how space can be designed to tell
a story, moving from malls (think Universal City Walk) to theme parks
(Disneyland as the granddaddy of them all), from special effect-driven
blockbusters to the latest in computer games like Riven. Panelists
include Rocket Science Games co-founder MICHAEL BACKES, Academy Award
winning visual effects supervisor JOHN DYKSTRA, Disney Imagineer BRAN
FERREN, architects CRAIG HODGETTS and MING FUNG, cultural critic
NORMAN KLEIN, architectural historian SYLVIA LAVIN, new media theorist
PETER LUNENFELD, interactive artist MICHAEL NAIMARK, and Virtual
Reality Modeling Language co-creator MARK PESCE.

SCRIPTED WEEKEND

The SCRIPTED SPACES conference is a one day, single track event, but
it is part of the larger SCRIPTED WEEKEND. On Friday night, April 17,
Norman Klein, the Chair of Scripted Spaces, and Peter Lunenfeld, the
Director of the ITA, will present SCRIPTED SCREENS, a selection of
film clips, animations, VRML sites, virtual environments, computer
games, and other screen-based scripted spaces. All day Saturday,
E.D./A.C., a show of Entertainment Design projects by Art Center
students will be open in studios and galleries around campus. On
Sunday afternoon, April 19th, Klein will lead SCRIPTED SITES, a bus
trip to four scripted spaces in Southern California. SCRIPTED SPACES,
SCRIPTED SCREENS and E.D./A.C. are free of charge, but require
registration by email, phone, or post [please send full contact
information]. Seats on the SCRIPTED SITES bus must be ordered in
advance by mail: checks for \$20.00 payable to "Art Center/Scripted
Spaces" at the address listed above [the 35 seats are available on a
first come, first served basis].

PANELISTS

MICHAEL BACKES, Computer Games Entrepreneur and Cinematic Polymath
Backes co-founded Rocket Science Games, co-authored the script for
Rising Sun (1993), was associate producer of Congo (1995), display
graphics supervisor on Jurassic Park (1993), and visual effects
supervisor for The Peacemaker (1997).

JOHN DYKSTRA, Visual Effects Supervisor
A legend in the field of special effects and winner of two Academy
Awards, Dykstra's career stretches from Star Wars (1977) to Batman
Forever (1995) and Batman and Robin (1997).

BRAN FERREN, Executive VP, Walt Disney Imagineering
Ferren believes that it is the art and technology of storytelling that
creates engaging and memorable experiences. He is responsible for
Research & Development for The Walt Disney Company and runs the
Creative Technology group at Walt Disney Imagineering (Disney's theme
park master planning, design and development group), and is known for
establishing a brain trust at Disney that includes Danny Hillis, Allen
Kay, and Marvin Minsky.

CRAIG HODGETTS and MING FUNG, Hodgetts + Fung Design Associates
Hodgetts and Fung are innovative and award winning exhibit designers
and architects. Recent projects include the Eames exhibit at the Vitra
Museum and redesign of the Egyptian Theater in Hollywood for the
American Cinematheque.

NORMAN KLEIN, Chair, Scripted Spaces Conference
A member of the faculty at CalArts, Klein is a far ranging cultural
critic and historian, and the author of numerous books, including
Seven Minutes: The Life and Death of the American Animated Cartoon
(Verso, 1993) and The History of Forgetting: The Erasure of Memory in
Los Angeles (Verso, 1997).

SYLVIA LAVIN, Chair, UCLA Department of Architecture & Urban Planning
Lavin is an architectural historian with an expertise in modernism.
She is the author of Quatremere de Quincy and the Invention of a
Modern Language of Architecture (MIT, 1992).

PETER LUNENFELD, Director, Institute for Technology & Aesthetics (ITA)
A new media theorist, Lunenfeld is one of the coordinators of Art
Center's Graduate Program in Communication & New Media Design. He is
the editor of The Digital Dialectic: New Essays on New Media (MIT,
1998)

MICHAEL NAIMARK, Media Artist, Interval Corporation
Naimark spent twelve years as an independent media artist before
joining Interval Research Corporation in 1992. He was instrumental in
making the first interactive laserdiscs in the late 1970s at MIT and
has worked extensively with projection and immersive virtual
environments. His current project can be found at
<www.interval.com/projects/be_now_here>.

MARK PESCE, President, blitcom
Pesce is the visionary computer programmer who co-created VRML, the
Virtual Reality Modeling Language that offers the first truly
interactive, networked, world wide three dimensional environment.
blitcom is the first network to use VRML to create narrative
entertainment.

CREDITS

"SCRIPTED SPACES: An ITA Conference on Entertainment Design, Narrative Architecture, and Virtual Environments" is supported by the Graduate Programs at Art Center. Other support from the Office of the Vice President for Institutional Advancement, and the Departments of Illustration, Environmental Design, and Product Design. All speakers, times and venues subject to change without notice.

< XII Colloquium on Musical Informatics >

XII CIM 1998 CALL FOR SUBMISSIONS

CEGO - Centro Polifunzionale di Gorizia
Via Italico Brass, 22
34170 Gorizia - Italy
Tel: +39 481 33869
Fax: +39 481 33981
Email: <XIICIMinfo@canin.sci.uniud.it>
URL: <<http://www.sci.uniud.it/~ciminfo/>>

XII Colloquium on Musical Informatics
September 24-26, 1998
Gorizia, Italy

AIMI - Associazione di Informatica Musicale Italiana

The Italian Association for Musical Informatics, AIMI, in cooperation with the University of Udine, organizes the twelfth Colloquium on Musical Informatics, which will be held in Gorizia (Italy) from September 24 to September 26, 1998.

This conference is co-sponsored by IEEE CS Technical Committee on Computer Generated Music

SCOPE

The Colloquium on Musical Informatics is an international meeting of researchers interested in musical applications of computer science. The previous editions showed an increasing interest in this area, as proved by the number and quality of scientific contributions as well as by the development of new tools to be used by composers, musicians and musicologists.

TOPICS

The special theme of the conference is:

- * Restoration of Audio Documents

The other topics to be covered include, but are not limited to

- * Computer Music and Other Digital Art
- * Artificial Intelligence
- * Aesthetics, Philosophy, Criticism

- * Acoustics of Musical Instruments and Voice
- * Audio Analysis and Resynthesis
- * Audio Hardware
- * Audio Signal Processing
- * Composition Systems and Techniques
- * History and Analysis of Electroacoustic Music
- * Interactive Performance Systems
- * Machine Recognition of Audio
- * Machine Recognition of Music
- * MIDI Applications
- * Music Analysis
- * Music Data Structures and Representations
- * Music Education
- * Music Grammars
- * Music Languages
- * Music Notation and Printing
- * Music Workstations
- * Performance Interfaces
- * Psychoacoustics, Perception, Cognition
- * Realtime Systems
- * Room Acoustics
- * Sound in Multimedia
- * Sound Synthesis Languages
- * Sound Synthesis Methods
- * Studio Report
- * Other

SUBMISSIONS

XII CIM invites submissions of papers, demos, presentations and posters covering all aspects of computer music. The official language is English. All submissions are subject to peer review. The accepted contributions will be published in the Proceedings of the Colloquium and each contributor is expected to give a talk/demonstration which will be scheduled according to the timing below:

- Paper: 4 pages (A4) in the Proceedings
 about 20 minutes for presentation

- Demo/Presentation: 2 pages (A4) in the Proceedings
 about 10 minutes for presentation
 free time for demonstration

- Poster: 2 pages (A4) in the Proceedings
 about 10 minutes for presentation
 free time for discussion

Submissions should be received by March 1, 1998. The contributors will be notified of acceptance/rejection by May 1, 1998. Camera ready papers are due by July 31st, 1998.

The submission guidelines appear in the XII CIM Brochure and in the XII CIM Web site.

We encourage electronic submissions to the email address above.

REGISTRATION

The participation fees for the conference are:

L. 100.000 (Italian currency) - ordinary
L. 80.000 " " - AIMI members
L. 50.000 " " - students

and should be paid not later than August 24, 1998, by money transfer in Italian currency to the following Bank account:

Beneficiary: Dipartimento di Scienze Storiche e Documentarie
Description: XII CIM.
Bank CRUP - Cassa di Risparmio di Udine e Pordenone
ABI 06340, CAB 12300
Account number: 31853.8.6

A 50% extra-fee will apply to payments after August, 24.

Information on how reaching Gorizia and on local arrangements will be made available through the Web URL above.

XII CIM - 1998 MUSIC AND INSTALLATIONS

XII CIM is particularly interested in electro-acoustic music that includes some aspect of composition and computer performance. The Musical Committee will choose the musical works showing innovative musical and technological solutions. The organization offers a hall suitable for electro-acoustic music with the following equipment:

- 1 amplification system 4 output channels (standard quadraphonic)
- 1 analog mixer 32/8
- 1 digital mixer Yamaha 02R
- 1 DAT
- 1 CD
- 10 microphones

Composers are invited to submit their music and the whole project for performance, i.e. a score and/or recorded segments. If the work requires individual performers, these should be provided and payed by the composer.

Music submissions should be received by March 1, 1998.

INSTRUCTION FOR ELECTRONIC SUBMISSION OF PAPERS, DEMOS AND POSTERS

Include the following items, in the specified order:

1) Author Names and electronic contact information; corresponding author first, followed by all other authors, on separate lines.

2) Contact information for first author only:

Address
Phone
FAX

3) Submission Type.
Choose one of: Paper, Poster, or Demo

4) Title of Paper or Project:

5) Keywords (5 maximum).

These will be used to generate the master index to the proceedings.

6) Content Area.

These will be used to help route submissions to the appropriate reviewers. Select one from previous topics, or denote as "other: your own content area".

7) Resources required for paper presentation. Choose from this list:

- CD
- DAT
- Audio Cassette
- Video: VHS-PAL
- Overhead Projector
- Slide Projector
- Computer(s): Type and Configuration
- Other:

8) Abstract describing the paper, demo, or poster. This should be written in English and of at most 500 words for Paper Submissions and 300 words for Posters and Demos.

< Call for papers: SCI '98 >

Prof. Nagib Callaos (Chair)
 IIIS
 6220 S. Orange Blossom Trail, Suite 173
 Orlando, FL 32809, USA
 Fax: (407) 856-6274
 Email: <WMSCI98@aol.com>

Simon Bolivar University
 Dpto. Procesos y Sistemas
 A.P. 89000, Caracas, Venezuela
 Tel/Fax (office): +58 (2) 9621519
 Fax (home): +58 (2) 9638852
 Email: <ncallaos@usb.ve>

URL: <http://www.iiis.org>

 WORLD MULTICONFERENCE ON SYSTEMICS, CYBERNETICS AND INFORMATICS
 Orlando, Florida
 July 12-16

Honorary Presidents: Bela H. Banathy, Staford Beer and George Klir
 Program Chair: William Lesso
 Conference Chair: Nagib Callaos

 MAJOR THEMES

- Conceptual Infrastructure of Systemics, Cybernetics and Informatics
- Information Systems (ISAS '98)
- Control Systems
- Managerial/Corporative Systems
- Human Resources Systems
- Natural Resources Systems
- Social Systems
- Educational Systems
- Financial Systems

SCI in Psychology, Cognition and Spirituality
SCI in Biology and Medicine
SCI in Art
Globalization, Development and Emerging Economies

(Topics for each theme could be found at the Conference web page or by e-mail request)

PURPOSE

The purpose of the Conference is to bring together university professors, Corporate Leaders, Academic and Professional Leaders, consultants, scientists and engineers, theoreticians and practitioners, all over the world to discuss themes of the conference and to participate with original ideas or innovations, knowledge or experience, theories or methodologies, in the areas of Systemics, Cybernetics and Informatics (SCI). Systemics, Cybernetics and Informatics (SCI) are being increasingly related to each other and to almost every scientific discipline and human activity. Their common transdisciplinarity characterizes and communicates them, generating strong relations among them and with other disciplines. They interpenetrate each other integrating a whole that is permeating human thinking and practice. This phenomenon induced the Organization Committee to structure SCI '98 as a multiconference where participants may focus on an area, or on a discipline, while maintaining open the possibility of attending conferences from other areas or disciplines. This systemic approach stimulates cross-fertilization among different disciplines, inspiring scholars, generating analogies and provoking innovations; which, after all, is one of the very basic principles of the systems movement and a fundamental aim in cybernetics.

BACKGROUND

The success achieved in ISAS '95 (Information Systems Analysis and Synthesis) held in Baden-Baden (Germany), symbolized by the award granted by the International Institute for Advanced Studios in Systems Research and Cybernetics (Canada), as the best and largest symposium at the 5th International Conference on Systems Research, Informatics and Cybernetics, encouraged its sponsors and session chairs to organize ISAS '96 at Orlando and prepare a more general Conference on Systemics, Cybernetics and Informatics (SCI '97) at Caracas (Venezuela). The widely acknowledged success of ISAS '96 (held on July 22-26 at Orlando) by means of spontaneous verbal feedback and a written comprehensive evaluation from 143 authors, of high quality papers, from 32 countries, galvanized the Program and Organizing Committees to make a definitive commitment to organize SCI '98 and ISAS '98 at Orlando, in July 12-16, 1998. Many Program and Organizing Committee members from past international and world conferences are joining us for SCI '98 and ISAS '98, including most of those who organized the World Conference on Systems sponsored by UNESCO and the United Nations' World Federation of Engineering Organizations (WFEO). We are still looking for more organizational support from experienced scholars, consultants, practitioners, professionals and researchers, as well as from international or national organizations, public or private, academic or professional.

PARTICIPANTS

Participation of both researchers and practitioners is strongly encouraged. Papers may be submitted could be on: research and science engineering, case studies drawn on professional practice and consulting, and position papers based on large and rich experience gained through executive/managerial practices and decision-making. For this reason, the Program Committee is conformed according to the criteria given above.

TYPES OF SUBMISSIONS ACCEPTED

Research, Review or Position Papers
Panel Presentation, Workshop and/or Round Table Proposals
New Topics Proposal (which should include a minimum of 5 papers)
Focus Symposia (which should include a minimum of 15 papers)
Tutorial Proposal (which should include an outline of it and a brief biography, and clearly indicate whether the tutorial is half-day or full-day duration and whether it is technically or managerially oriented).

SPECIAL TREATMENT FOR EARLY SUBMISSIONS

Submissions will be reviewed by three Program Committee Members as soon as they are received. Consequently, early submissions that were not accepted by at least two referees, will have the opportunity to re-submit their papers according the suggestions done by their reviewers. The hope of the Organizing Committee is to provide a supporting process for improving the quality of papers that otherwise would have been rejected. Just early submissions could have this kind of support.

Authors of early submitted and accepted papers will have the opportunity to make suggestions about new requirements that are not being fulfilled by ISAS 95 software, which was a first prototype. In this way they could engaged in the evolutive participative design that is being followed for both the Electronic Proceedings and the CD-ROM Extended Encyclopedia.

CONFERENCE FEES

The conference fees will be \$300 before April 20, 1998 and \$350 after April 20, 1998.

SUBMISSIONS AND DEADLINES

February 23, 1998	Submission of extend abstract or paper draft (500-1500 words).
March 23,1998	Acceptance notifications.
May 11, 1998	Submission of papers camera/ready, hard copies and electronic versions.

PUBLICATIONS

Participants who wish to present a paper are requested to submit three copies of a condensed first draft by January 12, 1998. Submitted papers will be referred. SCI98 papers will be published by means of paper and electronic proceedings. Selected papers will be published by the International Institute of Informatics and Systemics, and included in the CD-ROM Extended Encyclopedia of Systemics, Informatics and Cybernetics, whose development is presently in progress. Notification of acceptance will be sent to authors by March 9, 1998. The full paper, which cannot exceed eight single-spaced typed pages, should be sent by means of diskette and photoready hard copies of artwork, not later than April 20, 1998.

Best papers will be published by:

"Cybernetics and Human Knowing: A Journal of Second Order Cybernetics and Cybersemiotics".

Members of the Program Committee who are referees of the Journal will take the decision on the issue.

"Journal of Law and Information Systems"
"Systems Journal"
"Educational Technology"
"Technological Forecasting & Social Change"

Other Journals are being considered for other areas of SCI '98.

INVITED SESSIONS

To organize an invited session for SCI' 98 (or ISAS '98), the following steps are suggested:

- 1) Identify a special topic is in the scope of SCI '98 (or ISAS '98). You may contact the chair or other program committee members on the suitability of the topic, if it is not included in the Conference Program.
- 2) Contact researchers or practitioners in your field to see if they can contribute a paper to your proposed session and attend SCI' 98 (or ISAS' 98).
- 3) Collect the abstracts (2-3 pages) from each perspective invitee.
- 4) Write a summary (1-2 page) on the session's significance and coherence of the invited/selected papers.
- 5) Mail the invited session proposal including a summary and copy of all abstracts before March 16, 1998, to Nagib Callaos.

ISAS '97 AND SCI '98 PROCEEDINGS

ISAS '97 proceedings are available in 3 volumes of hard copy and/or CD-ROM version with search and hypertext features. For more information contact:

Ms. Jenia Bezada
Email: <nacallao@telcel.net.ve>

An electronic version of the SCI '98 proceedings will also be available on CD-ROM, with search and hypertext features. Other media, such as sound, animation and video, are also being considered.

These proceedings will also be included in the CD-ROM Extended Encyclopedia of Systemics and Cybernetics, whose development in presently in progress.

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ACKNOWLEDGMENTS

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