



Leonardo Electronic Almanac

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INTRODUCTION
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Craig Harris, Executive Editor

Leonardo Electronic Almanac  
Volume 8, Number 12  
Introduction

This is my last issue as Executive Editor of Leonardo Electronic Almanac, and I am pleased to be offering to LEA readers the first installment of a series of three special issues based on the Living Architectures conference at the Banff Centre for the Arts. Molly Hankwitz is serving as the Guest Editor for this series, and I'm confident that readers will agree that this series is rich in content and broad in scope. This installment provides a wide selection, including an introductory piece, "LIVING ARCHITECTURES: Designing for Immersion and Interaction: Welcome and Introduction" by Sara Diamond; "Virtual Reality and the Urban," by Richard M. Levy; "Navigation through Knowledge Spaces," by Thomas Whalen; "resistant spaces :: subjects," by Linda Wallace; and "Simulation: The Cultural Anticipation of Our Own Demise," by Greg Niemeyer with Julie Daley. Future installments will appear during Volume 9 of LEA.

Again, it has been an honor and pleasure to have served the community as Executive Editor of Leonardo Electronic Almanac, and I thank all of those who have contributed to the development of this valuable publication. Please do continue to participate.

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FEATURE ARTICLES
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< LIVING ARCHITECTURES: Designing for Immersion and Interaction:  
Welcome and Introduction >

by Sara Diamond

The following text provides an overview summary of the key issues and directions of the Living Architectures Event at The Banff Centre for the Arts, September 22-24th. This is followed by my detailed comments on the first two days events delivered on the second and third morning to stimulate discussion and create continuity. I comment briefly on Day Three, as I did not create a detailed summary. After that, there are my notes on the action oriented research retreat, which picked up off of the third and final day's directions. My comments provide links between presentations. These are followed by a description of the action oriented research retreat that followed it. My role at all Banff New Media Institute events is to develop the event concept, play the role of lead facilitator and provide summaries of all of the key

points through the event. As well, I connect these ideas with others at the event and with larger concepts, projects and initiatives outside of that forum. I try to pull action out of these cerebral events through providing a context where people show their research as well as present their ideas, much as Jean-Claude Guedon suggests the need to represent for the subject to understand.

The Living Architecture structure allowed the development of key research questions over three days, with a one-day project development and refinement process that led to clear granularity. This research think tank grouped scholars from across many disciplines in order to discuss concerns of digitisation within physical and virtual architectures. The contributors responded my call to arms (or perhaps armaments):

"This research Summit will develop approaches to designing highly responsive spaces, contexts and their contents and the needed intelligent software and tools, including surfaces, network capabilities, cellular technologies, motion sensing systems, projection and neural networks. Outdoor environments such as gardens, extreme sport spaces and nature walks can also be interactive. This summit will address questions such as; can we develop a shared protocol? How can we create affordable environments that can link together and support creative projects and learning? What are the applications for these environments? How can artists, designers, architects, software creators build a closer alliance? Where do these design projects fit in the world of public and private art? Should spaces create context or be content laden? We will consider case studies of projects and their needs as well as existing design protocols. This summit will be a think tank for designers, artists, architects, computer scientists, cultural theorists, and economists." The term architecture was used to consider software architecture, in particular that of large-scale changing data repositories (such as the Internet). It was used to discover the relationships needed between physical environments that people inhabit and the design of related environments within networks. The fundamental direction of the research discussions were about human computer interface design, usability, frameworks needed for the meaningful interpretation of data and the challenges of designing for the nomadic nature of people, network and architectures. Architecture as a profession considers the ways that knowledge about human scale, social life, biological needs, etc., can be applied to designing useful and aesthetic environments. Metaphors from space as well as time are often used to understand computer processes. The visualisation and specialisation of data (3D) figured as a key element of the discussions.

Key themes of Living Architectures:

The think tank returned consistently to try to find more effective ways of theorising human computer interaction. Participants compared strategies that proliferate devices that are explicit stand-alone computers, and strategies that provide thin client access to embedded networks and embedded ubiquity within physical environments. There was a substantive and ongoing debate about the need for realism, in particular in allowing users or audiences to suspend disbelief and in a related way, in allowing scientists and designers to localise models into their own contexts while sustaining key points of exchange. This latter issue has become a focal point for ongoing research based on the event. Another discussion about physical environments considered the changing design components of virtual environment presentation spaces. Almost a full day was devoted to issues of collaborative remote design, learning and games play and the relationships between the designs of spaces

Designers presented their projects that drew on performing arts, human movement within spaces, drama and staging in relation to architectures that held embedded technologies, or networks that could transform and effect the movement within an actual space. We also considered design for ZeroG and the ways that the loss of constraint in that environment (NASA Space research) allowed for challenges in rethinking social interaction and identification.

We considered the tools necessary to provide meaning within the vast array of disparate objects that make up the Internet and databases. We looked at the architecture of knowledge, spring and mass systems, 3D visualisation systems, artificial life and neural network research using biological and architectural metaphors, space beyond 3D and designing for that context and returned again to think critically about the narratives and metaphors that we use to describe and understand spaces and computing processes. Considerable time was spent discussing the challenges that architects confront in designing compatible physical and virtual environments and in designing building that include intelligence. Design tools were considered for their inherent biases.

Engineering and computer science discussions considered methods of developing real time 3D graphic applications, wireless and broadband delivery of ubiquitous environments and experiences, the design of all manner of wireless interface devices suited to use within spaces, the design of an intelligent and networked carapace or aura that individuals would be able to take with them under all circumstances needed in their life, deep data base structures and related challenges. Computing was consistently seen as a means to new levels of human understanding beyond our physical and cognitive limits.

Here are my detailed considerations of some of the talks:

The Subject Linda Wallace and Sandy Stone, working with her colleague Samantha Krukowski, provided conceptual bookends for the first day. The day began and ended considering relationships and the social spaces these inhabit. Sandy told a story about a preoperative transsexual whose heterosexual army lover was murdered because of his relationship with her and the forms of resistance throughout and after the conflicts. Sandy talked about the recalibration of the subject within a physical performance space. The participants also expressed the hope that this performance could be nomadic, acted or re-enacted as a "real life diegesis" of inclusion and exclusion, in the actual spaces of resistance where the actual lovers lived out their lives and death. Linda spoke of the need to consider one's position within a space as either engaged or indifferent or resistant. Linda and Sandy spoke to the current constant movement of the subject through physical spaces, the nomadism that work demands now, often not by choice; the requirement for tools to accompany the new media worker. Linda called for lines of flight, the creation of a pod where one can hide within the intensified surveillance both of data and actual travellers in the architecture of airports. Sandy demands an erotic touch in the reconstitution of the subject. She describes the actuality and physicality of desire enacted (present) contrasted to a desire for presence when desire is absent.

This notion of absence works as a framing metaphor. Katherine Hayles has written about this in her discussions of data and the associative, iterative qualities of data and our use of data. Jean-Claude talked about archival consciousness, the value of archiving history and navigation. Doug Macleod's ironic talk suggested that the library and the archive are a Canadian metaphor for a fraught relationship with identity. Architecture becomes an Alien practice; instead we prefer endless information navigation, in a bureaucratic search for identity.

Movement The first day considered movement as a guiding principle within physical and virtual spaces. We again talked about alien invasion as a metaphor. Joy Mountford described people looking up at Christian Moller's buildings from a plaza, seeing his bright projections on the buildings, and expressing the desire that aliens land. The projections on the building induced a trance like state and a sense of community. They exude the glow or magic of science fiction.

We considered movement as providing meaning and function for humans within spaces. Choreography is the embodiment of movement through the dancer's body, created by the choreographer or the designer. Is the choreography of human bodies through spaces engineering? We recognised the problem of social engineering because this sort of engineering is always meaningful (it has goals), and stems from self-conscious attention. We explored associative movement through spaces in the work of Kristine Woolsey. A key frame freezes a moment in space/time. She uses the technology and then digital metaphor of a key-frame. Is the key-frame an incidental snapshot or is it full of meaning, a pivotal point of transformation? This question refers back to the ways that narratives are attached to specific spaces as stories of functionality (kitchen, home, and workplace). How then do we design for those over determined spaces and how do we shift key-frames, and movements to create junctures or points of change within those spaces, so that new forms of social transaction can occur? In Kristine's buildings she uses interactive media to design and move people through those spaces.

Paul Kaiser also spoke about movement. Paul initially worked with highly defined choreographs by master artists (Bill T. Jones); now he quotes every-day movement with an incidental and enhanced perception that occurs when movement is limited, for e.g. by disability. Limitation and containment can be used to create behaviours that are emergent. Richard Povall, composer and computer scientist also poses the concept of emergence as opposed to the binaries of absence and presence. Katherine Hayles has written about this shift in the nature of new media culture. The design of navigation strategies through data are grounded in notions of emergent behaviours; these too have a history, for example taking us back to thinking about Buckminster Fuller's theories of evolutionary spaces and tools. Richard Lovelace reminds us that there is a history of contents, philosophy and devices.

Intelligence Artificial life research produces a somewhat paranoid sensibility in larger publics. These fantasies are enacted in technology goals and expressed as content for the gaming industry. Toys become physical expressions of human ideas about AL and AI, as well as being limited by current capacity. Human subjects are influenced by the ways that toys and games are designed. The intelligent toys are made to play with us. What happens in a world where there are intelligent (although dumb in human terms) toys socialising human children? Joy Mountford asks what happens when the toys "know us" and then what happens when the toys are stupid (not programmed)? What happens when the buildings are smart but the smartness is not the specific smartness that we (as individuals or groups) want and need to have designed into them? What happens when large corporations design the smartness? It's not just a question of "Are they smart or are they stupid?" It's also, "Who designs intelligence into these environments and how do they understand intelligence?" Mark Green reminds us consistently about the limits of technology. Intelligence in tools is very limited; it's best when its distributed and it has very limited functionality. In the future, who will design the interface behind my face?

What kinds of subjectivity are produced by not knowing whether

something is intelligent or not, and what its intelligence is. So how does our subjectivity get produced within that? How tentative might we become?

Media Doug MacLeod looked at the power of media to effect architecture as a practice. He asked how do we grow a creative architecture in vitro, a visionary architecture, one that is ecological and understands both the ideas of the virtual and also the very physical world that we live in, which is also a biological world. Cameron McNall, a physical architect and theorist used metaphors from the pre-computing world and the pre-digital world, the images of "Get Smart". Cameron was pushing us to also think about the physicality of design and our bodies within physical buildings. There was a warning there, and in Doug's discussion about surveillance, the panopticon design of many virtual spaces and buildings.

Tools We then began to talk concretely about tools and design. We discussed scalability; working small and presenting big or at whatever scale we want to, both in physical spaces and in wired spaces and on an intra or extranet. Robert Dickinson from Fakespace spoke about this. Linda Jacobson, has worked with SGI as their virtual reality evangelist, to develop principles that integrate depth and allow the viewer to gain perspective in emerging environments. Then we debated standards. What are the gains and losses of imposing standards in software design? What happens when you create languages that control creative possibilities; MIDI allowed a flourishing of musical composition and play, but also imposed severe limits especially on world music rhythms. Open source models characterise academic software design and are also a metaphor for emergent artwork, as Jean-Claude Geudon suggested. The question of standards, languages that control and release, the idea of bringing WIMP interfaces into navigable virtual spaces (aka Viz Sim).

Discussions explored input and output devices that match or parallel each other. What devices work with the body, even through the body, what are the parallel interfaces and outputs?

Denis Gadbois' presentation provoked a debate about history, a thread that ran through many discussions. How much should new media images represent something familiar? Someone called again for the death of representation. History is relevant to product design. Denis argued the power of realism, Char Davis, corroborated by her programmer/collaborator John Harrison argued the need for abstraction, suggesting it is fact more meaningful. Both said the most interesting new media works are made when mistakes happen. We learn from mistakes - these open new possibilities.

Social Architectures Scott Snibbe opens up a world of play, where people are interdependent and connect through proximity, using the metaphor of the veranoid set which charts the closest paths of relationships. He takes patterns from nature into the social world and then from the social back into a new nature. The term proxemics, which he spoke about, looks at how people play and create relationships through their closeness to each other; this acts itself out according to cultural difference. Scott shows the importance of using the right biological metaphor-- the living architecture becomes digital. Katherine Hayles provides concept of the skew-mark, a coagulation of the historical point of transition and change, where ideas begin to position around certain kinds of moment or Diegesis. Then there's a shift or change, which is interesting, because that brings us back to the key-frame. Scott's installations diagram this. So we're definitely currently looking at these sorts of moments of transition or transformation.

We had a substantive fight about dimensions. The debate was "What is dimensionality?" "What is a subatomic set?" We debated about dimensions in space versus dimensions in time, the ways that we looked at a dimension as being something that reproduces itself but also doesn't; how do you represent something that makes a conceptual leap?

A group of computer scientists and architects leapt up and tried to take us through our next dimension of learning, explaining what the twelfth dimension is in ten minutes, how you represent the problem of limits of human perception. Gordon Fitzpatrick noted this. A key question of research is how to create collaborative environments, where we can work and play together. We need to know why we should bother to use technology; technology needs to provide a qualitatively different experience. In fact, the shifting nature of authorship and identity ran through the entire day; this is directly related to how we design both physical and virtual spaces and how we, as subjects with an identity, understand them. . We also talked about the appropriate use of medium. Should string quartets be distributed over networks versus situations that cannot be represented using existing media? How do we represent new forms of practice? Gordon is here, from Nortel, in part to say, "Work with those of us designing these systems to actually push the ways that content and human interaction take place within them."

We talked about realism and new forms of graphics. We talked about the death of the polygon. I drew a little diagram that I borrowed from Brian Wyvil who was talking about the problem of modelling and the attempt to move the animation industry again from frame animation. Brian suggested that it is possible to change an industry from polygons to a revolutionary and efficient way of working with implicit surfaces, one that requires mathematical imagination. Brian's world is on the periphery of graphics research as much of art is on the periphery of pop culture. It was interesting that in that orbiting universe of computer practice, there's also a tension which many of us as designers and artists, experience. How as artists do we shift dialogue and discourse from the periphery to the centre, what happens when we undertake that?

Which brings me back to Linda from SGI's presentation. What happens when the virtual environments made by researchers and artists, begin to become standardised as vizsim? It is interesting to look at where peripheries collaborate, which again gets us back to the line of flight. Joy Mountford reminded us that interfaces need to be haptic, that is touch-based; and sonic, that is surrounded with sound, body-based in all kinds of ways, not privileging the visual. These are critical design issues as we think about architecture and architectural practices.

The Author and Perception Coming back to the discussion of the author, there was an ongoing discomfort in defining what does/should the architects do now? Kristine asked, "When the architect enters a democratic dialogue with the client, discloses information that allows shared planning with the client, and when the architect also builds as a contractor, how does the role change?" Jean-Claude asks, "What is the role of the artist within this shifting framework of authorship?" This is a collapse of function that opens up new forms. Marcos Novak and Katherine Hayles, from quite different perspectives, gave some answers. Marcos gave us the assignment of opening the sensorium, of our tiny scale of perception, to using virtual tools and architecture to allow us to imagine beyond our physical capabilities. He saw the role of architecture as attempting to articulate a cosmology and provide us with allegory, which is quite different from metaphor.

Katherine Hayles talked about our need to struggle with this problem of allegory. If we are enframed within the machine, do the senses become pure simulation? She considers the cunning or adaptability of our sensory apparatus. We return to, "What is the value of design?" Design has huge responsibility if we are creating a new sensorium and creating the role of the interactor within that world. What does the interactor do, what does interactive media do in relation to a building? How do we respond? How explicit or implicit should those actions be? What is the interface; what are its metaphors?

Jakub Segen creates eloquent work, using hand and gestural language systems that can cross cultures and allow people to speak to each other, yet could also be culturally specific or localised. These gestures allow collaboration and self-awareness. I saw a match between Jakub's work and Scott Snibbe's story of how, as a child, his first subjectivity was a realisation of his hand's presence. He felt that it was of his body and outside his body, controlled by his muscles but also having a will of its own. This notion, of course, has an awakening erotic sensibility to it. This in turn related to Sandy's performance about the physicality of the erotic. Char talked about how the hand represents instrumentality. If we want interfaces dispel authorship and a directorial instrumentality, then there's times when the hand is not the appropriate interface. The same is true of visual interfaces that assume a controlling gaze. What is the role of passivity, as well as activity, within interaction and within architecture? Char and John's collaborations struggle with these issues directly.

Back to the Subject So that brings us to the subject, which is where I'm going to end the first day's summary, having worked backwards from the evening. Linda Wallace provided the notion of the living architectural "media space". Linda suggests that media space is constantly authored, often not by ourselves but by those outside us. We create our own pathways within that architecture of media. Katherine Hayles discussed the simulation as self and the potentially infinite power of computation and subjectivity within the simulation. Once resolution is no longer a question, where is the subject get constructed? This erases the line between our physical selves and our simulations. Jean-Claude Guedon's definition of the subject is quite different; it is a subject in negotiation. He notes that the modern subject acts to give, not possess. This subject shifts in fact, from ownership to the capacity to give, but to give it assumes possession in the first place. This is perhaps a collective possession, where the subject constantly repositions and redefines itself within the group. He discussed shareware in software and as a metaphor. It provides a movement in a social understanding of resource movement, creating "a phonemic atomic subjectivity". Guedon states that human subjects still require a body of understanding, in other terms, he notes the role of physicality within the definition of the subject. This is an analogue way of fixing the subject, even if it's for a moment. We need to see and feel art works, as well as conceive of these. Representation remains critical. Marcus Novak, who aptly theorises twelve dimensions, still decides to make physical work, which acts as an extrusion, a physical and tactile representation of these, humanly impossible to perceive dimensionalities. This provides erotics of surfaces that can be touched, seen and navigated. This differs from Hayles argument. After his statement a participant called for the death of representation.

Those were the issues and presentations of the first day.

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

[Ed. note: the complete content of this article is available at the



LEA website: <<http://mitpress.mit.edu/e-journals/LEA/>>.]

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< Virtual Reality and the Urban Landscape >  
by Richard M. Levy

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Abstract

Virtual reality (VR) from its very beginnings has been used to visualize architectural and urban space. Even though VR is not bounded by the concerns of the physical world, these interactive abstract worlds rely on a familiar language of architectural elements. This paper discusses the influences that urban simulation has played on the physical design of cities and how the image of the city continues to serves as an important theme in the creation of virtual worlds.

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

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

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< Navigation through Knowledge Spaces >  
by Thomas Whalen

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Abstract

Human beings, as premier creators and consumers of knowledge, have created a global knowledge space. The World Wide Web provides just one more technology in a long list that we have developed to navigate through this knowledge space. Currently we use individual words in search engines to accomplish this end. However, we are beginning to experiment with unconstrained language, sentences and dialogues on the Web. These natural language technologies not only have the potential to provide a better way to navigate the global knowledge space, but also provide a richer representation of knowledge because they allow people to interact with knowledge in the most natural possible way.

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

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

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< resistant spaces :: subjects >  
by Linda Wallace

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## Abstract

This paper posits the idea of 'architectural media space' and how such spaces might be dealt with by 'alien' subjects -- those who do not wish to be part of the dialogue the space invites, or assumes.

## Bio

Linda Wallace is an artist and curator, currently working on a doctorate at the Australian National University, Canberra.

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

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< Simulation: The Cultural Anticipation of Our Own Demise >  
by Greg Niemeyer with Julie Daley

## Luther and the Emancipation of the Image

Between 700 CE and 1566 CE, a debate called the Bilderstreit (German for: image debate) polarized the European Catholic Church. At question was the veneration of images, such as paintings or sculptures, of Saints, the Madonna, Jesus and God. Such veneration was common practice, and were sharply criticized by the Iconoclasts, who believed that any veneration of images violated the second commandment:

(16) Beware lest you act corruptly by making a graven image for yourselves, in the form of any figure, the likeness of male or female, (17) the likeness of any beast that is on the earth, the likeness of any winged bird that flies in the air, (18) the likeness of anything that creeps on the ground, the likeness of any fish that is in the water under the earth.

Images at the time were barely understood as artifacts, which are separate from what they represented. This notion was supported by the practice of including remains of the bodies of Saints in the artifacts. The image of a Saint was seen as an actual part of the Saint and was not understood as a simulation or a signifier. This image culture further intensified the debates regarding religious artifacts. The protests of the iconoclasts reached its peak in the Bildersturm (German for: image storm) between 1522 and 1566. In the Bildersturm, Iconoclasts raided churches and destroyed or burned religious artifacts, leaving the churches bare and whitewashed.

The actual resolution of the Bildersturm, however, did not lie in the destruction of images, but in advancing the cultural distinction between an image and what it represents. In the emerging Protestant church, it was Martin Luther who first articulated the abstract nature of the image in 1525:

Whether I want it or not, when I hear Christ, an image emerges in my heart of a man hanging at the Cross, just as readily as my face projects itself onto water, when I look into it.

Luther clearly distinguished between the image of Christ and the

Christ himself. He identified the image as a product of an abstract notion, projected into the heart, comparable to a reflection. With this abstraction, the religious image was liberated from its conflicted role as a ritual artifact and was defined as a communicative representation of an idea or a form.

The dispute over the ritual usage of images in the Catholic Church was settled by a decree of the Nineteenth Council at Trent in 1564. The council's Decree on Sacred Images stated that it was not the artifact itself--the signifier--which was being revered. Instead, the Council decreed, it was the signified saint who was being revered . Thereby the artifact was no longer ritualized, but was defined as a device to communicate an abstract idea.

The role of the image in Western Culture from this point onwards was to communicate ideas, and the role of the artist changed from artisan to author. This transformation constituted a fundamental evolution in Western image culture, and provided the basis for Western visual culture from Cranach and Durer onwards.

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

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OPPORTUNITIES
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< University of Michigan's School of Art and Design and School of Music >

Send to:  
Search Committee  
School of Art and Design / School of Music  
University of Michigan  
2000 Bonisteel Blvd. Rm. 2055  
Ann Arbor, MI 48109-2069

TWO FACULTY POSITIONS: ANIMATION AND INTEGRATED DIGITAL MEDIA

The University of Michigan's School of Art and Design and School of Music are collaborating to develop an interdisciplinary faculty team to engage animation and integrated digital media. The two units are searching for two full-time, tenured or tenure-track faculty to begin on September 1, 2001.

The School of Art and Design position focuses on visual imaging for animation; the School of Music position on music and sound design for integrated digital media. The ideal candidates selected for these two positions will each have primary academic appointments in one of the two units with a secondary appointment in the other unit.

Each position entails teaching courses for the primary appointment unit as well as courses jointly taken by students from both units. Full participation in faculty affairs of the primary appointment unit will be expected. Public performances, presentations and/or exhibitions are also expected. Both Schools encourage and will facilitate engagement with the progressive, contemporary human and technical resources of the University of Michigan.

Qualifications: The ideal candidates will have advanced degrees or an equivalent combination of education and experience, university-level teaching experience, and established records of engaging the public in creative work.

Appointment Level: Rank open and commensurate with experience.

Salary: Commensurate with experience and appointment level.

Application: To include:

- o Letter of Application of not more than 2 pages
- o Curriculum Vita
- o Names/Addresses/Telephone Numbers and e-mail addresses of 3 references  
(No letters of recommendation accepted at time of application.)
- o Documentation of work: All types of documentation accepted, as appropriate to present applicant's capabilities and creative interests. Explicit review instructions must accompany submission materials, particularly those in digital form.

Due Date: March 12, 2001

The University of Michigan, located in Ann Arbor (40 miles west of Detroit) along the Huron River, is an internationally esteemed public research university comprised of 19 schools and colleges. Enrollment on the Ann Arbor campus is approximately 40,000 graduate and undergraduate students. Ann Arbor, listed as one of the top 10 university towns in the country, has an intellectually and culturally rich community, with a population of over 120,000.

The University of Michigan is a Non-Discriminatory Affirmative Action Employer. Women and minorities are strongly encouraged to apply.

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< Indiana University Center for Electronic and Computer Music >

Electronic and Computer Music Search Committee  
c/o Eugene O'Brien, Associate Dean for Instruction  
School of Music  
1201 E. Third Street  
Indiana University, Bloomington, IN, 47405

Faculty, Part-Time and Assistant Director Music Assistant Director of the Center for Electronic and Computer Music and teacher of MIDI and Computer Music and teacher of MIDI and Computer Music (part-time). Appointment effective beginning August 2001.

RESPONSIBILITIES:

This is a full-time position with responsibilities divided between teaching and administration:

(1) Teaching and introductory course in MIDI and computer music (two sections), supervising laboratory session in the Center for Electronic and Computer Music (CECM), and assisting the Center's Director with other courses;

(2) Serving as Assistant Director of the Center, assisting the Director with installing and maintaining computer music software and hardware, maintaining the Center's website, developing course materials, researching and purchasing equipment and software, and in

the general operation of the Center.

QUALIFICATIONS:

Doctorate or ABD in Composition or Computer Music. Active career as a composer of electronic works. Experience in teaching all facets of electronic music, including analog and digital syntheses, sampling, Csound, MAX/MSP/MIDI, sequencing, hard disk recording, standard audio systems, electronic music history and literature. Previous experience creating and maintaining an electronic music studio including PC and Mac music software and hardware, and audio systems. Some UNIX, Web authoring and networking experience desirable. Specific teaching experience with MOTU Digital Performer and Freestyle, Digidesign Pro Tools and Kurzweil synthesizers preferred.

SALARY AND RANK: Commensurate with qualifications and experience.

APPLICATION: Send letter of application, three letters of recommendation, curcciculum vitae and other credentials to the following address; please do not send recordings or other materials unless requested to do so. The search will remain open until a suitable candidate is identified; review of applications will begin on February 20, 2001. Women and minorities are encouraged to apply.

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| ANNOUNCEMENTS |

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< OLATS News >

URL: <<http://www.olats.org/setF6.html>>

OLATS is proud to publish the essay "For a new kind of Aesthetics" by the Italian philosopher and theoretician Mario Costa. This essay is the text (in French) of the communication that Mario Costa delivered during ISEA 2000 in Paris last December.

This essay completes the ones already published and is the first of a new serie of online publication that OLATS has undertaken in its "Livres & Etudes" (Books & Essays) section. Various texts by Edmond Couchot, among which the older, unavailable ones, will follow.

For a new kind of Aesthetics, by Mario Costa

Mario Costa's book The technological sublime, published in 1990 (French transl, 1994; Brazilian, 1995) have received an excellent reception and it seems to have had "the immense merit to propose an operating theory to the analysis of the contemporary art" (Annick Bureaud).

After ten years, and in view of everything else that happened in the field of technological-aesthetics production, Mario Costa tries to specify the principles of a new aesthetics.

He maintains that the present situation is already announced in some movements and artists of the historical vanguards (constructivism, Gabo, Moholy-Nagy) that have been misunderstood by aesthetics and art criticism. Then he shows how the traditional concepts of aesthetics are no more valid.

In fact:

- the production and fruition leave the interior life and change themselves in a sensorial way;
- the production leaves the symbols and aims to assume a cognitive essence;
- the activation of signifiants replaces the expression of signifie;
- the concept of artistic personality changes itself in that one of aesthetical-technological searcher;
- the subject and the belonging of works incline to be overcome;
- the interior life is projected outside and becomes machinery;
- the concept of form weakens to advantage of that one of stream.

The essay concludes with the indication of the tasks of the contemporary aesthetic-technological research and of the strategies that this one should follow in the actual organisation of art system.

\*\*\*\*\*

< Call for Papers - The Role of Artists and Scientists in Times of War >

Please send manuscripts or manuscript proposals to  
 Michele Emmer  
 Email: <M.Emmer@iol.it>  
 or to the Leonardo editorial office:  
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 425 Market Street, 2nd Floor  
 San Francisco, CA 95105, U.S.A.  
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Call for Papers

The Role of Artists and Scientists in Times of War

We live in a time when war, far from being eliminated from the planet, is a continuing fact of life for many. Some wars are overt military wars, others are endemic situations of social and economic conflict.

What are the roles of artists and scientists in times of war? How can we be useful? How can our work contribute to new approaches? Historically the work of some artists and scientists has been instrumental in shaping perceptions and initiatives.

LEONARDO Editorial Advisor Michele Emmer and LEONARDO seek papers discussing these and other topics that address the role and work of artists and scientists in times of war.

Texts that are being published as part of this project include the following:

Published in Vol. 34, No. 1 (2001):

- MICHELE EMMER: Artists and War: Answers?
- BULAT GALEYEV: Open Letter to Ray Bradbury
- JOSEPH NECHVATAL: La beaute tragique: Mapping the Militarization of Spatial Cultural Consciousness

Forthcoming:

- UBIRATAN D'AMBROSIO: Mathematics and Peace: Our Responsibilities
- ALEJANDRO DUQUE: New Media as Resistance: Colombia
- MATJUSKA KRASEK: The Role of Artists and Scientists in Times of War
- SHEILA PINKEL: Thermonuclear Gardens: Information Art Works about the U.S. Military-Industrial Complex

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< ArtSci2001 Symposium: Catalyst for Collaboration >

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

Symposium Announcement & Call for Presentation Proposals

ArtSci2001 Symposium: Catalyst for Collaboration November 2 - 4, 2001  
The Graduate Center of the City University of New York (CUNY)

Art & Science Collaborations, Inc. (ASCI) seeks 20-minute presentations of art-science collaborative projects at any of the following stages: concept, development, or production.

Projects must involve both artist(s) and scientist(s). Examples: performances, books, CD-ROMs, net.art projects, CAVE, audio, video, animations, research, inventions, plays.

This third international ArtSci symposium is being co-produced by The Graduate Center at CUNY and seed money has been provided by the Rockefeller Foundation.

Full details at: <<http://www.asci.org>> Also at the website is a link to download an 8.5x11" ArtSci2001 flyer (MS-Word format), suitable for posting or faxing. DEADLINE: March 1, 2001.

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