Leonardo Electronic Almanac Volume 4, No. 8
August 1996



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## INTRODUCTION

< This issue >

Craig Harris

The Ars Electronica Festival 96 begins in just a few days (Sept. 2 - 6) with the official opening of the Ars Electronic Center. "Memisis - The Future of Evolution" is this year's theme. Information about the center and festival is available at:

Ars Electronica Center
Tel: ++43(0)732 715 200
Email: info@aec.at
URL: http://www.aec.at

The Seventh International Symposium on Electronic Art (ISEA96) is taking place on September 16-20, 1996 in Rotterdam, Holland, and Wim van der Plas reports that it is going to be an exciting symposium. Participants are registering from all over the world, and people should get the most up to date information about activities by contacting the organizers at:

ISEA96
Tel/Fax: 31-10-4778605
Email: isea96@hro.nl
URL: http://www.eur.nl/ISEA96
http://www.xs4all.nl/~isea

This month Paul Hertz presents a fascinating hypertext profile of the Homestead/La Finca project, designed specifically for LEA. The text provided in the email-distributed LEA provides an overview of the project and the participating artists, and I encourage everybody to check out this article and the Homestead site. We are also fortunate to be able to provide LEA subscribers with Roy Ascott's perspective on accessing the NTT ICC 95 web site.

William Louis Sorensen presents a profile that provides illuminating details about the Copenhagen Cyberport project. Leonardo Digital Reviews contains a mix of book, software and video reviews. And among the opportunities and announcements that appear this month we have a preview of the 1997 International Computer Music Conference. I present a detailed description provided by the organizers, both because of their need to communicate some deadline information, and also because it provides insight into their approach to this event. The ICMC has been occuring for 20 years, and is established as a significant international event. In 1997 this will take place in Greece, and there is a strong intent to redefine the role and design of this event to reflect the diverse ways that new media resources are applied in creative contexts.

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## FEATURE ARTICLE

< IMPLICATE ART:
a commentary on accessing http://www.nttice.or.jp/ic95/ >

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I feel I have been involved in a glorious test case. Not in the sense of seeking confirmation of the Web as an appropriate vehicle for art, or of the artists' ability to create art in the Net, since both these factors have been positively and richly affirmed by this project. Rather, the test has been the extent that this imaginative presentation of online artistic inter-production, not only confirms a new cultural process, but prefigures a new kind of social process. The variety of attitudes, issues and techniques involved in the work of the twenty artists/groups here assembled reflects the complexity and interrelationship of issues in contemporary life: political censorship, the ambiguities of telepresence, transcultural semiosis, the interpenetration of artistic modalities and notations, non-linear narrative, urban mythology, the new sense of self and the variability of personal identity, all set within a truly global perspective in which the category limits between knowledge and play, science and subjectivity, construction and emergence, are triumphantly stretched and exceeded.

Set to occupy a finite period (nineteen days), NTT's ICC 95 was a website of cultural compression, a sort of time-hologram, in which any one part, approached at any one time from any one location, leads to all other parts in all other places: both interstitial and inter-sited. Here was a "gallery" whose internal structure and order were "implicate". Implicate, in the sense that the artists continued to add to and amplify their creations, to enfold and entwine them in denser and denser connections and associations, and implicate also, in the sense of creating a potential for the unfolding of an infinity of trajectories, according to the myriad interactions and interventions of the world-wide viewing public. To interact with these works was to become immersed in the issues, preoccupations, anxieties and enthusiasms of our times. This has been an exhibition laid out in cybertime rather than physical space, a complex, richly varied and densely stocked online gallery, a non-linear but internally coherent exposition of net art made for, by and on the web: the very paradigm of a Net Art Museum. Against the traditional gallery's sequencing of works on the wall, here we have a collection of deseriated works, whose order of viewing and interconnection, both semantically and experientially, is wholly open, observer-dependant, and interactive.

When I roll with a telepresent body on Paul Sermon's bed, is this the dramatisation of a nascent social process, or is it "only" art? When I view Masaki Fujihata's Mount Fuji through a telescope which stands many thousand miles away from me, is this art or "simply" exercising our newly-evolved cyberception of amplified human interaction with nature. To be In the Web at http://www.nttice.or.jp/ic95/ was, for me, always to be both engaged in art and implicated in new social process.

Social life is the concretisation of consciousness, and Net art is the product of the connectivity of minds before it is anything else. The significance of our experience of art on the web is that it articulates not only our own associative cognition but stimulates our participation in the global mind. Moving between sites as radically different as, for example, Tune-a-fish, Jews-in-Space, Behind the Mask, Dumb Type or Bulbous Plants, it become necessary to coin the term "paramentation" to define the extent of my experience. Mentation is simply a singular and individual act whereas this is a process which transcends individual consciousness and produces an engagement with world mind. It is in this global noeticity, the

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spiritual energy generated by paramentation, that the importance of this project lies. Noetic process precedes social process: in engaging with http://www.nttice.or.jp/ic95/ we are taking the first steps in a new way of being, and a new way of ordering our experience and of shaping the world.

In traversing the work of Blair or Coates, for example, who work both within and against the tradition of film and theatre, I am reminded how discontinuous, non deterministic our paramentation is. Global thought is not cinematographic in the way that Bergson described "the mechanism of our ordinary knowledge" (Creative Evolution, MacMillan, London, 1911, p.323). Henri Bergson, whose affirmation of the Heraclitean flux and flow, and the integration of Eastern and Western philosophy is so appropriate to our understanding of this present project, lacked the model of networked hypermedia that so aptly reflects the dynamics of world mind . The cognitive rhythms, the semantic jumps and leaps, the hyperlinks, the tunnelling from mind to mind, from real locations to virtual places, from people on the street to identities in cyberspace, are in the best sense indeterminate, directionless and all-at-once. I have a vivid memory of making music in Masuyama's delightful DOT COMmunity and suddenly finding myself in a musician's back yard in suburban Japan, only to be confronting, in microseconds, a Magritte in Paris.

Net behaviour requires Net literacy. In the early days of film, if a player dropped from the camera's view, or disappeared off the side of the screen, the nonliterate viewer wanted to know what happened to him. To play Ping requires another kind of literacy, just as Global Interior Project #1 requires a new kind of perception. Even the flow of time has to be reconsidered in experiencing these works. Bandwidth alone (or its limitations) demands that we learn to access and interact at variable rates and speeds. I am reminded of Greg Egan's book 'Permutation City' (1994), whose virtual human copies had a "model-of-the-brain" which ran 17 times slower than the real thing. Accessing the Net Gallery site was never that slow, but the bandwidth overload of busy periods can keep you hanging around, just as long queues can keep you from getting to see popular exhibitions in the conventional museum. Downloading delays can induce a trance state, their rhythms at a 'busy' site can become a mantra. The "time" of consciousness is never regular or continuous, and in telematic mind this is particularly so.

In the best sense http://www.nttice.or.jp/ic95/ was a provocation, demanding that the casual viewer or visitor to the site learn new telematic skills, alternative cognitive strategies and an openness to associative thought. HotJava, in all its applet-aware, extensible www splendour, and VRML in its fullsome dimensionality, increased complexity, delight and variety of this cultural menu.

Is it too early to speak of a spiritual journey? I certainly experienced a noetic voyage around these artists' Web sites; more than simply engaging with their sound, images, movies and messages, I felt I had entered their space of consciousness. Walter Benjamin was right about art's loss of aura in the age of mechanical reproduction. But Benjamin had no knowledge of our age of telematic emergence. Here the work of art does indeed have an aura, it is the aura of noetic potentiality rather than heroic personality.

ON THE WEB prefigures the destiny of art in the 21st century, in what will be its overarching concern with world mind, interpersonal consciousness and the technology of the spirit. In a culture that currently can only associate meaning with materiality, museums with ownership, space with closure, and walls with certainty, to

introduce the Museum within the Network and to cultivate the emergence of an authentic Net Art, as NTT ICC 95 has so adventurously done, is to show the way to radically new cultural behaviour, and to important new social process.



Published in:

ON THE WEB, NTT InterCommunication Center, Tokyo, 1996, pp.132-135

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PROFILES

## About the Homestead - A WWW Project by Paul Hertz

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### a virtual exhibition

The Homestead/La Finca is a virtual exhibition of art and texts exploring the theme of colonization, which I curated as part of a residency at the Universidad Politecnica de Valencia, in Valencia, Spain. A round-table discussion in Valencia with Roshini Kempadoo, Salvador Bayarri, and Rafael Lozano-Hemmer further developed the theme of the colonization of cyberspace.

### a colony in cyberspace

The Homestead aims to be “a colony in cyberspace,” with work by artists and critics on the theme of colonization, particularly the effects of historical colonization on the technological present and the colonizing effects of technology as a means of cultural dominance. Other areas within the original proposal -- media as extensions of the nervous system, the colonization of the body by media -- received less attention in the actual production of the site.

### in opposition to “technotopia”

Colonization is deliberately used as a provocative term, in opposition to “technotopia,” the idealized vision of technology offered by centers of economic and political power. Colonization implies borders, an “us” and a “them,” a degree of violence. Identity is constructed on the borders. On the border, objects and persons acquire names, differences are constructed. Even if cyberspace is a space without inside or outside, persons may be inside or outside. Who gets to participate?

### alternative or dystopic visions

Within the World Wide Web, the Homestead is one of several sites offering an alternative or dystopic vision of the emerging world wide communications infrastructure. James Luna, Guillermo Gomez-Pena and Roberto Sifuentes, for example, have created an “Ethno-CyberPunk Trading Post & Curio Shop on the Electronic Frontier” that deals with stereotypes of how Mexican-Americans and Native Americans

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should behave. In her hypertext "The Roar of Destiny Emanated from the Refrigerator. I got up to get a beer." Judy Malloy explores the intricacies of gender and interpersonal relations, using a collage technique to elude facile analyses or constructions of narrative line. Computers drift in and out of the "Roar of Destiny" as structural cues, as elements within it, and as psychic affects that hack consciousness in the form of hallucinatory dreams.

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lines of escape

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These authors suggest that the Internet is hardly a zone where we leave behind the culturally-determined signs of identity and their attendant privileges, ironies, and afflictions, that differences and boundaries persist even when people are not physically present. Differences get coded into language, the first medium of the Internet, and they persist in the new digital media that are becoming its lingua franca. They persist in the access to and use of technology. Difference denied simply goes underground, into the collective subconscious, as another form of power. Hauling it back into the light frees up new possibilities, lines of escape, of decolonization, of nomadic identity. The history and effects of colonization constitute one of the major collective lies that Western culture has buried. In this sense, my best ambition for the Homestead is that it might be a form of truth-telling: diverse, painful or funny, at once personal and public, but ultimately provocative and liberating.

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Crossing the Border - The Work of the Artists

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the exhibition space

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The rise of critics and curators as molders of the traditional art market and of what for the moment constitutes "art," rather than as mere discoverers of artists whose current production defines the moment, has led to a promiscuous and bountiful exchange of roles. Critics and curators, in particular, have become producers of art both figuratively and literally. The Homestead was intended from the beginning to be a "work of art" as well as a virtual space. I have described some of the curatorial and design issues Chris Young and I threshed out in planning the space in the section of production notes.

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Annette Barbier

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Annette Barbier's work "Home Invasion" - visitors to the Homestead have the opportunity to experience voluntarily one of the irritations of telecommunicative society: the barrage of marketing junk. Home Invasion contains audio clips of telephone solicitations, recorded over a period of about a month, along with Barbier's commentary. Though the tone is decidedly humorous, it doesn't take much to see the sinister side of the business, particularly as political, commercial, and professional databases circulate so freely -- and often seem indistinguishable.

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Roshini Kempadoo

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Image producer Roshini Kempadoo brings together texts and digital photoconstructions in "Sweetness and Light." She explores possible mappings between the colonial experience of the plantation system

and the class structures within the information economy. While Kempadoo emphasizes that there is no neat and simple correspondence, she raises some difficult questions, particularly for those of us who straddle the zone between power and poverty, "in-between, tiers of people controlling, propping up the system for their own survival and purposes." Information systems are the consequence and object of relations of production, not an elaboration of an organic evolutionary process (e.g. the exteriorization of the nervous system) that spills over as social or technological progress. The in-between must contend with a choice between anesthesia and ethical compromise. Perhaps, as was suggested in the round table in Valencia, they may find a creative solution in the creation of pirate signals in the information stream.

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Richard Maxwell

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Intimately bound up in the design of the Homestead, Richard Maxwell's hypertext, "The Thicket: A Possibility Space," presents a tangle of lateral branches where the unwary may get lost or emerge into unexpected vistas within works by other contributors to the Homestead. Left unattended, the pages of text will load at random, seizing control from anyone who stumbles into the Thicket. Nor will following the guideposts avail -- escape from the Thicket is a matter of jumping out and trusting to luck. This ironic structure supports equally ironic snippets of text, with digs at both the utopian and imperial aspects of colonization. This uncontrollable behavior could be a metaphor for the explosive growth of information space, while the leaps in logic within the Thicket and the leaps of escape beyond it suggest a non-hierarchical molding of the information flow, a rhizome.

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Esther Parada

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An examination of "networking" among the wealthy and powerful a century ago, essay "Transplant: A Tale of Three Continents" follows the marriage of Mary Victoria Leiter, a Chicago heiress, and George Nathaniel Curzon, a British lord who became Viceroy of India. Two plants, cinchona (quinine) and wheat, traverse the bounds of these familial, commercial, and geographic alliances. Lord Curzon's stellar diplomatic career was launched with the aid of Levi Leiter's wealth, gained in part from speculation in the grain market, while the British presence in India depended on quinine for sustaining the health of its bureaucracy and troops. Parada emphasizes that this is no simple tale of morality, but one that can challenge the polarities through which we tend to view historical events.

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Rejane Spitz

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Considering one of the most immediate intrusions of information systems into everyday life, Rejane Spitz began videotaping Brazilian workers interacting with Automated Teller Machines. Her work "PRIVATE DOMAIN (please keep off!)" grew out of her observations of how class differences and education affect people's ability to take part in the emerging world communications infrastructure. Visitors to PRIVATE DOMAIN can assume the role of various personages from Brazilian culture as they visit a hyperactive ATM, that dispenses advice and sarcasm along with its financial services. Graphically rich, with streaming audio and animation, PRIVATE DOMAIN demands bandwidth, but it also reveals the possibilities of the medium.

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Torrey Nomessen

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Although Torrey Nomessen purports to be a freelancer working for Tri-Angle Corporation, he is in fact its creator. You can even ask him for a job. Like many another entity on the Infobahn, Tri-Angle Corp. buys, trades, and sells information. More ominously, Tri-Angle Corp. seems to have a quasi-religious protagonism in its goal of integrating so seamlessly with your everyday life that you won't even notice it. Like credit or the hand of the market, it seeks to become invisible and omnipresent. A chipper, new age sensibility and the promise of better living through technology sugar coats the raw desire for control.

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Stephen Wilson

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"Homesteads in Mind Space" by Stephen Wilson provides visitors to the Homestead with a tool for seeking out ideas that may seem "fanatic, alien, wild, fringe." Citing Richard Dawkin's theory of memes, the cultural counterpart to genes, Wilson suggests that the Internet provides us with a stellar opportunity for cross-pollination of ideas -- some of which may be completely loony, but others of which may take root and evolve into new forms of consciousness and social adaptation. His CGI interface provides visitors with the opportunity to troll through sites that fit a number of outside or utopian categories (sites that may not make it into more generic search tools), and to add sites of their own.

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Production Notes

The following are some notes on the production of the Homestead, in no particular order.

Initially, Chris Young and I planned the Homestead metaphorically, as a "clearing in the woods" where settlement was taking place. While considerations of bandwidth and the current state of the technology precluded using VRML, in many respects we were thinking about modelling a real 3D space. Rather like the diagrams of the scene of the crime in a fair play mystery novel, we wanted to present the visitor with a space that could be rationally deduced. As we developed the work, this seemed less and less useful. Eventually we abandoned the scheme altogether in favor of a narrative approach, albeit one where a rational space seems to be alluded to. Our conclusion when the moment came to contemplate rendering a 3D database was that narrative afforded greater opportunity for contradiction, confusion, and paradox: virtues we desired. While it's clear that "really" real 3D space abounds in these same virtues, the experience left us questioning whether computer 3D modelled perspective (the descendant of the rationalization of space imposed by geometric perspective in the European Renaissance) should be the polestar of interface design. The topologically connected space of narrative, like the topological relations of kinship and other social constructs imposed on really real space, has inherent possibilities that hierarchically rationalized spaces do not.

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layout of the Homestead

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After months of storyboarding and brainstorming, we developed a design with a single entry point that quickly branches off into several directions, all of which sooner or later arrive at a jumping off point to the work of the artists. From an initial splash screen, a visitor goes to the Anywhere page. This page provides a link to

the essential software for exploring the Homestead (Netscape, MacroMedia Shockwave, RealAudio, the Talker plug-in). It also provides an immediate link to the Index page, a listing of the contents of the Homestead, for people in a hurry. Others can continue on to the Border. On the border you have three choices: fill in some forms, dive in the Thicket, or try to sneak through the fence. The latter two choices eventually lead through hypertext or animation sequences to the artists' work, but with a strong element of chance as to just where you'll end up. Filling in the forms involves clicking on a world map (based on Peter's equal area projection) to record the place of origin of your ancestors and providing a story about the place they came from. The stories are collected into a database. Those obedient souls who fill in the forms may advance directly to the Clearing, which also has links to all the artists' pages -- evidence that even on the electronic frontier authority still has the power to grant favors.

## design parameters

Here are a few of the constraints that were developed. None of them constitute hard and fast rules, but they have been tested in many designs. Needless to say, we ignored them freely.

+ Bandwidth: Design for rapid access, particularly in the entry points (the one exception being a modest splash screen). Once visitors reach goals, you can use big media more freely. While it may be obtrusive from a designer's point of view (like giving a word count at the beginning of each chapter in a book), indicate the size of media before users download it.

+ Plug-ins: Provide links to all plug-in technology up front.

+ Identity: Computer windows tend to have a single generic appearance; differentiate your window from all the others with consistent design cues such as headers and footers, background color or pattern, text and link color, palette, icons and other graphic elements, column and row grids, typography, etc.

+ Overview: Indices, maps, and overviews are a necessity--all the more so when you are playing with visitor by spinning them around a few times before delivering the goods.

+ Access: In a Web site planned as an exhibition, the exhibition space should not be too obtrusive, even in cases like the Homestead where it is intended as another art work.

## technical difficulties

In its early stages in May 1996 in Valencia, the Homestead was plagued by technical difficulties in international networked communication and could not be publicly presented. Now the Homestead is nearing completion, with mirrors planned in Valencia and Rio de Janeiro to solve those problems. At that point I expect it also to become more decidedly bi- or trilingual.

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< Copenhagen Cyberport >

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URL: http://www.iae.dtu.dk/cyberport

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In the Nikolaj Exhibition Building, Copenhagen Cyberport opens a flow of information from the surrounding creative world. The Cyberport exhibition incorporates a wide range of artistic activity and creates a media landscape which continuously updates a second Nikolaj on the Internet via an electronic Port.

Visitors are able to affect this flow during the entire period of exhibition.

The Cyberport includes and coordinates three other electronic and interactive projects named Blue/Green, Instant, Specific.

While the Cyberport is in operation, the flow of information and people through it is increasing; at the same time, the ongoing activity of the Port itself contributes to the flow.

From an "Open Platform" in Nikolaj, various artistic activities take place daily; performances, literary, visual and musical productions create afternoons of light and sound.

Data supplied by sensors are used to construct a moving image reflecting the presence and exact location of people in the room; in this way, the movements of the visitors control various computer and sound programs. The visual content is generated second by second as a complex image, displayed on large projector screens and 150 monitors, while the sound is distributed to two sound galleries.

The point of intersection between natural and synthetic creation opens and closes in a multiplicity of sounds and images varying from the complex to the extremely simple at the moment it passes through or is produced in the Port.

"Transactions in the Port"
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A Port (in the sense of a gate) creates congestion in two directions by compressing the stream of people leaving a city or entering it on their way to the marketplace to sell the most profitable goods. At present these are information - measured as electronic impulses in time, with CYBER (Gr.) control of direction and speed. The location - the screen - constantly dissolves into, and as a result of, movement, while the content is affected only when pixels seek to establish an identification - which, in principle, can be a representation of anything.

This state is represented, instantly and specifically, in the media-scape's decentering of information into value variables, impossible to determine as being either real or virtual.

Hence the fascination of being able to add to or subtract from a value - for instance the news value - depending on where in the stream one is placed, but without the possibility of controlling time, which is the dream of any control system. A flow.

Technology cannot rule the world, but it can easily disturb our sense of time and restructure our way of experiencing things. Seeing the world as a screen surface increasingly alters our perception of real space to a number of interfaces, postulating - by projecting our new multi-identities - that their hidden states are more ourselves than we will ever be.

So how does the individual activate his or her own pixel here? By surfing through as many circuits as possible? By constantly trying to determine his or her new position in a time converted from analogue to digital and continuously being reprogrammed? Posit the

concept of freedom as the absence of control, which is equally comprehensible or incomprehensible in a limited or unlimited space in time, with access to or exclusion from information - and will not be pinned down even by semantics in a form of simulation, where the sale has become identical to the goods themselves: the content.

The logically calculated multiplicity of space and the timeless distance involved in digital precision point to changes in our way of perceiving things and consequently to changes in our concepts of value, for instance in relation to "art". Can this state be conceived as a "mutation" occurring within a self-defined time space, in an imaginary, now-altered universe of hyperchaotic, calculated choices made visible in the banally simple? It is perhaps as when a high-level system of control takes over and integrates the lower levels, in this case leading to a reorganization of the personality structure and, consequently, a differentiation of the structure of society. A constantly increasing flow of information on a global level calls for a different psychic structure in order to deal with this excess of stimuli. The individual personality structure must go through numerous changes of identification and move through complex systems with a differentiation of control that corresponds to the level of complexity around it. And sense perceptions establish localities where mutual interest creates a space in time, regardless of distance: a movement from the self-generating to the self-organizing.

It is probable that earlier, tried-and-tested systems will re-establish themselves in an altered form, but the intervening intervals embrace wider-reaching, more complex and perhaps entirely different entities of information based on sense data created for, or rather by all users, and probably also involve what lies outside the human sphere of experience.

"The Pedestrian Street" Sweeps Across...the Stream:
What I intend by constructing a Port in a space of electronic time is to pose challenges and clarify artistic problems, expressed through the audio/visual media, combining individual electronic channels into new structures offering a different experience than that of the traditional, commercial media. This information space will be presented as an installation of a number of screen surfaces, forming a large media-scape extending along the main exhibition hall at Nikolaj. To control the flow of information, I have designed some main programs for the screen wall as a whole, providing varying levels and degrees of clarity in a flow score. The content of the flow is based on different sight and sound environments such as water, land, streets, and the city of Copenhagen - designed so that any stream of people at Nikolaj will sweep across the screen images of "The Pedestrian Street".

The idea of opening a Platform to various different, artistic approaches to the media and its potentials is, on the one hand, to extend the social space where creative information is usually produced, and, on the other, to engage in a dialogue with real time on this platform, in a continuous mixture of what has already been created: the momentary states of the past constantly accumulating in the Port.

The interactive set-up offers the public the opportunity of engaging in a direct dialogue with the artist's production by choosing among various flow structures and by changing the visual content of individual projects.

Finally, the movements of the public within the physical space of the church building will be registered by a number of interconnected

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sensors and used to control several computer and sound programs. This concept pursues the artistic interface as far out into the interference of public space as possible.

An electronic Nikolaj will be put on the Internet, where it will serve as a global Port, continuously updated by the real one in the exhibition building. Here, users of the Net can pursue many different sequences in the course of the exhibition. The Blue/Green project, The Electronic Cafe and The Global Gallery will also provide the Port with interactively generated information.

Time - a Prefabrication?
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The global context is constantly being redefined, so that the information supplied by each new second makes that of the preceding one unclear, and in this context the greatest amount of interactivity creates even greater potential interference in all systems. The past influences our concept of the future and forms our present, which is scanned into a simultaneous time, disappearing into electronic non-time, without space or location, an anytime, where delay has been canceled.

Saint Nikolai, one of the first churches built in Copenhagen, was placed near the harbour and dedicated to St. Nicolaus, the patron saint of sailors. After the fire of 1795, it ceased to be a parish church and became a fire tower, equipped with a ball that could be hoisted down as a pragmatic signal to the citizens of the city. The spireless tower was surrounded by butcher's stalls in a marketplace for "the stomach", as it was nicknamed, and later the building became a library and an exhibition place for artistic endeavours, with sufficient space for various aesthetic and informative fluctuations. Right now it serves as a Port, where transactions, concerning time and space, will be taking place until the Port closes again!

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LEONARDO DIGITAL REVIEWS
AUGUST 1996

Editor:Roger Malina
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## < Book Review: Music, Electronics, Intonation, by Alexander P. Mentyukov, Alexei A. Ustinov and Sergei A. Cheldiyev >


The Novosibirsk State Conservatory
Novosibirsk, Russia, 1993.
314 pp. ISBN 7196-0477-4.
In Russian.

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Music and electronic technologies have been on a path toward progressive and deep integration since the epoch of Leon Theremin, the father of Russian electronic music. This path has been marked by unexpected discoveries and new problems. This monograph reflects a complex approach to the study of intonation that combines elements of information science, radio electronics and scientific studies of art. The authors' definition of intonation as "the natural aptitude of a human being for comprehension and expression of sound" forms the basis for their scientific theories.

Existing differences and similarities between academic and folk traditions of intonation (Chapter 1) are explained as having their basis in a common character shared by laws of acoustics, the psychology of perception, logic and information theory (Chapter 2). Following the first two chapters, the authors consider electronic instruments and software in the context of varied intonation practices.

The authors see the prospect of further development of the use of electronics in music as dependent on the transference of sound-generation technologies, global rules of expressiveness and laws of intonation from musical culture to electronic sound production. They present their wide interpretation of the concept of intonation as an approach to this challenge, introducing terms such as "intonation intensity" and "the balance of intonating components." The concept of intonation intensity comprises the integrated functions that describe changes in separate intonating components (such as pitch, loudness and tempo) and their corresponding acoustic paramaters. According to the approach detailed here, factors determining musical content are not limited to pitch and temporal organization. All changes are considered equal, and the balance of intonating components is seen as what provides musical expressiveness. The distinctive feature of the authors' scientific position is their aspiration to renew the fundamental bases of musicology by taking into account not only the pitch-temporal coordinates that dominate Western European musical culture, but other components such as spectral timbre parameters, which play an important role in many non-European musical traditions as well as in modern practices of electronic music (Chapter 3).

In Chapter 4, the authors discuss characteristics of expressive potentialities and technical means, data regarding sound- synthesis technology, advantages and disadvantages of well-known synthesis methods and peculiarities of acoustic and electronic instruments in terms of the concept of intonation intensity. Practical questions connected with the use of software and hardware in the activities of composers, performers, research workers and teachers are addressed in Chapter 5. This monograph contains much information useful to musicians and engineers who are developing software and hardware for musical applications.

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## <  Software Review: Overture version 1.2.  >

Professional music notation software for the Macintosh.
Opcode Systems, Inc.
Tel: (415) 856-3333
Fax: (415) 856-3332
Email: info@opcode.com

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URL: http://www.opcode.com/

Reviewed by Marc Battier,
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Released by Opcode Systems in 1994, Overture has found its place among the highly regarded common music notation software for the Macintosh. It belongs to a class of programs designed to be used in a variety of situations. Release 1.2 has a number of new features and its performance is faster and more powerful than the original version.

It is now common to see professional MIDI sequencers with some common music notation capability. It is less usual to see notation programs that have substantial MIDI control implementation. In this department, there are features that make Overture unique, and they lie precisely in its MIDI implementation. The program behaves best when embedded in the Open Music System (OMS) environment. Open Music System is a technology developed by Opcode to serve as interface with external MIDI devices. It can also be used as a link between programs to exchange MIDI data. The program takes advantage of this environment to control MIDI devices in a simple yet compelling manner. Overture has clearly inherited a number of features from its older cousin, the well-known sequencer Vision. For instance, there is a piano-roll window that seems to come directly from the sequencer. Because Overture has received many features from the sequencer paradigm, its playback features are substantial. One can use the program as a MIDI sequencer while retaining full capability of editing data with a comprehensive music notation set of tools.

Most editing tools are available from a small graphic tool bar. The tool bar can be set horizontally on top of the page or vertically along its side. Once set, it can be moved anywhere on the screen, so that the page can stay neat and uncluttered. The tool bar displays only 15 tools, represented by three cursor buttons, 11 palette buttons and one transcription quantize button. The design for use of the tool bar is somewhat clever: there are 12 tools that can be turned into additional palettes, or pop-up menus. Simply click on a tool, and a new palette appears that shows tools of the same class. In turn, one can drag that palette and set it anywhere on the screen. The nice feature is that one can easily show or hide these floating tool palettes, so that, again, the screen can be occupied by no more than the palettes being used at any given moment.

The drum section comes with a General MIDI setting. This can be changed to match the drum map of specific devices. Users can also design (and save) their own drum maps with a convenient editor that allows one to choose any one of 16 shapes to serve as note head design for each note of a given map.

I have found that Overture is lacking some features. Among its weak points is the absence of graphics capability: there is no way to design and add various shapes to a score from within the program. However, Opcode has mentioned that it is possible to paste graphics created in other programs into the score. In a forthcoming release of Overture, it will be possible to create graphics with the help of specific tools and add them to the score. This is, of course, useful when non-music such as sound events stored on prerecorded media has to appear in the score; it can also aid in indicating the evolution of the settings of electronic-processing devices. It could also be used to add specific graphic indications of how to perform certain

notes or passages, although Overture does provide a large set of such symbols already.

Overture offers the usual variety of input formats: it accepts several types of external files, including MIDI files and various types of sequencer files generated by Opcode products (such as Vision and Studio Vision). The program can be used quite efficiently to import files created in other programs, including computer-aided composition programs (such as IRCAM's PatchWork or Symbolic Composer), improvisation-oriented programs (M comes to mind) and ubiquitous interactive programs such as Max. Once imported, Overture lets the user choose the time resolution, which amounts to a rhythmic quantization. This feature is common to most advanced notation programs. Overture implements it very smoothly, as the first guess that it does yields a very usable result. A demonstration model of Overture is available from the Opcode site on the Internet.

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## < Book Review: Soviet Faust - Lev Termen, Pioneer of Electronic Art, by Bulat M. Galeyev >

Supplement to "Kazan" magazine
Kazan, Russia, 1995. 96 pp. ISSN 6869-8961.

Reviewed by Yuri V. Linnik
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"Termen ne mret" - so could be entitled my review of this book (the Russian phrase "ne mret" means "does not die"). This palindrome reflects the truth: it is a mirror inversion that encloses its word sounds in a ring in which currents of immortality circulate. My first thought was to write: "Leon Theremin (Lev Sergeyevich Termen) missed his centennial by 3 years." But I immediately rejected the idea, believing that Theremin has lived to see and even to outlive his one- hundredth anniversary. Theremin is alive, and this is where he gets the upper hand over his predecessor Faust. Bulat Galeyev's "Soviet Faust" is a brilliant biography of this pioneer of electronic art.

When Lenin died, Theremin had a proposal for the Soviet government: he suggested that if they would freeze Lenin's body, he would find a way to revive it. Was this idea utopic? One should note its pragmatic, typically Faustian form: immortality is purely a matter of engineering, not a transcendental problem. Nikolai Fedorov, the founder of Russian cosmism [1], had a similar way of thinking. From the first time I saw and heard Theremin (at the Light and Music conference held in Kazan in 1975), I perceived him as a champion of such ideas. He belonged to a line of thinkers including Fedorov, Tziolkovsky and Rerikh. Galeyev's book, which contains a great deal of previously unpublished information on Theremin, corroborates my theory. It appears that Theremin conducted a thorough investigation of immortality, developing an idea of a "microscopy of time" and proposing it as a means of directing time in order to decrease entropy. The concrete details of the techniques he proposed are not my concern here; instead, I wish to attract the reader's attention to the very aim of overcoming death in the material world, not in the transcendental one.

An understanding of this point is essential to any understanding of Russian cosmic utopia as a whole. Fedorov's outlook is none other than that of a philosophy of transformation [2] carried out within

the material world. It must be emphasized that the means for achieving such a transformation are purely material and technological. As a matter of fact, Theremin was engaged in modeling transformation. As used by the cosmists, the term "transformation" does not mean dematerialization (spiritualists misunderstand it). Instead, it refers to making matter itself brighter and more spiritual, freeing it from entropy. It is apparent that such endeavors have a magical character, and the legendary theremin is none other than a magical device - certainly on the level of aesthetic perception, if not on a technical level. Theremin performers free themselves from the burden of entropic matter, manipulating "pure ether" (i.e. electromagnetic waves) lightly, without undue constraints or expenditures of physical energy. The theremin gives us an idea of the music of an already transformed world. Since ancient times, distant vision has been considered the prerogative of magicians. Is it possible to overcome the irrevocability of distance? As a young specialist in radio engineering, Theremin produced an answer: he created a prototypical large-screened television set in 1923. This was his way of overcoming the visual gaps imposed by distance - and it did produce magical effects. There were also other ruptures that were to be overcome by transformation, such as the discrete nature of the senses. Hearing, sight, touch, taste and smell sometimes function incoherently. Was it not appropriate that Theremin sought synthesize all sensory channels? It is significant, too, that his approach to this synthesis was an aesthetic one. Transformation meant complete harmony and beauty, as well as maximum creative liberty for the artist. As investigated experimentally by Theremin, transformation promised that all physical restrictions would be removed and that the artist would be able to go beyond the limits of space and time. Striving to achieve creative transformation of matter would result in a union between art and magic. Theremin amplified this union by means of technology. Without a doubt, this picture of transformed matter has many features in common with the so-called "virtual reality" of current computer simulations.

Galeyev's book leads one to unquestionably conclude that Theremin was the Columbus of virtual reality, beginning his experimentation in the field in the 1920s and 1930s. Many of his ideas have only recently come to be understood. An example is his "tactile glove," which allowed for the inclusion of tactile sensations into the ensemble of the effects Theremin used in his performances in order to achieve a "total synthesis of the senses." Computer-aided gloves are more elegant, but Theremin was the pioneer.

We have struck a high note with our statement that Theremin was a prophet of transformation. But perhaps it is dissonant with Theremin-Faust's close relations with the devil. Here we face paradoxes and antinomies of an intensity unprecedented in the history of art. Lenin was amazed by the theremin. He understood quickly that the principles used to create this wonderful device could be applied to other, purely practical fields. We find evidence of this in a letter he addressed to Trotsky, dated 4 April 1922:

"Discuss the possibility of reducing the Kremlin cadet guard squads by using an electrical alarm system (an engineer, Theremin, has demonstrated his experiments in the Kremlin: the peculiarity of the system is that an alarm signal is produced when anyone so much as approaches the alarm wire) (p. 24)."

Theremin began working to ensure the security of the state upon the recommendation of Lenin himself. We could also say that he began working for state security, which has a slightly different meaning. In any case, Theremin was at home in Lubianka [3], which did nothing

to save him from imprisonment in the gulag. I remember very well the shock I experienced when a stunning fact came to light a few years ago due to perestroika: Termen's epic long-term stay in America, marked by friendships with Einstein and Chaplin, was an intelligence mission. Theremin, descendant of the Albigo, was a man of strong moral principles and a socialist in essence, honoring Lenin and his cause throughout his life. He obtained his Communist Party card (pictured on page 80 of Galeyev's book) in 1991, at the age of 95. There are no doubts that his deed was sincere. >From my student days, I remember hearing talk about a unique bugging device possessed by the KGB (Komitet Gosudarstvennoi Bezopasnosti) that was said to scan information by detecting window-pane vibrations. The question of whether it was only a legend invariably arose. The atmosphere of total suspiciousness so characteristic of our country predisposed us to accept legends as truths: our souls trembled more perceptibly than the window panes that were said to be treacherously transmitting our seditious conversations into ambient space. This legend, however, turned out to be true. Code-named "Buran" (Snowstorm), Theremin's device won him an award for his ingenuity. Approved by Stalin, it was used against him by former KGB chief Beria, who recorded Stalin's conversations. After years of careful preservation of these recordings, Theremin finally threw them out when they began to fall apart with decay. Was his decision too hasty? I believe that there may have been a chance to restore these tapes.

From the theremin's detection and amplification of the lofty harmony of spheres came the revelation of the instrument's essential meaning in the form of a surveillance device. Such was the amplitude of Theremin's endeavors, which appear to be riddled with contradictions. Theremin himself was of a different opinion, being a wholehearted servant of Fedorov's "Common Cause," the aim of which was to unify humanity. (Fedorov himself understood it as involving the "raising from the dead" of all ancestors, which would result in the inevitable resettlement of humans on other planets due to overpopulation on Earth.) According to the structure of this Common Cause - which was the same for communists, Albigos and Fedorov followers alike - beauty and goodness were blended inseparably. One might wish to argue with such a point of view. The example of Theremin shows us, however, that it can give rise to eminent persons.

References

1. Fedorov was a late--nineteenth-century Russian theologist/philosopher. Cosmism is based on a concept of the interrelationship of humanity and the Universe.
2. In the sense in which it is used here, the philosophical term "transformation" refers to an active, creative process and not merely a spontaneous process of change.
3. "Lubianka" is a Russian figure of speech for the KGB, just as "Lengli" stands for the CIA.

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## <  Video Review: Mastering the Theremin  >

written and directed by William Olsen.
Produced by Big Briar,Inc., and Little Big Films,
554c Riverside, Asheville, NC 28801,
U.S.A. Color/black-and-white video, 45 min. (1995).

Reviewed by Jason Barile
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There are no official schools or textbooks for learning to play the theremin. Joseph Schillinger's "shkola igry na termenvoske" (School for Theremin Playing), a document dating from 1929, is only a sketch. Throughout the 1920s and 1930s, Leon Theremin gave lessons in his private studio and research facility in New York. In 1993, Clara Rockmore wrote a small booklet entitled "The Art of the Theremin," which contained short exercises. Now, Big Briar has become the source of the first modern instruction on the subject with the release of their video, "Mastering the Theremin."

The video begins with a brief history of the life of Theremin and an introduction by Robert Moog. Next, it provides a series of six lessons designed to teach musical techniques. Each lesson contains a demonstration by Lydia Kavina and a few exercises to help develop theremin skills.

In the first lesson, basic hand movements and body positioning are introduced as Kavina plays "Moscow Nights." The video then discusses the functions of each antenna of the theremin. Methods of pitch control such as open and closed fingering principles and changing fingering positions are covered in lesson two (for anyone who has seen Rockmore's amazing fingering methods, this lesson explains a great deal). Lesson three moves to the left hand, covering techniques for attack and decrescendo, staccato playing and separation of musical phrases by wrist movements only. Lesson four combines these principles in describing how to hide pitch jumps. The fifth lesson continues this description and teaches expressive techniques. Kavina illustrates these methods with a beautiful version of "The Swan" by Saint-Saens. She states, "the ability to control expression and thereby realize different interpretations of a melody is the art of playing the theremin." The final lesson demonstrates uses for different amounts of vibrato - the most characteristic and often overused theremin technique. Following the lessons are three performances of original pieces by Lydia Kavina. Like Clara Rockmore, whose goal was to make the theremin known as a classical instrument, Kavina concerns herself with promoting the theremin's musical capabilities, as her performances demonstrate.

First she plays her "Monologue for Theremin," then "Swamp Music," composed for theremin and synthesizer. This composition uses the full pitch range of the space-controlled instrument and takes advantage of its unique ability to produce wide pitch swoops as well as precise melodic tones. The synthesizer part consists of digital frequency-modulated sounds that harmonize with the timbre of Kavina's instrument. Her last composition (in three movements) is "Suite for Theremin and Piano," with piano accompaniment performed by Kevin Ayesh. These performances are perhaps the most inspirational features of the video. The Russian virtuoso demonstrates her mastery of the instrument throughout long melodic passages, sharp staccato notes, and expressive effects. Playing the video on high speed shows just how much body control Kavina has, as only her arms can be seen moving as she plays.

"Mastering the Theremin" is an invaluable resource for those wishing

to play the theremin. All too often, the theremin is used as a novelty for sound effects or background ambience by players who have ignored the musical aspects of the instrument. This video should help break the trend, as it demonstrates just how wonderful the theremin can sound. It does as much to inspire thereminists as it does to teach.

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<  Digital Review Notes  >

Special Thanks to Grace Sullivan, Leonardo Music Journal

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 newmedia 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, CDROM, CDI, on-line, diskette, WWW/MOSAIC, ...).

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, 236 West Portal Ave,#781, San Francisco, Ca 94127, USA.Event and exhibit organisers, and authors of virtual/electronic publications and events interested in having their event reviewed should send information in advance electronically (only) to:

davinci@uclink.berkeley.edu

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

mason@uclink.berkeley.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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<  End Leonardo Digital Reviews  August 1996  >

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OPPORTUNITIES

<  Visual Arts Department at the University of California San Diego Seeks Media Artist  >

Kim MacConnel, Chair
Visual Arts Department
University of California, San Diego

 ISSN 1071-4391 ISBN 978-0-9833571-0-0

9500 Gilman Drive
La Jolla, CA 92093-0327 USA

MEDIA ARTIST. Assistant Professor, tenure-track, to entry Associate Professor with tenure. Rank and salary commensurate with qualifications and experience and based upon UC pay scales. We are seeking a film or video maker who also has a significant engagement in an area of computer-based art/media production (i.e., web-authoring, CD-ROM, digital imaging, interactive installation, virtual reality). Candidate should have a strong exhibition record and be able to demonstrate an in-depth understanding of film, video, and computer practice and their relationships to contemporary art discourses. Teaching experience and MFA or equivalency required. The candidate will actively participate in the ongoing development of facilities and curriculum. The university provides a number of opportunities for doing research within a department of broad interdisciplinary concerns. The position is available beginning the 1997/1998 academic year.

Send letter of application, curriculum vitae, names of three references (do not send letters of recommendation and/or placement files) and evidence of work in the field. This evidence may be in the form of slides, tapes, disks, publications and/or public lectures and should be accompanied by return mailer and postage.

All applications received by December 20, 1996 or thereafter until position is filled will receive thorough consideration. Please reference position number 9764N on all correspondence.

UCSD is an Equal Opportunity/Affirmative Action Employer with a strong institutional commitment to the achievement of diversity among its faculty and staff. Proof of U.S. citizenship or eligibility for U.S. employment will be required prior to employment (Immigration Reform and Control Act of 1986).

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## ANNOUNCEMENTS

### < The 1997 International Computer Music Conference >

Thanassis Rikakis,Conference Director
Brad Garton, Music co-ordinator
Perry Cook, Paper co-ordinator

ICMC 97
International Computer Music Conference 1997
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The 1997 International Computer Music Association (ICMC) will be held in Thessaloniki Greece from the 25th to the 30th of September. An introductory note focusing on some new initiatives we are taking for ICMC 97 and the ICMC 1997 Calls for Participants are included.

We hope you have a chance to read this mail as soon as possible as some of these initiatives (like the hiring of four major guest ensembles for the performance of the ICMC compositions or our

expanded Exhibition Hall) may be of interest to you and may influence your submission plans. You can find a much more detailed presentation of our plans for ICMC 97 at our web site. If you have any questions or comments please contact us.

"For we never sing in order to distinguish ourselves
from the world, my brother,
We sing in order to unify the world."

Yannis Ritsos

This statement captures the spirit motivating our plans for the 1997 Conference in Thessaloniki, Greece. Our intention is that the 1997 ICMC be as open as possible -- open to new ideas, open to new participants, open to the future of computer music. To achieve this openness we are:

* expanding the presentation of research, while maintaining a single 'track' of papers (no parallel paper sessions!).

* increasing the amount of music presented, while also working towards an enhanced sensitivity to the output context required by the diverse musical activities falling under the "computer music" rubric.

* supporting the participation of four renowned contemporary music ensembles, guaranteeing a high degree of performance skill in our concert presentations.

* creating a Conference structure intended to foster direct interaction among participants (those wishing to spend time with old friends, chat with new acquaintances, discuss research, music, solve world problems, etc. will find ample opportunity for this activity at the 1997 ICMC!).

* soliciting a large amount of public involvement. The 1997 ICMC is one of the sanctioned events of the Organization for the Cultural Capital of Europe-Thessaloniki 1997 and will be promoted highly throughout Greece at the International level. Some central ICMC 97 activities will be open to the public.

The Exhibition Hall
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It may seem impossible to accomplish the above goals. How can we "expand the presentation of research" while limiting the paper sessions to a single track? Perhaps the single paper session will last 17 hours each day -- but then how can we state that we intend to provide more time for "direct interaction among participants"? Our solution to these conflicts lies in a greatly expanded conception of how the Exhibition Hall will function at the ICMC. Rather than exist as a separate room where a few vendors demonstrate recent products, the 1997 ICMC Exhibition Hall will be the central focus of the Conference. The Hall will act as the hub for all Conference events, located directly adjacent to the concert halls, paper session room, and the ICMC Cafe.

The Exhibition Hall will also serve as an area for the presentation of recent research beyond the single-track paper session. All posters and demonstration sessions will be held in the Exhibition Hall. We will be providing a number of booths for use by ICMC participants. The structure of the Exhibition Hall will allow us to present more contemporary research, and will also allow us to grant more time for presenters doing posters and demonstrations. The booth design will also foster more direct interaction among presenters and

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attendees -- those desiring information about a particular demonstration or line of research will be able to make appointments to meet at the Exhibition Hall.

A number of well equipped booths (necessary audio equipment, workstations, internet access, etc.) at the Exhibition Hall will be available for use by academic and research institutions. One of the criticisms of past ICMCs is that a particular research center may find that its representation at the ICMC is dictated entirely by the judgement of the paper jury. While we certainly endorse the role of the ICMC juries in maintaining the high standards we have come to expect at the ICMC, we also believe that individuals and institutions should be given the opportunity to present research *they* feel is important. For example, the Computer Music Center at Columbia University may want to give an extended overview of recent research done, while also providing a meeting-place for ICMC attendees interested in learning more about Columbia or swapping recent software. A "Columbia-CMC" booth in the Exhibition Hall for a designated period of time will satisfy these desires nicely, without having to rely upon acceptance of a large number of papers. In one sense, the Exhibition Hall booths can function as expanded studio-report sessions, where time will allow greatly-extended presentations of work.

We also hope to attract a much larger presence by vendors involved in computer music. The organization of the Exhibition Hall should appear quite attractive to prospective commercial participants. Important and innovative work done in the industrial sector will receive the same attention as the research coming from academic institutions. We want the ICMC to be *the* premiere Conference for the presentation of state-of-the-art music technology. Another attractive aspect for potential ICMC exhibitors: the ICMC in Thessaloniki will be happening in close time-proximity to two other major European technology events -- the International Exhibition of Information Systems & High Technology Products (INFOSYSTEM) [September 20-24, 1997], and the European Telecommunication Conference [September 21-28, 1997].

Finally, the Exhibition Hall will be open to the public. Being located in a central and easily-accessible part of Thessaloniki, the Exhibition Hall should become a major attraction during the Cultural Capital celebration. We are expecting a large number of visitors -- we are indeed singing to unify the world!

ICMC Papers
---
We are seeking presentations of research in all aspects of computer music, certainly including aesthetic and compositional perspectives, as well as signal-processing and synthesis research.

Because of the involvement of IPSA (the Program of Psychoacoustic and Music Research at the Aristotle University of Thessaloniki) as the primary sponsoring organization of the ICMC, we are quite interested in seeing papers focusing on recent research and speculation in the areas of music cognition and perception. The opening session of the conference on the afternoon of September 25th will be devoted to "Music and the Brain". There will also be sessions on Psychoacoustics in Composition, Scales/Tuning Systems and Data Auralization/Sonification.

Since we are targeting a single track conference, we will be able to accept a limited number of papers. There will also be strict limitations on oral presentation time as well as the traditional page limitations for publishing the Proceedings. However we will be

able to accept a much greater number of demonstrations and posters due to the Exhibition Hall format. You also have the opportunity to decide for yourself what you might present at the ICMC if you or your research institution choose to use one of the Exhibition Hall booths. To be honest, for many extended research and software presentations the Exhibition Hall makes a lot more sense. You will have a longer period of time to make your presentation, and you will be able to speak directly with people most interested in your work.

ICMC Music
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The most salient musical feature of the 1997 ICMC is the contracting of several well-known contemporary music ensembles for the evening concerts, with individual performers from the ensembles available for the afternoon concerts. These ensembles will provide a solid base of performance talent to draw upon for the ICMC concerts, plus they will give us a broad range of available instrumentation for pieces submitted to the 1997 ICMC. The concerts will be broadcast over the Greek national radio and television network, and plans are in the works to produce a post-ICMC compact disc of selected ICMC performances (this will be in addition to the ICMC CD of selected works accompanying the *Proceedings*).

We recognize, however, that much extant computer music does not fit well into a traditional concert format. At past ICMCs, this problem has been addressed by establishing a "listening room" for continuous presentation of tape music during the Conference. This solution is plagued by several difficulties, however: it is nearly impossible for ICMC participants to discover when a particular piece is being performed, and the compositions presented have been limited to tape-only computer music. The "listening room" has also been difficult to find at several ICMCs, and has generally been very poorly-attended.

We also plan to have a "listening room" at the Thessaloniki ICMC, but it will be a sizable room directly adjacent to the Exhibition Hall. This room will be used for tape-only music, of course, but it will also be configured for the presentation of interactive pieces, solo works, and multimedia works unsuitable for a 'concert-hall' format. Lengthy tape pieces -- often quite stultifying in a traditional concert setting -- and other types of music requiring alternative listening strategies can be best presented in this area. The performance schedule for this room will be displayed throughout the ICMC site.

In addition to these venues, we are also soliciting music for more specialized performances. We encourage submissions of music that can be used as ambient sound in the Exhibition Hall and concert hall lobby. We would also like music performance proposals for the ICMC Cafe, where we will be featuring a "computer music cabaret" session (if enough submissions are received!).

We're basically hoping to surround the ICMC with a carpet of computer music activities -- use your imagination! We encourage proposals for all types of musical events and installations.

Additional
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We would also like to see submissions for special tutorial sessions before the Conference itself. Contact ICMC-97 with your ideas for these sessions.

Concurrent with the ICMC, IPSA will be sponsoring a special installation involving sound synthesis controlled by movement. Ten Greek choreographers/dancers will be utilizing the installation to

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create on-going interactive sound works. We are soliciting proposals for this installation.

The 1997 ICMC promises to be a special event. If you need an additional excuse to make the trip, the activities of the Cultural Capital Organization are by themselves quite exciting. Actually, if you need an excuse to try to go to Greece, you should probably seriously re-evaluate your approach to life.

We look forward to seeing you in 1997 -- Kalo Taxidi!

DEADLINE: All music materials submitted must be postmarked by January 10, 1997.

**********

< MUSICA NOVA '96 in the Czech Republic >

| Karel Odstrcil | Rudolf Ruzicka | Libor Zajicek |
|---|---|---|
| President, SEAH | Vice President | Assistant |

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URL: http://www.savba.sk/logos/music/institution/cecm/info.html

The Czech Republic's Spolecnost pro elektroakustickou hudbu (SEAH) and the Foundation of Czech Music Fund would like to invite you to participate in the 5th annual international electroacoustic music competition, MUSICA NOVA '96. There is no application form, and you need NOT mail your submissions by registered mail. For further information on this competition or the Czech Republic's electroacoustic music activities, please email us at this address. To read more about all aspects of Czech and Slovakian electroacoustic music, please visit the Bratislava Experimental Studio's web site.

Thank you very much for your participation!

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## ACKNOWLEDGMENTS

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## LEA WORLD WIDE WEB AND FTP ACCESS

The LEA Word Wide Web site contains the LEA archives, including all back issues, and the Leonardo Electronic Gallery. The Profiles and Feature Articles have been extracted from the back issues, and reside in their own sections of the site. It is accessible using the following URL:

http://www-mitpress.mit.edu/LEA/home.html

Back issues, submission guidelines and LEA Gallery files are available via ftp anonymous, using the following method:

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ftp mitpress.mit.edu
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password: your_email_address
cd pub/Leonardo/Leonardo-Elec-Almanac
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