Vol. 16, no. 2. Summer 1996

Array

Communications of the ICMA

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ICMA News

From the Editor

This issue of *ARRAY* has a few new sections which I hope will be of interest to ICMA members. So, let me know what you think - I need to know if it's useful, not so useful, or what else you'd like to see.

I have never been able to get my head round is exactly *where* ICMA lives, and what all the various email addresses and sites are for. And I find I'm not alone - *ARRAY* submissions are being sent all over the place ! The truth is, ICMA is a difficult beast to pin down, geographically, as one would expect with an international organization. In an effort to clarify the situation, *ARRAY* will now regularly feature information for you to refer to, listing all the snail and email addresses relating to ICMA, and what each is for (See page 29).

ICMA members come from far and wide, and may only meet up once a year at ICMC - if that. There aren't many opportunities to find out and share what we're all up to. This issue sees the start of a **ICMA Members' News** section. Please do send in brief information on your recent computer music achievements and projects.

And a **CD review** section seemed like a good idea...There are so many computer music CDs out now, and many of us are putting out CDs on small, independent labels. Apart from the invaluable section in CMJ, independent reviews - by specialist reviewers - are few and far between. This issue sees a modest beginning, with many more reviews to come - an international band of ICMA volunteer reviewers are currently immersed in the CDs received to date. See the CD review section in this issue for more information on reviewing, and on submitting CDs (page 28).

Lastly, apologies for the delay in launching the web version of *ARRAY*. Soon.....!

Katharine Norman
(K.A.Norman@ shef.ac.uk
Editor, *ARRAY*)

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Announcements and Calls

Musica Verticale

From : a.cipriani@agora.stm.it

Musica Verticale presented 11 concerts in its 18th Series (Sept.30, 1995 - Jan. 6, 1996). This year we performed the selected pieces in the Acquario Romano, Ostiense Air Terminal and the Galleria Comunale d'Arte Moderna in Rome.

The performed pieces were by: F.Sbacco, P.Stollery, V.Heyn, J.Cage, E. Martusciello, P.Steenhuisen, J.C.Risset, L.Camilleri, T.Takemitsu, I.Xenakis, D.Zimbaldo, M.Bagella, S.Reich, V.Globokar, R.Doati, M.Garuti, D.Smalley, S.Scodanibbio, M.Tadini, M.Ainger, B. Proeve, M.Squillante, E.Campion, S.Petrarca, A. Nunez, R. Cicchelli-Velloso, G.Baggiani, G.Natalini, E. Pappalardo, S. Tamburini, E.H.Flammer, R. Barret, E. Cocco, R. Friedl, N. Cisternino, M. Bortolotti, M. Cardi, P.Koonce, R.Bianchini, H. Pousseur, K. Fukushima, M. Tadini, E.Campion, A. Cipriani, L. Berio, G.Tedde, F. Romitelli, S.Atkinson, C.Calon, B. Truax, A. Di Scipio.

We decided that the first part of our next Series (autumn/winter 1996) will be dedicated to 'Voice and Electroacoustic Music' in all forms (tape music, voice(s) and tape and/or live electronics, sound poetry etc.)

We would like to thank performers and composers who sent their material. Our selection and program for 1996 will be announced in September. Pieces already sent will be also considered for 1997.

Our call for 1997 Series will be announced next spring.

Our newly voted executive, in charge until 1998, includes:

Enrico Cocco (President), Riccardo Bianchini, Emanuele Pappalardo

Our address is:
Festival di Musica Verticale
Via Gentile da Mogliano, 158
I-00176 Roma
ITALY
tel/fax 0765/36386
e-mail
a.cipriani@agora.stm.it
lms@aquila.infn.it

Texas Computer Musician's Network Call for Membership

The Texas Computer Musician's Network (TCMN) is a chartered non-profit corporation dedicated to the educational promotion and distribution of electro-acoustic art music by Texas-based artists. For the purposes of TCMN, electro-acoustic music includes computer-generated music, computer-assisted music composition (algorithmic composition), live electronic/computer music, and multimedia.

The goals of TCMN are:

* to promote member's works by providing venues for performance
* to foster community awareness of electro-acoustic music through public concerts, galleries, and sonic installations
* to host public discussion forums on current trends in electro-acoustic music, and
* to provide on-line databases regarding performance opportunities and other electro-acoustic music resources.

Membership Qualifications:

To qualify for membership, applicants must meet the following criteria:

1) be a Texas resident OR a former Texas resident OR a student or faculty member at a Texas educational institution OR be an alumn(us/a) of a Texas educational institution.

2) be a current practitioner (composer or performer) of electro-acoustic music. For the purposes of TCMN, electro-acoustic music is defined as any music created in the following manner: computer-generated, computer-assisted (algorithmic), live electronic/computer performance, and multimedia. Multi-media works (video, film, slides, performance art, computer-generated graphics) must include an electro-acoustic audio element.

Member benefits:

* subscription to monthly electronic mail newsletter CueTrack. Each edition includes: upcoming TCMN events, member activities, member profiles, and opportunities.

* subscription to biannual printed organi-zation newsletter ShopTalk. Each edition will be dedicated to articles about electro-acoustic music issues in Texas.

* commitment from TCMN to program works submitted to the organization's archives on concerts, galleries, or installation events.

* eligibility for participation in lectures and/or demonstrations.

* eligibility for inclusion on future compact disc releases.

* eligibility to participate in public discussion forums about electro-acoustic music.

* access to on-line resources (soundfiles, software, etc.) relevant to electro-acoustic music via the World Wide Web.

* discount on CDCM Series compact discs.

Annual dues structure:
Member $30.00
Student Member v $15.00
(must submit proof of student status)
For more information about TCMN or to request a membership application, contact:

Tim Crowley
MS 4240, Music Program
Texas A & M University
College Station, Texas 77843
P: (409) 845-8697
F: (409) 862-2666
email: tcmn@cube.cemi.unt.edu

or visit the TCMN WWW homepage at:
http://orpheus.tamu.edu/
music.program.web/computer.music/
TCMN.html

Now available:
THE COMPUTER MUSIC TUTORIAL
by Curtis Roads

ISBN 0-262-68082-3 $50.00 (paper)
ISBN 0-262-18158-4 $70.00 (cloth)
1234 pp. - 504 illustrations
http://www-mitpress.mit.edu/mitp/recent-books/comp/roads.html

The Computer Music Tutorial is a comprehensive text and reference that covers all aspects of computer music, including digi-

tal audio, synthesis techniques, signal processing, musical input devices, performance software, editing systems, algorithmic composition, MIDI, synthesizer architecture, system interconnection, and psychoacoustics. A special effort has been made to impart an appreciation for the rich history behind current activities in the field. Profusely illustrated and exhaustively referenced and cross-referenced, The Computer Music Tutorial takes the reader step-by-step through the entire field of computer music techniques. Written for nontechnical as well as technical readers, the book uses hundreds of charts, diagrams, screen images, and photographs as well as clear explanations to explain basic concepts and terms. Mathematical notation and program code examples are used only when absolutely necessary. Explanations are not tied to any specific software or hardware.

For Orders Inside the U.S., The MIT Press encourages you to order from your local bookseller.

Electroacoustic Music 1929-1970 (IDEAMA)

Institutions can subscribe the IDEAMA Target Collection now.

The Center for Arts and Media Technology Karlsruhe (ZKM) and Stanford University's Center for Computer Research in Music and Acoustics (CCRMA) are pleased to announce the availibility of the International Digital Electroacoustic Music Archive (IDEAMA) target collection. Co-founded by CCRMA and ZKM in December, 1990, the IDEAMA was created to collect, preserve and disseminate historically significant electroacoustic music.

An international advisory board of renowned composers was formed to help establish the international scope and reputation of the archive. To identify, locate and choose materials for the target collection, CCRMA and ZKM each formed a selection committee comprised of eminent composers, musicologists and other individuals who are well-versed and active in the field.

CCRMA and ZKM have been jointly responsible for collecting archive materials on a regional basis: ZKM has focused on European electroacoustic music, while CCRMA is responsible for music from the Americas, Asia and Australia. The original analog tapes for targeted works, composed between 1929 and 1970, have existed in a number of archives, radio stations, studios and private collections. More then 700 works have been collected and processed to form the IDEAMA target collection.

Sources for the European works include numerous major centers such as INA/GRM Paris; WDR Koeln; EMS Stockholm, Experimental Studio Warszaw, Siemensstudio Muenchen and the former Studio di Fonologia, Milano. In addition, works from smaller studios and private collections, and from the estate of Hermann Heiss have been included.

Sources for works in the USA include the Columbia-Princeton Electronic Music Center, the defunct San Francisco Tape Music Center (works now housed at Mills College, the University of California at San Diego, and by individual composers), the University of Illinois Experimental Music Center, Bell Telephone Laboratories (personal collection of Max Mathews), various individual composers, and commercial CDs. The Laboratoris de Investigacion y Produccion Musical (LIPM), the first major center for Latin American electroacoustic music, digitized approximately 30 works for the target collection. Japanese works have been provided by the National Center for Science Information Systems and by Dr. Emmanuelle Loubet. Most of the Japanese works were originally produced at the Tokyo studio of NHK radio.

This historic collection will be distributed to IDEAMA institutions on approximately 100 stereo audio CDs, with information about the music on the commercial Filemaker Pro database. There are three types of IDEAMA institutions: founding institutions (ZKM and CCRMA), partner and affiliate institutions. The founding institutions have collaborated to establish policies and procedures for creating the archive and its ongoing function. The partner institutions have participated in the formation of the archive, in most cases by contributing materials. They will house the archive, as will new affiliate institutions.

The IDEAMA will be distributed to affiliate institutions after April, 1996. In order to become an IDEAMA affiliate institution, and for all other information, please contact Thomas Gerwin at:

Acknowledgements

Cecilia1.0b1 - Come and get it!

What CECILIA is:

CECILIA is a music/sound production system that uses MIT's Csound as its sound-processing language. CECILIA is available as an SGI executable only. Ports to MacOS and Linux are envisaged for the near future.

CECILIA was designed with all Csound users in mind, but specially those whose main concern is the efficient production of music and sound. Its principal aim is to enhance production by proposing a powerful design interface and a number of "speed" tools in an integrated environment. Almost all Csound-related tasks will enjoy an enormous productivity boost under CECILIA.

CECILIA does so by addressing "problem areas" in music/sound production with Csound:

The specification of time-varying functions; the specification of init "variables" in instrument design; the interplay of Csound with other vital production functions such

as formatting, playing and editing audio files; referencing on-line documentation; the orchestra/score dichotomy of Csound; the specification of complex scores.

For more info (and to download), come and visit the Cecilia page: http://www.musique.umontreal.ca/Org/CompoElectro/CEC/

Jean Piche
Alexandre Burton
Faculte de Musique
Universite de Montreal

Toronto Artificial Life Event Spring 1997

The Artificial Evolution Studio is planning a concert-exhibition for the weekend of May 2 to 4, 1997. This event will present a full-blown concert of music created using artificial life, as well as an exhibition of other art employing the same techniques. We are currently collecting information for this event.

Areas of interest include, but are not restricted to:
* Genetic Algorithms
* Cellular Automata (Conway's Life)
* L Systems (Lindenmeyer's artificial botany)
* Computer Viruses
* Dawkin's Biomorphs
* Artificial organisms (Langton's Vants, Reynolds' Boids, MIT Mobots)
* Artificial environments (Tiara, Venus)

We are interested in applications of these ideas to:
* music composition
* sound and image synthesis
* computer animation
* interactive sculpture
* installation art

The concert component will include diffused electroacoustic music as well as pieces played by live performers and other "autonomous agents" (computers or robots), and could include non-technical systems demonstrations. The exhibition component will include computer graphics, prints and photographs, robots and autonomous

agents, video and "live" computer animation, as well as interactive displays and presentations. The focus of this event will be the artistic manifestation of artificial life in any form. If you are currently working in this area and would like to participate, please contact:

Bruno Degazio (artevo@interlog.com)
The Artificial Evolution Studio
192 Spadina Avenue, Suite 512
Toronto, Ontario, Canada, M5T 2C2
416-504-9354 FAX

Common Lisp Music for the Macintosh PowerPC

We are happy to announce the first native release of Bill Schottstaedt's Common Lisp Music for the Macintosh PowerPC. Common Lisp Music (CLM) is a signal processing/music synthesis language in the Music V tradition implemented in Common Lisp and C. The Macintosh port uses Apple Events to automate the cross-language compilation process between Macintosh Common Lisp 3.9 (MCL-PPC) and Code Warrior C 8.0.

Sources to Common Lisp Music are available free of charge via anonymous FTP from

ftp://ccrma-ftp.stanford.edu/pub/Lisp/clm.tar.gz.

If you don't have gzip or tar for the Mac, take

ftp://ccrma-ftp.stanford.edu/pub/Lisp/MacUtils.sea.bin

as well. After installing CLM sources see README.clm for more information, or visit the CLM home page at http://ccrma-www.stanford.edu/CCRMA/Software/clm/clm.html

The Macintosh port of CLM requires a PowerPC, MCL-PPC (3.9) and Code Warrior 8.0. MCL-PPC is available from Digitool at http://www.digitool.com

Code Warrior 8.0 is available from Metrowerks at http://www.metrowerks.com.

Rick Taube
Composition/Theory
School of Music
University of Illinois
taube@uiuc.edu

Societe Francaise d'Informatique Musicale : SFIM

Claude.Cadoz
Claude.Cadoz@imag.fr

As the secretary of the french Working Group on Computer Music (Groupe de Travail sur l'Informatique Musicale : GTIM) of the scientific board of the Music and Dance Department of Ministry of Culture, I am happy to inform you that we intend to create a French Association for Computer Music (Societe Francaise d'Informatique Musicale : SFIM)
Interested parties should send their details and suggestions to Claude Cadoz (Claude.Cadoz@imag.fr). These will be also forwarded to the members of the Working Group GTIM who are :

Groupe de Travail Informatique Musicale

André RIOTTE
Jean-Claude RISSET (LMA-CNRS)
Claude CADOZ (ACROE-LIFIA)
Emmanuel FAVREAU (INA-GRM)
Marie Hélène SERRA (IRCAM)
Hugues VINET (IRCAM)
Philippe DEPALLE (IRCAM)
Philippe GIRARD-BUTTOZ (DIGIGRAM)
Gérard MARINO (CEMAMU)
Luc MARTINEZ (CIRM)
Yann ORLAREY (GRAME)
Philippe PREVOT (LIMCA)
Michel REDOLFI (CIRM)
Hugues GENEVOIS (Departement du Patrimoine Musical Direction de la Musique et de la Danse, Ministère de la Culture)
Jean-Pierre DALBERA (Ministère de la Culture et de la Francophonie Mission de la Recherche)

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ACROE-IMAG
46 Av. Felix Viallet
38031 GRENOBLE Cedex - France
Tel : (33) 76 57 46 61
Fax : (33) 76 57 46 02

New Design Proposals for Modern Musical Instruments
by Nils Pietschmann

Published by:
Tectum Verlag
Edition Wissenschaft
Reihe Musikwissenschaft, Band 3
ISBN: 3-89608-283-3

Abstact of project report.

The MIRT projects investigate timbral manipulation on networked musical instruments (i.e. via MIDI). By using synthesis and sound processing parameters, the proposed software system digIT (digital Interactive Technology) seeks to offer highly interactive real-time manipulation on synthesisers and studio equipment. This way of working introduces The Try Out Watch & Listen Principle as an optimised hand operated interfacing method, enabling the user to create complex mixtures of synthesis and processing techniques (Dynamic Real Time Performance Synthesis). In other words, digIT transforms manual user input into a stream of data which is sent to a user defined set-up of music technology. Through immediate aural feedback from the connected hardware in combination with some form of graphical re presentation, digIT is able to provide an interactive multimedia link between the user and his/her instruments. The digIT philosophy is therefore a modern approach to explore the capability of networked music technology. As well as focusing on the need to improve hand operated user interfaces for musical applications, this paper also discusses new interfacing standards for music technology. The digIT software prototypes PerformaX and StudiomaX are fully operational on the Atari ST range of computers. A new, advanced prototype called MIRTmaX is running on the Apple Macintosh.
The complete report can be ordered worldwide from:

Tectum Verlag
Edition Wissenschaft
Am Roedchen 18
D-35043 Marburg
Tel: +49 (0)6421 - 481 523
Fax: +49 (0)6421 - 43 470

If you are interested in any of the software prototypes, please contact us personally.

Nils Pietschmann
Pruefeninger Str. 56 b
D-93049 Regensburg
e-mail: eibi@1.stud.ngate.uni-regensburg.de

Andrew Purdy
Lohmuehlenstr. 27
D-12435 Berlin
e-mail: pin10231@chemie.fu-berlin.de

Tel. +49 (0)941 - 25 061
Tel. +49 (0)30 - 534 8763
Fax +49 (0)941 - 270 666

Electronic Music Foundation
<emf@emf.org>
An invitation to all members of ICMA:

We'd like to invite your interest in keeping in touch with Electronic Music Foundation (EMF) as it grows. In summary:

We're the most comprehensive source worldwide for sales of compact discs of electronic and computer music. Our goal is to make all of your CDs easily available.

We're just starting the EMF compact disc label. Our first release will belater this spring.

The EMF Bookstore will be launched within the next few weeks, making available books, some historically important software items, CD-ROMs, and other media having to do with computer music.

We'll soon be publishing 'Plugged In,' a guide to selected computer-music and other noteworthy events worldwide with email notifications of calendar events within specific areas.

A web-based 'Bulletin Board' for announcements and whatever other uses prove worthwhile will be launched within the next few weeks.

The EMF Information Center, including pointers to our Charter Subscribers, pointers to sources for materials worldwide, a directory of links to other sites of interest, and an electronic music photo archive is underway.

Our goal is to create access to materials. Have a look at our web site at http://www.emf.org

As a reminder, ICMA members have an automatic 5 percent discount on all compact disc purchases. And there's a lot more that we can do for you as a Charter Subsciber. Please ask us about it. Contact us at

ICMAmembers@emf.org
Electronic Music Foundation
116 North Lake Avenue
Albany NY 12206
USA
Voice: (518)434-4110
Fax; (518)434-0308
emf@emf.org
http://www.emf.org

The Banff Centre for the Arts

is accepting applications for its Music and Sound programs in 1996-97. Application fee: $42.00. Contact:
The Banff Centre for the Arts
Office of the Registrar
Box 1020, Station 28
107 Tunnel Mountain Drive
Banff, Alberta, CANADA T0L 0C
tel: (403) 762-6180
fax: (403) 762-6345
e-mail: arts_info@banffcentre.ab.ca
http://www.banffcentre.ab.ca

AMAZING MAZE (1996 ff.)
An Infinite Interactive Realtime Composition for
Sampled Sound Particles and Optional Live-Performer(s)
by Karlheinz Essl

AMAZING MAZE is realtime composition and improvisation environment for Apple Macintosh computers. It is represented by a computer program which generates music by manipulating sampled instrumental sound particles according to certain compositional strategies. It can be downloaded from algo.comp ftp-server:

ftp://heinous.music.uiowa.edu/pub/max/AmazingMaze_1.3.2.sit.hqx

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Visit the ICMA Web Site
http://coos.dartmouth.edu/~rsn/icma/icma.html

Announcements, cont.

This freeware program comes as a binhexed StuffIt archive (2 MB) containing a runtime version of MAX (MAXplay 3.0), a huge library of compositional software routines (RTC-lib) and a resource file composed of 45 instrumental sound particles (16bit, 22 kHz, mono).

System & Software Requirements

Apple Macintosh Computer with at least 8 MB of RAM, System 7.x, SoundManager 3.x installed. The program plays directly through the sound output of the Macintosh and does not need any additional hardware.

More information - always up-to-date - about this work-in-progress can be found at: http://www.ping.at/users/essl/works/amazing.html

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Donncha O Maidin has developed an object-oriented representation for scores in common practice notation. The main aim of the representation is to facilitate the development of software for processing of scores. I have used this representation for developing analytic algorithms. The system together with examples is documented in O Maidin, Donncha. *A Programmer's Environment for Music Analysis.* PhD thesis, National University of Ireland, 1995.

Donncha O Maidin,
Department of Computer Science,
University of Limerick,
Limerick,
Republic of Ireland.

International Conference on Computer Music and Music Science

October 15-19, 1996, Shanghai, China

Sponsor: Shanghai Jiao Tong University Cosponsors: Shanghai Conservatory of Music, Shanghai Institute of Art, Shanghai Musicians Association, Shanghai Computer Music Association, Peking University

With Support from: Shanghai Educational Development Foundation of the Education Commission of Shanghai People's Government.

OBJECTIVE

Musicians have long been studying music and searching its rules through scientific means. They have been fully applying new technological achieve- ments to various aspects of music. Music is a kind of art in sound infor- mation and the computer is a powerful information processor. The computer has already become musicians' favorite tool. The application of multimedia has given a new touch to composition, performance and research/analysis of music. On account of above reasons, we will hold an International Confer- ence on Computer Music and Music Science.

MAIN THEME
(A) Computer Music
(1) Computer music and multimedia.
(2) Intelligent musical instrument, analysis/synthesis of musical sound.
(3) Software environments of musical information system.
(4) The representation of musical information.
(5) Data base of musical information.
(6) Man-machine interface of musical information system.
(7) Computer assisted music instruction and composition.
(8) Computer music and cognitive science.

(B) Music Science
(1) Music acoustics.
(2) Music and mathematics.
(3) Physics of music.
(4) Study of temperament.
(5) Psychology of music.
(6) Experimental aesthetics of music.
(7) Science of the singing voice.
(8) Ethnomusicology.
(9) Physiology of music.
(10) Therapeutics of music.
(11) Instrumentation.
(12) Archaeology of music.

ADDRESS FOR CORRESPONDENCE
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Department of Computer Science and Engineering
Shanghai Jiao Tong University
Shanghai 200030, P.R. China
Email: szxu@cs.sjtu.edu.cn
Fax: (86)-(21)-62820892

What NeXT ?

My NeXT, trusty sample-cruncher and companion on several trans-Atlantic journeys, has reached the end of the road. Desperately nervous at the thought of how to support my Unix addiction, I posted a request for advice on icma-talk, and elsewhere. I received numerous helpful replies and, as a significant number of people expressed interest in sharing the advice, I'm publishing an edited digest of the information on my web page - there was just too much to fit into *Array* . I've also posted information about some related newsgroups, manufacturers etc - by no means a comprehensive list.

find it all at : http://www.shef.ac.uk/~mus/staff/kn/postnext.html

Thanks to all in the computer music community who generously shared their experience - too many names to mention, but you know who you are !

Katharine Norman

NEW ON-LINE SITES AND JOURNALS

Ars Electronica Web Page
http://www.aec.at

The site will provide information about the last 15 and future years of the Ars Electronica Festival, about ongoing activities concerning the Ars Electronica Center and some more.

New on-line journal: Mikropolyphonie

Mikropolyphonie aims to encourage scholarly analysis and discussion of contemporary music making and research, of any genre. It will be a refereed journal published on the World Wide Web.

In New Directions in Music, David Cope defines mikropolyphonie as "highly complex densities of polyphonic motion in which no single voice dominates" - this is the philosophy of the journal in that we hope to promote lots of different viewpoints through our web pages where no one doctrine will dominate. We hope that the journal will promote contemporary music

in a post-industrial, multi-cultural world. Each issue will contain a feature article section, a general article section, a communication page, a review page, and a what's new page.

Call for submissions:

This is a call for submissions for the first on-line issue of Mikropolyphonie. Its feature section will be on "Musical Futures" in which we invite you to spectulate on music beyond 2000. Articles can adopt this theme or any general subject matter associated with contemporary music. Submissions should be as follows:

Text (max 2000 words): html or plain ASCII text.
Images: GIF or JPEG format
Sound: AIFF format soundfiles, 8-bit, 22kHz sampling rate, mono.

The above may be sent to:
musdjgh@lure.latrobe.edu.au
as Macintosh-formatted email attachments or on Macintosh-formatted HD floppies to:
David Hirst
Music Department
La Trobe University
Bundoora, Vic 3083
Australia

While authors should adopt the Harvard style, we are keen to explore the interactive frontiers possible on the net. Thus JAVA applets will be encouraged for inclusion.

A demonstration site is under development and will be made available soon.

Mikropolyphonie is a project of the National Networked Facility for Research in Australian Music. This facility has been made possible through financial assistance from the Commonwealth Department of Employment, Education and Training.

David Hirst
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La Trobe University
Bundoora, Vic 3083
Australia
MUSDJGH@lure.latrobe.edu.au

WWW Page:
http://farben.latrobe.edu.au/Music_Docs/MusDeptHomePge.html

Ars Sonora on-line journal (in French)

http://www.imaginet.fr/MANCA/invite/asr.html#asr3

Lorsque l'on souhaite promouvoir une forme de musique, ouvrir le débat par le biais d'une revue s'avère rapidement nécessaire ; encore faut-il prendre garde à ne pas refermer un tel projet sur une caste déterminée, dans un état d'esprit corporatiste ou protectionniste. Ars Sonora consacre ses efforts à la propagation des musiques électroacoustiques, quelles que soient les intentions stylistiques ou esthétiques de ses protagonistes.

PHILOSOUND - new mailing list from Soundsite

PHILOSOUND CHARTER

Philosound — Philosophy of Sound and Sound Art.

The list is for the study of cultural and theoretical aspects of sound and sound art. This list reflects that there is a poetic texture to life that can be traced by admitting the possibility of ontologies which aren't necessarily dominated by philosophy of the gaze. There is an associated World Wide Web journal, called Soundsite, found at the URL; http://sysx.apana.org.au/soundsite/

As well as general discussion the list will have calender events e.g. notices of conferences, art shows, and the like, as well as reviews of artworks, music/audio CDs, books and films. The best posts to the list will be gleaned and archived on Soundsite, where they will remain as a public resource for scholars and others researching the field.

The range of topics found on this list might include: language and discourse; voice; poetics; acoustics; psycho-acoustics; the nature of perception and sensory experience; hearing vs. listening; aurality and corporeality; space and architecture; sound geographies; philosophies of sound; post-musics; film, video and tv soundtrack; sound art and sound by artists; sound and noise; virtual systems; human-computer interface; communication and technological systems; low fidelity sound; radio and radiophonic art; performance; recording; composition; aesthetics; art.

The list-owner is Anne-Marie Jonson from Contemporary Sound Arts

<csa@sysx.apana.org.au> and the technical administrator of the list is Scot Art <scot@sysx.apana.org.au>. Please address all issues of list topic and range to the list-owner, technical issues about the list and its day to day operation should be directed to the technical administrator.

SUBSCRIBING AND UNSUBSCRIBING

The list can be subscribed to by emailing philosound-request@sysx.apana.org.au and putting in the message BODY (subject is ignored);

Subscribe Your Name <your@email.address>

The angle brackets on the email address are required.

DIGEST LIST

There is a 'digest' form of the list sent out twice each week (Friday and Tuesday Mornings, Eastern Australian time). If you do not want to receive a separate message for each one sent to the list, subscribe to the digest and you will recieve all messages sent to the list since the last digest combined into twice-weekly message.

Send email to philsound-digest-request@sysx.apana.org.au and put in the message BODY (subject is ignored);

subscribe philosound-digest Your Name <your@email.address>

The angle brackets on the email address are required.

And don't forget the Soundsite website - new material on Soundsite includes an excellent paper by Richard Thorn on the anthropological basis for a sound ontology,. The Soundsite URL is
http://sysx.apana.org.au/soundsite/

We are still very interested in publishing new material, so please email
soundsite@sysx.apana.org.au to discuss your ideas for soundsite articles.

Announcements, cont.

SWITCH

SWITCH, the electronic arts journal of the CADRE Institute at San Jose State University, publishes in electronic form on the World Wide Web at **http://cadre.sjsu.edu/switch**, with three issues per year. We are interested in fostering a critical viewpoint on issues and developments wherever crossovers between art and technology occur. We rely largely on the written word and will provide an outlet for new critical writers as well as recognized experts in the field. We also hope to generate or encourage collaboration with others who are working with and considering similar issues.

Loretta Lange, Editor
e-mail: lllange@sjsuvm1.sjsu.edu
vox: 408.924.1102

Christine Laffer, Associate Editor
e-mail: 70451.1665@compuserve.com
vox: 408.995.0277

Gary Singh, Contributing Editor
e-mail: gsingh@email.sjsu.edu
vox: 408.924.4641

NewMus MusicNet
Tri-Quarterly of Modern Composition

NewMus MusicNet is an on-line journal of new and experimental music published under the auspices of the NewMusNet conference of Arts Wire.

NewMus MusicNet strives to present the finest experimental works of our time as well as writings by and/or interviews with such composers. Modeled after Henry Cowell's Great Depression Era quarterly "New Music," our main purpose is to identify and distribute the most recent experimental music which by its very newness often remains unpublished by traditional means.

NewMus MusicNet is issued tri-quarterly, in April, October and February. It is available through the NewMusNet World Wide Web home page at the following URL:

http://www.tmn.com/0h/Artswire/www/NewMusNet/nmnhome.html

NewMus MusicNet welcomes submissions for consideration from music experimenters all over world. Works in the ultra modern idiom may be sent by anonymous ftp to:

ftp://ftp.tmn.com/NewMusJournal/NMJ_Submissions

Email douglas@tmn.com for guidelines. (information is taken from NewMusnet web page)

International Alliance for Women in Music announces the inauguration of a new publication:

WOMEN AND MUSIC: A Journal of Gender and Culture is a journal of scholarship about women, music, and gender that encompasses a rich mixture of disciplines and approaches. Submissions of varying length are now being accepted for consideration in the inaugural issue. Expected publication of the first issue is winter 1996/97. Send submissions to:

WOMEN AND MUSIC/IAWM
Department of Music
B-144 Academic Center
The George Washington University
Washington, DC 20052

All submissions will undergo the same blind review process.
For further information, call the IAWM office at 202-994-6338, or send an e-mail message to Catherine Pickar at <cpickar@gwis2.circ.gwu.edu>.

WOMEN AND MUSIC: A Journal of Gender and Culture will be available to IAWM members as part of the current dues structure and to non-IAWM members for a fee.

Members of the Editorial Board are:

Patricia Adkins-Chiti, Karen Ahlquist, Jane Bowers, Rae Linda Brown, Marcia Citron, Susan C. Cook, Suzanne Cusick, Joke Dame, Linda Dusman, Sophie Fuller, Sylvia Glickman (ex-officio), Lydia Hamessley, Ellie M. Hisama, Freia Hoffman, Jeffrey Kallberg, Ellen Koskoff, Fred E. Maus,

Helen Metzelaar, Pirkko Moisala, Margaret Myers, Jann Pasler, Karen Pegley, Catherine J. Pickar (editor-in-chief), Julie Ann Sadie, Catherine Parsons Smith, Ruth A. Solie, Riita Valkeila, Amy Wajda (editorial assistant).

Catherine J. Pickar
Associate Professor of Music
The George Washington University
Washington, DC, 20052
Phone: 202-994-6338
FAX: 202-994-9038

British Computer Music mailing list

This mailing list is intended for the computer music research community to exchange information, conference/seminar announcements, job offers, and any other matters of interest at the national level.

Initially at least, the list will be unmoderated and open to postings from all. Mailbase policy is that most of the list membership should be from somewhere.ac.uk.

for more information:

http://capella.dur.ac.uk/doug/bcm/

CALL FOR PAPERS, MUSIC COMPOSITIONS, PRESENTATIONS, ARTWORKS, CHOREOGRAPHY, THEATER, DANCE STUDIES AND INTERACTIVE INSTALLATIONS

THE SIXTH BIENNIAL SYMPOSIUM ON ARTS AND TECHNOLOGY, FEBRUARY 27 - MARCH 2, 1997

The Connecticut College Center for Arts and Technology, in collaboration with the departments of Academic Computing, Art, Art History, Chemistry, Dance, English, Library, Mathematics/Computer Science, Music, Physics, Physical Education, Psychology, and Theater, is pleased to announce The Sixth Biennial Symposium on Arts and Technology, February 27 - March 2, 1997 The Symposium will consist of paper sessions, panel discussions, art exhibitions, concerts of music, mixed media works, video, dance and experimental theater. Selected papers and presentations will be published by the Center.

Papers and Presentations:
A detailed two-page abstract including audio-visual requirements should be sent to

the address below no later than September 15, 1996. Authors of accepted papers will be notified by November 1, 1996. Finished papers must be submitted in camera-ready form and must also be submitted on disk in one of the following formats: Word or Wordperfect by January 15, 1997. The Center encourages research papers and presentations in all areas of the arts and technology, but is particularly interested receiving papers concerned with Interactivity, Virtual Reality, Cognition, Information Technologies, Applications in Video and Film, Music (composition, performance, theory, interactivity, etc.), Experimental Theater, Compositional Process, Innovative Use of Technology in Education, Computer Simulations of Physical Phenomena, Scientific Visualization and Social and Ethical Issues in Arts and Technology.

Music Compositions:

Works for instruments and tape, or tape alone, or interactive compositions are being solicited at this time. Available instruments are: flute (doubling on piccolo), oboe, clarinet (doubling on bass clarinet), bassoon, trumpet, horn, trombone, percussion (two players), piano, and strings (2,1,1,1).
Works should not exceed 15 minutes in length and should be submitted with accompanying score, where appropriate. Tapes for selection purposes should be on cassette or DAT. Tapes for performance should be 15 i.p.s. stereo or quadraphonic, or DAT. Video works should be 3/4 inch Umatic or 1/2 inch VHS. A self-addressed, preposted envelope should be included for the return of materials within the U.S.A. Foreign materials will be returned at our expense.

Artworks:

Works of computer-generated or computer-aided art, or computer -controlled interactive art are encouraged. Animations, Video or other works of computer art on tape will be shown in concert settings and in less formal settings throughout the Symposium. Slides or video (VHS) and complete descriptions of works should be submitted by the general deadline of September 15, 1996. Black and White photographs for publicity and for possible reproduction in a printed insert to the Proceedings must be sent by January 15, 1997. Reproductions of accepted works must be sent on disk (PICT, TIFF, PCX, GIF) by Jan 15, 1997. Funds for the shipping of artworks are extremely *ICMA ARRAY V16, N2*

limited.

Choreography , Dance and Theater Studies:

Computer-generated or computer-aided choreography is being solicited for live performance or for videotaped presentation. Specially produced dance or theater videos are of particular interest, as opposed to concert tapes or other archival uses of video. Also of interest are proposals for demonstrations of software for dance or theater notation, choreographic analysis, or for interactive studies and/or multi-media studies of performance in dance, theater and hyperspace. Workshop proposals are also welcome.
Videotapes or complete descriptions of performance works (not longer than 20 minutes), demonstration or workshop proposals should be submitted by the **general deadline of September 15, 1996.** Tapes for selection purposes should be VHS.

Panels:

Proposals for panels are welcome. The proposals should include prospective panelists, and should be directed to topics which fit the general description of the Symposium. Of particular interest for 1997 are panels which might include explorations of cross-disciplinary approaches to arts and technology issues.

GENERAL INFORMATION ON SUBMISSIONS

Please include a self-addressed preposted envelope for the return of materials within the US. Foreign materials will be returned at our expense. The Center encourages email submissions for text materials. Material should be sent to:

Center for Arts and Technology
Box 5365
Connecticut College
270 Mohegan Avenue
New London, CT 06320-4196
phone: [860] 439-2001
email: cat@conncoll.edu

Please send your email address to us at cat@conncoll.edu so that we may update our files.

LAUNCH OF ABC CLASSIC FM COMPUTER COMPOSITION AWARD

The ABC Classic FM Computer Composition Award was launched during a live broadcast of New Music Australia on Wednesday 29 May at 9.30pm from the Iwaki Auditorium at the ABC Southbank Centre, Melbourne.

The award was announced earlier this year as part of ABC Classic FM's 20th Anniversary celebrations. It will be open to Australian composers under 35 who are currently working with music software. The winner, to be announced in November, will receive a state-of-the-art computer and musicsoftware package to the value of $12,000.

For further information contact:

John Crawford
Presenter, New Music Australia
Ph: domestic 06-275 4606
international 61 6 275 4606
internet crawford.john@a2.abc.net.au

Rosemary Swift
ABC Classic FM Marketing Manager
Ph: 02-333 2697

AUSTRALIA: Electro-Acoustic Workshop - Call for Pieces

On Sunday 19th October ACMA Sydney and the CPCF (Contemporary Performers' and Composers' Fellowship, a Sydney-based group) are combining to put on a workshop and concert of electro-acoustic music.

Performer members of the CPCF will be available, probably flute, violin, cello, piano, percussion.

This is the call for pieces. The deadline is Monday September 2nd 1996. Submissions should include:

* a cassette of a performance (if possible);
* a description of the work and of the equipment and performers required;
* a programme note;
* if members of the ensemble are involved, parts should be included as well.

Submissions should be sent to:

Gordon Monro
School of Mathematics and Statistics
University of Sydney F07
NSW 2006

Equipment available

In general composers will need to bring their own equipment. The organisers will provide a stereo sound system, a small mixing desk, and DAT and ordinary cassette decks.

Selection of works

Works will be selected by the organisers on the grounds of interesting musical use of the electro-acoustic medium. (Thus what are essentially works for conventional instruments transcribed for MIDI would not be accepted, but works which make essential use of MIDI are encouraged.) Where members of the ensemble are involved, performability and the rehearsal time required will also be considered.

Pieces for members of the ensemble are particularly encouraged, but all types of electro-acoustic pieces, including pure tape pieces, are acceptable.

We may not have a conductor available, so works for the ensemble should not require a conductor (unless you can conduct yourself).

As the main purpose of the workshop is for composers to present their works, composers must be able to attend the workshop. (An exception may be made for interstate composers.)

For further information contact Gordon Monro on (02)-351-5775, or monro_g@maths.su.oz.au

This event is in the CPCF WWW site at http://www.usyd.edu.au/~gmonro/ cpcf.html

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CALL FOR PIECES

The German piano duo Rainer Burck - Robert Ruhle would like to establish international contacts to composers who might be interested in a collaboration. We are specializing in contemporary music and have performed at numerous international festivals in Europe, premiering many works by composers from several countries.
We are particularly interested in works for two pianos and electronics, using different technologies: ea music on tape, MIDI technology and live electronics.
Composers who are interested are requested to contact:

Rainer Burck
Am Samuelstein 9
72574 Bad Urach
Germany
Tel.: +49-7125-7790
Fax: +49-7125-70685
E-Mail: 101515.3514@compuserve.com

COLLAGE : an open project.

http://web.azur.fr/collecticiel/collage
you need Netscape 2.0 or more.

Collage is an in-progress project concerning territories invested by sound, it works in a rhizomatic manner and may appear in different forms each time.

This global project calls transversally on all fields, artistic and the others, its investigations may be about music, art, literature, radiophonic domain, scientific, or documentary, and so on.

Collage project confronts many layers: the official diffusion of music, the different methods and uses of music and sound, the music implicit in daily life, and many aspects around these propositions among them:

Sound material criticism, the implication of the musical writing across different mediums (traditional writing, indexed writing, processing writing, computer aided writing, etc.), the investigation of the "fixed" sound and finally the articulation between memory and listening.

Calls for contributions and/or proposals for events are made to practitioners in these differents fields.

There is no leader or director of the global project Collage, each participant may take the whole or a part of the running program and lead a Collage event (he becomes then the moderator of this project) launching, if he wants, a new call for more contributions or using past programs.

An aim will be that these programs move on in different appearing forms and kinds, in different places and countries. The rules or contraints and the modalities of appearing of each Collage event are totally free and are suggested by the moderator; the announcement of the event to be realised must be sent into the Website Collage.

Jerome Joy

COLLAGE - >>>>> Radio
Moderator: Jérome Joy
Deadline: **15 Sept. 1996**

Announcement

A new Collage event is in preparation for the beginning of Autumn in Marseille, France. This event will be programmed on the air during one or two weeks, 2 or 3 hours a day.

Previous audio submissions will be re-programmed but new works and sendings may complete and extend the list .

This announcement requests contributions and proposals which fulfill the following criteria: Called knowledges (paradigms): Public Space, Communication. These knowledges are research axes or orientations of this project and not only necessarily a "topic" or a "subject" to be illustrated. The Collage projects are evaluations and not illustrations.

Each participant may send one or several musical or audio piece(s), complete or extract, edited or not, on DAT tape, magnetic tape, audio tape, floppy disk or encoded files by e_mail,etc. This piece may be a musical one, a recording, a radiophonic work - any form of audio work. The duration is not important.

Deadlines:

Deadlines are only in relation to a particular Collage event. Works and pieces may sent at any time, because Collage is an uninterrupted project or an in-progress one.

Please confirm your interest or participation by fax or e_mail.

Information and submission:
Jérome Joy, 6 rue Fodéré, 06300 NICE FRANCE
FAX: 33/ 93 56 84 32
E_MAIL: jjoy@azur.fr

A Call for Participation in the Discussion

We would like to invite you to take part in
the Net-Symposium of the Ars Electronica
'96. For the first time the real Symposium
which will take place from the 2nd to 7th
September will be prepared in the form of a
discussion in the Net.

The invited guests were requested to write
an opening statement as starting point for
the discussion. At the same time everybody
else is invited to post their statements, crit-
ics, related material to the open forum (open-
memesis@aec.at).

Participants of the Panel are: Robert Adrian
X, Sadie Plant, Richard Barbrook, Mark
Dery, Sandy Stone, VNS Matrix, Arthur &
Marilouise Kroker, Herbert Hrachovec,
Francis Heylighen, Derrick de Kerckhove,
Karin Spaink, Paul Garin, Perry Hoberman,
Tom Sherman, Konrad Becker, Heimo
Ranzenbacher. The discussion is moder-
ated by Geert Lovink.

The concept for this year's theme was de-
veloped by Gerfried Stocker. In his open-
ing statement Stocker points out that
"memes describe cultural units of informa-
tion, cognitive behavioral patterns that
propagate and replicate themselves through
communication ...the discussion is intended
to probe specific segments of the techno-
cultural revolution against the background
of the idea of a "culturally based history of
creation".

URL: http://www.aec.at/meme/symp/
Contributions to: open-memesis@aec.at
**To subscribe to the Symposium just
mail to open-memesis-request@aec.at
(message text 'subscribe')**

Ars Electronica Center
Hauptstrasse 2
A-4041 Linz
Tel.: 0732/712121-0
Fax.: 0732/712121-2

**The Center for Computer Music at
Brooklyn College seeks tapes** to consider
for performance at its two annual concerts
of electroacoustic music. Compositions of
ten minutes or less are preferred.

Send materials. to:

Noah Creshevsky, Acting Director
Center for Computer Music
Brooklyn College of The City University
of New York
2900 Bedford Avenue
Brooklyn, NY 11210-2889
USA

WNUR-FM (89.3), a not-for-profit col-
lege radio station at Northwestern Univer-
sity, seeks recordings of electronic/com-
puter music for current and future broad-
cast. Composers should send a high quality
cassette or DAT together with the
composer's name, address, telephone
number, brief notes about the composer and
the piece being sent for consideration, and
the composer's current achievements to:

Peter Edwards
WNUR-FM
c/o The Classical Show
1905 Sheridan Road
Evanston, IL 60208

ELECTROACOUSTIC MUSIC IN
URUGUAY

Martin Alejandro Fumarola

Ediciones Tacuabe from Montevideo, Uru-
guay, has recently launched a compact disc
with almost all electroacoustic works by
the Uruguayan composer Coriun Aharonián.
The CD features tape alone pieces as well
as mixed ones.

CD "COMPOSICIONES
ELECTROACUSTICAS DE CORIÚN
AHARONIÁN"

1 - *Homenaje a la flecha clavada en el
pecho de Don Juan Díaz de Soli's*. Real-
ized in 1974 at the GMEB studios, France.

2 - *Gran tiempo*. Realized in 1974 at the
GMEB studios.

3 - *¡Salvad los niños!*, produced at the small
studio Elac in Montevideo in 1976.

4 - *Esos silencios* (1978, revised 1981),
produced at the small studio Elac as well.

5 - *Apruebo el sol*, composed in 1984 at
EMS, Stockholm, Sweden.

6 - *El progreso* from *Música para aluminios*
(1967) for three instrumentalists and tape,
realized at SODRE, Montevideo.

7 - *Que*, realized in 1969 at the Centro
Latinoamericano de Altos Estudios Musi-
cales of the Instituto Torcuato Di Tella,
Buenos Aires, Argentina.

Composer, musicologist and organizer,
Coriun Aharonián is one of the most impor-
tant personalities in the contemporary mu-
sic scene in Latinamerica. He composed
both electroacoustic and instrumental mu-
sic and his aesthetics has a very close rela-
tionship with the political, social and eco-
nomic problematic of the Latinamerican
region. He characterised his music with
terms such as "poor" and "austere" and in
this sense he devised a personal trend, called
in Spanish, "minimalismo espectorante",
which influenced several composers in the
Latinamerican countries.

As a musicologist, he wrote many papers,
essays and articles referred to popular and
contemporary music in Latinamerica, most
of them can be considered as mandatory
reference to all those seriously interested in
studying Latinamerican music. He never
practised reactionary musicology. His ar-
ticles and essays appeared in publications
such as *Nutida Musik* (Sweden), *Derives*
(Canada), *Pauta* (Mexico), *Lulu* (Argen-
tina) and *Musik Texte* (Germany). Formerly
Professor of musicology at the Uruguayan
Universidad de la Republica, he was co-
organizer, together with Conrado Silva,
Graciela Paraskevaídis, Jose María Neves
and Cergio Prudencio, of the famous
"Cursos Latinoamericanos de Musica
Contemporánea". Together with Ariel
Martínez, Daniel Viglietti and Conrado
Silva, he founded the Uruguayan "Núcleo
de Música Nueva", which played a vital
role in the contemporary music scene in
Uruguay, organizing concerts, festivals and
meetings with contemporary music from
all over the world.

CD "COMPOSICIONES DE
GRACIELA PARASKEVAÍDIS"

Ediciones Tacuabe has also launched a
compact disc with works by the Uruguayan
Argentinian woman composer Graciela
Paraskevaídis. The CD was co-produced
together with the INA and Deutschlandfunk
and contains her electroacoustic piece
Huauqui, produced in 1975 at the small

Announcements, cont.

studio Elac in Montevideo.

Graciela Paraskevaídis has composed instrumental as well as electroacousticmusic. Her aesthetics are also very determined by the political, social andcultural situation in Latinamerica. Graciela Paraskevaídis is member of the Board of Editors of "New Music Magazine", the newsletter of the ISCM. An excellent article related to Latinamerican contemporary music appeared in Interface (now Journal of New Music Research), in which she pointed out the importance of composers Juan Carlos Paz and Koellreutter. Her electroacoustic work *Entera Revisación* was performed on April 23, 1996, in the Open Air Electroacoustic Music Concerts held at the Universidade de Brasilia.

I háve provided some info about Aharonián and Paraskevaídis on the Web, which can be found at the URL:

http://crca-www.ucsd.edu/bobw/uruguay.html

The above-mentioned CDs can be ordered from:
Ediciones Tacuabe
Casilla de Correo 1342
U-11000 Montevideo
URUGUAY
Phone: +598 2 925552
Fax: +598 2 922794

I have prepared a detailed list of electroacoustic works available from Ediciones Tacuabe, along with music of other recording companies, which will appear in an upcoming issue of Computer Music Journal under the title of "An Incomplete Diskography of Latinamerican Computer Music".

Personally, I think that Coriun Aharonian and Graciela Paraskevaídis could help in co-organizing an eventual ICMC in Latinamerica since they have plenty of experience in organizing big international events on contemporary music.

OBITUARY:
IN MEMORIAN EDUARDO BÉRTOLA (1939-1996)

On February 20, 1996, Argentinian composer Eduardo Bértola passed away in the city of Belo Horizonte, Brazil. After suffering from depression and having serious financial problems he committed suicide.

He was born in the province of Córdoba (Argentina) in 1939. He pursued composition studies at the Universidad Nacional de Córdoba. In 1970 he attended the International Summer Courses in Darmstadt. At the beginning of the seventies he worked in the GRM (Groupe de Recherches Musicales) in Paris under the direction of Pierre Schaeffer and Francois Bayle. Appart from that, he also especialized in musical acoustics at the University in Paris. Besides, he was influenced by Bernard Parmegiani.

From 1979 he established in Brazil, first in Belo Horizonte, where he became Professor of analysis and contemporary music techniques at the Music School of the Federal University of Minas Gerais; then in Brazilia, where several of his instrumental pieces were published by MusiMed; and finally in Belo Horizonte again. He was the Director of an electroacoustic music studio at the Music School of the Federal University of Minas Gerais. Before he died, the Municipality of Belo Horizonte had commisioned the composition of a work.

He composed fourteen electroacoustic works, of which *Dynamus*, *Pexoa*, *Procne*, *Penetraciones I* and *Penetraciones II* are of historical significance. He hardly ever used computers for his compositions and was very fond of manipulating sounds in a very primitive way (this is not said in acontemptuous manner). Some of his compositions have very strong political connotations. They possess a very picturesque Latinamerican milieu.

Eduardo Bertola has also composed several instrumental pieces. One of the most salient characteristics of Bertola's instrumental music is the fact that he treated acoustic instruments as if they were tape music.

His electroacoustic work *Dynamus*, included in the LP series *Musica Nueva Latinoamericana* can be ordered from Ediciones Tacuabe. It is only available on LP.

Scores of his instrumental pieces can be purchased from:

MusiMed
Editora e Distribuidora Ltda.
Caixa Postal 09693
Cep. 70001-970 - Brasilia/DF
BRAZIL

The music of Eduardo Bértola, Graciela Paraskevaídis, Coriún Aharonián,along with that of Joaquín Orellana (Guatemala), Gilberto Mendes, JoseMari'a Neves (Brazil), Mariano Etkin, Oscar Bazán (Argentina), Cergio Prudencio (Bolivia), and many other composers, represent a unique tendency in contemporary music in Latinamerica, which I called "pure Latinamerican contemporary music" in a paper I will present in ICMC 96.

News reported by:
Martin Alejandro Fumarola
Estafeta 56
RA-5001 Cordoba
ARGENTINA
Phone: +54 51 242388
Fax: +54 51 217676
Email: maralefo@turing.fis.uncor.edu

Members' News

ICMA MEMBERS' NEWS

This is your chance to share your recent news with the ICMA community ! Send in brief information on what you've been doing lately, to K.A.Norman@shef.ac.uk (Katharine Norman)

Current ICMA members only, please !

Jon Christopher Nelson was recently hired as an Associate Professor of Music Composition at the University of North Texas, where he will assume leadership of CEMI (Center for Experimental Music and Intermedia). He has also received a Bourges Prize for his composition *They Wash Their Ambassadors in Citrus and Fennel* (also on the 1995 ICMC-Banff CD).

Gustavo Tolosa will take up a post at Abilene Christian University, Texas, after completing his doctoral studies at Eastman. He continues his performance and research into music for piano and electronics and has recently performed *Ringing, Stillness, Pearl Light* by Diane Thome, *entendes, entends, le passe qui marche . . .* by Hope Lee and *Velocity Studies: III* by Allen Strange.

Katharine Norman's new CD, *LONDON*, has recently been released on the NMC label. It features her tape works *In her own time*, *London E17* and *People Underground* in addition to *Trilling Wire* for clarinet and tape, premiered at ICMC 1994. Available from NMC Recordings, Francis House, Francis Street, London SW1P, UK or through most record stores.

"The End," a 6-minute computer-generated animation created by Chris Landreth and **Robin Bargar,** has been nominated for an Academy Award in the category Best Short Film (animated). Landreth designed and created the graphics, Bargar designed and created the sound; the artists worked together to create the script and storyboard. For further information see: **http://www.aw.sgi.com:80/Feature/ the_end.html**

Jonathan Berger (Director, CSMT, Yale University) has recently been appointed

Associate Professor at CCRMA, Stanford University. Berger's *The Lead Plates of the Rom Press* was released this Spring on CD by CRI (Night Chains - music for electronic 'cello performed by Jeffrey Krieger). He is currently working on a piano concerto commissioned by the NEA.

Robert Willey will be taking a leave from his position at the University of San Diego to accept a Fulbright Scholarship. He will teach computer music at the Federal University of Minas Gerais, in Belo Horizonte, Brazil. The project includes the development of NUCOM, Brazil's national computer music association, which holds its third symposium in Recife in August (http://www-laforia.ibp.fr/~ramalho/ sbcm96.html).

Larry Austin has been awarded a Magistere in the Bourges competition (see elsewhere in this issue) and announces upcoming concerts celebrating his work: **Larry Austin's 66th Birthday Concert** at the Merkin Concert Hall (New York), 8:00 p.m., Thursday, September 12, 1996. Programme includes *Accidents Two, Blues Ax* (world premiere) and *Life Pulse Prelude*. The concert is preceded by **Larry Austin's 66th Birthday Solo Tape Gallery Exhibition**, featuring his tape works.

Barry Truax is preparing a new CD, titled *Inside,* for release on his Cambridge Street Records label in August at ICMC 1996 in Hong Kong where one of the featured works, *Bamboo, Silk and Stone*, composed with Randy Raine-Reusch for Asian instruments and tape, will be performed. Also on the CD will be the electroacoustic music theatre work, *Powers of Two: The Artist*, with singers Marcel van Neer and David Garfinkle, premiered at the 1995 ICMC in Banff, and two works performed by Lawrence Cherney, *Inside*, for bass oboe and tape, and *Beauty and the Beast*, for oboe d'amore, English horn and tape.

Dennis Miller's piece, *Repercussions*, was selected for performance at JIM '96, a three day computer music conference held on the Isle D' Tatihou off the coast of Normandy, France. Miller also had two works performed on the Discovery Series, University

of Glasgow, and another work presented at the KymaFest, a concert of music performed using the Kyma System, at Kingston University, Kingston, UK.

David T. W. Wong, who gained an MA from The City University, London, UK in Electroacoustic Music Composition, is now working for the University of Cambridge, UK as a Network Analyst Programmer for its Financial Board. He can be reached at dwong@totalweb.co.uk, or http:// www.totalweb.co.uk/dwong

Terry Pender has been appointed Technical Director of the Columbia Electronic Music Center this year, working for Brad Garton. His multi-media opera, *Recognitions* was recently premiered at the University of Cincinnati's College-Conservatory of Music and he is currently working at the Banff Centre.

Ruhan Alpaydin is doing volunteer work for IEEE CS technical committee for computer music and recently worked at Milan State University producing the recently published IEEE CS CD-ROM on musical standards.

Eric Chasalow received tenure at Brandeis University and will become the Chair of the Music Dept. this August. A recent tape piece, *And it flew upside-down*, was played in Glasgow, at JIM96 in Normany last May, at ICMC Hong Kong in August, and will be included on a limited edition CD from RRRecords. Other Electro-Acoustic pieces were performed this year by Auros New Music Ensemble, Hyprism, the Warebrook Festival (VT), Piccolo Spoleto, and at the SEAMUS conference in Birmingham AL.

Warren Burt's 1993 composition *39 Dissonant Etudes*, for computer controlled microtonal piano samples is about to be released as a CD by Sydney's Tall Poppies record label. The production is funded with help from the Music Board of the Australia Council, Australia's federal arts funding agency. Information about the release can be obtained from Tall Poppies, PO Box 373, Glebe, NSW 2037, Australia.

Allen Strange has had residencies at Bowling Green State University, University of Oregon, Eastern New Mexico State University, LIPM, Buenas Aires, Argentina. Recent performances include *More Charms*, for string orchestra, *Velocity Studies IV: Flutter* for saxophone and digital media, *Shaman: Sisters of Dreamtime* for violin and digital media, *Phoenix and the Harlequin for digital media*, *Velocity Studies IV: Flutter* for saxophone and digital media, *Velocity Studies III: RIP for piano and pianos*, *Split Personality Were Being* . He will represent the ICMA as guest of the International Conference on Computer Music and Music Science, October 15-19, 1996, Shanghai, China sponsored by the Shanghai Jiao Tong University.

Allen Strange and **Pablo Furman** were guests of LIPM in Bueunos Aires, Argentina this June. By invitation from Fernando Kropfl, Strange and Furman presented a concert of computer music from C.R.E.A.M. (Center for Research in Electro-Acoustic Music) at San Jose State University in California.

Rob Frank recently returned from giving a series of seminars with Phil Winsor on Computers in Music and Education at several universities in South Korea. Topics included algorithmic composition techniques and Music CAI (Computer Assisted Instruction). During their visit they also met with the President and members of the Korean Electronic Music Society.

Georg Hajdu (now at hajdu@uni-muenster.de) has joined the faculty of the Muenster Musikhochschule after 5 years at Berkeley. He won 2nd prize in a competition for algorithmic composition in Guanajuato, Mexico in 1995 (for *Klangmoraste*) and received honorable mention at the Blaue Bruecke competition in Dresden, Germany in 1996 for *Intermezzo* from his opera in progress *Der Sprung*. *Riots* for saxophone, electric guitar and double bass) was published on the CD "Missionare Neuer Musik" by the ensemble Ugly Culture.

Michael Rees' MANTIS for Soprano Chanteuse and Taped Electronic Sounds was premiered on June 2nd at the "June in Buffalo" festival, State Univ. of NY. The algorithmic work is based on a text by Suzanne Greathouse, and was performed by Martha Elliott.

Sean Varah, Assistant Director, Harvard Computer Music Center announces that *Idioma*, for piano and tape, was commissioned and performed by Sonia Rubinsky at the National Library in Canada (on Glen Gould's piano, no less!) He was awarded an ASCAP Foundation Grants to Young Composers Award for *Slipping Image* his dissertation composition for flute, percussion, violin, cello, and tape.

Howard Sandroff's 1990 composition, *Tephillah* for clarinet and computer was one of only two works by American composers featured at the inauguration festivities of IRCAM, in June, with the composer in attendance. On July 7th Chicago Symphony clarinetists Larry Combs and John Bruce Yeh and Depaul University clarinet professor Julie DeRoche performed the World Premiere of *la Joie (The Joy)* at ClarinetFest (The International Clarinet Conference) at La Cite' Universitaire Theater.

Howard Fredrics has accepted a position as Assistant Professor of Music Synthesis at Western Carolina University beginning August 15, 1996. His address will be:
Department of Music
Western Carolina University
Cullowhee, NC 28723, USA

Pablo E. Furman was recently named a Fellow of the John Simon Guggenheim Memorial Foundation in the field of Music Composition for the period starting February 1997. The work to be done during this time be a composition for chamber ensemble and computer generated sounds. The Fellowship was awarded on the basis of several recent, mostly electroacoustic, works.

Gary Singh, Administrative Assistant for the ICMA, recently attended the June in Buffalo festival, at SUNY at Buffalo. His performance satire of technology and computer hobbyism, *Machine Wash Warm*, was recently performed in Las Vegas, Nevada. Other recent/upcoming endeavors include performances at the ICMC in Hong Kong, California Institute of the Arts in July, and *SoundCulture 96*, the third transpacific festival of contemporary sound practices, last April. He recently took time off from *ARRAY* layouts to hole up at Britainia Arms to follow the European Championship.

ICMC 1997

Overview of the 1997 International Computer Music Conference Thessaloniki, Greece September 25-30, 1997

Thanassis Rikakis, Conference Director
Brad Garton, Music
Perry Cook, Papers

Organized by:
The Program of Psychoacoustics of the Aristotle University of Thessaloniki (IPSA), The International Computer Music Association (ICMA), The Organization for the Cultural Capital of Europe-Thessaloniki 1997

With support from:

Columbia University Computer Music Center, Princeton University Computer Science Department, Stanford University Center for Computer Research in Music and Acoustics (CCRMA)

Thessaloniki. The very name conjures images of greatness — Mount Olympus, Alexander the Great, the flowering of Ancient Greek civilization.

Greece. The land of philosophy, the culture of intellectual life, the place that put the "classic" into "classical". And one of the friendliest countries you will ever hope to visit.

Put the two together and you have the site for the 1997 International Computer Music Conference. If you plan to attend only one ICMC in your life, it should be this one... if you are a regular ICMC participant, you will find some delightful enhancements awaiting you at ICMC-97.

Our theme for the 1997 ICMC is a quotation from the Greek poet Yiannis Ritsos:

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

This statement captures the spirit motivating our plans for the 1997 Conference. 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.

The 1997 ICMC is one of the sanctioned events of the Organization of the Cultural Capital of Europe-Thessaloniki 1997. For those unfamiliar with the European Cultural Capital designation, it is an appellation given annually to a particular European Union city. Being designated as the Cultural Capital guarantees support for a wealth of artistic activities in the selected city. Attendees at the 1990 ICMC in Glasgow, Scotland (the first time an ICMC was held in a Cultural Capital city) can attest to the cultural vitality generated by the Cultural Capital Organization.

We have been able to use strong commitments from the Aristotle University of Thessaloniki and the ICMA along with the Cultural Capital sanction to build a solid foundation for the 1997 ICMC. This has given us the opportunity to design some "special features" of the 1997 ICMC in keeping with our theme of `unifying'. Our base of support allows us to:

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

—increase 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.

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

—create 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!).

—solicit a large amount of public involvement. The Aristotle University of Thessaloniki enrolls approximately 60,000 students, making it one of the largest single Universities in Europe. The Cultural Capital was partly secured by promising a large "public interface" for the 1997 ICMC. Greece is a country hungry for new technology, and past concerts in Greece have demonstrated that a large interest in computer music exists in the general population. Iannis Xenakis is one of the leading cultural heroes!

The Exhibition Hall

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 restaurant/bar.

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 well-equipped booths (necessary audio equipment, workstations, internet access, etc.) 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 attendees — those desiring information about a particular demonstration or line of research will be able to make appointments to meet at the Exhibition Hall.

The booths of the Exhibition Hall will also 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 conferences — 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

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 focussing on psychoacoustic research, a special session on "Music and the Brain", scales/tuning systems and data auralization/sonification. Beyond that, we are seeking presentations of research in all aspects of computer music, certainly including aesthetic and com-

positional perspectives as well as signal-processing and synthesis research.

The International Computer Music Association publishes an extensive set of ICMC "Guidelines" for organizing the Conference. Although the Exhibition Hall concept is somewhat outside the general scope of the *ICMA Conference Guide*, we plan to adhere quite closely to the *Guide* in other aspects of the 1997 ICMC. In particular, the paper jury will *strictly enforce* the page limits established in the *Guide* for long (8 pages, 30 minute presentation) and short (4 pages, 20 minute presentation) papers. The jury will also consider papers *only* in the category (long or short) in which they are submitted.

Read the last sentence again.

Papers will *only* be considered in the category they are submitted. Occasionally in the past, a long paper would be 'bumped down' to a short paper for acceptance — this will not happen at the 1997 ICMC. What this means is that you must seriously consider how you want to present your research It is incumbent upon you to decide the category in which you want your paper to be evaluated. We will be accepting approximately 20 long papers and 80 short papers (more if we are able). If you wish to make your submission decision based on odds-of-acceptance rather than content, you would be wise to use the short paper category. And please don't cheat and submit the same paper in several categories — we will be checking!

Although this may seem a bit draconian, you should bear in mind that we will be able to accept a much greater number of demonstration and poster presentations (again, you must decide in advance the category of submission!). 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. If you are confused about the paper submission categories, please don't hesitate to contact ICMC-97 at the addresses given below.

The only significant departure from the *ICMA Conference Guide* is that we will be accepting only electronic submissions for

the 1997 ICMC papers. Our feeling is that most everyone involved in computer music now has access to the internet, and we would like to do our part to save a few trees. Plus it greatly assists us in the preparation of the paper abstracts for the jury, allowing us to extend the submission deadline by several weeks.

ICMC Music

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 restaurant/bar, 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. As with the paper submissions, we will be adhering to the *ICMA Conference Guide* in handling the music submissions. The music jury will be judging the music submissions by the category submitted. Think hard about the best way to present your music; an evening concert of contemporary ensemble music is often not the best format for a meditative multi-media piece. This is your opportunity to design your own music-output interface, and we will do what we can to accommodate your ideas.

Additional

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 create on-going interactive sound works. We will be soliciting proposals for this installation — stay tuned for technical details and further information!

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 (for example, the priceless treasures from the monasteries of Mount Athos are being publicly displayed for the first time ever!). 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 — Kalos Taxidi!

About the Program of Psychoacoustic and Music Research at the Aristotle University of Thessaloniki:

The Institute of Psychoacoustics and Music at the Aristotle University of Thessaloniki (IPSA) is a joint project involving six different Schools and Departments in the University (the Psychology Department, Music Department, Engineering School, Computer Science Department, Medical School, English Language and Linguistics Department). Twelve professors and twenty-five students from the above Departments are currently active in projects of the Institute. IPSA collaborates with a number of foreign Universities and research centers through an extended international exchange program. Current research projects of the Institute include: Physical modeling of ancient instruments, Music Perception in Alzheimers patients, Music Therapy for deaf children, Control of sound synthesis through movement.

The Institute is housed at the Otolaryngology Clinic of the University Hospital (AHEPA). Research projects at the Institute take advantage of the following facilities:

Hearing and Speech Unit - Laboratory of Speech Pathology and Phonology

Laboratory of Neuropathology and Experimental Neurology

Laboratory of Electroacoustics and Music Technology

Laboratory of Experimental Psychology

Multimedia Research Laboratory

The Institute emphasizes both artistic creation and research. The central laboratory of the Institute is the Computer Music Lab where original music compositions and original sound synthesis software are produced. The Institute produces three concerts a year featuring music composed at the Lab. Eight composers are currently active at the Lab. The Institute has organized a number of highly successful conferences, including the Psychoacoustics Symposium [Athens, 1991]; the Computer Music Conference and Festival [Delphi 1992]; and the recent Physical Modeling Conference [Thessaloniki 1995] involving the modelling of recent musico-archaeological finds in Greece. IPSA has also sponsored several international seminars on Psychoacoustics in recent years.

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CALL FOR PARTICIPATION
1997 International Computer Music Conference

Call for Papers/Demonstrations

ICMC97 is seeking the submission of SIG-

NIFICANT new and original work for the Paper Session. We are targeting a single track conference for the main paper presentations, and will be locating longer demos in the Exhibition Hall area.

We desire submission of abstracts in all areas of contemporary computer music and signal processing research. We will also be focussing on several key themes:

Music and the Brain
Scales and Tuning Systems
Auditory Display and Music
Psychoacoustics and Composition

The concentration of ker themes on psychoacoustics reflects the research focus of IPSA and the unique relationship between IPSA and the University of Thessaloniki Medical School. Papers discussing recent research and speculation in the areas of music cognition and perception are certainly encouraged!

Call for Music

ICMC97 invites the submission of a wide variety of computer music. The Music Jury will be seeking music for a range of different performance contexts, so music designed for different listening strategies is certainly welcome. Selected pieces will be included on a compact disk of music from the 1997 ICMC. Many of the performances will be broadcast throughout Greece on the national radio and television network.

We do have several areas where we can offer expanded resources for performance:

— The NEW! IMPROVED! "Listening Room": We will be outfitting a central space for the performance of tape works, solo/interactive works, multimedia works and other non-concert-type presentations.

— The Ensembles: ICMC97 has hired four major contemporary music ensembles specifically for performance of interactive and tape/instrument pieces. Smaller subgroups (and soloists) can also be drawn from each of these ensembles. Submission of new (and existing) works for these instruments is strongly encouraged.

The ensembles (and instrumentation) are:

2e2m: saxophone, flute, clarinet, bassoon, trombone, cello, bass, percussion

SurPlus: flute, oboe, clarinet, bass clarinet, horn, trumpet, trombone, violins(2), viola, cello, bass, piano, percussion, soprano

Ensemble FA: flute, clarinet, horn, trombone, violin, viola, cello, bass, piano, percussion

Theta: flute, clarinet, recorder, violin, cello, piano, psaltery(canon), wind instruments (all played by one soloist) — pan flute, ney, double flute, double mantoura, gemshorn, pastoral flute

Each ensemble also has its own conductor, of course.

— The "computer music cabaret": We are also seeking music for performance at the ICMC97 bar/restaurant, directly adjacent to the main Exhibition Hall. Good food, good wine, the magic of the Aegean...

— Ambient Sounds: ICMC97 will also be playing continuous music in the main Exhibition Hall, and is soliciting music for installations in the Hall and the lobby of the performance hall next to the Exhibition Hall.

— The "Sonic Movement" installation: 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 create on-going interactive sound works. We invite the submission of interactive sound ideas (movement-sound mapping algorithms, etc.) and systems that can be used in this environment.

Call for Booth/Exhibition Hall Participation

The Exhibition Hall will be the central focus of the 1997 ICMC. All main ICMC97 activities will be connected to the Exhibition Hall. We encourage research and academic institutions, vendors, corporations and individuals with significant demonstration projects to use the facilities of the Exhibition Hall. ICMC97 will provide audio playback gear, workstations and internet access to booth users. Most booth presentations will be non-juried — this is *your* chance to choose what you wish to present at the ICMC! The Exhibition Hall will be open to the public; we are expecting a large public involvement.

Some Caveats

ICMC97 will be posting (and continuously updating) a list of available technical resources on our web page. Please consult

this to determine if you will need to make special technical arrangements for your paper presentation or music performance submissions. Although ICMC97 will make every effort to accommodate equipment and performance requests, there is indeed a finite amount of money in the world.

Music

Because of our commitment to the ICMC97 performance ensembles, we cannot offer support for particular individual performers. If you have special needs or requests, please contact us in advance so that we can attempt to make equitable arrangements. This is not intended to discourage the submission of works written for specific performers, but ICMC97 cannot guarantee any support or payment for these performers.

Papers/Demonstrations

We are organizing a single track conference, and as such there will be strict limitations on oral presentation time, as well as the traditional page limitations for publishing the *Proceedings*. Read the Submission Guidelines closely on the submission form — it will greatly improve your chances of acceptance if you consider seriously the best category for your submission.

We will also be accepting electronic submissions *only* for ICMC97 papers and demonstrations. If this presents problems for you, please don't hesitate to contact us!

For more information, submission forms and guidelines, and up-to-date ICMC news, please visit our web page at:

http://alexandros.csd.auth.gr/~icmc97/

You may also contact ICMC97 directly:

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Featured Articles

The Impact of Fractals, Chaos, and Complexity Theory on Computer Music Composition

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In the last decade there has been increasing interest in emerging sciences related to complexity, Chaos theory, fractals, neural nets, and the Gaia hypothesis. According to the modern view, the universe is developing regularly along a line that the physicist and mathematician can plot and understand. The prevailing efforts in science have tried to explain all phenomena as variants of an essentially ordered structure. However, in the last twenty years, a reverse hypothesis has grown which supposes that most of the universe is non-linear and, perhaps, beyond understanding. Cosmocentric complexity grows into deterministic chaos, a chaos that shows some emergent innovation—balancing on the delicate edge between order and chaos. Per Bak, a physicist from Brookhaven National Laboratory in New York, illustrates this with a pile of sand on a tabletop. Imagine a growing sand pile, with grains of sand being continuously dropped from above. The pile grows higher and higher until it cannot grow any more reaching the critical height. The complexity of interlocking grains of sand has reached self- organizing-criticality[Waldrop 1992] and it is ready to do something. So when the next falling grain hits the pile, nothing or—anything— may happen. It can result in a tiny shift of just few grains or in a catastrophic collapse of the whole pile—there is no way of predicting this non- linear result. This example displays a behavior very similar to the critical mass of plutonium, in which the chain reaction is just barely on the verge of nuclear explosion. Such behavior is very common in nature, points out Bak, and we can see the ubiquity of large impulses being rare and small ones being common. Crisis management becomes a norm for nature, pushing itself to the brink between control and chaos.

There is an easy misunderstanding of emergent behavior which lies in the assumption that whatever is produced on the verge of chaos is good or creative. It is simply new, and evolution over time may show only if it is anthropocentrically positive or negative. Even when the product of emergent behavior fits into the ecological system, this does not mean that it is elegant or aesthetically pleasing; it simply means that it works within the larger context. It does not even mean that it is the best solution—it simply represents the first one that came along, hit critical mass and went into action.

Another characteristic of nonlinear systems is that they are self-organizing. Myriads of dumb and mindless entities interconnect into tangles similar to hives of bees or masses of neurons in a brain. Out of this dumbness and quite by accident the neural network of the brain emerged, and humankind became smart for no predetermined reason at all. What is interesting is that these self-organizing systems have no focal points—they are mostly decentralized. For example, there is no central authority in the human brain, one that is in charge of all others, a place where it all comes together[Dennett 1991], only unrestrained redundancy and colossal parallelism. Accelerating up organic time via computer simulations of complexity theory; neural nets, and self-organizing evolutionary systems have been tried. However, most of the models were, understandably, realized using serial computer processing to simulate parallel behavior, as in the beehive.

Parallel processing is still in its early days and what we are trying to do here is to put the technological cart in front of a conceptual horse. Humans think in serial narratives, thus the first computers were programmed on an idea that copies that logic. The human brain obviously works through parallel activity but yields a consciousness which operates in a serial way—a linear story. Hence, we may never be able to write a software that takes parallel computer processing to its fullest capacity. Today's artificial intelligence projects are as feasible as pragmatic physical designs of four-dimensional objects, in spite of Nicholas Negroponte's daring prediction that machines will be intelligent [Negroponte 1995]. Humans are certainly the best at designing small, elegant, and manageable systems that they can understand and use creatively; complexity in nature is for the present moment beyond human reach and next to impossible to use pragmatically.

Now what relevance do these new scientific findings have to computer music composition? Applying computer models of complexity theory to musical structure, then pushing the compositional system out of equilibrium to the very edge between order and chaos is rich only in possibilities. Believing that creativity is balanced at this knife edge between predictability and randomness [Jencks 1995] is wrong. All that results is something new and beyond quality control. If, as earlier posited, complexity is dumb and mindless as universal law, then human-edited musical structure based on such a complexity, cannot be otherwise. It is an illusion to believe that music constructed this way works beyond cultural boundaries on the level of transcendental communication. It should always be kept in mind that complexity of sound structures emergent behavior is amoral and has no intrinsic value. It may result in something new and innovative but also be a blatant bore to the musical audience.

This problem can be viewed through Einstein's absolute mis-statement that the universe is a friendly place (for whom ???). This premise is feasible only in relation to the thinking that humans have more rights on this planet than, say, the AIDS virus. But do they? How about an asteroid which, as a result of some emergent behavior of cosmic proportions, wipes out all life on the Earth tomorrow—can we believe that the universe would really care about it? Imagine the question from the universe's point of view: does it make any difference for the universe if Mars or the Earth disappear? As far as we know at this historical moment, the universe would just mind its own business and keep on expanding into the next emergent innovation. For innovation to be considered creative, we need a viable context, an ecosystem to whose well being this innovation will contribute. Thus, rather than struggling to incorporate these new

scientific findings into the structure of our computer music compositions, it would be better to concentrate on the environment that can understand our masterpieces. Music needs to operate within human\s reach, not within any chancy hyper-complexity.

So, what is the environment in which our music exists, and how do we conclude whether its contribution is positive or negative—this is the question with which composers ought to be concerned. Switching contexts, how do we figure out what is good and what is bad food. We look for response and, based on that response, we draw conclusions. Eating greasy cheeseburgers often, would certainly raise my cholesterol level and, in the long run, I may end up having a heart attack. Conversely, if I release my music into the public arena of my environment and get no positive response or audience interest, I probably would fall into the category of esoteric innovator rather than pertinent creator.

Musical sounds per se are certainly meaningless, because music cannot express anything extra-musical, unless the association to which it refers already exists in the minds of the listeners. There is no way to convey any meaning if there is no common redundant ground of socially shared experiences and responses. I would venture to say that almost all of us agree that music when placed in a public arena is primarily about communication between a composer and the audience. The question thus becomes: should my intention have larger orientation: the universe as a whole [Jencks 1995] addressing a community of intergalactic proportions where the complexity of emergent structures is commonly understandable, or should I present my music to a community of interested inhabitants on planet Earth?

How big, after all, does community have to be in order to be manageable for successful interaction. This can be answered by another question: what size is the audience that understands your language of communication? Nicholas Negroponte predicts that we will socialize in digital neighborhoods in which physical space will be irrelevant and time will play a different role [Negroponte 1995]. But what he misses is that the primary focus of socializing on the Net is not only transcendence of space and time, but, most importantly the transcendence of the body. To paraphrase Marshall McLuhan technology is the extension of

human powers and what we see today is that technological prostheses had begun to 'liberate' us from the limitations of the human body[Slouka 1995]. Cyberspace is being tilted as a hyperreal simulacrum designed to be a pure, clean, and spotless—providing us an escape from the real world (already demoted by the Net's digerati to the acronym RL) as being boundless in its difficulties[Borgmann1992]. This is the reason why the biggest difference between horses and cars, as Keith Hensen points out, is that cars don't need attention every day and horses do [Kelly 1994]. In other words silicon-based machines are supposed to work infallibly, while carbon based ones fail almost every day. One could well ask at this point why are humans so unhappy about the shortcomings of life and the body and such big suckers for pseudo-perfection?

Human obsession with perfection has a long and sullen history. From the early beginnings of scientific treatment of music by the ancient Greeks, who derived Greater and Lesser Perfect Systems of musical intervals, long-desired aural perfection has never been achieved. It is not by chance that musicians, being far more interested in formal theory of musical structure, seldom talk about the meaning of musical content From a different angle, the history of western music can be perceived as a series of failed attempts in achieving absolute formal perfection as a bridge to transcendental purity and personal redemption.

It would be silly to blame Plato, who lived 400 BC., for believing that various types of musical scales produced an automatic subconscious process which, in turn and with great precision, were capable of modifying a listener's behavior. But two millennia later, were Boulez, Babbitt, Xenakis, LaMonte Young, and Cage, to name a few paradigmatic ones, essentially any different in a philosophical sense? All of them held to the modernist music idea, that objective musical perfection can transcendentally affect the listener. Yet they are so similar to Plato in their musical undertaking. These modern composers either attempted to create the perfect structure using various methods of extreme complexification such as total serialism, pitch set manipulations, mathematical permutations, etc., or they searched for purity by stripping the structure to the basic elements of sound such as perfect fifth to be held for long time. John Cage, as always,

makes a unique case in his endeavors for perfection through indeterminancy and chance— which he believed operate unpredictably and transcendentally as does nature. It is easy to see how modernist composers struggled to improve their formal structures, getting closer and closer to ultimate purity, but it is not easy to see why.

Achieving ultimate purity was always very important to humans. By cleansing the world around them, purging it from evil and dirtiness, humans hoped to qualify themselves for eternal life. Human effort reflects this urge toward perfection, the striving for immortality. Body was the first thing on this superhighway to purity, which had to be abandoned. Next came the real world with its imperfections. Ernest Becker makes this argument vividly clear pointing out that humans are truly sorry creatures because they have made death conscious [Becker 1975] and, therefore, they have to transcend the limitations of the human condition and achieve victory over impotence and finitude [Becker 1975]. People like to surpass their physical fate in the perishable world of flesh and blood, devising a nonsensible project that would assure immortality in a spiritual rather than physical way. Through this transference humans try to overcome what Freud defined as fear of self-knowledge, realizing that what they are is nothing but frightened creatures conscious of their limitations. I am not quite sure that the above mentioned composers were seeing their artistic activities from this perspective; because if they did, they would have realized the implausibility of their efforts.

No wonder that these various perfection strategies, applied to the field of music never generated any important human response. These composers treated music as a stand-alone object of absolute value. They seemed to ask, why base quality of music on cultural response, which represent no absolute categories but rather are subjective properties of the dirty world filled with non-perfection, death, and impermanence. The conviction that music, which has structural quality and is close to some imaginary perfection, affects the listener transcendentally—is not that far from Plato's ancient belief. The living proof that the whole idea of purity in music was an embarrassing failure lies in its tremendous lack of communication with any audience.

Surely these composers must have cared whether the audience listened. Milton

Babbitt's 1958 article Who Cares if You Listen? clearly exemplifies the core of the problem. Babbitt was lamenting how the general public is largely unaware and uninterested in contemporary music. Let's suppose that this paper is written in Klingon instead of English you would thus be expected to make an effort to understand it. But, would you do it? Of course not! Thus, as a writer, I can blame your ignorance for miscommunication in getting my message across. This logic makes no sense at all. On what grounds may one suppose that the public is going to be largely interested in anything or anybody who is not, in return, interested in the public interest. It should have been understandable to Babbitt why the public is much more appreciative of a car mechanic at a muffler repair shop than of a mechanical engineer with Ph.D. at NASA. The former is not more important than the latter, but because in the everyday world where ordinary people live and dwell, it is much easier to experience the benefits of having a muffler replaced than the benefits of the ingenious construction and design of the launching pad for the space shuttle. Perhaps, we need more composers who get a bit more musical grease on their compositional hands.

What we need are composers willing to give up chasing perfection in the narrow realm of highly specialized perfection and, instead, address the problem of communicating with real and imperfect human beings—and finding the most efficient way to do so. We need a new approach. The first step toward this new approach should be focusing on small neighborhoods, on communities that try to understand us even as we strive to understand them, communities of common people that we care about and with which we want to share some common emotions and experiences. We should educate ourselves globally, learning all the peculiarities of the universe that we possibly can, but our efforts for musical communication ought to be directed locally. As Kevin Kelly says: Where there is an ecosystem, there are local experts. An outsider can muddle through an unfamiliar wilderness at some level, but to thrive or to survive a crisis, he'll require local expertise[Kelly 1994]. In these small neighborhoods, we may be able to concentrate on what Lyotard calls small narratives, or things that are valuable and useful to local populations. If we lose our local context, which is the only context within which we can physically dwell, we may immerse ourselves into an utterly amoral universe. We should beware of the global village concept which is evolving away from the locally-defined, individual nature, toward a collective hive-mind of the mass self. In such an environment, there is no concern for individuals or the music that they produce; communication becomes a non-controllable, unpredictable, non understandable, and self-organizing amoral complexity.

We must understand that the Information Age should represent quality, not the quantity of information [Jencks 1995] and in that light, we ought to use our globally-acquired knowledge of complexity theory. As we look at the musical world of modernity, we can see that it has been moving, for the most part, according to complexity theory. Composers composed an avalanche of musical pieces that relate more to each other than to the common human condition. One innovation followed another to infinitude, just like mindless and purposeless emergent products. We can decisively conclude that complexity may be a law that governs the universe, but at the same time a law which humans must defy. The reason is best described in Becker's words: the tragedy of evolution is that it created a limited animal with unlimited horizons,[Becker 1975] making us already an exception to the rule. The humans have a mind and the wisdom which implies making judgments in advance rather than retrospectively [Salk 1973]. Evolution does not have a mind. Thus, we may as well stay on this divergent evolutionary path and start caring and communicating with each other rather than succumbing to the powers of mindless complexity that innovated us. We are like a self regulating Bonsai in the universe; paradoxically being both the gardener and the tree at the same time! We can snip an undesired behavioral twig here; we can plot a new foliage pattern there; we can chart a change of direction; reroute a root; or trim a wild impulse—the one thing we are not going to do in face of evolutionary complexity that innovated us, is to become that which we are not. My suggestion: as composers and as beings we should start celebrating and sharing who we really are with one another and leave absolutes and truth for a more appropriate time and possibly another organism—an organism that complexity driven evolution might spit out mindlessly down the existential line.

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The Web as Generative Art

Lecture prepared by Andrew Garton
Masters of New Media Lecture Series -
RMIT, 2 May 1996

"The body as an organisation is obsolete. The artist's role becomes one of an evolutionary guide, a genetic sculptor, an architect of internal body spaces."
Stelarc, 1984.

Abstract

With the Internet fast becoming ubiquitous in the developed world artists are finding new ways to not only express themselves, but to communicate with each other across geographically remote, and often politically volatile regions of the World to collaborate with like-minds. OMA - Ausländer und Staatenlose - a W3 Opera[1] is an overview of creative processes evolving through computer networks, the interactions and simulated communities that spawn from them and more significantly, the art that is the process of remote interaction itself. More specifically, OMA is about generative art, whereby computers, within a networked environment such as the World Wide Web, are used as enhancer, as generator of new media content in concert with communities of collaborating artists.

The Web as Generative Art

The Web, and the Internet for that matter, are unlike any media we have ever known. Regardless of the hype, the Net is not a database, an encyclopaedia, a magazine, the denizen of perverts and pedeophiles, nor is it like a magazine, it doesnt even come close to competing with television. It is ephemeral, ever-changing, growing more like life itself than any media we may try to identify it with.

The Web is exciting. Computer networks are exciting. They are liberating media enabling anyone with access to the technology to share something of themselves, to discover new lands of thought, of expression. This *is* a revolution. Were charging head first, all senses on deck, towards a transformation in the way we communicate, create and express ourselves. Despite what you may think now, given the outrageous growth of Internet activity, its still the most significant development in communication since wireless radio. It is akin to that of the printing press when exclusivity of the written word was smashed, when language was freed and people communicated to each other via the written word. The downside was the gradual loss of oral traditions within many of our societies. Story-telling was largely replaced by story writing and reading.

Today, these traditions are being rekindled, and largely via the Net. Laurie Anderson remarks, Technology today is the campfire around which we tell our stories. Theres this attraction to light and to this kind of power, which is both warm and destructive2.

The written word, it has been suggested, makes permanent what in oral language was permeable and ephemeral3. Writer, Jacques Leslie, suggests that, ... in email, weve devised a written medium that partly undermines the assumptions of writing, that evokes the uncertainties of oral culture. Getting used to email [and the Web] ... may mean accepting its vast capacity to sow ambiguity4.

People are telling each other stories everyday via email, via IRC (Internet Relay Chat), within simulated environments such as MUDS5 and the popular Warner Bros. net interactive, The Palace6. Theyre forming new types of communities, warped and indulgent tribes, friendly, strange and sometimes decadent virtual villages unlike any we have ever known. The net is more like a mall than a super-highway. You can stop and talk to some one without fear of being run over.

Weve come a long way since the days of stone and wood.

How does the Web figure in all this? The Web, interactive Internet communities and games like MUDS, are generative media, platforms for art, for expression that evolve, change and never look and sound the same twice. The most engaging of sites are those that change as frequently as the shelves in supermarkets. Some, as wine, mature slowly, growing in complexity and depth creating pathways and journeys perhaps new traditions and folk-cultures.

Designing and programming a site to change as frequently as, say, a screensaver, takes some doing. But it is possible to build layers of generative processes. For instance, embedded within the OMA Web site (http://www.peg.apc.org/toysatellite/OMA/) is a soundscape which, with the appropriate plugin7, will play automatically when the page is loaded to screen. It will play for approximately 5 minutes. Whenever you return to the site the piece will replay but differently each time. Although its basic structures were composed it is, for all intensive purposes, re-composing itself.

The composition is derived from a system based on the anagramatic relocation of five notes comprised of atonal or compound chromatic clusters/chords. These are dispersed over nine bars which are in turn cycled over 81 bars. The entire piece is then looped generating fresh variations of its humble 45 note, 9 chord, 81 bar seedling.

It was composed with a remarkable piece of software called, Koan. All pieces created with Koan are interpreted and composed in real time, generating different versions of your piece every time it is played so that it is never heard the same twice.

Brian Eno has enthusiastically adopted Koan, creating a Generative Music installation at the 11th annual Music Festival of "Urban Aboriginals"8 in Berlin, and an album on diskette called, Generative Music 1. Eno suggests that kids in the future will wonder why *we* ever used to listen to the same piece of music over and over again.

Generative music not only challenges the way we listen to music, it leads us to rethink our notions of interactive-multimedia, our notions of a digital aesthetic. The digital realms offer us the opportunity to not set our ideas in stone, but to allow them to grow and manifest new forms. Were seeing the demand for this already in the simulated worlds such as LamdaMOO and the YORB9, spaces that are evolving even as we speak. Brian Eno says of computers, I think the best about computers is that they can grow things from seed... .10

Computers need not only be used as a means for storing and replicating information, they can be used as creator, as generator of new media content. Stephen Holtzman, author of the thoroughly engaging Digital Mantras - The Language of Abstract and Virtual Worlds, suggests that computers are ...the ultimate manipulators of abstract structures. And we, the great abstractionists, need only fuel them to maintain our exploratory quests, wherever they may lead us...

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Mail Bonding - Email is creating a new oral culture - Jacques Leslie (Wired 2.03 PG 42)

Multi-mediatrix, Pamela McCorduk, Wired 2.03, PG 81.

Notes

1. Andrew Garton's Masters project - Masters of New Media, Royal Melbourne Institute of Technology
2. Multi-mediatrix, Pamela McCorduk, Wired 2.03, PG 81
3. Brenda Denat, The Hebrew University of Jerusalem - unpublished essay on computers impact on text
4. Mail Bonding - Email is creating a new oral culture - Jacques Leslie (Wired 2.03 PG 42)
5. Multi-User Dungeons
6. The Palace Client Software - http://www.thepalace.com
7. A piece of software that is activited within a Web browser (such as Netscape)
8. Urban Aboriginals - http://www.icf.de/urban
9. New York based public access computer bulletin board and television community
10. Before and After Science, an interview with Brian Eno, PC Format, March 1996, Issue 54, PG 32

[1] Andrew Gartons Masters project - Masters of New Media, Royal Melbourne Institute of Technology
[2] Multi-mediatrix, Pamela McCorduk, Wired 2.03, PG 81
[3] Brenda Denat, The Hebrew University of Jerusalem - unpublished essay on computers impact on text
[4] Mail Bonding - Email is creating a new oral culture - Jacques Leslie (Wired 2.03 PG 42)
[5] Multi-User Dungeons
[6] The Palace Client Software - http://www.thepalace.com
[7] A piece of software that is activited within a Web browser (such as Netscape)
[8] Urban Aboriginals - http://www.icf.de/urban
[9] New York based public access computer bulletin board and television community
[10] Before and After Science, an interview with Brian Eno, PC Format, March 1996, Issue 54, PG 32

[From the editor]

For the novice, or even the experienced guru who happens to use another system, grasping the concept of a particular software package can perhaps be daunting, especially if one doesn't know where to go to find tuition, assistance or documentation. This overview of Csound, kindly provided by Lonce Wyse, is the first of a series of short articles, designed to give those interested a means of getting started.

Some What's and Where's about Csound
- Lonce Wyse

Brief Overview

Csound is a general purpose software sound synthesizer authored primarily by Barry Vercoe at the MIT Media Lab. Vercoe traces the history of the development of Csound back as far as the 1960's to Max Mathew's Music 4 language. The current paradigm separates an orchestra of "instruments" from an event "score". Csound reads the scores and orchestra files and produces a digital audio file. If the machine is fast enough, it can send the output stream directly to an audio port in real time. There is also support for building orchestra instruments that take MIDI data streams from files or a MIDI port.

Instruments are chunks of code constructed of opcodes that generate or modify signals. For example, there are opcodes provided for oscillators, resonators, and delay units. Basic mathematical functions and arithmetic operations can be called, and familiar program control statements control execution. Many opcodes encapsulate very complex operations. For example, there is a comb filter, a reverb, delay units, sample converters, and a "pluck" opcode which is an implementation of the Karplus-Strong plucked string algorithm. Users can even extend the language by writing their own opcodes as well.

The current Csound uses the score file to set up tables which can be read by the instruments. A set of "Gen routines" are called to initiate the tables with data from audio files or functions. These tables can then be read by instruments and used for efficient oscillators, waveshaping, wavetable synthesis, envelope control, etc. Of course, the score file is also the place to initiate events and provide the parameters that control the instruments.

Csound Users

Csound is used by an ever broadening community of musicians, composers and sound hackers. I recently posted a question to the Csound mailing list asking where Csound was being taught, or was being used to teach synthesis and composition. The following is a list of institutions gathered from the responses.

School of Music, U. of Washington
North Eastern, Boston
Center for Music Research, Florida State
Berklee College of Music, Boston
Media Lab, M.I.T.
U.C. Santa Barbara
U. Montreal, CANADA
McGill University, CANADA
Composition Dept., U. of Florida
IRCAM, Paris
CEMI (Center for Experimental Music and Intermedia, U. of N. Texas
U. of Oldenburg, Germany
School of Music, CalArts (California Institute of the Arts, Valencia, CA)
School of Music, MM Resource Center, U. of Britsh Columbia
Florida International University
Dept. of Music, University of Huddersfield
Folkwang-Hochschule Essen, ICEM Institut fuer Computermusik und elektronische Medien, Essen
Electroacoustic Studio, University College Bretton Hall, Wakefield UK
Hebrew U., Jerusalem
Dept. of Music Technology, Utrecht School of the Arts
Computer Music at Quilmes University (Buenos Aires, Argentina)
School of Music, Queen's University, Belfast, Northern Ireland, BT7 1NN
DEA d'electronique, Universite Paris Sud (France)
School of Arts and Media, Music Dept., Latrobe University, Bundoora Australia
University of Texas, Austin
Dept. of Music, University of Durham, UK

Kopavogur Computer Music Center (Kopavogur, Iceland)

Reykjavik College of Music (Reykjavik, Iceland)

Harvey Mudd College, Claremont Califormia,

Media Arts Centre, Royal Holloway University of London

Center for Contemporary Music, Mills College, Oakland CA

Hochschule fuer Musik Berlin, Studio fuer elektroakustische Musik

Austrailian Centre for the Arts and Technolgy (ACAT), Australian National University, Canberra

Music Department, University of Western Sydney - Nepean

Music Department, University of Sydney

Music Technology Program, Music Dept., Univ. of Utah

Center for Performing Arts & Technology School of Music, University of Michigan, Ann Arbor.

School of Music, Michigan State University

Hiller Computer Music Studios, University at Buffalo, New York, USA

School of Music, University of Maine at Augusta

Departments of Electronics and Music, University of York, UK.

School for the Contemporary Arts, Simon Fraser University

Eastman Computer Music Center of the Eastman School of Music.

Louisiana State University

Dartmouth college, Hanover, NH

Computer Science Dept., Bath UK

Universit Paul Valery in Montpellier, France

Csound Links

There are versions of Csound for a number of machines and operating systems including UXIX, Mac, SGI, SPARC, PowerMac, PC (Dos, Windows, Windows95) and Atari. Most of the platform versions can be found at ftp://ftp.maths.bath.ac.uk/pub/dream/, a site maintained by John Fitch who is also doing a heroic job of maintaining several of the versions while holding down a day job. There are several environments designed to enhance the ease of use of Csound. "Cecilia", which runs on SGI machines, was developed at the University of Montreal, and resides at http://www.musique.umontreal.ca/Org/CompoElectro/CEC.

A front end called CSounder, was developed by DTD Technologies http://www.ddtm.com:80 for Windows and Windows 95. A graphical interface to Csound called Patchwork is available from Russel Pinkston's ftp site, indigo.pac.utexas.edu. Several collections of instruments have been generously made available to the public. I will only mention a couple intended as tutorials, but there are other treasure troves that you can discover by net searching or joining the mailing list described below. Example instruments by Jean Claude Risset and Richard Boulanger, among others, can be found at a Media Lab ftp site, cecelia.media.mit.edu:pub/Csound. John-Philipp Gather has over 100 instruments gathered at http://mars.let.uva.nl/gather/accci/accci.html, with excellent documentation for self-tutoring in Csound and synthesis in general.

The Latest

Martin Dupras and James Andrews initiated a lively mailing list, with Csound discussions ranging from the philosophical to the mundane. You can join the list by sending the message: subscribe your_username @ your_hostname to Csound-request @ maths.ex.ac.uk.

The 1996 International Computer Music Conference in Hong Kong will host several talks on the latest developments to Csound. The scheduled talks include "Extended Csound" by Barry Vercoe, "NetSound: Realtime Audio from Semantic Descriptions" by Michael Casey and Paris Smaragdis, and "Csound GM: Designing Real-Time Instruments with Csound's New MIDI Opcodes by Richard Boulanger and Scott Vercoe. There is no doubt that the combination of ever more powerful and affordable computers and the software work around the "the Lab" over the last couple of years will make for some exciting developments in the world of sound synthesis.

Lonce Wyse is at the Institute of Systems Science at the National Universtiy of Singapore. His current research includes sound modeling and the musical use of chaotic oscillators.
Contact: lwyse@iss.nus.sg
http://www.iss.nus.sg/People/lwyse/lwyse.html

Coming Soon! ARRAY Goes On-line

1996 Magistere, Bourges

LARRY AUSTIN and LARS-GUNNAR BODIN EACH AWARDED 1996 MAGISTERES , BOURGES

The International Institute for Electroacoustic Music, Bourges, France, has announced that composers Larry Austin (US) and Lars-Gunnar Bodin (Sweden) have both been awarded a 1996 Magistere (Magisterium) in the 23rd International Electroacoustic Music Competition. The honorific title is awarded, as well as a prize of 10,000 francs; a compact disc recording of the work for the "Cultures Electronique" series produced by GMEB/UNESCO/CIME; performance of this and other Austin works on "Synthese 1997: the 27th International Festival of Electroacoustic Music", spring, 1997; international radio broadcasts of the work; and an invitation to the composer for a residency in one of the consortium of participating studios for electroacoustic music. Through the years of the competition, eight Magisteres have been awarded.

The Magistere title with prize is awarded to composers who have worked creatively in the electroacoustic artform for twenty years or more. In awarding of the Magistere, the competition jury takes into account the composer's participation in the development of electroacoustic music and the composer's contribution in its history. Composers are asked to submit three examples of their work, one from an early period and two from a more recent period, to characterize the composer's path within the general context of the evolution of electroacoustic music.

Larry Austin received for his work *BluesAx* (1995), for saxophonist and computer music on tape and is the first US composer to receive the award. In recognition of his standing in computer music and, more specifically, his role in ICMA we would like to honour his achievement with a profile of his work.

LARRY AUSTIN

Austin's electroacoustic music is well-known and widely performed; e.g., his extensive computer music and papers have been selected for performance and presentation, from 1975 to 1995, in virtually all twenty-two of the annual International Computer Music Conferences. He serves on the Board of Directors of the International Computer Music Association, presenters of the ICMC, 1984-present; from 1990 to 1994 he served as the ICMA president. In 1986 he co-founded and continues as president of CDCM: Consortium to Distribute Computer Music, producing the CDCM Computer Music Series of compact discs on Centaur Records; since 1988 CDCM has released 22 compact disc volumes of computer music.

Larry Austin and His Musics
by Rodney Waschka

The musics of Larry Austin resist style or label. As John Cage observed, "It's beautiful! I don't understand it!" Each piece or series of pieces has its distinctive, carefully conceived profile, each always composed from the bottom up. He re-invents music for every piece he makes. Yet, there are threads through all his work that are thoroughly consistent with this dynamic flux of experiment and invention: the creation of new form-modeling processes (open, set, narrative, spatial, temporal), the exploration and experimentation with powerful, technological tools to create the materials of his pieces, and, always present, the metaphor—the poetic imagery for each work.

Having known and worked with Austin and his music for more than a decade, I now have some understanding of the reasons for his long-lived and continued success as a composer. The first component is the character of his talent: grand and rugged, lyrical yet unsentimental and, perhaps surprisingly, all firmly rooted in his knowledge and deep appreciation of the pluralism of the worlds musical traditions, all this welded to a natural and profound musicality. This is immediately evident in the kinds of pieces he sets out to make — works that introduce fruitful new procedures and large-scale works that develop and re-model important ideas from the past and present. The ground-breaking pieces feature significant musical innovations, as in three works for piano and electronics composed in the 'sixties, 'eighties, and 'nineties: *Sonata Concertante* (1983), for piano and computer music on tape, where the concept of duality and contrast occur simultaneously rather than successively; or technological innovations, as in *AccidentsTwo: Sound Projections for Piano with Computer Music* (1992), where the composing and processing of the spatialization of the sounds is stunning; or both, as in *Accidents [One]* (1967), where concept and technique are fused. His large-scale works refer to the past as in his realization and completion of Ives' Universe Symphony, mixing the past and present; or his updating of Mozart in the *Sinfonia Concertante: A Mozarean Episode* (1986), for chamber orchestra and computer music narrative; and expound on contemporary concepts as in *Transmission Two: The Great Excursion* (1989), for chorus, narrative, and computer music ensemble; and his computer music portraits of four contemporaries in his solo tape piece, *SoundPoemSet* (1990).

The second component of Austin's success is obvious to anyone who has ever tried to keep up with his whirlwind pace. Larry Austin works very hard. He is a demanding and inspiring teacher and a skillful administrator, but most importantly, a dedicated, often tenacious, composer. His amazing ability to regularly re-tool, to re-educate himself in the ways and means of the latest technological advances is evidence of his youthful, ongoing curiosity and enthusiasm. (He laughingly relates that recently he was described as "a senior artist in transition".) These traits are apparent in the music. The first seeds of ideas are thoroughly and carefully worked out and documented in one of his many notebooks. His attention to detail continues as he produces, revises, and polishes his sounds. The final product incorporates daring ideas, skillful craftsmanship, and the magic that is instilled in a work after many long, long days that normally begin a 5 a.m.

Larry Austin's music lives and thrives because of Austin's constant willingness to apply his talent and effort to explore new ideas, materials, and procedures. We celebrate the broad and important nature of Austin's contribution to contemporary music and, especially, to computer music, a genre of music he loves and so generously nurtures as one of its pre-eminent and most prolific composers.

Bourges and Ars Electronica

Prix Ars Electronica 1996: Computer Music

Winner, Golden Nica Award:
Robert Normandeau - *Le renard et la rose*
Distinctions:
James Dashow - *Media Survival Kit*,
Regis Renouard Lariviere - *Futaie*
Honorary Mentions:
Francesco Boschetto, Chris Brown, Kui Dong, Jonty Harrison, Matt Heckert, Gordon Monahan, Gordon Monro, Stephen Montague, Michel Redolfi, Jacob Ter Veldhuis, Alejandro Vinao
More info from:
http://prixars.orf.at/winner/ winners.html

Bourges - Prizes Announcement

For full (very !) details of the winners see **http://www.gmeb.fr/ palmaresmus96.html (for music prizes) http://www.gmeb.fr/ palmareslog96.html (for software prizes)**

In the interest of space, only prize winners and finalists are listed below - but many congratulations to all who received recognition in the competition!

MAGISTERE AWARDS: Larry AUSTIN and Lars Gunnar BODIN
RESIDENCIES
Pierre COUPRIE (France), Palle DAHLSTEDT (Sweden), Fernando David POLONUER (Argentine), Johathan PRAGER (France), John PRIOR (UK), Artem VASSILIEV (Russia)
GRANDS PRIX DU CONCOURS
Francesco BOSCHETTO (Italy), Lothar

VOIGTLAENDER (Germany)
CATEGORIE MUSIQUE ELECTROACOUSTIQUE DE STUDIO
PRIZE
Erik Mikael KARLSSON (Sweden), Jukka RUOHOMAKI (Finland)
FINALISTS
Richard KARPEN (USA), Takehito SHIMAZU (Japan), Hans TUTSCHKU (Germany)
CATEGORIE MUSIQUE ELECTROACOUSTIQUE AVEC INSTRUMENTS
PRIZE
Luigi CECCARELLI (Italy), Jon Christopher NELSON (USA)
FINALISTS
Jack BODY (NZ), Frank SCHWEIZER (Germany), Joseba TORRE (Spain)
CATEGORIE MUSIQUE ELECTROACOUSTIQUE A PROGRAMME PRIX
PRIZE
Jonty HARRISON (UK), Mario VERANDI (Argentine/Italy), Daniel ZIMBALDO (Argentine)
FINALISTS
Francesco BOSCHETTO (Italy), Erik Mikael KARLSSON (Sweden), Manuel ROCHA ITURBIDE (Mexico)
CATEGORIE MUSIQUE ELECTROACOUSTIQUE EXPERIMENTALE
PRIZE
Willis GARNET (Canada)
FINALISTS
Agostino DI SCIPIO (Italy), Florian MUTSCHLER (France)
CATEGORIE MUSIQUE ELECTROACOUSTIQUE DE CARACTERE
PRIZE

Alain MICHON (France), Mark WINGATE (USA)

Palmares First International Music Software Competition

Category 1: Analysis / Synthesis out of Real-Time
Prize
Tom Erbe (USA) for SoundHack (Macintosh)
Mentions
Vincent Lesbros (France) for Phonogramme (Macintosh)
Michael Norris (New Zealand) for SoundMaker plug-ins (Macintosh)
Category 2: Analysis/Synthesis in Real-time
No prize or mentions
Category 3: Computer-Assisted Composition
Prize
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CD Reviews

An international band of willing volunteers is currently listening to the many CDs received for review in *Array*. By the next issue we hope to have quite a few reviews to publish, covering a wide range of computer music. For now, a couple to get started with....

Horacio Vaggione
Musiques pour piano et electroacoustique

Philip Mead - Piano

Chrysopée Électronique (1995) LDC 278 1102

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One can think of few performers of contemporary music as deserving of tribute as Philip Mead. This CD comprises five works for Piano (*Tahil* and *Myr*), Piano and Tape (*Till* and *Leph*), and Tape (*Schall*), all dedicated to the British-based pianist. Mead has always made a virtue of performing works that other pianists either cannot or will not play, and through his practice of commissioning works is a proactive force in contemporary music-making. It is thus fitting that Vaggione and the Chrysopée Électronique label should gather together a set of works which in their different ways illustrate the interactions between electroacoustic techniques and the live piano (according to the composer's notes the solo works reflect electroacoustic thinking and techniques), since Mead's expertise and experience in playing with electroacoustic media is so admirable and unusual. Mead's performances on this disc are typically assured and powerful, utterly convincing in their execution.

The works themselves present a rather interesting group. *Till* present a bridge between the acoustic worlds of the two solo works and the less directly pianistic *Leph*. In *Till* the connections between piano and tape part seem to extend the familiar sounds and techniques of the piano, whereas in *Leph*, the pianistic is extended beyond such an acoustic world without completely losing sight of the piano as origin. Such a play with the boundaries between instrumental and electroacoustic is rarely achieved with such skill either by a performer or composer. The final piece *Schall*, for electroacoustics alone, further extends this play. All the pieces seem to share more than just a pianistic source for sound materials, through expressing different versions of Vaggione's 'pianistic' imagination. It is all too easy to assume that using the live instrument as source for electroacoustic sounds guarantees connections between live and electroacoustic elements within a piece. Such an assumption is not made here, and the variety of connections that do occur do so in many ways.

Perhaps unsurprisingly, the five pieces seem to function best as a set. The two solo pieces seem to make most sense in relation to the electroacoustic pieces (although I am unsure whether the same goes for the converse). One might be forgiven for assuming that over 50 minutes of piano sourced material from the same composer, some of which is quite abrasive, might prove fatiguing. On the contrary, this collection has a sense of both continuity *and* diversity which is continually refreshing.

Luke Windsor

Luke Windsor is a music analyst and empirical musicologist and is a
part-time member of staff in the Department of Music, University of Sheffield.
http://www.shef.ac.uk/uni/academic/I-M/mus/staff/wlw/lwhomepage.html

James Tenney SELECTED WORKS 1961-1969

Though much of the music on this CD was composed over 30 years ago, what struck me most was the freshness of, if not the timbres themselves, the composing mind at work. This is youthful music, in the best sense of the word; all the pieces bubble with the thrill of using what was very new technology, to make new sounds, and new musics. The enthusiasm is perhaps most apparent in *Collage #1 ("Blue Suede")* and *Dialogue*, the first putting Elvis through a filtered collage - the earliest plunderphonics around ? - the second a far more sophisticated counterpoint of noise and pitched sounds. *Dialogue* is constructed through largely stochastic means, and there's a kind of otherworldy nervous energy that, fortuitous or not, gives the music an expressionistic depth more reminiscent of Webern than Xenakis. The other short pieces on this disc are *Music for Player Piano* , a palindromic, computer-generated romp and *Analog #1: Noise Study* , inspired by commuting in heavy traffic. Only the overlapping, filtered drones of *Noise Study* perhaps do show their age a little, not in the quality of the recording (the remastering is superb throughout the CD) but the almost submarine quality of those early filters and oscillators.

Now, on to the hard stuff. *Phases (for Edgard Varèse)* and *Ergodos II (For John Cage)* are both longer works in which Tenney applied stochastic methods to generate trajectories for, almost all, musical parameters. (For those who want more on Tenney's procedures, Larry Polansky's CD liner notes are those of an expert, and carefully list other sources of information.) *Phases* was, to my ear, by far the strongest work on the CD. Its fascinating counterpoint of high-pitched chattering, growling

machinations and sudden windows of fleeting melody makes for a demanding, sometimes difficult, listening experience. Yes, it does have all the timbral and gestural inflections of 'early electronic music', but it also has a compelling sense of identity - a strange, sphynx-like character, singing to itself. *Ergodos II* was Tenney's first experiment in spatial sound - using the new stereo capabilities in Max Mathews' Music IV. Indeterminate in form, the tape can be played in either direction, or in superimposed segments, over any number of speakers. It shares the same sound world as *Phases*, but is somewhat more transparent and, of course, moving in the stereo field. *Ergodos* refers to the ergodic, or static, form Tenney was after - and the piece does have that Cageian sense of time suspended as fleeting, short gestures scurry from one space to another.

The final two pieces on the disc, *Fabric for Ché* and *For Ann (Rising)* couldn't be more different. *For Ann (Rising)* consists of nearly 12 minutes of slowly rising Shepard tones, ultimately rising out of existence. Regenerated by Tom Erbe, from Tenney's Csound scripts, it's a fun example for teaching purposes but perhaps difficult to appreciate as more than a conceptual adventure. On the other hand, *Fabric for Ché* is - as Polansky remarks - a most surprising piece. Politically inspired, this is a densely-woven fabric quite unlike the pointillistic textures of the other works here. It presents a continuous wall of sliding noise, glissandos slowly grinding past each other like great hunks of granite. I loved it.

Tenney's contribution to the development of computer music is undisputed, and this CD is a valuable documentation of his early composition. Undoubtedly coloured by the technology and aesthetic of its time, the music still sings.

Katharine Norman

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If you'd be interested in reviewing CDs on a regular basis, please contact Katharine Norman (K.A.Norman@shef.ac.uk), editor of Array. New reviewers from outside North America are particularly encouraged.

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--Gary Singh

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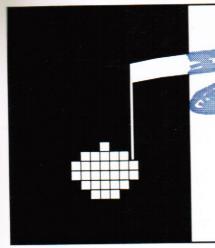# International Computer Music Association

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