Reviews

Events

Sonic Arts Circuit VIII: International Electronic Music Festival

American Composers Forum, Boston Area Chapter & Boston Cyberarts Festival, Institute of Contemporary Art, Boston, Massachusetts, USA, 27–28 April 2001

Reviewed by David Cleary
Boston, Massachusetts, USA

“It was the best of times, it was
the worst of times . . .” This
opening phrase pair from the novel
A Tale of Two Cities by Charles
dickens aptly describes the gamut
of compositional quality in the
two concerts presented by the
American Composers Forum–
Boston Area Chapter under the
banner “Sonic Circuits VIII.” In
short, pieces ranged from first rate
to abysmal.

The best items on the Friday concert
proved very satisfying. Dennis
Miller’s video-with-music entry, Sec-
ond Thoughts [2000], is eerie and dis-
quiting, full of striking, often
hallucinogenic abstract images and
highly evocative music. It possesses
a strong feel for form and a nicely
gauged sense of flow. Flight [1989] by
Ezra Sims pits a warm yet forceful
sound against a prerecorded tape teeming with undulating sounds suggestive of highly stylized organ
music. The work’s twisting, oozing
microtonal pitch constructs keep the
listener enjoyably intrigued. Flautist
Kirsten Wegeman performed the solo
part ably. Charles Dodge’s ethereal
and charming tape piece Fades,
solves, and Fizzles [2000] finds
discreet variety within its predomin-
antly high tessitura sound world.
Cast in a multi-layer variation for-
mat, the piece does become a bit pre-
dictable as it unfolds, but it knows
when to stop. Unfortunately, this is
more than can be said for the re-
mainder of the program. Noises
[1999] by Amnon Wolman, Jorrit
Dijkstra’s Improvisation [2001], and
two works by Ron Kuivila,
TECHOIRAMA (obsessive/compul-
sive) [2001] and The Beatification
of the Facsimile Tone [2000], all suffer
from the same ills that plague Lou
Reed’s album Metal Machine Music:
glacial unfolding, non-existent struc-
ture, monochromatic sonics, and
staggering length. The less said about
these self-indulgent entries, the
better.

The Saturday concert had its share
of winners as well. Ileana Perez-
Velazquez’s . . . Un ser con unas alas
eormes . . . [1996] surrounds its
showy, challenging solo violin part
with a fragmentary tape backing that
adapts material from John Cage’s
Freeman Etude No. 17. Despite its
angular and dissonant sound world,
this nicely constructed piece proves
highly effective. Kristina Nilsson
played the violin part with flair. Lu-
nar Nutrition [2001] by David Bryant
and Timaeus I and II (both 1999) by
Neil Leonard gave their jazz quintet
and computer-sounds combination
fruitful platforms for some splendid
improvising. Mr. Bryant [keyboards]
and Mr. Leonard [saxophones/com-
puter sounds] were solidly bolstered
by Badal Roy [tabla], John Lockwood
[drums], and Bob Gullotti [drums].
Arun Chandra’s the gift of gab [1997]
and Richard Lerman’s Border Fence
and Changing State 6 (both 2000)
were less successful. The first of
these, a solo tape entity, employs
bland sounds and progresses predict-
ably, while Mr. Lerman’s sound-
scapes are shapeless, eccentric, and
timbrally static. Changing State 6
did provide what is likely the most
unusual program note sentence en-
countered in some time, though:
“Since 1986, I have written many
pieces for self-built metal micro-
phones which are played using small
jeweler’s propane torches.” Would
that the piece itself had been as fas-
cinating.

True enough, this was a decidedly
mixed pair of evenings. But, if the
pun be pardoned, the best items
heard here pleased like the dickens.

Ought-One Festival

Kalvos & Damian New Music Bazaar
[KGDR-FM], Montpellier, Vermont,
USA, 25–26 August 2001

Reviewed by Jennifer Hymer
Münster, Germany

The Ought-One Festival took place
in Montpellier [Vermont], America’s
smallest state capitol, on 25–26 Au-
gust 2001. Bringing together 160
composers and performers for 40
concerts of all possible, non-
restrictive musical genres, its subti-
tle, “The Woodstock of Non-Pop,”
was aptly earned.

The event was organized by the
hosts of Vermont Public Radio’s
award-winning radio show “Kalvos
& Damian’s New Music Bazaar,”
composers Dennis Báthory-Kitsz and
David Gunn. Wishing to showcase a
broad stylistic range of musical
forms at the forefront of the 21st
century, what started off as a small
local event quickly became an inter-
national one, with appearances by
performers and composers ranging
from the New York downtown mu-
sic scene, Dartmouth College, the
Belgian Logos Ensemble, and Ensem-
ble WireWorks from Germany, to
computer music pioneers Clarence

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Barlow and Larry Austin, as well as composers Ji Hi Kim and John McGuire, among many others. The use of electroacoustic and computer means in a variety of musical expressions was highly prevalent among the artists in attendance.

Ought-One was dedicated to Clarence Barlow, whom Mr. Bathy-Kitsz and Mr. Gunn attribute as an ongoing inspiration for their aesthetic philosophy. “Clarence, through his boundless energy and good humor, sowed seeds years ago which are blooming on this Festival weekend” (Bathy-Kitsz). His ensemble piece, Le Ciseau du Tom Johnson, was premiered by Ensemble NonSequitur, with particularly notable playing by the young cellist, Ha-Yang Kim.

The New York presentations consisted of a cast of glamorous, well-rehearsed performers and composers showing the influences of theater, New Age, synthetic sounds, and [despite the festival’s subtitle] popular music. Flautist Margaret Lancaster combined elements of cabaret and comedy in her solo flute and electronics program, performing pieces by Karlheinz Stockhausen, Jon Appleton, and Kaija Saariaho. In Mr. Appleton’s Stop Time, for a tap-dancing flute player, musical excerpts are recorded live and then played back, providing Ms. Lancaster with her very own immediate dance accompaniment. Bass clarinetist and composer Michael Lowenstein achieved stunning results with his works for electronics, sampled sounds, and virtuoso playing. In At The Refrain: Day In, by means of electronic “clothing,” Mr. Lowenstein is able to trigger an amazing assortment of sampled sounds and music through physical gestures in an amusing theatre piece that describes his “typical” day in New York City. Composer and Village Voice critic Kyle Gann’s Caster and Sitting Bull is a one-person microtonal opera, in which, through his own narration-song technique accompanied by a pre-composed microtonal background, he delves into the conflicting psyches of two men representing opposing stances of America’s historic past. Other New Yorkers included composer/singer Eve Beglarian, pianists Nurtt Tilles and Eleanor Sandresky, and violinist Martha Mooke.

The academic environment of Dartmouth College was represented by faculty composers Larry Polansky, Jon Appleton, and Eric Lyon. In Mr. Lyon’s Stumpery Party Massacre, an almost-piano concerto with percussion, his protest of U.S. military policies is marked by virtuoso piano improvisations by the composer himself and harsh drum calls by the percussionists.

Another feature of the festival were the 15 installations set up in a “Dream Room” by composers such as Maggi Payne, Anna Rubin, Karlheinz Essl, and Larry Austin. In Mr. Austin’s Williams [re]Mix[ed], for octophonic computer music system, based on the formula of John Cage’s Williams’s Mix, he has composed five ensuing variations built from categorized elements such as wind, electronic, and manual sounds. Taking full advantage of today’s digital technologies, Mr. Austin has created a surprisingly tangible and sensuous version of Cage’s pioneering, pointillistic tape piece.

Additional performances at the festival included Brenda Hutchinson performing her own Go Through Walls and Stuff Like That, Joseph Celli and Ji Hi Kim with their compositions for double reed and komungo, Gregory Beyer performing Elaine Thomazi Freitas’ a falta que ele me faz . . . for berimbau and electronics, and singer Beth Griffith performing John McGire’s A Cappella for voice and tape. Duo “Odd Appetite” gave a memorable rendition of Kaija Saariaho’s Pres for cello and computer, and Larry Polansky’s “Polo” guitar duo performed Mr. Bathy-Kitsz’s HighBirds for guitar and playback, among other pieces. There was also a lecture/demonstration by music researcher Manfred Clynes.

A Zip-Three Festival is planned for 2003 (see http://zipthree.com/ for details).

Publications

Makis Solomos, editor: Presences of/Présences de Iannis Xenakis


Reviewed by Martin Laliberté

Paris, France

Yet another publication on Iannis Xenakis!! One might think that this “well-known” composer had been properly studied over the last 30 years, especially after the significant impact his music had in the 1960s and 1970s. Clearly, this is not the point of view of the younger generation, of Xenakis’s children rather than his siblings, so to speak. An international symposium on Xenakis was held in Paris in 1998 under the leadership of Makis Solomos and Marianne Lyon. It included presenta-
After reading the book, one gathers that the study of Xenakis’s music has evolved significantly in the last decade. The contributions signal that the musical community is now getting over the shock of Formalized Music and the composer’s other theoretical writings. Obviously, the theoretical and technical aspects of Xenakis are still very much part of the field, but most of these contributions depict and discuss another Xenakis—closer to the real, multifaceted man, perhaps. It is now well known in Europe that for this composer, algorithmic and formal processes were only a means to attain a much more important objective: creating significant and original music. In fact, in his own late writings and teaching, Xenakis was surprisingly distant from the formal aspects of his music (the calculations evidently bored him) and preferred to discuss aesthetics and philosophy. The second generation appears to have followed his lead in this regard.

The first part of the book deals with the origins of Xenakis’s music. It includes an early text (1955) of the composer in its first French translation, discussing the specifics of Greek music; in turn, the ideas included in this article are used by Makis Solomos as a conceptual grid shedding a most interesting light on Xenakis’s music from his Bartókian early pieces to Metastaseis, his striking “debut” piece. Mr. Solomos also discusses the relationships of young Xenakis with serialism and with Olivier Messiaen. That discussion is amplified by Ricardo Mandolini’s text in the second part of the book, as we will see. Another starting point for Xenakis was his contact with Pierre Schaeffer and the early musique concrète group. François Delalande and Evelyne Gayou, of the Institut National de l’Audiovisuel/Groupe de Recherches Musicales [INA/GRM], present several useful historical facts on the first years of that studio and Xenakis’s work there between 1954 and 1962. For instance, they underline that, in 1958, as an associate member of the group, he took part in a sub-group pondering the relationship of music and mathematics, clearly a forerunner of the essential EMAMu, Xenakis’s own research center. The two authors also discuss the gradual divergence of the composer from Schaeffer, especially because of the latter’s attitude towards cybernetics and computers, and Xenakis’s leaving the group, yet on rather good terms. This article offers a second conceptual grid needed for an understanding of Xenakis’s formative years.

That part of the proceedings also focuses upon the lesser-known late period of the composer’s output. Typical of the distance underlined in the introduction of this review, James Harley proposes an esthetic, rather than the usual poietic, analysis of the orchestral works starting with Jonchaies (1977). He presents [in English] Xenakis’s concept of “sonic event,” akin to Schaeffer’s “objet sonore,” as an analytical tool, in order to put forward the global and perceptive [esthesic] aspects of the music, rather than its inner micro-levels and the composer’s [poetic] point of view. This detailed and solid communication is filled with graphs and excerpts of important works, as well as useful analyses. The illustrations, belying the book’s nice cover, encounter an editorial problem: for economical reasons the proceedings were printed in small type on lesser quality paper, which is a shame. The quality of the contents of this book truly begs for a proper edition. However, neither the authors nor the editors are to be blamed. The problem, rather, is that...
of academic financing. Let us hope that the success of this first edition will finance a better quality hardcover one.

Miha Iliescu studies the works of the 1980s onward. In his provocative view, the last evolution of the composer can be linked to postmodernism or, even, neoclassicism: the striking glissandi of the 1950s become melodies, the sound clouds become chords, and the arboresences become polyphonies, thus revealing the relationships of those “strange” musical objects to their “ancestors.” But, he argues, despite the fact that the musical works may thus seem less “extraterrestrial” than thought at first, Xenakis’s music did bring a significant shift of the musical universe by truly expanding the traditional western musical categories. This part of the book ends with an analysis of the last period by Mr. Solomos. In this rather short contribution, the author gives aesthetic keys to the late works and points out many paths of further study. He mainly discusses the new “asceticism” of the composer, his abandonment of effects for a much simpler and homogeneous, often homophonic in a constant fortissimo, and a few other pieces.

The second part of the book, Theories, opens with a discussion by Riccardo Mandolini of the similarities of the Boulezian and Xenakian utopias. Again, this is typically a second-generation point of view, in the sense that a reconciliation of antitheses is attempted. The Parisian art-scene is famed for its “chapel wars,” its often very tense conflicts between artistic points of view. As is well known, Pierre Boulez and Xenakis were the leaders of such vehemently opposed groups in the 1970s. It is thus surprising and provoking to see such an attempt at reconciliation. Despite the personal and seemingly aesthetic opposition of the two composers, Mr. Mandolini underlines the closeness, in truth, of generalized serialism and formalized music. In his view, both are formal discourses hiding an inner core of unformalizable musical intuition. The later evolution of both composers toward a simplified language, allowing much more “artistic free will,” appears as a confirmation of this hidden proximity. This was, perhaps, confirmed by the recent recordings of Xenakis’s music by Mr. Boulez’s Ensemble InterContemporain.

Agostino Di Scipio’s text (in English) studies some cybernetic aspects of Xenakis electroacoustic music, especially in the recent GENDY series. It also includes technical discussions of Analogique A+B, Concret PH, as well as some stochastic procedures. The author convincingly demonstrates that the algorithmic and formalized systems were means to unify all the compositional levels, from the microforms to the macroforms, in a single artistic gesture. Close in spirit to Mr. Mandolini, he also suggests an evolution of the composer from the “noise” of Information Theory towards a “deterministic chaos” point of view. He ends his discussion by a heart-felt appeal to reach for equilibrium between the humanistic and scientific study of the composer: “To orient ourselves toward the one, we have to stand up well rooted into the other.”

Benoit Gibson then proposes a concise and generally clear discussion of sieve theory, including some analytical materials for Persephassa, Terretektorh, and a few other pieces. This essay competently fills a serious gap in French about the theory; it is both clearer and simpler than Xenakis’s own discussion. For instance, the author proposes the matrix as a simpler and more powerful analytical tool than the usual graph paper and equations.

Angelo Bello presents [in English] a personal view of the UPIC computer music system that does not add much to what is already known, besides a few details concerning the peculiar and rich implementation of Frequency Modulation in the 1995 version of the UPIC. Sadly, his discussion of spatial issues is quite unclear. Jean-Luc Hervé tries to underline Xenakis’s relevance for contemporary music by the use of the “sound image” concept and a global, macroscopic approach. He also puts forward the proximity of Xenakis and Schaeffer. The author’s reasoning does not always convince me, but I do find worth mentioning his disdain of the tools (he compares the musical computer to a useless but unexciting washing machine!) to focus instead on the aesthetic results.

The third part contains the texts dealing with aesthetic and philosophical aspects of Xenakis. Joëlle Caulrier’s essay proposes an Adornian, “content of truth” point of view regarding Xenakis’s attempt to unify art and science (the saying in France goes that Xenakis “spoke music with the scientists and mathematics with the musicians”). She elegantly argues that Xenakis tries to express a truly contemporary view of humanity’s place in the universe, that he manages to create a music in his image, a music with [roughly translated]: “a great dignity in intensity, a relativized presence of humanity within the cosmos, a subtle use of time, both moving and expanded to a universal time-scale.”

Carmen Pardo Salgado analyses the role of abstraction in Xenakis’s work. This dense and well—thought-out text puts Xenakis forward as a
philosopher and, thus, relates him with others, especially Aristoxenus, Parmenides, and Plato. She also discusses his work in the light of philosophical aesthetics and critically describes his approach to the visual arts. In her view, Xenakis has successfully tried to use abstraction as a way to understand and order the essential discontinuity of the world, or, at least, of man’s discontinuous perceptions.

Matthieu Guillot proposes another philosophical text, attempting a cross-study of Xenakis’s music with philosopher Michel Serre’s views of the late 1960s, especially those gathered in *Music and Background Noise*. Mr. Serre suggests that Xenakis’s music constitutes an “aleatoric protomusic,” a music of the noises of the world. This contribution may be on the whole worth reading, but the discussion would be more convincing if the author had been a bit less certain that we are still that much surprised by Xenakis’s music and if he had been more critical of his neo-mimetical point of view.

Cândido Lima’s essay attempts a sociological study of the Xenakis phenomenon, especially his popularity with young or unskilled audiences. The UPIC system is used as an example. Some of the author’s arguments and ideas are worth notice but this text is unfortunately undermined by a generally unclear and fuzzy style.

The fourth part is much more technical and analytical, which, in agreement with Mr. Di Scipio, I find necessary for a balanced view. Antonio Lai uses some concepts derived from Thomas Kuhn as a conceptual grid for a detailed study of *Nomos Alpha*. Mainly, he proposes that Xenakis has brought a solution to the crisis of the tonal paradigm with his sieve theory, a good alternative to dodecaphony or serialism. However, the author is not always convincing, particularly on the notion of “musical progress.” This study is nonetheless useful for one who wishes to get under the surface of this complex piece, and it makes good use of some of Mr. Solomos’s prior study.

Helena Santana has studied the orchestration and movements of sounds in *Terretetkort*. This text constitutes a good starting point for further study of the piece, clear and abundantly illustrated, but remains too much on the descriptive side for my taste. I would have wished a deeper study of the aesthetics involved.

Ronald Squibbs raises (in English) important and convincing questions about the methodological aspects of analyzing a piece by Xenakis. He uses *Evryali* as an example. This study is answered (again in English) by another of the same piece by Linda Arsenault, which looks at the work in a programmatic way, a depiction of the fight of Perseus and Medusa. Her article is based on interviews with pianists Marie-Françoise Bucquet and Claude Helffer.

Ellen Rennie Flint then studies the experience of time in *Psappha*. This text (in English) combines a clear description and use of sieves and of Greek poetical metrics, as well as some ideas of Jean Piaget, in order to study some psychoacoustical problems about time.

Beatrix Raanan analyses *N’Shima*, in particular the result of the convergence of two formal approaches: one based on the text and the other on the breath, noises, and singing. This is a well illustrated and analyzed contribution, showing the relationship of the noises and extraneous sounds with similar effects asked of instruments. Saxophonist Serge Bertocchi then looks at *XAS*, for saxophone quartet. This detailed study even raises the matter of potential “mistakes” in the score, or is it just another case of “warping the results” of a system for musical reasons?

Finally, Peter Hoffmann discusses the use of resynthesis as an analytical tool for electroacoustic music in general and for *Gendy3* in particular. This is a fine example of this most interesting and fruitful trend in recent musical analysis. It also provides good insight on an important non-standard synthesis method. I am convinced that this well-illustrated text will be of much interest for *Computer Music Journal* readers.

The last part of the book comprises a text by Xenakis from 1980, previously unpublished in French, and three studies of his architectural works and his *Polytopes*. All contributions are from architects, thus helping to put that aspect of his work into perspective. The three architects underline the premonitory aspects of Xenakis’s work and its relevance for today’s architecture. Xenakis’s text deals with the correlations between the public and the sources, theatrical and auditory. Five aspects are examined: size, spatio-temporal relationships, the nature of the sources, types of “receptacles” for the sources, and the public and technology. The examples are taken from his *Polytopes*. This text is illustrated by the author, and thus constitutes a primary source that can prove useful, despite its modest ambitions.

Elisabeth Sikiaridi’s contribution examines (in English) the concept of “morphologies” in Xenakis’s architecture, the Philips Pavilion in particular. The author, after explaining why the Pavilion long remained minor for architectural studies, proposes a new examination of it in the light of the computer-aided evolution of the field and, even more importantly, its recent attempts to
include multimedia and to create hybrid spaces. The study also includes a needed comparison between the architectural approaches of Le Corbusier and Xenakis. For the author, Xenakis’s main contribution to the field is of aiming for a transfer of concepts and procedures. As an example, she describes the façade of the La Tourette monastery as being musical, closely related to the composer’s ideas, while *Metastaseis* makes a clear use of the hyperbolic paraboloids then fashionable with architects.

Philipp Oswalt devotes his communication (in English) to the notion of densities in Xenakis’s architectural works. He is interested in the artist’s dynamic and ever-evolving conception of space. Examples are taken from the *Polytopes* and the Philips Pavilion. The last essay, by Sven Sterken, studies the ruled surface as a theme in the work of Xenakis. For the author, this aspect reveals a search for a parametrization of space. The illustrated examples are taken from the Philips Pavilion, the *Polytopes* and *Diatope*, the *Cosmic City*, and his little-known design for the *Cité de la Musique* in Paris.

To conclude, I found reading these proceedings globally rewarding and enriching, despite my few criticisms. They simply must be consulted for any serious work on Xenakis.

**Rocco Di Pietro: Dialogues with Boulez**

Hardcover, 2001, ISBN 0-8108-3932-6, US$ 35.00, 109 pages, foreword (Paul Griffiths), bibliography, index; Scarecrow Press, Inc., 4720 Boston Way, Lanham, Maryland 20706, USA; telephone (+1) 301-459-3366 or (800) 462-6420; electronic mail custserv@rowman.com; World Wide Web www.scarecrowpress.com

Reviewed by alcides lanza
Montreal, Quebec, Canada

A somewhat disappointing small volume in three chapters, *Dialogues with Boulez* does not seem to be a significant contribution to the understanding of this important and often controversial contemporary music figure. The book does reveal, though, aspects of Pierre Boulez’s personality, including his acerbic viewpoints and harsh statements about many of his contemporaries.

The first chapter sheds some light on Mr. Boulez’s compositional procedures, and his need for links with literature. It also clearly establishes his penchant for constantly modifying and, at times, never finishing certain of his works. For example, Mr. Boulez states in his lecture “The Work without an End”: “The question, more specifically, was the possibility or impossibility of having a work closed or, on the contrary, to have a work open—which means examining various transformations until you are able to ask questions about what is the actual ending of a work.” Quite revealing. There are comments concerning the influence of the French writers Stéphane Mallarmé and Marcel Proust, and of the Italian composer and conductor Bruno Maderna.

Mr. Boulez elaborates on the use of quotations (by himself and others), with interesting comments on Richard Wagner’s *Siegfried Idyll*, cited by Wagner again during the third act of *Siegfried*. “You find the same ideas, the same thematic motives...the material is enmeshed in the fabric of the larger whole of the work but in *Siegfried Idyll* this same thematic material is rather separated, juxtaposed, and does not really mix well.”

The composer/conductor is critical of Karlheinz Stockhausen, Robert Schumann, Gustav Mahler, and others. In all cases, he values the “moment form” aspects of quotation music, but denigrates the absence of the development of ideas. Of Mahler and his symphonies he says, “It is very strange for me when you have a kind of quote in these symphonies from *Das Knaben Wunderhorn*, which he cannot develop. You know it’s a quote. The idea itself is self-contained, a kind of moment form, and it is impossible for him to develop this at this point.”

Many of the questions posed by Mr. Di Pietro in these dialogues are more like statements. In several cases there are actually a series of questions, comments, and asides followed by another question, the whole lacking focus. To his credit, Mr. Boulez bravely tries to reply to these, but he himself ends up taking convoluted paths to arrive at an answer. Some careful editing (and perhaps review by Mr. Boulez?) would have helped to clarify these passages.
The most positive aspect of this book is in knowing that the composer is active, that he is conducting less and composing more, and that he continues to be involved with computer music and new technologies. Four pages are dedicated to reproductions from the manuscript of *Anthèmes II*, for violin and computer processing. This is found in chapter 3, The New Boulez, and a few pages of text feature the composer explaining aspects of the piece. These are solid explanations that give us a glimpse of what the computer interaction with the violin is. Regrettably, the musical examples themselves, hard to read as presented in the book, have no clarification or explanation of symbols, computer interactivity, or instruments.

**Riccardo Bianchini and Alessandro Cipriani: Virtual Sound: Sound Synthesis and Signal Processing—Theory and Practice with Csound**


Reviewed by James Harley
Moorhead, Minnesota, USA

Until quite recently, if you were a newcomer to the sound synthesis program, Csound, you would not have been able to get much help from existing documentation if you ran into problems or found the language puzzling. If you were teaching a computer music course that included Csound, you would most likely have had to develop your own set of tutorials and assignments. If we judge by the widespread popularity of the free software, then these clearly were not major problems to Csound’s acceptance within and beyond the computer music community. Be that as it may, we now have a veritable cornucopia of learning materials available, and *Virtual Sound* is one of the best sources for tapping into this wealth.

Authors Riccardo Bianchini and Alessandro Cipriani (their biographies are given at the back of the book) are highly experienced practitioners and instructors of Csound. Mr. Bianchini, who has been teaching electroacoustics and computer music in Italy since 1974, is also the developer of WCShell, a “front end” for Csound that runs on Windows-based computers. They have structured the text in a logical way, progressing from basic concepts and programming techniques through various synthesis and processing methods to MIDI and other involved topics. It is always possible to organize a sequence of topics in different ways—one might include amplitude and frequency modulation in a section together with additive and subtractive synthesis, for example—but the most important concern is the clarity of the presentation. On that count, *Virtual Sound* succeeds admirably.

The opening chapter, “Csound: How It Works,” begins with simple discussions of the concepts and basic components of orchestra and score files. From there, additional elements are introduced incrementally, with each new function or technique clearly explained. The Csound code given in the text is also accessible on the CD-ROM, so users can try the programs out right away, even if they haven’t yet sorted out what text editor to use, and so forth. The Extensions sections, found at the end of several chapters, goes into more detail regarding the software, programming issues, digital audio, and other issues. One could skip over those sections and still gain a good understanding of Csound and digital synthesis, but these explanations are nonetheless extremely useful.

Once the user is up and running, the book moves on to chapters on additive and subtractive synthesis, introducing new “opcodes” (functions or utilities of Csound), and gradually building up the repertoire of available tools and techniques. Other chapters include Stereo; Control Signals, Vibrato, Tremolo, 3-D Sound, Digital Audio (discussing concepts rather than programming techniques); Sampling and Processing; Sound Analysis and Resynthesis; Using MIDI Files; Real Time MIDI Controls; Amplitude Modulation and Ring Modulation; Frequency Modulation; Global Variables, Echo, Reverb, Chorus, Flanger, Phaser; Convolution; The Table Opcode, Wave-shaping Synthesis, Vector Synthesis, Granular Synthesis and Formant Synthesis, Physical Modeling Synthesis; and Csound as a Programming Language. It is apparent that...
the scope of the book is large; this would be an ambitious program of study to get through in one term. But the foundation for a comprehensive study of the fundamentals [and more advanced techniques and issues] is laid out here with care.

The authors have included, as appendices, discussions of Mr. Bianchini’s WCShell, for those users working on the Windows platforms, and issues relating to mathematics and trigonometry (use of logarithms, decibel conversions, angle measures, and so forth).

The final section of Virtual Sound, comprising over 100 pages, is devoted to specialized topics. These chapters are written by other Csound experts who have developed particular applications. The score and orchestra files are not included on the CD-ROM, unfortunately, and direct links to authors’ Web sites are not given. Richard Boulanger’s Csound [MIT Press] contains a large collection of similar such contributions, as well, some in the text and some on CD-ROM. If one is interested, then, one can gather from these two sources a great deal of the work being done in the Csound world. Some are of limited interest, but that does not detract from their value for anyone who may be drawn into those particular concerns. In the volume under review here, these research/application articles include: “Csound and Linux” by Nicola Bernardini; “Generating and Modifying Scores with General Purpose Programming Languages” by Mr. Bianchini; “Dyad Controlled Additive Synthesis” by James Dashow; “Sound Synthesis by Iterated Nonlinear Functions” by Agostino Di Scipio; “GSC4: A Csound Program for Granular Synthesis” by Eugenio Giordani; and “DirectCsound and VMCI: The Paradigm of Interactivity” by Gabriel Maldonado. Virtual Sound was first published in Italian, and it is a tribute to the strong computer music community in that country that such a range of substantial contributions comes exclusively from there.

The text is rounded out with a list of references, a list of related Web sites [reproduced, with links, on the CD-ROM], an index, and finally, a handy list of the Csound opcodes for easy reference.

The accompanying CD-ROM contains copies of Csound [for the Macintosh part, those versions are PPC 3.47 and PPC 4.01], the orchestra and score files for all of the examples given in the main part of the text, and any necessary sound sample and analysis files for the programs in the book. Unfortunately, there is no mention of the contents of the CD-ROM anywhere in the book. Considering the publication’s pedagogical intent, it would have been good to include an index or explanation to help orient users, especially those who might be approaching Csound, command-line programming, and perhaps digital audio, for the first time. Having said that, it isn’t too difficult to match the names of the orchestra and score files on the disc, listed alphabetically, to the filenames given at the top of each code example in the book.

Along with these utilities, there are a couple of rather more mysterious folders. One, named Keller, turns out, upon investigation (which involves clicking through various subdirectories to find an HTML folder, launching a browser then finding the Introduction.html file) to be a research project based on applying granular synthesis to the processing of environmental sounds by then-Simon Fraser University student, Damián Keller (the title, however, “Introduction to the Ecological Approach,” isn’t all that enlightening without further reading). This work seems similar to the contributions to the book’s Readings section, and was perhaps a late addition. There is also a folder titled Galileo (standing for Graphic and Algorithmic Music Framework), which appears to be a more comprehensive composing environment incorporating a [real-time] version of Csound.

Particularly useful on the CD-ROM, if the user is also connected to the Internet, is a page of links to various Web sites concerning Csound [and related topics]. From there, one can find all manner of examples, discussions, institutions, and versions of the software for other platforms. For novices, an investigation of these links will do much to persuade them of the liveliness and interactivity of the Csound community.

Virtual Sound is a valuable addition to the growing collection of texts concerned with computer music. The writing is clear, the organization is well-considered, and the additional resources are useful. As an aid for learning to work with Csound, this book is pretty much as good as it gets.

Simon Emmerson, Editor: Music, Electronic Media, and Culture

Hardcover, 2000, ISBN 0-7546-0109-9, US$ 69.95, 252 pages, notes, references, discographies, index; Ashgate Publishing, Ltd., Gower House, Croft Road, Aldershot, Hampshire GU11 3HR, UK; telephone (+44) 1252-331-551, fax (+44) 1252-317-446; electronic mail info@ashgate.com; World Wide www.ashgate.com/

Reviewed by Anna Rubin
Oberlin, Ohio, USA

The acousmatic aesthetic, first pronounced by Pierre Schaeffer in the 1950s, emphasized the timbral prop-
erties of a given sound as the primary terrain for the composer, largely ignoring that sound’s real world origin. Some 50 years after such an approach was first expounded, British composer/theorist Simon Emmerson has edited a slim volume laying out the psychological, cultural, and aesthetic bases of an expanded and vastly altered compositional practice in which narrative, association, cross-cultural elements, and historical reference share the stage with timbral development. Mr. Emmerson’s earlier essay collection, The Language of Electroacoustic Music, clarified and summarized a fairly wide variety of aesthetic issues and compositional strategies in electroacoustic music extant through the 1980s. This new book has the more focused goal of validating and establishing a theoretical justification for cross-cultural, postmodern, and “transgressional” musics which breach boundaries of low and high art, genre and creative authorship, through the ubiquitous means of digital technology.

The nine essays in this collection are divided into three larger sections: Listening and Interpreting; Cultural Noise; and New Places, Spaces and Narratives. The authors are all based in the United Kingdom and are variously active in composing, performing, broadcasting, lecturing, organizing, and writing on the subject of new and electroacoustic music.

The groundwork for the entire book is laid in the opening salvo of the first section, an essay by Luke Windsor that focuses on the work of psychologist James Gibson and, specifically, his concept of “ecological listening.” Mr. Gibson sees perception as the result of a dynamic relationship between the organisms and the environment, such “that organisms are directly sensitive to such structure” (p. 19). The kernel of this argument is that Mr. Gibson and Mr. Windsor grant a “lawful” integrity to the material world with which we interact in a reciprocal relationship, and we ignore the context, quality, and history of our sonic environment to our musical impoverishment.

The author argues for multivalent listening and contextually determined aesthetics. He illustrates his point by short analyses of music by composers including György Ligeti, Pierre Henry, and Fred Frith, examining such issues as the difference between the scored work and its supposed “correct” interpretation, source recognition, and notions of received instrumental practice.

In Ambrose Field’s essay, “Simulation and Reality: The New Sonic Objects,” the author endeavors to extend our notions of the compositional use of real world sounds, allowing for the compositional manipulation of their “extramusical significance.” He points out four different aspects of a work’s “landscape morphology,” namely, the hyper-real, real, vital, and non-real, in which the quality of simulation is defined. In effect, he argues for a link between “musical processes and extrinsic contextual information.” He makes useful distinctions between musical metaphor and simile and extends Denis Smalley’s notion of transcontextuality.

The third essay in this first section, “Beyond the Acousmatic: Hybrid Tendencies in Electroacoustic Music,” is by Simon Waters and is a particularly useful survey of seven “emergent tendencies in electroacoustic music and in the arts generally.” These tendencies are: new technologies, cultural pluralism, perception of authority, tradition and innovation, representation, economics, and environment. Mr. Waters manages to cogently summarize quite a lot of information and probe beneath several of the frequently mouthed generalities about the digital revolution. For example, in his comments on “storage,” he observes that “inefficiency and forgetting” have been lost to a great degree and that therefore “there is a sense of loss in the knowledge that filtering processes must now be consciously constructed . . . [P]olystylism and musical eclecticism [are] not only . . . a rejection of modernist predilections for formal coherence but [a] simple mechanical adaptation to the inadequacy of human memory” (p. 58) in the face of the vast amounts of potential musical material available.

Thus, the author avoids both the triumphalist and apocalyptically negative view of the new digital technologies. This essay will be of particular use for instructors in electroacoustic music courses.

The second large section on Cultural Noise opens with a reprint of Chris Cutler’s classic, “Plunderphon-
ics,” a marvelous overview of “sampling culture.” His take on the ever-present relationship between low and high art is especially useful while his short sections recall the form as well as the content of much influential art criticism from such writers as Marshall McLuhan and Walter Benjamin (while illustrating a point of Simon Waters’s that authors in the older medium of print will more and more be influenced by the speed/cross-cuts/associational linkage afforded so easily by digital media).

Mr. Emmerson’s own essay—inquiringly titled “Crossing Cultural Boundaries Through Technology”—is an instructive account of the various issues involved in his collaborative work with the Indian ensemble, Shiva Nova. He examines such matters as notation, the relation of composer and performer, the intervention of technology in cross-cultural work, and the fixity/identity of the given piece wherein traditional performance practice (such as that of classical Indian music) and improvisation are intrinsic. His detailed descriptions are particularly useful in understanding his process for working with the ensemble.

“Cacophony,” by Robert Worby surveys the exploitation of noise in both low and high art musics in the last 100 years. He introduced me to “skittle” (a British punk variant) but surprised me by ignoring Hip-Hop and its widespread influence, both here in the United States and abroad.

The concluding section of the book begins with Kirsten Glandien’s essay on new radio art. It catalogues the tremendous variety and cultural diversity of radio sound work and shows how radio’s promise for innovation is being realized on the Internet. Her perspective is a valuable one and is ignored in older surveys of electroacoustic music.

Mr. Emmerson’s second essay in this collection is his attempt to “extend Denis Smalley’s notion of the ‘indicative field’ to include sounds which are themselves heard nowadays primarily through the ubiquitous loudspeaker and to relate these to” cultural and everyday urban experiences. (Mr. Smalley is frequently quoted throughout the book and has clearly been a major reference point for Mr. Emmerson and company.) Thus, a recognizable lick from a funk bass or a 2-sec vocal riff become “gestural” refers to as much recognizability and metaphoric power as the sound of a door slamming. This insight acknowledges and theoretically locates the time-honored use of quoted musical materials all the while clarifying the widespread low-brow cultural practice of sampling.

The concluding essay in the book is by Katharine Norman, and is a highly imagistic and associative journal of her intent listening to Paul Lansky’s Things She Carried and Luc Ferrari’s Presque rien avec filles. Her writing calls to mind the innovative essays of the American writer Deana Metzger, among others, who wrote in parallel columns, allowing herself to comment upon her own writing in medius res. Ms. Norman uses different styles and sizes of type to differentiate different perceptions and is intent on defining how voice, sound, and music interact to create new dramatic listening spaces. Occasionally impenetrable, I still appreciate her writing and am eager to rehear these works now with the benefit of her intense listening. What more could Mr. Lansky and Mr. Ferrari ask?

By book’s end, some amount of cross-reference and repetition is a bit dulling, but understandable in light of the difficulty of slicing entirely separate topics for each essayist. Electroacoustic musicians will find this book stimulating and a welcome balance to our literature, which is so heavily weighted towards the technical.

**Francesco Giomi and Marco Ligabue: L’istante zero, conversazioni e riflessioni con Pietro Grossi**

Softcover, 2000, ISBN 88-87027-65-X, 103 pages, illustrated, appendix, biographical note, list of works, bibliography, discography; Sismel – Edizioni del Galluzzo, c.p. 90, I-50029 Tavamuzze, Italy; telephone/fax (+39) 55-237-34-54; electronic mail galluzzo@sismel.it; World Wide Web www.sismel.it/

Reviewed by Giuseppe Rapisarda Paternò, Italy

As the title indicates, this book is an interview with Pietro Grossi, a pioneer of contemporary experimental music in Italy. In fact, he first founded the chairs of Electronic Music in 1965 and of Computer Music in 1984 at the Conservatory of Music in Florence, and he is the first Italian composer to work with computers. He found his vocation as a composer after some years spent as a cellist for the Maggio Musicale Fiorentino Orchestra; he was only 19 years old when he took up his orchestral career.

The book is divided into six chapters and each of them deals with a particular phase of Mr. Grossi’s musical and artistic life. The overall impression paints a portrait of a man who has looked at music as a child would, opening his enthusiastic eyes on a wonderful musical panorama. Francesco Giomi and Marco Ligabue (the authors of this publication) ask Mr. Grossi a set of questions that gives him the chance to recount the
history of his life from the beginning up to the present. He was a cellist, a composer, a teacher, and a promoter of contemporary music. It is touching to read in the first pages that “it was a big event when a colleague performed Gershwin’s *Rhapsody in Blue* at the Conservatory. It was an extraordinary thing for the school.” After reading this, one understands that this witness of the past century is speaking about his life and about a whole cultural milieu—including a musical environment in which contemporary music was not much promoted. Mr. Grossi gave impulse to the musical life in Florence by founding in 1960 the association Vita Musicale Contemporanea. Every year, from 1960 until 1967, this organization promoted concerts, and it had historical importance because of all the music and musicians these concerts brought to light. Not all the concerts were successful, some of them were contested by narrow-minded people, but many of the participating composers became fundamental representatives in the history of contemporary music.

Thanks to his musical activity, Mr. Grossi came into contact with many important musicians, including Franco Ferrara, Bruno Walter, Herbert von Karajan, Luigi Dallapiccola, Bruno Maderna, Willem Mengelberg, Leopold Stokowski, Wilhelm Furtwängler, Alfredo Casella, Richard Strauss, Sergiu Celibidache, and Igor Stravinsky. He also performed much contemporary music that would influence his future path as a composer. After becoming acquainted with some of the works connected with that tradition, Mr. Grossi applied mathematical processes derived from combinatorial analysis in his first compositions for chamber ensemble. He was attracted by this discipline because it gave him endless possibilities for variation. This methodological approach would also be present in his computer music experiments and compositions.

The second part of the book is dedicated to Mr. Grossi’s experiences in electronic music, computer music, and “homeart” (a word created by him). The relationship between this musician and electronic music began in the early 1960s in Milan at the RAI (Italian Broadcasting Corporation) Musical Phonology Studio, where composers such as Luciano Berio, Bruno Maderna, Luigi Nono, John Cage, Aldo Clementi, Franco Donatoni, and Giacomo Manzoni worked with the new technology. After his experience in Milan, Mr. Grossi founded in his own home S2F M (Florence Musical Phonology Studio), where composers and students could work. Every composition was a work-in-progress and could be used to compose other works by the same composer or by others. S2F M organized sound installations in art galleries, museums, and particular architectural locations. In 1965, it was transferred to the Florence Conservatory.

In 1967, Mr. Grossi began using a computer built by Olivetti General Electric to play traditional music scores. After this initial experience, he applied to the IBM Center for Research in Italy and to the CNUCE (University National Center for Electronic Calculus); these organizations placed their computers at Mr. Grossi’s disposal and he was able to code programs to create and modify traditional scores and new works.

The most recent of Mr. Grossi’s artistic experience is named “homeart,” and it was presented for the first time at the Venice Biennial Exhibition, “New Atlantis: The Continent of Electronic Music.” This experience of electronic art comes from Mr. Grossi’s desire to express himself in the field of graphics too, following the same principles used for his computer music creations. This kind of art allows the artist to work at home, thanks to a personal computer, and his house becomes like a “gallery at home,” or a “permanent installation.”

In my opinion, the purpose of this book is to provide readers, students, and scholars with the possibility to enter into contact with Pietro Grossi’s artistic experience from the beginning to recent times, presented in a light, informal way. The editors organized the book chronologically, and this arrangement seems appropriate for an easy comprehension of Mr. Grossi’s musical path. It also helps to preserve continuity between the different phases of his artistic development.

John Rahn: *Music Inside Out: Going Too Far in Musical Essays*
This is a curious book, nestling in the epistemological crevice between a "greatest hits" album and an auto-Festschrift. Music Inside Out is, on the one hand, a selection of many of John Rahn's most provocatively influential essays and articles culled from various journals, especially Perspectives of New Music. On the other, the book celebrates the uniquely interdisciplinary brand of polymathematics practiced by Mr. Rahn in his three decades of inquisitive journeying to and from music theory. Thus, streams of musical, mathematical, and classical logic intermingle throughout the collection, further enriched by mystical, humanistic, and humorous tributaries.

However, as a "greatest hits" the work is incomplete: there is, for instance, little mention of Basic Atonal Theory (New York: Longman 1980), surely the work by Mr. Rahn most familiar to readers of this journal. Similarly, unlike a true Festschrift, the only contributor other than Mr. Rahn himself is his erstwhile colleague, Benjamin Boretz, who flanks the collection with an introduction to, and a summary of, the former's "determinitorialized" critical stance, to cite Saul Ostrow, series editor (p. viii). Indeed, Mr. Boretz's closing chapter, "Music As Anti-Theater," already functions as a thoroughgoing and lucid review of the book in which it is situated.

Notwithstanding the theft of this reviewer's thunder, then, Music Inside Out affords the academic community an opportunity to foreground two aspects of musical thought which all too often have been de-emphasized to the point of invisibility in contemporary music theory: firstly, the "penetrating and being penetrated by the other," (p. 30) to use one of Mr. Rahn's more vivid images, of music experience and life experience; and secondly, the many slips 'twixt the cup of axiomatic logic and the lip of music theory. This, one assumes, is the principal reason for the publication of a collection of articles of which all are readily available elsewhere.

Running through the collection is a skein of reflexive self-analysis and self-critique, from which generalizations about the nature of analytical praxis may be extrapolated. This tendency is most notable in the articles "Notes On Methodology In Music Theory," "Aspects Of Musical Explanation," and "How Do You Du [by Milton Babbitt]!"

"Notes" argues for strategies in which the theorist eschews the anthropology of distance, of studying, "say, a tribe in New Guinea as perceived through the cultural theory, or way-of-looking-at-the-world, of [the theorist's] native Scarsdale" (p. 80), for an analytic worldview in which "each composer, or each style period of a composer, or at the extreme, each composition, may be a musical microculture sufficiently differentiated so as to suffer loss of being under some Procrustean regime [such as top-down analysis]."

In "Aspects," the author explores such a flexible, piece-specific methodology as a plotting of points along four-dimensional continua, each analysis locating itself, according to the piece's needs, at points along the axes of "[1] analog/digital, [2] in-time/time-out, [3] top-down or concept-driven/bottom-up or data-driven, [4] theory of experience/theory of piece" (p. 51). Such flexibility allows the internal rigor of "digital," "concept-driven" analysis to mediate and be mediated by the external ad hoc-ism of "analog," "data-driven" analysis in varying degrees, dependent upon the music being analyzed.

The pitfalls of employing either approach in isolation are eloquently argued:

Analog explanations communicate a much fuller and more precise message than do digital explanations . . . but digital communications are supposed to be enormously more intersubjective than analog ones. If an analog communication ever does connect perfectly, so that . . . all communicators have precisely the same experience, we shall never know. Isomorphism of such experiences is untestable. On the other hand, digital or scientific communication is constructed just to maximize intersubjectivity, or at least
to maximize the testability, among a community of communicatees, of the isomorphism of what is communicated. Would anyone use a formalized theory to explain how to ride a bicycle? Or teach mathematics (or music theory) solely by empathy? (p. 59)

This kind of rudimentary reflexivity is tested analytically in the self-analysis of Milton Babbitt's 1951 song-cycle, "How Do You Die!," a detailed parsing of pitch-class and time-span patterns within the first few bars of the cycle, interspersed with invaluably trenchant self-critique.

The preceding analysis has glibly talked of "trichord-timespans," assuming that this concept made sense and could be applied to those sounds. Certainly there has not been enough "data" examined firmly to support these or any other theoretical apparatus... the utility of such concepts is to be taken on faith. (pp. 130–131)

In other words, without a great deal more explicatory theory, the seemingly piece-specific, "data-driven" analysis founders on the reefs of its own ill-defined top-down concepts.

Leading from this position, the second thought-motive developed throughout Music Inside Out is the idea that the terminological basis of current music-theoretic methodologies needs to be more logical, in the mathematical sense, rather than being content to leave epistemological lacunae where rigor should obtain. This conviction is most eloquently expressed in combative essays such as "Repetition," and "Logic, Set Theory, Music Theory."

"Repetition" constructs a tripartite taxonomy of repetition consisting of "lively" "repetetion," "zombie"-like "répétition," and "dead" "slavery" (p. 8). The differences between categories are ones of telos: "répétition" leads to a preformed image of the "repeated thing," and thus is closed and restrictive; in "repetition," the endpoint is not preformed, and points beyond the repeated thing to the "shaped thing," and thus is richer and more creative; whereas "slavery" equals boredom–telos-free repetition. Judging by the later condemnation of "an Americanized world pop 'culture,' dancing out its fatal anxiety in a purgative tarantella," (p. 21, "Differences") most Western commercial music of the last decade would fit snugly into this anti-teleological cul-de-sac.

The definitions themselves are not what is most valuable here: more significant is the care taken to define a musical phenomenon which has always been an unspoken "given" in music theory, rarely if ever defined beyond what Mr. Rahn terms "you know what I mean" (p. 112). It is extremely useful to remind ourselves (pp. 9–11) that the repetition of "a as then-a" depends on an abstraction from context; that "recognition is derived from cognition: cognition gives then-a, then abstraction gives a-from-then-a, which we recognize as a;" and that we recognize "A = [a, then-a]" by "play[ing] the record twice: [A, then-A]." Thus time itself becomes an unordered set, because A is one example of [a, then-a], and further instances modify the way that we recognize A. Perhaps most usefully [and deserving of further attention], just as both a and A are time-context-dependent, then "the temporal experience [a, then-a] is itself abstract in an essential way: a-for-Mary is not a-for-John," and thus all concepts of repetition are themselves contextual and person- and situation-specific.

The pressing need to define terms more concisely and precisely is explored in similar detail in "Logic," which highlights the clear blue water between axiomatic set theory and pitch-class set theory in terms of the clarity and precision of definition of its terms. In Mr. Rahn's theory, there are no "givens." Let the definition of "note" given below stand as a synecdoche for the other terms such as "rest," "time-adjacency," "arpeggiation," "neighbor," "level-analysis," and so on:

\[ x \text{ is a note IFF } x < z, < T_1, T_2 > \]

for some value of z, T_1, T_2 [p. 114], with "z" taking values that are pitches, "T_1," initiation times, and "T_2" release times, akin to the format of MIDI note-on/note-off messages minus the amplitude byte.

Again, the significance is not in the definitions themselves—an odd by-product of the "level-analysis" of Mozart's K331 opening theme [p. 121] is a distinctly non-Schenkerian, non-common-practice reading of the background levels—but in the acknowledgment that, without clarity and logic of rule-definition, contemporary music theory can end up as little more than the "unconceptual jargonized technical data-processing" condemned in Mr. Boretz's introduction (p. 2).

Occasionally, the use of extremely vivid metaphors to clarify a position might cause raised eyebrows and blood pressure in emotionally repressed British reviewers. For example, the exhortation to "return from the voyeuristic contemplation of the larger orgy to the closer pursuit of the particular nymph at hand" [p. 113] seems an egregiously lubricious device with which to switch the reader's attention from wider theory to the specifics of level-definition in "Logic." However, such colorful language is always informed by a polymath's keenness to draw parallels
from a lifetime of extremely broad education and experience, and from an underlying conviction in the connectedness of things.

However, it is hard not to come away from the reading of these articles without a nagging sense that, perhaps ironically, Mr. Rahn’s comments upon popular culture are not quite as polymathically informed as is the remainder of his argument. This suspicion comes to a head in the manifesto-like “What Is Valuable in Art?” where his personal aesthetics expand into something more absolute and global, with predictably problematic results.

According to the article, “people need real art” (p. 156) because of music’s status as “communicative action” (after Habermas). Such an art must be “aesthetic” (p. 148), in the sense of transcending use-value, and evince the following: “craftsmanship” (p. 149)—divine, bottomless, non-meretricious complexity; “expression” (p. 150)—reference to the wider world through complexity; “self-expression” (p. 152)—the authenticity of avoidance of meretriciousness, a sense of “music and the Sacred”—contemplation of unattainable Infinity (p. 153); and “originality” (p. 158)—defined by the circular acceptance of music’s “communicative” qualities.

Now, as a personal response to music favored by Mr. Rahn, this sort of categorization is unimpeachable. But, if the above is meant in any way to imply some absolutist definition of artistic “value” (which is certainly the case this reviewer reads it), problems arise. Chief among these is the fact that all of the criteria for artistic value expressed above seem designed to omit any possibility of pop-cultural artifacts achieving such status (with the possible exceptions of Madonna, the post-modern richness of whose music videos is discussed in “Differences,” and Jimi Hendrix, cited as an exception to the tendency of Rock towards “compliance” [p. 43] in “Centers, Dissenters”). “Aesthetic” value and “craftsmanship” are defined in terms of immanent complexity, which quality is at best tangentially relevant to commercial music, as are the complementary “expression” and “self-expression.” Similarly, a sense of communion with the Infinite is not generally a high priority for many pop musicians, and the author’s “originality” is rarely that of Rock. But what if we define these terms somewhat differently?

(Disingenuously) off the top of this reviewer’s head: what if, for example, “craftsmanship” is defined in terms of the complex reflection (by performer and listener, in different ways) of the cumulative osmosing of decades of listening to blues-scale solo ideas that one might find in late-period John Lee Hooker? Or “originality” in terms of the transcendence of classical norms of formal process that one might attribute to an extremely repetitive, non-varying, nine-minute Drum-and-Bass tune? Or “self-expression” as the rheumy nihilism of mid-1970s UK Punk Rock? These examples are taken at near-random from musics which fit this reviewer’s personal aesthetic, to illustrate not only the arbitrariness of that aesthetic, but also the arbitrariness of any such schema predicated upon what the UK pop music analyst Allan F. Moore has described as “rhetorical substitutes for ‘like.’” Mr. Boretz’s citation [p. 2] of Godfrey Winham’s critique of “unsupported jargonized ideological positing” by unnamed New Musicologists is surprisingly relevant here: “They can say these things, but why should anyone believe them?”

Such “unsupported positing” sits ill with the highly detailed, invaluable level of logical clarity elsewhere in the book, and also seems bereft of the similarly rich self-critique informing the other main strand of Music Inside Out. In spite of, or perhaps partially because of, its extrapolation of the personal into the absolute, this self-critique is based upon a profoundly logical sensibility whose ontological rigor (if not always whose analytical results) will continue to expand in influence in areas related to music theory in the coming century.

Scott D. Snyder: Active Noise Control Primer

Hardcover, 2000, ISBN 0-387-98951-X, US$ 59.95, 159 pages, illustrated, index; Springer-Verlag New York, Inc., 333 Meadowlands Parkway, Secaucus, New Jersey 07094, USA; telephone (800) SPRINGER; fax (201) 348-4505; electronic mail info@springer-ny.com; World Wide Web www.springer-ny.com/

Reviewed by Timothy Place
Kansas City, Missouri, USA

Controlling noise levels in various industrial, commercial, and residential environments is not new. Many techniques have been developed over the years to combat noise problems. Examples include building barriers and enclosures, and acoustically treating surfaces. These techniques fall under the rubric of passive noise control. In contrast, active noise control is an approach whereby noise is cancelled out by generating a phase-inverted version of the offending noise.

In concept this is a very simple technique. Its execution however, is plagued by many difficulties. Because of these problems it is implemented in less than 1 percent of all
Multimedia noise control applications. *Active Noise Control Primer* is a brief introduction to active noise control applications and the challenges present in designing a strategy for active noise control. Such strategies consist of several components. A reference microphone brings the sound into a control system that then digitizes the signal and calculates a corresponding signal to cancel it out. A loudspeaker then produces this canceling signal. Finally, a second microphone brings sound into the control system to measure the amount of residual noise in the system.

The challenges lie in the fact that the sound will change as it propagates away from its source. For example, sound travelling down a ventilation duct will be modified by the acoustic properties of the duct space. If the offending noise changes between the point where it is picked up by the microphone and where the speaker should cancel it, the active noise control strategy will be ineffective because the sound being produced by the loudspeaker is no longer an exact phase-inversion of the noise. A control system can be fine-tuned to adjust for how a given sound will alter as it travels. However, the sound alteration will vary over time with temperature, humidity, and age of the components. Latency in the control system must also be finely tuned in order to distribute the canceling waveform with the correct phase, which forms the basis of the technique.

Scott Snyder states that he is directing this book toward an audience with a mathematics or physics framework, and no background in acoustics or sound. Chapter 1 explains what active noise control is, albeit rather verbosely. Because chapter 2 presents fundamentals of sound, which is much more comprehensively covered in the standard texts of the field, it could be skipped by anyone who has a background in audio.

Chapter 3 begins the actual discussion about noise control. After brief explanations of power measurements, causes of noise and hearing loss, and a short description of passive noise control, the author engages in a lengthy description of active noise control. Chapters 4 and 5 discuss free space noise control and enclosed space noise control. Each employs a set of techniques having slightly different implementations. In some cases both free-space and enclosed-space techniques can be combined to provide an optimal noise control solution. Chapter 6 follows by dealing with the propagation of sound in ducts.

Chapters 7 and 8 discuss the heart of an active noise control system, the controller. This critical component is responsible for taking the input from the reference and error microphones, and calculating the canceling waveform to be generated from the system. The book does not attempt to provide enough information to enable the design or construction of a controller. The reader does gain however, an understanding of the basic concepts of how it works.

To implement an active noise control system, one would need to purchase a more substantive book. Mr. Snyder’s stated goal is to brief someone “contemplating active noise control for the first time or using a controller someone else has developed.” The book does this satisfactorily, and avoids detailed mathematics, signal processing information, and programming. The content of the book may not apply directly to most computer music activities; however, it may be useful for finding solutions to eliminating noises such as those created by ventilation ducts.

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**DEGEM: Klangkunst in Deutschland (Sonic Arts in Germany)**


Reviewed by Oliver Schneller
Paris, France

*Klangkunst in Deutschland (Sonic Arts in Germany)* is the title of the
first CD-ROM presented in both German and English by the German Society for Electroacoustic Music (DEGEM) in collaboration with the Aesthetic Strategies in Multimedia and Digital Networks project of the University of Lüneburg. The disc, issued on the Wergo label, contains portraits and work samples of seven "sound artists" currently living and working in Germany. As a special feature, DEGEM has included its International Documentation of Electroacoustic Music database (in FileMaker and Excel formats) containing a worldwide listing of studios for electronic music and a catalogue of 21,062(!) works written between 1901 and 1999 by over 4000 composers.

Five individual artists, Werner Cee, Michael Harenberg, Robin Minard, Jutta Ravenna, and Johannes S. Sistermanns, as well as the artist-tandem Sabine Schäfer/Joachim Krebs were invited to present themselves and their work with texts, pictures, audio samples, and spoken words. The CD-ROM seems a tremendous medium for the purpose of introducing artists who find themselves working in the zone between music and the visual arts with an emphasis on composed installations and interactive environments. After reading through the informative texts at their own pace, users have the possibility to get an impression of the spatial set-up of the often rather complex installations by viewing video-clips while listening to the actual acoustic responses. Pure audio files of a higher quality are provided for works where listening is the priority. Needless to say, both audio and video samples in their CD-ROM presentation convey merely an idea of the aura of the works presented. In reality, they may feature 32-channel spatialized sound or highly differentiated light choreography. One artist, Michael Harenberg, aware of this limitation, had the idea to create a new work especially for his contribution to the CD-ROM. His enjoyable "virtual interactive sound installation" PERSIMFANS transforms the graphic user interface into an interactive audiovisual experiential field which invites the user to freely browse through and interact with 15 virtual "rooms" appearing on the monitor. The sounds are also virtual in that they are based on physical modeling of flutes, percussion, and string instruments.

In spite of the fact that each of the contributors were given complete liberty to assemble their presentations according to their own wishes, the disc retains a graceful sense of unity with its engaging user surfaces. In addition, this release provides a vast source of information on the "state-of-Sonic-Arts," with links provided to individual Web sites as well as listings of publications and compact discs. (On a technical note: the various plug-ins that are needed to fully activate the HTML- and JavaScript-based applications have been conveniently included on the CD-ROM by DEGEM.)

The following provides a brief overview of the individual contributions. Werner Cee [b. 1953], a musical autodidact, fellow of the Akademische Schloß Solitude and Zentrum für Kunst und Medientechnologie (ZKM) in Karlsruhe, and Bourges prize winner in 1993, presents his work in six categories: 1) Sound and Light installations [multi-media], 2) Acoustic Art [composition], 3) Soundscape [installations], 4) Theater (mostly music theater projects for children), 5) Live music [improvisations], and 6) Ethnomusicological projects, mostly in collaboration with the writer Bettina Obrecht (specializing in music from the Scottish Highlands and Istanbul). His works in these categories range from more or less "traditional" installation set-ups such as microphone/loudspeaker feedback-signals transformed to create a self-generating piece, to the light installations lost (1992), in which a stroboscope is suspended from an elastic cable, to between the lines (1992), coordinating the diffraction of colored light through a mass of glass-splinters with sonic responses, to braindrops (1993), in which the frequency and electronic transformation of the sound of water droplets is controlled by bio-feedback via EEG-processing.

A different aspect of Mr. Cee's work are his "acoustic films," mostly composed for radio production and filed under both of his categories, Acoustic Art [composition] and Soundscape. While traveling the composer collected recordings of mostly urban environments and later mixed them to create an acoustic portrait. Such an "acoustic film" can then even be performed outdoors, as in the case of Open Air Soundscape [1998], a "piece for summer sunset" lasting over two hours to be performed in a familiar space that is then gradually acoustically contextualized and transformed into an Istanbul bazaar or a Cuban village via eight-channel sound diffusion.
Returning to Michael Harenberg (b. 1961), one discovers already in his early works an emphasis on the use of computers. His activities have included collaborations with multimedia artists Clarence Barlow and Barbara Heller, shows at the Documenta in Kassel (1992) and participation in the aforementioned Aesthetic Strategies project at Lüneburg University. Following his early compositions for instrumental ensembles are works in which the sounds of real instruments have been replaced by an array of virtual instruments created by complex physical modeling algorithms. His works Stundenlang Nr. 5 for a dancer, four instruments, and virtual flute, E./L./M-Medusa for virtual bass flute and computer (1999), and Doublebind (1998), an interactive sound installation for “low-tech” analog equipment and complex computer-controlled physical modeling, make extensive use of this synthesis technique. Inter-music (1996), for Speech Synthesizer, connects to the virtual space of the Internet by reciting all the URLs that were to be found in Mr. Harenberg’s browser at the time.

If the accent of Mr. Harenberg’s work lies in the creation of the artificial and virtual, the installations of Robin Minard (b.1953, Montreal) seem often to be based on finding links to the organic world through the use of technology. Works such as Silent Music (1995) or Landscape I (1997) consist of hundreds of mushroom-like little piezo loudspeakers that cover the floor or are mounted on walls. The organic analogy of these plant-like configurations that emit soft sounds of computer-controlled MIDI instruments is enhanced by their responsiveness to natural phenomena. In Weather Station (1995), light and climate sensors turn detected weather changes into MIDI control data, while Intermezzo (1999) is a fixture of hundreds of loudspeakers partially hidden among bushes, adding to the acoustic environment of the Federal Garden Show 1999 in Magdeburg, Germany.

The transformation of a given environment through sound is also the theme of Mr. Minard’s Neptun (1996) commissioned by the Institute of Electronic Music (IEM) in Graz. Here, two small rooms of a castle in Graz are fortified with a layer of artificial walls behind which lies—invisibly—an 8 cm-thick “loudspeaker ribbon” that circumscribes the two rooms. Water-like, streaming sounds evenly pass through this diffusion field. The composer describes the “loudspeaker ribbon” as:

A variation of the electrostatic principle sometimes found in high-fidelity loudspeaker systems. The ribbon diffuses sound uniformly across its entire surface. For the installation Neptun a special loudspeaker ribbon, made from a paper-thin amalgam of aluminum and Mylar plastic, was developed and produced together with Christoph Moldrzyk (Berlin).

Interaction with environments, in particular with hidden or even inaccessible ones, is also one important aspect of the work of Jutta Ravenna (b. 1960). Besides installations using floating sound-buoys to amplify the barely audible sounds of water-insects [LeiseLaute(Feld1), 1994], or the mixing of digital and real cricket-chirping in an abandoned factory hall [LeiseLaute(Feld2), 1994], she has found ways to make the inner world of computer circuit boards acoustically tangible. Through the use of impulse amplification and transposition these sounds become audible to the human ear. By creating sculptures of mounted racks with circuitboards, often equipped with light- and pressure-sensors, Ms. Ravenna’s aim is to “re-materialize and integrate this phenomenon [the circuit board] into the real world in which it is presented.”

A particularly original manifestation of this idea is the series of Data-Sound-Windows (Fields 1 to 4) created in 1995. In Field 1, green windows of semi-transparent circuit boards contextualize the sacred space of a church. By placing the construction in front of the church windows the intricate patterns of the circuitry shine through in counterpoint to the usual paintings found on the windows. Field 1 is equipped with light sensors that trace light changes that are transformed into timbral changes in the accompanying soundscape of amplified printer, mouse-click, and ventilator sounds.

By comparison, Cologne artist Johannes S. Sistermanns (b. 1955) stresses the “performance” aspect more than any of the other composers presented on the DEGEM CD-ROM. His work revolves around the idea of resonance in the widest possible sense: “The room becomes a resonance of what is out, the outside is the resonance of what is in.”

In Mr. Sistermann’s works, “resonance” encompasses the acoustic response of a room or body as well as the resonance of a mind: “I just want to open up a field of infinite possibilities. I make an invitation.” Resonance happens in the response of the listener: “Experience yourself as an observer whose body is being played.”

To begin with, a practical example of this composer’s idea of resonance can be found in his frequent use of his multi-monochord, which is based on Pythagoras’s instrument but which has 39 strings tuned to the same pitch. His Lichtung (1997) suspends three such instruments in the atrium of the SFB-Soundgallery in Berlin. Their excitation occurs via

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membrane contact by transferring radio and television sounds onto the bodies of the monochords.

In his “TV-under-water-performance,” Water under Water (1992), and Klangort (1992), the monochord at first resonates to the sounds of Mr. Sistermann’s voice and is then struck by pebbles collected in his mouth during a dive in the Rhine river.

A broader idea of resonance comes to carry the pieces Paris, drinnen (1992), and Paris, drinnen (1997), the monochord at first resonates to the sounds of Mr. Sistermann’s voice and is then struck by pebbles collected in his mouth during a dive in the Rhine river.

The objective of the installation was to intensify the experience of acoustic conditions through the artistic–poetic manipulation of architectural space. The sounds themselves fluctuate between low continuous drones and rhythmic and discrete artificial or processed animal utterances. Controlling this elaborate sound-space composition is the Topoph40D, a spatialization system developed for Sabine Schafer by Sukandar Kartadinata during the early 1990s. Three computers share the control of this system together with a special mixing board built to fit this configuration. Computer A received the itineraries of the desired spatial motions as MIDI data from a sequencer, transforms them into system-exclusive control data that is relayed to computers B and C, which then translate the data into the format used by the mixer, which in turn passes out the discrete signals to the speakers by means of voltage controlled amplification (VCA).

Other projects involving elaborate spatialization are Sabine Schafer’s TopophonicPlateaus (1995), for 27-channel sound, electroacoustic sounds, human voices, and computer-controlled piano, SonicRooms (from 1997), a group of sound-tents with individual multichannel spatialization; and Joachim Krebs’s AquaAngelusVox (1998), a 16-channel sound installation with visual projections premiered in the Zeiss-planetarium in Berlin.

Whether through the statements of the artists, the audio or video samples of their works, or score excerpts and diagrams, this CD-ROM presents a wealth of stimulation and ideas around the context of “Sonic Art,” “Audio/Visual Art,” “Sound ART,” and “SOUND Art,” or whatever definition one chooses to settle on. In spite of the practical necessity to be selective, the expectation raised by the title to present an overview of “Sonic Arts in Germany” is not disappointed, and one leaves one’s screen with an inspired air and the hope that listening/seeing/perceiving will continue to be challenged through the creation of art.

Recordings

Heidi Grundmann, Editor: Sound Drifting. I Silenzi Parlando Tra Loro

Compact discs (2) with booklet (49 pages), 2000, Triton Verlag/ORF Kunstradio; available from ORF Kunstradio, Argentinierstrasse 30 A, A-1040 Vienna, Austria; telephone (+43) 1-501-18277; electronic mail kunstradio@thing.at; World Wide Web kunstradio.at/SD

Reviewed by Ian Whalley

Hamilton, New Zealand

The Ars Electronica symposium and exhibition, now in its 20th year, aims to present artworks that traverse boundaries through digital technologies used as an implement, a medium, and as subject matter. The theme for the 1999 event held in Linz, Austria, was “Life Science.” It
focused on the crossover between biological and digital life forms. Sound Drifting was run as part of Ars Electronica, and involved networking 16 interdependent sub-projects including 50 artists from locations in Australia, Europe, and North America. It was conceived as “an experimental non-biological organism: a network or community of generative algorithms constituting a virtual autonomous organism living, interacting, breeding and ultimately dying in the matrix of the internet” (p. 3).

The 16 sub-projects interacted together to create a sound installation, where the world could tune in to the online air” meant that radio stations around the world existed not in the present but in cyber space. “On site” aspect involved each sub-project being linked through the Internet, creating a montage from collated audio information. This montage could be streamed back to sub-projects, and the output at each sub-project could also include recycled material from other sub-projects. The “on site” aspect meant that some sub-projects were also physical locations where installations were open to the public. Others existed only in cyberspace. “On air” meant that radio stations around the world could tune in to the online installation of Sound Drifting, and could broadcast what they thought appropriate. In this way, the event could have different versions depending on the sites visited and the segments chosen for radio broadcast.

The booklet briefly summarizes the philosophical background to the project. This is followed by commentary and images from each sub-project showing how the installations address the central themes of the project. The first audio CD in the publication includes extracts from most of the contributing sub-projects. The second disc is a recording of the output of Sound Drifter, the generative software system from the Linz version of the project. This software allows sounds to interact and mix themselves within dynamic parameters and borders, input being provided by the incoming Internet streams of the various sub-projects, each produced by a generative algorithm.

The philosophical basis for the project begins from I Silenzi Parlando Tra Loro (The Silences Speak to Each Other), where Filippo Marinetti defines silence in binary opposition to a broad definition of sound. The booklet argues that his work “suggests that he would not have been especially surprised by machines speaking silently to each other, across the world, in binary code” (p. 3). The text maintains that Sound Drifting existed not in the production or shared experience but in the placeless space of the Internet, where silence is transformed into one of the many metaphors for that which we can neither perceive nor imagine” (p. 3). The sounds at each sub-project source were encoded and decoded to and from digital form, and the listener to this silent language was the central generative algorithm. Once various projects were plugged in, Sound Drifter was then “a silent instrument, alive and interacting across the world” (p. 3).

The intention was not to produce music conceived for the concert hall, nor to provide a showcase or gallery space for the works of individual artists. This project was about networking, communication and collaboration, and about control-sharing between artists, users and machines; about letting go of one’s own art and making ecological use of existing things; about listening to the world without adding to it; about the different concepts of duration and evolving processes at work in the material and immaterial realities of which we are part; about the aesthetics of different but connectable sounds, images, texts appearing on line–on air–on site as fugitive interfaces to a complex, invisible and not yet properly understood system of data-processing. (p. 4)
Futurists or John Cage, but it has yet to be a wide range of opinions. Taking a contrary view for a moment will hopefully stimulate further discussion. The inherent danger with Sound Drifting is the assumption that sophisticated process equates to substantive product. Technically, there are now increasingly advanced “digital organisms” that inhabit the Internet, such as multi-agent/mobile-agent decision-making systems. Many of these entities influence the speed and efficiency of decision-making rather than adding content to established procedures. Apart from the digital nature of data generation, one is left to ponder whether much of the actual process and sonic product could be arrived at with analog equipment.

A second danger of this approach is that in replacing a judgment about artistic product by concentrating on process, everything and nothing become art instantaneously, and publication becomes the defining difference. The random and the most inspired moments of individual genius become equals on this level playing field. Perhaps the most central tenet of the project can be likened to a revolving door, a rather recent invention. Both the widened access to music-making and the expanding boundaries of music are recurring themes in the history of music technology, as are the dialectics of chance and self-expression. Digital music technology might have allowed us to revisit Marinetti and the Futurists or John Cage, but it has yet to facilitate unique ideas of this stature, perhaps.

Finally, history suggests that product or outcome rather than process is significant in the long term. Access to equipment does not guarantee quality of outcome, or we might all have played the piano like Scott Joplin, or been in one of the few Punk bands anyone remembers. Further, randomness, taken to sonic extremes, results in new insights about the nature of what counts as music over the past century, but gives new insights into comparatively few great works. It is left to talented improvisers to fuse and balance chaos and poetic self-expression. Quality results, whatever the medium used, are the product of the few, because artistic talent is deeply undemocratically distributed, and generative systems are only a partial substitute.

As a document of Sound Drifting, the booklet and the two CDs must fall short by the project’s own definition, because it is difficult to capture the full process and multidimensional nature of the full project in print and in short audio extracts. Lifted from the original production context, one is left with partial material and images, and must imagine the rest. Links to some of the Web sites remaining on the Internet help to balance some of these limitations, however. This publication gives a sense of the magnitude of the project, much of which would have otherwise been lost when the installation was unplugged. As such, it presents a summary of some of the recent work being produced globally by intermedia artists, and outlines the contrasting philosophical approaches adopted for a range of central issues.

Accepting that the intention was not to showcase individual artists, the audio excerpts on the audio CDs are still worthy of individual attention. Each reflects one or other of the mainstream sonic art genres developed over the past 50 years, recently extended with the application of digital technology. A soundscape approach is evident in works such as A Mic, by Gordon Paunovic and Robert Klain, that includes sounds recorded during the recent fighting in Belgrade. This sub-project (and a few other, similar ones) is interesting because of its precise geographical and temporal references.

Other works are more abstract because of their virtual locations, such as Alien City by Marin Breindl, Norbert Math, and Andrea Sodomka, that scans a virtual cityscape for sounds and images which lend themselves to more abstract sound treatment. This approach is extended to surreal sounds in works such as Frozen Teardrop in Space by Will Sergeant, based on an asteroid metaphor and tending in style toward contemporary acousmatic music.

Industrial sources are evident in The Plant Room by Colin Fallows, a work that includes air supply and circulation pumps that were recorded “on site” then manipulated. More traditional instrumental sounds are evident in works such as Public Piano by Grant Gregson, Matt Smith, and Sandra Wintner. Radiophonic art is explored in Honor Har-ger’s and Adam Hyde’s virtual installation, pso.NET, made from a collage of radio sounds, spoken programs, and inter-station noise.

Sound Drifting leads the way for many others to explore the territory of Internet audio to see where it might take us. The publication will hopefully add to what promises to be a healthy debate surrounding these activities, and it documents the different aspects of the event for those who missed the original installations.
Paul Lansky: Ride

Compact disc, 2000, Bridge 9103; available from Bridge Records, Inc., 200 Clinton Avenue, New Rochelle, New York 10801, USA; electronic mail bridgerec@bridgerecords.com; World Wide Web www.BridgeRecords.com

Reviewed by Jon Appleton
White River Junction, Vermont, USA

Idle Chatter Junior (1999)
Subtly shifting harmonic motion by a sometimes string-like pad underlies the vocal hocket of speech fragments by men, women, and children. Synthetic, tonal, percussive elements double the fragments. I consulted a specialist who could make out no coherent utterance. She advised me to just relax and enjoy the ride. Halfway into the work a slightly threatening and mildly creepy feeling came over me. But I continued to listen because, after all, this is Paul Lansky’s fifth offering in the idle chatter genre—one he created and which is much admired. About two minutes before the end, the piece becomes gentler and more intimate. Reassured, I held on as the texture thinned to a coda of soft voices which stops when the message is complete. This work is a lot of fun and there isn’t much fun in computer music.

Ride (2000)
The title work of this disc is magnificent. Imagine turning the visual experience of racing down the New Jersey Turnpike at night into a dreamy sonic experience. Some will find this idea “new age,” but I think it has drama whereas “new age” music anesthetizes. Ride’s predecessor, Night Traffic, composed ten years earlier, shows the value of further developing a musical idea in the same way that the idle chatter series does. I was disappointed when at about seven minutes into Ride there suddenly appears voices and rapid percussive sounds which seem borrowed from one of the idle chatter pieces. Enough already. But after about three minutes the landscape returns (this part should have been issued as the score for A.I.—it might have saved the motion picture). When the voice/percussive motive returned again I gave up hoping for a sustained aesthetic direction. I guess I am a purist. Without the running percussive voices this work is capable of transporting the listener to spaces no instrument can go. This is one of the goals of electroacoustic music.

Looking Back (1996)
This nostalgic bauble, based on Mr. Lansky’s high-school song, should encourage young composers to try their hand at short études based on famous classical themes. The composer writes that “we all knew the tune, as you will . . .” but I am afraid most musicians working with computers don’t know or care much about Brahms.

Recordings

Heavy Set (1998)
Describing this work Mr. Lansky writes, “I designed a computer model of the right hand of an imaginary (and very large), improvising pianist. The model attempts to think as a pianist as he moves around the keyboard, listening to concurrent lines, deciding when to add non-harmonic tones, play chords, go up, go down, play loud, soft, lyrically, firmly, and so on.” Certainly the structure described is here but the intelligence is not (not that all improvising pianists are intelligent). On occasion we are reminded of Keith Jarrett’s giant solo improvisations of the 1970s. The string pads become a bit of a distraction and the incessant “jazzy” passages often seem like compositional algorithms beyond the reach of the musical mind. It’s clever but without tunes it verges on monotony. In his notes the composer declares, “I look forward to the day when nobody will care whether or not a computer was used in the process of making a piece.” I share his wish and suspect that most people who listen to music do not care. I wonder, if I did care that a computer was used to choose the pitches and rhythms of Heavy Set, would I have found the work more intellectually challenging?

Dancetracks: Remix (1997)
Tempting as it is to reveal the compositional history of this work—you will find it in the liner notes if you are wise enough to purchase the CD—the music itself is extraordinary. There are many references to memories, musical and otherwise, in this collection of Mr. Lansky’s works, but Dancetracks: Remix does it best by giving a kind of summary of electric guitar riffs as loosely remembered over time. Just as Mario Davidovsky and others opened the
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Paul Lansky demonstrates in this piece what might be done with other repertoires of other solo instruments. I am inspired to try working with the melodic and timbral character of the violin as they appear in the encores of Fritz Kriesler, Jascha Heifetz, and Kyung Wha Chung. What is also wonderful about Dancetracks: Remix is its international flavor. I can imagine this work being popular in such diverse cultures as India, Japan, and Europe. Even more gratifying to me is the American feeling of the piece. It is a work I would play if somebody asked me for a music that embodied contemporary American art music.

Marc Tremblay: Bruit-Graffiti

Compact disc, 1999, empreintes DIGITALes IMED 9949; available from DIFFUSION i MéDIA, 4580 avenue de Lorimier, Montreal, Quebec H2H 2B5, Canada; telephone (+1) 514-526-4096; fax (+1) 514-526-4487; electronic mail info@electrocd.com; World Wide Web www.electrocd.com/

Reviewed by Joseph Reinsel
Troy, New York, USA

Marc Tremblay is known for his tape works, and he has been interested in incorporating this medium into many different contexts. Along with his interest in working in the visual medium he has created many beautiful and haunting compositions that play in the stereo field like children on a warm day at the beach. He has worked with improvisational artists Martin Tétartu and Michel Ratté, his works have been broadcast in Europe, the United States, and Canada, and they have won several awards.

Mr. Tremblay works in a world of noise. As he explains in the liner notes, “I try to compose using objects that transmit sounds, to conceive music that becomes the aesthetic extension of noise.” This extension brings us into a world where noise rises beyond its conventional auditory frame; he has created matrices of sound that are funny, crude, genius, and beautiful. Some of the pieces may put you off guard, but I think that this is where the “noise” element enters into the context. Each of these pieces seems like a study on working with the juxtaposition of sonic images and how they balance with a defined space. Some seem to work, others do not.

The first piece on this compact disc is Vroom, a study of the sounds of an automobile. Mr. Tremblay is very liberal in his use of these mechanical sounds, molding them in many different ways by stretching the sounds out or cutting them very short. At one point, he creates a dense melodic texture using the sounds of car horns, raising and lowering the pitch of them, and having many enter simultaneously.

Another track that sticks out is Residus (Clip Dadaiste). This is a piece created primarily from bathroom noises. Upon first hearing this piece I was not sure what to say. That is not to say that I didn’t find it interesting. In fact I enjoy the recontextualization of these sounds. It is just that the scatological nature of them left me a little nauseous. Maybe that is what the composer wants us to feel. Nausea is a response, right?

The remaining pieces on this CD are similar experiments with sound design, humor, disgust, history, popular culture, and consumer electronics. Mr. Tremblay has a very distinct grasp of trying to explore the boundaries of life, and here is a document that represents these investigations. The other tracks are: Conte Sous La Lune, Cowboy Fiction, « . . . ceci est un message enregistré . . . », and L’argent . . . toujours l’argent!

Finally, if the reader will permit me to say this, I feel this disc is too flashy. It has many interesting colors, textures, and hooks, but I don’t feel satisfied when each of the pieces is complete.

Blue Gene Tyranny: go, Blue

Compact disc, 2000, oodiscs oo64; available from oodiscs, inc., 261 Groovers Avenue, Black Rock, Connecticut 06605-3452, USA; telephone (+1) 203-367-7917; fax (+1) 203-333-0603; electronic mail oodiscs@connix.com; World Wide Web www.oodiscs.com
In the liner notes to the album *go, Blue*, Stephen Rush writes that Blue Gene Tyranny is a “nutsy” character, who is “living on the fringes of sanity and wholeness, embracing weirdness and oneness.” While the music included on this disc is somewhat unique, I certainly wouldn’t characterize it as anything that was crazy or odd. Perhaps it would be more honest to label the works on the disc as being “mildly eccentric.”

Originally from Texas, Mr. Tyranny studied composition with Otto Wick and Frank Hughes. In 1961 he was awarded a BMI Student Composers Award. Throughout the 1960s and 1970s, he toured with a variety of unique groups, including The Carla Bley Band, Iggy Pop, and The Prime Movers Blues Band. He has also appeared as a performer on recordings of Laurie Anderson, Robert Ashley, and John Cage. In addition, Mr. Tyranny taught “Recording Studio Techniques,” “Harmony and Counterpoint,” and “Jazz Improvisation and Literature” at Mills College from 1971–1982. He has worked as a freelance composer/performer in New York City since 1983.

The CD opens and closes with duets between Mr. Tyranny (piano) and Mr. Rush (synthesizer). In both cases, the improvisations are innovative, grow effectively, and present a good deal of variety both in terms of texture and dynamics (particularly in the duet that closes the recording). There are some very attractive moments in both duets. Tyranny’s playing in the first is reminiscent of the melodic writing of Frank Zappa with its fast tonal flourishes and ornamentation.

In *Isle of the Rose Apple Trees I* Mr. Tyranny plays a solo ballad that is predominantly rhythmically free. The second movement, which is also ballad-esque, is an ensemble piece where the instruments present a progression which is punctuated by the composer’s piano stylings. Like most of the tracks on the disc, this piece is tonal, but it ends somewhat abruptly in terms of the harmonic progression.

The *Decertified Highway of Dreams* features the Digital Music Ensemble of the University of Michigan (directed by Mr. Rush). Each movement sounds somewhat like a Steve Reich ensemble vamp, stays pretty much at the same tempo, and ends abruptly. The vamp used in any given movement changes very little, becoming a bit mundane. Traces of Philip Glass can also be heard in this work. A variety of soloists are featured in each movement. The first movement features a steel drum-type sound with a penny whistle–like timbre playing over the top of the ensemble. The accompaniment of the second movement is an amalgam of Steve Reich and a 16-beat pop groove. The tune for this movement is a bit more on the “out” side, showing a strong Zappa influence. A heavily reverberated flute provides an interesting pad. The third movement has an accompaniment that sounds like a mix between Steve Reich’s *Eight Lines* and an open Pat Methany-esque improvisation. In this movement, the group’s vocalist, Erika Banks, sings over the top of the piece in a way that is reminiscent of Philip Glass. While the solos in this movement are good, there are few surprising moments, save for the very end.

The album is arranged such that the movements of *Decertified Highway of Dreams* and *Isle of the Rose Apple Trees* are interspersed. This is an effective programming choice, emphasizing variety over consistency. In addition, the movements of *Decertified Highway of Dreams* are presented in reverse order. The liner notes consist of Mr. Rush relating his experiences working with Mr. Tyranny. While the writing clearly communicates the director’s admiration for the composer’s work, it isn’t terribly informative.

The performances on the album are generally good. The timbres are basically of the run-of-the-mill variety. However, the electrified wind instruments (bassoon, trumpet, flute, and euphonium) are sonically interesting. Traces of Philip Glass can also be heard in this work. A variety of soloists are featured in each movement. The first movement features a steel drum-type sound with a penny whistle–like timbre playing over the top of the ensemble. The accompaniment of the second movement is an amalgam of Steve Reich and a 16-beat pop groove. The tune for this movement is a bit more on the “out” side, showing a strong Zappa influence. A heavily reverberated flute provides an interesting pad. The third movement has an accompaniment that sounds like a mix between Steve Reich’s *Eight Lines* and an open Pat Methany-esque improvisation. In this movement, the group’s vocalist, Erika Banks, sings over the top of the piece in a way that is reminiscent of Philip Glass. While the solos in this movement are good, there are few surprising moments, save for the very end.

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O.K., so here is another MP3 software program. The thing to note about this one is that it is a very thorough program which includes a CD ripper, MP3 and AIFF encoders, an audio Music Library, a MusicMatch Music Guide, and a portable MP3 player software all in one package! [Description taken from the Web site.] Pretty exciting, eh? It is slightly different in its make up from other MP3 programs like Apple’s iTunes or Casady & Greene’s SoundJam because it is set up to control large libraries of MP3 files and to organize them effectively.

Upon first launching the software after installing it I was greeted by a dialog box that asked me if I wanted the program to gather all of the MP3s on the hard drive so the Jukebox could play them. This is a great feature. It means I don’t need to search around for the files in the labyrinth of folders on my computer; the program will find them and link them to the program for me so I can access them easily from within MusicMatch Jukebox. Another rudimentary finding was that the screen aesthetics are very nice; the program will even try to find the name of the song and a graphic of the CD cover online through the CDDB Music Recognition Service (www.cddb.com).

Next, to get into “ripping” audio from your CDs onto your hard drive, this program lets you have more control than other programs over the file format of the converted audio. I have used Audiocatalyst, SoundJam Plus, and iTunes for taking music from audio CDs to produce MP3 files. All of them do a great job. The only thing they don’t seem let you do is specify with precision the resolution of the converted file. MusicMatch JukeBox gives you three presets that are the normal codec schemes for MP3 files. In addition, it allows you to choose the kbps rate from anywhere between 16 and 320 kbps. This is a feature one may not use that often but it gives you that flexibility if you need it. One thing that I didn’t get to try is the MusicMatch Downloader. I am sure it is a great asset to the package as it allows you to download your encoded songs onto a portable MP3 player.

In one other way, this software is a step above other MP3-encoding programs I have used. It allows you to create libraries of files very quickly and organize and catalog them efficiently. There are many such products out there and most of them work well. But MusicMatch Jukebox is a great program, in particular for those who are hungry to create mass archives of digital music and access them whenever they like.