Events

Sónar in 2009: 16th Barcelona International Festival of Advanced Music and Multimedia Art

Barcelona, Spain, 18–20 June 2009.

Reviewed by Joyce Shintani and Metin Kara
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The 16th edition of Barcelona’s Sónar Festival took place from 18–20 June 2009. The youthful and exuberant festival with its sprawling and exciting diversity of “advanced music and multimedia art” was marked this year, like so many other festivals, by the effects of the global recession. A 20-percent loss of sponsoring resulted in fewer foreign artists and certain other restrictions. In spite of this, some of the new, more economical events were among the most entertaining and promising on the playlist; and with a total number of visitors around 75,000, Sónar 2009 stayed pretty much on a par with previous years (information and quotes in this review are from an interview with indefatigable international press coordinator, Georgia Taglietti, as well as from program notes and press releases).

As in the past, the festival was divided into Sónar by Day and Sónar by Night (for details on the festival’s organization and history, see muse.jhu.edu/journals/computer.mus...v030/30.1shintani.html). Sónar by Day had to forfeit several venues and events: There was no co-exhibit at the Santa Monica Art Center, to the dismay of video fans the rich international and historic SónarCinema was reduced to the screening of a single work, the 2009 Sónar image, which played to an empty auditorium—a quirky video, to put it kindly (viewable at 2009.sonor.es/en/imatge-2009.php); and readings, literature, or “antiliterature” were sought in vain this year. Moreover, the SonarMática exhibit “Mecánics,” a DIY exhibition of musical instruments created using robotics and other technology, did not benefit from the customary meticulous curating, with many works not functioning or lacking personnel to inform visitors. And online availability also occasioned festival casualties that aficionados will miss: no more catalogs (too expensive), and no more CD compilations—ripped-and-burned to death, replaced by SonarRadio (2009.sonor.es/en/sonar-radio.php).

But in spite of these shortfalls, the festival, well organized as ever, offered some excellent new media art venues, drawing on Barcelona’s thriving multimedia music and art ambiente. A smoothly functioning, punctual, capacity bus with expert guide Antonia Folguera shuttled visitors to the new venues. On the top of our list was the Hangar, a center for artistic production and research founded by the Catalan Association of Visual Artists (AAVC) in 1997, housed in a restored industrial building. Its 1800 m² offers space for fifteen individual workshops, a media lab, two sets, equipment hire service, technicians, and production advice. Hangar also organizes workshops for training artists (the Arduino workshop coordinated by Alex Posada impressed us), runs an international exchange program, and provides production grants.

Also at the top of our list was the visit to Niu, a nearby multimedia art gallery. It produces, exhibits, and disseminates contemporary audiovisual art, multimedia design, digital art, and independent electronic music. The focus is on “audio and visual” culture arising from the emergence of digital technology in art, design, and communication. Activities include exhibitions (bravo to Julio Lucio for his perfectly functioning “SoundWalk”), services for artists, artists agency, training courses, and an online radio station.

The final new venue was the planetarium in the recently expanded CosmoCaixa Science Museum. The museum, which opened in 2005, has been heralded as the finest science museum in Europe with 50,000 m² of exhibition space. In its planetarium, the team of Evelina Domnitch, Dimitry Gelfand, and Francisco López presented their work Ten Thousand Peacock Feathers in Foaming Acid C/Isaac Newton, 26, curated by Arnau Horta. The work was praised as a “unique synaesthetic show, halfway between experimental cinema, VJing, musical performance, and real time science demonstration,” in which the artists “use laser beams to scan and project the surface of the soap film they produce by combining a variety of chemicals in real time. The image that surrounds the viewer recalls the activity and the dynamics of living cells [or, as the title indicates, the complex shapes and colors of peacock feathers].” While the presentation itself was less striking than the advertised text, the venue is inspiring, and future presentations there will have plenty of room for reaching new heights.

Sónar by Day, with its four non-stop concert stages grouped in and around the CCCB/MACBA complex (Barcelona Center for Contemporary Culture and Museum of Contemporary Art), really brought it home.
As every year, there seems to be something for every taste in popular electronics. Some works emphasize more visual aspects, others solely musical. Some employ live musicians, others solely recorded sounds. Minimalist concerts ranged from cool to poetically evocative, such as Ben Frost’s excellent “post-minimal” set [E-guitar + audiovisuals], in which he constructed immense arches of sound, of dimensions evoking natural phenomena like icebergs. We saw something above water and sensed a gigantic gestalt beneath. With his huge auditive shapes, Mr. Frost succeeded at communicating great inchoate feelings to the audience [parts of his set with further links are viewable at www.ethermachines.com/?m=200906]. Other concerts hit levels of sensory saturation sufficient to trigger epileptic fits. The palette of artists ranged from Old School to new talents. We were particularly stirred by the polished sets of “old masters” Hank Shocklee of the Bomb Squad and Jeff Mills (Mr. Shocklee has a great calendar of pertinent up-coming events on his Web site www.shocklee.com/). The day set of Jeff Mills, one of Detroit Techno’s greatest founding impulses, met all the criteria of a concert in the “Master Artist” category. His ability to use a short breakbeat, a snippet of text, or a fleeting two seconds of a piece to form a chain of mental association displayed the talent of a musical storyteller par excellence. Flashing eyes, furrowed brow, Mr. Mills at four turntables and a Pioneer mixer lays down a beat loop and seamlessly, perfectly, lays track after track on top of it. He lets the texts create his narrative. Vinyl is flashing, but scratching is at a minimum—a rare spice used as an accent. After four minutes, a second beat rhythm is laid down with the first rap text on top. He adds a woofer bass note with scratches on top that almost drown out the loop and the rap track. The beats flow out over a sea of smiling faces with closed eyes in the glaring, smoky sun. As the tracks become shorter, Mr. Mills’s concentration sharpens, with never a glitch in beat transitions. One track seems to arise naturally from the previous one, each new one eliciting acknowledging applause. The music is never too loud, texts remain comprehensible, and in the speed and precision of their associative power the artist continues his narrative, not afraid of a Grand Pause for emphasis. A pastiche in the best sense of the word, the entirety works on musical quotation, re-contextualizing the “texts of old” for our ears new today. Fine features and filigree fingers, deftly, precisely, and himself silent (only the whisper of a smile after 50 minutes), Mr. Mills finds and cues up the next breakbeat. With imperturbable concentration he builds the beats per minute, signaling the impending highpoint: after 60 minutes, he’s at 144 BPM, then falls back to 115 and lays down a virtuoso scratch episode. A connoisseur’s set. In the second hour, the tracks hovering around 120 BPM are longer, more danceable and mellow. Mr. Mills continually respects phrase structure and thereby creates a matrix of context into which he places his musical comments. The crowd hears it and feels it and becomes a whole, multi-piece, pulsating, human mosaic. Two times he smiles now, high bones above his hollow cheeks. No bling, clad in classic, serious black, with only a watch and simple wedding band next to the silver glint of his ear phones. Three more smiles, more hiatus, beats per minute rise again from 102 to 144. The set is over. We smile now.

Although no particularly striking artistic trends or aesthetic tendencies were discernable in Sónar by Day, the acts in general seemed polished, professional. Compared to Sónar by Night, the day venues are quieter and more intimate, a fact that artists realize and take advantage of. In a day set, an artist can more carefully craft the message and is able to enter into a dialog with the audience, as in a club atmosphere.

By contrast, Sónar by Night is a cavernous venue in the vast convention center, Fira Gran Via, some miles from the central downtown venue. It, too, benefited from improved transportation possibilities, although unfortunately it also suffered from some major technical problems. The first of two evenings was kicked off by Grace Jones—singer, performer, ex-model, Andy Warhol muse, and gay cult star. Her act featured fabulous science fiction costumes with spacey head gear and vertiginous high-heel strutting. In Slave to the Rhythm with its refrain, “Keep it up,” Ms. Jones sang and hula-hooped in her tight black corset with beautifully pulsating glutei maximus [at age 61] for a full five minutes. Yes, she kept it up. Admittedly, at her age this is a remarkable display, but nonetheless something of a letdown for neophytes accustomed to harder fare. This did not seem to disturb her coterie of devotees who were delighted in spite of the extremely tardy start of her set [you may see this number by searching for “Grace Jones Sónar 2009” on YouTube].

A propos of youth accustomed to harder fare: The drug situation at Sónar by Night seemed to go overboard, leading to some unpleasant excesses [Spain, like The Netherlands, has a very tolerant drug policy]. It does make a difference in the character of an audience whether one is offered a substance by a friendly neighbor, or shoved down by raucous trippers and pushers, and the
number of our bruises this year multiplied.

As for an overview of further musical offerings of Sónar by Night, this year there was an emphasis on dubstep music. For those not acquainted with it, dubstep is a genre of electronic dance music rooted in London's early-2000s UK garage scene, distinguished by a two-step rhythm similar to garage and grime with emphasis on bass and dark sounds. Its value as a metaphor for the dark, overwhelming events of our times is evident in the note I jotted: “Very deep beats beyond our control subsume us. We battle to get a handle on the brutal and unrefined sound in order to survive.” But full disclosure: Our reviewing team consists of the present writer, schooled in conservatory electronic music, and Mr. Kara, an aficionado of rap, black, reggae, and open to all sorts of dub. Because neither of us has expertise in the dubstep genre, we refrain from attempting a detailed critique. We will, however, go so far as to remark that both reviewers missed diversity in the acts presented at Sónar by Night in 2009. We also note that our opinions differ widely from other reviewers. We were generally let down by the “big names” on the program—even Jeff Mills’s evening set fell short; our Night favorite was beat-boxer Beardyman, whom some reviewers found unpleasantly exaggerated. We found many of the Night sets adequate, but not exciting, and we were relieved when at evening’s end DJs simply played music that delivered unpretentious dancing fun. And we danced.


Sónar is the sum of its parts, and other events more than compensated for any nighttime frustrations. The usual Sónar Professional seemed larger than in past years, possibly due to the continued miniaturization of equipment that makes transportation to a trade fair easier. The concomitant SONAREXTRA exhibit “1980s Hoodlums: In Film, Press, and the Street,” curated by Amanda and Mery Cuesta at the CCCB was a remarkable in-depth exhibit that not only revealed Barcelona’s seldom-seen “gangsta” culture, but also pointed out connections between that culture and other aesthetic trends of the era (these exhibits, all the SonarMática works, as well as others, are depicted with further background information at 2009.sonar.es/pdf/SonarMatica2009_en.pdf). And in 2009 SónarKids had its debut. Designed for children to learn by enjoying music and art, SónarKids had a myriad activities: live performances (with sound adapted to children’s hearing), DJ and beat-boxing classes, a hip-hop dance masterclass, and workshops on illustration, MIDI frameworks, felt dolls and objects, building with Lego, and so on. “SónarKids is conceived for a generation of parents who want to share a way of spending their free time with their children.” With over 5,000 visitors in its first year, it was an unqualified success. A further companion event was the third annual conference of Digital Music 2.0, a trade conference organized by the Catalan Institute of Cultural Industries. A “yardstick event” throughout the season in cities from New York to Buenos Aires, from London to Rome, from Hamburg to Tokyo—24 events in all. In Fall 2009, these satellite events were crowned by participation in the event “Hypersounds” in the Museo Nacional Centro de Arte Reina Sofia in Madrid, a season of concerts, performances, installations, and panels by artists who have produced outstanding work in the field of research into sound and featuring the many creative possibilities of sound and its various spatial, emotional, and aesthetic interactions (www.hypersounds.es). Taken together, all these activities earned for Sónar in 2009 the Prize of the City of Barcelona for International Projection. The prize was awarded by the Barcelona City Council after a unanimous vote by the jury and highlighted the fact that “Sónar is an international benchmark for electronic music.”

Our review of Sónar 2009 hasn’t covered all its facets, but time and space are finite. We end with “something old, something new.” An “advanced” festival that in 16 years has proven its mettle, established itself, and earned a well-deserved award as “ambassador for Barcelona” will open out with a new one-off event: In commemoration of the Holy Compostellian Year, the 2010 edition of Sónar takes place simultaneously in two cities, Barcelona and A Coruña—Sónar Galicia, “a journey to the end of the world along the Way of St. James.” And all that was Sónar in 2009.
Publications

Gerhard Nierhaus: Algorithmic Composition: Paradigms of Automated Music Generation


Reviewed by Paul Doornbusch
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There is little doubt that algorithmic composition really came into its own as computers became less expensive and more accessible. Formalizable and mathematical approaches to musical composition have had a longer history, but were less intensely applied before the development of commodity computers.

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This book necessarily has a mixed content of music and mathematics, but the audience appears to be firmly students of algorithmic composition, and that includes beginning students. When I checked, the publisher had the book listed in its mathematics section, which is misplaced, I think, as the level of mathematics in the book is really only what a music student would desire. Despite its worrying problems with details [more later], in this book students have a good basic text that will explain the fundamental ideas of style imitation in algorithmic composition. Although I find it short on real examples of interesting music, and perhaps long on superficial examples, the book does manage a broad overview of musical style imitation techniques and brings together a large range of disparate literature that has a bearing on the subject.

The introduction goes through the chapter layout of the book and discusses its intent. One of the limitations it takes on, and one that disappointed me, is that the works of individual composers, or individual works, are not dealt with. The book presents an overview of common or prominent methods of algorithmic composition in a systematic way, discussing their features, particularly for style imitation. After a rather extended historical overview, the chapters each discuss Markov models, generative grammars, transition networks, chaos and self-similarity (fractals), genetic algorithms, cellular automata, neural networks, and artificial intelligence.

The historical overview goes back to the Renaissance and further, discussing the development of philosophy, the abstraction and representation of numbers and counting in different cultures (back to about 3000 BCE), and so on. Although the development of algorithmic thinking may depend on these being in place, I found the chapter overlong and the details and level of treatment boring and mostly irrelevant to the immediate goal. It may, however, be fascinating to students, and it certainly provides key developments and the names of those involved. The discussion on calculating machines is quite thorough, covering developments by John Napier, Blaise Pascal, and more, through to the handheld mechanical calculators of the early 20th century and including Charles Babbage’s analytical engine. The history of modern mathematics continues, discussing key ideas about the formalization of logic and the development of the modern computer. The historical discussion of computers seems rather idiosyncratic, initially, as it does not define the requirements of such a machine, and secondly as it claims that Konrad Zuse constructed the first computer. Modern computer history texts [for example, Electronic Brains: Stories from the Dawn of the Computer Age by Mike Hally, and others] say that Zuse created one of the first electromechanical digital calculators, and the distinction is significant because the definition of what exactly constitutes a computer is important. This book fails to notice the distinction, and many other aspects of computer history, and also manages to misspell the names of several key people or give them incorrect titles. The subsequent discussion on what can be computed is somewhat confused but the general model of a computer is useful. The chapter ends by introducing the computer in algorithmic composition and briefly mentions the work of...
Lejaren Hiller and Leonard Isaacson, Max Mathews, and Iannis Xenakis.

Each of the following chapters adheres to a similar structure: some history, the underlying theory including some basic mathematics, then a more detailed discussion citing examples, and a summary to close the chapter. This makes it easy for a student to find what they might want in the book, without reading too much, and it is a logical structure, particularly so for teaching. The author usefully makes the distinction early in the book between what he calls “genuine composition” and style imitation. Genuine composition is defined here as “a means of implementing compositional strategies for the creation of a new piece of art” (p. 3). Style imitation is defined as “the generation of musical material according to a given notion of musical style” (p. 3). I would propose an extension to the definition of genuine composition: a means of implementing compositional strategies with the intent of creating a new piece of art that offers a unique (and hopefully compelling) aesthetic musical experience. Students of computer music might confuse these two aspects of the practice, genuine composition and style imitation, so the distinction is important to make. However, it is not expanded upon later in the text, and this may leave readers confused. Each chapter ends with a summary, some discussion of the strengths and weaknesses of the technique, and, often enough, some evaluation of whether the technique is more appropriate for genuine composition or style imitation, although really only style imitation is discussed. A list of references is given at the end of each chapter, and these usually include some of the standard material, although by no means are all of the standard or classic references mentioned. There seems to be much fine research omitted, particularly research on genuine composition, but there are also other references included, many from other disciplines, which are very good to see.

The chapter on Markov models begins, as do most of the chapters, with a history and theory section, this time on the conditional probability system. Several typographical errors (incorrect arrows in a diagram, and obvious misspellings) mar the beginning of this chapter. After briefly mentioning the work of Hiller and Isaacson, and Xenakis, it goes on with variations of Markov models and spends several pages on their use in generating imitations of musical style. The book mentions in the initial introduction that for genuine composition with Markov models one needs to look at Hiller and Xenakis, but curiously it does not mention this point in the chapter itself, and the chapter barely spends two short paragraphs discussing their work.

Chapter 4 on generative grammars is the largest in the book, at 37 pages. The initial history and theory section takes several pages and is dominated by the linguistic history of generative grammars and Noam Chomsky’s hierarchy of these. Some similarities between generative grammars and Markov models are made, as generative grammars are a hierarchical system of semantic units, and also discussed are the limitations of applying linguistic rules to musical composition. The chapter continues with the use of generative grammars in style replication and (standard) music analysis, particularly Schenkerian analysis, and goes on to examine in detail their use in style imitation for ethnomusicology and jazz.

Transition networks are covered next by the book. The similarities with generative grammars are noted, so again this chapter concentrates on musical style, with particular emphasis on the work of David Cope. Petri nets are also discussed, with their similarities to Markov models noted.

The beginning of the chaos and self-similarity chapter gives an appropriate background on the area, neither too long nor too short, and mentions the main players and concepts. A rather detailed discussion follows of fractals, Lindenmayer systems, and the concept of fractal noise is quickly covered. The rest of the chapter focuses on the application of Lindenmayer systems to musical content generation, usually pitches, with several examples in standard notation.

Genetic algorithms are an outcome of biological evolution theory, but their introduction within their chapter covers them in a highly computer-centric manner. Musical applications are discussed comparatively early, and a key element of genetic algorithms, fitness assessment, is discussed in detail. One of the points noted is that with genetic algorithms it is difficult to define fitness criteria for generated material that lies beyond the stylistic limitations of the starting material. Rhythmic generation receives its own section in this chapter, whereas it is more woven into the fabric of other chapters, perhaps because so much work with genetic algorithms is dominated by pitch. The chapter continues with the use of genetic algorithms in style replication, for example jazz, and in interactive real-time systems. Before closing, artificial life-forms are discussed where algorithmic composition is a by-product of artificial life-forms “living” and “interacting” in an artificial environment, and the possibility of using genetic algorithms to synthesize sound is unfortunately only raised and is considered as being beyond the scope of the book.

The introduction to the cellular automata chapter is straightforward.
and one is quickly led into the theory of one-dimensional cellular automata (CA) with minimal confusion. After a discussion of two- and three-dimensional CA, extended types are mentioned (continuous automata, n-dimensional CA, chance operations, and so on) before moving onto CA in algorithmic composition. A range of research in the area is examined, mostly from within the last 20 years. The claim that Peter Beyls was the first to use CA to generate musical structures is curious given that the earliest reference I can find to this is from 1989, and Iannis Xenakis used CA in many pieces [for example, Ata and Horos] from 1986 at the latest, and even this may not have been the first. The lack of any mention of Xenakis in this chapter is difficult to understand given how famous he is for using CA. Further discussed is the application of CA in real-time interactive systems, and the summary notes the difficulty of predicting the behavior of cellular automata as well as the difficulty of mapping the output to musical parameters. The decision not to negotiate the terrain of genuine composition in this chapter is regrettable given how much published research is available on it.

Using another analogy from biology, artificial neural networks model the structure of the brain. The introduction to this chapter leads smoothly from the basics and biology to computational models and includes such details of neural networks as connection weighting and network training. The application of artificial neural networks to algorithmic composition is initiated by a discussion of using them to harmonize melodies in the style of J. S. Bach. The discussion continues through a system to produce folk melodies, more work in the style of Bach, waltzes, and more. It notes how artificial neural nets are “superior” to Markov models for such endeavors, but there is no explanation of what “superior” means in this regard or of the testing or decision-making process used to make this claim. The end-of-chapter synopsis notes that artificial neural networks may be useful for automatic musical classification, and also notes the difficulty of training one to produce large-scale works. In addition, it draws attention to the fact that the output of an artificial neural network is practically never assessed for musical quality—the fact that there is an output is considered a success, regardless of how “good” it may sound. In closing, the author notes how artificial neural networks can achieve surprising results outside of the domain of their input, compared with generative grammars and Markov models.

Artificial intelligence [AI] is a logical progression from artificial neural networks and it is the last chapter before the final synopsis of the book. The chapter begins with a brief introduction and then a discussion of the main concepts as manifest in the ELIZA program before getting onto the applications of artificial intelligence to algorithmic composition. ELIZA is one of the earliest examples of an artificial intelligence program, created in 1966 by Joseph Weizenbaum; it will probably be a mystery to most computer users who are less than 40 years old. However, as ELIZA is a parody of a conversation with a psychotherapist and is based on keyword selection and rephrasing them into questions, it is considered a poor example of artificial intelligence (as exemplified by the Turing Test) and somewhere between a hoax and a gimmick in AI circles—even Weizenbaum was dismayed that people thought so much of it, so its dominance of this chapter is puzzling. A comprehensive discussion of Turing Tests in algorithmic composition can be found in the CMJ article titled “The Interrogator as Critic: The Turing Test and the Evaluation of Generative Music Systems” by Christopher Ariza (33:2, Summer 2009). The chapter continues with a discussion of what might constitute musical intelligence and a comparison between ELIZA and David Cope’s Experiments in Musical Intelligence system. Knowledge representation as a key concept in algorithmic composition and artificial intelligence systems is discussed, as are state spaces, search algorithms, and heuristic systems, citing the [groundbreaking at the time] mid-1980s work by Roger Dannenberg on automated accompaniment. Reasoning and rule-based systems are covered in some detail and there is an overview of cooperating intelligent agents to round out the chapter. Artificial intelligence is an enormous field of study and this chapter does a decent job of covering the main ideas of the discipline and how they might relate to musical composition, although only in the context of style imitation.

The final synopsis starts by noting that different algorithmic methods might be used for different parts of a composition and that algorithmic composition is useful for style imitation or genuine composition. The notion of genuine composition is subsequently dilated by saying that it is dependent on the social context, or historical period of its creation, and that composers may have a proprietary style that they imitate. This may be valid for varieties of popular music, but it is invalid for what is often called “contemporary art music.” It then goes on to say that the procedures described in the book are used mainly for style imitation, and at least part of the reason for this is the field the author works in. I think the claim that the tools are used mainly
for style imitation is unjustified, as it ignores a canon of algorithmically composed music which is original, successful, and compelling, from such composers as Clarence Barlow, Herbert Brün, Charles Dodge, G. M. Koenig, Iannis Xenakis, and so on, all of which have well documented algorithmic methods. For examples of references on genuine algorithmic composition, one can find many in Curtis Roads’s *Computer Music Tutorial*, and Christopher Ariza’s excellent treatise, *An Open Design for Computer-Aided Algorithmic Music Composition: athenaCL*, has 37 pages of references and a large selection of these are involved with genuine algorithmic composition. More philosophical algorithmic composition issues are examined in more detail as the chapter continues and other key ideas are discussed such as what constitutes musical style, to what extent algorithmic procedures are used in genuine composition, and how some forms of algorithmic composition require critical appraisal of the results as part of the creative process. The implication that some results are not critically assessed is extraordinary, and begs the question if composition of any kind, algorithmic or not, is possible without critical appraisal. Fortunately, this is expanded upon later.

The chapter also discusses the limitations of algorithmic composition and lays some of the blame for this on the limitations of the MIDI protocol, without mentioning that this is easily overcome by using Open Sound Control (OSC) and that many systems work happily with it (AC Toolbox, Max/MSP, Pure Data, Supercollider, etc.), but MIDI is probably quite adequate for most style imitation purposes. Another way to overcome the limitations of MIDI is to use Csound output, and the previously mentioned systems and more offer this possibility. Csound has existed for years even before MIDI as Music-N language output from historical algorithmic composition systems.

A later discussion on how some traditional instrumental compositional forms (such as fugues, motets, and so on) may be seen as algorithmic composition because they use rules, seems to miss the point that composers historically have always gone beyond the rules, or broken them, in their work—for example, it is sometimes the parallel fifths and octaves in Bach’s music which help to make a piece sound so good. The chapter tries to claim that algorithmic composers do not readily publish their methods and that the dominance of style imitation is a by-product of the publication of researchers, but the claim seems incorrect as there is a wealth of information on at least Xenakis and Koenig and every composer whom I have asked has readily been willing to discuss how their music is composed. Besides, can it really be that the volume of published material is more important than the quality of it or the importance of the ideas discussed? The justifications for not discussing genuine composition in the book do not stand up to scrutiny. While it is clear the book focuses on style imitation, arguments justifying this such as the proposed limitations of MIDI for algorithmic composition and the lack of literature on genuine composition are incorrect.

The section on strategies for data encoding and musical mapping is very welcome as mapping in particular is an often-neglected part of the process. The encoding and mapping discussion concentrates on pitch mapping and does not approach other musical elements or concepts, for example event density or shape operations, but rather discusses the problems of music encoding and data mapping for style imitation. Similarly welcome is the section on the evaluation of material. However, style imitation issues also dominate the arguments here. The arguments for algorithmic machine-assessment of generated material are interesting, but it makes me feel that the word “composition” in the term “algorithmic composition” is somehow being misused if human assessment is deemed too unreliable to be suitable for research purposes, as we are probably quite some way off asking a machine if our algorithmic compositions sound any good or not. The previously mentioned CMJ article on Turing Tests notes that “use of the TT in the evaluation of generative music systems is superfluous and potentially misleading; its evocation is an appeal to a measure of some form of artificial thought, yet, in the context of music, it provides no more than a listener survey” (p. 49). Making algorithmic composition into a system or game of data manipulation to match a style criteria, the results of which are also assessed by the machine, seems to miss the point of musical composition: Perhaps it needs another name. This section on assessment, and indeed most of the book, seems to contradict the concluding remarks of the chapter, which reads: “However—algorithmic composition is not a musical golem, usurping creativity from the human realm. The algorithm is a tool and means for the creative examination of the complex aspects of musical production” (p. 272). If musical creativity is so important, why is the emphasis in this book on style imitation rather than the greater creativity of genuine composition?

What would have been an interesting discussion in this final chapter is one focusing on how music theory and rules are often reductive in nature, taking common elements from a number of compositions or parts of a single composition, to make generalizations and propose
the rules used. Musical composition, on the other hand, is at root an expansive and creative activity, often going beyond rules to achieve a desired aesthetic result. However, this is not addressed anywhere in the book. Despite much discussion of the semantics used to describe the various possibilities and varieties of algorithmic composition, the final chapter is an important one, and it really should appear at the beginning of the book, as it would make much of the book more understandable in its light, especially for students.

The basics of the key tools of algorithmic composition are adequately covered in this book, and as such it does a mostly competent job of presenting them fairly clearly, but only in the realm of style imitation and despite many errors of detail. One of the things I found while reading the book was that I wished for an included disc, or even a Web site, with the musical examples available for playback so that I could quickly listen to them. I hope that the publisher and author consider this, as it would improve the book as a teaching resource. I also found the numerous errors, misspellings, and typographical errors to be distracting, and potentially worrying.

I approached this book with a large degree of enthusiasm and optimism, unfortunately I left it feeling disappointed. The emphasis on style imitation in the book and the lack of discussion of “genuine composition” is, I feel, a great shortcoming. There was an important opportunity here to go beyond style imitation—to me, as a composer, it is the least interesting or useful aspect of algorithmic composition—and delve into the more difficult realm of creative composition of compelling musical works. Furthermore, the book does not delve into algorithmic sound synthesis (surely still micro-composition), or examine in detail how some composers have used algorithmic principles to create great works, let alone attack the core issue itself. Although the systems outlined in the book may be applied in a range of ways from the superficial and trivial to the very sophisticated, nowhere is the problem addressed of what musical composition really is. This has been a problem with some other books on algorithmic style imitation, but to my mind musical composition is something other than the application of a set of rules (particularly music theory rules), and it goes beyond this. Style imitation already has a large body of literature; I feel this book does a good job of pulling much of it together, but it has missed an opportunity to go further and add to the literature on algorithmic approaches to genuine composition.

Thomas Licata, Ed.: Essays on the Music and Theoretical Writings of Thomas DeLio, Contemporary American Composer, with Accompanying CD of Selected Compositions of Thomas DeLio


Reviewed by Benjamin R. Levy
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Thomas Licata’s collection, Essays on the Music and Theoretical Writings of Thomas DeLio, Contemporary American Composer, is a remarkable new book, the first full-length study of a unique composer and groundbreaking theorist whose contributions to computer music and percussion literature are undeniable, and whose analytical insights into music of the avant-garde continue to stand out as relevant and thought provoking. The essays included in the volume are well chosen and balance analyses and appraisals of Mr. DeLio’s music by other authors, as well as new essays by Mr. DeLio himself, both analytical and theoretical, concerning other composers and his own work. The collection includes both European and American authors, writings by theorists, composers, and performers, and through this variety of perspectives, succeeds in the difficult task of making connections between the subject’s work as both composer and theorist as well as interdisciplinary connections to other artistic fields. As Hermann Sabbe states in the book’s introduction, “DeLio is, indeed, a scholar and artist in one” [p. v], and this Festschrift brings out many themes and questions that carry over from one side of his work to the other.
The first section of the book is devoted to Mr. DeLio’s work as a composer, and includes several analyses of his works—essays by Linda Dusman, Agostino DiScipio, Wesley Fuller, and Michael Boyd—that represent both electronic music and works for acoustic instruments, most of which are included on the accompanying CD. All of the analysts at some point have to come to terms with some of the strikingly original features of the music, in particular, the composer’s use of long periods of silence, and, related to this, his preference for nonlinear, non-hierarchical structures.

Linda Dusman’s “Luminous Presence: Thomas DeLio’s think on patch (four songs for tape)” begins by responding to the question of how these purely electronic works fit into the tradition of song. Although the composer and poet (P. Inman, whose voice is the principle source of sound material) have closely related artistic sensibilities, their voices remain distinct in these settings. Mr. DeLio’s concern with engaging the audience to reflect actively on the process of perception puts his songs squarely at odds with romantic ideas of narrative. Ms. Dusman points in particular to one instance where the composer’s voice is heard on tape, referring to the process of recording and composition, making this process more transparent and dissolving any sort of imaginary scenario that romantic Lieder often work to create.

Michael Boyd’s excellent analysis focuses on though for piano. Mr. Boyd parses the surface of the work into layers, rather than addressing changes as sections, an approach that seems quite fitting here—each sounding event seems like a representative from some pre-existing strand, which momentarily surfaces and then recedes into silence, an effect that seems more common to electroacoustic music than to instrumental works. Moreover, this approach allows Mr. Boyd to look at the connections between different events [looking at pitch class emphasis and density within particular layers], and address them as related instances of a common type, but not as causally connected to one another. Mr. Boyd supports this reading of the piece with an examination of the lengths of the silences that separate these events, preserving open, non-causal connections between the sound events.

Agostino DiScipio’s essay, “Notes on Digital Silence: Listening to Tom DeLio’s Short Tape Works,” is not an analysis of a single piece, but an examination of features, including extended silences, in several works. Mr. DiScipio points out that there is a difference between technologically “generated” silence, and a recording of natural silence, or of ambient space. Likewise we may observe that the nature of the silence changes depends on the surrounding material, whether acoustic or electronic, if electronic then whether synthesized or concreté, and also, whether or not a text is involved.

The authors are in agreement that Mr. DeLio’s use of silence is decidedly not Cagean—it is not an invitation to attend to external sounds happening in the environment as in 4′33″. Instead, the silence functions as “blank spaces on a page, more graphic or visual than ‘musical’” (p. 28), according to Ms. Dusman, who also equates this silence to “negative space” or “margins.” Addressing silence through an analogy to the visual arts is a common strategy through all the analyses in this volume, and given Mr. DeLio’s frequent references to contemporary visual artists in his own essays, this seems like an effective way of coming to terms with a phenomenon that is less familiar in music. This analogy to visual arts also helps address the non-linear nature of the music, comparing the way we come across events to the way our eyes would come across different objects while scanning the canvas of a painting.

Mr. DiScipio points out that in Mr. DeLio’s music, the “silent segments have a duration that far exceeds what perception psychologists describe as
the width of the present [i.e., the time span of 8” to 12”], within which sequential events can in one way or another be connected to the whole" [p. 51]. He then relates the silences in this music directly to the issues of nonlinearity, and connects the challenges and complexity directly to human perception. When put to the extreme lengths that we find in Mr. DeLio’s music (Ms. Dusman points to instances where over half of the piece is “negative space”), the functions of individual silences become multifaceted. No longer do we have a purely anticipatory silence before the performance, a reflective one afterwards, and other smaller “breathing pauses” within, as Zofia Lissa presents as the norm in her “breathing pauses” within, as Zofia one afterwards, and other smaller

The degree to which Mr. DeLio’s works provoke questions fundamental to musical discourse can be seen in Robert Morris’s contribution, “Music, Talking About Music, Talking About Talking About Music,” which appears later in the volume. Mr. Morris posits a three-level system where discourse about music becomes self-conscious at the third level. He mentions certain text pieces [such as Cage’s Lecture on Nothing] as examples where all three levels of discourse “can share the same cognitive and experiential space” [p. 242]; in the context of the book as a whole, though, one may wonder if Mr. DeLio’s pieces approach this in another way, through self-conscious moments in the music such as the one Ms. Dusman cites, but even more remarkably, non-verbally, through the silences which draw the listener into active consideration rather than passive reception.

The performers represented in this volume address many of the same issues raised by the theoretical and analytical discussions; the change in perspective, though, is quite informative. In his “The Evolution of a Performance Practice: Thomas DeLio’s wave / s,” Morris Palter discusses his interpretive decisions while working on that piece: considering the implications of a pitch/noise dialogue that flows through the piece and how this dialogue effect his decisions regarding instrument selection, attack, resonance, and blend. His essay is a valuable companion piece to Steven Schick’s discussion of Xenakis’s Psappha [in The Percussionist’s Art: Same Bed, Different Dreams, University of Rochester Press, 2006]; this comparison will be of particular interest to those familiar with Mr. DeLio’s analyses of Xenakis. The book presents yet another notable connection as Mr. Shultis’s discussion of Mr. Ferneyhough mentions Mr. Schick, and
conversely, Mr. Shultis’s role as a performer and interpreter of Mr. DeLio’s music comes up in Mr. Palter’s essay.

Tom Goldstein’s essay deals extensively with performing the silences in Mr. DeLio’s music. In light of the previous discussion, one can see how complicated a task this can be. Mr. Goldstein asks, “Should the silences necessarily be intense? Should they even be serious? Should they perhaps be serene?” (p. 201). And it is clear that he recognizes the multitude of functions that happen in these rests and is conscious of how a performer might aid or detract from the sense of openness that is so vital to the composer’s aesthetic. Mr. Goldstein also addresses the difficulty of learning and practicing a type of music where one has no chance to make causal connections between events. It is fascinating to hear a performer’s take on the practical implications of the same issues discussed in the earlier analyses: the nonlinear nature of the music, and the devalued role of memory.

Tracy Wiggins’s interview with Mr. DeLio ranges over his influences, inspirations, and starting points, and his ways of thinking about his own music and the relationships between pieces. The composer seems drawn to the fragmentary and incomplete, and both Mr. DiScipio [in the electronic medium] and Mr. Palter [in the percussion music] discuss interrelationships between works, relating some of the short pieces together in the same way that brief individual sounds are connected across the silences within a piece. When Mr. Wiggins broaches this subject, it is interesting to hear the response: “Actually, I think of all my music as related. Each piece is a different facet of my view of music” (p. 209).

The final section of the book is devoted to Mr. DeLio’s theoretical and analytical work, including essays by the subject and others. Robert Morris’s essay (discussed earlier) is included here, as is an essay by Steven Johnson on “Organic Construction in Music of Morton Feldman”; indeed, the recent boom in American scholarship on Morton Feldman owes much to Mr. DeLio’s *The Music of Morton Feldman* (Greenwood Press, 1996).

Mr. Johnson’s analysis focuses on *For Frank O’Hara*, stressing the role of texture, register, and timbre as well as harmony in this piece of music, and bringing out an interesting discrepancy between Feldman’s rhetoric and the actual music.

Mr. DeLio’s critique of trends in contemporary music theory comes out in his interview with Mr. Wiggins, and also in his essays “Circumscribing the Open Universe,” and “The Open Universe Revisited”—the latter of which appears for the first time in the present collection. In the first of these essays, the author explains how he sees the idea of an “open” work, drawing on Italo Calvino and Allain Robe-Grillet [among others] to articulate the idea of the artwork not as an object, but as something in the process of becoming. In the second, follow-up essay, Mr. DeLio addresses this same idea in greater depth, both from a compositional perspective and also from a theoretical one. He sees a very destructive trend in much of the set-class analysis pioneered by David Lewin and Alan Forte. Although he does not cite specific essays from Mr. Lewin, Mr. Forte comes under direct criticism in Mr. DeLio’s analysis of Anton Webern’s masterwork, *Bewegt* (Op. posth., 1913). And the two analyses that end the book exemplify the philosophical distinctiveness of Mr. DeLio’s approach to analysis, while pointing out the limitations he finds accompanying the codification of set theory, or other fixed systems of analysis.

Mr. DeLio’s critique focuses on Mr. Forte’s contribution to an Analysis Forum on Webern’s *Bewegt* (*Journal of Music Theory, 18/2, 1974, pp. 13–43*) and in particular on Mr. Forte’s statement that “it is reasonable to assume, however, that orchestration was not a primary consideration, whereas the overall pitch organization of the music was a fundamental concern” (quoted p. 322, n. 8). Mr. DeLio points to a snare-drum roll, which fills the noise spectrum as a culminating point for his own hearing of the piece—a convincing argument, using spectrographs as evidence of his claims, and centering around a specific sonic event in the composition that Mr. Forte’s analysis ignores entirely. Indeed, an analysis that focuses entirely on pitch-class relationships would have trouble capturing this aspect of the work’s design, which, given the role of *Klangfarbemelodie* in Arnold Schoenberg’s work, seems quite plausible in his student’s music as well.

Mr. DeLio’s second analysis focuses on the iconoclastic Italian composer Giacinto Scelsi, and the third movement of his *Quattro Pezzi* (su una nota sola). The analysis here examines the role of microtonal inflections, attack noise, and dynamics in shaping the form of the piece, again using spectrographs to analyze the full spectrum of sonic activity. The author examines the spectral data and makes observations pointing to a change in the implied fundamental of the single note to which the title of the piece refers. This analysis also points to reasons that Scelsi has been held in high esteem by spectral composers Gerard Grisey and Tristan Murail. More and more composers are taking into consideration the full range of noise and pitch as an integral part of their composition, and although this approach is perhaps most commonly acknowledged in contemporary electronic or percussion music, yet Mr. DeLio has chosen two early orchestral examples for his analysis, showing
the need to address timbre in earlier music as well. In so doing he calls attention to the dangers of codifying set theory, and expecting analysis to be based solely around the assumptions of this analytical system. After all, what could a set-class analysis that assumes octave-equivalency say about such a piece, built around the diversity of sounds within a single note? These analyses are thought-provoking in that they do not aim simply to describe how the piece goes, but are invitations to explore radically different ways of hearing the work, moreover, when read at the end of the present collection, they resonate with Mr. DeLio’s theories of what an open artwork should do, and also with the aesthetics of his own compositions. Through its diverse essays, the present book succeeds in the remarkable task of showing this cross-disciplinary consistency in ways that few other volumes have attempted.

**Recordings**

Stephen Travis Pope: Ritual and Memory

Compact discs (2) and DVD-Video (1), 2007, EMF CD/DVD 068; EMF Media, Electronic Music Foundation, Ltd., P.O. Box 8748, Albany, New York 12208, USA; Web www.emfmedia.org/.

Reviewed by Gareth Loy and John Snell
San Rafael and San Geronimo, California, USA

In 2007, Stephen Travis Pope released this retrospective two-CD + DVD-Video set, described in the liner notes as “memories and rituals, which is to say they are dreams meant to wake us up.” The wake-up call for your reviewers came when we discovered we’d signed up to the daunting prospect of evaluating in excess of two hours of quite varied musical material, spanning nearly half of the entire history of computer music as a discipline [which we take to begin with the work of Lejaren Hiller and Leonard Isaacson in 1956]. The video material adds another 75 minutes. Your humble reviewers chose to limit themselves to the audio CDs, respectively titled “Ritual Places,” and “Dunkelkammergespräche.”

The breathtakingly broad swath of musical aesthetics and music technology incorporated by Mr. Pope in these CDs is revealed by both the compositional styles as well as the technologies one hears in their tracks. Indeed, the two are like sides of a coin, and the composer consistently finds compelling ways of adapting and combining media and tools to his compositional aims, though his aims are not always easy to discern.

A case in point is the final work on the retrospective CDs, Paragraph 31: All Gates Are Open (A National Anthem), finished in 1993. Mr. Pope describes this major, 30-minute work as a “tongue-in-cheek suite filled with Swedish-language puns and word-plays,” which leaves your non-Swedish-speaking reviewers at a loss to penetrate very deeply into the compositional design. Simply opening our ears to listen, what we hear is indeed a “hallucinogenic text-sound piece” in which the composer’s fascination with vocal transformations is fully developed: The voices alternately provide exaggerated expression and fragmented obscuration of the text they are reading, based on poems by Swedish concept artists Michael Hausswolf and Leif Elggren, who have crowned themselves kings of “the imaginary or virtual nation of Elgaland/Vargaland (KREV).” Mr. Pope says this work “serves as one possible national anthem” for these poets’ imaginary nation (and, indeed, one can only imagine the kinds of citizens who could actually march to such music).

A darker and more haunted aesthetic is at work in the text-sound piece, Kombination XI. Finished in 1990, based on a German poem by Helmut Heissenbüttel, it conjures the loneliness and alienation of gazing into a cold river at night. The work is constructed through extensive transformations of a male and female voice with the phase vocoder, which slurs and renders their utterances for this somber “ritual/liturgical music” designed “to assist the listener in working through his/her un-lived grief.”

Also at the dark end, Leur Songe de la Paix (2002) is a mixed text/music work that incorporates extended excerpts from a speech of Dr. Martin Luther King. In “A Time to Break the Silence,” delivered a year before his death, King challenges the militarism in American culture that led to the travesty of the Vietnam War. Mr. Pope’s music provides an appropriately angst-laden accompaniment, however the extended verbatim quotations of King’s spine-tingling words and mesmerizing delivery engaged our minds to such an extent that the music fell into the background.

Contrasted to the dark textures and ethereal sonic backdrops of the text–sound works just mentioned

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**Computer Music Journal**
are sunnier musical ideas such as WAKE: Ten Tangents for Dance, Bat out of Hell: Stories for Dance, Ballet Music for my Siblings, and Day, An Improvisation, which all project a fluid and engaging rhythmic and harmonic sense. The first three exploit canonical FM synthesis and musique concrète techniques; the latter uses mid-1980s personal computers to realize music in real-time “for low-end MIDI synthesizers,” designed “as an installation in multiple city environments.” Such accessible works are actually quite difficult to make convincing, but Mr. Pope's imagination for movement and dance easily carries the listener along.

Because of the broad span of time encompassed by the output in this collection, your reviewers couldn’t help but note how the tools and techniques of computer music have evolved over his career. Just as the pianoforte evolved from the time of Muzio Clementi to Steinway, so too, Mr. Pope's retrospective reveals to us the evolution of the techniques of computer music in his age. At the early end (1979/1980), WAKE: Ten Tangents for Dance was composed using the mid-1970s SSSP system in Toronto. The signature effects of low-precision calculations necessitated by this early real-time computer music system create glitches, noise, and “crunchies” that overlay the music, providing an acoustic snapshot of an era of computer music systems reminiscent of what one experiences gazing at a slightly scratched antique daguerreotype.

In Bat out of Hell: Stories for Dance, wonderfully resonant bell-like sounds ring with a vibrant acoustic quality somewhat reminiscent of the tamboura or the drone strings of a sitar. The music moves spatially in a playful manner, somewhat like African Mbira playing, in Day, An Improvisation.

Amidships in this career span, circa 1984–1985, lies Requiem Aeternam Dona Ais, an étude on then-de rigueur John Chowning-style FM synthesis of bell tones. Alas, by now the contemporary ear has become habituated by the signature spectral evolution of FM bell tones (as dictated by the Bessel functions of the first kind) to such an extent that we experienced difficulty listening past this effect to hear what else the composer had in mind.

None of these technological limitations reflect badly on our composer: These were just the tools we had to work with in those times. Beethoven, for example, found clever ways to exploit the timbral resources of Clementi’s piano, and our composer similarly works with what he has, mostly to good effect. In later works such as Paragraph 31, the sonic landscape is pristine. In Kombination XI, the composer actually conjures technical limitations in order to exploit them: He pushes the phase vocoder technique beyond its “comfort zone” in order to achieve particular sonic effects.

Your reviewers first encountered Mr. Pope and his work in the early 1980s, in a time when to be ambitious in computer music required a substantial capability to configure and program mainframe computers from scratch. Most of the works represented here derive from music programs and programming languages he has developed since the start of his career, beginning with his music shell for UNIX. [For an interesting tour of some of his software tools and musical notations, see track 4 of the DVD.]

As this retrospective offering demonstrates, he has sustained a long and successful career as a composer and music technologist. Yet what arises to the surface from beneath all the technology, all the musical prosody, all the compositional algorithms and experimentalism, is Mr. Pope's spiritually informed humanity. He says, “Listening deeply to music can be a powerfully mystical experience.” He knows whereof he speaks.

**Esther Lamneck: Cigar Smoke**


**Reviewed by Pauline Minevich Regina, Saskatchewan, Canada**

Esther Lamneck is a clarinetist teaching at New York University, where she is director of the NYU New Music and Dance Ensemble, as well as Director of Woodwind Studies and of the Graduate Music Program in Italy. She has been described by the New York Times as “an astonishing virtuoso.” In her own words, Dr. Lamneck is “dedicated to expanding the boundaries of music to create new art forms which include performance movement and instrumental theatre” (steinhardt.nyu.edu/music/auditions/new_music_and_dance).

She has an impressive catalogue of discs of mixed electroacoustic music, featuring both clarinet and the Hungarian tárogató.

**Cigar Smoke** is a collection of works for clarinet and electronics, all of which were written for Ms. Lamneck. It could be said to represent a snapshot of current trends in academic composing, since all the composers are university professors, at the University at Buffalo, New York University, University of Illinois, University of Iowa, University of Maryland, and State University of New York, Oneonta. All the works
Mr. Rowe has written on the aesthetics of interactive music systems, and the new parameters they afford to composer and performer. He has pointed out that by using an interactive system, the composer must make highly specific musical decisions in designing the computer programming, while necessarily ceding some creative control to the performer as she interacts with the computer. Ten years ago, in 1999, he wrote:

> The resulting music represents a new kind of composition at the same time that it necessitates new kinds of performance skill. The human player working with an interactive computer system can learn how to perform with it much as she would learn to play with another human. The very real differences between computer and human performers mean, however, that the human has a new degree of freedom in invoking and directing real-time algorithms through different styles of performance. An interactive composition changes and matures as the human and computer performances increasingly intertwine (“The Aesthetics of Interactive Computer Systems,” Contemporary Music Review 18:3, p. 85).

Since those words were written, uncounted numbers of works have been written for interactive systems and live acoustic performers, so the field has matured in many ways, but these aesthetic issues are still being addressed. What that means for this reviewer is that one cannot critique this disc using the traditional differentiation between the merits of the composition and the merits of the performance, because that distinction is necessarily blurred in interactive compositions. Ms. Lamneck’s ability to play the role of virtuoso performer and also to be playful through improvisation is obviously central to the composers featured on this disc. As Lawrence Fritts says in his program notes to Musicometry I, “The result is a truly collaborative work, in which the performer and composer adopt the essential language of the musical language of the other, as expressed in the dedication: ‘To, from, and for Esther Lamneck.’”

The disc is named for the first piece, Cigar Smoke (2004), by Robert Rowe. The composer describes the work as part of a larger one he envisions that is “based on the story of a different composer living under an occupation who steps outside for a smoke and is mistakenly shot by a nervous soldier (as happened to Anton Webern).” Within this framework, the piece would begin the moment the composer steps outside. Nervous drumbeats act as a prelude to the appearance of the clarinet, with soft high notes and multiphonics. Swirls of sound are created by computer loops of recorded sound from the performance, and perhaps give the impression of smoke rising. The atmosphere is tense and edgy, in accord with the programmatic outline. Parts of the piece are notated, but these are punctuated by cadenzas, as described earlier. The cadenzas afford Ms. Lamneck the opportunity to create a huge range of sounds, including growls, multiphonics, and slap tonguing. The piece finally dissipates in a swirl of rising notes, diminuendo.

Musicometry I by Lawrence Fritts shows an interest in sound for its own sake. Again, there are many interesting, almost animal-like sounds such as scratching, blowing through pads, hisses, and grunts.

Trio for Clarinet and Two Computers by Cort Lippe is an entirely improvised and interactive work, and as such is the most technologically
The computers are programmed using Max/MSP and function as musical instruments, tracking parameters of the performance including timbre, pitch, tempo, and articulations. The performer interacts with the computers by shaping the various inputs through her playing. The first two movements can best be described as frenetic, and are difficult to follow simply because of the speed of the music. The first comprises short, arclike gestures almost like shrieks. Ms. Lamneck's sound is harsh, almost like a saxophone. The second movement functions as a classical scherzo, with even more energy and very pointed, sharp gestures. The final movement is more lyrical and was my favorite of the three. The clarinet plays long lines that transform imperceptibly into their own computer reflection. There is a sense of declamation to this movement that is much more expressive than the other two.

Dinu Ghezzo’s work Abyss was inspired by John Milton’s play Samson Agonistes, and reflects the story of Samson’s tragic downfall. The piece is in seven sections, played without interruption. The eclectic computer track is made up of various electronic sounds, combined with samples of the clarinetist’s playing from an earlier work, Sound Etchings, that she commissioned from Mr. Ghezzo, along with fragments of cadences and other music from the Italian Renaissance. This is a highly evocative work, in which the clarinet performance complements and is complemented by the electronic sounds in larger melodic gestures that are very expressive. There are wonderful microtonal effects, achieved by alternate fingerings. The sound is particularly rich and full in all dimensions. I found that this track has the best reproduction of clarinet sound.

Orlando Legname, composer of Event Horizon 3, credits Ms. Lamneck with an active role in the creation of the piece. This is one of a series, now numbering five, of works for acoustic instruments and computer-generated tape. It begins with a sweep of electronic sound leading to a low drone, over which the clarinet plays long expressive lines. The interplay of electronic and live sound is striking. In the middle of the work is a cadenza in which the performer explores the possibilities of alternate fingerings, flutter tonguing, and multiphonics. Throughout, she shows sensitivity to the lyrical style set at the beginning of the piece.

Lawrence Moss’s Lifelines is in some ways a more conventional work than others on this disc, perhaps because it was written earlier (1998). The piece is fully notated, and where the clarinetist improvises, the time allowed is short and she is directed to imitate material previously presented by the tape, so the piece is much more classically structured than some of the other works.

The final work on the CD is Crack Hammer (2004) by Zack Browning. Browning explains that the piece is one of a series in which he explores the application of magic squares to musical structure. A magic square is a series of numbers arranged in a square, so that the sum of each row, column and diagonal is the same. In Von Nettesheim’s De Occulta Philosophia [1531], seven magic squares are associated with the seven bodies of the Ptolemaic universe [Saturn, Jupiter, Mars, the Sun, Venus, Mercury, and the Moon]. Mr. Browning used the magic square of Mars to structure this piece. Each number’s unique position in the square is mirrored in the score by a specific style, rhythm, density, timbre, and orchestration. The resulting work is, perhaps surprisingly, jazzy, with interesting rhythmic patterns, and a sense of playfulness.

This is a really interesting and worthwhile disc for anyone interested in exploring the possibilities inherent in composing for an acoustic instrument and interactive music systems. Ms. Lamneck’s technical mastery of her instrument is impressive, and she shows a wide expressive range. Occasionally her sound can be harsh and a little forced, as in Cort Lippe’s Trio, but that may be in accord with the expressive character of the work. While the recording quality of the CD is generally good, I would like to hear more stereo separation for a better sense of depth; I found it a little one-dimensional compared to other recordings of clarinet and electronics, for instance, Francois Houle’s Double Entendres [Earsay es05001, 2005]. But this is definitely a recording that I would recommend.

**Multimedia**

**Priscilla McLean: Symphony of Seasons**


**The McLean Mix: The McLean Mix Live!**


Reviewed by Elizabeth Hinkle-Turner
Denton, Texas, USA

I have known Barton and Priscilla McLean for years and it was a great pleasure to receive copies of their DVD offerings in the mail. As I have seen nearly all of the pieces collected here in live performance, I was especially interested in determining how well they translated to a DVD experience. The McLeans have been touring and making music as independent creative artists for multiple decades and call upstate New York home when they are not traveling the U.S. and the world. Their spirit and philosophy are well articulated and documented in publications such as Priscilla’s engaging and amazing book, Hanging Off the Edge, and articles featured in Perspectives of New Music and Journal SEAMUS (full bibliography at members.cisbec.net/mclmix/articlesreviews.html). This spirit and philosophy as well as their home location are an integral part of the pieces found on the DVDs and are most obviously evident in Priscilla McLean’s The Symphony of Seasons (2001–2003).

Priscilla began this first work in video after spending considerable time observing the video production process of the duo’s Rainforest Images (1993) collaborator, Hasnul Saidon. Priscilla is frank about the considerable time and expense that can go into video creation and Barton further shares that from the beginning, the Mix made the decision not to grab onto the latest trends and technologies for their own sake. Instead, he comments, “we feel that this is the quickest way to artistic obsolescence. In our camera work, as well as our post-production choices, we try instead to pose universal themes and tools that transcend the video fad of the moment,” and adds, “I think that general statement has been said repeatedly about our music as well” (personal communication). I must say that as a composer and video artist myself who is bound by both aesthetic and financial concerns, I heartily agree with the sentiments of the McLeans and feel that this perspective is born out by the high artistic integrity of the three DVDs in general and The Symphony of Seasons in particular.

Opening The Symphony is Jewels of January. Priscilla began gathering footage for this work around their farmhouse setting and fleshing out ideas for a complete four-movement piece in 1999 with completion in 2003. The videos were completed first and then, as the composer reports about the soundtracks, “the music just burst forth” (personal communication). The initial film material for Jewels of January was ice
formations at a nearby stream, and I agree with Priscilla that the careful visual study of the ice in various stages of growth and decay is both contemplative and compelling. In fact, of the four movements, *Jewels* remains my favorite from its stark yet rich black, white, and gray imagery to its simple but stereophonically interesting soundtrack (this is a great video to view wearing headphones which is one of the ways I experienced all of the DVDs).

Movement two, *The Eye of Spring*, was the least successful movement for me, although I certainly like the idea behind the work, which Priscilla states as being about spring and fecundity and how it would feel to be a "sexual" flower opening up to whatever came by (whew!). As the composer adds, "This is a piece only a woman could create, I am sure!" [personal communication]. The soundtrack for *Spring* features Ms. McLean’s powerful siren-like voice and works well on its own without the video accompaniment which I felt suffered a bit from too many blurry effects. However, *July Dance*, movement three, is a great video effect romp with dancing and shimmering trees and other summer images. Because I spend my Julys here in Texas where it becomes so hot that the heat creates visual waves in front of everything outside, I related easily to this piece!

Finally, the work closes with *Autumn Requiem*, a collaboration of Barton and Priscilla. At 26 minutes, it is the longest of the movements and I have seen this work both live and on DVD. One might think that such a lengthy video would be tedious, but quite the opposite is the case; the beautiful autumn images are so intriguing and the effects subtle and original enough to retain interest. Once again a rich and compelling soundtrack recorded flawlessly and utilizing Ms. McLean’s voice singing portions of the requiem mass and other selections and a variety of electronic sounds and found object instruments constructed and collected by the couple over the years completes the work.

The *McLean Mix Live!* DVD features four live performances by the Mix and successfully combines live footage with processed video sequences for variety and interest. Much more than a "concert film," the *Live! DVD* offers the pieces and video "commentaries" on the pieces. An example of this is Priscilla McLean’s *In the Beginning* (2000), that opens the DVD. During the almost 17-min work, one gets occasional glimpses of the concert setup but for the most part one is treated to the video portion of the piece [a collaboration of Priscilla and A. J. Jannone] superimposed with varying degrees of transparency on Priscilla’s face performing a virtuosic series of vocalizations recalling for me the “conversations” of György Ligeti’s *Aventures* and *Nouvelles Aventures*. The video superimpositions add an obvious “Mother Nature” element to the piece but in general simply convey a primeval and organic essence which I think was most likely the composer’s intent. This is a good illustration of how live performances and pieces can be effectively “discussed” by their creators long after the concert experience has finished, and I like this idea.

Next on the DVD is Barton McLean’s *Happy Days* (2000), featuring clown-acting, percussion, music boxes, party hats, and a variety of other fun stuff. Barton gamely plays “the straight man” [really, you can put a party hat and a lei on Barton but in the end he remains the consummate gearhead geek!], here leaving all the good lines to Priscilla who once again shows her marvelous performance skills. This particular selection is simply a recording of a live performance. All-in-all, the work is fun and enchanting. With *Wilderness* (1989) by Priscilla McLean, we are back to more of a “video as commentary” concept and this piece is primarily a recitation with soundtrack. I thought that Priscilla’s vocal expertise was on even more amazing display here than in the first selection and enjoyed her added theatrics as well. The piece itself is a realization of Carl Sandburg’s poem, “Wilderness,” and she certainly does justice to the work. Earlier I commented humorously on Barton’s “gearhead” status but the footage of this piece in particular showcases how valuable such status is to the duo. Priscilla gets on beautifully and easily with her dramaticization in large part because Barton never misses a cue. Continually adjusting knobs, tweaking computer applications (many of the works on these DVDs utilize Barton’s amazing abilities with Max/MSP), twiddling flexatones and a variety of other instruments, his “behind the curtain” mechanizations are a kinetic joy to view. *Wilderness* is described in the DVD program notes as a “staple of McLean Mix concerts since 1989” and, indeed, I can remember the first time I saw it under less than ideal circumstances in a basement room at Oberlin College. Still, then as now, Priscilla’s fabulous vocalizations and Barton’s active instrumental are intriguing and fresh, the piece has aged well.

Finally, *Magic at Xanadu (MAX)* by Barton McLean features his “Composers Playpen” computer program written in Max/MSP. The piece was inspired by the Samuel Coleridge poem, “Xanadu.” Mr. McLean writes in his program notes that central to the idea of the software is the initiation and changing of melodic, harmonic, and rhythmic loops in
real time. Most of the loops are pre-recorded with a few recorded and modified during the course of the performance, while a third musical line is performed on the keyboard. The composer writes that this makes for a virtuosic live event where he must modify up to 14 musical ideas at once. Unlike the other three pieces on the DVD, filmed at Engine 27 in New York City in 2000, Magic at Xanadu was recorded at the Knickerbocker Theatre in Holland, Michigan, in 2008. Magic begins with almost a toy piano-like riff that is then continuously layered and filtered and developed. The video here is a terrific display of Barton at work; one gets to see the music he is using, his hands on the computer and keyboard, all of the inner workings of a live interactive piece up close and personal. Occasional video effects are used to create a surreal visual study in keeping with the music. I enjoyed having a front row seat here, especially since I have not seen this piece live.

The third disc, Collaborations 2000–2008, provides another excellent visual chronicle of this duo's pieces and performances. Most interesting is that each of the collaborations here is unique in nature from the others. The first offering, MILLing in the ENNIUM [2001], is a more traditional collaboration with Priscilla creating the video and Barton creating the soundtrack. As one might imagine from the title, the work is a collage both sonically and visually. From the opening "rising sun" and music recalling 2001: A Space Odyssey to the images of a variety of musical and religious cultures, one is invited to reflect upon history, and, actually, each time I saw this (once live and twice in my studio), different ideas were conjured in my mind. The work progresses slowly so be prepared to sit with it awhile and really concentrate on what it has to offer.

Jambori Rimba was primarily completed during the couple's extended residency in Malaysia in 1996, and the soundtrack features an electronic drone composed by Barton and sounds of the rainforest in Borneo recorded by both him and Priscilla. The video was done by Malaysian video artist Hasnul Saidon, and, as mentioned earlier, became the inspiration for Priscilla to do her own video work in The Symphony of Seasons. One can see in this initial piece many of natural themes and video processes that have become a part of Priscilla's later pieces. Jambori Rimba was originally an installation and what is found on the DVD is a collaborative performance that the McLeans created from the installation materials. What strikes me most about Jambori Rimba is that it is a piece of subtle layers, and upon each viewing one can choose to grasp the whole or follow the thread of one of its parts.

In Natural Energy [2008] both McLeans had a hand in the video and soundtrack. Much of the sound track material was created by Barton using Max/MSP, generating an ostinato over which melodic ideas are improved using various whistles and flutes, the ever-present flexatone, Priscilla's voice, and some invented instruments. Video was created by Priscilla with input from Barton. Of the works featured on all three DVDs, Natural Energy is definitely the most abstract. However, although one may not actually see literal images of an environmental nature, they are certainly evoked. The viewer is given the essence of the natural phenomena if not the phenomena themselves. For example, the extended first portion of the work imparts the idea of flames but whether it is the flame of a candle or the physical "flame" that ignites a dancer or musician is never explicitly stated. Similarly, water is evoked next but it is more fluidity than literal water itself. Altogether, this is something new from the McLean Mix which may suggest an intriguing evolution of their style for the next decade of performances. For a behind-the-scenes look at how Barton and Priscilla collaborated and created the sounds for Natural Energy, a "bonus track" of rehearsal footage is included on the DVD.

While some visual artists and filmmakers may quibble with the aesthetics of a few of the McLean's video processes and title settings, for the most part these DVDs maintain visual integrity and most importantly, reflect the visual taste and sensibilities of the Mix which is, of course, of utmost importance here. I must say that the audio, both in terms of the soundtracks for the works and the digital recording, is outstanding in quality and easily passed the rigors of my new home sound system and my new stereo headphones. The DVDs come nicely packaged in sturdy plastic containers (attention, librarians and other preservationists!) so one certainly gets a high quality product for home and institutional libraries.

To have these three DVDs in one's personal and university collection is essential, I think, if one is to have a comprehensive representation of American electroacoustic music. The McLeans have been a unique fixture on the American music (and also international) scene for decades and they embody a creative and entrepreneurial integrity that is inspiring and demands acknowledgement and recognition. Those of us who have known Barton and Priscilla for many years know them to be fun and imaginative people and performers who are generous with their advice, time, and energies (I can think of at least two occasions off-hand when the Mix definitely picked
me up when I was feeling quite low creatively and professionally. I additionally encourage the acquisition of Priscilla McLean’s *Hanging Off the Edge* as well, as it provides a great deal of back-story for the creation of the pieces featured on the DVDs and other works; the DVDs and the Priscilla McLean book represent “the essential McLean Mix” for me. Further background and writings by the McLean’s about their music, their travels, and their tours are extensively showcased at their Web site [members.cisbec.net/melmix/index.html].