Reviews

[Editor’s note: Selected reviews are posted on the Web at mitpress2.mit.edu/e-journals/Computer-Music-Journal/Articles/reviews/index.html. In some cases, they are either unpublished in the Journal itself or published in an abbreviated form in the Journal.]

Events

Multimedia Festival
Transmediale 05 in Berlin

International Media Art Festival, Haus der Kulturen der Welt, Berlin, Germany, 4–8 February 2005.

Reviewed by Joyce Shintani
Stuttgart, Germany

Under the patronage of the German Ministry of Culture and with half a million euros per year guaranteed for the next five years, the multimedia festival Transmediale 05 (www.transmediale.de/page/home.0.2.html) opened its doors in the Haus der Kulturen der Welt in Berlin from 4 to 8 February 2005. The fact that the Ministry of Culture has admitted the Transmediale to its elite group of “beacon” projects of best-practice contemporary art alongside the Donaueschingen Music Festival, Ensemble Modern, and other media events such as the Kassel Documenta, is an indicator of the importance the German government attributes to new media art.

The festival began in 1988 as “Video-fest,” a sub-project of the Berlinale Film Festival, long before the days of popularized internet, digital art, and electronic-ambient music, and morphed into “Transmediale” in 1998. It has since established its place as Germany’s largest and most prestigious festival for new media art. Today, the festival is divided into two parts: the Transmediale [T05] that, reflecting its origins, is dedicated primarily to moving image art, and the Club Transmediale (CTM; further information can be found at clubtransmediale.de/), a parallel platform devoted to music started in 1999 to bridge the gap between “art and Berlin club culture” (electronic dance music).

The vast program of T05 encompassed some 11 conferences, 27 lectures, 27 exhibitions, 8 performances, 100 screenings, a prize competition, 15 workshop exhibits where visitors could construct their own digital gadgets and robots, as well as myriad partner exhibitions. CTM encompassed further concerts, dance events, cinema screenings, and installations. Director of it all was the loquacious Andreas Broeckmann, who managed to moderate or comment on almost all events simultaneously.

In contrast to the broad festival themes of recent years, such as “remainders of utopian potential,” globalization, or public space, T05 questioned the “basics” of contemporary culture in the areas of biotechnology, politics, and media art. “Our perception of what constitutes our basic needs must continually be redefined. . . . The festival investigates the aesthetic and ethical foundations of a frantic and hyper-potential culture and presents models of artistic practice whose ethics derive not from past value systems, but from an appropriation of an extreme and contradictory contemporary culture.”

What in the program booklet had the flavor of a leftover modernist manifesto turned out in practice to be a playful, imaginative, and many-sided festival (the program can be downloaded from www.transmediale.de/page/files/download/download/tm05_schedule.pdf).

However, before “getting down to basics,” the thorny definition of terms had to be dealt with. Multimedia; electronic, digital and sound art; Klangkunst; sound installation, time-space collage; audio-visual art. . . . the array of terms was nearly as varied as the panoply of definitions. Artists, curators, academicians, and philosophers from the USA, Asia, and Europe offered background, history, and definitions. No final consensus was reached, nor was one sought. The diversity of approaches and lack of established canons are testimony to the fact that the new media area is still in its baby shoes; technology and theory are developing more rapidly than they can be analyzed and classified. The charm and innovation of the exhibits owed much to the unselconsciousness of a new field, as yet unshackled by convention.

Theme “Basics”

The theme of the conference, “basics,” turned to the fundamentals of art and to the ethics of contemporary society. It also represented (to this American viewer) a notable attempt to escape the navel-gazing often characterizing traditional art in “old Europe.” The exhibits in the “basement” venue reflected the conference’s theoretical underpinning and offered dialogue with artists and insights into their approaches. Portable shelters developed with and for street people (paraSITE, USA) or prisoners’ inventions (Temporary Services, USA) drastically marked the “ground zero” of basic needs. A Geiger counter for “corporate fallout” was a morbidly witty device, using bar codes and a database of genetically modified foods and corporate behavior to detect the ethical status of groceries at the supermarket (James Patten, Visible Food, USA).

The “basics” theme gave an ethi-
cal aspect to most of the festival conferences and also contributed to a rich variety of works and thought, from the serious to the slap-happy: presentations of art initiatives in Southeast Asia, a discussion on a Wikipedia article on media theory, freshly composed cellphone ring-tone downloads, or a bring-your-sine-wave party, as examples. A desire was expressed for more African and South American entries, and after Okwui Enwesor’s benchmark Documenta 11 focused on Africa, it is hoped that T06 succeeds in opening up geographically while keeping its variety and high level.

Another theme that has resurfaced in the German multimedia scene and that ran throughout Transmediale was the old discussion of how to combine different art disciplines. The first panel discussion, “Listening Out,” questioned the separate-but-equal co-existence of the two Transmediale festivals. And with good reason. Most of the works and exhibits witnessed at the visually oriented T05 were either silent or they employed sound or noise, but not music. One couldn’t help but ask, “If works at the Transmediale employ multiple media, why isn’t music one of the media?” But the current discussion surpasses previous discussions on Gesamtkunstwerk or synthesthesia, which were intent on combining visual and musical forms of “high art.” At Transmediale, visual art was heavily represented with academic and theoretical panels, and its integration with CTM’s popular club music might appear to be a union of non-equals. But is it?

Throughout the twentieth century, film and photography fought their way as new art forms into the high art canon as did visual pop art from Andy Warhol onward. Electronic music, the “ancestor” of club music and electronica, also managed to box its way into the canon thanks to the efforts of Pierre Schaeffer, Karlheinz Stockhausen, Herbert Eimert, et al. But in the course of the 1990s, a schism of sorts took place. While electronic music remained in its ivory-tower institutions, personal computers and affordable software took off for the dance floor. The good old rotating, reflecting, crystal disco ball of the 1970s gradually evolved into laser and other lighting effects, then video. Finally, in the 1990s, digital technologies permitted visual media to play a more prominent role, and, as a natural consequence, the two media began to interact in the club atmosphere—the popular Gesamtkunstwerk of the digital era had arrived.

Club Transmediale

Today’s “club” music still has solid roots in popular art, as demonstrated by the lively CTM concerts performed in the Berlin discotheque “Maria am Bahnhof,” but it remains largely marginalized in the high art canon, dramatically so in Germany. (The latest examples of this were the German Musicological Society’s congress in Weimar and the symposium “Critical Composition” in Stuttgart’s Schloss Solitude, both of which largely ignored popular music, aside from gender aspects of rock singers and abundant ethnological treatment of folk musics.) It is obvious that this alternate club culture is giving birth to a healthier new current of electronic music. The seriousness of CTM’s endeavors was underscored by the presentation of the book Gendertronics, a theoretical text from the venerable Suhrkamp publishing house documenting the discussion of gender and electronic music of last year’s festival. Jean-François Lyotard may have proclaimed the end of the great narratives 30 years ago, ostensibly leading to the dissolution of divisions between high and low art. Yet, in many cases, this convergence is not taking place, and the burden of straddling art “classes” and generations complicates the already onerous task of merging media formats. In this sense, CTM and T05 have existed separately for six years, and the opening panel rightfully posed the question: “Quo vadis?” For all that, is the divergence perceived at Transmediale the result of a clash between high and low cultures, between various media, or simply a generation gap, with visual art already “over 30” and club music still in its lively youth?

There was some evidence of rapport between club and electronic music cultures at T05; for example, the panel “Sound Art Visual” [Anthony Moore, Edwin van der Heide, Elena Ungeheuer], which bravely asserted that “the dominance of the visual in media art has broken down.” Christian Ziegler’s performance was another case in point, where low-tech DJ scratch technique met off-the-shelf samplers, filters, and synthesizers. In the work Turned a DJ scratches live, placing various paraphernalia [rubber bands, post-its, etc.] directly on the amplified LP while a “composer” transforms the scratched sounds in real time and a dancer interacts with video projections. In this video-sound-dance piece, the scratched sound material is transported throughout the multiple segments of the piece in quasi leitmotif fashion. Though the work united many intriguing aspects of different media, the loosely bound segments and techniques did not coalesce into an intense artistic experience. The conundrum of merging media in art was reflected from many sides at T05, and it is to be hoped that the exchange will continue and deepen. From the musician’s point of view, there is much to be gained.
Transmediale Awards

The climax of the festival was the awarding of the Transmediale prize. In yet another manifestation of the turbulence of this young art form, prize categories from the past such as interactive, video, software, CD-ROM, internet, and image, were jettisoned this year in an attempt to "re-evaluate the connection between art and media technologies." In the end, three equal prizes without category were awarded: to Camille Utterback (USA) for her installation Untitled 5; to Thomas Köner (Germany) for his video Suburbs of the Void; and to the Austrian duo 5volt-core for its work Shockbot Corejulio.

Shockbot Corejulio is a self-destructive hardware/software system [www.5voltcore.com]. A robot arm is attached to a computer and receives command signals from the computer and then attempts to get the computer to produce short circuits inside itself. From this interaction, a series of images is produced and deconstructed on the monitor, ultimately, defective command signals arrive, and the system breaks down completely. The work, in the genealogy of Jean Tinguelly’s machines that destroy themselves and Georges Bataille’s “beauty of destruction,” highlights the performative aspect of software and redefines relationships between hardware/software components. In Shockbot Corejulio sound was present only as a noise component.

Camille Utterback’s installation Untitled 5 translates physical movement in the exhibition space into imagery that is painterly, organic, and evocative while being algorithmically generated [www.camilleutterback.com]. The work consists of a large wall projection, a walking area in which viewers are detected by a video sensor, and Ms. Utterback’s own programmed painting software, which transforms movements into projected images. With body motions, the viewer interacts with the software and sees the result on the screen. Using colors and painterly gestures reminiscent of abstract expressionist Joan Mitchell, the work brings to the forefront the interaction between the artist, the viewer, and the viewed. The relationship between passive viewer and static object is broken, thereby creating new subject/object relationships between artist, work, and viewer. Despite lacking any audible element, the installation was nonetheless a delight to watch and to interact with.

Suburb of the Void, a 14-min installation combining visuals and sound by the established video artist Thomas Köner, was the only prize work to incorporate sound. For the jury, the work represented the "perfect combination of sound and image." Drawing on his declared predilection for “cold” climates and sounds, Mr. Köner used 2,000 photos of a traffic intersection in Finland in winter for the visuals, taken by surveillance cameras over a period of several months. He assembled the photos into video form and underlay them with the analog filtered sounds of Finnish children playing.

The grainy images change very slowly from night to day, from color to black-and-white, bringing gradual changes of mood. In this impressionistic play, actual pictorial elements appear blurred, recalling Claude Monet’s Rheims cathedral studies or, more recently, the white-gray minimalist landscapes of Luc Tuymans or Qui Shi-Hua. In all cases, the poetic ambiguity of what is seen is one of the aesthetic charms of the works. Congruent with the grainy, ambiguous images, Mr. Köner created minimal, white-sound, ambient music, white noise à la Morton Feldman. Although most viewers had difficulty remaining at the installation for longer than one or two minutes (chairs would have been welcome), viewing all 14 minutes revealed the subtle and understated interplay of the images with the music, and it was this evocative interaction that particularly convinced the jury.

For the artist, the permanent cold in the north of Finland is connected with the deceleration of the image and thus with a sharpening of the viewer’s senses. Mr. Köner tries to engage the visitor in the observation of the passage of time. But does the slow-motion picture/sound drone activate the imagination, or lull it to sleep? In the tension between high-tech and concept art, abstract and concrete, Suburb of the Void with its under-cooled statement succeeded in eliciting controversy. Mr. Köner’s works have been widely performed and received numerous awards, and there’s certainly no arguing with his earnest investigations into sound, silence, and their implications for a society overwhelmed with audio massages [c.f. his Ars Electronica speech, found at www.koener.de].

However, in the context of the Transmediale, it seemed that both artist and jury accepted the primacy of the visual image, whereas the musician has a different set of criteria to hear by. And there’s the rub. On the one hand, the question was omnipresent: “Is this all music has to offer moving images?” On the other hand, how does the musician empty the ears of tradition in order to engage in creating sounds based on new criteria to match new art forms? The astonishing variety of works and approaches presented at the Transmediale gave ample room for speculation on new media art and its aesthetic questions in a continuing heated and productive art–technology discourse.
3rd Spark Festival of Electronic Music and Art

School of Music, University of Minnesota, Minneapolis, Minnesota, USA, 16–20 February 2005.

Reviewed by A. William Smith
Lethbridge, Alberta, Canada

The third annual Spark Festival of Electronic Music and Art, held at the University of Minnesota (UMinn) School of Music, 16–20 February 2005, was so much fun that I want to go to the next one. Ranging from sampled sounds of the hip-hop scene with the kick-off event—DJ Spooky—mainly for UMinn students, to electroacoustic and other events such as an eight-channel concert, there was a venue for every facet of the electronic music genre, it seemed. Although I was particularly impressed by the intensity of pianist Shiau-uen Ding in her own concert as well as with the NeXT Ens Ensemble, I was rewarded by attending all events. The diversity of the experience is what I found valuable.

On Wednesday evening, DJ Spooky bridged popular culture and academia and promoted his new book at the keynote event by passing out free CDs to the hundreds of students in attendance. He attempted to connect graffiti with music created by contemporary DJs. Coming from the more serious side of sound, I wondered at first if this were an appropriate way to begin an international festival, but it was an attempt to reach out to young people at the university focused in other ways. It was disappointing that those hundreds of students at the first event rarely attended others of the diverse programming.

Thursday began with papers, followed by a panel session, “The Polarized Composer: Addressing the Conflict of Musical Upbringings of Today’s Young Composers.” The papers and points of views of the panelists are concisely summarized in the elegant conference program (available online: spark.cla.umn.edu/archive.html), and the gist of the panel discussion centered around academia as the “keeper of important cultural material.” The panelists, all very articulate, struggled with the ideas of what is worthy to study and seek as a career path regarding sound. It seemed that central to their arguments was the nature of authority and endorsement. Indeed, isn’t it?

At the famous Weisman Art Museum designed by Frank Gehry, on the other side of the UMinn campus, approachable by a walking bridge over the Mississippi River, a 4 p.m. concert featured visuals with adjudicated sonic environments. Among the six works, 60x60 was an hour-long event with minute-long compositions culled from 60 electronic music artists throughout the world and sequenced by Robert Voisey. This serial event was important conceptually, and unity of the discrete sound experiences was attempted through visuals created by a single artist, Shimpei Takeda. Although everyone seemed to be able to appreciate the uniqueness of each of the 60 compositions composing the entire work, some of the audience members indicated to me that their interest seemed to wander about 20 minutes into the piece and that they were not able to connect emotionally with the one-minute pieces that did not display any developmental relationship to the others. Nevertheless, one of the ends of the creators was to introduce audiences to a broad range of practicing electronic artists, and while it would have been very difficult to identify a single piece because there were no visual cues such as a number or name in the visuals associated with a particular 60-segment, 60 more artists must be encouraged by performances throughout the world of that miniscule fraction of their creativity.

To complete the first full day of the festival there were two experimental performances in two different venues, one on campus and the other off. The first featured five performances involving real-time processing of sound as well as interactive graphics. The Whole in the Coffman Center, a basement space that is similar to a theatrical black-box venue, had a cash bar, although most attendees seemed more interested in talking than in taking refreshments. Circular tables with lighted candles provided a warm and comfortable setting for enjoying performing groups of up to six people on a small, lighted stage with a screen for video projection. J. Anthony Allen with his group of performers calling itself Ballet Méchanique was memorable with his glove-controlled clips of a drum performer on video that formed the backbone of a work with drum set, bass, trumpet, and other instruments. The idea of using found or borrowed material resonated with the pop cultural opening of the festival.

In the evening, various performers sometimes were hard to see in the Town Hall Brewery, a microbrewery with the absolute best dark beer I’ve had in ten years. The stage was not raised and there wasn’t enough seating, but the food was great and the setting very informal. On the first evening, Jamie Allen and his suitcase with sensors in it gave a physical performance, but the audience also enjoyed Ray Dybzinski with his sound-driven lasers and guitar playing in Sounding Spirals. A similar event was held on the Friday and Saturday nights after the evening concerts, with performers such as Seiji Takahashi and Michi Yokota from Japan, Neil Rorlick from New York, etc.
and others. What a way to end the days . . . but this made for an intense experience for someone like me wanting to hear every paper, meet everyone, and listen to every work.

On Friday, the festival again featured lectures by artists and scholars as it did on Saturday and Sunday, and included a masterclass by Philippe Manoury, artist-in-residence. Mr. Manoury also gave the keynote lecture on Saturday afternoon and had a piece with flute played by Elizabeth McNutt on the Saturday night Electroacoustic Concert at the Ted Mann Concert Hall. I found his work, Jupiter, to be very well crafted, elegant as a fine sonic wine with attention to detail in sonorities. This and other events were available to the public, though on this particular blustery evening, many forewent the experience. Clarinetist Esther Lamneck, who is specializing in intersections of live and pre-processed sounds, explored her instrument through Musicometry I by Lawrence Fritts and Cigar Smoke by Robert Rowe. She made many of us want to compose for her.

As well as the informal venues in the evening, and capstone Saturday night concert, there were events in the In Flux Auditorium, an irregularly shaped space, and the Lloyd Ullman Recital Hall. The audio immersion concert (Friday, 4:30 p.m.) featured audience seating surrounded by eight loudspeakers. One of the virtues of this venue is the sensitivity of the artists to the spatialization of sound. A first-year composition student at UMinn, Josh Clausen, had the closing work, Phoneme Play, and the piece had a dynamic intensity to its influence of popular culture. I hope to hear Mr. Clausen’s work next year based on this promising debut.

At the Friday 8 p.m. concert, press-and-play fully realized standalones and a variety of instrumentalists performing with electronic means were featured. Dennis Miller in his faktura had stunning 3D graphics (as I always find) created by POV-ray, and together with Noel Zahler’s Gothic Tempest added variety through visuals. Dr. Zahler, one of the drivers of the biennial Arts and Technology Symposium at Connecticut College in New London recently became director of the UMinn School of Music. Connecticut College’s loss is UMinn’s gain. His piece, created in the late 1980s, has held up very well. I delighted in experiencing it at its premiere at the second Arts and Technology Symposium, and found again the aesthetics to be very secure and filled with a sense of wonder about nature.

Tae Hong Park performed Bass X Sung on bass guitar and Cory Kaszprzyk on saxophone performed Robert Hamilton’s Is the same . . . is not the same. The variety of work on this Friday 8 p.m. concert and for the entire five days was staggering. Spark Festival Director Douglas Geers, who programmed strong works in several venues, is one of the major driving forces behind this event. Work from throughout the electro-musical world was solicited for at least a dozen formal and informal concerts/performances. I saw the boxes and boxes of submissions that Mr. Geers and his team had to adjudicate. Much work went into the planning and execution of this festival and I found the results exemplary. I feel much richer for having been able to attend.

Finally, I hope to hear more of NeXT Ens, a student group from Cincinnati dedicated to performing new works of interactive acoustic and computer music. Its concert was scheduled Saturday at 11:15 a.m. Secret Pulse by Zack Browning had the drive I’ve always loved from parts of the Béla Bartók quartets. They make music that crests like a wave.

The submission call for the annual Spark Festival comes again in the autumn [see the festival Web site, spark.cla.umn.edu, for details], and I look forward to returning.

Amnon Wolman, Ron Kuivila, Phill Niblock: Sound Art at Gasp

Neil Leonard, Curator, Gallery Artists Studio Projects, Brookline, Massachusetts, USA, 4/5, 12, 19 March 2005.

Reviewed by Alexia Rosari
Boston, Massachusetts, USA

“At Gasp we believe art is a powerful tool that enriches, reflects, and propels change that affects human experience . . . the art of today is produced in a context where differences should be tolerated, distances are negotiated, and otherness must be embraced.”

This statement by Gasp co-owner and co-founder Magda Campos Pons is a token of the positive energy and enthusiasm that flows through this newly established gallery in Brookline, Massachusetts. Ms. Campos Pons and husband Neil Leonard are two remarkable artists, teachers, and entrepreneurs, both internationally acclaimed for their work in video, photography, painting, and sound art. Together they founded Gasp in September 2004, creating a unique venue “by artists for artists,” which not only functions as a gallery but also as a space for studios and projects. I had the pleasure of visiting a three-part event in March 2005 by the title “Sound Art,” curated by Mr. Leonard. This was my first time visiting Gasp and I was impressed by both the beautifully open gallery layout and the exceptionally warm reception I was greeted with by the gallery owners and their staff.

The first exhibition, End of Deviation, which ran on Friday 4 March and Saturday 5 March, was an instal-
lation by Amnon Wolman, a sound installation artist and composer who splits his time between Israel and New York. His works include computer-generated and processed sounds, symphonic works, vocal and chamber pieces for different ensembles, film music, and music for theater and dance.

End of Deviation consisted of two notebook computers, four loudspeakers, and two projectors. The installation was set up in the back room of the gallery, allowing the visitors to comfortably relax on pillows while quietly absorbing the sounds and visuals. The concept of the installation was simple: the computers were each running a Max/MSP program producing stereo sounds and visuals of six independent clocks and manipulated photographs [see Figure 1]. The clocks controlled the sounds and the changes in the visuals. I personally felt myself drifting into a timeless space and losing track of chronological time while being carried by the soothing sounds; I profusely enjoyed Mr. Wolman’s installation.

Appearing quiet and reserved at first, Mr. Wolman soon revealed his passionate and playful nature by sharing with me what sparked the idea of this installation:

I got excited about the idea of parallel “clocks” that measure different time units and that led to the sound and visual processes. Each of the pieces so far is a solution for some problem that is raised by the clocks and time issue in the previous piece. So far I have been lucky because every solution created another problem, which got me excited and was a reason for the next installation.

End of Deviation challenged the idea of physical time and proposed its own way of measuring time, both acoustically and visually. According to Mr. Wolman, “Time is measured in specific drops that hang before flying down. Images and sounds are used to portray the time between a single occurrence and another, dividing this unlimited time into smaller units that progress in parallel dimensions of time.”

As I was enjoying the sound installation I struggled to make out what the photographs represented. Albeit this was primarily a sound installation, I was quite intrigued by the images. To my amusement, Mr. Wolman conveyed to me that they were images of men’s chests, a collection of which he happened to own and therefore ended up using. “This is because I am gay and also because I worked on another piece, Peter and Mr. Wolf, with the great video artist HD Motyl, which was based on men’s chests. It’s fun for me to know that men’s chests are the source for the images, but it really is irrelevant to the piece . . . the clocks are the important visual part.” If you want to find out more about Mr. Wolman and his work, visit his Web site (www.amnonwolman.org).

The second event took place on 12 March, featuring Ron Kuivila in a one-hour sound art gesture and performance comprising “two and a half pieces.” Mr. Kuivila is a conceptual artist and composer who has pioneered the use of ultrasound and who has explored compositional algorithms, speech synthesis, and live performance sound sampling, to quote only a few of his many acoustical adventures. He has performed and exhibited his work throughout the United States, Canada, and Europe. Mr. Kuivila is a faculty member of the Music Department at Wesleyan University.

Mr. Kuivila’s installation was presented by means of six loudspeakers, placed in thoughtfully selected locations within the main room of the gallery. The speakers were carefully positioned so as to allow sound to be...
The first piece, *Outgoing Message*, was a sound collage of “sounds synthesized based on the specifications for dial tones, ring tones, and busy signals,” as Mr. Kuivila explained. The piece began with individual tones being tastefully laid out in intervals, creating a feeling of suspense and anticipation. It later progressed with a collection of increasingly sustained tones building up to a sensation of “waiting,” filled with intensity up to the end of the piece.

The second piece, *Architectonirama*, was composed of two sections, the impulse structure being the same in both. Mr. Leonard explained:

"*Architectonirama* is a study that intertwines the expansion and contraction of time structure (the concept of irama) with the perfect regularity of electronic pulse. The algorithm for acceleration is based on Jim Tenney’s *Spectral Canon for Conlon Nancarrow*. As Mr. Kuivila performs the piece he records each successive iteration of the piece and plays it back in the space, in tribute to his teacher Alvin Lucier who explored the use of architectural space in his *I am Sitting in A Room*.

In the second section of the piece, the impulses were picked up by a microphone which was in the signal chain of an amplitude-triggered phase shift network. In Mr. Kuivila’s own words: “The second part brings out tonal qualities of the room while the first part is more in relation to the rhythmic properties such as flutter echoes, etc.” Mr. Kuivila’s work allowed the audience to intensively experience the acoustical three-dimensionality of the physical space they were in. I personally find it especially stimulating that this installation will always be a unique variation of itself, depending on the shape and dimensions of the venue in which it is being performed.

The March “Sound Art” series wrapped up on the 19th with a four-hour sound installation and performance by legendary and world-renowned minimalist composer, photographer, and filmmaker Phill Niblock. Mr. Niblock lives in New York and has also been known as the director of the Experimental Intermedia Foundation since 1985. The evening opened with the mid-1960s underground classic, *The Magic Sun*, a 17-min experimental black-and-white film shot and directed by this artist. He used a unique negative process to create this beautiful, almost fluid black and white photography-like masterpiece. To my personal delight, this film has recently become available on DVD through the Atavistic label (*Music Video Distributors*).

*The Magic Sun* was followed by an approximately three-and-a-half-hour-long presentation of three individual video projections, simultaneously documenting people at work in rural Asian areas, crafting shoes and textiles, fishing, working in fields, and forging iron. The videos were accompanied by an underscore based on ten pieces of Mr. Niblock’s thick and loud, drone-like signature music run-off a notebook computer. The drones had been meticulously constructed by means of layering and shifting single pre-recorded notes played by instruments such as saxophone or cello. The subsequent rubbing of the different harmonics and frequencies created a modulation effect resulting in this drone-like sound. Mr. Leonard added a live component to several of the pieces by improvising to the rich sound texture on soprano, alto, and tenor saxophones as well as clarinet and bass clarinet. By slowly walking through the facility while playing his instrument, Mr. Leonard contributed a moving element to the frequency spectrum of the drone sound. This loud, dark, and rumbling underscore combined with the colorful and laborious footage induced an almost trance-like state within the spectators. It was a quite impressive and intense sensory experience.

Sound Art at Gasp proposed three very distinct sound installations and performances, and proved that there are indeed no limitations to the possibilities of how sound can be expressed, challenged, and at the same time intertwined with visuals. The series was a stimulating and enriching feast for the senses, consistent with the driving force and innovative spirit behind the gallery’s statement. Sound art fiends would be well advised to take note of the Gasp Web site (www.g-a-s-p.net) in order to remain informed on upcoming events of this nature.

**14th Florida Electroacoustic Music Festival, 2005**


*Reviewed by Larry Austin*

*Denton, Texas, USA*

The 14th annual Florida Electroacoustic Music Festival (FEMF), directed by its founder, James Paul...
Sain, was presented at the University of Florida, Gainesville, 7–9 April, 2005, with Morton Subotnick as guest Composer-in-Residence. Nine concerts of new electroacoustic/computer music compositions included a broad spectrum of fixed-media audio, video, and DVD pieces, as well as various mixed-media combinations of instruments, voice, soloists, ensembles, electronics, and dance, many works performed with interactive computer music/video involvement.

All FEMF concerts were produced in the University of Florida, Phillips Center for the Performing Arts, Black Box Theater, an intimate but excellent sounding venue equipped with eight-channel playback, the loudspeakers surrounding the audience for optimal listening. Five of the nine concerts were “juried concerts,” including works submitted for consideration, then selected for performance. Two ongoing programming traditions, instituted by Mr. Sain in the 1990s, provide FEMF with a national/international flavor: (1) invited/curated concerts by other well established university/college electroacoustic music studios in the USA; and (2) an annual concert of European electroacoustic music curated by FEMF Associate Director Javier Alejandro Garavaglia. Additionally, Mr. Sain carries on an established FEMF practice of welcoming works for performance by past FEMF Composers-in-Residence, giving festival participants an opportunity to hear recent compositions by widely recognized practitioners—your present writer included, I’m gratified to mention.

Concert 1: Electroacoustic Music from the Florida Electroacoustic Music Studio (FEMS)

The first of four curated concerts was presented by the resident University of Florida studio, FEMS, as a morning concert on the first day. Cast as a heat-oriented metaphor for the disorientation experienced by a person with Attention Deficit Disorder, composer Tim Reed’s harmonica sounds seemed to wander aimlessly about the space in his Invisible Vectors. Russell Brown’s Catchpenny featured violist Sally Barton in dialogue with pre-recorded viola pizzicati, then arco, then patterns, scales, and sustained sounds, all about discrepancies between just and tempered tuning—playing out a rather dry essay on same.

The title of Patrick Pagano’s DVD piece, Taking a Picture of Taking a Picture, tells it all: mixed sonic textures combined with visual collaborator Amy Laughlin’s album of flickering photo images. The program continued with Chan Ji Kim’s Awaiting, nicely mixed, with sustained tones, and reflectively soulful. As annotated by the composer, Joo Won Park’s Binge was a “textural variation on seven percussion samples,” looped and variously combined imaginatively, much as a human percussionist might have improvised. New Reactions, by Samuel Hamm, colorfully sets a short, recited poem of the same name by Neil Flory, expertly exploring a variety of time-stretching processes. The last and best piece of the concert was What the Bird Saw by Suk-Jun Kim. The beautifully chosen and creatively diffused sounds were, as the composer described in his notes, “bits of oblivious memories . . . watching what a bird would see and listening to what a bird would hear.”

Concert 2: Music from the Cincinnati Conservatory of Music

The afternoon concert of the first day was curated by composer Mara Helmuth, director of (ccm), the College-Conservatory of Music Center for Computer Music at the University of Cincinnati, featuring performances by its own resident NeXT Ens Ensemble. Three mixed-mood, fixed-media pieces opened the concert: Maria Panayotova-Martin’s DVD piece, Il Semfоро Blu [heard again in full stereo in Concert VII, with animation by Fang Zhao, Kazuaki Shiota’s Crumble; and Matthew Planchak’s etudes ( . . . scapes), the best conceived/realized of the three.

The remaining six pieces on the program were for different combinations of the instruments of the ensemble (flute, piano, violin, cello, percussion) and electronics, juxtaposing more musically evocative experiences. Cassini Division, by Margaret Schedel, for four instruments with programmed Max/MSP computer interaction and video projection, explored abstract formulations of the harmonic series, sustaining attractively complex sounds and sights, like the gravitational resonances of Saturn’s moons, her metaphorical allusion. Jennifer Bernard’s oyxomoronic Pure Dribble, for several instruments and recorded basketball game sounds, was great fun for players and audience alike, complete with a seventh-inning stretch [sic]. Gabriel Ottoson-Deal’s Scintillating Fish followed: a short, cute, minimalist piece, mainly for flutist Carlos Velez, whose improvised cadenzas interacted cleverly with a Max/MSP patch. In his program notes, Christopher Bailey characterized his piece, Balladei, for piano and CD, as “a twisted mish-mash of fragmented medieval European musical syntax . . . North Indian Shenai music, medieval dance rhythms, Irish jigs, and more.” Enough said. In contrast, composer Ivica Ico Bukvic provided no notes at all, yet his piece, Tabula Rasa, for flute, cello, piano, and electronics, swelled and elaborated beautiful
sonorities, well-suited for this classic ensemble. Mara Helmuth’s The Edge of Noise, for the full ensemble and electronics, rowdily finished the program with noisily fascinating instrumental/electronic flourishes.

**Concert 3: Juried Concert A**

Outrageous! A totally soused [but brilliant!] soprano calling herself “Steve” [Janet Halfyard] stumbled down several stairsteps to the stage from an emergency exit, still cradling a drink, uttering epithets, cackling and mocking the score that she disdainfully threw aside, page by page, still somehow managing to “sing” the piece. GSOH, for voice and electronics, by Simon Hall, was a wonderfully funny, theatrical surprise to begin the first evening concert! And what piece could follow such a hilarious event? It was Kristine Burns’s DVD piece, Liquid Gold, a cool, quietly minimal piece presenting, as she noted, “an abstract distillate of a symbiotic relationship between metallic sounds and . . . monochromatic synthesized video.” This is a beautifully crafted composition.

Next, Neil Flory’s CD piece, Imaginary Cities, eloquently recounted its tale of sounds in future cities “filled with activity, technology, danger, and discovery,” as his notes described. A virtuosic piece in every sense, Lawrence Fritts’s Musicometry I, “To, from, and for Esther Lamneck,” for clarinet, live and pre-recorded/processed, presents Ms. Lamneck at her best: the consummate improviser, fast and furiously filling every electric moment with hundreds of notes. What a piece, what a performer! Punctuation, by Isaac Schankler, for octophonic fixed medium, exploited the sound and sense of words in space, the vocalized words originally recorded by Aleise Barnett.

David Durant’s excellent CD piece, Hazeur’s Curve, metaphorically takes us to this so-named Mobile, Alabama, street with a cityscape of big, fast, and exaggerated sounds. The Last Castrati, a CD piece by Ricardo Climent, is an excellent montage of vocal sounds, transposed and transformed imaginatively. The final work on the concert was Orlando Garcia’s piece, Separacion, bravely performed by soprano saxophonist Griffin Campbell, whose sounds were all but subsumed by the tape and who dizzily breathed circularly its long tones amid a wall of recorded saxophone tones and tunings, the most radically unrelenting work of the evening . . . nay, of the festival so far!

**Concert 4: Juried Concert B**

The second day of concerts began mid-morning and opened quietly with a beautiful flute and interactive computer piece, Fluctuation, by Seung Hye Kim. The breathy sounds and classic, birdsong-like gestures—reminiscent of classic solo flute pieces by Claude Debussy and Luciano Berio—were sensitively performed by flutist Kyung Lee. Edward Martin’s Drift began and ended with noticeable tape hiss, and continued with whooshes and transformed metallic sounds. This was a standard electroacoustic catalog of processes with standard technical language, definitely drifting in and out of my consciousness, as the composer’s title metaphor explicated.

Before presenting his piece, Wandering Around the City, Erdem Helvacigolu invited the audience to enjoy a Turkish sweet he had provided for the intermission, a delicious after-taste of the Istanbul soundscape his CD piece provided, smooth cross-fades between city-scenes he had mixed and recorded. [As I remarked to the composer afterwards, I was surprised that his wanderings in Istanbul were so smooth, with no sudden shifts or rough edges.] Composer-saxophonist Eric Honour’s piece, Didjeriduet, pitted the live, often discontinuous, multiphonic alto saxophone sounds against the recorded/mixed/transposed samples of the folk instrument, the didjeridoo. Neither won the match (sic).

The second half of the program began with Colby Leider’s excellent composition Veritas ex Machina, for percussionist plus real-time electronics, its mostly ringing-metal instruments performed ably by percussionist Matt Sexton. At one point in the piece, Mr. Sexton stomped a foot on the stage floor, at another he uttered something aloud, asserting a human frustration of some kind in this multiverse-machine piece! Singularity, by Mark Ballora, was beautifully performed by flutist Jui-Ghih Agatha Wang, whose idiomatic patternings, sequences, and lyrical episodes were complimented by her electronic, computer counterpart in real time.

Slowly Sinking Slower, a DVD piece by Douglas Bielmeier, depicted aural and visual trash heaps—really! Surging Waves 2, by Shinichiro Toyoda, for this listener offered an ironic paean to Pope John Paul II, whose funeral mass was that same day; its layers of guitar/computer drones soothed our sensibilities.

Paula Mattusen’s . . . of one sinuous spreading . . ., for piano and computer, was gently performed by Kathryn Woodard on the piano harp, interacting in an improvisatory manner with the composer’s computer program which often reversed and sustained the sounds. As in some such improvisatory works, the fascination the composer and performer have for the process can lead to an overlong outcome. The final piece of the concert was Bologna by Paul Thomas, who wrote about his CD piece that, “Simply put, Bologna is a
most of the audience by dancing with the piano bench to the piano as the tape playback began. Then, he began to play/dance his piece, encounter.dce. I sat transfixed through the rest of this piano/dance melange, a truly sensational experience! You have to see/hear it to believe! A brief, nicely composed CD piece followed: Kuilas by Gabriel Lit. For the last piece, Chapman Welch’s Residual Images, a large, extended-range marimba was wheeled on stage, followed by its performer, Eric Willie. The piece was virtuosic, both in the intricate interplay of patterned arpeggios and the sustained tremolos; its interaction with the computer program made for a lively performance.

Concert 6: Juried Concert C
Larry Austin’s Tableaux: Convolutions on a Theme, for alto saxophone and octophonic computer music, opened the evening concert of the second day. While recusing myself from reviewing my own piece, I will write that saxophonist Stephen Duke, who commissioned the work, was masterful in his presence and playing. He made his part blend with and animate the composer’s convolutions of the performer’s recordings of the composer’s saxophone transcription of Modeste Moussorgsky’s Promenade from his Pictures at an Exhibitions.

Sylvia Pengilly’s DVD piece, Patterns of Organic Energy, was beautifully composed in every way, its algorithmic cross-synthesis of both sounds and imagery truly representative of the best in this renewed era of the integrated sight-sound genre. In contrast, Clifton Callender’s Canon, for electronic player piano, presented an obvious type of programmed notation, where voices combine, as they independently accelerate and/or decelerate.

Dreaming of the Dawn, by Adrian Moore, is a CD piece inspired by Emily Dickinson’s poem of the same title. Its busy montage of diversely processed instrumental sound sources were expertly diffused by Mr. Moore. Next came Trajectories, by Eric Lyon, an octophonic piece whose tennis ball-like timbres bounced around the space, then combined with attractive, choral sonorities to create a very clear and satisfying spatial listening experience. Ending the first half of the concert was Cort Lippe’s Music for Cello and Computer, where what cellist Margaret Schedel performed was at once sensed by the Max/MSP program, then analyzed in various parameters and transformed to join the cello in a musical dialogue, in this case a very detached encounter.

An intensely loud CD piece, Fractures, by Ronald Keith Parks, ensued after the break (sic) for intermission. To my ears, Mr. Parks achieved his aim of “the creation and exploration of a sound world in which the listener is immersed and sometimes saturated with sounds that embody stress and pressure acting on objects at or near their breaking point.” Following was Benjamin Broening’s rendition of his work, Nocturne/Double, for piano and tape, gently and quite pleasantly exploring live and recorded piano sonorities.

The chemical formula for Adrenaline constitutes the complete title for William Kleinasser’s provocative piece for trombone quartet and interactive computer. According to the notes I wrote during the performance, it was true to its formulation: “Wild and wooly! Busy, angry, volatile, explosive!!” I loved it! Black Ice, a CD piece by Robert Dow, is the final work of his extended cycle of works focusing on different types of sonic material, in this case crackling styrofoam and rippling water, noisily combined and overlong. The highlight of
the concert was the last piece, Robert Rowe’s *Cigar Smoke*, truly smoking with excitement, interactively performed with Mr. Rowe’s computer program by ace clarinetist and Rowe’s colleague and collaborator at New York University, Esther Lamneck.

**Concert 7: Juried Concert D**

The first concert of the last day began mid-morning with David Kim-Boyle quietly performing his *Holographic Flute Piece*, for piano and computer. Interestingly, the composer read his scrolling, algorithmic score directly from his laptop computer screen, which provided a selection of classic works (by Arnold Schoenberg, Anton Webern, Frederic Chopin, et al.) for him to excerpt, while the computer quoted other famous piano pieces. Tohm Judson’s CD piece, *[insert time here]*, was an attractive but minimal soundscape, and Mike McFerron’s CD piece, *So Be It*, resounded with continuously evolving piano samples. *So Be It*, a CD piece by Ragnar Grippe (Sweden), began with assertive hammerstrokes and continued as a kind of retrospective montage of earlier electronic music pieces.

After intermission, we heard Matthew McCabe’s well-crafted CD process piece, *In the Gloaming*. Then, in Tom Lopez’s audio/video piece, *Underground* (video by Nate Pagel), we experienced its audio/video trains moving continuously in a cleverly animated sight and sound but ending somehow abruptly. 48 13 N 16 20 O is the title and apparently the geographic coordinates for the CD piece by Tae Hong Park, a kind of travel-collage and sound-tour mix of the composer’s recorded wanderings about some unnamed city. The last piece, David Taddie’s *Luminosity*, for recorded and live flutes, was performed beautifully by flutist Kyung Mi Lee, highlighting the breathy, sonorous character of the instrument in the classic tradition of Varese’s *Density 21*. Mr. Taddie’s luminous images shined long after its too short duration, in this mind’s ear.

**Concert 8: Electroacoustic Music from Europe**

The afternoon concert of the last day was curated by composer Javier Alejandro Garavaglia and was devoted entirely to tape music by composers based in Europe. Magdelena Buchwald entitled her piece, *Angorum catena*, meaning literally “chain of melancholy,” an excellent collection of “non-synthetic,” Doppler-shifted noises, combined with diverse sound objects. As the composer Luis Antunes Pena describes *Sonorous Landscapes I and II*, “in this piece nothing happens.”*"* Iconic or not, an expase of virtually nothing is what we got. *L'apparozopme do tre rughe* by Roberto Doati explores all manner of guitar musics whose recorded samples were provided by guitarist Elena Casoli and were, at length, cast in a montage of different styles.

Yet another sound catalog—fire, this time—was heard next in *Feuer-Werk 17* by Thomas Gerwin. The quadraphonic . . . *in the opposite direction . . .* by Krzysztof Knittel was a gibberish stew of pop music out-takes. Finally, *Summer Grasses* by Hiromi Ishii gave us a long, virtually silent first section followed by outbursts of sonic events in the second, followed by a return to virtual silence, all inspired by a Haiku poem by Basho and described by the composer as an experiment in perception, albeit a very personal one, I would say.

**Concert 9: Juried Concert E**

The program for the evening concert of the third and last day included pieces by nine of the festival’s most accomplished practitioners of electroacoustic and computer music, their pieces characteristically mature and accessible for an appreciative audience. Richard Boulanger’s tribute to the memory of a recently lost family member, *Moving into the Light*, was composed for performance by his son, cellist Phillip Boulanger, and by himself as soloist on the computer music instrument, the Radio Baton, along with live video processing by Greg Thompson. Cast in three continuous movements, this quietly lyrical and harmonious lament demonstrated unequivocally how technology can be used effectively to express deeply held feelings. Pete Stollery’s CD piece, *Serendipities and Synchronicities*, was also a tribute, in this case to the late Delia Derbyshire of Dr. Who fame (she composed its theme). The piece was short and sweet and full of delightful references to British times and electronic tunes of the 1960s and after.

Then, clarinetist Esther Lamneck returned to perform Zack Browning’s *Crack Hammer*, a crackerjack combo of computer and clarinetist: it was a fight to the finish, both contestants making me cheer! I didn’t quite understand the premise of Paul Koonce’s *Adolescent Aulos*, for the octophonic digital medium. It is the second in a series of pieces exploring the synthetic, timbral properties of the oboe, the composer’s acoustic model for the ancient aulos. Its calls and answers were heard by me as much simpler timbres in what seemed an unfinished compositional experiment. The premiere of Javier Garavaglia’s *Hoquetas*, for tárogató performer Esther Lamneck and computer interaction, suffered an unfortunate false start. Partially recovering, the piece still had fits and starts and apparent problems with its planned, interactive hockets. A pity. I trust we will have
the opportunity to hear the piece properly sometime in the future.

After the intermission, James Sain’s ball peen hammer, for flute and computer, was performed by flutist Cynthia Sain, her flute sounds magnified, transposed, and variously processed by a Max/MSP patch/program provided by composer Ron Parks. Then, we were treated to the multi-sonic/graphic Archimedes: Mathematics II, by James Dashow, with dynamic video animation by Sebastian Cudicio. The sounds and images of this sequence are spectacular, truly “digital multi-art”, as Mr. Dashow describes the experience. The piece constitutes scene 2, act 2 of his grand planetarium opera, Archimedes, completed over the last several years. Next came Hubert Howe’s Harmonic Fantasy, one of the latest in his continuing series of works exploring additive waveform synthesis, in this case the first 32 harmonic partials, heard successively, singly, and in combination, that process creating the form and substance of his piece.

The last piece of the concert and of the 14th annual FEMF was composed and performed with his portable computer by composer-in-residence Morton Subotnick, his Until Spring Revisited. What we heard were patterings in combination and mainly synthesized/processed sounds reminiscent of his earliest pieces, such as the classic Silver Apples of the Moon (1967), The Wild Bull (1968), Touch (1968), Sidewinder (1971), and, of course, Until Spring (1975). The music was attractively accessible and imaginative, as were his two composer-in-residence presentations. The first, for his composer colleagues, was aptly enlightening about the origins in the 1960s of his own electronic music, and the second, for a general convocation of university music students, focused on his educational perspectives on “music as metaphor.”

Kudos go to Director Sain and his intrepid FEMF associates and staff who more than capably negotiated the audio/visual/performance intricacies of the complex production of this important and very successful festival. I look forward to its 15th incarnation next year!

Publications

Trevor Pinch and Frank Trocco: Analog Days: The Invention and Impact of the Moog Synthesizer

Softcover, 2002, ISBN 0-674-01617-3, 368 pages, illustrated, foreword (by Robert Moog), discography, sources, notes, glossary, index, US$ 16.95; Harvard University Press, 79 Garden Street, Cambridge, Massachusetts 02138, USA; telephone (+1) 800-405-1619 or (+1) 401-531-2800; fax (+1) 800-406-9145 or (+1) 401-531-2801; electronic mail HUP@harvard.edu; Web www.analogdays.com/. In Europe, contact Harvard University Press, Fitzroy House, 11 Cheneys Street, London WC1E 7EY, UK; telephone (+44) 20-7306-0603; fax (+44) 20-7306-0604; electronic mail info@HUP-MITpress.co.uk.

Reviewed by James Harley Guelph, Ontario, Canada

Having gained back the right to commercial use of his own name, 2002 seems to have launched something of a rejuvenation in the professional life of Robert Moog. [Editor’s note: Robert Moog passed away 21 August 2005, after this review was written. An obituary will appear in the next issue.] In addition to this book, Analog Days, by academics Trevor Pinch (Cornell University) and Frank Trocco (Lesley University), Hans Fjellestad’s film, Moog, has recently been released [reviewed elsewhere in this issue]. Although the book doesn’t take note [the film does], there is perhaps more interest now in the Moog synthesizer, the Theremin, and related technology, than there has been for decades. There is, additionally, increased attention being paid to the history of electronic music, and this book, which goes way beyond the scope of its subtitle, “The Invention and Impact of the Moog Synthesizer,” contributes substantially to the elucidation of this field. With the Moog synthesizer as the focus, the book is more a general history of the analog synthesizer.

The writing is informal for the most part, aimed at non-academic readers. Much information is based on extensive interviews, so there is much anecdotal discussion, but this does not detract from the presentation. The authors have taken good care to ensure that the chapters retain their particular focus, and that the overall trajectory remains clear. In trying to tell the story of the Moog synthesizer, they have found it neces-
sary to explore related technology, other inventors, cultural phenomena. To me, this makes good sense.

To justify their approach, the authors’ explain:

The paradox of history is that significant events are often recognized long after they occur, when it may be too late to recapture what went on and why . . . We try to avoid hindsight. By tracking down and interviewing the early pioneers—engineers, musicians, and other users—we have tried to recreate the enthusiasm and uncertainties of what is was like back then . . . We see our own task in writing this history as being akin to the practice of analog synthesis. Our sources of sound are the stories we recorded and discovered in texts. We have filtered the stories to bring out certain themes and have muted others. We have shaped our account, giving it narrative structure, in the way that synthesists shaped sound. We have, on occasions, fed the stories back to the participants and hence produced yet new version of the events. Sometimes when stories do not match up, rather than get rid of the inconsistences, we have allowed the discords to remain. If we had chosen another configuration of quotes, we are quite sure we could have produced a rather different history. [p. 11]

In addition to an introduction (“Sculpting Sound”) and conclusion (“Performance”), there are 14 chapters, each divided into sections often given picturesque titles; colorful quotations from songs or texts head up each chapter. The introduction, for example, is led off by two quotes:

“A examination of more recent phenomena shows a strong trend toward spray cheese, stretch denim and Moog synthesizers” [Fran Lebowitz, Metropolitan Life], “Holidays & Salad Days, and Days of Moldy Mayonnaise” [Frank Zappa, “Electric Aunt Jemina” from Uncle Meat].

Chapter one, “Subterranean Homesick Blues,” outlines the early days of Mr. Moog’s life and the early days of developing the synthesizer and beginning to promote it.

Chapter two, “Buchla’s Box,” looks sideways to the parallel development of modular synthesizers by Don Buchla taking place in San Francisco. Chapter three, “Shaping the Synthesizer,” returns to the Moog story and looks in more detail at the synthesizer design and how it evolved.

Chapter four, “The Funky Factory in Trumansburg,” looks at the original Moog enterprise, located in a village outside of Ithaca, in upstate New York, and how the marketing to major centers such as New York City and to practicing musicians developed.

Chapter five, “Haight-Ashbury’s Psychedelic Sound,” returns to the West Coast to explore the musical and cultural revolution occurring out there, and the synthesizer’s part in that [returning to Don Buchla].

Chapter six, “An Odd Couple in the Summer of Love,” traces Mr. Moog’s trip to the Audio Engineering Society convention in Los Angeles in 1967, his contact with electronic musicians Paul Beaver and Bernie Krause [who became sales associates], and their connection with the pop-music scene on the West Coast.

Chapter seven, “Switched-On Bach,” looks at the Wendy Carlos story [told with no participation from Ms. Carlos], the making of that seminal recording, and related stories and issues. The authors did speak to Rachel Elkind, Ms. Carlos’s associate at that time, and do not avoid discussing the sex-change operation and how that impacted professional [marketing] issues.

Chapter eight, “In Love with a Machine,” is a portrait of musician Suzanne Ciani and her Buchla synthesizer. It also provides the authors’ opportunity to address gender issues in the testosterone-driven world of music technology. Linda Fisher (of Mother Mallard’s Portable Masterpiece Company) and Pauline Oliveros also make appearances here.

Chapter nine, “Music of My Mind,” spotlights Malcolm Cecil and Bob Margouleff who, in 1969–1970, put together TONTO (The Original Neo-Timbral Orchestra), a custom, multi-unit synthesizer contraption that eventually captured the interest of Stevie Wonder.

Chapter ten, “Live!,” surveys some of the seminal live performances and performers of the Moog synthesizer. These include: Herb Deutsch and his jazz quartet; Chris Swansen and his jazz quartet [including John McLaughlin], David Borden and Mother Mallard, Don Preston [Mothers of Invention]; Gershon Kingsley and the Moog Quartet; and especially Keith Emerson.

Chapter eleven, “Hard-Wired—the Minimoog,” looks at the significant transition from the modular Moog to the all-in-one performance models. At the same time, one is presented with a picture of the company that was moving from a one-engineer operation to a larger entity, marking the point when Mr. Moog had to begin relinquishing control.

Chapter twelve, “Inventing the Market,” explains how the Minimoog was brought to market [primarily through the efforts of David Van Koevering], to become the first synthesizer to be widely sold in music stores as an instrument rather than a novel piece of audio hardware. This is also where we learn that Mr. Moog sold the company to a venture capitalist.

Chapter thirteen, “Close Encounters with the ARP,” explores the on-
set of the competitors’ synthesizers that were brought to market in the
1970s, mainly the ARP line (developed by Alan Robert Pearlman). The
ARP was aggressively marketed, and gained great notoriety through its ap-
pearance in the Steven Spielberg’s Close Encounters of the Third Kind
[1977]. We are also introduced to Tom Oberheim, who was instrumental in
developing polyphonic synthesizers.

Chapter fourteen, “From Daleks to the Dark Side of the Moon,” gives a
brief overview of what was going on in the UK, primarily through the
EMS operation led by Peter Zinovieff. (The “Daleks” reference comes from
“Dr. Who,” a popular sci-fi television series that incorporated electronic
sounds into its soundtracks.)

The lengthy Conclusion touches
on a number of issues in its attempt
to summarize.

Our story of the synthesizer
draws attention to the role
played by users. Designers
“script” or “configure” ideal uses
into their machines . . . Scripts
try to constrain the agency of
users, but users can exert agency,
too, and can come up with their
own alternative scripts . . . Users
do not come to technology un-
prepared. They are part of a wider
culture of use, and they learn
within that culture . . . Analog
Days shows that the world of
synthesizer production and con-
sumption were not separate
worlds. What our story reveals is
that consumers have played a
crucial role throughout the his-
tory of the synthesizer and in all
aspects of its development, in-
cluding design, testing, sales,
and marketing. [pp. 311–312]

The book is completed with a repre-
sentative discography, a list of
sources (including the who and when
of the authors’ extensive interviews),
and a modest glossary of terms.

Recordings

Esther Lamneck: Tárogató: A Folk Instrument With a
Contemporary Sound

Compact disc, 2001, Roméo Records
7212, available from Roméo Records;
telephone (+1) 917-613-8865; elec-
tronic mail info@romeorecords.com;
Web www.romeorecords.com/.

Reviewed by Laurie Radford
Edmonton, Alberta, Canada

Viewed in a broader historical and
global context, the small legion of
mechanical instruments to which we
now confine most music-making ac-
tivities, especially in the western
world, is a surprisingly limited and
comparatively impoverished sam-
ping of the rich and diverse sound-
making technologies that have been
invented, refined, and adopted in mu-
sical practice and cultural ritual over
many millennia. Recent ethnomusi-
cological research, and a growing in-
terest in an increasingly global view
of music-making (read: the “market
for world music), has led to the redis-
covery, and in certain cases, resurrec-
tion, of some of the wind, string, and
percussion instruments that have
fallen by the wayside over time. The
recording Tárogató: A Folk Instru-
ment With a Contemporary Sound
offers an opportunity to hear a little-
known Eastern European wind in-
strument expertly played and given
renewed attention by a selection of
contemporary composers.

The modern tárogató is a single
reed, wooden wind instrument with a
conical bore. Its fingering is similar
to that of the oboe and the resulting
non-tempered scale is associated
with a long tradition of improvisa-
tion. Its origins are likely in the
Middle East where, centuries ago,
“tárogató” referred to a double reed
instrument often called an Eastern
obo or Turkish pipe. The soloist on
this recording, Esther Lamneck, plays
a version of the tárogató built in the
latter part of the nineteenth century
in Budapest.

Almost no written music for the
instrument exists due to its adoption
as a folk instrument integral to im-
provisational traditions. Seven new
pieces ranging from solo improvisa-
tions to works with electronics and
signal processing are offered on this
disc. The composers approach the
tárogató with varying degrees of rev-
erence for its past and curiosity about
its future. Many of them draw upon
the improvisational character of the
instrument and its performance tra-
dition while several treat it simply as
a unique wind instrument with
which to sound the voice of their mu-
sical inclinations.

Through a Glass [1986] by Dary
John Mizelle was the first work com-
misioned by Esther Lamneck for the
It is a plaintive, haunting solo work employing a modal scale that brings out the “rich dark tones and piquant bright timbres of the instrument’s unique non-tempered tuning.” Lithic ornamentation and raspy repeated pitches permeate the graceful arch of the work’s design. Robert Rowe provides a fitting continuation of this reflective quality apparently so characteristic of the instrument in his work Shells [1992]. Here the tárogató is paired with a computer running the composer’s interactive environment, Cypher. The tárogató’s leaps, slides, and rapid gesticulations are paired with ostinato reactions and accompanying drones and counterpoint as Cypher listens to the instrument’s performance and joins in with a variety of textural and timbral contributions. There are several very successful passages in the work where a balance is reached between the respective contributions of the tárogató and Cypher, and the final moments of the work find Cypher effectively shadowing the restrained, descending melodic lines of the wind instrument.

The short work Ah Kishinev Subotica [1993] by Robert Cogan marries the tárogató’s distinct timbre with more recently developed contemporary wind techniques including multiphonics, multiple trills, use of the instrument’s extreme registers, and simultaneous singing by the performer. This little gem summons up a sense of organic sound-making via the marriage of breath and this instrument. Alfonso Belfiore’s Tra le Cose Tenute [Among the Things Remembered] from 1995 combines prerecorded electroacoustic materials with an open form score for the tárogató player. The performer selects at random various notated materials for performance and subsequently triggers changes to the dynamic and registral character of the prerecorded audio materials through an interactive computer system. The tárogató, suspended atop undulating bells, punctuating cymbals, and rumbling drones, is at times lyrical and sustained, at other times playful and fiercely focused in its melodic gyrations. In choosing to keep the electroacoustic materials subdued beneath the tárogató’s vibrant sound throughout the entire work, the composer unnecessarily limits a potentially rich dialogue between the two media.

Larry Austin’s eponymously titled Tárogató [1997–98] is the lengthiest work on the disc and combines the solo tárogató with dancers and an octophonic computer part in performance. The materials for the work arise once again from the improvisational traditions of the instrument and its unique timbral and tuning characteristics. The computer materials often function as a tárogató choir, wreathing the live player with a diverse and ever-changing contrapuntal fabric. It acts as both a reflection of the live player and as an instigator of rhythmic and melodic ideas subsequently taken up by the performer. The texture is rich and full of wildly romping figures and exchanges throughout, almost as if the tárogató is traveling through its own sonic history.

Shadows [1998] by Ron Mazurek consists of a short series of exchanges between the tárogató and an electroacoustic part constructed from modified samples of the instrument. Drawn from a larger work, Shadows is singular in character, intense in its angular yet cohesive combination of the instrument and the modified sounds drawn from it. The final work on the disc is by the featured performer, Esther Lamneck. The three movement Settings [1999] draws upon fragments of folk material to provide a foundation and point of reference for the most extensive and adventuresome playing that Ms. Lamneck demonstrates on this disc. A halo of delay and reverb surrounds and girds the tárogató’s rapidly repeated figures in all three movements. Use of fast iterations, leaps, and turns in the extreme high register in the second movement are very effective as are the arpeggios spanning wide registers and played at breathtaking speed throughout the piece.

Writing for a unique instrument and a virtuoso player offers both possibilities and limitations, especially when a heavy dose of improvisation is involved. Nonetheless, the meeting between an ancient tradition and the contemporary bent of exploration and sonic extension is a fruitful beginning to the rediscovery of this intriguing instrument.

Mario Verandi: orillas distantes / distant shores


Reviewed by Laurie Radford Edmonton, Alberta, Canada

orillas distantes / distant shores is a compilation of six electroacoustic works by Argentine-born composer Mario Verandi. His studies in Barcelona and his activities as a member of BEAST [Birmingham Electro-Acoustic Sound Theater] at the University of Birmingham are evident in the finely sculpted sound practice throughout these works. The
pieces presented on *orillas distantes / distant shores* adhere to two distinct categories in Mr. Verandi’s work: the use of recognizable sound sources and soundscapes in combination with transformations and extensions of these same materials, and a more extensive, abstract style of composition that distances the sound sources from their associative origins.

*Evil Fruit* (2000) explores the world of a selection of Brazilian percussion instruments: deep resonant skin and wood timbres tapped out in rapid volleys and rolls; crystalline, metal shards pulsing and bouncing across the stereophonic field. Throughout the piece, the composer pries open the work’s iterative pace and reveals moments of reflective, bell-like resonance. The alternation of abrupt and subtle metallic punctuations ushers forward a series of contrasting iterative textures until a human voice appears to modify and meld with the drum. The evident percussive origins of many materials give way toward the end of the piece to a broader, less distinct sonic image that transports the listener into a distant sonic space. Finally, a climactic increase in spatial proximity and sound-object density returns us to the drum and voice of the work’s origins.

*Fréquences de Barcelone* (1997), awarded a prize at the International Radiophonic Competition in France, takes the sounds of Barcelona and thrusts them onto the sound stage amid a variety of other carefully chosen sound materials. The work is both soundscapes and fantasy, a recontextualization of daily urban sounds, conversations, street music, rushing waves, and the shrill cries of children at play filtered, stretched, fragmented into a dynamic and fascinating race through the sound world of this vibrant city. Mr. Verandi judiciously juxtaposes moments of traffic chaos with the calm of late-night rain, the din of a midday restaurant with modified bells and the blur of faraway traffic. This piece is a shapely and colorful voyage that hints at an underlying urban narrative of discovery and the magic of a living sound.

Employing spoken texts from *Bodas de Sangre* [Blood Wedding] by Federico García Lorca and samples of Spanish flamenco music, *Figuras Flamencas* (1995) straddles the real and the surreal, from the familiar twang of the flamenco guitar and the earthy tones of flamenco singing, to ghostly textures of ringing, spiraling string sounds punctuated by frenzied vocal incantations. The temporal design of the work is especially effective: dense, exciting moments of movement and rapid change are contrasted with sparse, mesmerizing drones amidst gradually evolving inharmonic spectra, much as the art of flamenco juxtaposes frenzy and repose, passion and calculation. The whispered intonations, disappearing snippets of transformed singing, and raspy textures of strummed guitars bring the work to its conclusion and a final solo recitation that poignantly hearkens back to the strains of flamenco singing at the opening of the work.

Given the opening excursions into the sounds of Spanish culture, the next work on the disc demonstrates a strikingly different facet of Mr. Verandi’s electroacoustic practice. *Heartbreaker* (1996) is based on the activity of breaking objects “and the various forms of energy that are freed by this phenomenon.” Meticulous and extensive exploration and transformation of a particular family of sources materials, from the breaking of bricks and glass to the tearing of paper and the crushing of leaves, produces an extremely rich and varied palette of sonic objects that the composer employs with clarity and imagination. Warring pulse-driven ostinati transform into thunderous, swaying waves of low-frequency crunching, then into a tremulous, fragile tinkling that betrays the violent origins of the sounds. The work is a sonorous delight and is formally coherent and shapely. The recognizable hammer-breaking-brick at the conclusion seems rather too literal and banal after the riches offered up during the preceding ten minutes.

*Faces and Intensities* (1996) is another of Verandi’s prize-winning works (Musica Nova 1996) and another that delves into the abstract exploration of a sound’s transformative potential. The guiding model here is that of continuity: slow, methodical transformations, changes of speed, adjustments of spatial movement and focus. The work proceeds in slowly evolving arches of increasing and decreasing energy, never resting long enough to establish a point of reference, always remolding the temporal flow and spatial arrangements of its contributing materials. There is an intensity and complexity to this shifting, kaleidoscopic ambience that holds the listener in a suspended oscillation of expectation.

The final piece on the disc, *Plastic Water*, is one of the most recent offer-
The work was conceived as an eight-channel work designed for performance on the Sigma 1 diffusion system at TU-Studios Berlin. The stereo version presented on this disc makes one yearn for the opportunity to experience the original multi-channel work. The composer once again brings his considerable technical prowess to bear upon a simple sound source (the crushing and squashing of a plastic bottle) and squeezes out some beautiful timbral objects via his sound transformation practice. The “water” of the title informs the iterative patterning that dominates many of the textures in the piece and an evocative plastic bottle “solo” draws the work to its somewhat premature conclusion.

The works on orillas distantes / distant shores are now, in some cases, nearly a decade old. These works by Mario Verandi maintain a vivid and visceral quality that encourages repeated audition, and makes one eager to explore the composer’s more recent work.

**Bone: Uses Wrist Grab**

Compact disc, Rune 176, 2003; available from Cuneiform Records, P.O. Box 8427, Silver Spring, Maryland 20907-8427, USA; electronic mail cuneiway@aol.com; Web cuneiformrecords.com. Review

Like many of Nick Didkovsky’s recordings, the cover for Uses Wrist Grab states: “Listen to this record extremely loud and in one sitting. Open your windows so your neighbors can hear it, too.” This reminds me of Italo Calvino’s parody of the experience of reading in his novel If on a Winter’s Night a Traveler except that it would appear that Mr. Didkovsky is dead serious. Unfortunately, while sheer volume might enhance some of the 14 pieces contained in Uses Wrist Grab, it merely compounds the problems in others. Regardless, this recording was created from an interesting premise, only possible through the use of current technological tools.

This CD contains seven pieces by Mr. Didkovsky, six by UK rocker Hugh Hopper [Soft Machine, Gong] and one they co-wrote. Each member of Bone (those two plus drummer John Roulat of Forever Einstein) recorded his parts in his own studio. They communicated with each other by email, and sent audio files back and forth for the purposes of rehearsal and tweaking. The final drafts were then mixed and produced by Mr. Didkovsky. As of the release date, Mr. Hopper and Mr. Didkovsky had not yet met in person. The fact that they were able to create this CD from three separate locations presents some intriguing issues. The reliance upon current technological standards for the transfer of audio seems perilous given the inevitable appearances of obsolescence and instability. Yet, they pulled it off. Mr. Didkovsky writes in the liner notes: “As I was mixing this record, I was struck again and again by how much it all sounds like an organic band that could have rehearsed together.” Indeed, the bass/drums lock-step approach does frequently sound as if the players had been eyeballing each other in order to achieve synchronous precision. But there remains much that is missing from the organic band scenario, and this, I contend, is as it should be. What is perhaps most fascinating about this project is that the musicians did not rehearse together as a unit. Unlike much rock-band music, their project required the technological tools they used. A sense of disembodiment occurs as we hear the bass and guitar parts not quite fitting together. This conjures a kind of technological dissonance. One could say that we hear the distance between the musicians’ respective studios.

We also clearly hear differences in aesthetics. Thankfully, it continues to be difficult to categorize Mr. Didkovsky’s music. His employment of asymmetrical meters, gratuitous dissonance, and tonally ambiguous harmonies rubs against the pop sensibility implied by the compositional forms and instrumentations with which he works. As in his other projects, highly idiosyncratic computer-generated melodies and rhythms twist and turn within a torturous random walk. His inventive sonic referential vocabulary includes tokens from the bayou, heavy metal, the Middle East, Led Zeppelin, and Javanese gamelan [thanks to the use of the prepared guitar]. One hears a palpable, grating friction between his composed elements.

This friction is much less apparent in Mr. Hopper’s material, which tends toward a lackluster mélange of monotonous repetition and drone-like material. He is a capable per-
former on Mr. Didkovsky's tunes, yet as a composer he relies too much upon ostinato and looping. The results sound overblown and puffy without much substance. Interestingly, Mr. Didkovsky uses two software instruments he created only on Mr. Hopper's tunes. Machinecore is an interactive software instrument programmed in Java Music and JSyn. Hell Café is a pulse-based software instrument programmed in JMSL/JSyn. It is available for online audition at www.punosmusic.com/pages/hellcafe.

Lastly, there is the issue of material reuse. Mr. Didkovsky gets a lot of mileage from the material he contributed to Uses Wrist Grab. The first piece, entitled To Laugh Uncleanly at the Nurse, was originally composed for the Fred Frith Guitar Quartet. According to the composer, he “aggressively rearranged” and re-recorded it for this release. Sara's Wrist Grab was originally for the Sara Hook Dancers, but she ended up using a different Didkovsky piece. Hence its appearance here. Overlife 1 and Overlife 3 were composed for the John Malashock Dance Company, and originally performed as a duo with Mr. Didkovsky and percussionist Steven Schick. We'll Ask the Questions Around Here, Part 2 appeared previously on Binky Boy. The question of whether convenience or recontextualization was Mr. Didkovsky's motive for reusing his material is left with the listener.

In short, this disc is a lopsided effort with several strong pieces by Mr. Didkovsky.

Tom Erbe, Chris Mann, Larry Polansky, douglas repetto, Christian Wolff: Trios

Compact disc, Pogus P21031-2, 2004; available from Pogus Productions, 50 Ayr Road, Chester, New York 10918, USA; electronic mail pogal@pogus.com; World Wide Web www.pogus.com/.

Reviewed by Steven M. Miller
New York, New York, USA

Four musicians + one assembler/editor/recontextualizer = Trios. Improvisations recorded on two separate dates by two different trios [Larry Polansky, douglas repetto, Chris Mann, and Mr. Polansky, Mr. repetto, Christian Wolff, respectively], and reassembled, edited, and generally reworked at will at a later date [by Mr. Erbe], the music of Trios is a sonic stew of postmodern proportions. It is a music that invites and even revels in contradictions, oppositions, simultaneities, and de-/re-contextualizations.

In juxtaposing recordings of live improvisations within studio-tailored treatments of them, Trios neatly confronts a number of binary oppositions seemingly entrenched in traditional musical discourse: live/studio, real-time/non real-time, improvisation/composition, human-performed/computer-produced, acoustic/electronic, author/interpreter, technician/creator, etc. But these confrontations do not consist of detailed explication and reasoned argumentation in either musical or textual language. It is rather a case of problematization-in-action. Musically, the package seems to present all of these issues all of the time, without specifically addressing any of them individually. The intensely minimal nature of the liner notes is itself a central agent in this confrontation. The liner notes list no individual titles [except Track One, Track Two, etc.], and do not delineate personnel on a per-track basis. Even the recording details outlined in the paragraph above were taken from the record company Web site rather than from the disc; the recording information and respective roles are not detailed on the disc itself beyond identifying individuals and their respective sonic/instrumental domains. In other words, as a package the disc and liner notes present the sonic results and the actors respectively, and seemingly not much else. But much more is implied, if only by omission. Especially because the pieces themselves are exercises in re-contextualization, by intentionally not contextualizing them in the liner notes in familiar terms of authorship, linear process, artistic and technical production, power dynamics, artistic intention, etc., the creators throw open to question many of the prevailing notions of modernist musical thinking.

Musically, the six tracks form a remarkably coherent set of pieces totaling just under an hour. With individual track times ranging from under 3 minutes to over 15, none of the pieces is significantly different from the others in overall impression or in its particularities. Listening from beginning to end is a largely seamless experience. However, underneath what at first listening seemed to me to be a largely undifferentiated stream of sounds, the disc revealed itself, upon repeated listen-
elements are apparent in a variety of static and dynamic panning positions. Foreground to background perspective is manipulated via differing reverberation and equalization characteristics. Interjections from heavily processed voice snippets provide for a raucous focal point. Track Two (2:56) leads off with slide guitar gestures and snippets of processed voice over/in front of “live” voice. This piece has more dynamic contrasts, at times dropping to single repeated piano clusters. Its short length lends a more focused feel. Track Three (15:09) begins with sustained computer/electronic timbres, clouds of repeated guitar figurations and voice. It maintains this aggregate texture with only slight timbral modulations for considerably longer than most of the other pieces, in the neighborhood of four minutes, before introducing other timbral elements (in this case, a single piano figure). In doing so, it establishes a more relaxed feel that is static yet subtly changing. Aggressive treatments of the voice enter later, snippets of bass, piano, and short melodica phrases follow, building a more dynamic interplay of elements into the texture. Track Four (14:26) opens with guitar feedback. Bass thumps and scrapes, computer noises, and eventually voice enter slowly, thickening the texture and filling out the pitch and timbre spaces in a gradual manner. Eventually the texture thins out again, undergoing slow changes until the computer and guitar fade out at the end. Track Five (4:27) seems almost austere in comparison to the other tracks, with less overall textural density and less frenetic energy overall. Sporting a relatively succinct time length and with the familiar timbres of electric guitar and piano dominating, this one could very well be the “radio single” of the disc. Track Six (6:26) features frenetic rhythmic ac-

tivity, sonic jump cuts, and aggressive timbres in the first few minutes, slowly giving way to piano and slide guitar interplay with faint computer/electronics background. Percussion and more insistent piano sounds, including scraped/rubbed strings, filter in and out of focus.

Although exhibiting certain surface similarities to free improvisation, noise bands, “onkyo,” urban soundscape composition, and other such sonically adventurous musics, Trios successfully resists easy categorization. It prods the listener to think while it engages the ear. Musically as well as intellectually, it challenges much of the status quo. Many of these issues have been present to varying degrees in a wide range of musics, from musique concrète through hip-hop and electronica to World Beat and beyond, yet the degree to which Trios engages them all is still somewhat unusual.

Reviewed by Alan Shockley
Pittsburgh, Pennsylvania, USA

Chris Mann’s manic, ever-unintelligible voice fills large expanses of this compact disc. Amid the constantly moving and intricately variegated texture, familiar sounds recur: occasionally the friendly sound of Christian Wolff’s melodica peeks through the miama, the flutter of tremolo-bar vibrated electric guitar, a slow plunking at a piano.

Five musicians contributed to the music here. According to Pogus Productions’ Web site, the album “combines instrumental and electronic improvisation with non-real-time computer processing and editing.” Composer/guitarist Larry Polansky, Chris Mann (narrator/poet/vocalist), and douglas repetto (computer musician/live electronics manipulator/recording engineer) recorded “several hours of live improvised material in

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one session” in January of 1998. Then, in April of that same year, composer/pianist/bassist/percussionist/melodica player Christian Wolff joined Mr. repetto and Mr. Polansky to record additional material. The products of both of these trio sessions were then (in the CD’s tertiary level of creation) offered over to Tom Erbe (credited with “recording, editing, processing” in the liner notes), who sifted through material from the two trio improvisations and shaped them into the six resultant CD tracks.

Overall I find the shorter tracks more successful than the longer ones. As much as Mr. Mann’s chattering has to recommend it, the best track is the last one in which there’s no recognizable vocal part on the surface of the piece.

Track Two, the shortest of the album, opens with glissando electric guitar, quickly joined by Mr. Mann’s pitch-prominent delivery. A brief silence, and then repeated notes on the (sometimes) prepared piano (sounding like a glass rod resting on the strings at times—with a metallic harpsichord-ish sonic result), then manic Mr. Mann is back, joined by blips of electric guitar (warmed by a little reverberation this time). The harshness of the filtered voice gives this track a contemporary sheen, and the brevity really works for this assemblage of sounds.

Track Three has a thicker texture: slow dives of electric guitar (a much more distorted timbre here) or of electronic assemblages, Mr. Mann’s voice periodically lowered or made harsh and distorted, occasional white-noise spikes, clean guitar oscillations (various thirds), a meandering movement in Mr. Wolff’s bass. The encouraging beat of the melodica peeks through about two-thirds of the way through the track, and then a little bluesy piano steps in, sometimes backed by sample and hold-like blipping, or by heavily distorted guitar—and then there’s Mr. Mann again. But, for a couple of minutes the computer sounds (and computer altered ones) keep even his bubbles at bay, with a full and rhythmic sound. Heavily processed and altered voice, and quasi-minimalist piano take us to the end of the track. Track Three is longest of the album, and perhaps its most representative. But, it just doesn’t keep the listener’s attention like the two short tracks of the CD.

Track Four: electric guitar has the first word—long notes, distorted, faintly sinister percussive things punctuate the underbelly of the sound. Then, Mr. Mann’s babble enters and builds to his own Australian braying. The guitar dominates this time, though. With subtlety, long sounds take over: electronics, more guitar, the voice’s presence recedes then eventually returns. In its absence the listener notices how much of the rhythmic activity of the track (and the album as a whole) is carried by this element. A delicate electronic whine (almost the shortwave of Karlheinz Stockhausen’s Hymnen, but not quite) and grossly slowed voice (becoming a percussive and bassy thump) end the track.

Track Six opens with rattling prepared piano and percussion, high glisses on clean guitar, along with a much noisier, distorted guitar sound and a flitting of processed piano and electronics. Then, scrabblings [piano and otherwise] with perhaps the voice instrumentalized and pushed to the distant background. [Finally, Mr. Mann doesn’t dominate the texture—the voice is actually absent.] Following, a clockworks sound of high piano and high guitar notes repeating, repeating, repeating. Then, nothing. This track is the most beautiful of the album, and a reason to give even the longer tracks another listen.

Overall, Trios succeeds. Despite the time and distance separating the various contributors and contributions to this CD, the result hangs together as a single work. Though I find the voice-dominated texture a bit fatiguing after awhile, the beauty of the end of the last track—and the moments of melodica “sunlight” or of dinky piano peaking through—keeps me intrigued and engaged throughout. Recommended.

Matthew Burtner: Metasaxophone Colossus

Compact disc, innova 621, 2004; available from innova Recordings, 332 Minnesota Street #E-145, St. Paul, Minnesota 55101, USA; tel (+1) 651-251-2823; fax (+1) 651-291-7978; electronic mail innova@composersforum.org; Web innova.mu. Reviewed by Peter V. Swendsen Charlottesville, Virginia, USA

Released in the fall of 2004, Metasaxophone Colossus is a tour de force showcase for composer, performer, and instrument-inventor Matthew Burtner. It is a compact disc that pays homage to the great Sonny Rollins’s 1956 album, Saxophone Colossus, while bringing together Mr. Burtner’s primary work from the last few years and thereby providing a bookend to his 1999 release, Portals of Distortion (innova 526). If you have been anywhere near the computer music scene in the recent past, you have likely heard one or more of these memorable pieces performed live by Mr. Burtner on his elegantly home-brewed Metasaxophone. Anything you give up in hearing them on CD is quickly accounted for by the delight of having them collected in one place. At a time when many alternate controllers and extended instruments
surface just long enough for a single piece or performance, it is a rare luxury for us as listeners and scholars that Mr. Burtner has developed a legitimate repertoire for his instrument, one that is both carefully crafted and finely documented on this new CD.

The Metasaxophone is an acoustic tenor saxophone retrofitted with an onboard computer microprocessor and an array of sensors of which Adolf Sax himself would be proud. Jazz is typically offered as the ultimate arrival of Sax's creation, but those of us who play the often-shunned rebel horn of the classical world can appreciate the fact that Mr. Burtner's work pays homage to the vision and passion of Sax as an inventor, as well as to his computer music likenesses, such as Mr. Burtner's former teacher, Max Matthews. But anyone who has seen Mr. Burtner play his creation in person knows that the instrument it-tener immediately senses his or her location as being inside the bowl itself; at its most expansive, the listener in the small object of the tenor-based Metasaxophone, the instrument in this case is actually not the tenor-based Metasax but rather a hybrid of Mr. Burtner's soprano horn and a convincing computer model of a Tibetan prayer bowl by physical modeling expert, Stefania Serafin. The piece opens with a sounding of the bowl as percussive key taps set it resonating, and the listener immediately senses his or her location as being inside the bowl itself. Experimentally, the piece—as it then begins to traverse a fluttering and shimmering high register—becomes largely about the modulation of the size and shape of the bowl. At its most precise, the piece places the listener in the small object of the bowl itself, at its most expansive, the listener could just as easily be in an enormous mountain bowl with sound reflecting off distant canyon walls. Delta 2 is an emergent feedback piece, its slow evolution relentlessly leading to a prolonged swell of thick and edgy sound. A cross between minimalist pulsing and Hendrix-inspired screeching, it argues against Mr. Burtner's program notes that call it the “softer side of the electric sax.” Conversely, I find it intensely charged and almost manic in both procedure and performance. That was certainly the case at the CD release party, where Mr. Burtner was joined for this piece by the wonderful jazz trumpeter, John D’earth. Having begun the piece quietly at opposite ends of the stage, by the end the players were inches from each other, red in the face, and wailing on their horns.

S-Trance-S, the longest track on the CD, is linked by both title and approach to S-Morphe-S. The fundamental difference here is that Ms. Serafin's physical model is that of a string instead of a bowl. Mr. Burtner bows, plucks, and rubs this virtual instrument with a measured and deliberate pacing throughout the piece, which never quite finds the same frenetic energy as most of its counterparts (as the name suggests). This is a late night piece that one can imagine as the middle 12 minutes of an hours-long improvisation. While its gritty bursts of semi-pitched noise foreshadow the intense din that is Delta 1, it eventually leads the listener peacefully to the disc’s “intermission.”

The intermission music itself—St. Thomas Phase—is a tribute to Sonny Rollins. The only non-real-time piece on the disc, it gathers, retains, and expands enormous energy from the sampled Rollins music, spinning a wash of sound that drifts in and out of phase and rhythmic stability. For the ears, it is the perfect palet-cleansing piece of ginger or scoop of sorbet before digging in to the tasty second half of the album.

Noisegate 67, the first piece written for the Metasaxophone, is a sea of breath, noise, and relentless multi-phonic textures in which the acoustic qualities of the horn are at their most raw and powerful. The piece is less successful than its album-mates 

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at conjuring a truly unified meta-instrument, often sounding like a standard tenor sax blowing over a background wash of computer-generated sound. Conceptual differences aside, however, this is a striking piece that would likely prove an accessible starting point for anyone coming from the world of experimental jazz or free improvisation.

Speaking of accessible starting points, *Delta 1* will convincingly and unapologetically turn you on or off. This is non-stop sonic assault, though the drums produced by Mr. Burtner’s polyrhythmicon—the same tool used for *St. Thomas Phase*—are underpowered compared to the blaring electric horn. Flying in the face of Spinal Tap’s “our knobs go up to 11,” this is a piece that only has to be turned up halfway to sound loud.

Relative calm returns with the disc’s final track, *Endprint*. This piece is scored for nine acoustic saxophones, perhaps suggesting that the acoustic nature of the instrument is what truly endures. Rich with electronic-sounding multiphonics, the piece swims in and out of your head. At the CD release performance I sometimes found its swelling resonances so saturating that I looked around half expecting to see people’s skulls actually bubbling and vibrating. Mr. Burtner, using an approach reminiscent of pieces such as Maggi Payne’s *Hum* and *Hum 2*, harnesses the power of this “choir of the same instruments” to great effect.

Ironically, the originality and even existence of *Metasaxophone Colossus* is most likely the result of Mr. Burtner giving up the saxophone for several years earlier in his life, frustrated with the conventional techniques and repertoire it then embodied for him. When he finally returned to it, he did so with a Xenakis-inspired commitment to always forget one’s previous creations and start fresh.

That spirit is undeniably evident on this fine disc, which should prove equally inspiring to performers, composers, tinkerers, and inventors, while also challenging and rewarding listeners from a variety of musical backgrounds.

**Multimedia**

**Ludger Brümmer, Compositions; Silke Braemer, Videos: Thrill**


Reviewed by Alan Shockley
Pittsburgh, Pennsylvania, USA

This DVD-Audio/Video/ROM release from 2003 gathers together five multi-channel audio works by composer Ludger Brümmer, two of them paired with video work by artist Silke Braemer. This is a smart release in that includes multiple versions of each track: the audio is available in linear PCM format, 16- or 24-bit resolution (depending on original source files), with a sampling rate of 48 kHz. Paired with the video parts of the DVD, the music is also encoded in stereo, Dolby Digital surround, and DTS formats. [*Inferno der Stille*, originally created in an eight-channel version is available in a five-channel mix, eight channels being normally unavailable in DVD player outputs, but Mr. Brümmer even provides the individual eight channels of audio as AIFF files in the DVD-ROM partition of the DVD.] In these ways, the composer allows listeners some way to experience this music, be their playback means ever so humble.

First, the audio-only tracks. The disc opens with *Phrenos*, an 18-min work from 1997 that won the Grand Prix—Pierre d’Or as best work in all categories at the 1997 Bourges Competition. It was commissioned by and realized at the Zentrum für Kunst und Medientechnologie (ZKM) Institute for Music and Acoustics Karlsruhe. A sharp, sudden opening becomes string orchestra/choir-like sustained sounds. These build to a second outburst, briefly climaxing in tape-loop-iness. The next outburst releases some human speech and the comic arpeggiation of speed-changed voice recordings—providing one of the rare moments of non-abstract electronic sounds on the entire disc. These sounds are then looped and they circle the listener, slowing down and returning to the bed of sustained pads. These fade to silence. Gradually, the faintest, most delicate blips color the quietude. Another short outburst and then the sonic wallpaper of a starship continues. About halfway through the piece, cascades of tinkling loops become audible; these circle and crescendo. A few feral gasps sound through this chiming orchestra of circling material. After a diminuendo to almost nothing, the faint “wallpaper” returns. It accelerates, a spinning arcade of sound transforming into a helicopter. This flying machine slows until another outburst (much like that of the opening) wakes the listener. Faint sustained sounds—now vaguely string-quartet-like—are followed by a longer outburst, miasmic, taking us into the final minute of the piece. A gradual diminuendo and the clink of a small hammer on glass ends the work.

Track three is the next audio-only
work, *de la nuit* from 1999. Finally, *Inferno der Stille* from 2000 (track five) closes the disc. I find *Inferno* to be the most engaging work of this release, comparing it to both of the other audio-only tracks and to the two tracks with video. This “Inferno of Silence” draws source material from the Introitus section of Wolfgang Mozart’s Requiem. Mr. Brümmer also mentions developing metallic sounds through physical modeling procedures and details an algorithmic approach to this composition in the liner notes. The opening resembles a reversed and stretched sound capped by a sudden decrescendo. This is succeeded by extremely faint sounds, sometimes sounding mandolin-like. Close-to-extremely faint sounds, sometimes sounding choral-like sounds take over and Mozart's strings become recognizable, eventually crescendoing to an abrupt cut-off. A faint tinkling resonates, and then some whispering-like coiled metal, followed by a large crescendo depositing the listener at a loud and active plateau. With about five minutes remaining, the piece grows quiet again; there are distant sustained sounds, the brushes on metal again, and a gradual crescendo begins. Cascades wash over the listener, eventually clearing for about a half-minute of Mozardian transulence. The slow fading and dismantling of this sound takes us to the work’s conclusion.

As mentioned above, this hybrid disc also includes two audio works mated with video works created by Silke Braemer. One of these is the title work, *Thrill*/*Le temps s’ouvre* from 1999. Mr. Brümmer’s title, Ms. Braemer has chosen an independent title for her video work.) The earlier of these two audio/video works is the 1997 *Lizard Point*, created as a commission from the International Computer Music Association for the International Computer Music Conference in Thessaloniki in 1997. This 20-min work opens with a metallic “scream” of sound and the image of a standing male figure bathing in a garden. We drive by spectral blue trees as toy-piano and marbles-in-the-clockworks sounds enter. Hands undulate on the left of the visual field, and a tire swing tilts back and forth into view. We begin to see bobbing circles and some percussive tiny bell sounds build, leading to a distorted guitar-like outburst, and then to a metallic hammering. The screen, mostly black and white throughout the video, is tinged briefly with blue/blue-green lines, and the bobbing white circles continue while a distant human figure begins an approach. The color drains out, and the bobbing and the figure’s approach continue. As we get more and more space in between the sounds, the figure finally seems right before the viewer. There’s a loud, spinning interruption, mated with quickly changing/moving images, then we’re back to the approaching figure, almost frozen, again overlaid with the bobbing circles. A white screen and a woman jumping into the arms of a man are matched with fuzzy, white-noise infused sounds, and slow upward glissandi.

At this point essentially all of the visual materials for the piece have already appeared, as have most of the audio ones. There are some gradual transformations—the metallic hammering gradually comes to resemble a train bell, and after a somewhat sinister stretched-bell crescendo, “church bells” ring and ring. The bobbing circles return and return never much changed, but the undulating hands morph into blue threads across the screen that mimic the earlier movement. The ghostly trees lose their color in future iterations; the male bather returns, accompanied by sparkling high notes. The hammering returns, more bell-like and fades slowly to nothing at the end of the work.

Mr. Brümmer explains that the primary musical material he used for *Lizard Point* was a set of intervals lifted from the second movement of Ravel’s *Gaspard de la nuit*. The notes further explain the video: “The aim in the collaborative process of creating the video was to investigate the moment of tension between real and digitally produced realities and movement qualities and to present them according to media-specific aspects.”

Despite the somewhat restricted sound palette for Mr. Brümmer’s works represented here, I’m not tempted to label him a minimalist, but there seems no more fitting label than this one for Ms. Braemer’s video works. A 20-min video piece repeating essentially three images seems to embrace a limited aesthetic. Almost all the images in both pieces here are black and white, and when color does occasionally tint the screen, it is almost always blue. Video technology has come a long way since 1997, and a viewer’s expectations have been heightened by the extremely well-funded eye candy of popular movies. Unfortunately, this makes these pieces seem a bit crude. The limited palette grows old after awhile.

Mr. Brümmer’s compositions in this release, whether paired with video or not, definitely sound like a singular voice. I do find myself hoping for some more referential sounds—a few glimmers of the real world, or, if not literally *concrète* ones, at least a few more that remind us of familiar sounds. Because of this hope, for this listener *Inferno der Stille* is the most approachable work here: in it we
hear Mozart and recognize something familiar.

Hans Fjellestad: Moog

DVD [NTSC], 2005, plexiform 018; available from Flexifilm, 45 Main Street, Suite 504, Brooklyn, New York 11201, USA; telephone (+1) 718-643-7300, fax (+1) 718-643-7320, electronic mail info@flexifilm.com, Web www.plexifilm.com/moog.html or www.plexi.co.uk/.

Reviewed by James Harley
Guelph, Ontario, Canada

After having made the festival circuit in 2004, Moog, “the name that brought electronic music to the masses,” has been released on DVD. [Editor’s note: Robert Moog passed away 21 August 2005, after this review was written. An obituary will appear in the next issue.] Robert Moog is, of course, a central figure in the history of electronic music. This film, along with the 2002 publication of Analog Days: The Invention and Impact of the Moog Synthesizer by Trevor Pinch and Frank Trocco (reviewed elsewhere in this issue), signals the attention recently being paid to his place in the field.

The film is produced in an easy-going, documentary style. Mr. Moog is presented in many settings: encountering important musicians associated with the Moog synthesizer (and the Theremin); in his workshop/production plant, at home; in historic clips from earlier in his career. The introduction features an interesting waveform-derived animation (created by fizzy eye) and an amusing cartoon sequence in which a Simpsons-esque Bob Moog character introduces his wild-looking modular synthesizer, finishing with the humble line: “Well, I appreciate your comments, what you think the potential of a contraption like this is.”

As director Hans Fjellestad notes in his written introduction included with the DVD:

[We] decided early on that we weren’t interested in taking a conventional approach to the Moog story. The film does not track the history of electronic music. It is not a chronological history of the synthesizer. No archive still photos, no narration. Moog is focused on the man today, in his own words.

Mr. Moog, who was pushing 70 during the filming, is clearly no longer young. He speaks haltingly, and occasionally lacks focus. [He is, it must be said, an official “geek,” with a pocket protector and a bunch of pens handy!] But, the spark is still there when speaking of what he cares about. He gets mystical at times. This bent ranges from comments heard at the beginning such as, “I can feel what’s going on inside a piece of electronic equipment,” to thoughts on the “connection” between musicians and their instruments that goes beyond the physical/rational, to his conviction that his ideas “came through” from beyond, “something between discovering and witnessing.”

Along with his instruments, Mr. Moog also cares about his organic garden, located outside of Asheville, North Carolina (pity about the chickens!), his family, as well as the conviction he shares with his philosopher wife, Ileana Grams, that there “is a level of reality where there is no time and there is no space, there’s just energy, and we have contact with that through the intermediate layers . . . so, if the right connections are established, I don’t see why a piece of matter . . . can’t make contact through this very high level of reality that has access to everything, past and future.”

Along with the “solo” interviews, Mr. Moog is shown conversing with a variety of characters: from Herb Deutsch, the first experimental composer to work with the engineer and who to a large extent stimulated the development of the modular synthesizer, to Walter Sears, an early sales associate who did much to promote the new instruments, to various musicians such as Rick Wakeman, Keith Emerson, Money Mark, and many others. Some of these encounters are wonderful. One of my favorites is the session with Money Mark [a.k.a Mark Ramos-Nishita], who sits with Mr. Moog at a synthesizer and tweaks knobs while talking about what he thinks sounds cool, drawing the inventor into playing with the sounds as well. Some of the encounters are more stilted: DJ Spooky, for example, comes across as mostly speaking to himself, with little connection to Mr. Moog or his technology [to be fair, this is not a musician known for playing synthesizers]. Elsewhere, we learn that Rick Wakeman is a bit of a “lad” [crude jokes], and that Bernie Worrell equates music with sex. Yee-haw!

I viewed the film with someone who had no specialized knowledge of
the history of electronic music. From that perspective, the film worked well. From my perspective, I wondered about some of the elements of Mr. Moog’s story that were missing. For one thing, beyond Herb Deutsch, there are no composers included or even referenced (beyond mention of Vladimir Ussachevsky). We do witness the evolution of the instrument from “experimental” music to commercial applications to live performance, so perhaps this lacuna is understandable. We also don’t hear anything about Mr. Moog’s protracted business and legal struggles (although today, he is doing well with Big Briar/Moog Music, with the newly won right to the commercial use of his name, so perhaps it wasn’t necessary to talk about what happened in the intervening years). In the various discussions throughout the film discussing the history of the Moog synthesizer, there is only a single oblique reference to Switched-On Bach. Considering the impact this album had on the popularization of the synthesizer, this does seem odd. In the liner notes accompanying the DVD, the director mentions that attempts to contact Wendy Carlos were thwarted and that she “even threatened legal action.” For someone whose career has been shaped by her involvement with this instrument and the man who invented it, this is puzzled behavior. In any case, this is a hole in the story that looms large, at least from the historical perspective.

What does come across in the film, however, is that the Moog, and the Theremin, are alive and well. Current groups and musicians continue to use them: among many others, Stereolab, Tino Corp., Pamela Kirsten, and Char- lie Clouser (the session with him that is included in the Extras is one of the best; imagine Mr. Moog and his family attending a Nine Inch Nails concert!). I think it’s especially relevant that the director himself performs with the Moog, using the moniker “33.” The soundtrack is filled with a variety of Moog-based music, new and old, from artists who appear in the film and others who do not. This continuing relevancy of this instrument (and man) to music-making is perhaps the strongest message of the film, and Mr. Moog does express his preference for live rather than studio-produced music. For all the effects his age and struggles have had, Mr. Moog’s own vitality shines through, and his legacy, his synthesizers and Theremins, are still present, living through music being performed today, still cool!

Various: -40, Canadian Propaganda Films of the 1940s Reworked
DVD [NTSC]/Compact disc, 2004, csc 011; available from COCOS0L1DC1T1; electronic mail info@cocosolidciti.com; Web www.cocosolidciti.com/.

Reviewed by James Harley Guelph, Ontario, Canada
The National Film Board of Canada [NFB] was created in 1939 as a public agency “that produces and distributes films and other audiovisual works that reflect Canada to Canadians and the rest of the world.” Over the 66 years of its existence, the NFB has produced an impressive body of work, ranging from documentaries to features to animations to experimental films [consult the Web site: www.nfb.ca]. As an aside, the NFB has been important for the history of electroacoustic music in Canada. Norman McLaren, who developed the experimental animation unit, created sound by painting/engraving on the film itself. Maurice Blackburn, a composer, collaborated with McLaren and helped to establish the “Atelier de conception et de realisations sonores,” a studio at NFB for experimenting and creating electroacoustic music.

The aim of the -40 project was to open up the archives to new filmmakers and musicians, reworking a set of 20 short documentary films from the 1940s. As the curatorial statement in the liner notes states: “The collected works on -40 are very much a product of their times, while also being part of an enduring cultural conversation about personal and national identities . . . Using the contemporary [de/re]constructive
modality of the digital remix to bring the past into sharp focus in an electronically altered present, the artists overlay technologies, new over old, and the global, political and personal interweave."

The project was divided into two parts: ten artists reworked the film [transferred to digital video] while leaving the original audio intact; ten other artists reworked the soundtrack while leaving the original film intact. It would have been particularly interesting to have two artists rework the audio or video of the same film, but in this case, 20 different films were used, a unique one for each participant.

The package includes a CD containing the ten tracks of reworked audio, and a DVD containing the ten reworked videos and the ten original films with the reworked audio. The bilingual [English/French] liner notes include a curatorial statement (no author credited), an essay by journalist Marc Glassman, and film credits with biographies for the 20 artists.

From my perspective, the audio remixes cover a fairly narrow range, generally falling into the beat-oriented, “techno” category. Having said that, different tracks tend more toward one or other of styles such as “ambient,” “glitch,” “hardcore,” etc. Most of them present fragments of the original soundtracks, mostly clips of narration. By far the most experimental of the set is the Guinea Pig Club (originally titled New Faces Come Back, from 1946) by Venetian Snares [a.k.a. Aaron Funk, from Winnipeg]. The film shows officers from various countries at a “club” recovering from reconstructive surgery, many of their faces horribly disfigured. The image of these men attending a piano recital is accompanied here by wildly distorted piano sounds, with both tempo and pitch fluctuating widely. In a sharply ironic way, the music follows the “narrative” of the film closely, and, uniquely, makes no attempt to create a “beat” to dance to.

The other track I found most interesting is You Choo-Choo-Choose Me! (originally titled Trans-Canada Express, from 1944) by Secret Mommy [a.k.a. Andy Dixon, from Vancouver]. Original sound material from the film is subjected to various treatments: slicing, looping, distorting, etc. The music adds a disturbing, but playful, tone to the images of trains and related people, technology, and landscapes.

Definitely Not Internment Camps (originally titled Of Japanese Descent, from 1945) by Meck [a.k.a. Mike Baugh, from Montreal], includes enough of the original narration to underscore the—from today’s perspective—heartless propaganda which pretended that shipping Japanese-Canadian people off to camps in isolated locations “has resulted in the improvement of the general health level.” The beat-oriented electronic music that gradually evolves from underneath the narration makes oblique reference to Japanese ethnic music.

Aku:en [a.k.a. Marc Leclair, from Montreal] constructs his remix entirely from samples of the original soundtrack for Dynamisme des ondes [same title, from 1942], often slicing the sounds up very finely to create an engaging beat, continuously evolving. What is apparent to me is that while I may not find many of these tracks interesting to listen to on their own, at least for long (and I realize others may well disagree), they all add an interesting perspective to the original films. They are better heard by watching the DVD, in my opinion.


Turning to the other set, the reworked videos preserving the original soundtracks, I don’t have the technical expertise to comment on the digital editing. Altogether, the videos present a veritable compendium of effects and styles. They are all worth checking out. The dated (?) propaganda style of many of the films provides a ripe target for postmodern intervention. Some of the videos are blatant in their irony, some are more subtle, particularly that of Matt Burke, who carefully manipulates the speed/rhythm of the original [footage of Hitler] to alter our perception without being polemic [the narration is pure anti-Nazi propaganda, commenting on Hitler’s own propaganda].

You Address the Masses

valuable and provocative.

historical dialogue that results can be

NFB and elsewhere. The creative his-

remixing and reworking, from the

material can be made available for

hopes that more historical source

Burke (Toronto).

For Men's Minds,

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softVNS 2 Real Time Video

Processing and Tracking Software

softVNS 2.0 is listed for US$ 350.

Current versions are softVNS 2.19d

for Mac OS X, and softVNS 2.17 for

Macintosh OS 9. Contact David

Rokeby, electronic mail

drokeby@sympatico.ca; Web

homepage.mac.com/davidrokeby/

softVNS.html.

Reviewed by Margaret Schedel
San Francisco, California USA

David Rokeby developed the Very

Nervous System in 1986 as an installa-

tion that enabled a computer to

trigger sound and music in response to

the movement of human bodies.

His computer was not fast enough to

alyze streaming video data so he

created a rudimentary camera out of

76 light sensors and a plastic lens.

Using the Very Nervous System with

its dedicated external digitizers to

capture, convert, and extract motion

information from live video, he has

created installations for over a decade,

adding hardware and software mod-

ules as needed. Since 1993 Mr.

Rokeby has sold his technology as

several generations of upgradable pro-

prietary hardware. In 1999 he re-

worked the system to run under the

Max programming environment and
dubbed it SoftVNS; in July 2002 he

released an updated and expanded

version of this software: softVNS 2.

The integration of softVNS with

Max is seamless—the software re-

sides within the Max folder and is au-

thorized by SoftVideo.key, a file that

the developer sends the user via elec-

tronic mail which also resides within

the Max folder. softVNS objects are
denoted by a “v.” prepend similar to

Jitter’s jit. nomenclature. Speaking

of Jitter, Mr. Rokeby has written ob-

jects which translate from softVNS

streams to Jitter matrices and back

again. softVNS has some overlap with

the functionality of Jitter in terms of

video playback and processing, but

Jitter is designed for general data pro-

cessing including OpenGL geometry,

audio, physical models, state maps,
generative systems, text, or any other
type of data that can be described in a

matrix of values. softVNS is designed

purely for processing video and con-

tains a very useful set of objects for

real-time video tracking, including

presence and motion tracking, color

tracking, head-tracking, and object

following.

The tracking algorithms in soft-

VNS 2 are unbelievable. I’m sure
given enough time I could build simi-

lar patches in Jitter, but Mr. Rokeby

has had 20 years of experience track-

ing movement and it shows. A key

component in classic softVNS mo-

tion tracking is used in v.motion,

which is implemented by subtracting

the current frame from the previous

one—the differences are generally

causated by movement in the image.

There are many other tracking algo-

rithms: v.edges shows the edges of

motion; v.heads tracks multiple

objects at once; v.track follows a

specified small object; v.bounds

draws a rectangle around the borders

of the object and gives its center [see

Figure 1]; and v.centroid gives the

center of gravity of an object. It is fas-

cinating to compare the center of an

object as measured by its boundaries

and its center of gravity. Together

with objects that massage the incom-

ing video stream to make it easier to

track, these following objects are the

strongest reason to purchase softVSN

2 if you already own Jitter.

The other half of softVNS allows

video playback and manipulation. In

his own installations, Mr. Rokeby

has always had video and sound re-

acting to body movement, and he de-

veloped softVNS before Jitter and

Nato were available. Working with

video artist Charlie Woodman, I cre-

ated a patch that tracks the move-

ment of a dancer who controls over

60 parameters of the sound and 10 pa-

rameters of the video. Previously, I

had created video patches for Mr.

Woodman with Jitter, but he was

more than happy with the video “ef-

fects” in softVNS 2. Although we

didn’t have to use the v.jit object, it

works perfectly.

Getting started with softVNS 2 is

pretty easy; there is no tutorial per se

but there is a patch called

softVNS_2_Overview that introduces

the softVNS 2 objects and allows easy

access to example/help patches for
each object. The objects are divided

to type including sources/capure/display, spatial transforma-
tion, and tracking/analysis. I found it

much more useful to simply work

my way down the help files in alpa-

betalical order. It may sound absurd,

but there are only 183 objects; many

of them are minor variations of each

other such as the arithmetic opera-
tors or QuickTime effects objects.

The help files are extensive and show

some of Mr. Rokeby’s coding tricks to

make the tracking objects work their

best; my only complaint is that some
Mr. Rokeby has been using softVNS in interactive video installations over the past two years. Some of these are permanent exhibits that have been running all day every day for well over a year without downtime. While my own experience with softVNS has been more performance oriented, I haven’t experienced any problems with it crashing. There was a noticeable slowing down of processing when using several of the tracking objects at once on my 1.25-GHz Powerbook G4 with 1.5 GB of RAM. The computer could handle the tracking, but as soon as I added 60 streams of MIDI messages things got ugly. The CPU load for the tracking objects is very high, but it is definitely worth it.

softVNS 2 is coded for the Macintosh G4 velocity engine, and will not run on any earlier hardware. It includes extensive support for iSight, enabling users to easily turn off the auto-focus and auto-exposure, necessary for accurate video tracking. It also includes intuitive controls for my interface of choice, the Imaging Source DFG-1394-1 video-to-firewire converter which streams uncompressed video directly into the computer from any composite or s-video source.

Motion tracking has become more common since the 1980s, but this quote from Mr. Rokeby’s Web site is a striking description of the artistic impetus behind the development of his system:

Because the computer is purely logical, the language of interaction should strive to be intuitive. Because the computer removes you from your body, the body should be strongly engaged. Because the computer’s activity takes place on the tiny playing fields of integrated circuits, the encounter with the computer should take place in a human-scaled physical space.

The developer deliberately set out to oppose his art to the accepted belief of what computers are good at, continuing a contrarian streak that started at the Ontario College of Art. He has pursued his dream, creating amazingly powerful tracking software—thankfully he has turned it into an affordable and well-documented product for all artists to use.