Reviews

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 In some cases, they are either unpublished in the Journal itself or published in an abbreviated form in the Journal.]

Events

The Eleventh International Society for Music Information Retrieval Conference (ISMIR 2010)


Reviewed by KatieAnna Wolf
Cold Spring, Minnesota, USA

ISMIR 2010, the Eleventh International Society for Music Information Retrieval Conference, took place in Utrecht, the Netherlands, from 9–13 August 2010. It was jointly organized by Utrecht University, the Utrecht School of the Arts, the Meertens Institute, Philips Research, and the University of Oldenburg. Since 2000, ISMIR has become an interdisciplinary forum dedicated to research on musical data, and brings together researchers in areas such as musicology, library and information science, cognitive science, computer science, and others.

I write this review from the perspective of a computer science student and a newcomer to the Music Information Retrieval (MIR) community. As a first-time ISMIR attendee, the conference offered me the opportunity to investigate the field and see the possibilities it had to offer. This review outlines the events that transpired in Utrecht over the five days of the conference, and present a fresh perspective on ISMIR, and on MIR in general.

As a student attending the conference, affordable accommodations were offered in student housing units. Being able to connect with other students the weekend before the conference began provided opportunities to not only socialize with others, new and experienced, in the community, but also to tour Utrecht and the surrounding cities in an enjoyable excursion prior to the start of the conference.

Before the official opening of ISMIR 2010, introductory tutorials were held on Monday, 9 August, for those interested in gaining background knowledge on some of the subfields within the MIR realm. One such session, entitled “A Tutorial on Pattern Discovery and Search Methods in Symbolic MIR,” presented by Ian Knopke (BBC) and Eric Nichols (Indiana University), focused on symbolic music representation and applications, and cognitive approaches to MIR, including an overview of the principles of music cognition and the use of symbolic models for various MIR tasks. As a part of the second round of tutorials Meinard Müller (Saarland University and MPI Informatic) and Anssi Klipuri (Queen Mary, University of London) presented “A Music-oriented Approach to Music Signal Processing,” which focused on explaining how music-specific aspects can be exploited for feature representation used in various MIR tasks. The wide range of topics discussed included pitch and harmony, tempo and beat, timbre, and melody. Although I was familiar with most of these topics, the tutorial offered a well-rounded evaluation on the areas that would be focal points throughout the conference. Overall, the tutorials provided an opportunity for those new to the field to gauge their knowledge and prepare them for the upcoming conference.

The relaxed environment of the reception following the tutorials also offered an opportunity to get to know people in the community before the conference had formally begun.

The theme for ISMIR 2010 focused on MIR research and applications that modelled the perception and cognition of music, that gave insight to the human musical experience and understanding, or that used creative innovations of MIR research. To underscore this theme, Carol L. Krumhansl of Cornell University, well known for her research on tonal perception, opened the conference on Tuesday with her keynote speech entitled “Music and Cognition: Links at Many Levels.” She explored the associations between the objective properties of music and the subjective experience of music. An example of such a link is her study on sensitivity to frequent patterns in sound events to the encoding and remembering of music and the generation of expectations. She showed a direct emotional response in functional magnetic resonance imaging (fMRI) scans of the brain to music containing violations of those expectations. The links between objective properties and subjective experience, although present and important in the MIR community, are becoming more relevant in applied research as well. Through the project Plink: “Thin Slices” of Music, she explored the identification of artist, title, and release date of short excerpts of popular music with results pointing towards a large capacity for details and knowledge of style and emotional content of music in long-term memory.

In connection to the perception of music, invited speaker Joris de Man, the composer for the Killzone video games, presented his talk on Thursday titled “Behind the Music of Killzone 2.” He offered an alternative perspective on how music is being incorporated into the
are released during a special poster session dedicated to the presentation of methods developed over the year for various MIR tasks. The exchange facilitates the evaluation and swapping of state-of-the-art MIR methods, which contributes to the dissemination of cutting edge techniques within the community so as to facilitate further advances in the field as a whole. Some of the tasks featured in MIREX 2010 included: audio classification tasks such as audio artist classification, various audio genre classifications, audio music mood classification, as well as audio onset detection, audio chord estimation, audio music similarity and retrieval, etc.

Another notable segment of the conference was a morning dedicated to the future of MIR (fMIR). Two presentations kicked off the segment: the first on predicting the development of MIR research based on the parallels it has with natural language processing, and the second on how to address the challenges faced by MIR in order to make it a more versatile field. Douglas Eck then gave his talk on the future of MIR at Google with the idea that “music in the cloud” may be one direction the field is headed, in which the source of one’s music no longer sits on one’s personal device but on a public domain site such as YouTube. Another point he touched upon was that the future may bring a closing of the link between listening and making music, which may expand MIR in another direction. An industrial panel on fMIR then followed, moderated by Rebecca Fiebrink (Princeton); the panelists consisted of Douglas Eck (Google), Greg Mead (Musicmetric), Martin Roth (RjDj), and Ricardo Tarasch (Meemix). The group discussed topics involving how music technology would be changing over the next few years. With the increase in the computing power at people’s fingertips through their cell phones, the panel expanded on the possibilities for more user-defined personalization of listening capabilities. Another area touched upon is the possibility of the shifting of roles of the people within the music world, as listeners become composers via music generation, or produce music based on the environment. It was encouraging to know that leaders in the field are looking ahead to what it is becoming and how it is evolving.

Another aspect of the conference involved celebrating the enjoyment of music through several recitals held at the close of each day, after the posters and presentations. A reception commemorating the first day of the conference was sponsored by the City of Utrecht in the garden of the “Academie Gebouw” of Utrecht University during which Arie Abbenes performed on the Hemony Carillon of the Dom Tower. The performance comprised a combination of pieces by W. A. Mozart, in honor of the unofficial ISMIR theme, “Ah vous dirai-je, Maman,” and by Jacob van Eyck, as well as songs of The Beatles. The carillon recital demonstrated unequivocally how music surrounds daily living as the bells rang out for the entire city to hear. Wednesday’s recital, presented by the Utrecht School of Music and Technology (USMuT), one of the schools of the Utrecht School of the Arts (HKU), featured Sonsoles Alonso, an emerging pianist specializing in contemporary music and live electronics, and three works by composers combining technology and sound in innovative ways. The recital encapsulated the various ways in which music and electronics can be combined together to contribute to an emerging genre of performance for the future.

The conference banquet, held Thursday night, was hosted at, and included guided tours through, the National Museum "From Musical
Clock to Street Organ.” The attendees were treated to demonstrations of the various mechanical instruments, ranging from carillon clocks and music boxes to street and dance organs. It was a reminder of how music has evolved over the years, and how those at the conference are contributing to that development through their research. Concluding the dinner was the announcement of the best student paper, awarded to Hussein Hirjee and Daniel G. Brown for their paper “Solving Misheard Lyric Search Queries Using a Probabilistic Model of Speech Sounds,” and the best overall paper, awarded to Ron J. Weiss and Juan Pablo Bello for their paper “Identifying Repeated Patterns in Music Using Sparse Convolutonal Non-negative Matrix Factorization.”

As a fitting conclusion to the conference on the morning of Friday, 13 August, the late-breaking/demo session offered the latest developments in the MIR field, including hot-off-the-press research conducted in the recent months leading up to the conference. The session presented a tantalizing glimpse of what one could expect at the upcoming ISMIR 2011. After the final plenary session, the closing remarks wrapped up the conference with many thanks to the staff and an announcement of next year’s conference to be hosted in Miami, Florida, USA, during the last week of October 2011 with the theme “Music, Anytime, Anywhere.”

The welcoming environment of ISMIR 2010 and the amount of exchanging and developing of ideas within the field were convincing factors in determining the success of the conference. With such an international following and a diverse collection of subfields, the MIR community stays in continuous communication with a total of 1,346 subscribers to their on-line mailing list (subscription details at www.ismir.net). For those interested, it offers updates in the field and research discussions, as well as announcements and information on upcoming conferences.

KISS 2010: Kyma International Sound Symposium

Casino Baumgarten, Vienna, Austria, 24–26 September 2010.

Reviewed by Silvia Matheus
Berkeley, California, USA

The Second International Kyma Symposium (KISS 2010) took place from 24–26 September 2010 at the Casino Baumgarten in Vienna, in a newly renovated building with grandiose ornamented rooms and decorated ceilings dating from 1890. The Casino Baumgarten became one of the main recording studios in Vienna during the 1960s and 1970s due to its excellent acoustics.

The 60 KISS 2010 presenters and practitioners were sound artists, sound designers, audio engineers, scholars, and educators from Europe, North and South America, Asia, and Australia. They congregated in one of the Casino’s exuberant rooms for three days to share knowledge and common interests of the latest Symbolic Sound developments.

Kyma is the software that communicates with (Paca)rana. (Paca)rana is an extraordinary sound processing system with an amazing capability for programming, designing, and processing sound for live performance interaction [more information at www.symbolicsound.com/Products/].

The conference opened with the keynote speech by the president of Symbolic Sound Corporation, Carla Scaletti, entitled “Music is Not a Language: Non-symbolic Meaning in Sound.” Her eloquent and well-researched speech on the theme “symbolic sound” raised many questions, such as: How is music communicated? How is sound represented and understood? Is sound symbolic? Is music a language? Does it contain meaning?

Ms. Scaletti stated that “language, culture, and music are feeding into each other and the environment is not just physical, not just biological, but also cultural.” She proposed that music is not a language. But this does not imply that music does not have meaning. Music creates meaning in non-symbolic, non-referential ways. She referred to many authors in the fields of music, cognitive science, philosophy, and language, primary among them is Mark Johnson’s 2007 book, The Meaning of the Body: Aesthetics of Human Understanding. Readers can participate in open discussions on the subject of music, sound symbols, etc., at www.philosophyofsound.org/.

Ms. Scaletti ended the keynote speech with the following statement: “As sound designers and musicians we have direct access to people’s minds; in a very deep and direct way, sounds reach people pre-verbally, mapping to experiences and patterns that they learn long before they develop mastering language and critical thinking and filtering. It does matter what kinds of sounds in music we create. Welcome to Kyma Symposium!”

The conference started with warm applause from an eager and impatient crowd anxious to hear the latest in Kyma development. Ms. Scaletti’s speech had enough content to stimulate ideas of the importance of sound, symbols, language, and culture, and their interrelationships. This conversation on sound and its
symbolic meaning sufficiently filled two long days.

Mr. Jones’s presentation was followed by another presentation by Ms. Scaletti, entitled “What’s New in Kyma?”. She gave a short presentation of the latest changes in Kyma since the 2009 symposium in Barcelona (www.osculator.net/2009/09/09/kyma-symposium-2009-in-barcelona/).

The first day of the conference ended with a performance of Nearly Ninety by John Paul Jones. Mr. Jones, bass player for the band Led Zeppelin, played a commissioned piece by choreographer Merce Cunningham in celebration of his 90th birthday. Mr. Jones used Kyma extensively for signal processing. The performance was obsessive, with rapid signal-processing changes juxtaposing and layering each other, reminiscent of rock and roll while taking a much fresher approach. The sounds of the guitar were heavily processed, close to unrecognizable, and never seemed to settle down. Mr. Jones applied many transformations to the guitar. Additionally, there was an abundance of crescendos with constantly moving sound effects (mostly in the mid-to-high frequency range), pitch shifting, and thick layers of sounds with few sustained notes in suspense. He completely dominated the Kyma system and the audience. Toward the end of the piece, Mr. Jones created an auditory illusion of pitch ascending infinitely (the Shepard scale) to create a climax and then slowly descending using filter sweeps, finally ending with almost recognizable sounds of the guitar with bits of tonal chords, and melodic phrases turning into noisy, harsh strumming until the end. His performance was engaging to behold.

The second day of the symposium included lectures on philosophy and music. Hannes Raffaseder and Julian Rubisch presented a paper entitled “GEMMA (Generative Music for Media Application)” that explained how algorithmic and generative composition methods from the field of experimental new music can be transferred to the applied sector of media production. They are developing a software tool that will simplify the selection and production of media music using an optimized user interface and partially automated composition process. More information is available at the authors’ Web site (gemma.fhstp.ac.at/).

David Moss gave a demonstration on a Kyma controller he built, albeit different from what was announced in his abstract. He built the controller by taking infrared LEDs and attaching them to the ends of two sticks, which he then moved in front of a Nintendo Wiimote, fixed on a stand, communicating with Kyma through OSCulator (www.osculator.net).

Steve Everett presented a paper entitled “Auditory Roughness and Ecological Listening in Electroacoustic Music,” in which he examined the perceptual conditions for determining musical meaning in electroacoustic compositions.

Jim Brashear’s presentation, “System of Shadows,” offered a non-semantic dialogue and interactive performance environment for trumpet/flugelhorn and Kyma. His presentation focused on the gestural and abstract performance lexicon within System of Shadows, positioning the work securely within the realm of real-time, non-semantic dialog and symbolic interchange.

Lowell Pickett’s “The Pentagon” was an experiment using Kyma for live 3-D audio manipulation for a music venue of the future. The purpose of “The Pentagon” is to present a new type of performance space that provides the audience with a unique social and musical experience in surround sound. The performer is positioned at the center of The Pentagon (in the middle of the audience) and uses Kyma to spatially mix and manipulate audio. Alternatively, an assortment of performers can be positioned around the edges of The Pentagon. This experiment aims to heighten the audience’s awareness of the real and virtual spaces around them.

Peter Rantasa’s keynote presentation was on the conference theme: “Symbolic Sound.” Beginning with the etymology of the word “symbol,” Mr. Rantasa used semiotic concepts to uncover the “key to decipher the meaning of a sound.” He posited the notion that sound is first situated in our bodies; it connects us literally with the environment. More information about this presentation, and abstracts from the symposium, are available at the KISS 2010 Web site (tonsalon.at/KISS2010/index.php/program/). Videos from talks and concerts may be viewed at the Symbolic Sound Web site (www.symbolicsound.com/Learn/KISS2010).

The pieces presented at the conference were stylistically quite different from each other. There were electroacoustic and electronic music improvisations, DJ-house, pop/avant-garde, electronic, and live interactions with electronics, voice, acoustic instruments, and video using Kyma. It was very encouraging to hear all the different possibilities allowed by Kyma.

Events
The concert night started with Carla Scaletti’s *Autocatalysis* for Kyma and live audience. Ms. Scaletti’s musical environment was controlled by the audience using plastic clickers. The audience sounds were fed into a complex system that generated the piece, controlled the parameters, and activated processes in Kyma. “The piece can only happen with the input from the audience,” she said. The audience was energized by the clicking sounds that came in waves against harsh synthetic electronic bursts, sometimes machine-like but interleaved with lyrical organic material. Parameters for each processor were displayed on a large screen as guidance and feedback for the audience. “The sonic environment output emerges as the result of the interaction between the components of the system in a space,” stated Ms. Scaletti in the program notes. Her intent was successfully accomplished.

Andrea Young’s piece, *Insatisfecha* for voice and electronics, was inspired by a Huang O poem from the early 16th century. Ms. Young used her voice and a Wacom tablet with great skill to control processes in Kyma. In *Insatisfecha* a cacophony of vocal sounds, echoing, stretched-out cries, and movement between multiple loudspeakers, was engaging to listen to. The piece had a rich palette of vocal sounds interleaved with a delicate, percussive electronic texture. It evolved gradually, imparting a sense of melancholy, uneasiness, and mystery, and then peaceful rest. In all, *Insatisfecha* was very satisfying to listen to.

*System of Shadows* for trumpet/flugelhorn, Kyma, and live electronics is a successful collaboration between composer Brian Belet and performer Stephen Ruppenthal. The piece takes its inspiration from the three-movement form of a concerto. *System of Shadows* is a dialog between acoustic and electronic forces. The Kyma system designed by Mr. Belet provides great flexibility for the performer to improvise within. The trumpet sound is fully notated, but with room for improvisational commentary. The trumpet sounds were passed through a multiplicity of processes, creating a dense, arhythmic, reverberating texture. The sounds emanated from multiple speakers, taking over the entire room. For this piece, the composer focused on extending the trumpet sounds with multiple variations of the same source, like shadows, as the title implies. These two forces, trumpet and electronics, shifted back and forth, creating an engaging interplay of sonorities.

*Soundtracks for Movies that Don’t Yet Exist: Die Taubheit* for piano and live electronics was composed by Avi Benjamin. Mr. Benjamin used an acoustic piano, electronic keyboard, continuum fingerboard, Theremin, Kyma, and live electronics for his piece. It began with a virtuoso performance of Ludwig van Beethoven’s *Piano Sonata No. 32*, Opus 111, Movement 1, performed by the composer. Later on in the piece he extended his performance by playing the electronic keyboard, continuum fingerboard, and the Theremin, alternating skillfully between acoustic and electronic instruments. Mr. Benjamin created an environment using Kyma that allowed him to control the harmonic and rhythmic structure of Beethoven’s sonata with various types of processing. His performance skills, originality, and presence captured the attention of the audience. It was great fun to watch and to listen to this piece.

*Writeup* by Hector Bravo Bernard, for percussion and live electronics, is an improvisational piece. The music was generated live, using very high-pitched sounds with strident, harsh scrapes and long resonances to create a jarring wall of inharmonic sounds. Toward the end of the piece, a cloud of short, punctuated, high-pitched sounds oscillating with percussive low-pitched sounds gradually emanated from the dense texture, transforming this moment into a magical counterpoint. *Circles* was produced from plate excitation by intervention of different objects. It had a circular form, just as the title implies.

*A Sphere of Air is Bound* for wind instrument(s) and live electronics by Bruno Liberda is another example of a successful collaboration, this time between the composer and instrumentalist Stephen Ruppenthal. Mr. Ruppenthal’s presence was exuberant, full of energy and plasticity. His compelling performance, with complex and articulated phrases, fast and slow passages, short attacks and long sustains, and modulating pitches, was engaging and exciting to listen to. The trumpet dialogued and complemented the continuously evolving electronic texture. The electronic sounds and the processes used in this piece were carefully designed, contrasting and expanding the acoustic sound of the trumpet. They never seemed predictable. This, and the combination of contrasting timbres against the trumpet, successfully contributed to the development and interest of this piece. In his program notes, Mr. Liberda used the metaphor of weaving a basket to explain how he developed the idea and construction of the work:

[I] start from the most basic steps, namely the selection and processing of the material. The first thing was to choose the right kind of bamboo as material for the weaving. The tough texture of four-to-five-year-old Phyllostachys pubescens, for example, is ideal for making furniture, while the softer texture
of three-year-old Phyllostachys makinoi Hayata is easier to weave into a basket. Once the kind of bamboo is selected, it is then 'cooked' in soda water to remove the plant’s oils, and after that it is ready to be stripped to desired sizes. The stripping is a process that determines the results of the final products. Bamboo weaving is a time-consuming craft, and there is always the chance of making a wrong move that causes one to have to undo one’s work and start all over again.

The last day of the conference was devoted to Kyma only. The early part of the symposium was mostly dedicated to talks on the philosophy of the sounds, so finally it ended with what most participants wanted: Kyma master classes (that is, Kyma programming and design). The master class was followed by an excellent dinner and evening concert at Rhiz Bar Modern, where many participants from the field of electroacoustic music, electronic music, and ambient music gathered. Rhiz Bar Modern is located in a fashionable area of Vienna. The venue, which looked like a wine cellar, had a good sound system. The performance space was attached to a bar with thick walls and doors for acoustic isolation. The music selection and styles for this concert matched the environment well. We had the presence of masters of synthetic new age music, electronica, avant-garde music, DJ house music, you name it, and all produced using Kyma instruments.

Selected Nebulae by Samuel Pellman was inspired by images taken by the Hubble telescope of objects in deep space. Kyma was used for the surround-sound projection and for the creation of virtual instruments based on physical modeling. The sounds for this piece were mostly medium to low frequencies, smooth wave-like motions with additional rhythmic and melodic patterns “floating in space,” with lots of speed variations and delicate washes of high-pitched, melodic patterns in fixed tonal keys. The constant reverberation overpowered the entire room. The sounds complemented the video, which contained images based on mathematical transformations modeled from organic behavior and growth processes. Overall, listening to Selected Nebulae was a pleasant experience; I surrendered to the sounds and my imagination flew away into space. Pentagon by Lowell Pickett used live remix techniques within the Kyma environment. The composer used melodic songs with repetitive patterns in random juxtaposition in order to create acoustic spaces and slowly rotate through them. Some of the songs were vocals accompanied by an acoustic guitar; others were instrumental with focus on the percussion. In order to unify the different pieces into a cohesive performance, and modulate easily between contrasting songs, the individual pieces were organized by their synthesis processes, genre, style, and tonality. The selection of the pieces was tasteful and the remix was engaging to the ear. Mr. Pickett’s objective was to heighten the audience’s awareness of the virtual space around them.

Just Below the Surface by Teo Lipfert seemed to be concerned with the differences between what people say and what they mean. The composer claimed that sometimes people use precisely defined words, but the words actually mean something else, completely. For this work Mr. Lipfert used underwater video as a metaphor for this experience. Just Below the Surface is an engaging work, poetic with a surreal quality. The video images were processed, but still recognizable. Reverberated voices of children describing their dreams added another dimension to the video and its background music. The composer states in the program note: “The visual component of the film begins as an abstract mix of organic elements, none of which visually describe the audio content. As the film progresses the viewers become increasingly aware that they are beneath the surface of the ocean. Of course, a quick cut to recognizable reality signals a sudden awakening.”

Events
Liberda and Peter Rantasa, who orchestrated this event with great flair. Overall, the symposium was informative and inspiring for the Kyma practitioners. The majority of the participants came to meet Carla Scaletti and Kurt Hebel of Symbolic Sound Corporation and to learn more about Kyma—we would have loved to have had Kyma immersion for the entire conference. Unfortunately, only one day was devoted to this.

The third annual Kyma International Sound Symposium (KISS 2011) will take place from 16–18 September 2011 at Casa Da Musica in Porto, Portugal (www.casadamusica.com).

XVIII Colloquio di Informatica Musicale: Prossime distanze

Laboratorio G. Quazza, Università de Torino, Turin, Italy/Conservatorio de Cuneo, Cuneo, Italy, 5–8 October 2010.

Reviewed by James Harley Guelph, Ontario, Canada

From 5–8 October 2010, the Associazione di Informatica Musicale Italiana (AIMI) held the 18th Colloquio di Informatica Musicale (CIM), a national/international gathering of computer music researchers and practitioners held every other year in a different location in Italy. Although most events are presented in Italian, the majority of presentations at least provide English-language summaries and slides, making the colloquium informative for non-native participants. This year, the event was hosted by Andrea Valle, of the Centro Interdipartimentale di Ricerca su Multimedia e Audiovisivo (CIRMA) at the Università degli Studi di Torino, and Stefano Bassanese, of the Departamento Nuove Tecnologie e Linguaggi Musicali of the Conservatorio di Musica “Giorgio Federico Ghedini” di Cuneo. Turin and Cuneo are located in the Piedmont region of Italy. Turin was the primary location for the colloquium, but a week-long workshop was held in Cuneo on “Phantom Rooms—Networked Spaces,” led by Mark Traylor (California Institute of the Arts, USA). This intensive activity culminated in a networked performance on the last day of the colloquium that linked the two cities.

Another event that took place ahead of the colloquium proper was a day-long workshop on the SuperCollider music programming environment, given by Joshua Fermanter (University of Washington, USA). This session was followed by the opening concert featuring Michele Marelli, Italian clarinetist specializing in the music of Karlheinz Stockhausen. The concert featured music by the late composer from different periods of his output: Solo (1965/1966) in a version for bass horn and live electronics (provided by Stefano Bassanese and Nicola Biagini), Der kleine Harlekin (1975) for clarinet; and Uversa (2007), one of the works from Stockhausen’s late, unfinished cycle, Klang, for bass horn and electronics.


After lunch, Session 2, “Gesture, Interface, and Control,” included four presentations: “EJP—Electro Jamming Project” by Stefano Fumagalli and Saverio Monti [Conservatorio di Musica “G. Verdi,” Como], “e-Zampogné—A Southern-Italian Bagpipe Controller,” by Carlo Massarelli with Andrea Valle [Università degli Studi di Torino], “Per una rappresentazione audiovisiva del gesto,” by Maurizio Goina and Pietro Polotti [Conservatorio “G. Tartini,” Trieste], and “Experiencing Sonic Interaction Design: Product Design Activities at the SID Summer School 2010,” by Stefano Delle Monache with Davide Rocchesso [Università de Venezia]. The sessions concluded with a presentation by the organizers of the upcoming Sound and Music Computing Conference 2011, being held in Padua, 6–9 July 2011. This is an international event, held in a different location around Europe each year [smcnetwork.org/].
Colloquium participants were then guided back across town to the Teatro Vittoria, venue of the previous night’s concert (and the following night’s as well), for a concert of computer music. This event again featured a solo performer, this time Michele Lomuto, on trombone. He performed a series of challenging works with amplification and electroacoustic elements, either for fixed media or live interactive electronics, assisted by Stefano Basanesi, Benjamin Thibgen, and Nicola Biagioni. The sound system in the hall consisted of a high-quality eight-channel system that surrounded the audience (and pushed the performer quite far back on the stage, to keep outside of the diffusion area). The compositions presented were: *Popup* (2002) by Giorgio Tedde; *Susùn* (2008) by Christopher Jette; *tronicOnirico* (2009) by Gianluca Verlingieri; *Ouest Profond* (2009) by Lorenzo Bianchi; *Os, oris* (2002) by Agostino Di Scipio; and *Animus I (a brainstorm)* (2001) by Luca Francesconi.

The next morning, Session 3, “Psychoacoustic Modeling and Spatial Sonority,” included four presentations: “Physical Modeling of the Glottis and Acoustic-to-Articulatory Inversion,” by Enrico Marchetto and Federico Avanzini (Università Degli Studi di Padova); “Structural Modeling of Pinna-Related Transfer Functions for 3-D Sound Rendering,” by Simone Spagnol, with Michele Geronazzo and Federico Avanzini (Università Degli Studi di Padova); “A Microphone Array Approach for Browsable Soundscapes,” by Sergio Canazza, with Antonio Roda and Daniele Salvati (Università Degli Studi di Padova); and “A System for Soundscape Generation, Composition, and Streaming,” by Mattia Schirosa (Università Pompeu Fabra), with Jordi Janer, Stephan Kersten, Gerard Roma, and Iain McGregor.

Session 4, “Distribution between Proximity and Distance,” included just two presentations: “Fundamenti teorici per una laptop orchestra,” by Marco Gasperini, and “Meccanica/Azione/Sonora: emergenze linguistiche nella comunicazione di audio via rete,” by Federico Costanza, Marco Gasperini, and Alessio Rossato (Associazione Meccanica Azione Sonora).

After lunch, the second keynote presentation was given by Mark Trayle, on “Remote Utopias—Illusions of Space and Community in Networked and Telematic Art.” This talk provided historical background on Mr. Trayle’s work, citing The Hub and David Tudor as influences on his approach to the work he had been carrying out for the past week with a group of students in Cuneo. His talk was followed by Session 5, “Learning and Technology.” The three presentations included: “A Technological Augmented Learning Environment,” by Antonio Camurri, Sergio Canazza, Corrado Canepa, Antonio Rodà, Gualtiero Volpe, and Serena Zanolla (Università Degli Studi di Padova); “Un videogiochi per il training ritmico,” by Tiziano Bole; and “Visual and Aural Tools for Music Education Based on Audio to Score,” by Nicola Montecchio and Nicola Orio (Universita Degli Studi di Padova).

After the day’s sessions, participants were back to the Teatro Vittoria for a third concert, this one featuring the Fiari Ensemble, a new music group based in the area who, along with this program, were scheduled to present a whole series of concerts at the Teatro Vittoria over the autumn. With Joshua Parmenter running sound from his iPad, four members of the ensemble performed a selection of works with electronics from an international call for works. The program included: *Tagli mobili d’ombra* (2007) for cello and live electronics, by Stefano Trevisi; *Light, inside* (2010) for violin and live electronics, by Andrea Vigani; *Corpi sonori* (2009) for flute, clarinet, cello, and live electronics, by Joshua Parmenter; *IV Frammento da heterodyne* (2004) for clarinet and electronic sounds, by Massimiliano Viel; *Interplayflute* (2009) for flute and live electronics, by Luca Richelli; and *Dissieme* (2004, revised 2006) for flute/alto flute, clarinet/bass clarinet, violin, cello, and live electronics, by Harald Muenz.

The performers, as in the other concerts, were first-rate. The pre-concert talks, held prior to each concert at the Teatro Vittoria, were likely aimed at non-colloquium attendees, but useful for that outreach, and there were people present from the community. The pre-concert receptions, with a glass of nice Piedmont wine and good finger food, were convivial for all, and helped to keep the energy going through the long days and evenings with no dinner break until late at night.

The final day began with Session 6, “Assisted Composition.” The five presentations included: “Composizione assistita e processi di trasferimento di dati musicali da PWGL a Csound” by Massimo Avantaggiato (Conservatorio “G. Verdi,” Milano); “Un sistema integrato di progettazione, composizione ed esecuzione dedicato a un brano per pianoforte e sintesi per modelli fisici real time” by Giorgio Klauer (Conservatorio “G. Verdi,” Como); “La libreria Open Music OM4Sound—un approccio didattico a strutture di controllo in Csound” by Max Lanza, with Gianluca Verlingieri and Nicola Biagioni (Conservatorio “G. F. Ghedini,” Cuneo); “Composizione elettroacustica e tecnica waveset, un approccio creativo di ricostruzione algoritmatica” by Giorgio Bianchi and Pier Daniel Cornacchia (Conservatorio
“G. Verdi,” Como), and “Score-
Independent Ensemble Methods for
Description of Musical Expressive
Intention” by Sergio Canazza, Antonio
Rodà, Lauro Snidarò, and Ingrid
Visentini (Università Degli Studi di
Padova).

The third keynote presentation
was given by Joshua Parmenter, who
spoke about tools he has been de-
veloping for SuperCollider, “Composer’s
Toolkit: A Synthesis of Musical Lan-
guage.” After lunch, the final session
of the colloquium was devoted to
poster presentations, primarily by
graduate students. Rather than have
them all set up in a hall compet-
ing for attention, they essentially
made compressed presentations in
the lecture hall used for all the other
sessions, one after another. This
worked well, although anyone with
questions would have had to follow
up with individual presenters after
the session.

The final evening was filled with
no less than three events, in three
different locations. The first was the
performance of Phantom Rooms, the
networked computer music ensemble
that had been working with Mark
Trayle in Cuneo. Half of the students
were with Mr. Trayle in the Aula
Magna in Turin and the other half
were at the Conservatorio in Cuneo,
linked by audio and video. There were
some Internet difficulties, but the per-
formance came off well in the end.
It was evident that the musicians in
each location were listening to the on-
go ing sonic textures as they evolved,
adding and shaping the music in often
quite sensitive and creative ways.
After the conclusion of this short
concert, a bus shuttled everyone out
to the Virtual Reality & MultiMedia
Park. This impressive facility on the
outskirts of Turin supports a variety
of research and production, includ-
ing the virtual reconstruction of the
Poème électronique from 1958 by
Le Corbusier and Edgard Varèse. For
audiences larger than one, the team
has produced a version of the work
that is projected on a screen with au-
dio routed through an eight-channel
sound system. The soundpaths of
the music, originally routed through
c. 450 loudspeakers in the original
Philips Pavilion, are fixed for this
presentation, but an operator may
use a joystick-type controller to
navigate visually through the projec-
tion of the imagery from within the
pavilion. A call for works using this
system was put out to composers,
and several Philips Pavilion–based
VR renderings of electroacoustic
compositions were presented along
with the original music by Varèse
and Concret PH by Iannis Xenakis.
The composers were provided with
the programming parameters to de-
termine the spatial routing of their
audio through the loudspeaker con-
figuration of the original, mapped
onto the provisional eight-channel
system in the hall. They were also
able to navigate through the pavilion
as projected onto the screen, and,
in some cases, to add other visual
elements onto the virtual pavilion.
The works presented were: Semakode
(2010) by Domenico Sciajno; Studio
sull’intonazione della carne (2006)
by Francesco Abbrescia; Rotazione
(2009) by Alessandro Cipriani; High
Pockets (2010) by Gianluca Delfino;
Sovra-posizione (RSM) (2010) by Me-
canica Azione Sonora; Opera Omnia
(2008–2010) by Luca Richelli; Mae-
belawi Bahri/Sea of Illusion (2010)
by Dario Sanfilippo and Alfredo
D’Amato; Studio per O (2010) by
Antonio Santini; A un tempo (2009)
by Antonio Scarcia; and Je Dois M’en
Although the spatial routing would
have no doubt been better perceived
with headphones, the intended place-
ment and motion did come across, al-
though I think that programmed visual
travel through the virtual pavilion
would have been more successful than
the improvised joystick explorations
that were presented. In any case, the sys-
tem as implemented opens up other
possibilities for creating multimedia
work in immersive audiovisual
environments and will no doubt be
developed further through research
and creative activity.

The final event of the colloquium
took place at the Hiroshima Mon
Amour nightclub on the south side
of the Turin downtown, where dif-
ferent configurations of colloquium
participants jammed together. The
Laptop Mini Orchestra consisted of
Domenico Sciajno (who provided the
conduction and graphic score to guide
the performance), with Andrea Arcella,
Andrea Valle, Dario Sanfilippo, Franz
Rosati, Federico Placidi, Matteo
Milani, and Cat Hope. The Electroa-
coustic PlayGround group consisted
of Cat Hope, Franz Rosati, Ramon
Moró, Andrea Valle, Dario Sanfilippo,
and Gandolfo Pagano. Finally, the
floor was turned over to electronica
artist Frank Bretschneider, one of the
founders of the influential record
label Raster-Noton. Anyone still
standing was then free to dance the
night away.

There are plans to publish the
papers from the colloquium. Fur-
ther information on CIM 2010 can
be found on the event Web site
(modisti.com/n10/?p=6773).

Publications

John Luther Adams: The Place
Where You Go to Listen: In Search
of an Ecology of Music

Softcover, 2009, ISBN 978-0-8195-
6903-5, 180 pages, illustrated, fore-
word by Alex Ross, US$ 24.95;
John Luther Adams is a truly unique figure in American music. His interests in ecology and place resonate with a larger network of environmentally motivated artists, though his connection with Alaska and its influence on his music make his work truly distinctive. Mr. Adams's most recent book, his second, *The Place Where You Go to Listen*, documents the composer's large-scale installation of the same title. Begun in late 2003 and completed in spring 2006, the work is a continuous sound and light environment installed in and currently exhibited at the University of Alaska's Fairbanks Museum of the North. The installation's sonic and visual components are continuously changing based on environmental feedback from the surrounding region. About this aspect, the composer writes: "I conceived the music of *The Place* for an orchestra of voices, bells, and drums. Two choirs of virtual voices create the omnipresent sonic atmosphere, following the arcs and colors of night and day. Low-frequency 'drums' rumble in response to seismic data. And high-frequency 'bells' ring with disturbances in the earth's magnetic field" (p. 115). Colored lighting, the hue of which changes with the seasons and time of day, is also employed by Mr. Adams in *The Place*.

The book is divided into four larger sections: two collections of short essays, a reprint of the composer's journal kept during the creation and realization of the installation, and an overview of the work's technical aspects. "In Search of an Ecology of Music," the first collection of essays, begins the book and introduces the reader to Mr. Adams's music and views on its connection with the natural world. Commenting on this, the composer writes: "The central truth of ecology is that everything in this world is connected to everything else. The great challenge now facing the human species is to live by this truth. . . . By deepening our awareness of our connections to the earth, music can provide a sounding model for the renewal of human consciousness and culture" (p. 1). Mr. Adams briefly describes the path that led him to making music that resonates with nature, beginning with birdsong, later "musical landscapes," and finally, during the later 1980s and early 1990s, attempting to evoke one's experience or feeling of a particular environment. As a long-time resident of Alaska, much of Mr. Adams's work is in these areas centers on that unique location.

After discussing his music and artistic perspective generally, the composer introduces *The Place Where You Go to Listen*. Mr. Adams first addresses noise, one of the important sonic elements of his installation that he understands as a natural phenomenon and dubs the "breath of the world," going on to state:

After years of composing music grounded in metaphors of space and place, I find that my music has now become more tangibly physical, in a small architectural space that resonates within a larger geographic place. . . . *The Place* is dedicated to hearing the unheard music of the world around us. The rhythms of sunlight and darkness, the phases of the moon, the seismic vibrations of the earth and the fluctuations of the earth's magnetic field all resonate within this space. Streams of data derived from these geophysical phenomena shape the sound and light of *The Place*, which are synthesized and modulated on a computer, in real time (p. 4).

The composer notes that both site-specific work and real-time computer processing were new to his work with this project.

The book's next section reprints Mr. Adams's compositional journal from 21 December 2003 through 30 March 2006, covering the span of time during which he created and realized *The Place*. The journal constitutes the longest single section of the book, occupying well over half of its pages, and is divided into three sections: "Always Getting Ready," "Studio Notes," and "In *The Place*." In addition to documenting the composer's thoughts and reflections on this work, the journal also provides insight into a few other, related compositions and some aspects of Mr. Adams's daily life. As implied by the section headings, the journal is divided into chronological sections that correlate to different stages of the creative process. "Always Getting Ready" addresses the
composer’s preparatory work and initial conceptions of the installation. Particularly prominent issues for Mr. Adams at this stage included the relationship between the room that would house the installation and the exterior environment, as well as defining the work’s basic sonic and visual materials.

The “Studio Notes” section includes several of the composer’s sketches and documents his creative process after initial conceptual work, described in the journal’s preceding section, but before actually working in the museum space. Mr. Adams contemplates several interesting issues in this section. On his use of filtered noise, which is the work’s primary sonic element, he writes,

Rather than building up sonorities from a predetermined set of tones, I’m listening for tone within broadband noise, filtering the noise until I find its essential inner resonance. . . . I was determined to find the essential resonance of each instrument and let nature take her course. I’m glad I did. This resulted in rich and complex sonorities that would have been difficult to predetermine. Yet as unusual as these sonorities may be, they have a natural quality to them. They sound real. They resonate [p. 46].

Another notable topic that the composer addresses is the process of letting go, an important issue for many composers working in areas such as indeterminacy, live electronics, environmental works, and so forth. He writes,

Once I’ve designed these works [The Place and a related piece Veils] and set them in motion, the best I can do is to listen as much as I can and be sure I like what I hear at any moment . . . there’s no way I can monitor everything that may occur in The Place. . . . I can decide more or less where I want to go. I can make preparations for the journey. But exactly how things unfold is ultimately beyond my control [p. 60].

“In The Place” describes the final ten months of work on the installation, leading to its completion and public opening. This section of the journal focuses on the space’s physical modification and installation of the work, final adjustments made by the composer, and his reaction to the finished product. In his final journal reflections, Mr. Adams writes, “This journal ends as it began, with questions. I’m still not sure what The Place is. I’m not even sure that it’s music. . . . Whatever this work may eventually prove to be, The Place feels like the start of something I can only begin to imagine, suggesting questions that I’ve not yet learned to ask” [p. 100].

The book’s final two sections also deal with the finished work. In the short collection of essays entitled “Hearing Where We Are,” the composer reflects on the broader context in which his installation is situated. In particular, he is interested in issues such as the interaction of observer/museum space/outside world, and how one might perceive and understand this work. He comments,

The Place Where You Go to Listen undermines the usual expectations we bring to music. In The Place, events don’t occur in easily recognizable, repeating patterns. There is no narrative, no discourse, no development from beginning to middle to end. The music never ends. We’re always hearing the sounds of here and now, unfolding in their own time. This requires more active participation from the listener. It invites a new kind of listening [pp. 108–109].

“An Ecosystem of Sound and Light,” the book’s final section, documents many of the work’s details and peculiarities, including sketches, photos, diagrams, and so forth. Four color photographs and a detailed floor plan present a sense of what the museum space is like, and two other diagrams, which suggest that Cycling 74’s Max/MSP/jitter software was employed, provide samples of the composer’s computer interface. Though not exhaustive, this section does provide an overview of the technical parameters with which Mr. Adams worked, specifically how data relating to seismic activity, geomagnetism, cloud cover/visibility, and sun and moon movements are translated into sonic and visual elements. This composer is careful to note that his approach is not “audification,” “the direct rendering of digital data with inaudible frequencies into the audible range,” but “sonification,” “the process of mapping data with some other meaning into sound” [p. 113].

All of the sounds that one encounters in this installation are filtered pink noise that is tuned and adjusted in various ways: “[t]he harmonic fields associated with night and day are tuned in twelve-tone equal temperament; [t]he bell sounds associated with the aurora borealis are tuned in prime-number ‘just’ intervals; [t]he drum sounds articulated by seismic activity fluctuate continuously within a limited low-frequency range; [a]nd the sound of the moon is a narrow band of pink noise that floats freely over a wider frequency range” [pp. 114–115]. The day and night sounds, which the composer...
refers to as “choirs,” result from pink noise processed by banks of band-pass filters that are tuned to either the harmonic series (day) or subharmonic series (night). The fundamental of these series changes based on the height of the sun, which is 24.27 Hz (the rotation of the earth transposed into the range of human hearing) at its lowest point, midnight on the winter solstice, and can be as much as two octaves higher.

From a broader perspective, this book is valuable because it provides significant insight into Mr. Adams’s unique creative process. Comparable book-length studies of living, active composers are unfortunately relatively rare today, particularly those that focus entirely on a single, recently created work. Through the variety of perspectives presented in the book by the composer’s journal entries, reflective essays, and technical writing, one is able to understand his aesthetic positions and working methods with some comprehensiveness. Additionally, the installation itself seems like a quite compelling work, well worth experiencing should one visit Fairbanks, and appears to mark a shift in the composer’s work. Prior to his work on The Place, Mr. Adams’s use of electroacoustic technology was minimal, with orchestral and chamber music comprising the majority of his output (a full list of Mr. Adams’s work is available on his Web site www.johnlutheradams.com). Since beginning work on this installation, or possibly two years earlier with The Mathematics of Resonant Bodies for solo percussion and processed sounds, he has worked significantly more with electroacoustic possibilities. In the past few years, for example, he has composed works for orchestra and electronic sounds (Dark Waves from 2007, and The Light Within from 2010) and “electroacoustic soundscapes” (Veils from 2005, and the place we began from 2008) that seem closely related to The Place. The book will likely be of greatest interest to composers, artists, and scholars, though thanks to the composer’s clear writing and the concentration of most technical details in a single section, it is largely accessible to any individual interested in his work or specifically The Place. I highly recommend Mr. Adams’s book.