CCRMA

The Well-Tempered GRAIL

CCRMA Sound Worlds in the Bing Studio Space

Bing Studio Space                    Wednesday May 18th, 2016, 7:30PM
PROGRAM

“There is pleasure …” Simon Fay

Dark Waves John Luther Adams

Nekyia Gareth Loy

Kick / Push Alex Chechile

The Curtain Opens Jia Li

A Virtual Acousmonium Presents Someone Else’s Piece for Real Acousmonium

The Cascades Eric Lyon

I Dreamt I Dwelt in Marble Halls Anders Vinjar
PROGRAM NOTES

“There is pleasure …”

``There is pleasure in recognizing old things from a new viewpoint’’ - Richard Feynman

“There is pleasure…’’ combines elements of modern Electronic Dance Music and Computer Music, with the improvisatory approach of Jazz. The piece attempts to explore the materials and sounds used from multiple viewpoints, in addition to exploring 'modern' approaches to a number of 'old' techniques. The goal being to create a variety of moods, ambiances, and textures, using a minimal amount of basic materials - or to view a limited amount of musical materials from new viewpoints. This version of “There is pleasure…” was performed in one take, on the 6th of April 2016 in the Sonic Arts Lab at the University of Calgary, using the composer's AAIM (Algorithmically Assisted Improvised Music) performance system to manipulate and vary the pre-composed musical materials. All of the sounds used during the piece are created with Frequency Modulation(FM) synthesis, and the piece also relies on a constant underlying pulse to arrange these sounds in time, two approaches which are often viewed as dated within the genre of Computer Music. However, the underlying pulse is obscured through the use of overlapping tuplets, resulting in a wide variety of multi-layered rhythmic textures and a sense of rhythmic freedom. These variations in the basic rhythmic patterns, together with slight variations in the setting of the FM synthesizers, and the use of signal processing and diffusion technique, allowed the performer to also explore the sounds from multiple perspectives. Finally, the musical materials used during the piece are also viewed from multiple perspectives - with only 3 rhythmic patterns used throughout, but with each being used to trigger different sounds, and manipulated and varied in different ways, at different times during the piece.

Dark Waves

An earlier version of Dark Waves, for orchestra and electronic sounds, was commissioned and premiered by the Anchorage Symphony. This version (2007) for two pianos and processed tracks is a substantially new piece. “As I composed Dark Waves I pondered the ominous events of our times: war and terrorism, intensifying storms and wildfires, the melting of the polar ice and the rising of the seas. Yet even in the presence of our deepening fears, we find ourselves immersed in the mysterious beauty of this world. Amid the turbulent waves we may still find the light, the wisdom and the courage we need to pass through this darkness of our own making. In it, the pianists ride the crests of an electronic "aura" composed of sounds derived from the acoustic instruments. Waves of Perfect Fifths rise and fall, in tempo relationships of 3, 5 and 7, cresting in a tsunami of sound encompassing all twelve chromatic tones and the full range of the pianos.”
Now as my men were on their way I said a word to them: ‘You think you are on your way back now to your own beloved country, but Circe has indicated another journey for us, to the house of Hades and the revered Persephone there to consult with the soul of Teiresias the Theban.’
— Homer, The Odyssey

The name Nekyia is derived from the title of the 11th chapter of the Odyssey, at which point Odysseus and his crew have just escaped from Cerce’s island. But before they can return to Ithaca, they must make a ritual invocation of the Dead to obtain directions from the departed seer Teiresias. This composition conjures an image of the hero on the cusp of the transition from one adversity to another: first, enchantment, as on Cerce’s island; secondly, daemonic confrontation, as in the encounter with Teiresias. Alluring enchantment and terrifying confrontation merge and transform into one another. But in the end, they both recede like thunder rolling away, and we return “home” to our own here and now.

Nekyia was written in the late 1970’s at Stanford University’s Center for Computer Research in Music and Acoustics (CCRMA), then a project of the Stanford Artificial Intelligence Laboratory (SAIL). It was composed for the Systems Concepts Digital Synthesizer (also called the Samson Box after its creator, Peter Samson). Software written by myself and others at CCRMA directed the Samson Box to synthesize the composition in real time in quadraphonic sound. The piece won a prize in the 1979 Bourges Electroacoustic Music Awards.

This composition has itself survived a strange odyssey. Soon after Nekyia was finished, the SAIL laboratory and equipment was disbanded, and it was several years until the Samson Box was operational again. Numerous trips to Stanford and the cooperation of several aging and infirm computer systems were required to capture the audio data of Nekyia in digital format before the Synthesizer was ultimately decommissioned once and for all. A stereo reduction of the quadraphonic original was produced from this data for Wergo Records Computer Music Currents #5. Like Odysseus, the data for Nekyia then slumbered for many years on a set of obsolete 9-track magnetic tapes, each the size of a serving platter.

In the mid 1990’s, Perry Cook and I managed to locate (in the Chemistry Department) the only remaining tape drive on the Stanford campus that could read the Nekyia magnetic tapes. We used the newly invented Internet to transfer the data for Nekyia from that computer to one at CCRMA. Finally, we transferred the data to the newly invented CD-ROM optical media. Once again Nekyia had escaped from oblivion, reincarnated onto yet another transitory digital medium.
The data slumbered for many years in this format. In 2002, thanks to Marsha Bowman, I discovered the only remaining copy of this master CD-ROM in CCRMA's basement archives. (A year later this archive at the Knoll building was dispersed to make way for renovations.) A copy of Nekyia is now stored in the so-called Cloud. It has truly been an odysseyian journey.

The astonishing fact is that, in spite of its perilous journey, the work you hear in this concert is exactly the same bit-for-bit as that produced two and a half decades ago by the Systems Concepts Synthesizer in its original 4-channel configuration. I estimate it has taken about as much effort to preserve the work as it originally took to create it. Perhaps the moral is this: consider carefully what you create; you become a slave to your bits.

**Kick / Push (2016)**  
Alex Chechile

The second piece in a developing “underground” series of pieces, *Kick / Push* was recorded in two sessions at 4am on a skateboard in an underground parking garage with high quality in-ear binaural microphones and arranged for free-field speaker presentation. to loosen—creak. Loose the light.

**The Curtain Opens**  
Jia Li

This piece uses sound materials of percussions in Peking Opera. The percussions play very important role in the opera. They are very expressive. All of the elements in the opera need the percussion accompaniment. So the piece intends to use the original sounds that come from the percussions and their transformed sounds to make them new meaning.

**A Virtual Acousmonium Presents Someone Else's Piece for Real Acousmonium**

**Performers:**  
Emily Graber, Sound Diffusion  
Elliot Kermit-Canfield, Sound Diffusion

An acousmonium, or loudspeaker orchestra, is a system of spatially-separated loudspeakers designed for diffusing electroacoustic music. The speakers in such a system are chosen based on their sonic properties and placed in space with the intention of imparting spatial and timbral effects on the music played through them. The piece we are diffusing is a classic work of musique concrète, diffused through a virtual acousmonium within the CCRMA GRAIL (Giant Radial Array for Immersive Listening).
The Cascades

The Cascades presents field recordings of water sounds at various locations along the trail of the Cascades in the Jefferson National Forest, up to the first waterfall. The original quadraphonic recordings are staged to induce various kinds of spatial perception, using unique spatial configurations afforded by the 3D speaker array in the Cube at the Moss Center for the Arts. The composer wishes to thank colleague Mike Roan for his assistance in making the field recordings. This work was supported by ICAT at Virginia Tech. In this performance the work is spatially orchestrated for the Stanford GRAIL.

I Dreamt I Dwelt in Marble Halls

As with many of the songs, writings and parodies based on it - this version of “I Dreamt I Dwelt in Marble Halls” has only a tiny little bit to do with the original aria of the same name from Michael William Balfes opera. Balfes gypsy girl dreams about a life in the upper class, with riches and luxury. My piece is also about dreaming, however this dream is even further from reality - not being about anything at all. Nevertheless it takes place in various rooms and spaces, and is full of voices - singing, talking, teasing, shouting, playing and other sound. Dreams can go on for a very long time, even if they only occur in a brief moment. The musical manifestation of this dream is also rather short, lasting slightly longer than 5 minutes. The material is recordings of a choir, the space in la Madelaine in Paris, busy merchants out in the street, synthetic sounds and phrases, large spaces and tiny sheds. This material is moulded, twisted and bent, and built upon in new combinations. The original aria is said to bring misfortune, especially if one whistles or sing along in a theater. Legend has it that it was being played aboard the Titanic at the time it struck the iceberg. It's still too early to say whether this new tune has this same quality.
ABOUT THE ARTISTS

Simon Fay is a composer and performer of acoustic and electronic music in a wide variety of styles ranging from rock and jazz, to electroacoustic and classical. He earned his Bachelor of Arts in Music in jazz guitar and electroacoustic composition from the Waterford Institute of Technology, his Master’s in Sonic Arts from the Sonic Arts Research Centre. He is currently working towards his PhD in Computational Media Design at the University of Calgary, where his research is focused on the creation of the AAIM (Algorithmically Assisted Improvised Music) performance system - a portfolio of inter-connectable software devices designed to algorithmically vary given musical materials in real time for the purposes of improvisatory music.

Madeline Huberth is a CCRMA PhD Candidate and the SIGF Geballe Graduate Fellow. Her research explores performer production and listener perception of polyphony using EEG, and motion and audio analysis. She has cello and physics degrees from the University of Michigan, and a masters from the University of Cambridge. As a cellist, she was Assistant Principal Cello of the Lansing Symphony for several years.

Pianist Chryssie Nanou performs music in a broad spectrum of styles with special expertise in contemporary repertoire and the performance practice of electro-acoustic music. Born in Greece, she studied in Paris and the United States at Ecole Normale de Musique de Paris/Alfred Cortot and the Peabody Institute at Johns Hopkins University. A prizewinner at the Albert Roussel International Competition, she performs regularly in recitals and chamber music concerts around the world, featuring an eclectic repertoire that includes works from Couperin, Berio, Crumb, Beethoven, Ligeti and Davidovsky.

Gareth Loy (b. 1945) has excelled in a diverse array of musical disciplines throughout his life. He was a classical violinist and singer in childhood. He studied Japanise koto at UCLA, and sitar in India while in the Peace Corps, and concertized on that instrument professionally on return to the United States. In the late 1960's he created the Hermes Ensemble, which performed improvised musique concrete with abstract liquid light projections throughout California, including performances at the San Francisco Museum of Modern Art, and San Francisco Palace of Fine Arts, the San Francisco Art Institute, and many universities. He received a B.A. in performance of classical guitar, electronic music, and composition from San Francisco State University in 1975, and a Doctor of Musical Arts degree from Stanford in 1980, for which Nekyia was his doctoral composition. Nekyia won a Bourges Prize in 1989. He was a researcher and lecturer in music technology at UCSD for a decade thereafter. Subsequently, he worked as an engineer in the silicon mines in California’s Silicon Valley and practices today as an expert witness. His articles have appeared in many juried books and journals. He is the author of Musimathics, a two-volume work published by the MIT Press on the mathematics of music. He resides with his wife, Lisa, in Corte Madera, CA. From 1996-2003, he was a fixture in Chicago's experimental music underground; long-term affiliations include the electroacoustic duo EKG, the art-punk monstrosity Lozenge, and the Creative Music quintet Wrack.
Alex Chechile is an artist, composer, and Ph.D. candidate at CCRMA researching auditory distortion products in the context of music synthesis. His electroacoustic compositions and installations bring transparency to otherwise invisible processes in biology and technology. http://alexchechile.com

Jia Li is a current CCRMA visiting scholar from Shanghai Conservatory of Music. She has devoted herself to composition of electronic music and traditional music, which has produced many works of unexpected and unusual combinations of materials and media.

Elliot Kermit-Canfield is a sound engineer, composer, and researcher currently pursuing his PhD at CCRMA. He holds degrees in music theory and music technology from Penn State University, where he wrote his thesis on spatialization in the music of Iannis Xenakis, as well as a degree in music, science, and technology from CCRMA. He is fascinated by strange and interesting sounds and dabbles in all forms of audio.

Eric Lyon is a composer and computer music researcher. His work focuses on articulated noise, spatial orchestration and computer chamber music. His software includes FFTease and LyonPotpourri, collections of audio objects written for Max/MSP and Pd. He is the author of “Designing Audio Objects for Max/MSP and Pd", which explicates the process of designing and implementing audio DSP externals. His music has been selected for the Giga-Hertz prize, MUSLAB, and League ISCM World Music Days. Lyon has composed for such artists as The Biomuse Trio, Margaret Lancaster, The Noise Quartet, Ensemble mise-en, String Noise, The Crash Ensemble, Esther Lamneck, Kathleen Supové, Marianne Gythfeldt, and Seth Parker Woods. Lyon has taught computer music at Keio University, IAMAS, Dartmouth College, Manchester University, and Queen’s University Belfast. Currently, he teaches in the School of Performing Arts at Virginia Tech, and is a faculty fellow at the Institute for Creativity, Arts, and Technology.

While studying ethnomusicology and linguistics, Anders Vinjar experimented with potentials of programming-languages and AI-techniques to work on issues of music-analysis. He got interested in using the same tools to create music, stopped studying and started composing. His main interests are acousmatic music and other electroacoustic art, algorithmic composition, DSP and programming for music. He spends most of his composition-hours either doing field-recordings or musical programming inside functional programming-environments for music such as OpenMusic, Common Music, CLM, SuperCollider and other FLOSS-ware. His output includes concert-music of various kinds, installations, music for movies, streams/web-art, hacks, applications, workshops, lectures, occasional articles etc.