



The
Well-Tempered
GRAIL



CCRMA Sound Worlds
in the
Bing Studio Space

PROGRAM

Verdant Dance

Nathan James Tindall

Topology Chamber 2

Natasha Barret

On the Sensations of Tone IX: The Descent

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PROGRAM NOTES

Verdant Dance

Nathan James Tindall

Verdant Dance is a new fixed-media composition developed as part of a larger project exploring artistic expression through audio sample manipulation. This selection features recordings of an indigeneous wind instrument played by the Harari people of Ethiopia. Inspired by minimalism, hemiolas, and the music of Four Tet, Verdant Dance emerges from below to initiate a cyclic ceremony.

Topology Chamber 2

Natasha Barrett

'Topology Chamber 2' is an acousmatic composition in high-order ambisonics (5th order 3D) created from the sonification of spatial performance and instrument gestures. 3D motion data is captured from the recordings of a balloon and a cymbal being explored for their sounding characters. The motion and sound are analysed and segmented into micro- and meso-scale gestural objects, which are in turn 'recomposed' into larger datasets by way of coarticulation and concatenation. These new gestural datasets, idiomatic of the original performance, are sonified using a custom made application where you can explore the spatial gestural image from it's 'inside', while maintaining realistic parallax and parameter scaling. The sonifications are then used as the building blocks for a composition exploring 'tangible' acousmatic sound and real gestural behaviour, placing the listener alongside an invisible body-centred spatial expression where tensions emerge from the pull between known gestural archetypes and acousmatic sound.

On the Sensations of Tone IX: The Descent

Alex Chechile

OtSoT IX: The Decent was recorded with high quality in-ear binaural microphones in/under Paris, France and arranged for free-field speaker

presentation. *On the Sensations of Tone* is a series of electronic and electroacoustic pieces that explore the physicality of sound and spatial depth through auditory distortion product synthesis. Auditory distortion products are intermodulation components generated in the inner ear that, under certain conditions, can be perceived as additional tones not present in the acoustic space.

Three Unlikely Corporate Sponsorships

Mark Applebaum

Three Unlikely Corporate Sponsorships is a work of sound poetry for four-channel audio. It comprises only recordings of the composer's speaking voice, edited but otherwise unprocessed. Composed in 2016, it is dedicated to composer Charles Amirkhanian. The piece consists of three movements: I. Nestlé; II. General Motors; and III. Halliburton.

Shadow of Bells

Hans Tutschku

“In the summer 2014, I spent three months in Japan to study aspects of traditional and contemporary culture, life and ritual. I visited countless temples, listened to their bells and wandered the gardens - all of them breathing with a particular rhythm. The influence on my sense of time was incredibly fascinating. *Shadow of Bells* for piano and electronics brings those memories back into my musical world but I'm not trying to replicate any existing structure or particular musical source. The electronics act as a shadow to the piano and provide an acoustic space around the instrument. The 20-minute composition is a meandering walk through imaginary landscapes of quietness and resonance. The quick shifts between fluid, crystalline, singing passages, sparse lines and large chords depict the sonic interplay of a society with many contrasts. The sense of slowness has occupied many of my recent works. This new composition is again an invitation to step out of our fast-paced activities and to discover small elements and their variations through time.”

ABOUT THE ARTISTS

Nathan James Tindall is a current student at Stanford studying computer music at CCRMA through the Symbolic Systems program. He is also pursuing a master's degree in computer systems.

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.

Hans Tutschku was born in Weimar in 1966. Some of his first experiences with electronic music came with the “Ensemble for Intuitive Music Weimar” of which he has been a member since 1982. He studied electronic music composition at the Dresden College of Music and, starting in 1989, participated in several of Karlheinz Stockhausen’s concert cycles to learn the art of sound direction. He continued his studies in sonology and electroacoustic composition at the Royal Conservatoire in the Hague (1991/92), followed by a year’s study at IRCAM in Paris (1994). In 1996 he participated in composition workshops with Klaus Huber and Brian Ferneyhough. Hans Tutschku has taught electroacoustic composition as a guest professor in Weimar (1995/96); electroacoustic composition at IRCAM in Paris (1997–2001); and at the conservatory of Montbéliard (2001–2004). In May 2003 he completed a doctorate (PhD) with Professor Jonty Harrison at the University of Birmingham, and during the spring term of 2003 was the “Edgard Varèse Guest Professor” at the Technical University of Berlin. Since 2004, he is the Fanny P. Mason Professor of Music at Harvard University, where he teaches composition and works as director of the electroacoustic studios. Hans Tutschku is the winner of many international composition competitions, including: Bourges, CIMESP Sao Paulo, Hanns Eisler Prize, Prix Ars Electronica, Prix Noroit, and Prix Musica Nova. In 2005 he received the culture prize of the city of Weimar. He held a Fellowship at the Radcliffe Institute for Advanced Study for 2013, and a stipend from the Japan–U.S. Friendship Commission for 2014. In 2015 he received a commission from the Fromm Music Foundation.

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>

Mark Applebaum, Ph.D. is Associate Professor of Composition at Stanford University. His solo, chamber, choral, orchestral, operatic, and electroacoustic work has been performed throughout North and South America, Europe, Australia, Africa, and Asia, including notable commissions from the Merce Cunningham Dance Company, the Fromm Foundation, the Kronos Quartet, and the Vienna Modern Festival. Many of his pieces are characterized by challenges to the conventional boundaries of musical ontology: works for three conductors and no players, a concerto for florist and orchestra, pieces for instruments made of junk, notational specifications that appear on the faces of custom wristwatches, works for an invented sign language choreographed to sound, amplified Dadaist rituals, a chamber work comprised of obsessive page turns, and a 72-foot long graphic score displayed in a museum and accompanied by no instructions for its interpretation. His TED talk has been seen by more than one million viewers. Applebaum is also an accomplished jazz pianist and builds electroacoustic sound-sculptures out of junk, hardware, and found objects. At Stanford Applebaum is the founding director of [sic]—the Stanford Improvisation Collective. He serves on the board of Other Minds and as a trustee of Carleton College.

Dr Natasha Barrett is a composer, performer and researcher in the field of contemporary electroacoustic art music. She received her doctoral degree in 1998 from City University in London. After a short period as an associate professor at the music conservatory in Tromsø (Norway), she has since followed a career predominantly as a freelancer. Her work encompasses acousmatic and electroacoustic concert composition, sound installations, theatre music, large-scale outdoor media productions, sound-architectural works and interactive art. She regularly collaborates with designers and scientists, as well as musicians and visual artists. Her work is inspired by acousmatic sound and the aural images it can evoke, particularly in terms of the evocative implications of space. Besides her compositional activities, she is currently employed as a researcher at the Department for Musicology, University of Oslo, investigating 3-D gestural-spatial audio imagery, motion tracking and holographic 3-D sound reproduction. Barrett is also co-leader of the Norwegian spatial-music performance ensemble Electric Audio Unit (EAU) and a member of Ocean Design Research Association.

Barrett's works are performed and commissioned throughout the world and have received a long list of prizes. These include the Nordic Council Music Prize (Nordic Countries), Giga-Hertz Award (Germany), Edvard Prize (Norway), Jury and public first prizes in Noroit-Leonce Petitot (France), Five first prizes and the Euphonie D'Or in the Bourges International Electroacoustic Music Awards (France), Musica Nova (Prague), CIMESP (Brazil), Concours Scrimé, (France), International Electroacoustic Competition Ciberart (Italy), two prizes in Concours Luigi Russolo (Italy), two first prizes in the International Rostrum for electroacoustic music. Works are available on a number of releases including SACD and DVD-audio. For more information: www.natashabarrett.or.

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.

Shakers

Eric Lyon

Shakers is antiphonal electroacoustic music for 3D speaker array, composed for the Cube at Virginia Tech. Horizontal antiphonal schemes, heard in the work of 16th century composer Giovanni Gabrieli, are augmented with vertical configurations afforded by the Cube. Electroacoustic deployment of sound also allows for faster call and response times. The composer wishes to thank trombonist Jay Crone for his sonic contributions to this project. In this performance the work is spatially orchestrated for the Stanford GRAIL.

Le camere invisibili

Anders Vinjar

In *Le camere invisibili* by Anders Vinjar the music moves around in sounding constructions of rooms of many forms. The piece elaborates large and small rooms, strange and common rooms, rooms inside rooms, non-existent rooms - invisible rooms, unlikely rooms, impossible rooms, real rooms. And what happens when audio meets boundaries where space breaks down - walls, ceiling, floor, furniture, objects? The title is a rephrasing of Italo Calvino's masterpiece *"Le città invisibili"*. This composition is partly inspired by Calvino's book, both thematically and in structure. LCI is made on a laptop running Linux, using GPL'ed software CLM/Snd, Faust, SC3 for DSP, and Ardour for stitching things together.