

The Mills College Music Department and the
Center for Contemporary Music present

Mills Music Now 2015-2016

Lecture

David Rosenboom

***Deviant Resonances:
Nature's Creative Challenge to Absolute Mappings
of Biological Phenomena in Music***

Jeannik Méquet Littlefield Concert Hall
January 28, 2016 7 :30 pm

David Rosenboom Lecture

Deviant Resonances: Nature's Creative Challenge to Absolute Mappings of Biological Phenomena in Music

Abstract: Exercises in linking complex self-organizing systems to each other via mappings in multi-modal stimulus domains can pose fascinating challenges to our notions about predictive model building. Fortuitously, these challenges can also quickly reveal fertile territories from which to mine potential realizations in the creative arts and to examine for the purposes of advancing research paradigms. This is an endeavor in which art and science can meet in deep theoretical territory, artscience. What might we discover if we ask, "What happens when two forms of intelligence—presumably with brains—attempt to initiate co-communication with each other, while neither possess an a priori model describing the range and scope of manners in which intelligence can be manifested or has palpable experience with the potential scales of energy-matter-time-space (EMTS) over which forms of intelligence might operate?" Will they recognize each other? What predictive models can they use to search for something for which neither has a clear pre-definition? In advanced forms of BCI in the arts we also try to imagine and implement links among complex self-organizing systems—like brains or multi-person hyper-brains—with forms of synthetic intelligence—possibly imbedded in musical instruments—, which we try to endow with some faculty for self-organization and perhaps even what we now call deep learning (DL). To build these realizations, we may posit propositional models. They are propositional, because we, too, often operate with limited pre-definitions, and frequently with declared intentions to do so. Furthermore, nature operates with myriad forms of uncertainty at fundamental levels, and ironically, from that uncertainty emerges order, deviant resonances. Achieving absolutely predictable, quasi-deterministic mappings of biological phenomena, such as brain signals, onto multi-arts synthesis machines is bounded by fundamental limits born of these imbedded uncertainties in natural phenomena. In the arts—for this presentation especially music—, we have license to freely explore the nature of these limits and discover how valuable such uncertainties can often be in unveiling new creative directions and deepening our theoretical understandings. If we seriously examine the deviant resonances that can show up in BCMI when we try to implement absolute mappings, we can often reap rich rewards. What surprising insights might emerge if we try to untangle all the hidden assumptions in a statement like, "What is the size and complexity of the algorithm required for me to always know that my thoughts of raspberry gelato will eternally map to Eb-Major, and why do I care?" In this light, we will tour selected historical and very recent examples of propositional music employing extended musical interface with the human nervous system and speculate about new directions now appearing on the horizon.

Please turn off electronic pagers, alarm watches, and cell phones. No unauthorized recording or photography. Seating only during breaks in the performance. Please take a moment to look around for the nearest available emergency exit.

Biography

David Rosenboom

Richard Seaver Distinguished Chair in Music and Music and Dean of the Herb Alpert School of Music at California Institute of the Arts.

David Rosenboom is a composer, performer, conductor, interdisciplinary artist, author and educator. Since the 1960s he has explored the spontaneous evolution of musical forms, languages for improvisation, new techniques in scoring for ensembles, multi-disciplinary composition and performance, cross-cultural collaborations, performance art and literature, interactive multi-media and new instrument technologies, generative algorithmic systems, art-science research and philosophy, and extended musical interface with the human nervous system. His work is widely distributed and presented around the world, and he is known as a pioneer in American experimental music. David Rosenboom holds the Richard Seaver Distinguished Chair in Music in The Herb Alpert School of Music at California Institute of the Arts, where he has been Dean of the School of Music since 1990, a conductor with the New Century Players, Co-Director of the Center for Experiments in Art, Information and Technology, and member of the Center for New Performance. In 2011 he also served as Acting Co-President for CalArts. He taught at Mills College from 1979 to 1990, held the Darius Milhaud Chair, was Professor of Music, Head of the Music Department, and Director of the Center for Contemporary Music. His independent career outside institutions has spanned international performance and composition, consulting, recording, writing, instrument design, interdisciplinary research, and multi-media production

<http://www.davidrosenboom.com/>

Upcoming Mills Music Now Concerts:

Spring 2016

Saturday, January 30

MILLS PERFORMING GROUP: DAVID ROSENBOOM – ZONES OF INFLUENCE

Performed by David Rosenboom and William Winant with live video by artist Jinku Kim.

Saturday, February 6

THE MILLS PERCUSSION ENSEMBLE AND BLOOD MOON

William Winant, director

Saturday, February 13

IN MEMORY OF MARK TRAYLE

Chris Brown, John Bischoff, The Hub

Saturday, February 20

HILDA PAREDES

(Jean Macduff Vaux Composer-in-Residence)

Thursday, March 10–Sunday, March 13

SIGNAL FLOW FESTIVAL

Saturday, April 2

X-SOUND FESTIVAL

Friday, April 8

BARRY DOUGLAS

(Dewing Piano Recital)

Internationally renowned Irish pianist.

All Mills Music Now concerts are in Littlefield Concert Hall.

Buy advance tickets at: <http://www.boxofficetickets.com> (keywords: Mills College)

To receive an email music newsletter, please contact concerts@mills.edu. Find information about Mills music events online at: <http://musicnow.mills.edu>.

ABOUT MILLS COLLEGE

Mills College was founded in 1852 in Benicia, California, as a Young Ladies Seminary. Cyrus and Susan Mills purchased the site of the present 127-acre campus and built Mills Hall in 1871. Mills became a chartered college for women in 1885. Mills offers a bachelor's degree in music with emphasis on Performance, Composition, Electronic Media, or History/Theory as well as master's degrees in Composition, Electronic Music and Recording Media, and Performance and Literature. The Music Department includes the world-renowned Center for Contemporary Music. At Mills students can study traditional and contemporary music in a creative environment that fosters experimentalism. The Department's faculty includes composers Roscoe Mitchell, Pauline Oliveros, Fred Frith, John Bischoff, Chris Brown, Maggi Payne, James Fei, Zeena Parkins; scholars David Bernstein and Nalini Ghuman; and performers including William Winant, Molly Holm, Robert Schwartz, Belle Bulwinkle, Sara Ganz, Hank Dutt, India Cooke, Gianna Abondolo, Joan Jeanrenaud, Sandra Soderlund, Daniel Lockert, Hrabba Atladottir, Hall Goff, and Kala Ramnath. For information on studying music at Mills, phone (510) 430-2135 (Undergraduate Admission) or (510) 430-3309 (Graduate Studies), or contact the Music Department Administrative Assistant, Kathleen Baumgardner, at (510) 430-2171. Les Stuck (510) 430-2336 is Technical Director of the Center for Contemporary Music. The Concert Coordinator is Steed Cowart, (510) 430-2334.