



MORTON SUBOTNICK AND THE CALIFORNIA E.A.R. UNIT
FROM *SILVER APPLES TO A SKY OF CLOUDLESS SULPHUR*:
REVISITED

MARCH 24, 2012 8:30 PM

presented by

REDCAT

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California Institute of the Arts

CaLARTS

MORTON SUBOTNICK AND THE CALIFORNIA E.A.R. UNIT FROM SILVER APPLES TO A SKY OF CLOUDLESS SULPHUR: REVISITED

Saturday, March 24, 2012, 8:30pm

PROGRAM

From *Silver Apples to A Sky of Cloudless Sulphur: Revisited*

Morton Subotnick

California E.A.R. Unit: Eric km Clark, violin; Vicki Ray, piano;

Amy Knoles, percussion

The one-hour work will be performed in its entirety without intermission.

This performance is funded in part by grants from The Aaron Copland Fund for Music, LA County Arts Commission, BMI Foundation, Ann and Gordon Getty Foundation, the Los Angeles Department of Cultural Affairs, and the Amphion Foundation, and support for the California E.A.R. Unit has been provided by Chora, a project of the Metabolic Studio, a direct charitable activity of the Annenberg Foundation under the direction of Artist and Foundation Director Lauren Bon. Chora aims to support the intangibles that precede creativity.

PROGRAM NOTES

From 1966 (*Silver Apples of the Moon*) to 1977 (*A Sky of Cloudless Sulphur*) Morton Subotnick worked with Buchla equipment and tape recorders to fulfill his desire to create works that belonged in the home environment. The McLuhanesque question for him was, "What is the message of the phonograph record?" He finally got the answer in *A Sky of Cloudless Sulphur*. In more than a decade of creating, and thinking about the medium, the question of what to do with the technology in live performances began to coalesce. His idea for performances was to gather and organize all the musical materials created for a particular record, including the discarded music and musical fragments. New electronic "patches" would then be created and added to the gathered materials. The result would be a performance environment that would allow spontaneous performance and decision-making. This was too daunting a task for 1977, but today, with Ableton Live on his Mac and the new Buchla 200e, he can do it! So, he does. Joined by the California E.A.R. Unit

(celebrating their thirtieth season) with whom he has worked many times, this will be an evening of collective “spontaneous performance and decision-making”, using the elements of *Silver Apples of the Moon* and *A Sky of Cloudless Sulphur*.

ABOUT THE PERFORMERS

Morton Subotnick is one of the pioneers in the development of electronic music and multi-media performance and an innovator in works involving instruments and other media, including interactive computer music systems. Most of his music calls for a computer part, or live electronic processing; his oeuvre utilizes many of the important technological breakthroughs in the history of the genre. His work *Silver Apples of the Moon* has become a modern classic and was recently entered into the National Registry of Recorded Works at the Library of Congress, one of only 300 recordings chosen from the entire history of recorded music.

In the early 1960s, Subotnick taught at Mills College and, with Ramon Sender, co-founded the San Francisco Tape Music Center. During this period he collaborated with Anna Halprin in two works (*The Three-Legged Stool* and *Parades and Changes*) and was Music Director of the Actors Workshop. It was also during this period that Subotnick worked with Buchla on what may have been the first analog synthesizer (now at the Library of Congress).

In 1966 Subotnick was instrumental in getting a Rockefeller Grant to join the Tape Center with the Mills Chamber Players (an ensemble at Mills College with performers Nate Rubin, violin; Bonnie Hampton, cello; Naomi Sparrow, piano and Subotnick, clarinet). The grant required that the Tape Center relocate to a host institution that became Mills College. Subotnick, however, did not stay with the move, but went to New York with the Actors Workshop to become the first Music Director of the Lincoln Center Rep Company in the Vivian Beaumont Theater at Lincoln Center. He also, along with Len Lye, became an artist-in-residence at the newly formed Tisch School of the Arts at NYU. The School of the Arts provided him with a studio and a Buchla synthesizer. During this period he helped develop and became Artistic Director of the Electric Circus and the Electric Ear. This was also the time of the creation of *Silver Apples of the Moon*, *The Wild Bull* and *Touch*.

“The work which brought Subotnick celebrity was *Silver Apples of the Moon*. Written in 1967 using the Buchla modular synthesizer (an electronic instrument built by Donald Buchla utilizing suggestions from Subotnick and Ramon Sender), this

work contains synthesized tone colors, striking for its day, and a control over pitch that many other contemporary electronic composers had relinquished. There is a rich counterpoint of gestures, in marked contrast to the simple surfaces of much contemporary electronic music. There are sections marked by very clear pulses, another unusual trait for its time; *Silver Apples of the Moon* was commissioned by Nonesuch Records, marking the first time an original large-scale composition had been created specifically for the disc medium—a conscious acknowledgment that the home stereo system constituted a present-day form of chamber music. Subotnick wrote this piece (and subsequent record company commissions) in two parts to correspond to the two sides of an LP. The exciting, exotic timbres and the dance-inspiring rhythms caught the ear of the public—the record was an American bestseller in the classical music category, an extremely unusual occurrence at the time for any contemporary concert music. It has been re-released on a Wergo CD with *The Wild Bull*.

The next eight years saw the production of several more important compositions for LP, realized on the Buchla synthesizer: *The Wild Bull*, *Touch*, *Sidewinder* and *Four Butterflies*. All of these pieces are marked by sophisticated timbres, contrapuntal rich textures, and sections of continuous pulse suggesting dance. In fact, *Silver Apples of the Moon* was used as dance music by several companies including the Stuttgart Ballet and Ballet Rambert, and *The Wild Bull*, *A Sky of Cloudless Sulphur* and *The Key to Songs* have been choreographed by leading dance companies throughout the world.”

—Christian Hertzog, *Contemporary Composers*

In 1969 Subotnick was invited be part of a team of artists to move to Los Angeles to plan a new school of the arts. Mel Powell as Dean and Subotnick as Associate Dean, with four other pairs of artists, carved out a new path for music education and created the now-famous California Institute of the Arts. Subotnick remained Associate Dean of the music school for four years and then, resigning as Associate Dean, became the head of the composition program where, a few years later, he created a new media program that introduced interactive technology and multi-media into the curriculum. In 1978, Subotnick, with Roger Reynolds and Bernard Rands, produced five annual internationally acclaimed new music festivals.

In 1975, fulfilling another record company commission (this time, from Odyssey), Subotnick composed *Until Spring*, a work for solo synthesizer. In this work, changes in settings which Subotnick made in real time on the synthesizer were stored as control voltages on a separate tape, enabling him to duplicate any of his performance controls, and to subsequently modify them if he felt the desire to do so. While the use

of control voltages was nothing new, it suggested to Subotnick a means to gain exact control over real-time electronic processing equipment.

The next step in Subotnick's use of control voltages was the development of the "ghost" box. This is a fairly simple electronic device, consisting of a pitch and envelope follower for a live signal, and the following voltage-controlled units: an amplifier, a frequency shifter, and a ring modulator. The control voltages for the ghost box were originally stored on a tape, updated now to E-PROM. A performer, whose miced signal is sent into the ghost box, can then be processed by playing back the pre-recorded tape or E-PROM, containing the control voltages. As neither the tape nor E-PROM produce sound, Subotnick refers to their sound modification as a "ghost score". By providing the performer with exact timings, coordination between performer and the ghost score is controlled.

Two Life Histories (1977) was the first piece involving an electronic ghost score; the bulk of Subotnick's output for the next six years was devoted to compositions involving performers and ghost scores. Some of the more notable works in this series include *Liquid Strata* (piano), *Parallel Lines* (piccolo accompanied by nine players), *The Wild Beasts* (trombone and piano), *Axolotl* (solo cello), *The Last Dream of the Beast* (solo voice) and *The Fluttering of Wings* (string quartet). The subtlety, sophistication and control over real-time electronic processing that Subotnick demonstrated in these innovative works secured his reputation as one of the world's most important electronic music composers.

Subotnick reached the apex of live electronic processing in his work *Ascent Into Air* (1981). Written for the powerful 4C computer at IRCAM, this piece involved many of the techniques which Subotnick had developed in his ghost scores. In addition to the processing normally available to him with his ghost boxes, Subotnick was able to spatially locate sounds in a quadraphonic field and to modulate the timbres of the instruments. But perhaps the most significant aspect of this work is its use of live performers to control the computer music; the live performers, in effect, serve as "control voltages" to influence where a sound is placed, how it is modulated and by how much, etc.—the reverse situation of the ghost score compositions. Even more remarkable is the ability of traditional musical instruments to control computer-generated sounds."

In addition to music in the electronic medium, Subotnick has written for symphony orchestra, chamber ensembles, theater and multimedia productions. His "staged tone poem", *The Double Life of Amphibians*, a collaboration with director Lee Breuer and visual artist Irving Petlin, utilizing live interaction between among, instrumentalists and computer, was premiered at the 1984 Olympics Arts Festival in Los Angeles.

The concert version of *Jacob's Room*, a mono-drama commissioned by Betty Freeman for the Kronos Quartet and singer Joan La Barbara, received its premiere in San Francisco in 1985. *Jacob's Room*, Subotnick's multimedia opera chamber opera (directed by Herbert Blau with video imagery by Steina and Woody Vasulka, featuring Joan La Barbara), received its premiere in Philadelphia in April 1993 under the auspices of The American Music Theater Festival. *The Key to Songs*, for chamber orchestra and computer, was premiered at the 1985 Aspen Music Festival. *Return*, commissioned to celebrate the return of Halley's Comet, premiered with an accompanying sky show in the planetarium of Griffith Observatory in Los Angeles in 1986. Subotnick's recent works—among them *Jacob's Room*, *The Key to Songs*, *Hungers*, *In Two Worlds*, *And the Butterflies Begin to Sing* and *A Desert Flower*—utilize computerized sound generation, specially designed software Interactor and “intelligent” computer controls which allow the performers to interact with the computer technology.

All My Hummingbirds Have Alibis (1994) was an interactive concert work and a CD-ROM (perhaps the first of its kind). *Making Music* (1995) and *Making More Music* (1998) were his first works for children, and an interactive “media poem”, *Intimate Immensity*, premiered at the Lincoln Center Festival in New York (1997). The European premiere (1998) was in Karlsruhe, Germany. A string quartet with CD-ROM, *Echoes from the Silent Call of Girona* (1998), was premiered in Los Angeles by Southwest Chamber Music.

Subotnick is also doing pioneering work to offer musical creative tools to young children. He has authored a series of six CD-ROMS for children, a children's website (creatingmusic.com) and is developing a program for classroom and after-school programs that will soon become available internationally. These works are available from Alfred Music Publishers.

At present he is developing a music curriculum for young children, centered around creating music; the child learns from creating original music. He was commissioned to complete the larger version of the opera *Jacob's Room*, which was premiered in 2010 at the Bregenz Festival in Austria. He is working closely with the Library of Congress to prepare an archival presentation of his electronic works. He tours extensively throughout the U.S. and Europe as a lecturer and composer/performer. Morton Subotnick is published by Schott Music.

The California E.A.R. Unit (Eric Clark, violin; Vicki Ray, piano; and Amy Knoles, percussion) is a chamber ensemble dedicated to the creation, performance, and promotion of the music of our time. The Ensemble comprises performers and

composers who began with the goal of developing the first true repertory ensemble for new music in Los Angeles. The California E.A.R. Unit strives to achieve a flexibility and rapport within contemporary music, and earn an international reputation as one of America's finest contemporary chamber ensembles.

The California E.A.R. Unit was founded in 1981. In its thirty-year history, the ensemble has presented concerts of electroacoustic/live interactive computer music, music-theater, dance, and local and world premieres of over 500 chamber works. The E.A.R. Unit seeks to serve its home base of Los Angeles, reflecting the region's unique cultural diversity, and to represent Los Angeles and Southern California as its new music ambassadors to the world.

The ensemble has earned critical acclaim, garnering awards for its contributions to the field of contemporary American music such as the prestigious Chamber Music America/ASCAP Award for "Adventurous Programming" (2011), and the "Letter of Distinction" from the American Music Center in 1999. The Unit has performed in venues such as the Kennedy Center in Washington D.C, and Queen Elizabeth Hall in London. They have toured throughout the world: Brussels, Aspen, Kiev, Paris, Cologne, Tanglewood, New York, Boston, Minneapolis, San Francisco, Santa Fe, Amsterdam, Reykjavik, as well as to other domestic and international nodes for new music. They have been featured in documentaries for the BBC and Japanese television, American and National Public Radio, the Canadian Broadcasting Corporation, Danish National Radio, and WGBH's "Art of the States". From 1987 to 2004 the E.A.R. Unit was Ensemble-in-Residence at the Los Angeles County Museum of Art. Since then, they have been in residence at the Roy and Edna Disney/CalArts Theater (REDCAT) housed in the Walt Disney Hall complex. The Unit has worked closely with many composers such as Elliott Carter, Steve Reich, Morton Feldman, John Luther Adams, Fred Frith, Tod Machover, Julia Wolfe, Louis Andriessen, John Cage, Mauricio Kagel, Michael Gordon, Charles Wuorinen, Morton Subotnick, and Alison Knowles, among many others.

The E.A.R. Unit has recorded for Nonesuch, New Albion, New World, Tzadik, Cold Blue, O.O. Discs, Bridge, Crystal and Cambria labels. Recent CDs include: *GO* on the Echograph label, a recording of some of today's greatest living composers, John Adams, James Sellars, Frederic Rzewski, Julia Wolfe, and John Bergamo; *SETTINGS*, chamber works of Pulitzer Prize-winning Los Angeles composer Mel Powell; *Indigenous Music*, chamber works of Stephen "Lucky" Mosko; and Morton Feldman's *For Christian Wolff* on Bridge. Soon to come: David Rosenboom's *Champ Vital* on Tzadik.

UPCOMING PERFORMANCES AT REDCAT

March 31 – April 1

STUDIO: Spring 2012

April 5 – 8

Dayna Hanson: *Gloria's Cause*

April 12 – 13

KarmetiK Machine Orchestra: *Samsara*

April 14 – 15

My Barbarian: Post-Living Ante-Action Theater

April 18 – 19

New Zealand in L.A.

April 28 – 29

Wunderbaum: *Songs at the End of the World*

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