

Reviews

Performances, Conferences

Technology and Music: The Beginning and Now

*Stanford Centennial Finale
Weekend, 27 September 1991,
Stanford University, California,
USA*

*Reviewed by Glenn Spencer
Palo Alto, California, USA*

This concert was "presented to celebrate Stanford University's Centennial year and CCRMA's contributions to electro-acoustic music, and to honor Leon Theremin and Max Mathews whose respective contributions were visionary and extensible."

Beginning at 7:30 p.m. on a cool Friday evening in Stanford's beautiful Frost Amphitheater and despite some much needed regional dampness, the concert was attended by approximately a thousand people, an audience composed of local Stanford community members, Stanford alumni from all over who were attending the festivities and reunions on campus that weekend, and computer music enthusiasts who came from the surrounding San Francisco Bay Area and beyond. Although hundreds of chairs were set up in the center of the terraced lawns for various activities during the weekend celebration, many of the regular attendees of outdoor CCRMA concerts (which have in recent years been held in July) arrived to continue their picnic tradition, preferring to sit and recline on unchaired sections of the lawns.

Featuring two lovely soprano voices, some instrumental virtuosity, many of the latest controllers, processors, and synthesizers, and a healthy mix of solemnity, intellect, humor, and spontaneity, the program fulfilled its defined purpose. It seemed to have been chosen with concern for

the widely varying musical listening background of the expected audience. A good balance was achieved; there was something for every ear and eye. Except for an occasional distortion, the sound system was of the same excellent quality that has been the trademark of CCRMA concerts over the past decade. Seven selections were heard: six of them live performances, one of them for tape only. All of the selections, with the exception of the fourth, were composed in 1991. The fourth selection, *Vocalise*, by Sergei Rachmaninov, was performed by Max Mathews and Natasha Theremin. Their poignant performance will probably remain the foremost memory of this concert for most of the audience.

The first and longest piece of the evening was *Wildlife*, by CCRMA alumni David A. Jaffe and W. Andrew Schloss. Performed by the composers and described in the program notes as exploring new means of ensemble interaction, *Wildlife* is a four-way gestural intercourse among two instrumentalists and two computers. Jaffe played the Zeta electronic violin and Schloss played the Boie-Mathews Radio Drum. A NeXT computer processed gestural information from both the violin and a Macintosh II computer. It used the NeXT Music Kit and fed a Yamaha TG77 synthesizer. Running MAX, the Macintosh II processed gestural data from both the violin and the drum and sent data to the NeXT computer and to Digidesign's SampleCell software. Consisting of five movements totaling about 22 minutes, *Wildlife* rewarded listeners with a rich variety of structural and timbral contrasts and with exciting interactions, some sounding quite like more conventional spontaneous improvisations.

The second piece, *Table's Clear*, by Paul Lansky of Princeton University, was composed for tape from sampled

tableware sounds made by Lansky and his two sons, after a dinner in October of 1990, by tapping and banging "on everything in sight (and adding a few body parts to the mix.)" *Table's Clear* lasted about 18 minutes and presented clean sounds, some clearly identifiable and some rather mysterious as to their origin. Carefully structured in time and part, reminiscent of Mediterranean and Eastern dance rituals, punctuated occasionally with a faint, gleeful, boyish voice or two, this foot-tapping, delightful piece was a hit with the many Stanford alumni present who were attending, perhaps, their first computer music concert.

The third selection, *Walden Nocturnes*, was by Dexter Morrill of Colgate University. The final part of a three-part American work for soprano soloist begun in 1981, the *Walden Nocturnes* were written for and dedicated to Pamela Jordan, who performed them. She is on the music faculty of Loyola College in Maryland. These five nocturnes were inspired by and had their lyrics taken from the writings of Henry David Thoreau. They are entitled "Morning," "Afternoon," "The Whistle," "The Engine," and "Solitude." They premiered in St. Louis on 8 April 1991 and lasted about 13 minutes. The selection uses an onstage laptop computer that allows the soprano to control both accompaniment tempo and voice processing commands. Bruce Pennycook's MIDI-LIVE is the software used to execute the mixing of the natural soprano voice, the processed voice, and sampled string sounds that remain unprocessed. From where I sat, close to audience center, there seemed to be some sound distortion at certain places in each of the nocturnes, particularly on the louder and higher vocal passages. At the conclusion of the piece, I remember being only momentarily

concerned about this and stretched at intermission still hearing the lovely sound of Morrill's strings executing solid major seventh and ninth chords and rapidly ascending arpeggii to the sharp 11 and 13th. Basic old stuff, perhaps, but very American and delicious!

After intermission, Professor Chowning set the stage for the ceremony that would honor Max Mathews and Leon Theremin. The comparison of these two great pioneers in terms of the evolution of the analog-to-digital processing of musical information has been and will continue to be enlightening. Chowning named those electronic music pioneers that he felt sure were present somewhere in the large audience—Bob Moog, Tom Oberheim, Roger Linna, Peter Samson, Dave Smith, and Don Buchla—asking them to stand and receive their applause from the audience. He related that Moog had told him that morning that he had built his first Thereminvox at the age of 14. Chowning then explained the origin of the concert, saying that he, along with Paul Lansky and George Lewis, was invited by Sarah Caldwell to join her and other performers on a tour in the Soviet Union during January of 1991. During their stay in Moscow, he met composer Vladimir Komarov, who arranged a meeting with Leon Theremin, the 95-year-old father of this electroacoustic age, and his daughter Natasha Theremin, one of the most accomplished performers on the Theremin.

Stanford's Ewart M. Thomas, Dean of Humanities and Social Sciences, presented a Stanford Centennial Medal to Theremin. Thomas then gave Max Mathews a commemorative plaque made from a piece of the first computer used to synthesize music at Stanford in 1964. Theremin explained his instrument, at first in Russian, which was translated to the

audience by his interpreter. He then went on in English by himself, explaining the physics of the instrument. By moving his hands between the two antennae of the Theremin, he demonstrated its characteristic sound and played a short melody, the popular *Moscow Nights*. It probably looked easy to some members of the audience, but the neurophysiological training that goes into controlling the Theremin, in developing the associated gestures, must be at least as rigorous as that required for producing good intonation and expression on a violin.

Mathews then pointed out that he considers his Radio Baton to be truly the son of the Theremin for two reasons. First, it uses the same technique, radio waves, to sense the spatial positions of two batons. Second, they reflect the same main objective, namely, to make an instrument that could be played expressively. The difference between the two instruments lies in the interpretation of the spatial positions of the hands and batons. A Theremin player's hand positions are directly interpreted as pitch and amplitude. Spatial information from two radio batons goes into a computer, which then may be reinterpreted in a variety of ways (including pitch, amplitude, and tempo) depending on the computer program.

Having prepared the audience for the fourth selection of the evening, Rachmaninov's *Vocalise*, opus 34, no. 14 (1917), Mathews and Chowning introduced Natasha Theremin. Using his Conductor Program in the computer nearby, Mathews controlled the orchestral accompaniment with his Radio Baton as Natasha Theremin played the hauntingly beautiful melody on her father's Theremin. The artistry of her vibrato and tremolo gestures evoked for many the visual memories of the hands and fingers of the most skillful string players. Hav-

ing had minimal rehearsal time, they dedicated themselves throughout the 4 1/2-minute piece to producing their best. We were deeply moved by the sight and sound of the artist and the genius during their historic moment together.

The fifth selection was *En Plein Sol*, written by Don Buchla for two thieves and a percussionist. It was purposely not clear from the program notes what to expect. However, most of the audience slowly got the message as they watched the two thieves, Don Buchla and dancer Nicole Liboiron, and percussionist Mark Goldstein execute their roles in this clever, rather awesome, 8-minute introduction to a new avenue of music making and its multimedia implications. This and the next selection, *Reflecting Pools*, featured Don Buchla's new controllers Thunder and Lightning. Thunder is a programmable set of touch-sensitive surfaces. Lightning is a three-dimensional spatial position sensor based on infrared technology. They represented for many that night yet one more catapulted glimpse into the future of musical controllers, new and perhaps richer attempts to control electronically both the obvious and the most subtle aspects of musical expression.

Reflecting Pools was an interaction between three performers: Don Buchla used his Lightning, which directed a MAX-based performance program; George Lewis, currently at the University of California at San Diego, wandered around the amphitheater gathering sonic material by means of a pitch tracker on his trombone; and David Wessel, Research Director of the Center for New Music and Audio Technologies (CNMAT) at the University of California in Berkeley, who apparently was using both Thunder and Lightning. Both precomposed materials and those captured during performance were

said to be transformed and returned to the audience. Seeming to be almost totally improvised and unrehearsed, the performance lasted about 14 minutes. The performers appeared to be having fun with their controllers, and for brief periods there was some fascinating sound. But the piece overall was not something most members of the audience understood or would care to hear again. Only the most avant-garde knew, by eye and/or ear, what was really going on. Maybe only three?

The seventh and final piece, *Freedom*, was by Russian composer Vladimir Komarov, an organizer of the USSR Composers Union and currently Chief Musical Editor at Mosfilm Studios. Inspired by events in the Soviet Union during 19–21 August 1991, *Freedom* is an electro-acoustic poem for soprano and timpani. It was composed for this concert, its world premiere. The text was based on the impressions and diary writings of Komarov's wife, Margarita Komarova. This sobering and emotional 13-minute piece was sung and delivered exquisitely by Maureen Chowning as Komarov extracted the sounds of serious heavy metal from his timpani and triggered electronic wails, whines, rain, and tank fire with his mallets.

Upon leaving Frost that evening, I knew that I had just heard and witnessed some very special events academically, musically, politically. Perhaps a bit fatigued by it all, I hoped that I would live to see Stanford fulfill the wish expressed by Lev Sergeyevich Theremin that he return to Stanford after reaching the age of 100! Possibly because of its historical scope, this concert stirred up both emotions and ideas in the minds of many of the regular CCRMA concert attendees, including this reviewer. The most common post-mortems distilled from conversations with

about two dozen attendees revealed both acumen and ignorance and ran something like this: "Aren't you glad you finally got to hear a Theremin live, played by a real artist instead of in an old movie or by a technician at a science museum? Why these particular selections? Why wasn't my own particular favorite CCRMA composer called upon to celebrate this momentous event? Why was a certain selection so long and so boring? How come we didn't know about the concert until about a week before? Was it a last minute affair? Wasn't Natasha Theremin graceful and natural in her performance? If beautiful solos could be achieved by waving one's hands around in the air in 1920, why do we need all these other high-tech controllers which don't ever seem to be capable of producing such beautiful, expressive solos anyway!? Has there really been any progress in the past 70 years?"

A concert doesn't always leave you in a state of nirvana, totally at peace with yourself and your environment. A good concert can stimulate as well as soothe, catalyze the creation of new neural circuits as well as dredge up old memories. The above questions are real. The concert was successful.

The author was asked to write this review several weeks after the concert took place. He is therefore grateful to have had the opportunity to rehear it by means of cassettes supplied by Jay Kadis and Patte Wood of CCRMA. Upon rehearing the concert on tape a few times, I noticed a remarkable increase in my enjoyment of the two vocal works on the program. In Frost (and other concert arenas, both open-air and closed), I often find it difficult to understand the lyric being sung. The ambient darkness and these old eyes usually preclude my reading from the program during performance. Recorded right

off the mixing board, the two vocal works sounded cleaner at home, where I could listen with printed lyrics in hand. This especially helped me understand the *Walden Nocturnes* better.

New Music Theatre: Arches
Theatre Artaud, July 1991,
San Francisco, California, USA.
Reviewed by Fred Malouf
Mountain View, California, USA

On 11–14 July 1991, New Music Theatre presented a collaborative work called *Arches*. It was performed at the Theatre Artaud in San Francisco. Artistic director and composer Randall Packer was joined by soprano Judith Bettina, choreographer Deborah Slater, stage designer Alessandro Moruzzi, and visual artist Sigi Torinus. Other collaborators included Larry Neff (lighting design), Diane Robinson (stage director), and Richard Zvonar (sound artist). There were also about two dozen people who provided technical support. The following paragraphs are taken from Randall Packer's program notes.

With *Arches*, we have resurrected the ancient labyrinth model to provide the setting for a pilgrimage, a search for the "Center" through the circuitous corridors of 20th Century modernist thought. Two pilgrims proceed through this complex landscape, a maze which takes them on an unimaginable journey to an inevitable destination. Through the efforts of our collaborative team, a group of independent individuals who have contributed both similar and disparate points of view, we have constructed our own mythology; a series of "scenes" or "vignettes" which add up to a kind of micro-