STEARN'S 2 + 2 + 2 FALL LECTURE SERIES

SCIENTISTS IN MUSIC

September 10, 2 p.m.
School of Music Recital Hall
"COMPUTER SECRETS OF MUSICAL SOUND WAVES"
Gabriel Weinreich, Physics Dept.
University of Michigan

October 8, 2 p.m.
Rackham Auditorium
"CREATING THE MOOG SYNTHESIZER"
Robert Moog, inventor of the Moog Synthesizer

The beauty of music is hard to measure but one knows when it is there. The sound waves of music are open to detailed analysis and reproduction through the programs of modern computers but are hard to relate to beauty.

This problem will be dealt with on Sunday, September 10, when Professor Gabriel Weinreich presents the first of our "Scientists in Music" lecture series with the topic, "Computer Secrets of Musical Sound Waves". In it, Professor Weinreich will explore, through discussion and recorded examples, the circumstances under which computer synthesis

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"Computer Secrets of Musical Sound Waves"

methods are likely not only to "fool" the brain but to produce their own meaningful music.

Professor Weinreich is especially qualified to speak on this topic. His articles on the sounds of the violin and piano concern his research into fundamental concepts of the wave shapes of musical sounds. He also is a knowledgeable music listener and player.

Most of the music we hear reaches our ears through the use of modern technology; loud speakers, digital recording, computers. Thus today's listener needs to gain a better understanding of electronically produced sound. The Weinreich lecture/demonstration is an important step in that direction. It touches on such questions as: Is computer music real music, what justification is there for the inclusion of computer music in the traditional classical music repertoire?

It also considers how musicians may be excited and aesthetically stimulated by the inclusion of electronic technology in music as well as how they may tap into this field and discover new musical freedom.

Professor Weinreich will focus on bridging the physicist's and the musician's understandings of music for the essence of music is the relation between mind and ears.

According to Professor Weinreich, "The physicist can test his understanding of, for example, a piano as a piece of machinery by programming its structure and motion and then computing the vibrations to simulate the sound. If the end result does indeed sound like a piano, he knows he has the correct understanding of the instrument. From a musical perspective, however, he may want to explore what it is about the piano that 'does something' to us and proceed from there to explore other sounds in a similar manner."

Don't miss this unusual $2 + 2 + 2$ presentation!

"Creating the Moog Synthesizer"

UNEXPECTED OPPORTUNITY

The Moog synthesizer began its move into the music world in October 1964, while Robert A. Moog was still experimenting with prototypes of instruments capable of making music electronically. He received a telephone call from organizers of a convention for audio engineers. An exhibitor had cancelled, and they wondered if Moog could fill in.

After setting up his display in the exhibition hall, Moog was approached by a member of the Alvin Nickolai Dance Theater of New York, who was astounded by the new synthesizer. Nickolai, after hearing of Moog's display, examined the Instrument and commissioned one on the spot, becoming Moog's first paying customer.

Nickolai composed on the synthesizer, recorded the sounds, and played the audio tapes as accompaniment to the dances of his performers. Eventually the Moog synthesizer spawned numerous advances in electronic instruments, the most popular of which is the electronic keyboard.

WHY CONSIDERED SO REVOLUTIONARY?

Although synthesizers had been invented earlier, they often were not available to mainstream composers. Most were located in electronic music studios, usually at universities, and were used by experimental composers who wrote for specialized audiences.

In the late 1960's, thanks to Mr. Moog, commercially available synthesizers could be used as performance instruments. No longer restricted to academics and avant-garde composers, the instrument became a favorite among musicians and audiences of all genres. It's impact was tremendous.

TRULY UNIQUE

"The Model One Moog is a truly unique instrument," says William F. Malm, director of the Stearns Collection. "Seeing Mr. Moog demonstrate his original Moog synthesizer will be like watching Edison recreate his experiments and turn on his original lightbulb."

JOINT SPONSORSHIP

The significance of this particular $2 + 2 + 2$ event is symbolized by the fact that it is being sponsored jointly by The College of Engineering and The Stearns Collection.

Because of the special nature of this $2 + 2 + 2$ presentation, it will take place in Rackham Auditorium but don't forget that the entire Stearns Collection (including the original Moog synthesizer) awaits you in the School of Music.

STEARNS 20th CENTURY COLLECTION

The Moog synthesizer, now part of the Stearns collection, was donated on the condition that it would be named the Malm Moog synthesizer, in honor of the Stearns' director who continually works towards improving the 20th century aspect of the collection.

With the 21st Century fast approaching, the Malm Moog synthesizer joins a theremin, novachord and solovox, along with other modern musical innovations at the Stearns, indeed bringing the collection closer to its goal of documenting the history of 20th-century musical instruments.
FRIENDS OF THE STEARNS
MEMBERSHIP LIST, 1989

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PLEASE NOTE: The annual Friends of the Stearns business meeting will take place in The Recital Hall on Sunday, September 10 at 1:15 p.m., immediately before Mr. Weinreich's 2 + 2 + 2 presentation. Items on the agenda include the status of the Stearns collection and exciting future plans - what they are and how you may participate. The results of the election of Board members will be announced at this time. The Board generates much of the energy that helps the collection grow. Remember that it is elected by members of the Friends. If you are unable to attend the meeting please mail your ballot to arrive at The Stearns Collection before September 10.

Is your name listed above? If not, list it below!

Become A Friend of The Stearns

With your help, additional instruments may be restored, played, displayed and appreciated by the musical public.

Friends receive The Stearns Newsletter, invitations to the 2 + 2 + 2 lecture series and announcements of upcoming exhibits and performances. Your contributions help support all activities of the Stearns Collection.

Membership in the Friends of the Stearns Collection is available in the following categories:

Benefactor $1,000______  Sustaining $100______  Student/Senior Citizen/
Patron $ 500______  Friends $ 30______  Beyond 200 miles $15______

I (We) want to support the Stearns Collection of Musical instruments.

I enclose my check for __________________ made payable to The University of Michigan Stearns Collection.

Mr., Mrs., Dr., Miss, Ms.,

Please circle title(s) and print your name above as you would like it to appear on donor lists.

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Phone number

Street
City
State
Zip Code

Please mail this form with your check to Friends of the Stearns Collection, The University of Michigan School of Music, Moore Building, Ann Arbor, Michigan 48109.
How Do I Get to The Stearns?

The Stearns Collection of Musical instruments is located in the new Margaret Dow Towsley wing at the south end of the Earl V. Moore School of Music on Baits Drive in the University of Michigan North campus area. Enter through the doors nearest to the parking lot. The MacIntosh Vocal Arts Center is just across the hall and to the right of the entrance, and The Stearns galleries are down the stairs at the end of the hall to the right.

Admission: Free at all times.

Exhibit Hours: Thurs., Fri. 10-5, Sat., Sun. 1-8

Group Visits and Tours: To arrange for group visits or guided tours by members of The Stearns collection staff, please call (313) 763-4389.

Parking: Metered parking is available south of the entrance doors.

French Musicians Study
The Stearns French Collection

The Lo Jai Musicians arrived in Ann Arbor one day before their concert as part of the Summer Festival July 17. They immediately contacted the Stearns. As performers and researchers on French folk instruments they were particularly eager to study rare examples that are to be found in The Stearns Collection. They spent an exciting pre-concert afternoon in the research laboratory at the warehouse of the collection, measuring, photographing, and playing on the Stearns' bombarde oboe, gaboulet recorder, tambourin de Bearn beaten zither, a hurdy gurdy, and French bagpipes. The bagpipes were of particular value. Eric Montbel, the piper of the ensemble, had written his thesis on the cornemuse but had never seen the Stearns variety with its tiny built-in tuning whistle. Our musette was equally unique. The group shared their insights into the special aspects of the Stearns instruments before playing that evening on modern French versions of the originals they had seen in Ann Arbor. When they return to France, new research publications will appear based on our collection. The Stearns is international in content and in value. Keep atuned to its adventures through membership in the Friends organization.

This case was made possible through the generosity of Virginia M. Howard. You too can make things happen.