An evening of electronic music and light works will be presented by avant-garde composer La Monte Young and his artist wife Marian Zazeela at The Museum of Modern Art, on Monday, December 30, at 8:30 p.m. Tickets for the program, which is presented in connection with the current exhibition THE MACHINE AS SEEN AT THE END OF THE MECHANICAL AGE, are available at the Museum for $3.50; $2.60 to members.

Composer-performer-instructor-lecturer La Monte Young was born in Idaho in 1935 and studied here and abroad. The Director of The Theatre of Eternal Music, he has taken his group on tours throughout the United States and Europe. Mr. Young's compositions and lectures have appeared in numerous publications and his work has been exhibited in several galleries.

Marian Zazeela who also studied here as well as in Europe, was born in New York City in 1940. Her work has been exhibited in many American galleries, the Pasadena Art Museum, and The Museum of Modern Art's Art Lending Service and has been published in books and magazines.

Since 1962 Miss Zazeela has performed as the vocalist with The Theatre of Eternal Music and has provided the stage sets, costumes and lighting. For the last three years she has been creating light concerts with Mr. Young using slides of her own design projected directly on the performing musicians.

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The Museum of Modern Art
11 West 53 Street, New York, N.Y. 10019 Tel. 245-3200 Cable: Modernart

PROGRAM

SOUND AND LIGHT
LA MONTE YOUNG AND MARIAN ZAZEELA

Monday, December 30, 1968 - 8:30 P. M.

Ornamental Lightyears Tracery

The Well Tuned Piano (8 VI 64)

17 XI 68 ca. 10:10-10:40 P.M.
from "Map of 49's Dream The Two Systems of Eleven Sets of Galactic Intervals"

Projection, Marian Zazeela
Piano, La Monte Young
Voice, Marian Zazeela
Voice & Moog Synthesizer, La Monte Young

INTERMISSION

Drift Study 11:34 A.M.-12:34 P.M. 24 XII 68
from "Map of 49's Dream The Two Systems of Eleven Sets of Galactic Intervals"

Moog Synthesizer, La Monte Young

This is the premiere public performance of each of the tapes on tonight's program.

Technical Assistant

William Dawes

No Photographs or Sound Recordings Permitted
NOTES

Ornamental Lightyears Tracery

The projections form part of a series of light works designed for live performance on three or more slide projectors. The series contains numerous black and white negative and positive photographs of modular sections of several closely related designs. Each slide mount holds a photograph and a combination of colored gels. These design and color elements are combined into interlocking groups whose sequence, duration of appearance, and manipulation within the parameters made available by the functions of the machines are determined during the actual performance.

The symmetry of the designs and the repetitiveness of the patterns concerns centering and concentration. Movement is deliberate and takes place slowly in time. Performance usually accompanies La Monte's music, and the changes reflect the mood and flow of the sound.

This series was first performed at the Pasadena Art Museum, January 28-31, 1968 as part of "Map of 49's Dream The Two Systems of Eleven Sets of Galactic Intervals Ornamental Lightyears Tracery."

Marian Zazeela 1968

The Well Tuned Piano

The scale for this work is one of my own invention and is composed of a set of nine tones whose relationships to each other may be represented with rational frequency ratios. At least one of the intervals (64:63) had never before been used in music composition to my knowledge. This interval of 64:63 may also be heard as a pure interval articulated in sine waves in our music and light sculpture currently on exhibition in "The Machine" show.

I worked on the tuning of the piano itself for some months, and found it necessary to make fine adjustments daily in order to compensate for temperature changes even long after the tuning had begun to "settle in." It is nearly impossible to find a concert situation in which this work may be performed live at the piano. While the hall piano is tuned to my scale for a long enough period to obtain some degree of perfection, it is rendered unusable for the ordinary repertoire. Similarly, a piano cannot be tuned somewhere else and then moved to location as any movement of the piano whatsoever absolutely destroys the tuning. This means that the piano to be used must sit in the middle of the stage, conflicting with all other scheduled performances while it is being tuned and allowed to settle for perhaps a month. Consequently, this work will probably become best known as a tape composition.

Having composed the scale and tuned it on my piano, I then improvised various sections of music. From these I have chosen one tape recording of near fifty minutes in duration all of which was recorded in one afternoon.
The sources of sound on this tape are the voices of La Monte Young and Marian Zazeela, and sine waves sustained in various relationships over one continuous sine wave drone.

For the work in this style a set of chords and intervals is selected beforehand from "The Two Systems of Eleven Categories 1:07:40 AM 3 X 67 - " (first revision of "12-3 PM 12 XI 66 - 3:43 AM 28 XII 66 for John Cage from 'Vertical Hearing or Hearing In The Present Tense'") from which choices may be made during a particular performance. Only certain combinations are permitted in order to control which combination tones will be produced. The performers then improvise with these agreed upon combinations using their voices and the Moog Synthesizer. The result is a system where the continuous drone frequency and the ratios of the other frequencies to it are pre-determined, but the pre-selected frequencies actually sounded, their sequence, and duration, are determined by the performers during the course of each performance.

Draft Study

My drift studies are works made up entirely of two or more sine waves, the frequencies of which are tuned to relate to each other as rational frequency ratios in order to produce composite sound waveforms of periodic structure. The sine waves are sustained for the duration of the tape. The frequencies are tuned on highly stable sine wave oscillators using lissajous patterns on oscilloscopes to achieve perfect ratios. In spite of the great stability of the oscillators, the phase relationships of the sine waves gradually drift, causing their amplitudes to add and subtract algebraically. Not only does the sound become a bit louder and softer but at very loud levels one actually begins to have a sensation that parts of the body are somehow locked in sync with the sine waves and slowly drifting with them in space and time.

This tape was produced on a Moog Synthesizer custom designed for my work.

I have recorded an excerpt from "Drift Study 4:37:40-5:09:50 PM 5 VIII 68" on magnetic tape which is available in S.M.S. #4 from The Letter Edged In Black Press, 246 West 80 Street, New York City.

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