

SONIC ARTS UNION

VESPERS

for any number of players who would like to pay their respects to all living creatures who inhabit dark places and who, over the years, have developed acuity in the art of echolocation, i.e., sounds used as messengers which, when sent out into the environment, return as echoes carrying information as to the shape, size and substance of that environment and the objects in it.

Play in dark places indoors, outdoors or underwater; in dimly-lit spaces wear dark glasses and in lighted spaces wear blindfolds. In empty spaces objects such as stacked chairs, large plants or human beings may be deployed.

Equip yourself with Sondols (*sonar-dolphin*), hand-held echolocation devices which emit fast, sharp, narrow-beamed clicks whose repetition rate can be varied manually.

Accept and perform the task of acoustic orientation by scanning the environment and monitoring the changing relationships between the outgoing and returning clicks. By changing the repetition rate of the outgoing clicks, using as a reference point a speed at which the returning clicks are halfway between the outgoing clicks, distances can be measured, surfaces may be made to sound and clear signatures of the environment can be made. By changing the angle of reflection of the outgoing clicks against surfaces, multiple echoes of different pitches can be produced and moved to different geographical locations in the space. Scanning patterns should be slow, continuous and non-repetitive.

Move as non-human migrators, artificial gatherers of information or slow ceremonial dancers. Discover routes to goals, find clear pathways to center points or outer limits and avoid obstacles.

Decisions as to speed and direction of outgoing clicks must be made only on the basis of usefulness in the process of echolocating. Any situations that arise from personal preferences based on ideas of texture, density, improvisation or composition that do not directly serve to articulate the sound personality of the environment should be considered deviations from the task of echolocation.

Silences may occur when echolocation is made impossible by the masking effect on the players' returning echoes due to the saturation of the space by both the outgoing and returning clicks, by interferences due to audience participation or by unexpected ambient sound events. Players should stop and wait for clear situations or stop to make clear situations for other players.

Endings may occur when goals are reached, patterns traced or further movement made impossible.

For performances in which Sondols are not available, develop natural means of echolocation such as tongue-clicks, finger-snaps or footsteps or obtain other man-made devices such as hand-held foghorns, toy crickets, portable generators of pulsed sounds, thermal noise or 10,000 cps pure tones.

Dive with whales, fly with certain nocturnal birds or bats (particularly the common bat of Europe and North America of the family *Verperilionidae*) or seek the help of other experts in the art of echolocation.

Activities such as billiards, squash and water-skimming may be considered kindred performances of this work.

Thanks to Donald R. Griffin.

Alvin Lucier

SONIC ARTS UNION

CHRONOLOGY OF PRINCIPAL PERFORMANCES

1966

Rose Art Museum, Brandeis University
Waltham, Mass. Apr 22.

Library of Performing Arts, Lincoln Center
New York City, N.Y. Nov 7

Baird Hall, State University of New York
Buffalo, N.Y. Dec 18.

1967

"Winterfest", New England Life Hall
Boston, Mass. Feb 21.

Kresge Auditorium, Massachusetts Institute of Technology
Cambridge, Mass. Mar 2.

Hellenic Week for New Music
Athens, Greece. Apr 4.

Avanguardia Musicale 2, Sala Casella
Rome, Italy. Apr 7.

Societe Philharmonique, Palais de Beaux-Arts
Bruxelles, Belgium. Apr 13.

Richmond Professional Institute, Spring Arts Festival
Richmond, Va. Apr 29.

Antioch College
Yellow Springs, Ohio. May 19.

1968

ONCE Festival, Michigan Union
Ann Arbor, Mich. Feb 10.

Steinway Hall
New York, N. Y. June 6 & 7.

Rose Art Museum, Brandeis University
Waltham, Mass. Oct 16.

1969

Hunter College
New York, N.Y. Mar 20.

Upsala College
East Orange, N.J. Mar 22.

Moderna Museet
Stockholm, Sweden. Apr 14 & 15.

Vanhan Ulioppilastalon Juhlasali
Helsinki, Finland. Apr 16.

Henie-Onstad Kunstsenter
Oslo, Norway. Apr 21 - 23.

Cite Universite
Geneva, Switzerland. Apr 25.

Accademia Filharmonica, Sala Casella
Rome, Italy. Apr 29.

Societa Aquilana dei Concerti
L'Aquila, Italy. May 1.

"Music Now", The Round House
London, England. May 3 & 8.

Dartington College
Dartington, England. May 4.

Music Department, York University
York, England. May 6.

Muzicki Biennale
Zagreb, Yugoslavia. May 10.

Societe Philharmonique de Bruxelles
Bruxelles, Belgium. May 14.

Music Dept., Cornell University
Ithaca, N.Y. Nov 11.

State University of New York
Albany, N.Y. Nov 12.

1970

Fresno State College, Student Union
Fresno, Calif. Feb 10.

Mills College
Oakland, Calif. Feb 11.

University of California
San Diego, Calif. Feb 12.

Guggenheim Museum
New York, N.Y. Mar 24 & 25.

Goodwin Theatre, Trinity College
Hartford, Conn. Apr 29.

Walker Art Center
Minneapolis, Minn. May 1-3.

Kirkland Art Center
Clinton, N.Y. Nov 10.

1971

Finney Chapel, Oberlin College
Oberlin, Ohio. Mar 19.

Rackham Auditorium, University of Michigan
Ann Arbor, Mich. Mar 20.

Norddeutsche Rundfunk, Studio F
Bremen, Germany. Apr 27.

British Broadcasting Corporation, Delaware Rd.
London, England. Apr 29.

United States Embassy, Grosvenor Square
London, England. Apr 29.

University of Newcastle-on-Tyne
Newcastle, England. Apr 30.

Södra Theatre
Stockholm, Sweden. May 3 and 5.

Sveriges Radio, Studio 2
Stockholm, Sweden. May 4.

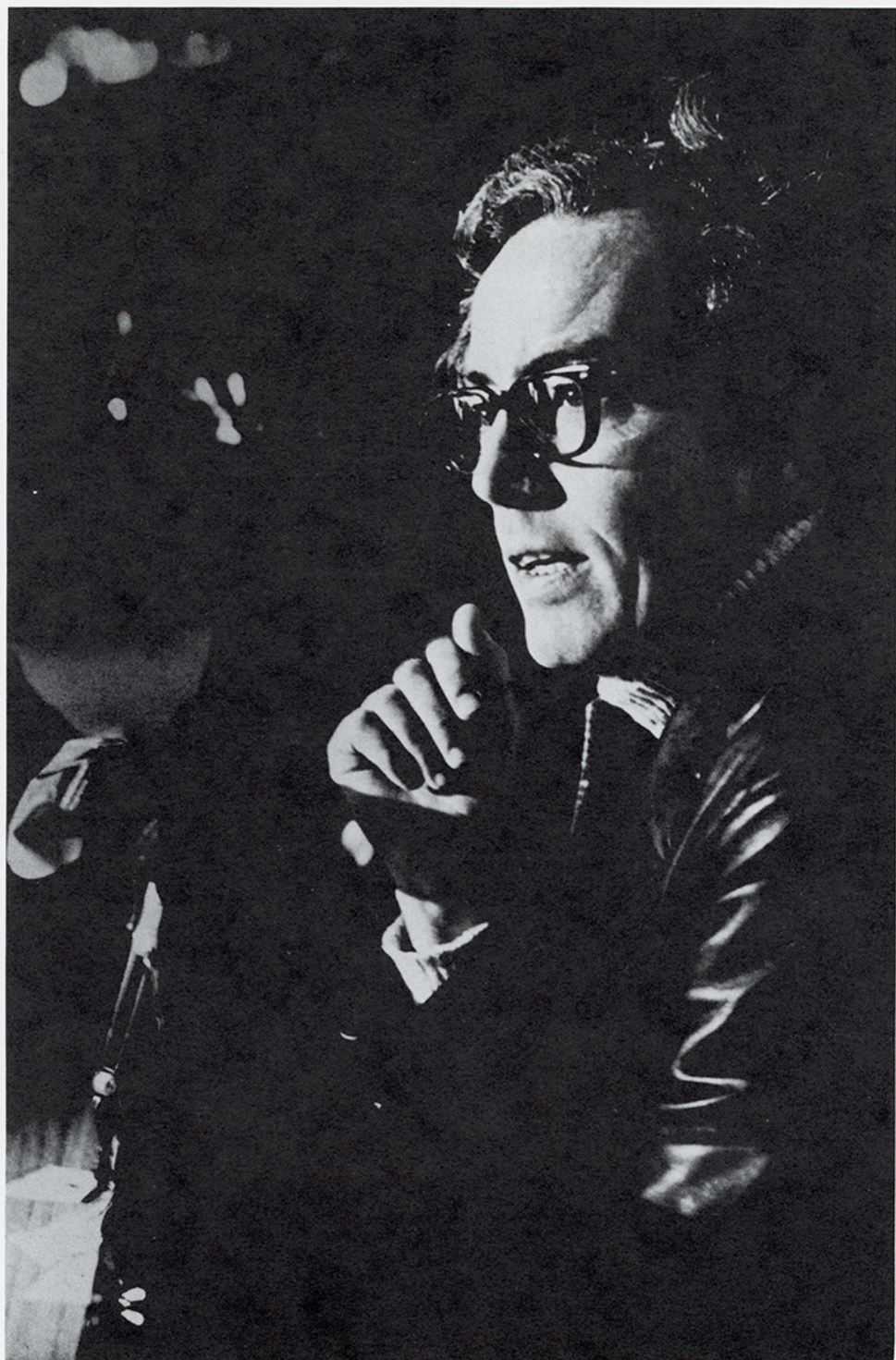
Theatre 140, Schaerbeek
Bruxelles, Belgium. May 10.

.....
... fascinating ... like listening in on the control room of a moonshop traveling not in space but in sound ... Theodore Strongin New York Times 26 March 1970

... an adequate description of the works they perform, and of their implications, would fill a book ... particularly remarkable for the creative possibilities it brings about ...
Tim Souster Tempo 89 London, 1969

... totally positive ... awakened a seated public by showing that one could make use of sounds otherwise than for delectation ... it was man engaging in his most ancient tradition. Have the wise musicologists of Zagreb revealed here the well-spring of the future?
Maurice Fleuret Le Nouvel Observateur, Paris July 1969

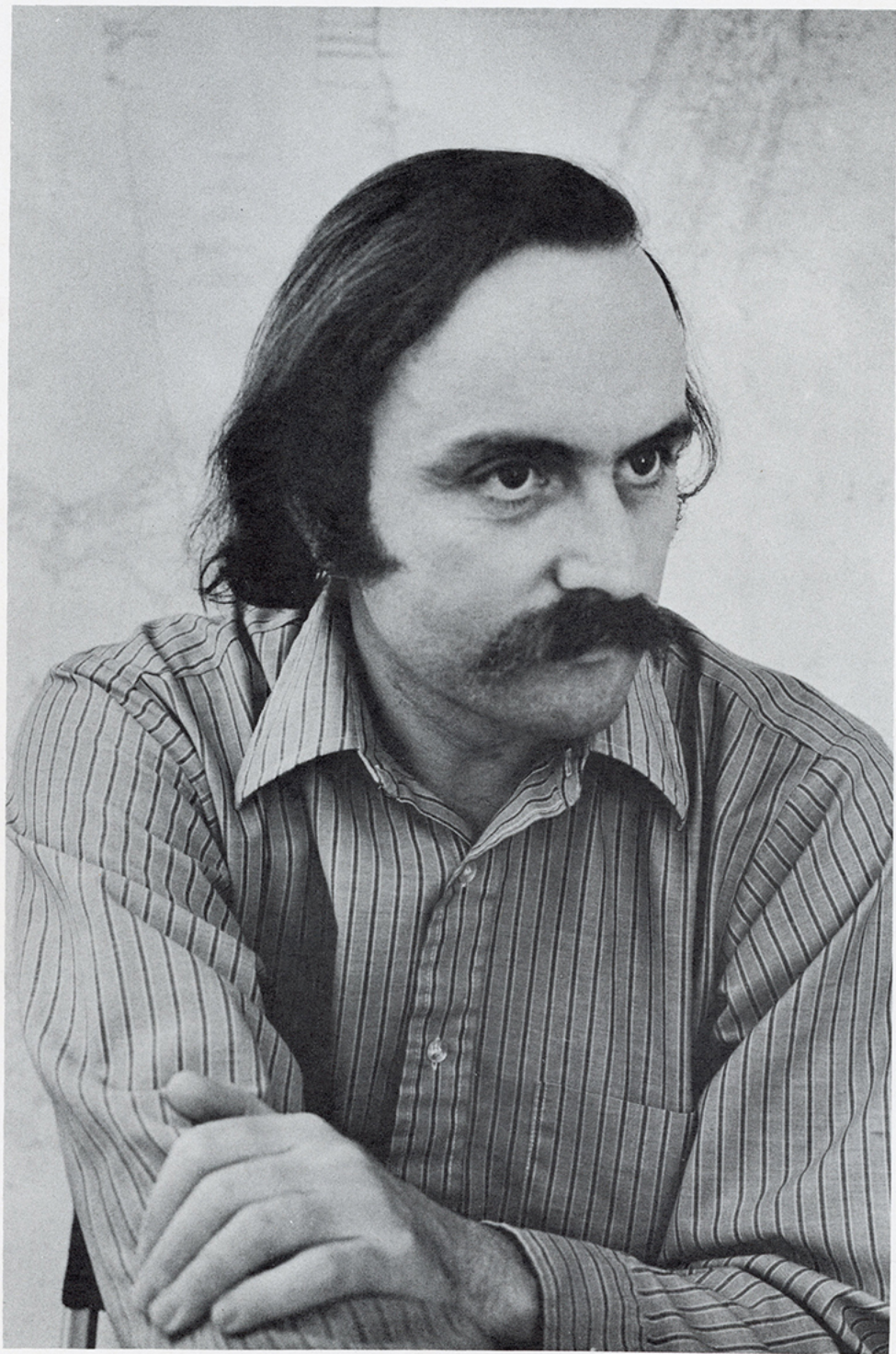
... an astonishing range of sounds ...
Michael Nyman The Spectator, London 9 May 1969



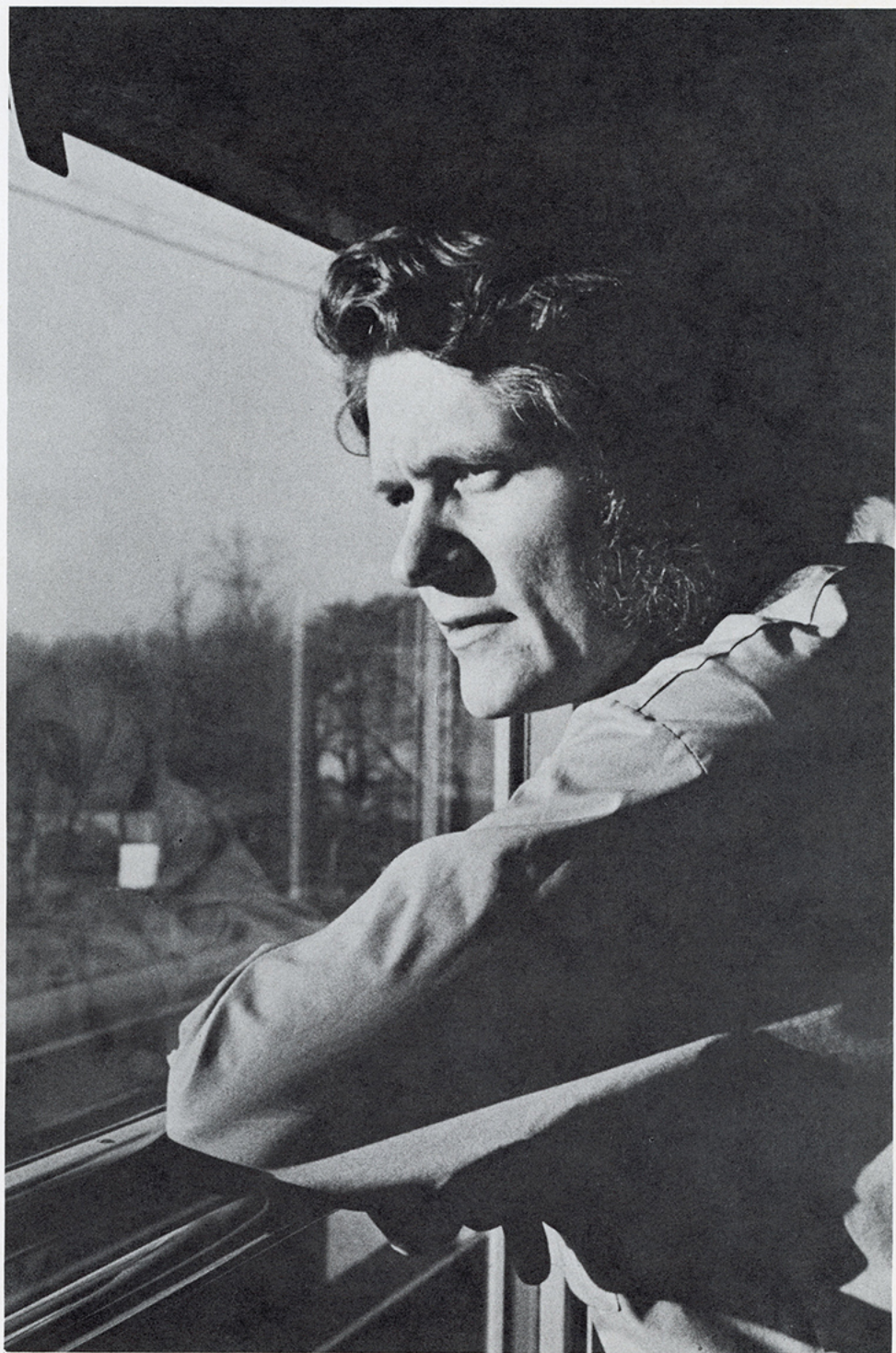
ROBERT ASHLEY is Co-director of the Center for Contemporary Music at Mills College. He was one of the organizers of the ONCE Festival and has since been director of the ONCE Group Theatre Music Ensemble. He was trained as a pianist and composer at the University of Michigan and the Manhattan School of Music. In addition to his musical activities, he produces sound tracks for professional motion pictures, several of which have won awards at international festivals. His music is published by CPE and recorded on Advance, ESP, CBS Odyssey, and Mainstream records.



DAVID BEHRMAN is a composer and concert organizer living in New York. He has published numerous articles and recording annotations concerning new music, and has collaborated in performances with John Cage, Frederic Rzewski, David Tudor, and Christian Wolff. He has been a producer of new music recordings for Columbia Records, notably the CBS Odyssey series. His commissions include the music for *Walkaround Time* which is in the repertory of the Merce Cunningham Dance Company. His music is recorded on Mainstream and Source records.

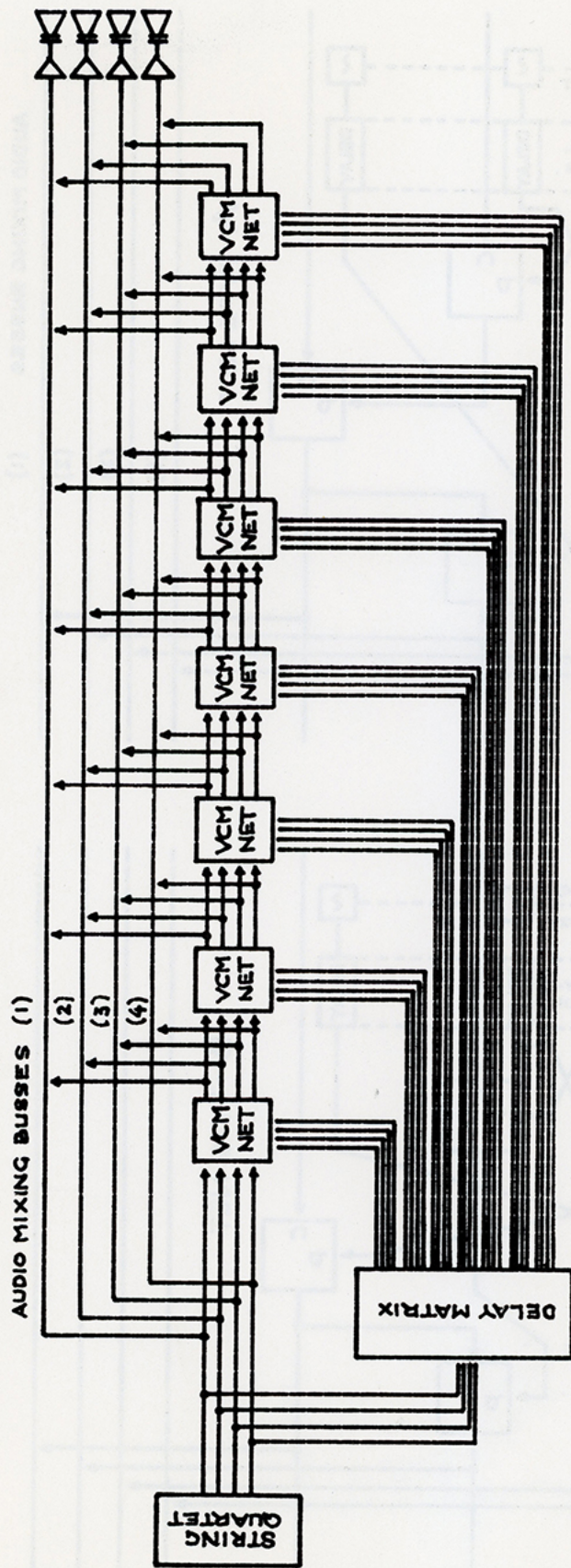


ALVIN LUCIER is on the Music Faculty of Wesleyan University in Middletown, Connecticut. He was formerly Director of the Brandeis University Electronic Music Studio and Conductor of the Brandeis University Chamber Chorus which premiered and recorded many works of 20th Century music including that of Ashley, Cage, Feldman, Ichiyanagi, and Oliveros. His music is published by BMI Canada Limited and CPE, and is recorded on CBS Odyssey and Mainstream records. His recent work *Vespers* is in the repertory of the Merce Cunningham Dance Company as accompaniment for the dance *Objects*.



GORDON MUMMA, one of the organizers of the ONCE Festival, is a composer and musician with the Merce Cunningham Dance Company. As a consulting engineer with Experiments in Art and Technology Incorporated, he designed the sound modifier console for the Pepsi-Cola Pavilion at Expo 70 in Osaka. He has been Lecturer-in-Residence at numerous American universities, and his articles on contemporary music and electronic technology have been published in several languages. His music is published by BMI Canada Limited and recorded on Advance, CBS France, Mainstream, and Odyssey records.

STRING QUARTET DESCRIBING THE MOTIONS OF LARGE REAL BODIES



THE BOW IS DRAWN CONTINUOUSLY BUT SO SLOWLY AND WITH SUCH GREAT PRESSURE ON THE STRING THAT THE STRING RESPONDS IN RANDOMLY OCCURRING SINGLE "PULSES." IN THIS MANNER OF PLAYING THERE IS MORE SILENCE THAN SOUND. TYPICALLY, A SINGLE DIRECTION OF THE BOW MAY TAKE 10 MINUTES. INSTRUMENTS SHOULD BE TUNED UNIFORMLY LOW. USE DIRECTIONAL MICROPHONES EXTREMELY CLOSE (WITHIN 3 INCHES) TO THE SOUND-HOLES OF THE INSTRUMENTS. THE DELAY MATRIX SHOULD PROVIDE DIFFERENT SIGNAL-DELAY TIMES IN A RANGE BETWEEN 5 MILLISEC AND 250 MILLISEC FOR EACH OF THE SEVEN GROUPS OF OUTPUTS. DELAY TIME IS THE SAME FOR ALL OUTPUTS IN A GROUP. WITHIN EACH VOLTAGE-CONTROLLED-MODIFIER NET ANY VC DEVICES MAY BE USED (WITHOUT REGARD TO SYMMETRY.) USE AT LEAST ONE OR AS MANY AS SEVEN VCM NETS, ALTERNATING A-TYPE AND B-TYPE IN SERIES. ALWAYS OBSERVE THE SYMMETRY OF CONTROL-SIGNAL AND PROGRAM-SIGNAL ROUTINGS. IDEALLY, THE SUM OF THE SIGNALS AT THE LOUDSPEAKERS SHOULD BE NO LOUDER THAN THE UNAMPLIFIED SOUND OF THE STRINGED INSTRUMENTS.

VOLTAGE-CONTROLLED-MODIFIER-NETS

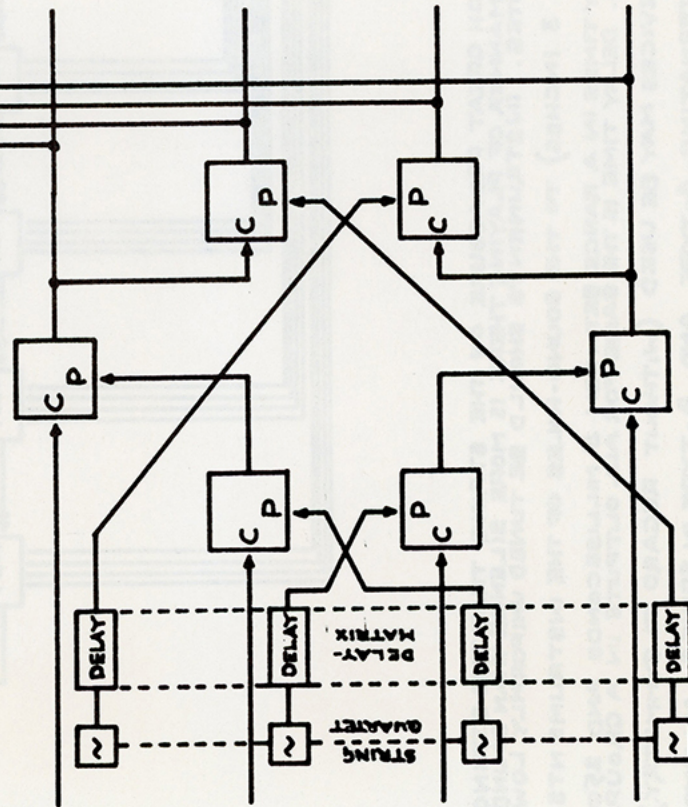
ALDIO MIXING BUSES (1)

(2)

(3)

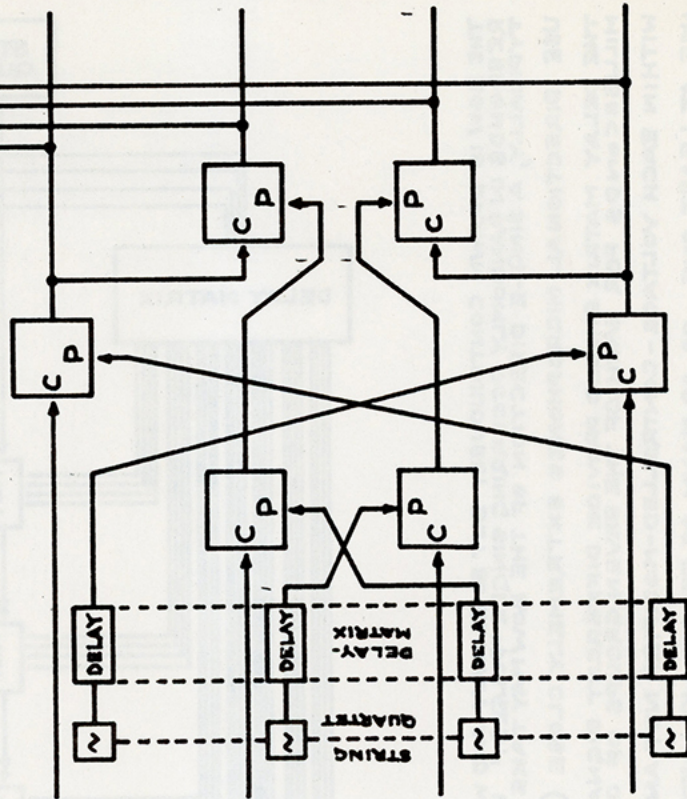
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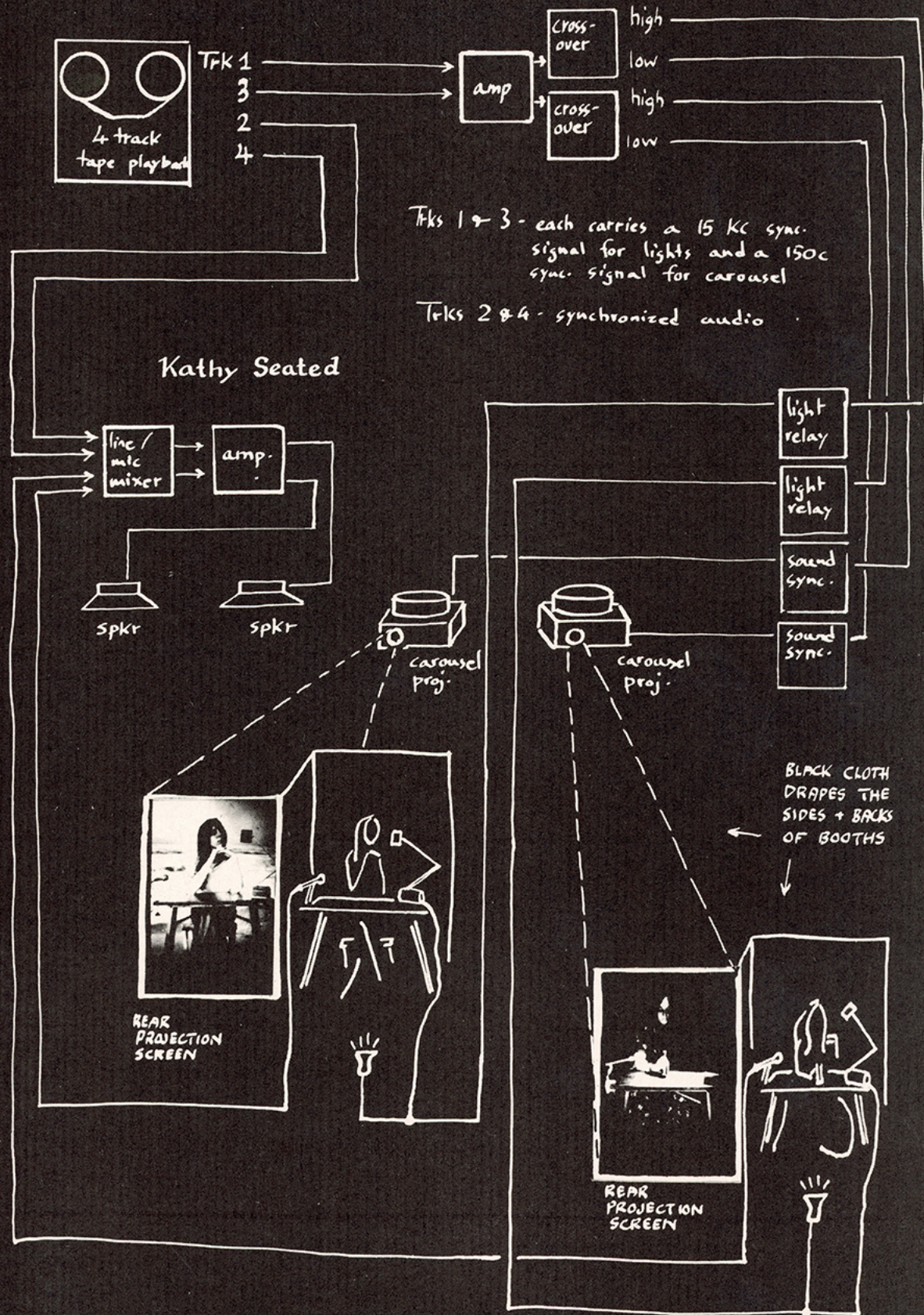
A-TYPE NET



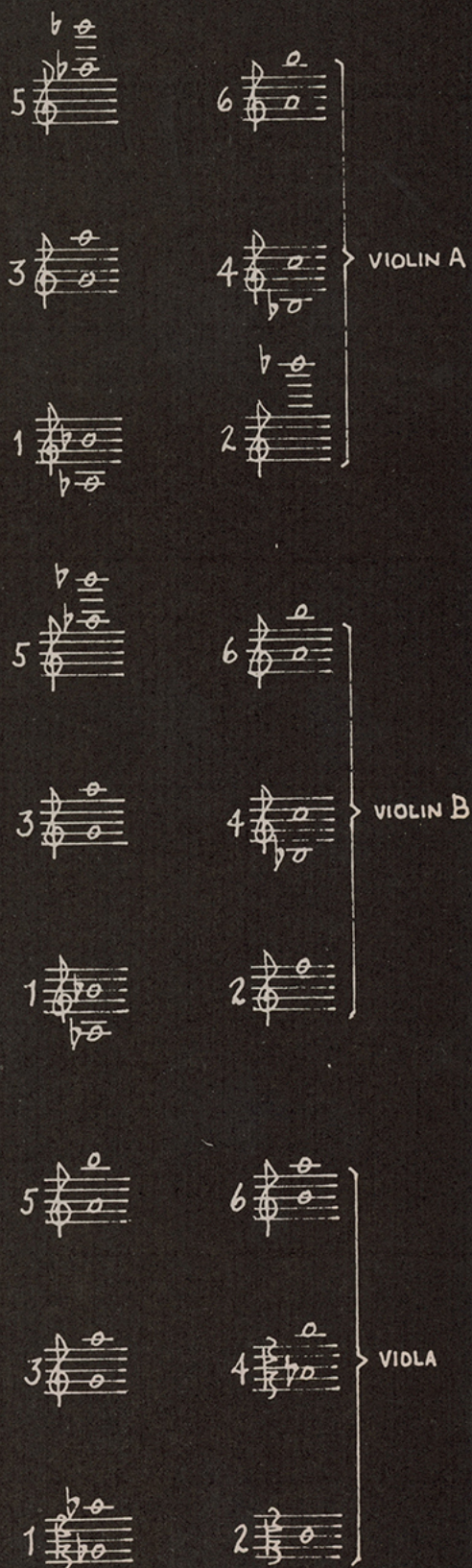
C: CONTROL SIGNAL INPUT P: PROGRAM SIGNAL INPUT

B-TYPE NET





DIGITAL SCORE DISPLAY with relation to
BOW-ARM COORDINATE SLEEVES
PHANTOM MYOELECTRICAL TELEMETERING SYSTEM
CYBERSONIC MODIFICATION MODULES



1st PERFORMANCE: CROSS TALK INTERMEDIA TOKYO, JAPAN
5 FEB 1969 YOKO HAYASHI, VIOLIN KONSUKE ONO, VIOLA

MUSIC ON RECORDING

by the composers

of the SONIC ARTS UNION

ROBERT ASHLEY

in memoriam CRAZY HORSE (symphony)

She Was a Visitor

The Wolfman

Untitled Mixes

Purposeful Lady Slow Afternoon

Advance FGR-5

CBS Odyssey 3216 0156

Source 4

ESP 1009

Mainstream MS/5010

DAVID BEHRMAN

Wavetrain

Runthrough

Source 4

Mainstream MS/5010

ALVIN LUCIER

North American Time Capsule

Vespers

CBS Odyssey 3216 0156

Mainstream MS/5010

GORDON MUMMA

Mesa

The Dresden Interleaf 13 February 1945

Horn

Music from the Venezia Space Theatre

Hornpipe

CBS Odyssey 3216 0158

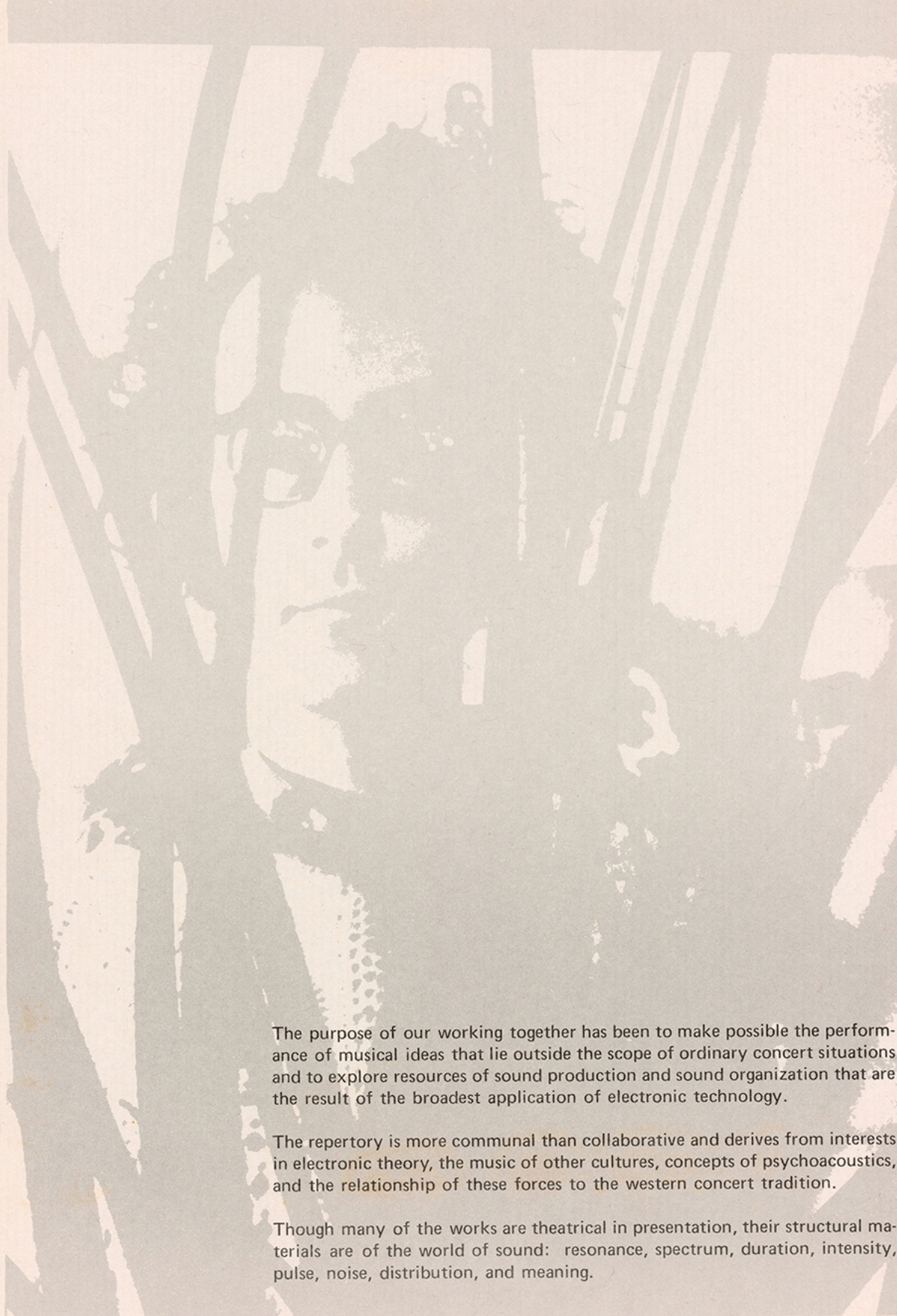
CBS France S-34 61 065

JME-1

Aspen 4

Advance FGR-5

Mainstream MS/5010



The purpose of our working together has been to make possible the performance of musical ideas that lie outside the scope of ordinary concert situations and to explore resources of sound production and sound organization that are the result of the broadest application of electronic technology.

The repertory is more communal than collaborative and derives from interests in electronic theory, the music of other cultures, concepts of psychoacoustics, and the relationship of these forces to the western concert tradition.

Though many of the works are theatrical in presentation, their structural materials are of the world of sound: resonance, spectrum, duration, intensity, pulse, noise, distribution, and meaning.

