

ELECTRONIC PIONEERS

BÜLENT AREL

ELECTRONIC MUSIC NO. 1 (1960)

MUSIC FOR A SACRED SERVICE: PRELUDE and POSTLUDE (1961)

Tapes realized at the Columbia-Princeton Electronic Music Center

MARIO DAVIDOVSKY

ELECTRONIC STUDY NO. 2 (1962)

Tape realized at the Columbia-Princeton Electronic Music Center

KENNETH GABURO

LEMON DROPS (1964-5)

FOR HARRY (1964-6)

Tapes realized at the University of Illinois Electronic Music Studio, and the composer's home studio

VLADIMIR USSACHEVSKY

METAMORPHOSIS (1957)

LINEAR CONTRASTS (1958)

Tapes realized at the Columbia University Tape Music Studio

The music on this record was produced at the original Columbia University Tape Music Studio and its successor, the Columbia-Princeton Electronic Music Center, and at the University of Illinois Electronic Music Studio. It includes some of the earliest electronic music released on commercial records, and is reissued by CRI after its deletion on the Son Nova and Heliodor labels. The tapes used in this reissue are all freshly mixed from the original materials.

Three fundamental types of electronic music are represented: (1) tape music composed from materials created from 'natural' (concrete) sounds such as gongs, voices, and instruments; (2) tape music composed from sounds which were generated by electronic instruments such as audio oscillators and manipulated by diverse processing devices; (3) tape music composed from mixtures of concrete and electronic sound sources.

In all of the compositions, the composers employed the customary techniques of manipulating basic source-sounds recorded on magnetic tape. For example, complex sounds were constructed by splicing together short pieces of tape cut from recordings of various basic sounds. The ear perceives a total impression of complexity without being able to distinguish each of the simple components. This mosaic-like technique, which demands considerable patience on the part of the composer, was, in the early days of tape music sometimes regarded as sufficient to the completion of a tape composition.

In these works, however, the composers found it compositionally desirable to further process basic sound sources by way of semi-automatic devices. For example, tape recorders and associated equipment were used to develop continuous patterns of sound, usually characterized by certain rhythmic rigidity, but nevertheless useful. Between the extremes of handicraft and machine work, the composers used a variety of other specialized techniques, made possible by the flexibility of tape and the versatility of electronic equipment. For example, varying speed was used to produce different pitches and timbres; filtering was used to suppress some of the timbral characteristics of a given sound; reverberation to let the echo add color, liveliness, and a sense of spaciousness.

The composers represented here all composed a number of works for conventional instruments prior to turning to the electronic medium. BÜLENT AREL, (b. 1919, Istanbul, Turkey) graduated from and taught at the Ankara State Conservatory. He was the first Music Director of Radio Ankara and pioneered in the field of electronic music combined with conventional instruments with his *Music for String Quartet and Oscillator* (1957), later revised and retitled *Music for String Quartet and Tape*. In 1959 he came to the United States as the recipient of a Rockefeller Research Grant to the Columbia-Princeton Electronic Music Center and contributed significantly both to the technical development and the literature of electronic music with over a dozen major works in his more than a decade association with the Center. He has taught composition at Yale University where he designed and installed the Electronic Music Studio in 1962 and has taught composition and electronic music for several years as visiting lecturer at Columbia University. Since 1971 he has been Professor of Music and Director of the Electronic Music Studio at the State University of New York at Stony Brook. He has composed a large number of instrumental, chamber, vocal, and symphonic works as well as music for the ballet, theatre, modern dance, television and film. His works include *MIMIANA I, II, III* for modern dance of which No. II appears on CRI SD 300, *FOR VIOLIN AND PIANO* (CRI SD 264) and *STEREO ELECTRONIC MUSIC NO. 2* (CRI SD 268). He is recipient of National Endowment for the Arts commissions for instrumental and electronic works, Columbia-Princeton Electronic Music Center commissions, and a New York Cultural Council Foundation commission for his work *Fantasy and Dance for Five Viols and Tape*.

Pulitzer Prize-winner MARIO DAVIDOVSKY (b. Argentina, 1934) has lived in New York since 1960, the year of his first Guggenheim Fellowship. Since then he has become renowned for his important *SYNCHRONISMS* series for electronic sound and traditional instruments (CRI SD 204 and 268), and for the elegance and refinement of his instrumental works (CRI SD 305). He has won the Naumburg, the Brandeis Creative Arts and the National Academy of Arts and Letters Awards, two Guggenheim Fellowships and two Rockefeller Fellowships. He has received commissions from, among others, the Koussevitzky Foundation, the Pan American Union, the New York Chamber Soloists, the University of Pennsylvania, Yale University, the Fromm Foundation and the Juilliard String Quartet. He is now (1976) Associate Director of the Columbia-Princeton Electronic Music Center and Professor of Music at the City College of New York.

KENNETH GABURO (b. Somerville, N.J., 1926) has, during most of his career, operated on the farther fringes of the advanced techniques. His first composition which employed extensive use of tape was *Bodies*, an opera for actors and tape, 1957. It was followed in 1958 by *Antiphony I* [Voices] for 3 string groups and tape. In 1975 Gaburo resigned from the University of California-San Diego, concluding 25 years of teaching (Kent State, University of Illinois, UCSD), to devote full time to his work, which, in addition to composition and other writings (e.g. a forthcoming book entitled: *Passing*, an autobiographic accounting of university life) includes his New Music Choral Ensemble (currently involved in Linguistic Theater) and a newly formed publishing company. He continues to compose for conventional instrumental and vocal groups, and as well, for tape and tape with live performers. In recent years his attention has also been directed to film and video compositions. Gaburo's *MALEDETTO*, a 40-minute spoken, sung and chanted composition, is on CRI SD 316.

VLADIMIR USSACHEVSKY (born 1911, Hailar, China) came to the United States in 1930 and attended Pomona College, Eastman School of Music, Claremont College, and Columbia University. He had a number of orchestral and choral performances before beginning to devote his entire attention to work with tape at Columbia University in the fall of 1951. His early experiments with tape were performed at a Composers Forum at the McMillin Theatre on May 5, 1952. The first concert of his and Otto Luening's tape composition in November, 1952, at the Museum of Modern Art in New York City gave rise to a term "Tape Music." In 1962 he completed what is probably the first completely electronic score, for a full-length feature movie, *No Exit* adapted from Jean Paul Sartre's play. Since that time he has produced electronic music for another feature length film, *Line of Apogee*, and for shorter film and TV productions, as well as composing works incorporating tape for chorus, and for symphony orchestra. He has received two Guggenheim Fellowships, two awards from the National Endowment for the Arts, and the Institute of Arts and Letters award for his pioneering work in tape and electronic music; in 1973, he was elected to a lifetime membership in the Institute. He is Professor of Music at Columbia University and chairman of the Committee of Direction of the Columbia-Princeton Electronic Music Center.

Davidovsky: ELECTRONIC STUDY NO. 2 is a tightly organized work, basically a succession of percussive sounds. The pitch is indeterminate, but the quality of sound gives the impression that it originated from a variety of resonant membranes. The composer here avoids using any semi-automatic processes of generating or modifying the sounds, and works for the complete control of every detail of his composition. This work was originally distributed on four tracks of tape, each connected to a separate loudspeaker. Even in this two-track stereo version, the place of origin of any given sound combination has a definite structural significance.

Ussachevsky: LINEAR CONTRASTS is a composition in which the composer created sound patterns by the semi-automatic techniques mentioned above. From these patterns a composition was shaped into a final form. Radical change of pitch and timbre was accomplished by the use of an apparatus known as "Klangumwandler," developed by Dr. L. Heck of Sudwestfunk in Baden-Baden, Germany, which produces precise alteration of the normal ratios between the harmonics of any given tone. This was the first use of this device by any composer. LINEAR CONTRASTS combines, structurally, a widely fluctuating sound-backdrop with a rhythmically rigid pattern, superimposed on it. The timbre and the pitch change with each repetition of this pattern. A short coda closes this study.

Arel: ELECTRONIC MUSIC NO. 1. The initial sound material of this piece is derived entirely from sine- and square-wave oscillators. It is composed in clearly differentiated sections, each with a carefully limited number of horizontal and vertical patterns. The progression of well-contrasted phrases in cumulative rhythmic tension lead, in the end, to a strong impression of unity.

Gaburo: LEMON DROPS and FOR HARRY are two of a group of five tape compositions made during 1964-5 (the remaining works are *Fat Millie's Lament*, *The Wasting of Lucretetzia*, and *Dante's Joynte*). "Harry" is Harry Partch. All are concerned with aspects of timbre (e.g., mixing concrete and electronically generated sound); with nuance (e.g., extending the expressive range of concrete sound through machine manipulation, and reducing machine rigidity through flexible compositional techniques); and with counterpoint (e.g., stereo as a contrapuntal system).

Ussachevsky: METAMORPHOSIS has no particular program, but is an attempt to create an impression of a dramatic event. The peak of intensity emerges with a high, vocal line, created from an experimental recording by the composer of Bethany Beardslee's voice. This line descends gradually and ends when a much abbreviated recapitulation of the beginning brings the work to a quiet close.

Arel: MUSIC FOR A SACRED SERVICE: PRELUDE AND POSTLUDE. This work is in two contrasted sections. The first contains sombre, sometimes organ-like sonorities, the second, more brightly colored, cascading patterns. The piece moves as a whole, in speed and complexity, from a broad and serious beginning to a virtuoso-like conclusion.

The works by Arel, Davidovsky and Ussachevsky were originally released on a Son Nova record; the Gaburo appeared on a Heliodor (MGM) record. Both were withdrawn, and CRI, following its policy of reissuing historically significant and musically important deletions, has released them again with assistance from the Alice M. Ditson Fund of Columbia University.

Produced by Carter Harman

(original liner notes from CRI LP jacket)