INTRODUCTORY REMARKS TO A PROGRAM OF WORKS PRODUCED AT THE COLUMBIA-PRINCETON ELECTRONIC MUSIC CENTER, GIVEN AT THE MCMILLIN THEATRE OF COLUMBIA UNIVERSITY ON MAY 9 AND 10, 1961:

Your presence here, at a concert of electronic music, is a compliment to the composers, as well as to the two Universities that sponsor their work; and while I extend to you a welcome on behalf of the Universities I also wish to convey the composers' hope that you will be as gratified by hearing their works as they are by your willingness to listen.

No doubt your expectations are mixed. You are ready to be surprised, to have your curiosity satisfied, and possibly even to experience snatches of enjoyment as you would at an ordinary concert. If that is your state of mind I am fairly sure you will not be disappointed. But it may be that you are here in a mood of combined trepidation and resistance: this, after all, is the Age of Anxiety. Or you may be bent on proving that electronic music is not music—doing this by the most painful test of endurance, or else you may be feeling caught because you have been brought by a friend and friendship is dearer to you than prudence.

For these or any other reasons you are ill at ease, allow me to suggest a very few considerations which should make you more serene, while leaving you your full freedom of opinion, your entire right to dislike and reject. I suggest, to begin with, that we are not here to like or approve but to understand. And the first step to understanding a new art is to try to imagine why the maker wants it the way it is. That is interesting in itself, even if we ultimately disown the product. To understand in this fashion does not mean to accept it, or to pretend to be art cannot come out of a machine: art is the human product par excellence, and electronic music, born of intricate circuits and the oscillations of particles generated by Con Edison, is a contradiction in terms. Here again the answer is simple: the moment man ceased to make music with his voice alone the art became machine-ridden. Orpheus's lyre was a machine, a symphony orchestra is a regular factory for making artificial sounds, and a piano is the most appalling contrivance of levers and wires this side of the steam engine.

Similarly, the new electronic devices are but a means for producing new materials to play with. What matters is not how they are produced but how they are used. And as to that we are entitled to ask the old questions—do we find the substance rich, evocative, capable of subtlety and strength? Do we, after a while, recognize patterns to which we can respond with our sense of balance, our sense of suspense and fulfillment, our sense of emotional and intellectual congruity? Those are the problems, beyond the technical, which our composers have tried to solve. We shall now attempt to their work with an attitude of open-minded curiosity and gratitude (I hope) and certainly with a generous fraction of the patience they have themselves invested in their efforts to please us.

JACQUES BARZUN

The Columbia-Princeton Electronic Music Center was established in 1959 with the assistance of a grant from the Rockefeller Foundation. The Center provides three studios for composition and research in the electronic production of music. One studio houses the RCA Electronic Sound Synthesizer and related recording equipment, the other contains specialized equipment for sound generation and modification. Earlier grants from the Foundation made through Barnard College, allotment of space and other assistance by Columbia University have enabled Otto Luening and Vladimir Ussachevsky of Columbia to conduct joint experiments in the medium, with technical assistance from Mr. Peter Mauze. The Center is jointly administered by Otto Luening and Vladimir Ussachevsky of Columbia University and Milon Babbitt and Roger Sessions of Princeton University.

BÜLENT AREL (Turkey) has taught, and composed symphonies, ballets, and chamber and theatre music. Until recently, he was a research assistant at the Columbia-Princeton Electronic Music Center, having come there on a grant from the Rockefeller Foundation. His electronic music no. 1, composed of sounds completely derived from electronic sources, is conceived in several general sound groups: undifferentiated continuous sound texture as background, contrasted with more clearly articulated signals. Throughout the work, the motif-derived texture remains as a constant, while the articulated signals are developed and expanded by a process which the composer likens to the growth of the branches of a tree.

HALIM EL-DABB (Egypt) was educated in the United States and was awarded a Guggenheim Fellowship in 1959. He has composed symphonies and concertos, and his ballet, Clytemnestra, was recently performed by Martha Graham and her company. LEYLA AND THE POET uses purely electronic sounds sparingly but obtains most of its effects by applying the tape manipulation technique of speed transposition, and electronic reverberation, to the instrumental and vocal materials prepared and recorded by the composer. The work is an incident from a ballet, Leilya, which is concerned with the growth of the branches of a tree.

VLADIMIR USSACHEVSKY (United States), born in China and
educated in the United States, composed a number of compositions for conventional instruments before beginning his pioneering work with tape at Columbia University in 1951. Since then, he has done many compositions for tape either alone, or in collaboration with Otto Luening. Together they furnished tape music for the New York productions of King Lear and Back to Methuselah, and works for tape recorder and orchestra. Mr. Ussachevsky is recipient of a grant from the National Institute of Arts and Letters and two Guggenheim Fellowships. CREATION—PROLOGUE is the first part of a projected extensive choral work. The text is derived from myths of creation: the Prologue uses excerpts from the Akkadian Enuma Elish, the most ancient of all, and Ovid’s Metamorphoses. The work begins in Akkadian, the language of Babylon, implying the chaotic state but giving no description of it. The composer says: “I felt a need of interpolating some such description from another ancient source, and thus the opening lines of Metamorphoses, rendered in Latin, are inserted, or musically speaking, superimposed on Enuma Elish. I sought to exploit the contrast between the archaic quality of Akkadian and the sound of classical Latin...” The composition is written for four full choruses and may be performed in various combinations of live performers and pre-recorded chorus, or simply as an entirely recorded work from two or four tape tracks. Antiphonal treatment of the material is frequently employed, and in several instances a dense dissonant texture is achieved by the use of multi-choral polyphony. In this performance the choral material was prepared by the Little Chorus of Macalester College, St. Paul, Minnesota, under the direction of Dr. Ian Morton. In a few instances the vocal range is enlarged by tape manipulation techniques. The accompaniment is almost entirely electronic in origin and includes a short section produced on the Synthesizer.

MILTON BABBITT (United States), Professor of Music at Princeton, composer, writer and lecturer, has had compositions performed both here and abroad. He received the National Institute of Arts and Letters Award, among other recognitions of his work. COMPOSITION SYNTHESIZER is a purely electronic work. It was created entirely on the Synthesizer and the output has not been subjected to any further mutations or modifications. The composition is less concerned with “new sounds and timbres” than with the control and specification of linear and total rhythms, loudness rhythms and relationships, and flexibility of pitch succession, which can be secured through the programming control of the Synthesizer.

MARIO DAVIDOVSKY (Argentina) studied composition with Maestro Guillermo Graetzer in Argentina and Aaron Copland in the United States. He has written ballet, chamber, theatre and film music. Awarded a Guggenheim Fellowship to study at the Columbia-Princeton Electronic Music Center, he is presently a staff member there. The sounds for ELECTRONIC STUDY NO. 1 were initially derived from three electronic sources: sinusoidal and square wave generators, and white noise. Conversion of these sounds into compositional materials was achieved by use of filters, reverberation chamber and through different recording processes. Basically, the study is built upon five sound mixtures working as a series which is inverted, transposed and interpolated, and the sound mixtures are changed in density and intensity from the original. The material is developed through four carefully timed sections.

OTTO LUENING (United States) studied music in Munich and Zurich. The artistic influence of Andreae, Jarnach and Busoni helped to form his career. He has composed over two hundred works, and is also an active conductor and educator. Since 1952, he has been a close collaborator with Vladimir Ussachevsky in the field of electronic music. GARGOYLE is a composition for violin solo and synthesized sound. The synthesized sound material was produced on the Synthesizer, and later manipulated by tape techniques. The composition consists of a subject and series of short variations, each complete in itself. Some are synthetic and others are for the solo violin. Several variations combine solo and tape. The single tones of the subject introduce different shades of the same type of sound, and continue to accumulate until the end of the piece when the subject is transformed completely. The violin variations function as lyric contrasts to the synthetic ones, which are mostly dramatic and brilliant. The violin solo part is played by Max Pollikoff.
The music on this record was produced at the original Columbia University Tape Music Studio and its successor, the University of Illinois Electronic Music Studio. It includes some of the earliest electronic music released on commercial records, and is reissued by CPI 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 demand on the part of the composer, 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. BULENT 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 METAMORPHOSIS, for modern dance of which No. II appears on CPI SR 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 / [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 MALEDDETTO, a 40-minute spoken, sung and chanted composition, is on CPI SR 318.

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 on 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 Laughing Matter and from the experience and knowledge which 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 Südwestfunk in Baden-Baden, Germany, which produces precise alteration of the normal ratios between the harmonies 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.

SIDE 2

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 Whistling of Lucrecetia, 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
Cover by Judith Lerner
STUDY NO. 2 - E.B. Marks (BMI): 6'20"
LINEAR CONTRASTS - ACA (BMI): 3'45"
ELECTRONIC MUSIC NO. 1 - same: 8'45"
FOR HARRY — Lingua Press: 4'47"
LEMON DROPS — same: 2'51"
METAMORPHOSIS — ACA (BM): 5'25"
SACRED SERVICE — same: 6'35"
LC#: 76-75063
© 1976 Composers Recordings, Inc.
THIS IS A COMPOSER — SUPERVISED RECORDING
MARIO DAVIDOVSKY

Three Synchronisms for instruments and electronic sounds

NO. 1 FOR FLUTE (1963) HARVEY SOLLBERGER (flute)

NO. 2 FOR FLUTE, CLARINET, VIOLIN, CELLO (1964) Sophie Sollberger (flute), Stanley Drucker (clarinet), Paul Zukofsky (violin), Robert L. Martin (cello), Efrain Guigui (conductor)

NO. 3 FOR CELLO (1964-65) ROBERT L. MARTIN (cello)
ARIO DAVIDOVSKY (b. Buenos Aires, Argentina, 1934) pursued his initial musical studies in Argentina, working in composition with Guillermo Graetzer, Teodoro Fuchs, Erwin Leuchter, and Ernesto Epstein. In the United States he has studied with Otto Luening and Aaron Copland. Since coming to the United States in 1958, Mr. Davidovsky has won more than a dozen major awards, fellowships and commissions, among them two Guggenheim Fellowships, a Rockefeller Foundation grant, a Koussevitzky Foundation commission and a Fromm Foundation commission for the Synchronism No. 2 recorded here.

While Mr. Davidovsky's reputation has rested largely on the works composed in connection with his association with the electronic music center at Columbia and Princeton universities, his catalog of compositions includes a considerable variety of scores for non-electronic media — chief among them being two string quartets, a clarinet quintet, Planos for orchestra, El Payaso ballet suite, and Serie Sinfónica. A 1965 Fromm Foundation commission has resulted in Mr. Davidovsky's composition, Inflexions for 14 Players.

Concerning the Three Synchronisms recorded here, Mr. Davidovsky notes that "They belong to a series of short pieces wherein conventional instruments are used in conjunction with electronic sounds. The attempt here has been made to preserve the typical characteristics of the conventional instruments and of the electronic medium respectively — yet to achieve integration of both into a coherent musical texture."

"In the planning and realization of these pieces," Mr. Davidovsky notes further, "two main problems arise — namely proper synchronization (a) of rhythm and (b) of pitch. During the shorter episodes where both electronic and conventional instruments are playing, rather strict timing is adhered to. However, in the more extended episodes of this type, an element of chance is introduced to allow for the inevitable time discrepancies that develop between the live performer(s) and the constant-speed tape recorder.

"To achieve pitch coherence between the conventional instruments which use the 12-tone chromatic scale and the electronic medium which is non-tempered, use is made of tonal occurrences of very high density — manifested for example by a very high speed succession of attacks, possible only in the electronic medium. Thus, in such instances — based on high speed and short duration of separate tones, it is impossible for the ear to perceive the pure pitch value of each separate event; though in reacting, it does trace so to speak a statistical curve of the density. Only in a very few instances have tempered electronic pitches been employed in the Synchronisms. Throughout all three pieces, the tape recorder has been used as an integral part of the instrumental fabric."
Electronic Study No. 3 in Memoriam Edgar Varese was completed in 1965 at the Electronic Music Center of Princeton and Columbia Universities. Primarily, the piece is constructed on its most basic level, using articulative processes available only in the electronic media. The intense concentration and speed of occurring events, together with the very sharp articulation characteristics of the piece, give it a very idiosyncratic texture.
Collaboration in musical composition is much rarer than, say, novel writing and even picture painting. But Otto Luening and Vladimir Ussachevsky have shown that it can be done, and they discovered the possibilities of composition for tape recorders. CONCERTED PIECE is the third and one of the most attractive results of this collaboration, as its frequent public performances attest. CRI is proud of the unusually beautiful sound of this recording.

At a conference in New York, Mr. Luening and Mr. Ussachevsky started a conference. Having agreed that they want to write a piece, they then decide how long it is to last, and then what type of effect or quality they wish it to have (it would be fascinating to eavesdrop on this part of the conference). The rest is simply deciding how to divide up the labor of composition and elimination of unsuccessful efforts and to Carpenter the sections together.

CONCERTED PIECE was composed in 1960 on commission by Leonard Bernstein and the New York Philharmonic, and premiered by them that year. The music bears some resemblance to a movement from a classical concerto. While this is not necessarily the sort of work to which pioneering is always the first response, it does present a convincing idea of the possibilities of the technique. The first part, composed by Mr. Luening, ends with the cadenza for taped sounds alone. It is somewhat more homogenous than the second, composed by Mr. Ussachevsky, which makes considerable use of an antiphonal interchange between the orchestra and tape.

OTTO LUENING had a long and distinguished musical career before he undertook composition on electronic tape. Of his more than 200 compositions, 15 make use of the tape medium; his SYNTHESIS is on CRI 215. In addition to his teaching activities at Columbia University, he is a director of the Columbia-Princeton Electronic Music Center.

VLADIMIR USSACHEVSKY is Professor of Music at Columbia University and Chairman of the Electronic Music Center. A native of Montevideo, Uruguay, and brought to the U.S. at the age of 17 to study with Aaron Copland, he remained to become Leopold Stokowski's assistant with the American Symphony Orchestra and conducted it himself with a flair and control that justified the maestro's confidence in him. As of 1968, he was serving as conductor of the New York Philharmonic. He has conducted public performances of CONCERTED PIECE in Mexico City, Israel and New York; he recorded its orchestral portions in Oslo.

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MEL POWELL

- EVENTS for tape recorder
  Voices: Mildred Dunnock, Martha Scott, Lee Bowman

- IMPROVISATION
  Ward Davenny, piano; Keith Wilson, clarinet; David Schwartz, viola

- SECOND ELECTRONIC SETTING

- TWO PRAYER SETTINGS
  New York Chamber Soloists; Charles Bressler, tenor
  Melvin Kaplan, conductor

MEL POWELL (b. 1923) is Chairman of the composition faculty and Director of the Electronic Music Studio at Yale. His music is characterized by a delicate lyricism that never descends to mere preciosity, and by a passion for clarity and immediacy that illumines even his most complex works.

EVENTS (1983) uses three pre-recorded voices and electronically-generated sounds. Each of the actors was asked to read Hart Crane's "Legend." The recorded voices were then treated exactly like the electronic sounds, and their overlappings and transformations result in a poem-collage. The simultaneities, and the returns and repeats of isolated phrases and words create a number of subsidiary meanings and associations, thus "interpreting" the poem. Interwoven with the poem-collage, and interacting with it, are the electronic sounds, and the interaction makes EVENTS Powell's most overtly dramatic piece.

IMPROVISATION (1962), a commission of the Yale University Summer School of Music, and TWO PRAYER SETTINGS (1963), written for the New York Chamber Soloists, make use of tightly controlled polyphonic webs which nevertheless allow each performer considerable freedom. The controls tend to create harmonic areas with clearly delimited intervals which often coincide with and unify motivic groups, as well as control of the different thrusts of the groups and their manner of attack. At times the tempo indication requires that each player perform as fast as possible without regard for the vertical correlation of the parts.

In IMPROVISATION the fluctuations of the tempo and the relatively complex writing in the strictly ensemble sections obscure the division between these and the freer sections, creating a continuum from one to the other.

In the TWO PRAYER SETTINGS, the strings are treated as a single polyphonic instrument and set against the oboe and the voice. The work is so rooted in the delivery of the texts that often they can be understood as normal discourse. Thus, the most complex passages occur when the voice is silent as, for example, at the opening of the second setting. The words of the first setting are by Paul Goodman, those of the second are attributed to Gregory the Great.

The SECOND ELECTRONIC SETTING (1962) contrasts sharply with EVENTS. Its divertimento-like surface and straightforward structure make apparent the amazing technical virtuosity of the work. The individuality of the parts is made explicit by their own registral, timbral and rhythmic characteristics; thus the SETTING carries to the electronic medium some of Powell's attitudes toward instrumental music. However, like every true virtuoso performance, the piece can be enjoyed for its sheer engaging sound by listeners who do not care how it was put together.

A.E.³

The American Academy of Arts and Letters and its parent organization, the National Institute of Arts and Letters, are honorary societies with a distinguished membership of creative artists. They are chartered by an act of Congress and are devoted to the furtherance of the arts in the United States.

Through joint committees of selection, these societies every year award fifteen grants to young artists in recognition of distinction and promise. Four of these awards go annually to composers, in addition to the Marjorie Peabody Waite Award given every third year to an established composer of distinction. In the spring an exhibition of the works of award winners in painting and sculpture is held at the Academy building. In 1956, it was decided to inaugurate a series of recordings with the similar purpose of calling attention to the works of award winners in music. This release, presented in collaboration with Composers Recordings, Inc. offers works by 1983 award winners, Vladimir Ussachevsky and Mel Powell.

This recording has been processed in Universal Stereo. For best results it should be played on stereophonic equipment, but it may also be played on modern monaural machines.


Cover picture: JIMMY ERNST
SIDE ONE

1. ARC: MUSIC FOR DANCERS
   (By Daria Semegen; Time: 13:40)
2. MIMIANA I: FLUX
   (By Biilent Arel; Time: 10:40)

SIDE TWO

1. MIMIANA II: FRIEZE
   (By Biilent Arel; Time: 13:02)
2. MIMIANA III: SIX & SEVEN
   (By Biilent Arel; Time: 12:23)

All the selections are published by American Composers Alliance, BMI.

Mastering engineer: George Piros
Atlantic Recording Studios, New York, N.Y.

Cover art: Abidine
Album design: Sandi Young
Project coordinator: Ilhan Mimaroğlu

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The myriad, diverse sonorities, expressions, and articulations of the electronic music medium provide a remarkable array of musical colors especially suitable for combination with the visual medium of dance.

The electronic music works on this recording were composed expressly for modern dance and were commissioned by choreographer Mimi Garrard in the span of nearly a decade. Each individual musical work is uniquely related to its own choreography. Collectively, the compositions reflect varying degrees of complexity and diversity of both an aesthetic and technical nature, and a wide range of emotional expression.

In creating a dance work, often the choreographer may chart out a meticulously detailed plan of action on stage, including each beat or count of the dance in exact tempo, descriptions of dancers’ movements which may form essential and recurring patterns, and numbers on the dancers, creating continuously changing abstract designs. This first electronic music score of the Mimiana series was composed after the choreography was completed, and consists of purely electronic sound phrases which parallel the overall gestures of the dancers, without indicating any specific beats or metric patterns, as such.

The dance work includes a film which projects changing colors, patterns, and numbers on the dancers, creating continuously changing abstract designs. This first electronic music score of the Mimiana series was composed after the choreography was completed, and consists of purely electronic sound phrases which parallel the overall gestures of the dancers, without indicating any specific beats or metric patterns, as such.

The music is buoyant in nature and was composed following a list of various rhythms and tempos previously designed by the choreographer Mimi Garrard. The dance consists of a total of seven dancers, numerically identified by changeable neon-light number displays on the helmets of their costumes, and grouped into a set of six against the single seventh dancer. Throughout the dance, the six reject the seventh dancer by either glaring up on, or retreating from her. The music opens with an exposition of the numbers from 1 through 7. As #1 appears, the basic single beat is heard in the music. When #2 and #3 arrive, the beat is subdivided into two and three (triplet) pulses respectively. So it continues, in the manner of an inventory of numbers through the introduction of the work. When a certain number is highlighted in the dance, its musical motive reappears. This beginning section uses overlapping phrases of these subdivisions of the main beat forming smooth layers of sounds. The music progresses toward a gradually introduced double-bass type sound which outlines each beat clearly and dominates the ending section of the work. In the end, as the seventh dancer finally expires, reiterations of a high seven-tone ostinato are heard, as the music ends by gradually fading away.

Mimiana III was composed using electronic sounds including the Buchla synthesizer as an elaborate source material generator in combination with tape mixing and editing techniques.

The music was composed following the choreographer’s detailed graph-diagram indicating each beat of the dance and descriptions of dancers’ motions on stage, combined with a plan of synchronous stage lighting effects. The dance itself does not suggest a specific programmatic idea throughout, but each section of its arc pattern seems to feature motivic gestures. 
ranging from slow, graceful movements to rapid motions involving solo, duet, and trio combinations of the seven dancers. Sometimes, the lighting effects themselves are featured in precise synchronization with the music, and create elaborate silhouette designs as they play across symmetrical groups of stationary dancers. The piece consists of five parts whose themes, tempos, and "orchestration" are arranged in the shape of an arc (A B C B A). Each section is itself divided into a smaller arc (a b a). After a brief introduction of phrases in groups of three beats each, the first part begins with two motivic elements arranged in a simple question-answer idea: lower range sounds on the beat, and contrasting high echoed flourishes in alternation. Section B introduces both a new tempo and "orchestration" or sound texture, as well as a new motive featuring a tremolo effect on harsh sounds alternated in various patterns from one channel to the other. A six note ostinato appears toward the middle of this section and is gradually integrated into a polyphonic passage. Section C's theme resembles an orchestral "tutti" and is followed by a variation of the tremolo idea and echo figurations heard previously. Although the music is essentially tonal and establishes various temporary tonal centers throughout, microtones and the characteristically rich textures of electronic sound sources provide dissonant impressions counterbalancing the tonal aspects.

The work was composed using a Buchla series 200 synthesizer and classic studio techniques. The music tape was synchronized at Bell Telephone Labs with the program of the Mimi Garrard Dance Theatre's portable computer-controlled lighting system by Mimi Garrard and James Seawright in preparation for Arc's first presentation in May of 1977.

Biilent Arel (b. 1919, Istanbul, Turkey) graduated from and taught at the Ankara State Conservatory. He was the first Musical Director and tonmeister of Radio Ankara and pioneered in the field of electronic music combined with conventional instruments with his Music for String Quartet & Oscillator (1957). In 1959 he was invited to the United States as the recipient of a Rockefeller Research Grant to the Columbia-Princeton Electronic Music Center and contributed significantly to the field as an innovator, teacher, and composer of over a dozen major works. He taught composition at Yale University where he designed and installed the Electronic Music Studio in 1962, and at Columbia University as a frequent visiting lecturer. Since 1971, he has been Professor of Music and Director of the Electronic Music Studios at the State University of New York at Stony Brook, Long Island. His works include instrumental, vocal, and symphonic music as well as music for the ballet, theatre, television, and film. His works have been performed by major orchestras and ensembles throughout the world.

Daria Semegen (b. 1946, Bamberg, Germany) studied at the Eastman School of Music, Yale and Columbia Universities, and in Warsaw, Poland as a Fulbright Scholar. Her composition teachers include Samuel H. Adler, Robert Gauldin, Bulent Arel, and Vladimir Ussachevsky. She has received numerous awards in composition including two BMI Awards, Chautauqua MacDowell Colony, and Tanglewood fellowships, Fulbright Grant, two National Endowment for the Arts grants and commissions from the New York Cultural Council Foundation and the Columbia-Princeton Electronic Music Center.
BULENT AREL (b. Istanbul, Turkey, 1919) graduated from the State Conservatory of Ankara, with a diploma in composition, piano, and conducting. He taught harmony and counterpoint in the same conservatory and piano and history of music at the Teacher's College in Ankara. He was one of the founders of the Helikon Society of Contemporary Arts, and was the regular conductor of the Helikon Chamber Orchestra for four years.

He studied sound engineering in Ankara under Joze Bernard and Willfried Garret of the Radio Diffusion Française, both members of the Club d'Essai of Paris. This collaboration marked the start of his interest in musique concrète, which later led him to electronic music. From 1951 until 1959 he worked at Radio Ankara as recording engineer and then as the Musical Director. In 1958 he pioneered in the field of electronic music combined with conventional instruments, with Music for String Quartet and Oscillator.

In 1959 he came to the United States as the recipient of a Rockefeller Research Grant for work at the Columbia-Princeton Electronic Music Center and in 1961 worked as an assistant to Vladimir Ussachevsky. The next year, he was lecturer at Yale University, where he installed an electronic music studio. Back in Turkey between 1963 and 1965, he composed the score for a musical which ran in Istanbul for over a year. In 1969 he was appointed Associate Professor and Director of the Electronic Music Studio at Yale University.

In 1974 he was completing a work for viols and electronic sounds commissioned by the New York Consort of Viols under a New York State Council of the Arts grant. He also received a National Endowment of the Arts grant in 1974, for completion of a large-scale piano work for pianist, Robert Miller.

He has composed symphonic works, chamber music, including For Violin and Piano (1966) recorded on CRI SD 264, and music for solo instruments. Of his many electronic works is Stereo Electronic Music No. 2 recorded on CRI SD 268.

The composer writes:

"Mimiana II: Frieze was commissioned by the Mimi-Garrett Dance Company. The choreography was completed some time before the musical score was composed. My general impression of the dance was of early Egyptian reliefs in which the human faces are seen in profile, while their torsos are facing outward. The dance gave me the feeling of a completely ritualistic procession consisting of slow and deliberate dancers' movements. Except for a few contrasting short bursts of fast, active sequences, the dance never lost its hypnotic character.

"In the musical score, all the sounds are electronically produced. Coincidently, the composition reflects some tonal feelings. From the middle part of the score, where the 'pure sounds' or sine waves are used, micro-tones are introduced and begin to give a descending character to the previously existing pitches by very gradually shifting the pitch structure downward — creating an intentionally blurred pitch relation.

"I restricted my sound colors and articulations only to those which would reflect the feeling of the dance. The MIMIANA II: FRIEZE musical score was composed and realized at the Columbia-Princeton Electronic Music Center in 1969."