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oeuvres/works/opere

<u>Sonoriferous Loops</u> , for flute, trumpet, double-bass, xylophone, marimba, percussion, two-channel stereo tape, 1964, 14'	MCC MPeC
<u>Non Sequitur VI</u> , for flute, violoncello, harp, piano, two set of percussion, two-channel stereo tape, 1966, 13'30	MCC MPeC
<u>Plot for Percussion</u> , for solo percussion, 1967, 7'30	MCC MPrC
<u>Touch and Go</u> , for solo percussion, 1967, 10'30	MCC MPrC
<u>Stalks and Trees and Drops and Clouds</u> , for solo percussion, 1967, 7'30	MCC MPrC
<u>Infraudibles</u> , composition of and with computer-synthesized sounds on tape, 1967, 8'30	MCC MPeC
<u>Mutatis Mutandis</u> , composition for interpreters, 1968, open duration	MCC MPrC

textes/writings/testi

BRÜN, Herbert "CHAOS AND ORGANIZATION." <u>Institute of Contemporary Arts Bulletin</u> 166, London 1967. 8-11	GMT
----- "FROM MUSICAL IDEAS TO COMPUTERS AND BACK." in <u>THE COMPUTER AND MUSIC</u> , Harry B. Lincoln, ed., Cornell University Press, Ithaca, 1970. 23-36	GMT

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cont.

- GMT
 "INFRAUDIBLES."
 in MUSIC BY COMPUTERS, Heinz von Foerster et
 James Beauchamp, ed., John Wiley and Sons, New York,
 1969. 117-121.
- GMT
 "MUTATIS MUTANDIS."
Numus West 4, 1973. 31-34.
- GMT
 "MUZYKA I INFORMACJA."
Res Facta III, Krakow, 1969. 172-191.
- GMT
 "PROBLEME DER VERSTÄNDIGUNG."
Hifi Stereophonie 6, Karlsruhe, 1973. 587-590.
- GMT
 "TECHNOLOGY AND THE COMPOSER."
 Interpersonal Relational Networks, Heinz von
 Foerster, ed., CIDOC Cuaderno 1014, Cuernavaca
 (Mexico), 1971. 1-25. La Revue Musicale 269-269, 1971.
- GMT
 "... TO HOLD DISCOURSE, AT LEAST WITH A COMPUTER..."
Guildhall School of Music and Drama Review, London,
 1973. 16-21.
- GMT
 "SUBSTITUTE OR ANALOGY?"
Nutida Musik 7, Stockholm, 1965-66. 27-31.
- GMT
ÜBER MUSIK UND ZUM COMPUTER.
 G. Braun, Karlsruhe, 1971. 121p.

activité/activity/attività

a) Supported by the Research Board of the University of Illinois, the School of Music, and the Center for Advanced Computation (CAC), I have designed and constructed a composer-computer interface which will allow me to enter the hitherto inaccessible realm of composition in precise wave form (in contradistinction to the existing techniques of approximating desired sounds with fairly suitable waveforms).

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Due to problems with the delivery times of some hardware, and due to substantial changes in the computer installations at CAC, the project took longer than expected, but is now in its final "debugging" state.

b) Supported by the Research Board and the School of Music, I have used the DCL Computer IBM 360/75 and the Calcomp Plotter for research in, and the composition of graphics which will stimulate and motivate interpreters and performers to use them as structural models for creations in their chosen mediums, music, dance, poetry, etc. By now the results of this work have accumulated texts and explanations, and a few publications.

MPrC

c) In conjunction with the above mentioned projects I have begun to develop some formalisms by which I hope one will be able to describe musically significant waveforms and graphically significant configurations of line segments and shapes; and also some formalisms that deal with the transformational properties of either a waveform or a visual configuration. Encouraged by some colleagues in the departments of Mathematics and Electrical Engineering, I call them, with trepidation, possible premises for an "arithmetic" of waveforms and line configurations, that may, in turn, be the groundwork for a contemporary theory of composition. Not being a mathematician, I will need much time and effort so that the result be a respectable presentation of the matter.

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biographie/biography/biografia

Born 1918 in Berlin, Germany, studied at the Jerusalem Conservatory of Music and with Stefan Wolpe and Frank Pelleg. Further studies included work at Columbia University, NY. From 1955-61, in addition to his activities as a composer, he conducted research concerning electro-acoustics and electronic sound production in regard to their possibilities in the field of musical composition: Paris, Cologne, Munich. During this period he also worked as a composer and conductor of Music for the theatre, gave lectures and seminars particularly emphasizing the function of music in society, and did a series of broadcasts on contemporary music. In 1963 he came to the School of Music of the University of Illinois as Research Associate, primarily to do research on the significance of computer systems for the composition of music, and is presently an Associate Professor of Music there.

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