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University of California, San Diego-La Jolla

oeuvres/works/opere

3-S stereo tape, 1972 — MCC
for electronically-processed string textures realized at Cal. Inst. of the Arts

(untitled) live electro-acoustic performance, 1973 — MCC
the computer output three scores for three synthesizer performers which directed the processing of source tapes

Mass Colligation 1 stereo tape, 1973 — MCC
computer-generated score which was realized in the Analog Studios, Cal. Inst. of the Arts

Mass Colligation 2 stereo tape, 1974 — MCC
computer-generated score which was realized from source tapes gathered at: WHA Studio one, Madison, Wisconsin, Le Centre Américain Studio, Paris, and the Analog Studios at Cal Arts, where it was realized

(prototype) stereo tape, 1975 — MPeC
compositional model for a B6700 ALGOL program, with synthesis by the computer. The mode of synthesis was an ALGOL program for automated granular synthesis which writes (at an average density) 3000 NOT records to the B6700 MUSIC V, per minute of sound

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programmes/programs/programmi

MC2 (Jan. 1974) MCC
NOVA BASIC (interactive), Data General NOVA computer - teletype output, Cal. Inst. of the Arts, Valencia, California.
MC2 is an autonomous compositional program based on various stochastic functions. The program is historical in that data output is analysed, which alters parameter values for the stochastic functions, which are updated at each internal state of the program. The functions interact with one another in one-to-one and many-to-one relations. The output on the teletype is both numeric and graphic. This output is organized into a score and approximated in an electro-acoustic studio.

PLFKLANG (Jan. 1975) MCC
Burroughs B6700 Ext. ALGOL, Burroughs B6700 computer (cards, disk, tape, line printer files used), University of California, San Diego at La Jolla.
PLFKLANG is a program bound to the FORTRAN MUSIC V system at UCSD. PLFKLANG generates NOT records for sound spectra at a mean density of 3000 NOT records for each minute of sound. Each NOT is an extremely short event of an individual frequency, an individual amplitude, but having a fixed duration (20 ms), and a fixed envelope (an interpolation between a Gaussian curve and a long pulse). The waveshape of each "grain" is variable in all degrees between a sine and a band-limited pulse wave. A composer specifies points, lines, clusters and masses of grains, each grain's values computed separtely with an efficient stochastic procedure, then the grains are processed by MUSIC V passes 2 and 3, where they are computed to an accuracy of 16 bits, rescaled to 12 bits, and output to the D/A at the Center for Music Experiment. Timbral spectra can result from 3 phases of the program: 1, varying the bandwidth of a section or mass of grains to a random cloud of grains, 2, by organizing sections of grains into simultaneous, yet stochastically varying clusters of time-dependent bandwidths, or 3, by varying the waveform of the grains by some time function.

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cont.

FLX (spring 1975)
Burroughs ALGOL B6700 computer, UCSD, La Jolla
FLX is a compositional program based on many of the concepts of systems theory. Each variable represents a compositional organizing principle. A foreground system computes values for these variables. The variables are represented in the program as stochastic automata. Analysis routines monitor the output data of the automata and control a background process of interaction among the automata. The program thus composes a continously varying compositional logic, through its control of the networks of relations among the compositional organizing principles. Finally, a translation routine gathers all the data concerning the values for the organizing principles, and translates these fuzzy properties into 2 types of output data: input to computer synthesis program PFKLANG, and score data to be used in the studio remix process (spatial characteristics).

activité/activity/attività

As a composer, my primary interest is structural music.
My orientation signifies a reorientation from:
Composition-as-object to: Composition-as-praxis in a two-fold sense. First, compositions come to embody praxis in-time; i.e., a composition represents a set of dynamic relations. Second, compositions are embodied praxis; i.e., a composition comes to represent the processes mediating its production.
As a listener, I more and more hear algorithms.

biographie/biography/biografia

1951	Born Cleveland, Ohio USA
1971	first work in electroacoustic music, U. of Illinois Experimental Music Studio
1971	Studio Synthetist (ARP system) Full Compass Sound, Madison, Wisconsin
1972	attended Formalized Music Seminar w/Xenakis, Bloomington, Indiana
1972-74	study composition at Cal. Inst. of the Arts, Valencia, CA
1974-75	study computer music composition at UCSD, La Jolla, CA

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