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oeuvres/works/opere

Tape VII, from Gilgamesh ("Journey to the Gods")
Utrecht, 1973

Sonic Landscape N° 3, 1975
a spatial environment with four computer-synthesized
sound tracks, Vancouver, 1975
Trigon, 1975, for trio and quadraphonic tape
(tape & live parts), Vancouver, 1975

textes/writings/testi

TRUAX, Barry
"THE COMPUTER COMPOSITION SOUND-SYNTHESIS PROGRAMS
POD4, POD5 AND POD6."
Sonological Reports 2, Institute of Sonology,
Utrecht, 1973. 57p.

"COMPUTER MUSIC IN CANADA."
Numus West 8, 2, 2, Spring 1975. 17-26.

"GENERAL TECHNIQUES OF COMPUTER COMPOSITION
PROGRAMMING."
Numus West 4, 1973. 17-20.

THE POD PROGRAMS FOR SOUND SYNTHESIS AND COMPOSITION
AT SIMON FRASER UNIVERSITY.
Dec. 1974, 23p. N.d., dactylo.

"SOME PROGRAMS FOR REAL-TIME COMPUTER SYNTHESIS AND
COMPOSITION."
Interface 2, 2, Dec. 1973. 159-162.

activité/activity/attività

The POD family of programs are designed for real-time sound synthesis and interactive compositional work. They were first developed by the author at the Institute of Sonology, Utrecht, Netherlands during 1972-73, and have since been re-instated and extended at Simon Fraser University.

The synthesis method for the POD5 version employs fixed waveforms with amplitude modulation or two-channel output as options. The POD6 version, which has seen the most use, utilizes a real-time version of John Chowning's frequency modulation method of timbral synthesis. Although both methods are limited to monophonic real-time output, the complexity and richness of sound produced, particularly in the POD6 FM system with its time-dependent spectra, has rendered the programs interesting and useful to composers in Canada and the Netherlands.

In Utrecht, the system runs on a PDP-15 machine (24K), and in Vancouver on a Hewlett-Packard 2116 (16K), the original version having been designed for 12K. Sampling rates for the POD5 program are generally above 40K, and for the POD6 system about 18K in Utrecht, and 10K in Vancouver.

The compositional method involves the selection of sound objects (potentially synthesized sounds without specific pitch or loudness) to be distributed in a random, Poisson-determined frequency/time field whose density and frequency range are variable in time. Various performance variables realize the theoretical distribution in ways whose effects can be heard immediately upon specification. The compositional method operates at both the syntactic and sonic levels, the primary task of the user being that of defining the inter-relationship between the two.