

MUSIC SUBMISSION TO THE PRIX ARS ELECTRONICA 1991 from DAVID EAGLE
Category: INTERAKTIVE KUNST

[Brief Statement on role of computer technology]

Using MAX, a graphic object-oriented MIDI programming environment for the Macintosh and SampleCell (16-bit internal sampler) *Traces* for flute and computer addresses issues involving the interaction between a live performer and a computer. This includes interpretation and expression, improvisation and composition and brings together aspects of artificial intelligence, psychoacoustics, performance practice and communication. Please see program note.

[Program note]

***Traces* for Flute and Computer (1991)**

David Eagle

Traces is an interactive composition. My aim was to create a performance context which explores a wide range of levels of interaction between the performer and the computer/sampler by developing various roles for the computer. These are:

- 1) Musical instrument - performed remotely by the flutist through musical gestures and signals, and foot-pedal triggers. In this role the computer is amplifying and enhancing the flute.
- 2) Interpreter - who listens to the flute and responds with repetitions and variations of material heard.
- 3) Improvising musician - making decisions about musical parameters and creating musical phrases in response to the flute following pre-programmed generative processes.
- 4) Composer - creating original musical material by enacting a series of algorithms. By analysing what it is doing, it can then make changes based upon its musical experience as an instrument, interpreter and improviser. In effect, it begins to develop an individual musical personality, with a catalogue of characteristic musical phrases and processes of development. In performance, it can be influenced by interruptions from the flutist, which alter the course of the music.

Within the piece, these four approaches are used interchangeably. The composition was realized in the University of Calgary Electroacoustic Music Studio on a Macintosh IICx computer using MAX, an object-oriented graphic MIDI programming environment and SampleCell, an internal 16-bit sampler. (D.E.)

Duration: 10:15

[BIOGRAPHY: David Eagle]

David Eagle was born in Montréal in 1955. He studied music at McGill University, the Staatliche Hochschule für Musik, Freiburg and the University of California, Berkeley. In recent years, he has cultivated an interest in computer applications to composition and improvisation and has realized pieces at CCRMA and UC Berkeley's Center for New Music and Audio Technologies (CNMAT). His music has been performed and broadcast internationally, including the Holland Festival, ISCM World Music Days, Canadian Electronic Music Festival (Sweden), International Accordion Festival (France) and Computer Music 90 (Tokyo). Since 1990, he has been Professor of Theory and Composition and Coordinator of the Electroacoustic Music Studio at the University of Calgary.