A Bridge From Nowhere (8'44")

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Keywords: Electroacoustic Music, John Cage, Clarinet, Quadraphonic, Use of Space, MaxMSP.

Abstract: *A bridge from nowhere* is an electroacoustic work written for clarinet and quadraphonic electronics. It is a tribute to John Cage's music and philosophy.

1. Introduction

John Cage is a revolutionary figure for music of all time.

A bridge from nowhere is inspired by his masterpiece *Lecture on nothing*, a brilliant musical prose composed in the '50s. It is written with the same rhythmic structure used in his compositions, such as, for example, Sonatas and Interludes.

The basic idea is that

a structure is like a bridge from nowhere to nowhere and anyone may go on it: noises or tones, corn or wheat. Does it matter which? (...) We really do need a structure, so we can see we are nowhere. (J. Cage, *Lecture on nothing*, 1959)

The structure of the piece evokes the text of Cage in its division into five sections. This is made clear from the stolid fragment that, as in the prose, is repeated at the beginning of each section and also from the apparent 'randomness' of every musical gesture. The central section is *the bridge* that brings together the whole composition, which ends with a new beginning, like *a bridge to nowhere*.

The composition is quadraphonic, and the acoustic sounds of the clarinet are opposing the electronic noises, sometimes reworking of monodic characteristic timbre of the instrument, sometimes totally synthetic.

2. Algorithms and strategies

Most of the sounds are coming from clarinet and are acquired ad hoc on the basis of the composition's purposes.

Each sound is subjected to various editing processes, especially warping, shuffling, convolutions, delays. All the processes I've used are related to my idea of composition: I'd like to have an apparently random content into a defined structure, given by the prose.

I formed complex sounds without any harmonic relationship. Changing the envelope of each sound, I meant that synthetic sounds have a typical profile of the sampled clarinet sound and clarinet loses its shape to conquer another one.

Many of the sound events are severely distorted, or deprived of their transitional attack, to create events more or less prolonged with an attack transient artificially slow. On some of these I applied a new transitional character, quick and impulsive, using the spectrum of the resonance area, commonly less rich in harmonics.

I used other editing processes to create events for which the original material is used as a modulating vocoding algorithm of spectra as rich as square waves and triangular ones, to enrich the sonic palette of timbres and the synthesis possibilities.

The continuous bands that characterize the central section are constructed from pink noise, with an excess of power for the low frequencies, molded with the convolution of other waveforms, especially clarinet events.

I used a delay in multiple sections, also with feedback, with the possibility to modulate or maintain constant the delay time. Clarinet and electroacoustic scores took place simultaneously, evaluating new performance practice for the clarinet, while respecting the structural features of this instrument. Every gesture of the clarinet is a *bridge* between the traditional writing and a new form of sound.

2.1. Space

Space is not mainly focusing on the forward axis, but tends rather to a wide distribution of the composition, also with moments of prevalence of exclusive zone or with obvious sudden contrasts.

I used MaxMSP to create an algorithm that allows me to manage the mapping of each sound event by creating random trajectories and rotations.

The space of the live clarinet, instead, is limited to the front stereo external to quadraphonic.

2.1.1. Spatial description/Diagram for the performance



Fig. 1. Diagram for the performance (1, 2, 3, 4 speakers).