

## Artistic Concept

*Éclats de voix* (Voice Fragments) was made from only one kind of sound source: the voice of an eleven years old child. The sounds used were all onomatopoeia extracted from comics. The voice was recorded in a digital sampler Akai S-1000. The first step in the transformation process has consisted in making some micro-editing of the recorded sound sources and by keeping some significant excerpts. This step was done with the system software of the S-1000 (version 2.2) -- which allows to stretch and shrink the samples, change the sampling frequency and so on -- and also with a sound transformation software (Turbosynth™ by Digidesign), which works on a Macintosh™ computer.

After having done some loops of very short durations — between a few milliseconds and one or two seconds — some short sequences were recorded and transferred to the digital system SYTER (SYnthèse en Temps Réel) of the Groupe de recherches musicales de Paris. This system is particularly interesting because it offers the possibility, for a specific transformation like the resonating filters for instance, to specify two (or more) different set-ups of the parameters, and then to go from one position to the other in real time with the simple movement of a mouse where all the parameters are adjusted accordingly.

These sounds and sequences were then resampled within the S-1000, grouped by sound family objects and recorded on a multitrack tape recorder. The sampler was driven by a sequencer software, (Master Tracks Pro™ from Passport Design). A very particular attention was given to the spatial treatment of the sound with the Lexicon 300 digital processor whose parameters are completely modifiable in real time by MIDI controllers. So, reverberation, delay or phase times were modified into the digital domain in a way that the composition of the sound space can be as precised as the other musical parameters.

The version presented here is a stereo «reduction» of the work which was first composed for a fourteen loudspeakers diffusion. So, each one of the separate track is assigned to a different loudspeaker. That means that the space of the sounds and the musical polyphony are clearly improve. The piece doesn't have to be mixed because each one of the different sounds of the multitrack is exactly the one that will be presented in the concert hall. Two versions of the multitrack tape exist. The first one is intended to a «front» orchestra of loudspeakers and the second one, to a «circular» orchestra of loudspeakers (see the Figure 1 and Figure 2). The work was composed with an orchestra of loudspeakers in the studio so the idea of composing the space like the other musical parameters was constantly put to the test by listening to the results.

## Equipment used:

Hardware: Sony TCD-D10 PRO (a portable DAT recorder), Akai S-1000 (a sampler), Macintosh IIfx (a personal computer), SYTER (real-time computer), Lexicon 300 (a digital reverb), Fostex G-16S (a sixteen tracks recorder with Dolby S).

Software: Master Tracks Pro (by Passport Design), TurboSynth (by Digidesign), SYTER (by GRM).