

"The Gates of H."

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The Gates of H. uses as the source-sound a sample of a folk piece, sung by a Bulgarian female choir. The idea of using a already existing piece of music for a new composition is to put a new structure above the source-piece creating a tension between the original structure of the source-sample and the structure generated by algorithms. It is the mixture between to different time concepts, where the listener understands sometime the algorithmical, sometime the source sound layer sometime both layers in its structure. The source sound has the function to be the known reference which is then restructured by the parameter constellations of the algorithms.

The dynamic modifications (crescendo/decrescendo), forward or backward, the new time position of the sound and the durations, together with the pitch conversion, create this masking effect to the source sound, so that the image of a voice is sometimes clear and recognizable, but sometimes not. The same masking effect influences the harmonic structure of the piece in that the tonal character of the Bulgarian folk song interferes with the pitch structure of the algorithms. This technique switches the recognizable image between the source sound and the algorithmic image.

The algorithms use one central idea: one or more values increase or decrease in different speed between two mobile limits. These values are then applied to different parameters. The first sound for example is generated by a pitch bouncing up and down, while the time value bounces forward and backward between the beginning and the end of the sound. In the case several (up to five) different values decrease and increase the values are used one after each other.

The formal structure of the piece is determined by accents, continuous dynamic levels and ramped dynamic levels. The composition itself starts with two extreme dynamics. While the first 340 seconds have only very soft, very loud levels (subito ff or subito pp) and accents the following part develops ramped dynamic parts with long crescendi and decrescendi. These dynamics are augmentations of the beginning dynamic switches, where a fast crescendo is perceived like an accent or subito ff.

Throughout the piece the accents get together to more and more complex accent-groups which grow up to structures audible in second 818-850 of the piece, where two transpositions of the developed accent group are sounding.

The sound processing techniques used in the piece were restricted to sampling-rate conversion and pointer operations. The piece was entirely created digitally on CCRMA's (Center for Computer in Music and Acoustics, Stanford University California) NeXT-Net using Bill Schottstaedt's Common Lisp Music synthesis language, Rick Taube's Common Music score/composition language, and Paul Lansky's RT mixing program.