À propos des fractales et du chaos dans les études pour piano de György Ligeti

Amalia BLĂNARU[1, 2]

Abstract: *The Piano Etudes composed by György Ligeti in the last two decades of life represent the synthesis of his musical thinking, thinking that integrates mathematical concepts. In the present study, we set out to investigate the presence of these mathematical concepts in the Piano Etudes and their role in the evolution of the form of these works. We started with existing researches, but also the composer's writings and interviews. We have associated them with their own analyzes in an interdisciplinary approach. There are similarities with Koch's curve, Gaston Julia's fractal, Cantor's function, but also Lorentz's butterflies. The fractal configurations appear as structural or generating elements of the integral form. The intuitive use of mathematical concepts is an integral part of Ligeti's compositional thinking and is one of the features of the stylistic unity of he's creation.*

Key-words: *György Ligeti, Piano Etudes, fractals*

---

[1] Şcoala Gimnazială *Vaskertes*, **amaliablanaru@yahoo.fr**
[2] Affiliation, *Société Française d'Analyse Musicale* (SFAM)