
EVA KNOLL, Mount Saint Vincent University

THE HILBERT CURVE: ALGORITHMS, PROCESSES, INFLUENCES, RESULTS

According to founding members of the Concrete Art movement, its intention is to avoid re-producing nature and, instead, to embody abstract ideas in real, concrete form, in order to make the built environment more bearable. Mathematics is a fount of abstract ideas, some of which are primarily visual.

I have been making mathematically-based art for more than 30 years, and will discuss some of the algorithms and processes that I have used to design and produce artwork based on the Hilbert curve, a fractal that fills a square surface, to any desired density. Along the way, I will also present artwork by some of the artists who have influenced my work. A number of my pieces will be on display in the accompanying exhibit that will be shown at the 2013 CMS Summer Meeting.