

TILING (inglese)

My art work "72 Tilings, 1992" exhibited for the first time at the Venice Biennale in 1993, then at the MLAC Museum of the University of Rome La Sapienza in 1995, then at AAM gallery in 1997 (Christov-Bakargiev 1993, Lombardo 1993, 1994, Calvesi, Mirolla 1995, Briguglio 1997) and published in previous articles as well, was considered again. New automatic composition procedures of the 72 tiles were found. A floor of 40 cells (8 x 5) was tiled according to some different automatic procedures: Random, Rotations of columns and rows, Perfect disorder of 4 and 5 tiles, String with rotations and insertions, Perfect disorder of rotations. Results are shown and discussed on the light of the Eventualist Theory. (Lombardo 2012).

New coloured stochastic tiles, based on new shape-generative algorithms, were created. While the first coloured tiles exhibited in 1992-97 (Calvesi e Mirolla 1995, Moschini e Briguglio 1997) were drawn using the SAT shape-generative method (Lombardo 1986), the new coloured tiles, here considered, were created using a slightly modified RAN method (Lombardo 2003, 2007). The RAN method was used to maintain the minimum number of regions and the minimum number of colours in the single tile even if its complexity grows. New tiling compositions are shown as well (Lombardo 2013).

A new algorithm, named V-RAN, generating minimal 3-4-5-chromatic stochastic tiles was created. It was applied composing 24-cells floors, in two different styles: Finding Symmetries and Avoiding Symmetries. V-RAN can be applied to a n-chromatic minimal map, without altering the minimality. Floors composed with non minimal tiles generated using SAT method (Lombardo 1985) was compared to floors composed with tiles generated using the V-RAN method. Each method was employed both in Finding Symmetries and in Avoiding Symmetries compositions. Results are shown and discussed. (Lombardo 2014).

My work "72 Tiles, 1992" was here considered again and new compositions were found. A floor of 24 cells (6 x 4) was tiled according to some different automatic procedures.

The tiles A10R and E20C were used in 4 compositions named: Finding Symmetries, Avoiding Symmetries, Strong Symmetries and Random. To investigate if symmetric compositions (good gestalt) are aesthetically and perceptually preferred to non symmetric compositions (background perception), symmetric compositions and non symmetric compositions were compared. Some aesthetic problems were raised and discussed on the light of the Eventualist Theory. (Lombardo 2015).

Stochastic tiles, as described in previous articles (Lombardo 1994, 2012), make floors (pattern compositions) with continuous drawings, whether the employed tiles are all the same or different. Although the floor drawings are always continuous, different tile compositions make different floor images. A minimal square floor with 4 tiles can generate many different shapes both in the crossings or in the sides of adjacent tiles. Here we analyze all possible combinations of the crossing-shapes, and all possible combinations of the side-shapes. Some minimal compositions of all different crossing shapes, some minimal compositions of all different side-shapes and some other aesthetically relevant compositions are shown as well. (Lombardo 2016).

As in previous articles (Lombardo 1993, 2016) stochastic tiles can form nonsense shapes both on side connections of 2 tiles or on crossing connections of 4 tiles. The shapes formed on side connections were named (I) and the shapes formed on crossing connections were named (X). Tile compositions without repetitions and rotations of (I) or (X) shapes are minimal. Minimal compositions including all possible (I) or (X) shapes are complete. Only minimal and complete compositions of (I) shapes were here considered and some remarkable minimal compositions with different stochastic tiles were created. New compositions using schematic tiles and real stochastic tiles taken from previous publications (Lombardo 1993) were shown. (Lombardo 2017).

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