

Simon Schießl

# Digital Cubes

*Digital Cubes* is an aesthetic “dominoes” game played with a set of electronic cubes. Each of the cubes’ surfaces is 8 cm (about 3.15”) square, and each cube contains a high-performance 16-bit microprocessor. On the top surface is a display consisting of 8 x 8 light diodes. Externally invisible infrared interfaces on each of the four vertical surfaces enable each cube to communicate with neighboring cubes without being physically connected to them.

When two cubes are placed side by side, they continually exchange data with each other, and the initially darkened displays on their top surfaces are activated. The light pattern they display symbolizes the flow of information in the cubes. The adjacent surfaces are its source.

One source alone generates uninterpretable information and thus random patterns on the display surface. It is only when the flows from two data sources are combined in one cube that the visual static sharpens into a decoded pattern and words become legible.

Each cube accommodates four terms, one per contact surface. Depending upon which vertical surfaces touch, their orientation, and the number of connected cubes, combinations of the following word groups scroll across the displays “marquee” style: *evil, good, smart, dumb; happy, sad, bored, excited; big, small, plenty, nothing; now, never, yesterday, tomorrow.*

The aesthetic quality results from the dynamic reaction of the light pattern in real time to the respective position of the cube and from the element of discreteness that is inherent in the form of the macroscopic pixel and in the jerky depiction of the light pattern. The cubes themselves are building blocks—i.e. pixels of a modular image. They in turn contain 8x8 picture points, 64 chunky light diodes each measuring 10 mm square.

Translated from the German by Mel Greenwald

