

The background of the cover is a complex, abstract composition of numerous thin, overlapping lines in various colors including black, white, blue, yellow, and red. These lines flow and curve across the page, creating a sense of dynamic movement and depth. The lines are most concentrated in the lower half of the cover, where they form a large, swirling shape that resembles a stylized letter 'S' or a similar organic form. The overall effect is one of intricate, generative design.

GENERATIVE DESIGN

Visualize, Program,
and Create
with Processing

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These thirty-five works by various media artists, designers, and architects active in the field of generative design are intended to serve as a representative overview of the subject and as a source of inspiration.

Basic

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In this section the basic principles of generative design are demonstrated using the four main aspects of design: color, shape, type, and image.

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The appendix is a kind of reflection. In it we summarize our thoughts about the changing design process and the new possibilities generative design offers. We link these thoughts with our sample programs and give a perspective on future developments.

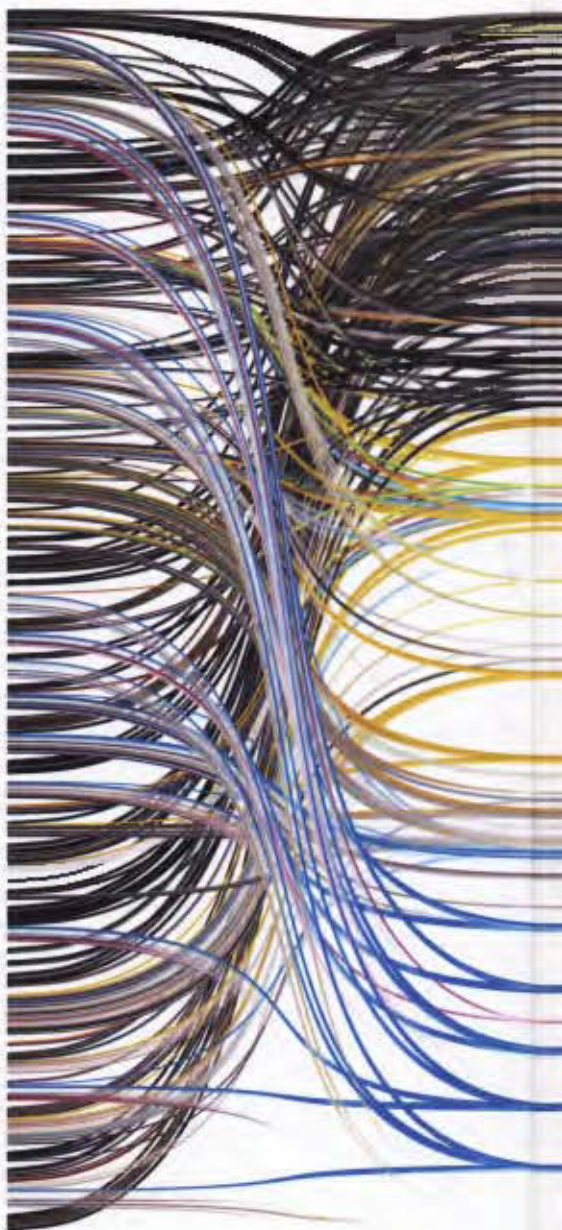
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Generative design is a revolutionary new method of creating artwork, models, and animations from sets of rules, or algorithms. By using accessible programming languages like Processing, artists and designers are producing extravagant, crystalline structures that form the basis for everything from patterned textiles and typography to lighting, scientific diagrams, sculptures, art installations, films, and even fantastical buildings.

GENERATIVE DESIGN opens with a gallery of thirty-five illustrated case studies, drawn from the work of graphic designers, sculptors, architects, and other visual artists, including Stefan Sagmeister, THEVERYMANY, Janne Kytönen, Casey Reas, Karsten Schmidt, and Marian Bantjes.

A step-by-step how-to manual follows, guiding users through specific, practical instructions for creating their own visual experiments by combining simple-to-use programming codes with basic design principles. A further handbook of advanced strategies provides visual artists with all the tools to achieve proficiency. The entire volume is cross-referenced to a companion website where source code for examples can be downloaded and users can share their own artwork, code, and techniques. GENERATIVE DESIGN is the definitive showcase, study, and reference for this exciting emerging field.

3D
agents
algorithms
art
architecture
art
attractors
color
corporate design
data graphics
drawing
font outlines
grid
image
image control
image colors
image filter
installation
interpolation
line structures
mesh structures
meshes
noise and randomness
organic shapes
oscillation figures
pixel values
Processing
recursion
shape
text
tree diagrams
typography
visualization
www



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