What Is Generative Design? Learn how people and computers can co-shape things that humans alone could never imagine.

The Old Way
Designers employed computer as passive tool.

Human
= Computer
= Design

The New Way
Computer and designer/engineer work as one creative unit.

How is generative design used today?

1. Algorithms analyze huge amounts of data, then calculate new parameters.
2. Design parameters and computer data are communicated through software.
3. Another computer generates a design from the parameters based on the data.
4. Designers can also make their own design algorithms that are then applied to the computer.

Artifex
A cartoonish robot of a computer can be easily edited in CAD programs to create unique and intricate designs.

Under Armour
Engineering tools allow designers to create complex and functional 3D models that would be impossible to design by hand.

How will it change the world of design?

- Numbers: Numbers can finally express what has been considered impossible.
- Creaivity: Creativity is no longer limited by our imagination.
- Sustainability: Sustainable design is now possible through algorithmic design.
- Art: Art is now accessible to everyone, thanks to algorithmic design.

Source: Redshift