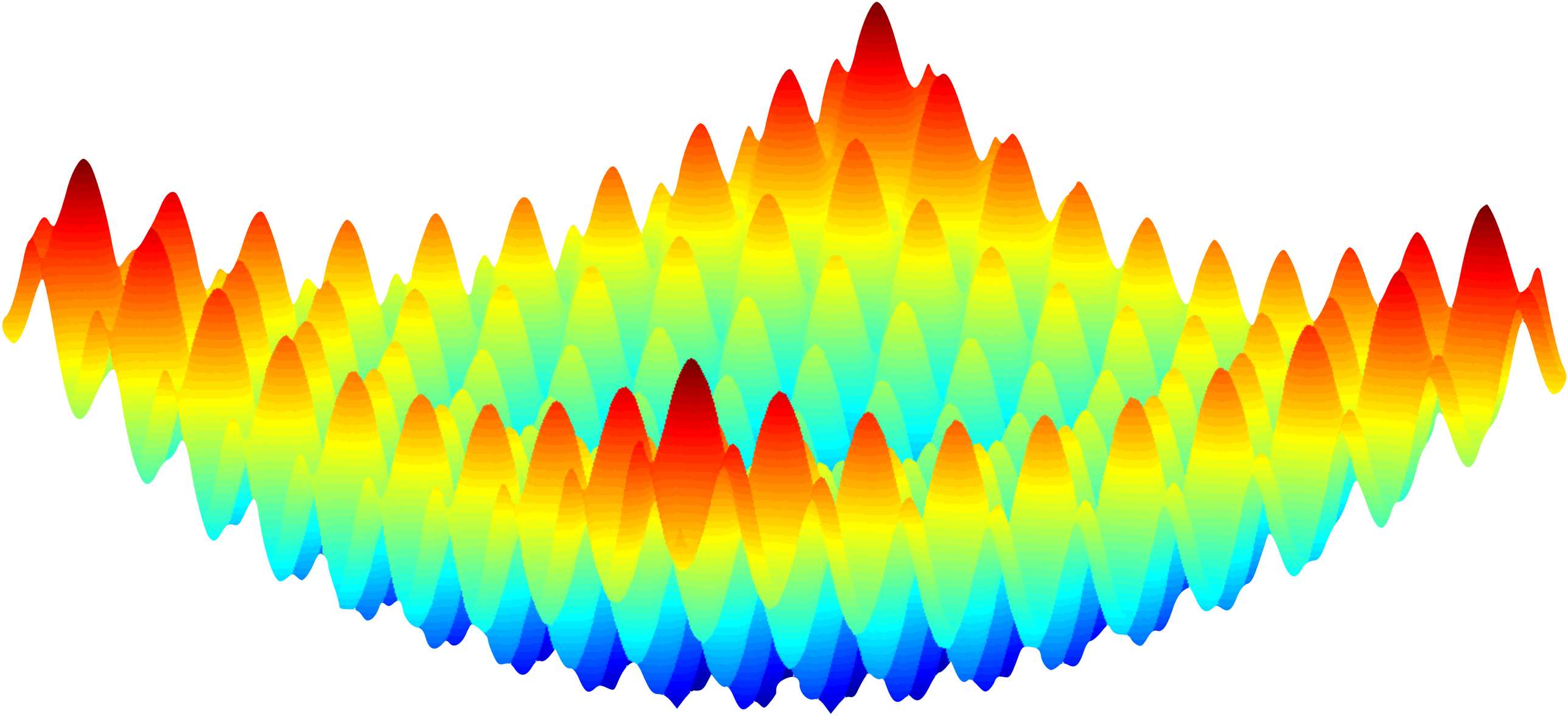


Traditional optimization workflows use a ‘bottom-up' approach.
Like that of the NASA ST-5 antenna — where a design space must be defined by the user and then searched by a genetic algorithm or similar optimization function.

optimize

output

validate

define

Dreamcatcher uses a 'top-down' approach.
Here, higher level goals are specified. This is the inverted differentiator between design optimization and Dreamcatcher's exploratory design synthesis process.

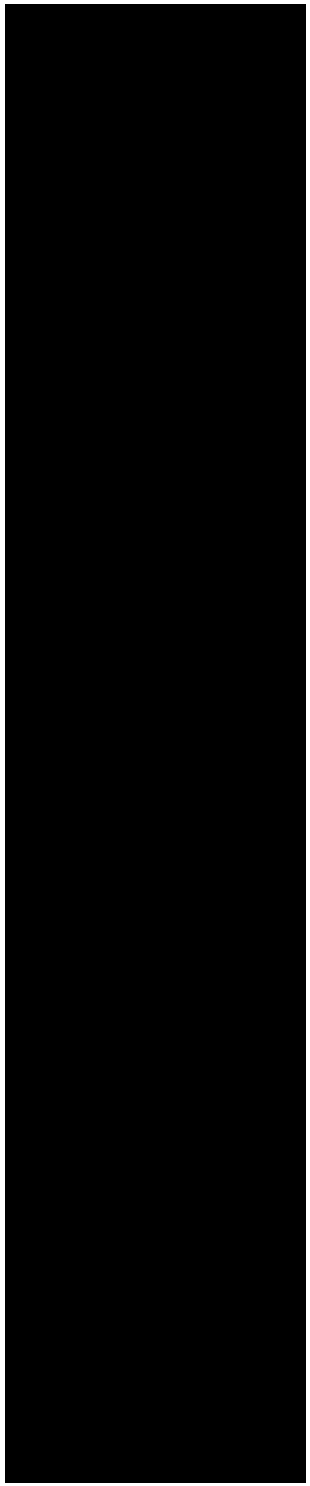
generate

define

explore

output

Instead of imposing a simulated environment onto a designed object . . .



We designed an environment to simulate all possible objects.

traditional optimization

behavior-based generation