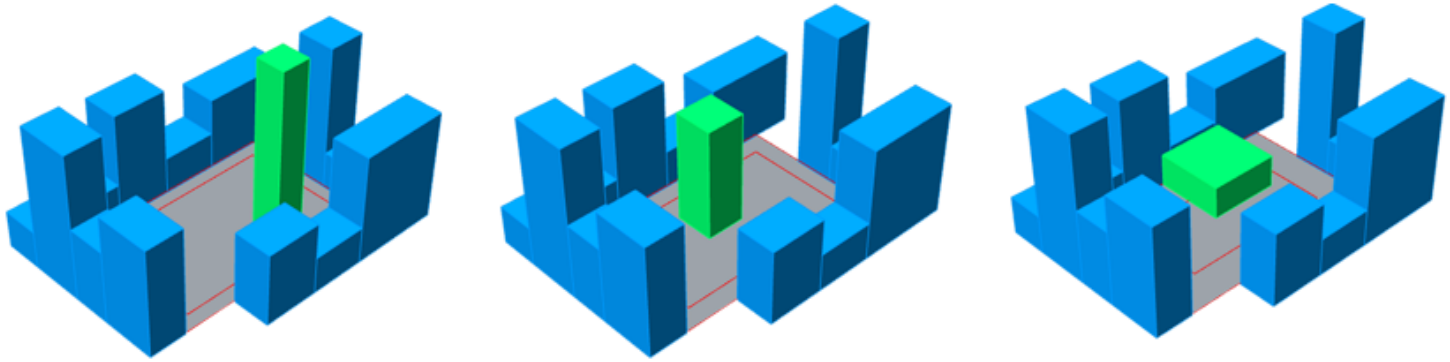


Generative Design

in Rhino 3d

Generative Design
In Rhino 3d

In this video

- What is it?
- Building a script
- Setting up a study
- Running a study
- My thoughts

Files are on github

https://github.com/aussieBIMguru

Revit 2021

Note: Requires the **AEC Collection**

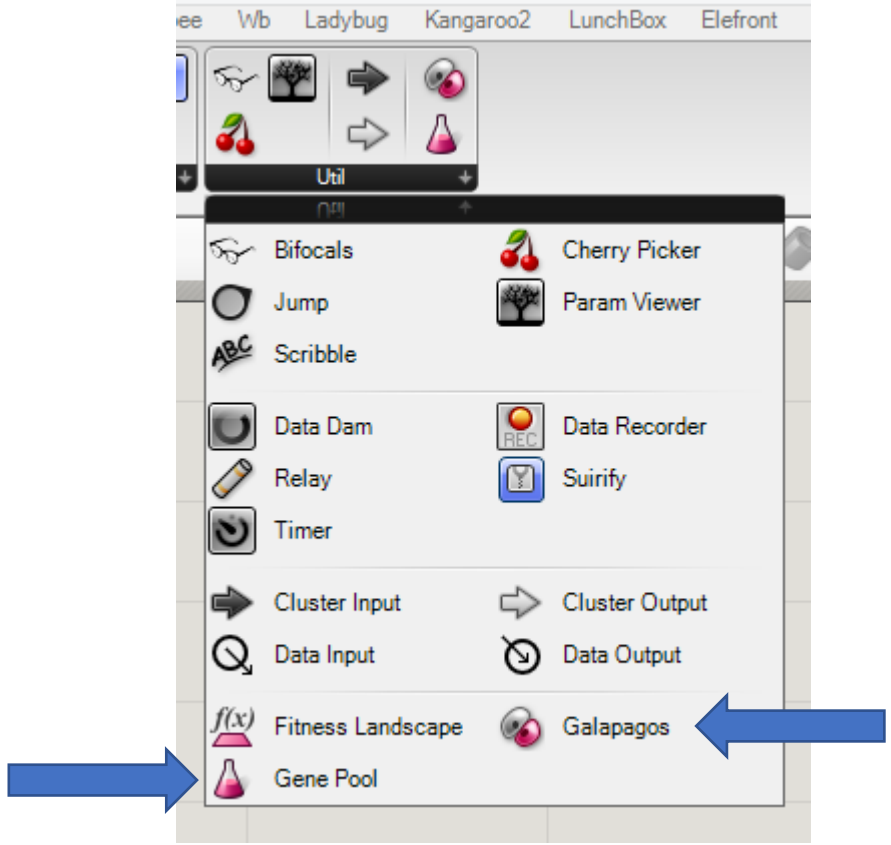
Rhino Inside

Rhino 3d Solvers

Proving Grounds

Free Generative Design – A brief overview of tools created by the Grasshopper community

Galapagos


Wb
Ladybug
Kangaroo2
LunchBox
Elefront
Util
Bifocals
Cherry Picker
Jump
Param Viewer
Scribble
Data Dam
Data Recorder
Relay
Suirify
Timer
Cluster Input
Cluster Output
Data Input
Data Output
Fitness Landscape
Galapagos
Gene Pool

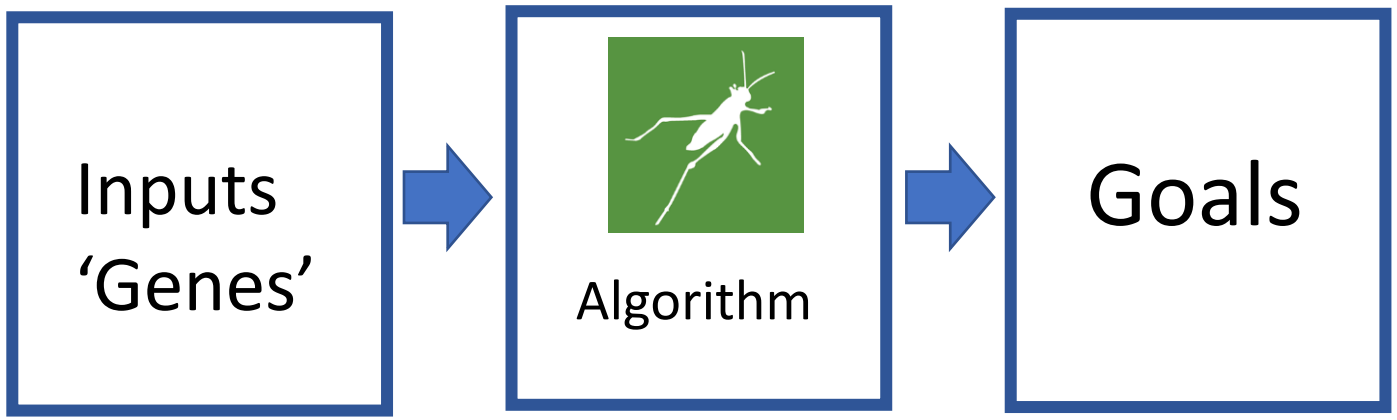
Galapagos

Evolutionary solving at work

Domed Intermediate Saddle Back

General Principle

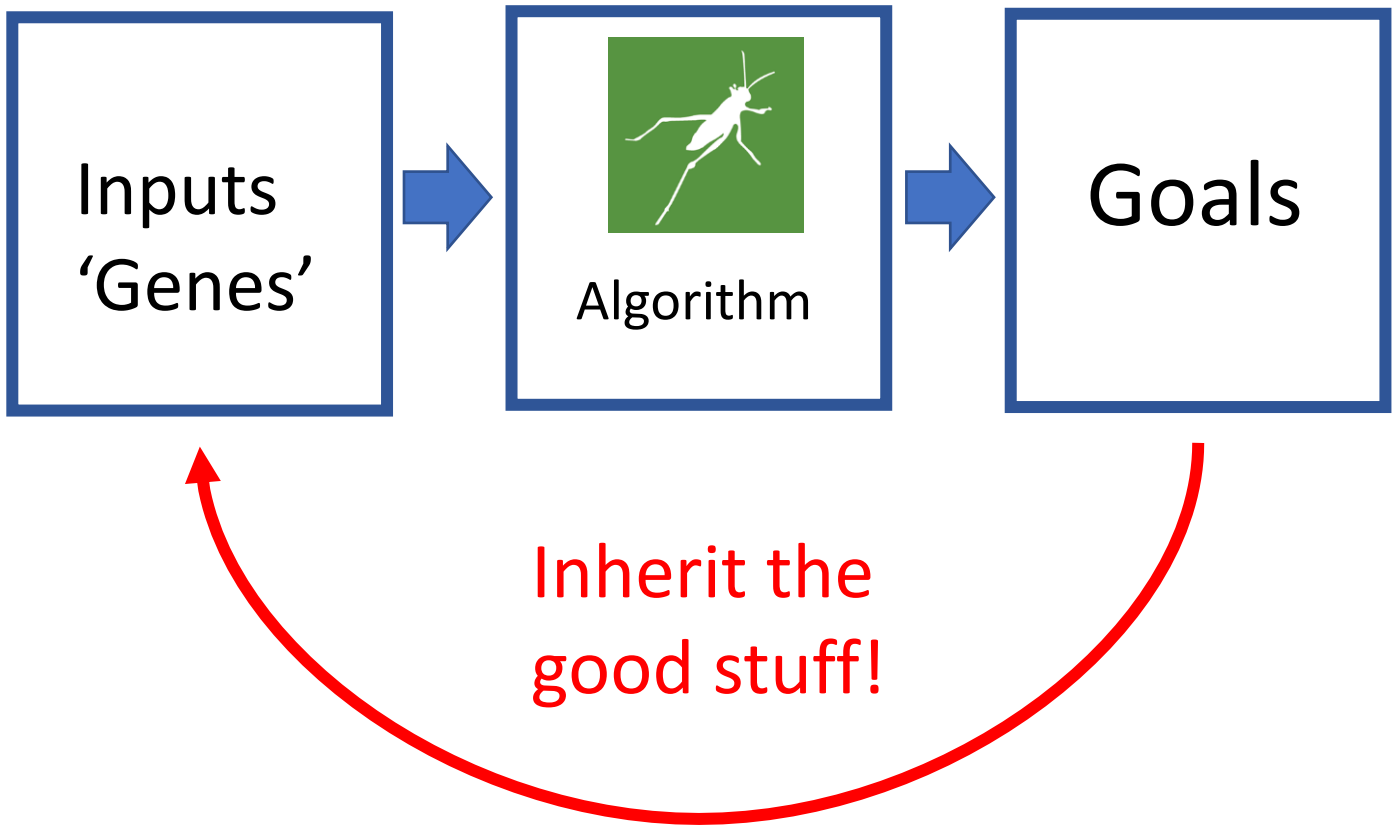
We randomise our inputs,
and **re-run** our study



We collect measurable **goals,**
usually what we call 'fitness'

General Principle

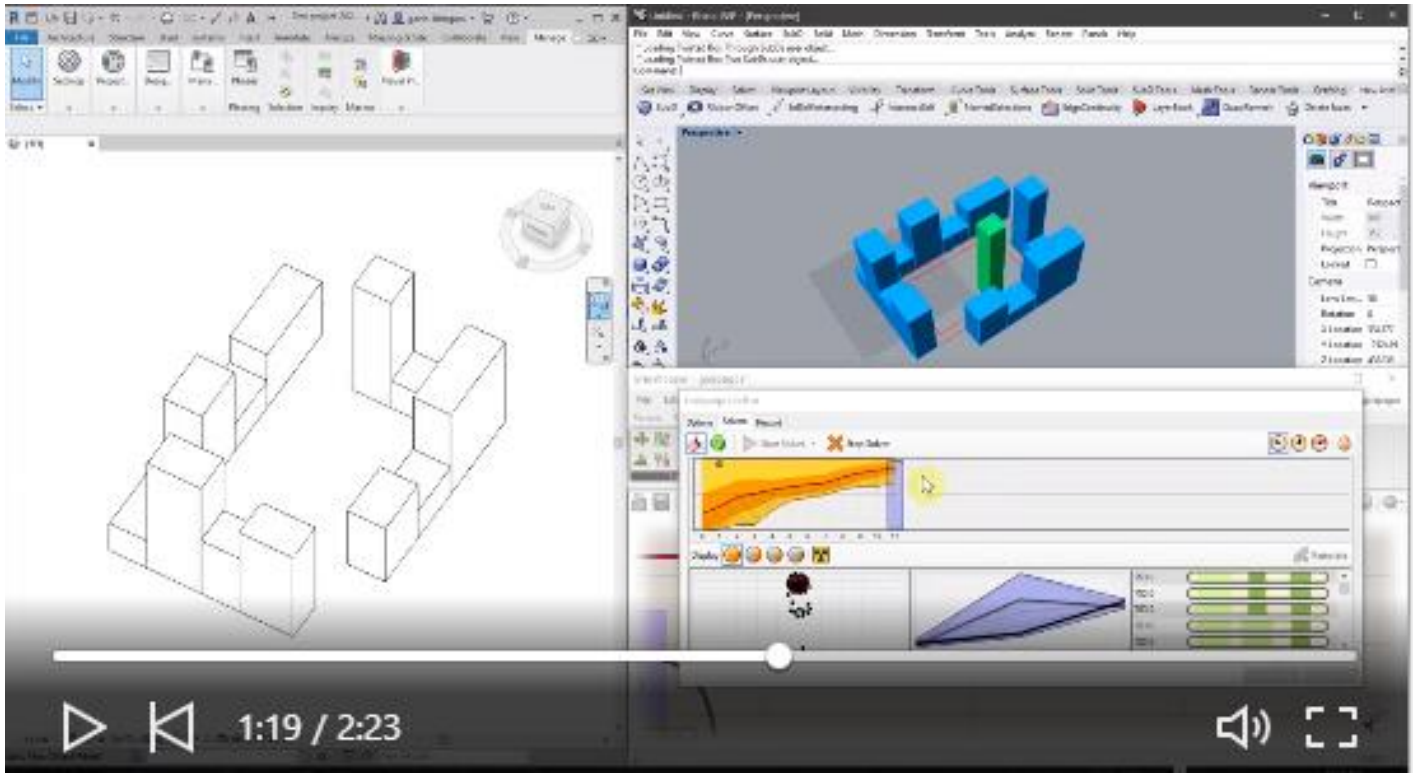
Future evolutions will **inherit** more successful **genes**



General Principle

Run 1 Run 100 Run 1000

Demonstration



My thoughts

The good

- Lightning fast
- Easy to set up, use and run
- Good gateway to other tools

The bad

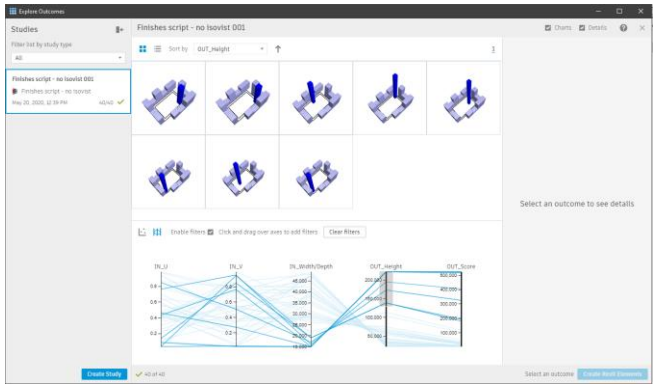
- Single goal of fitness
- Fairly random in approach

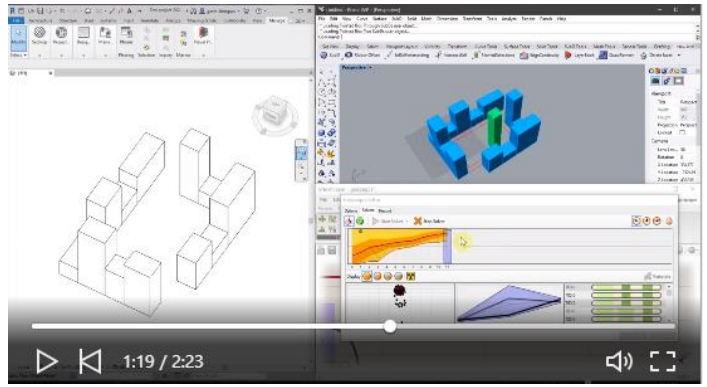
The ugly

- UI is not friendly for non-users
- Speed might scare designers

Future Videos

A quick side by side comparison.





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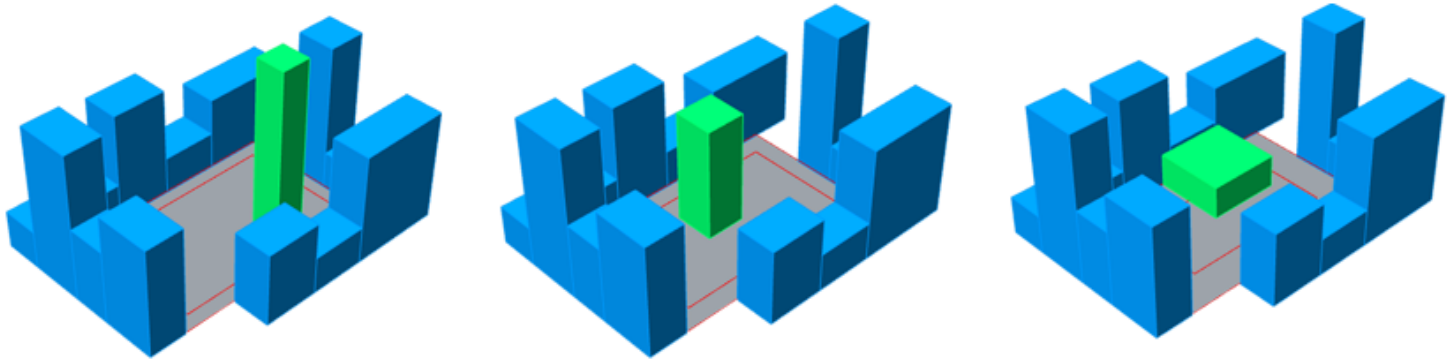

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