

The inhabitable forest_



the garden opening



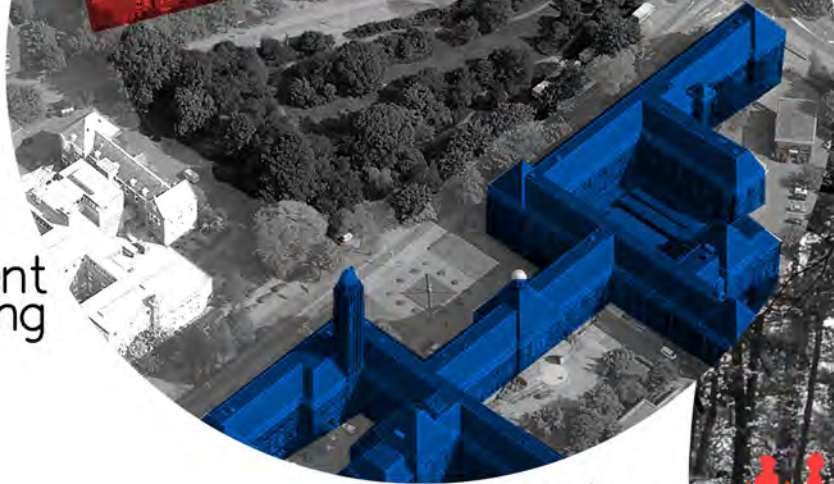
the atificial "forest"

Architectural objectives

science
centre



student
housing



arch
faculty

study spaces



cafe – lounge spaces



play spaces

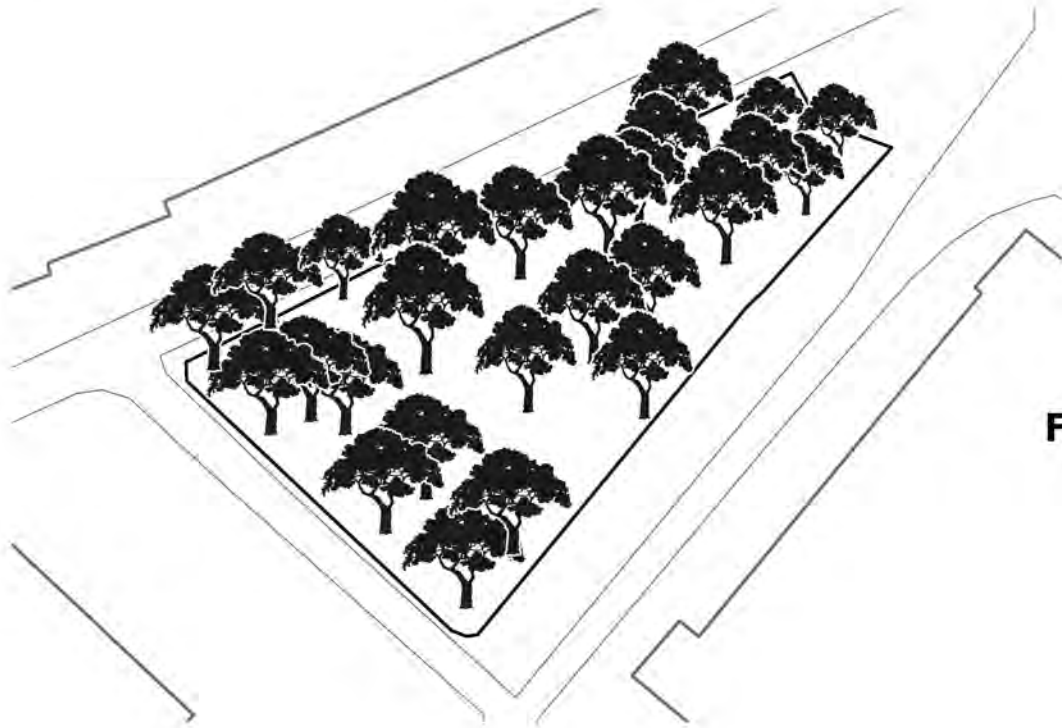


the artificial forest



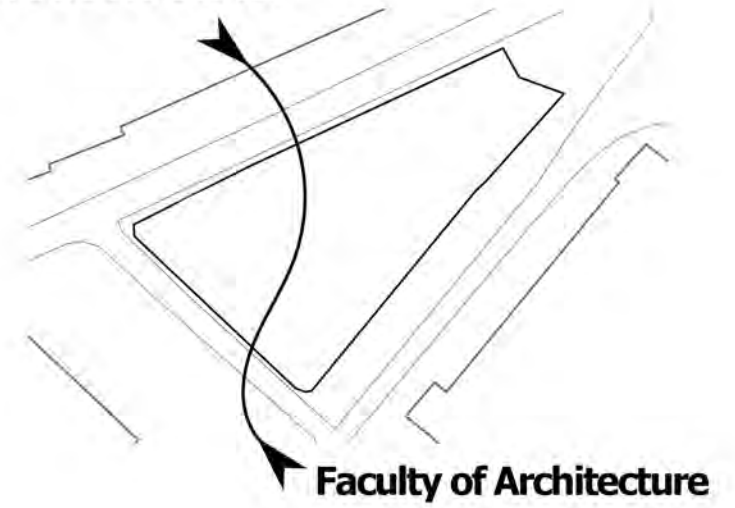
2. Site Analysis

Tree Analysis

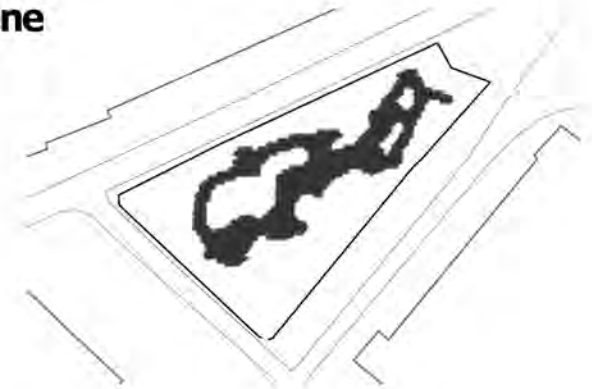


Connection

Delft Science Center

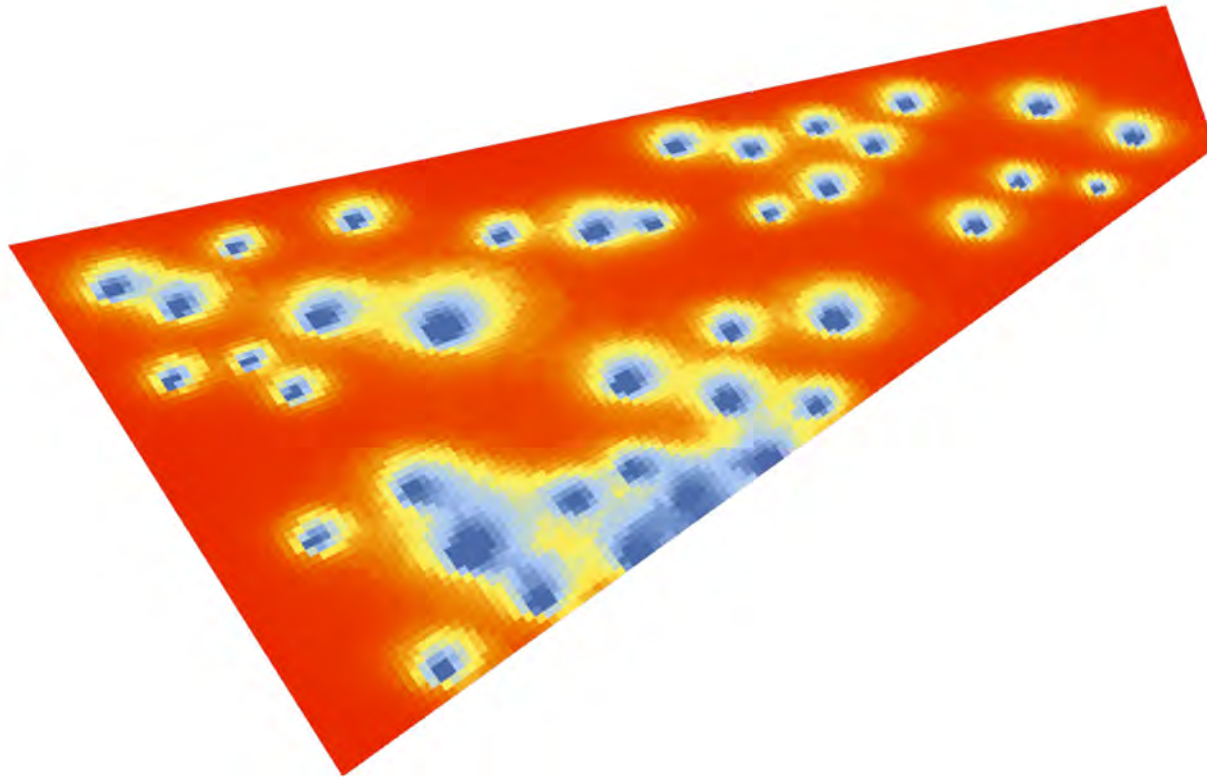


Free walking zone



Group 4: Ezgi, Georgia, Juin, Marvin

2. Solar radiation study



Much solar radiation



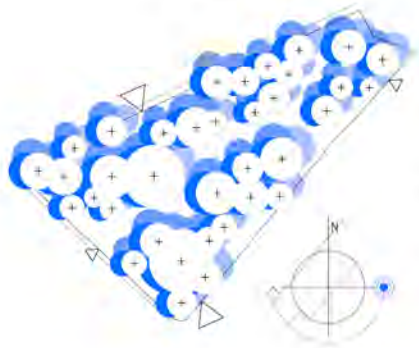
Little solar radiation



LadyBug

Computational design process_initial experiment

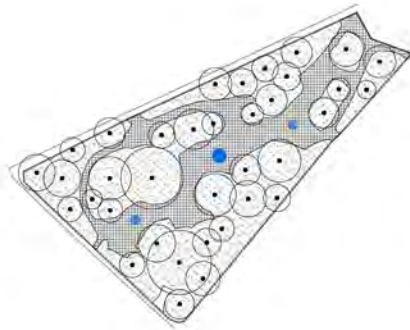
solar
radiation
analysis



geco

trees

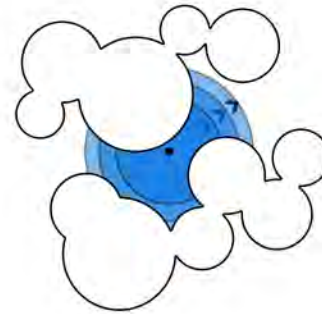
pavilion
location



galapagos

free
space
⊕
solar
radiation

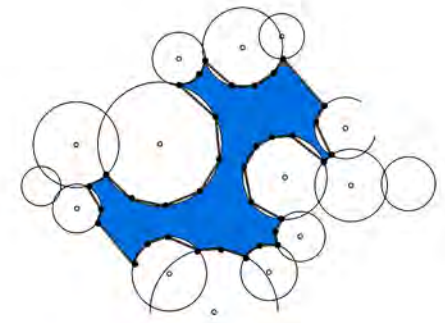
pavilion
area



hoopsnake

trees
area
⊕
program
requirement
400m²

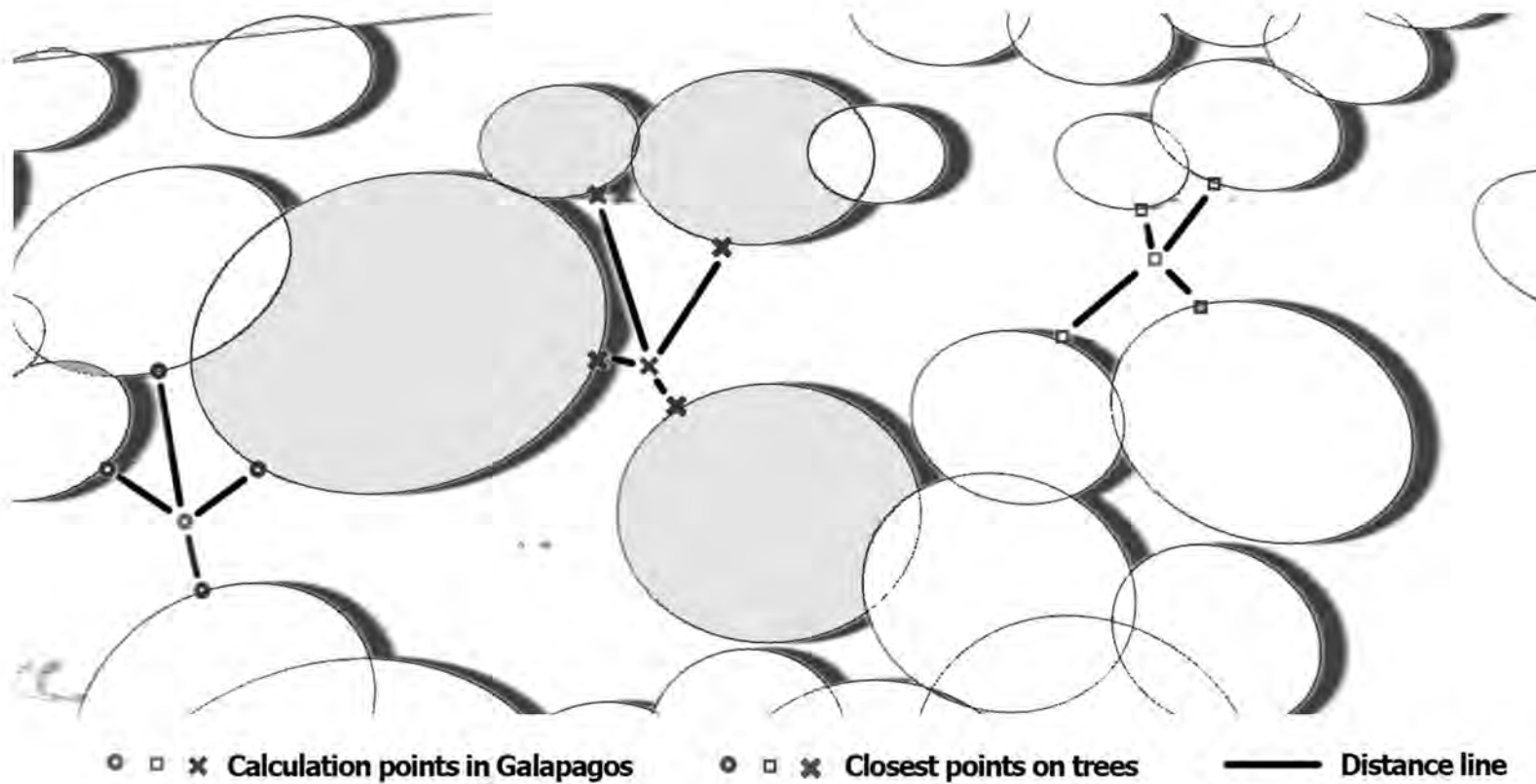
pavilion
outline



grasshopper

min/max
distance
between
points

Finding Pavilion Center



Galapagos



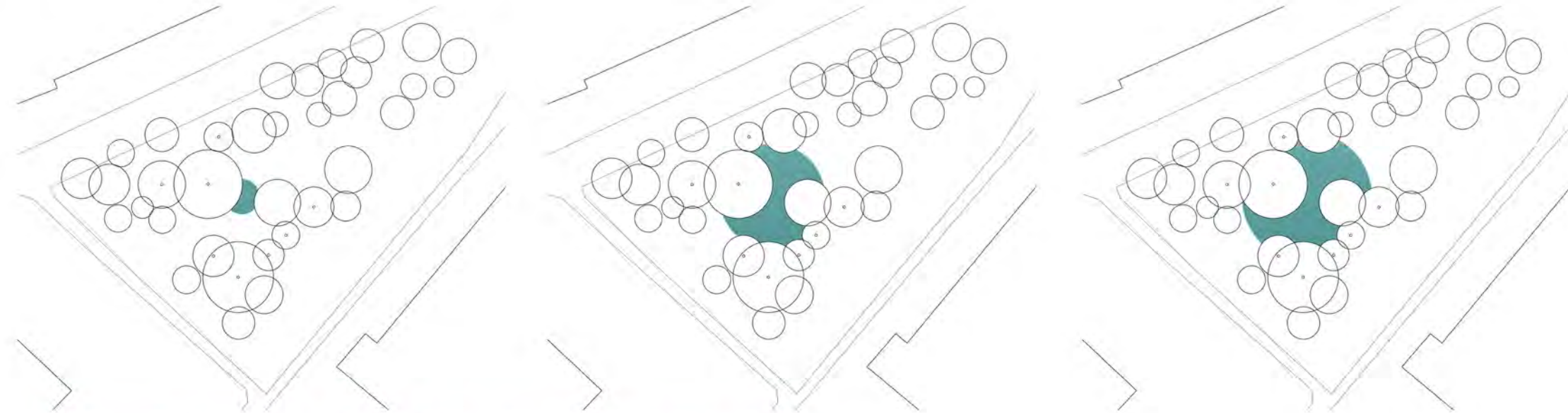
Move point over the site
(point can't be positioned
within a tree)

Calculate total
distance to closest 4 trees

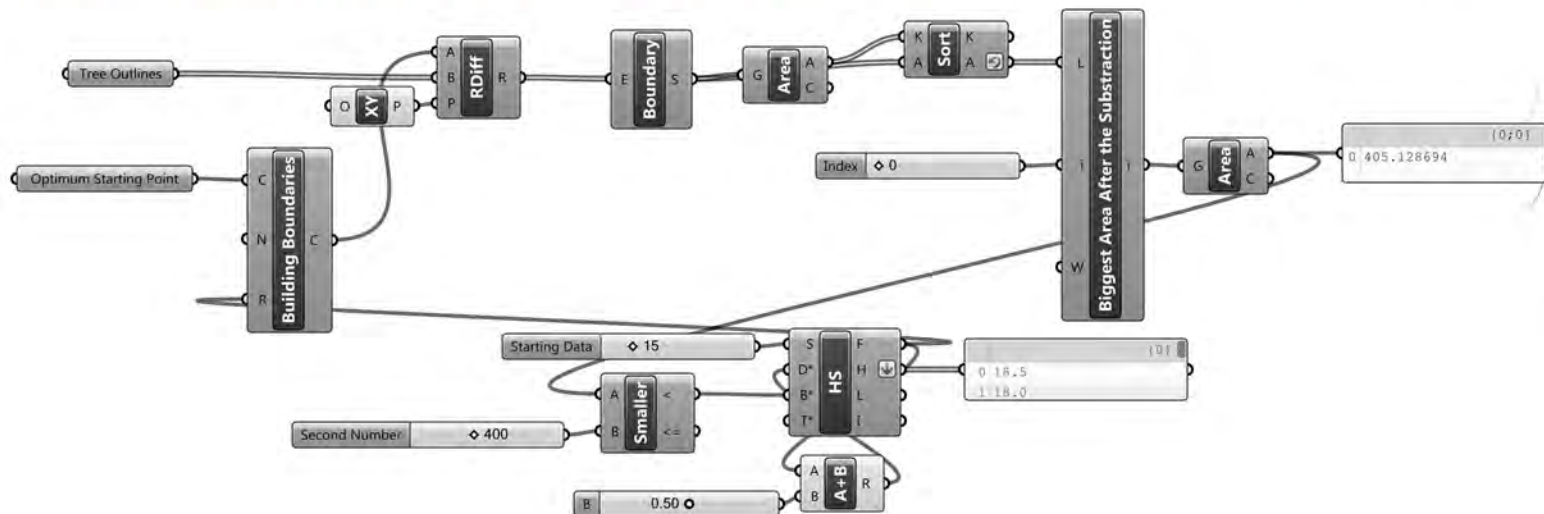
Position the point, where
the distance from the point
to the 4 trees is the highest

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meaning there is open
space to grow

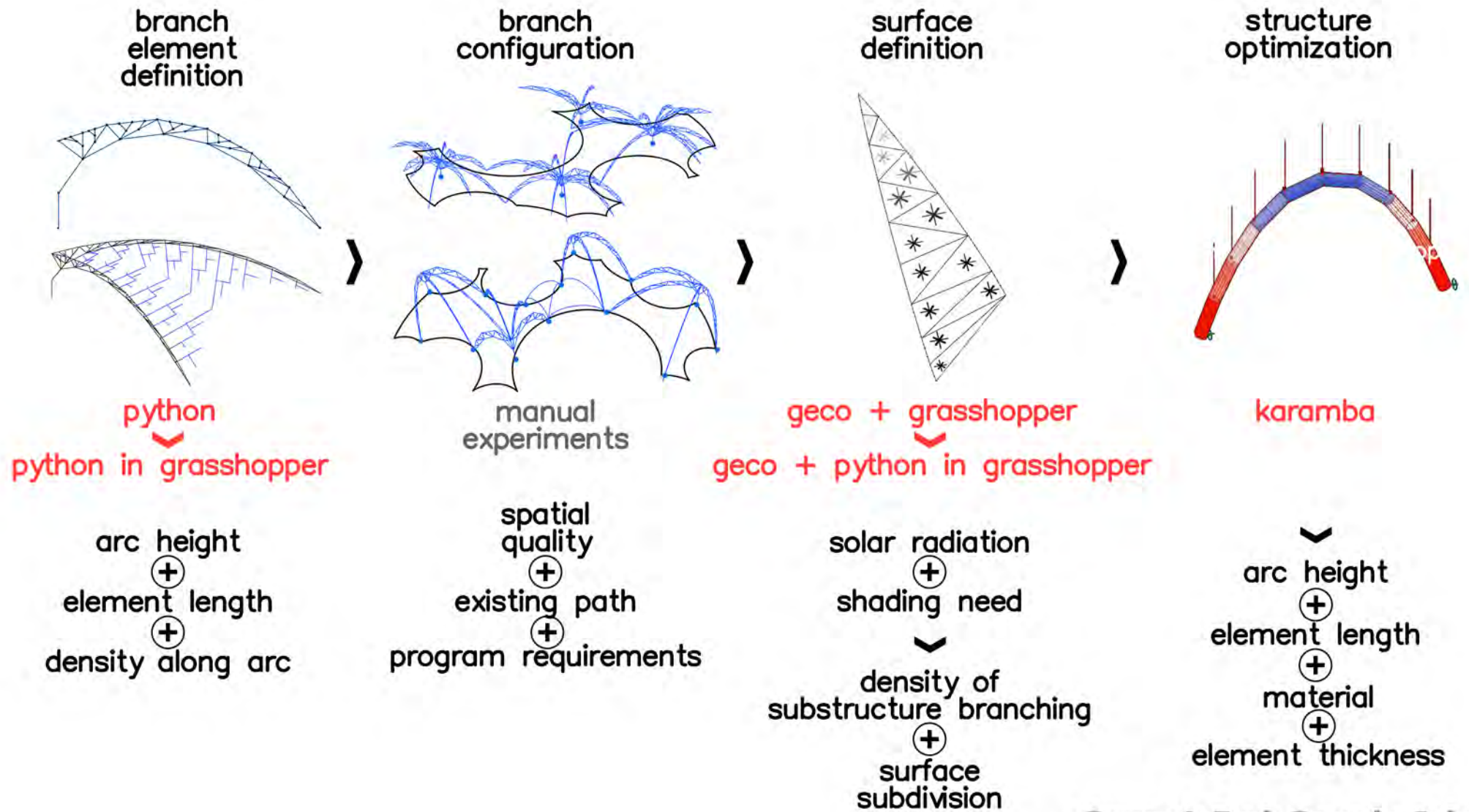
Pavilion Area Calculation



- . Pavilion starts growing from the optimum point as a circle.
- . Areas occupied by the trees are subtracted from this circle as they intersect.
- . Radius of the circle increases until the remaining part of the growing circle reaches 400sqm.
- . The loop is done by the help of Hoopsnake.



Computational design process_initial experiment



Generative system_iterative branching

INPUT

startpt = rs.GetObject("Get column startpoint")

groundpt = rs.GetObject("Get perimetre point")

h = rs.GetInteger("Get column height")

h_mid = rs.GetInteger("Get height at the middle of the arc")

