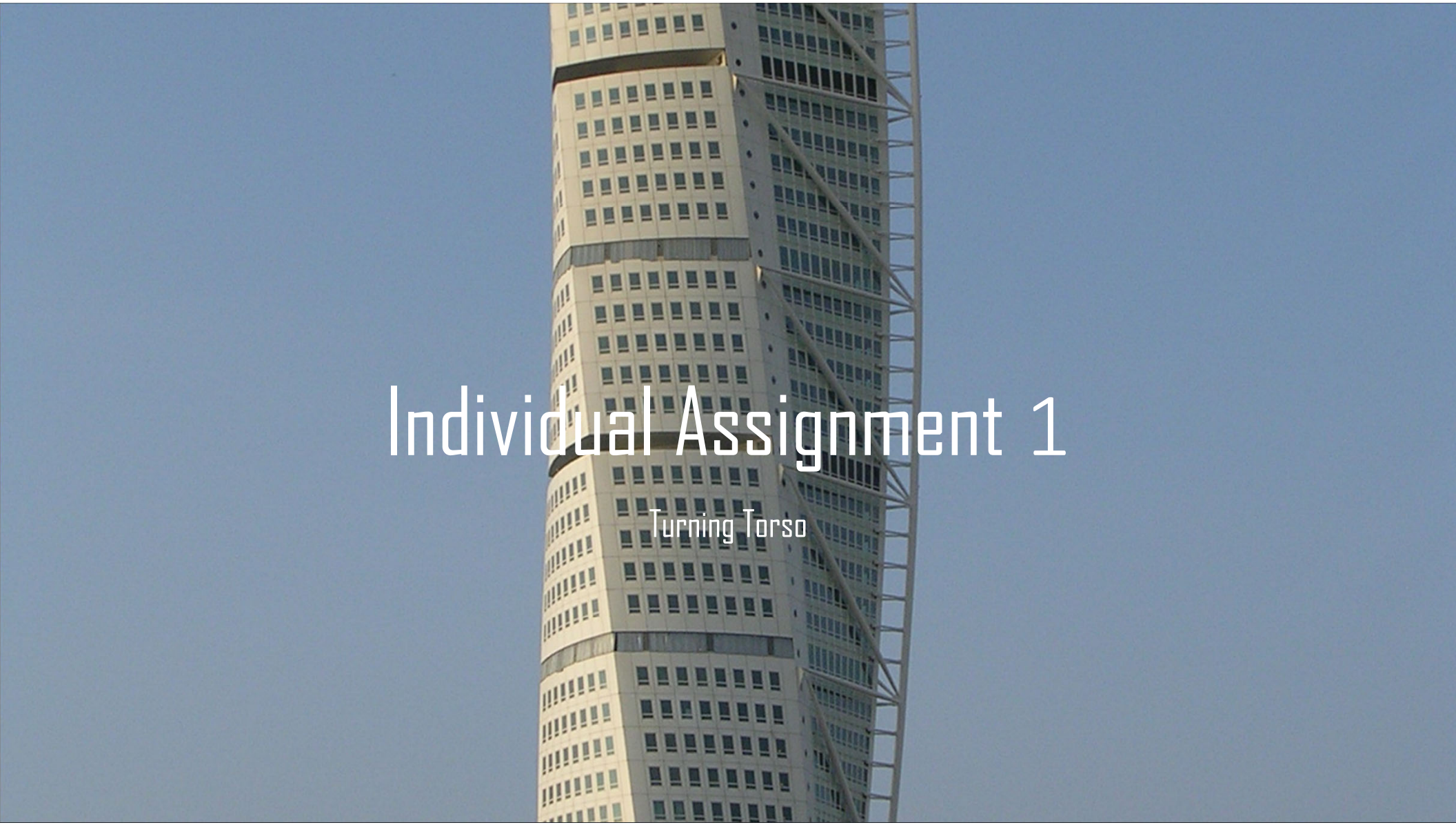
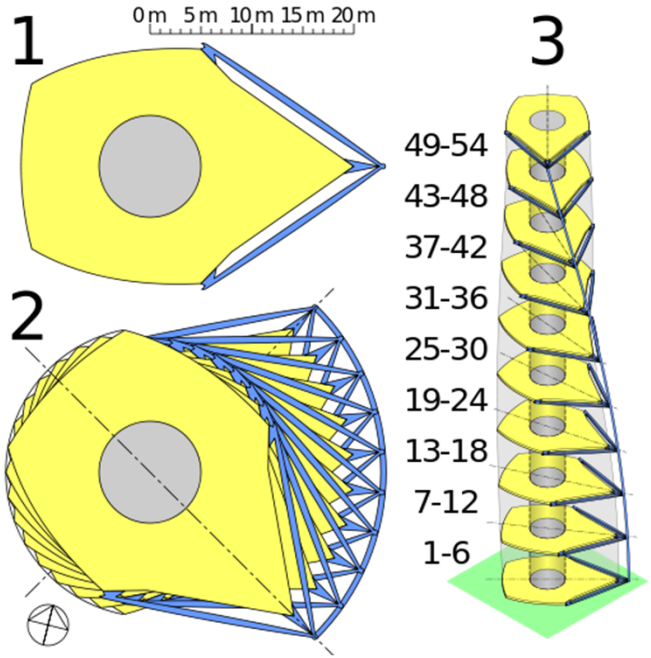


Individual Assignment 1

Turning Torso

The real turning torso

View from outside

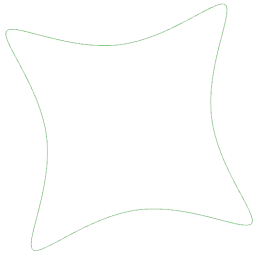


Floor plans and structure

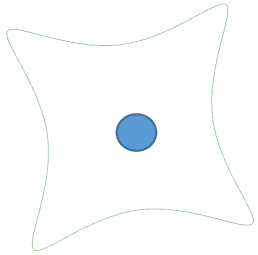
Parametric turning torso

Inputs

- A starting point that is also point of rotation.
- A choosen floor plan, closed curve och closed polyline. This can be referenced from Rhino or paramtrically controlled in Grasshopper



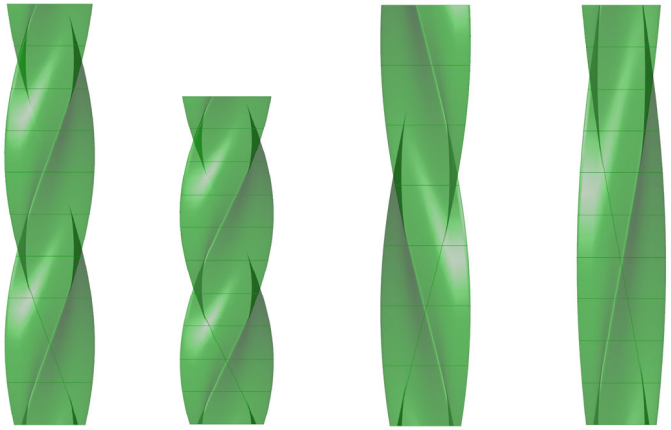
Floor plan profile in plan



Center point of rotation

Controls

- You should be able to controll the hieght of the tower, i.e the height is set through a parameter.
- How many floors
- The rotation angle



Notice: Tanken är inte att man skall använda komponenter som tex boxmorph, utan använda translationer(förflyttningar), rotationer likt de vi gått igenom dag 1 och dag 2

Useful components

Move

Vector 2Point (creates a vector between 2 points)

Divide curve

Loft

Rotate

Series

Line SDL(creates a line from a **S**tarting point in a certain **D**irection for a certain **L**ength)

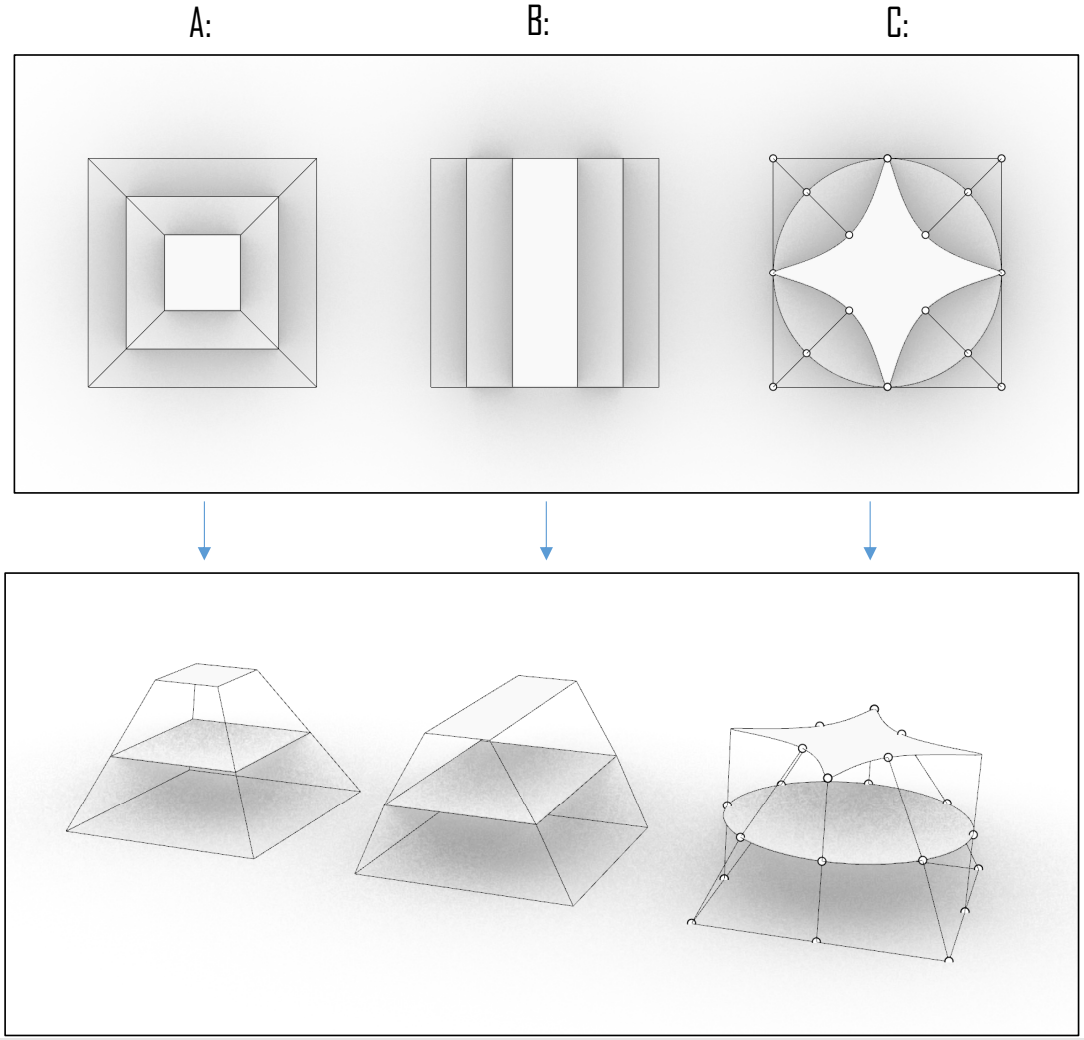
Extended features

Can you manipulate the geometry of the floor plans? Try using basic math without using built in components. (Do not forget to add the rotations to each floor).

A: Uniform Scaling

B: Tapering/Non-Uniform Scaling

C: Going from a Square base to a circle/star shape, or something else.



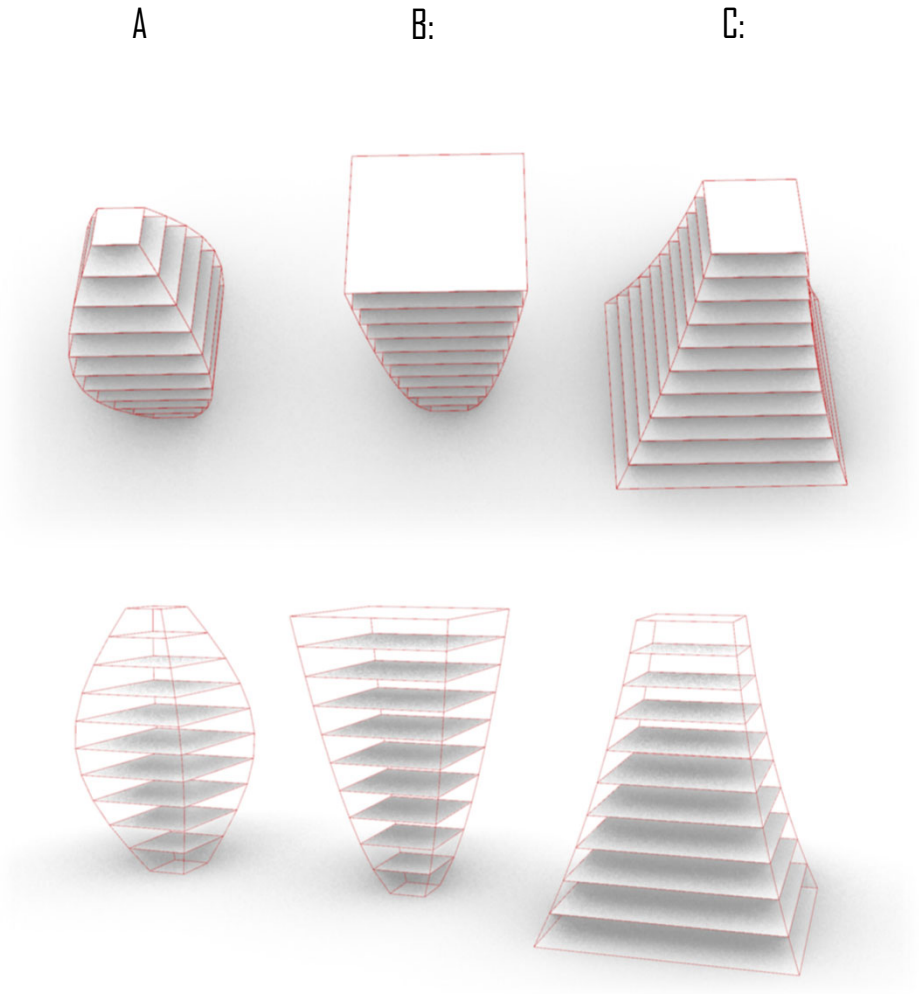
Extended features

Can you scale using a mathematical function?

A: Sine

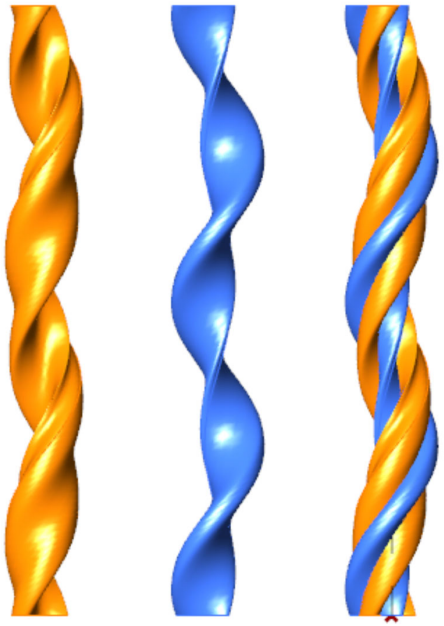
B: square root

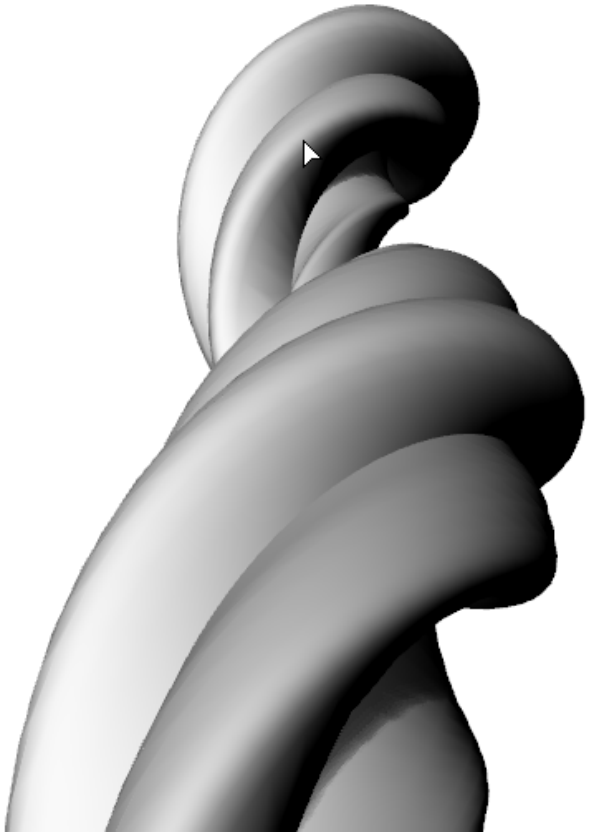
C: Exponiential growthm.



Extended features

Can you merge several designs/geometries into one?
Look at Boolean operations

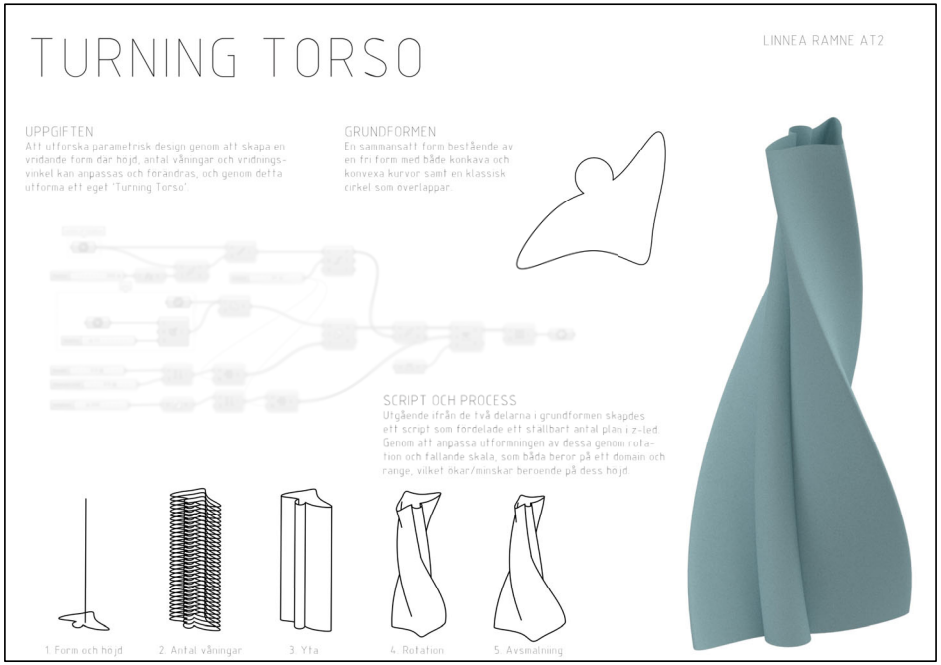




Examination – Inlämningsformat individuella uppgifter

Inlämning bör innehålla:

- Uppgiftsbeskrivning
- Angreppsätt, hur tog jag mig an uppgiften.
- ”Designen var uppbyggd med de här parametrarna… som kontrollerade designen på detta sätt” etc etc
- Bild av koden/scriptet, eller delar av den om det är för mycket kod för att kunna läsa (Use high res export in Grasshopper)
- Diagram eller bilder på olika variationer av din design möjlig med de parametrar ni har satt upp.
- Grasshopper koden/filen lämnas in separat.
- Deadline enligt Canvas



Exempel på inlämning, A3 format