Institute for advanced architecture of Catalonia | BARCELONA

MASTER IN ADVANCED ARCHITECTURE
SO.3 COMPUTATIONAL DESIGN
2018/2019

zahner factory

#parametric #skinfacade #parametricfacade

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http://www.wallacesc.com/inspire/zahner-company-expansion/

zahner factory

#parametric #skinfacade #parametricfacade

zahner factory expansion

crawford architects

8th and paseo blvd

kansas city, missouri



zahner factory grasshopper tutorial

#parametric #skinfacade #parametricfacade

https://www.grasshopper3d.com/forum/topics/parametric-bench-1
I used the script used in this discussion on how to do a parametric bench, to get to know one way of creating the façade of thezahner factory .
The script I used was posted by Mkr on April 16, 2015 at 10:50am.

pseudo code:

1.create an arch.

2.establish the length on the X plane.

3.generate a series of frames on the surface according to the X plane.

4.establish the main point of the frames created on point #3.

5.use a series of slider to change the location of the point on the X and Y plane.

6.create a series of numbers out of the points generated before.

7.create a 3D object from the series of numbers.

8.take the average of the point to generate a smother surface.

9.create a new surface from the points generated on #8.

10.slide the new surface in the amounts of sections desired.

11.extrude each section the amount desired using a slider.

12.close the volumes using the cap command.



zahner factory test #1

#parametric #skinfacade #parametricfacade

pseudo code:

1.create an arch.

2.establish the length on the X plane.

3.generate a series of frames on the surface according to the X plane.

4.establish the main point of the frames created on point #3.

5.use a series of slider to change the location of the point on the X and Y plane.

6.create a series of numbers out of the points generated before.

7.create attraction points to change the form of the surface.

8.create a 3D object from the series of numbers.

9.extrude each section the amount desired using a slider.

10.close the volumes using the cap command.



zahner factory test #2

#parametric #skinfacade #parametricfacade

pseudo code:

1.create an arch.

2.establish the length on the X plane.

3.generate a series of frames on the surface according to the X plane.

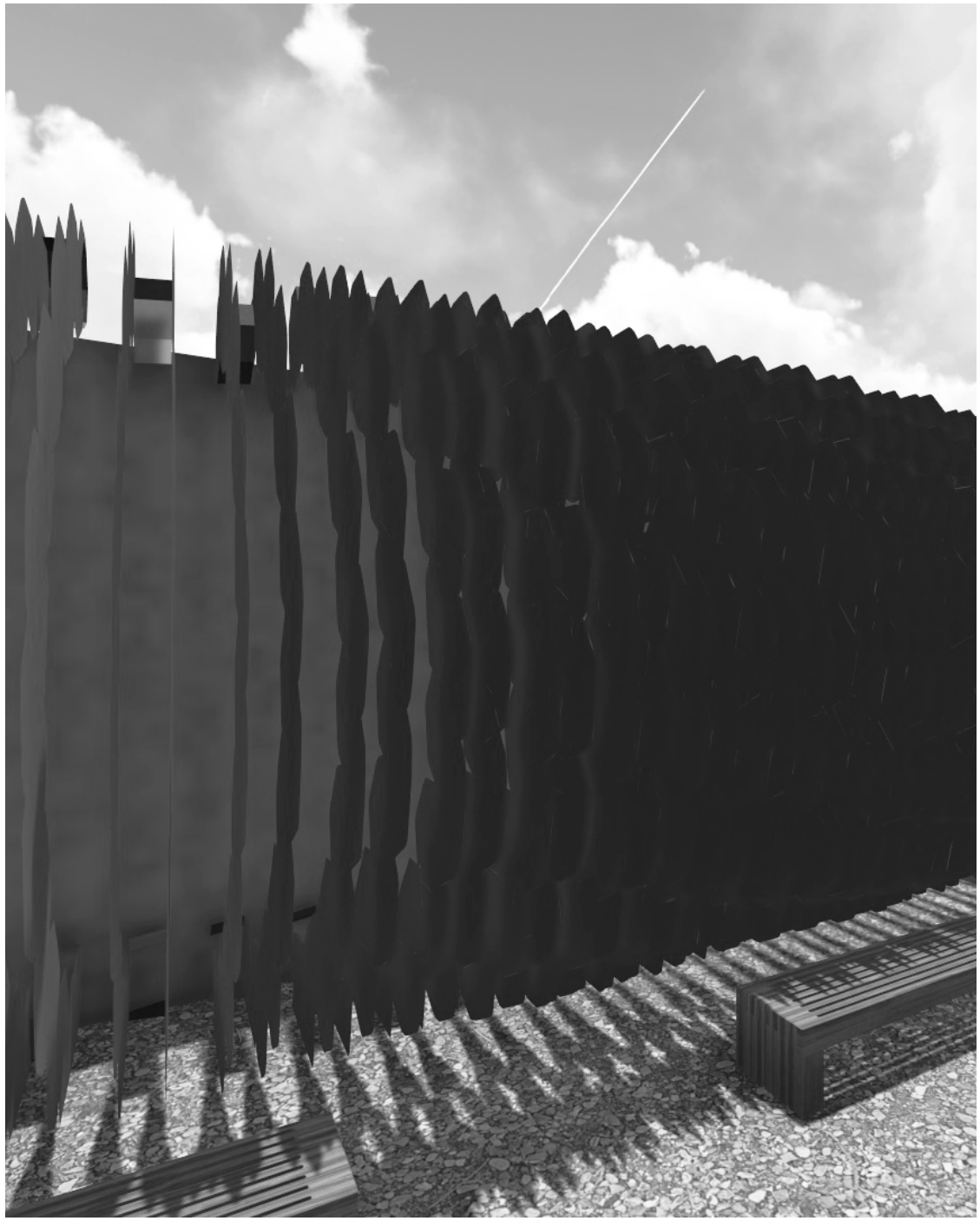
4.establish the main point of the frames created on point #3.

5.use a series of slider to change the location of the point on the X and Y plane.

6. use a image sampler to crear noise on the surface of the arc.

7.close the arc to generate a close polyline and then extrude the surfaces using a slider.

8.use cap hole to close the extrusion.



zahner factory test #3

#parametric #skinfacade #parametricfacade

pseudo code:

1.create an arch.

2.establish the length on the X plane.

3.generate a series of frames on the surface according to the X plane.

4.establish the main point of the frames created on point #3.

5.use a series of slider to change the location of the point on the X and Y plane.

6. use a image sampler to crear noise on the surface of the arc.

7. create a polygon on the YZ plane to apply to all the sections.

8. use loft on all surfaces and then extrude.

9.use cap hole to close the extrusion.

thank you!

Zahner Factory
Ricardo Lichtle