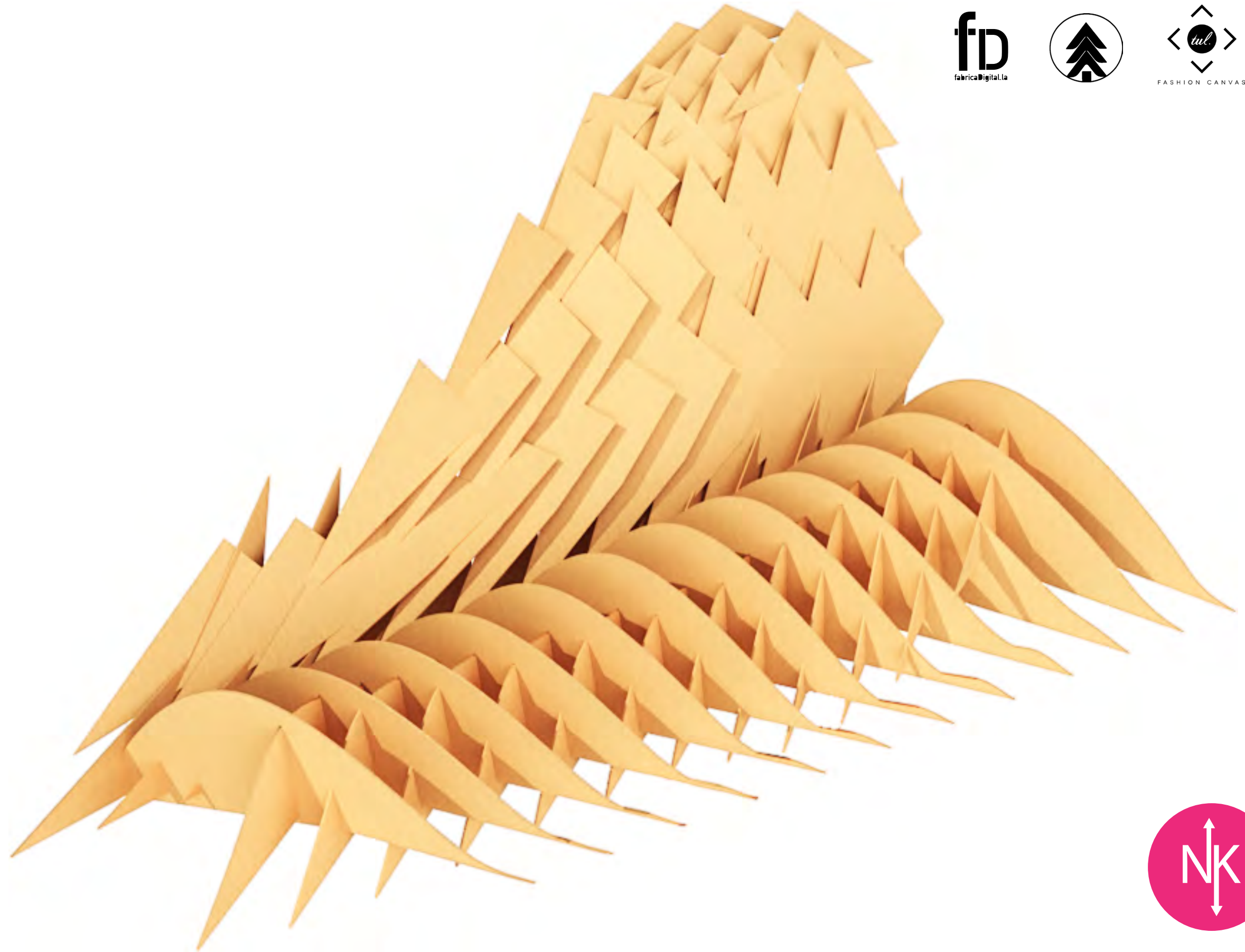




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Pink Team

*Arq. Eduardo Cardenas P.*

*Arq. Nicolas Díaz B.*

*Arq. Laura Alejandra García*

*Arq. Nadia Mendez*

*Dis. Ricardo Rambal Fattori*

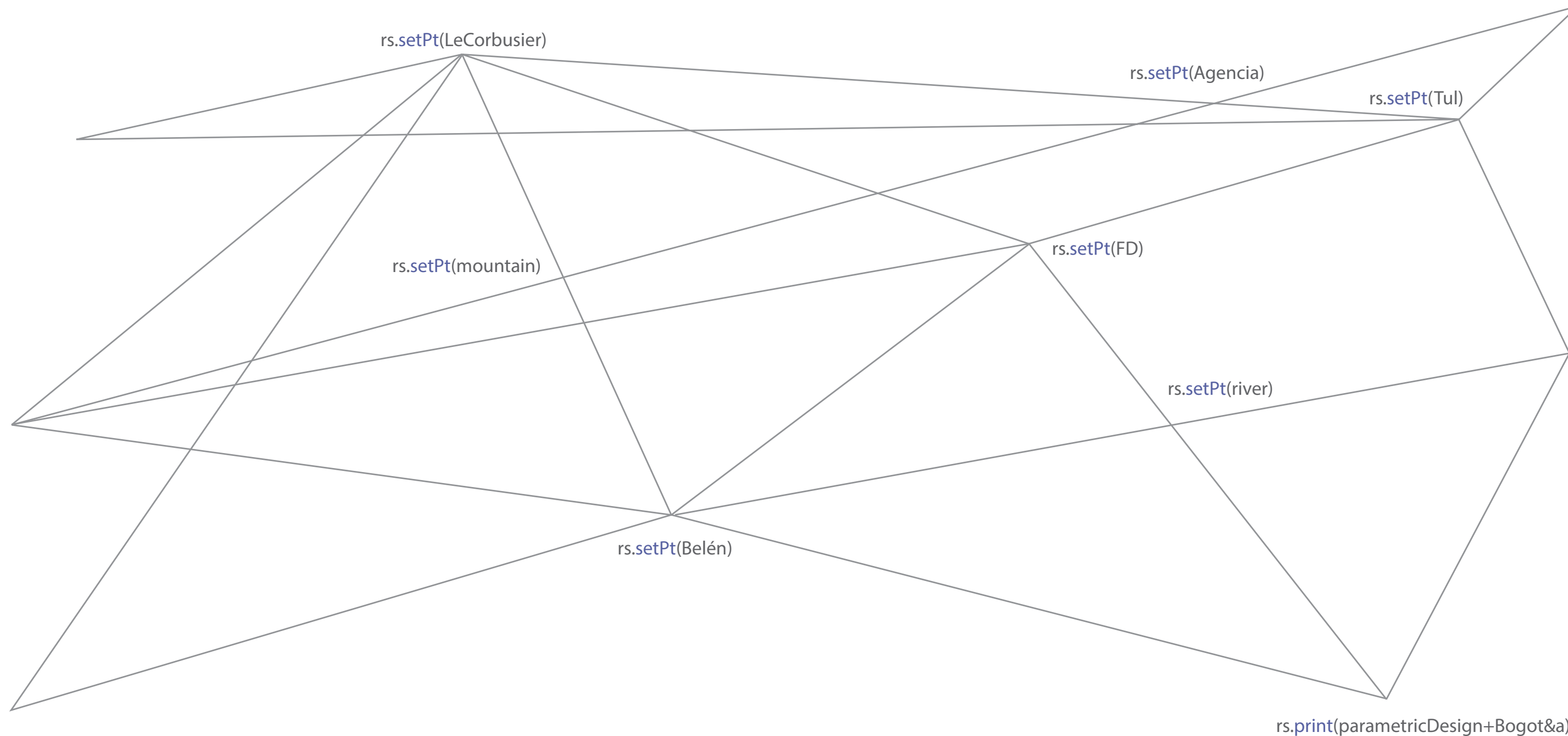
*Arq. Daniela Vega*

*Arq. Rodrigo Vargas*



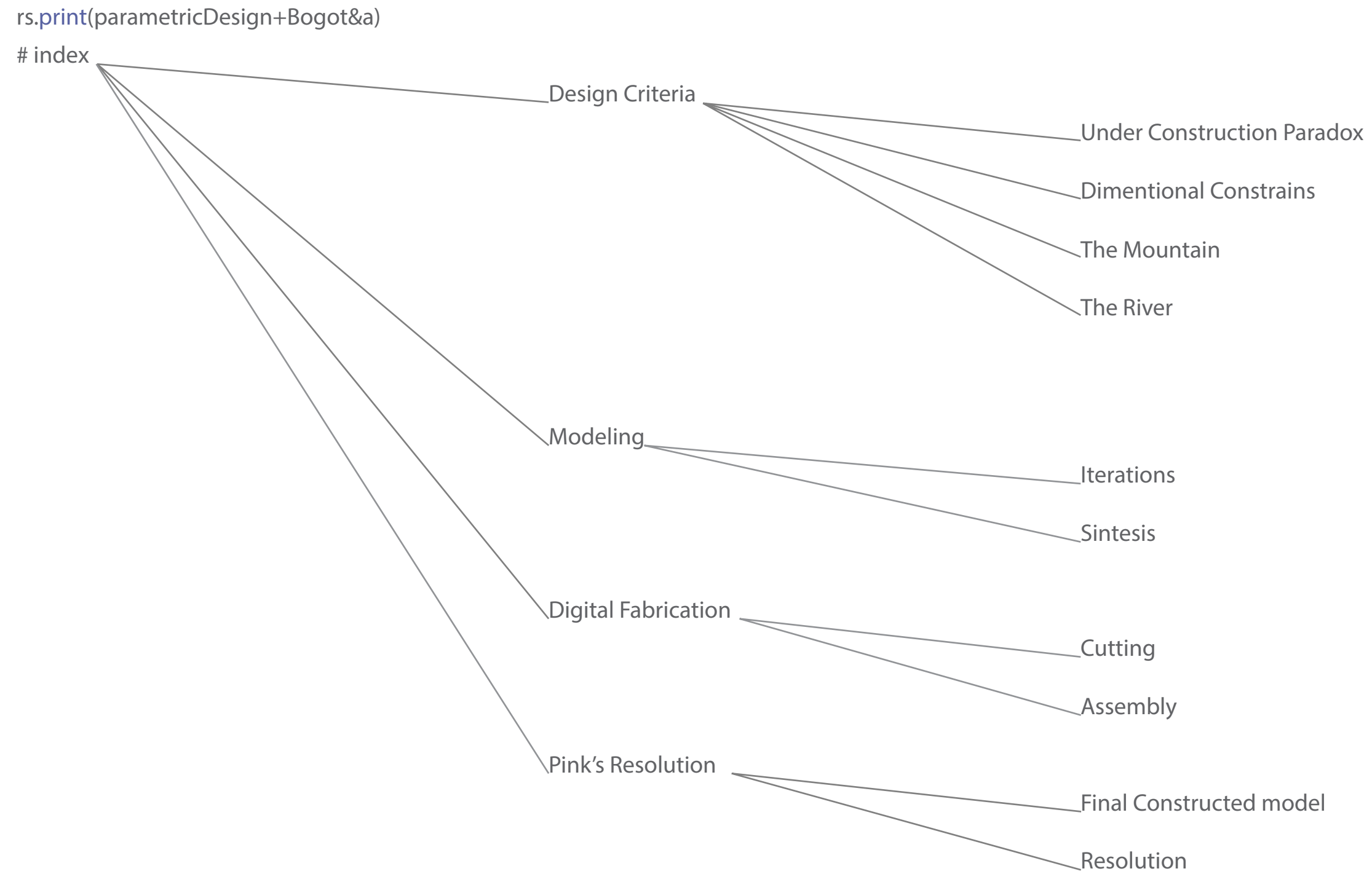
“Up the river, Up the mountain”

AA VISITING SCHOOL BOGOTÁ 2013



rs.print(parametricDesign+Bogotá)

////  
 We will deploy small-scale paradoxical actions, this appropriation  
 of a structure in the city will allow us to interrogate one of Bogotá's  
 most striking features: its bizarre ad infinitum phase construction.  
 ////





Daily stresses can drag anyone down, making **escapism** and getting away from it all an important part of getting **through life**.

-- The tendency **to seek distraction** and relief from **unpleasant realities**, esp. by seeking entertainment or engaging in fantasy.

--- **Normal** object in unusual places = **unusual** object in normal places, **dreamlike scenery**.

We will deploy small-scale **paradoxical actions**, this appropriation of a structure in the city will allow us to interrogate one of **Bogotá's** most striking features: **its bizarre and infinitum phase construction**.



Surrealism

Design Criteria

rs. print(designCriteria)

////

*to give "form" a sense of being besides itself, a need for conceptualizing ideas in a frame of needs and*

*desires.*

////

Under Construction Paradox

Dimensional Constrains

The Mountain

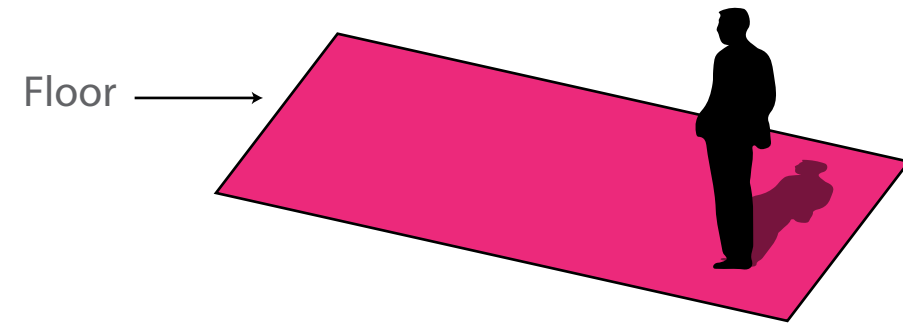
The River

"Up the river, Up the mountain"

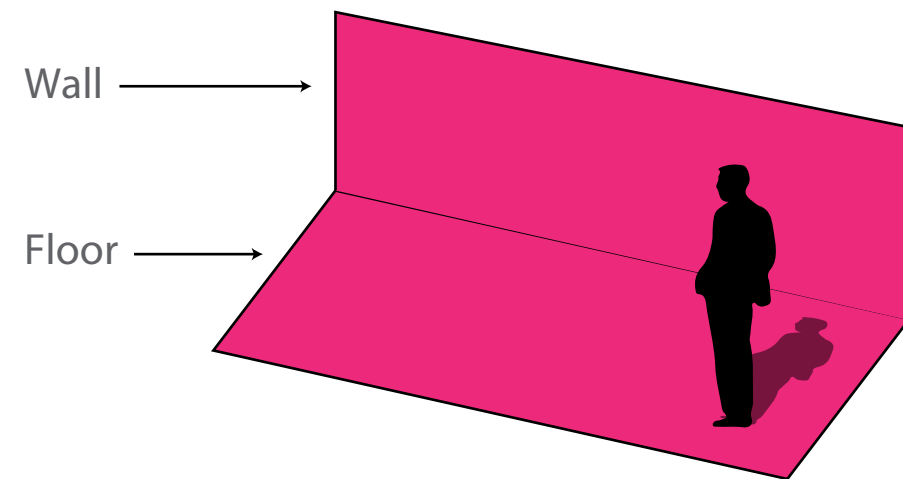
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Situation 1



Situation 2



rs. print(Dimensional Constrains)

////

*The object must respond to diferent places each once having its own unique constrain.*

////

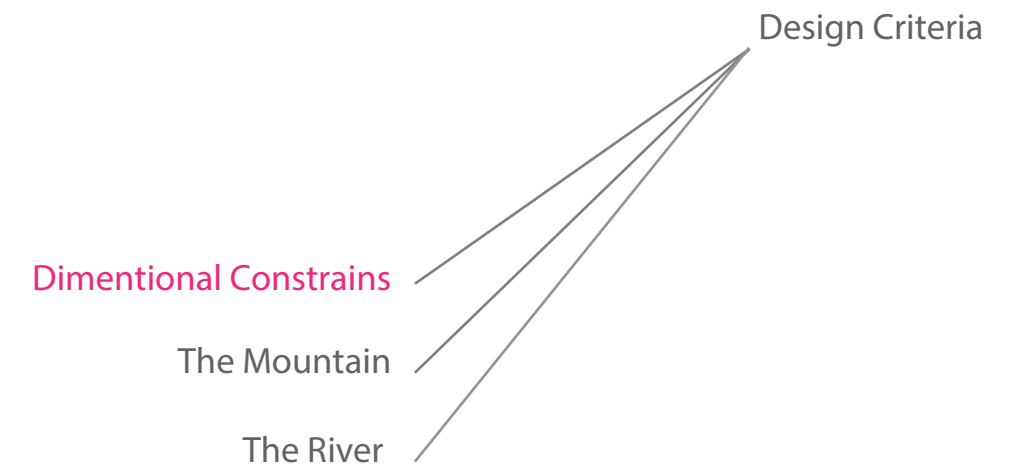
Tul Workshop



La Agencia Rooftop



Fabrica Digital



“Up the river, Up the mountain”

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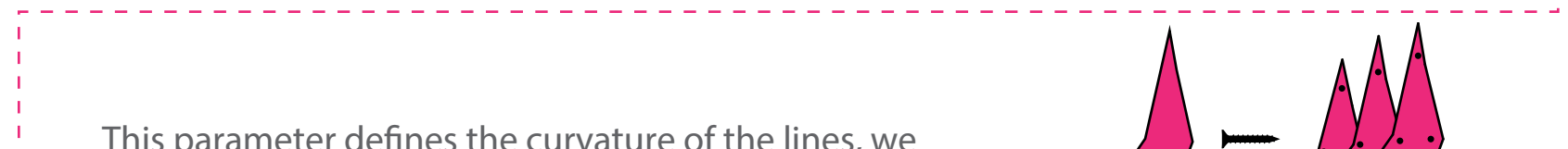
rs. print(The Mountain)

////  
A large natural elevation of the earth's surface  
//// *rising abruptly* from the surrounding level.

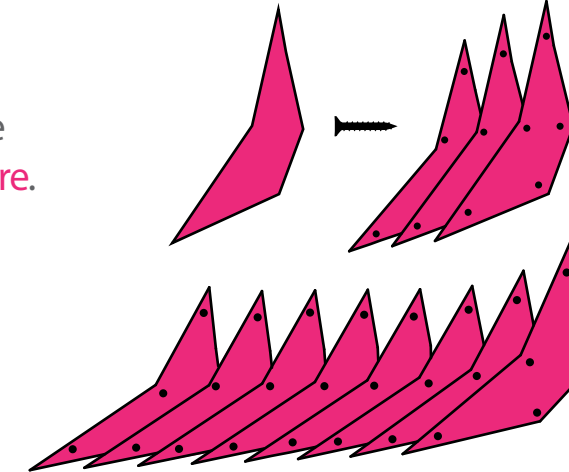
```
for i in range(1, len(curves)-10):
    ....for j in range(0, len(div)-5):
```

```
.....if i<20 :
```

```
.....crv3Temp = rs.AddInterpCurve (((divPTCoor[i+2][j], divPTCoor[i+3][j+4], divPTCoor[i+1][j+5])),1)
```



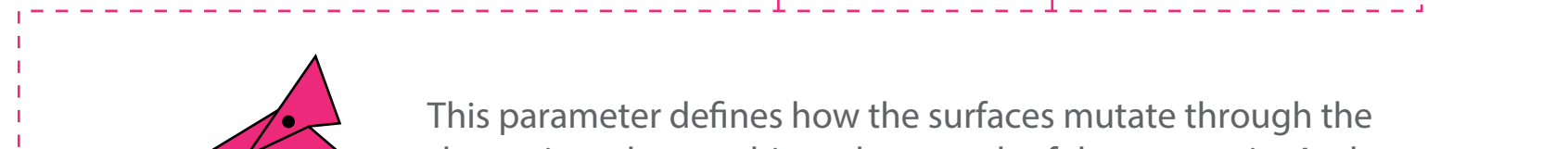
This parameter defines the curvature of the lines, we chose the lowest degree to *mimic* the *mountain texture*.



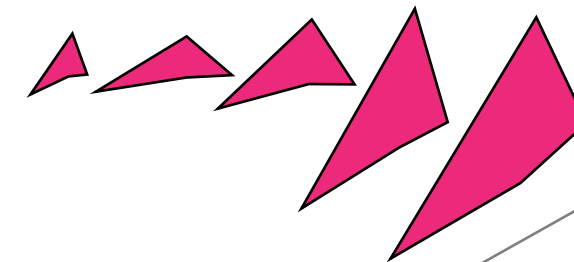
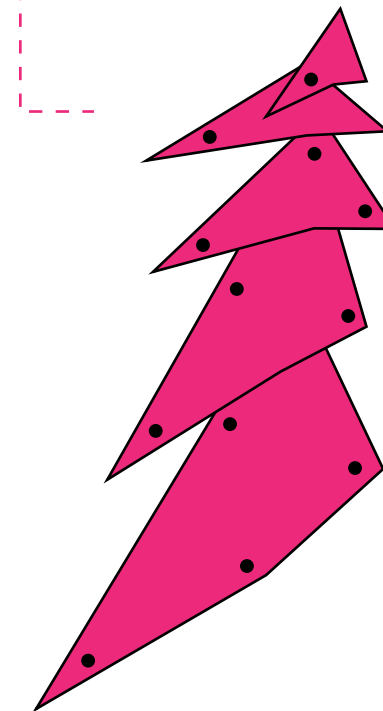
```
for i in range(1, len(curves)-10):
    ....for j in range(0, len(div)-5):
```

```
.....if i<20 :
```

```
.....crv3Temp = rs.AddInterpCurve (((divPTCoor[i+2][j], divPTCoor[i+3][j+4], divPTCoor[i+1][j+5])),1)
```



This parameter defines how the surfaces mutate through the shapes in order to achieve the growth of the mountain. At the bottom the pieces are big whereas as the top we wanted to represent the peak of the mountain.



The Mountain

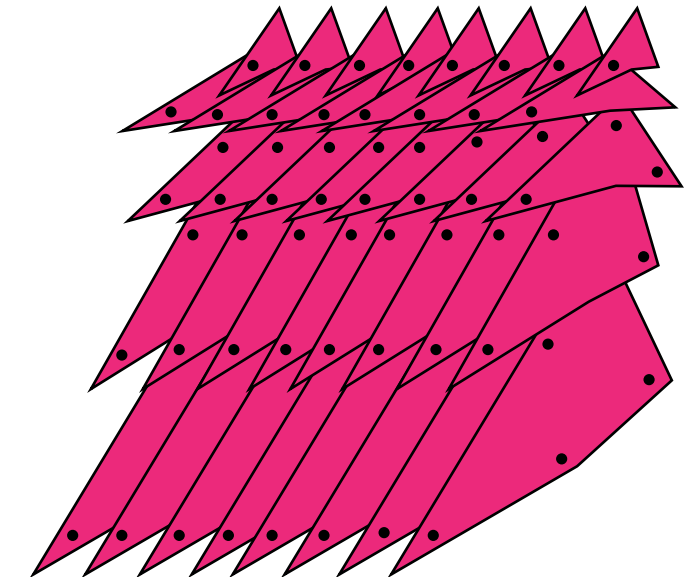
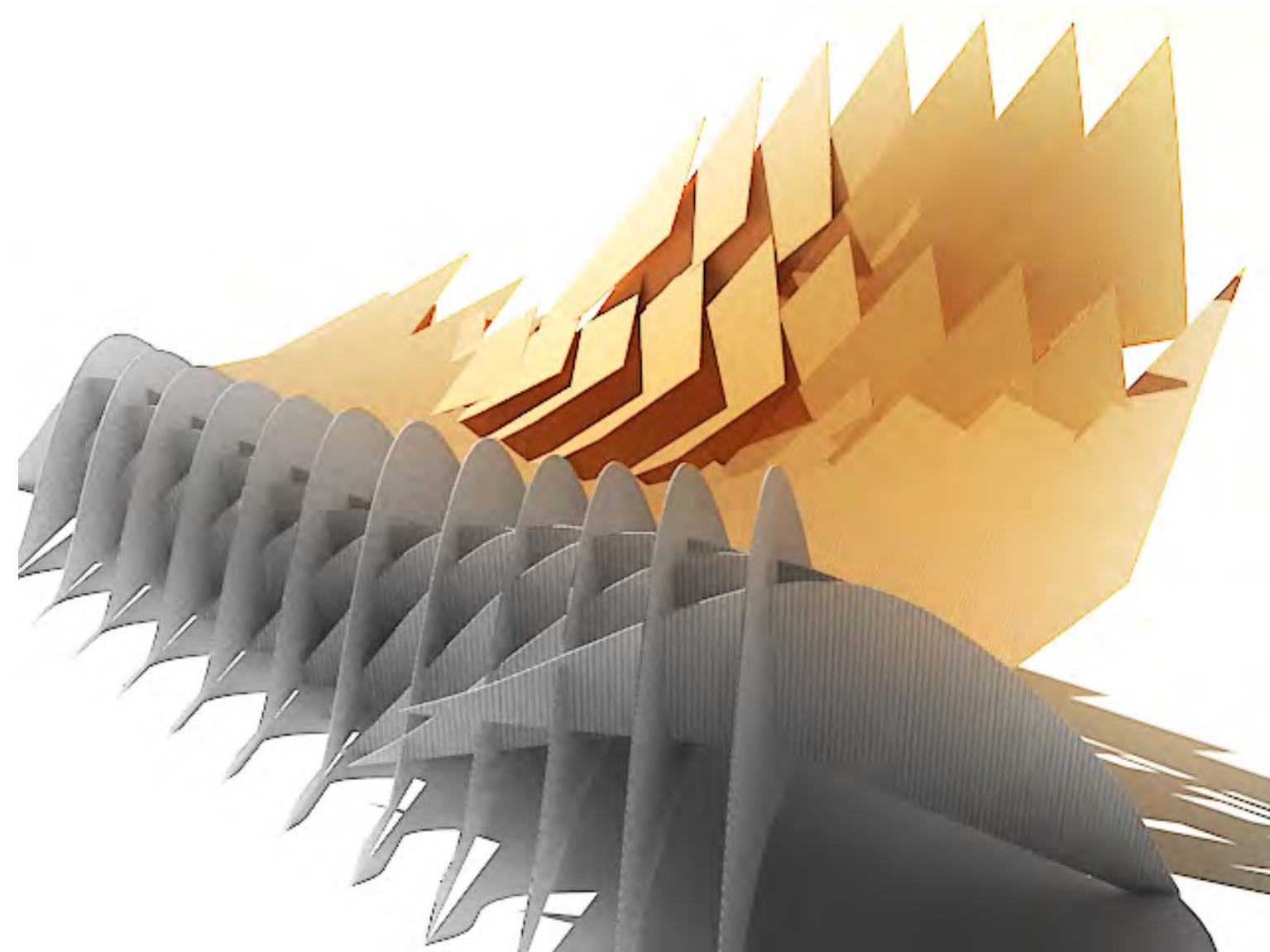
The River

Design Criteria

“Up the river, Up the mountain”

AA VISITING SCHOOL BOGOTÁ 2013





rs. print



*A large natural elevation of the earth's surface  
rising abruptly from the surrounding level.*

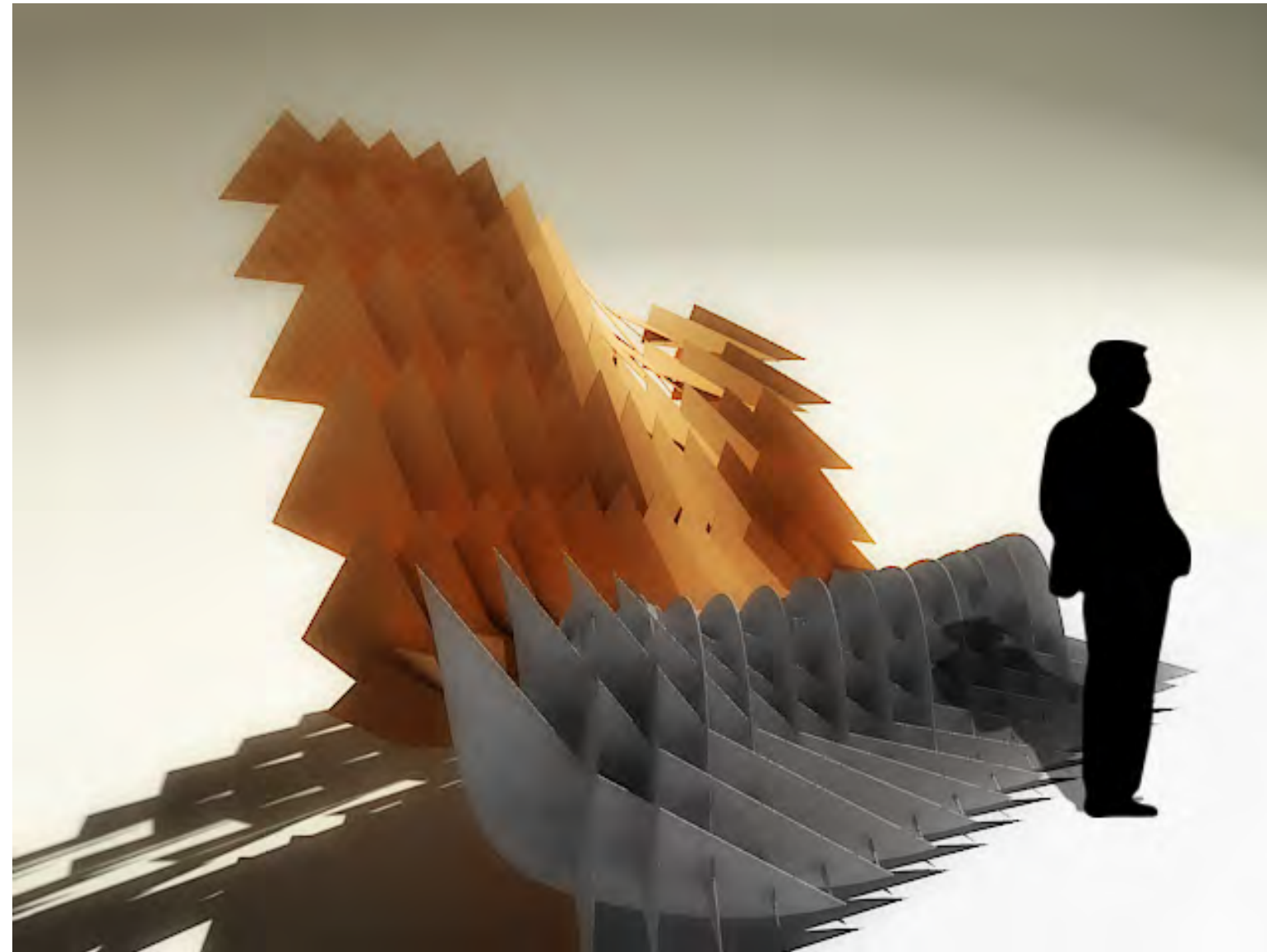


The Mountain

The River

Design Criteria





Design Criteria

The Mountain

The River

rs. print



A large natural elevation of the earth's surface  
*rising abruptly* from the surrounding level.

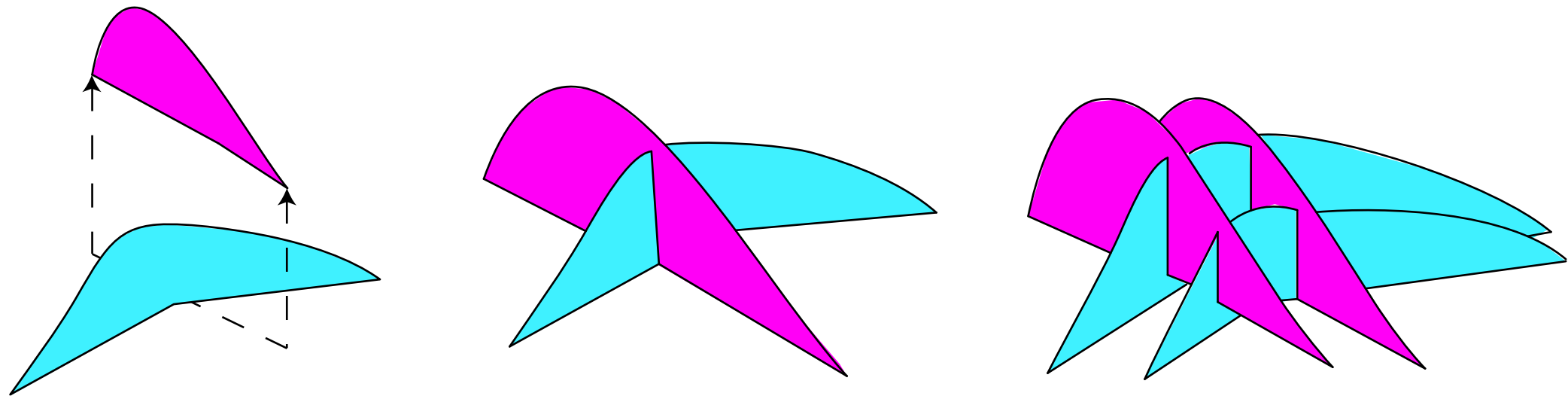




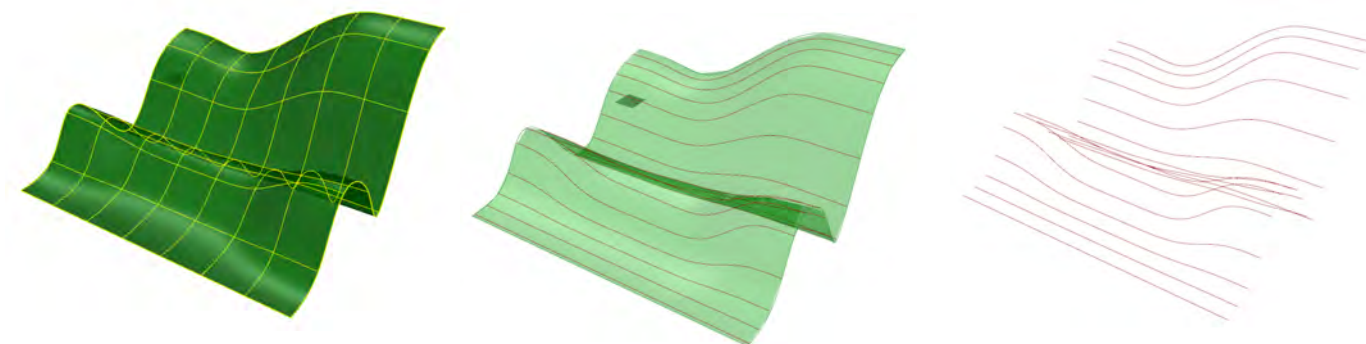
```
for i in range(1, len(axes)-10):
  ....for j in range(0, len(div)-5):
```

```
.....if i<20 :
  .....crv3Temp = rs.AddInterpCurve (((divPTCoor[i+2][j], divPTCoor[i+3][j+4], divPTCoor[i+1][j+5])),3)
```

This parameter defines the curvature of the lines, we chose the highest degree to **mimic** the **water waves**.

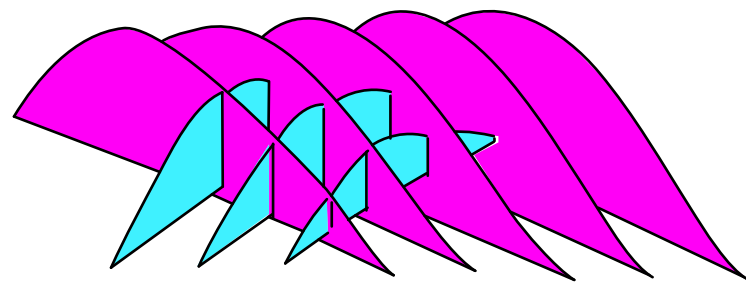
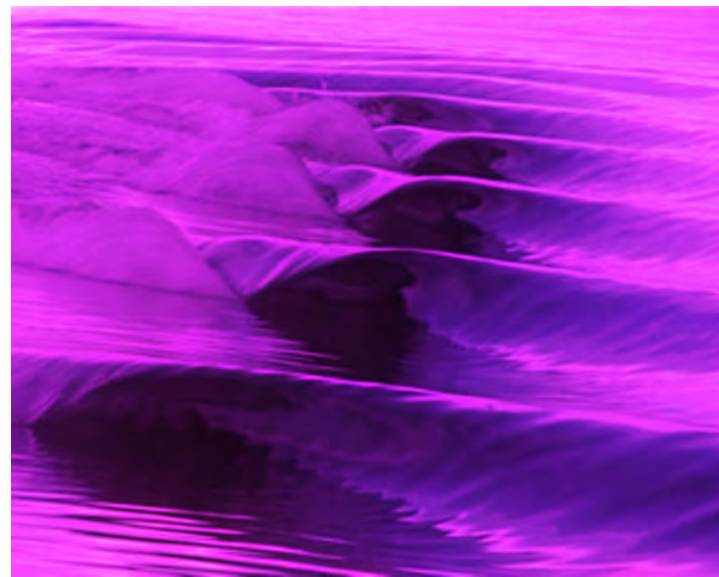
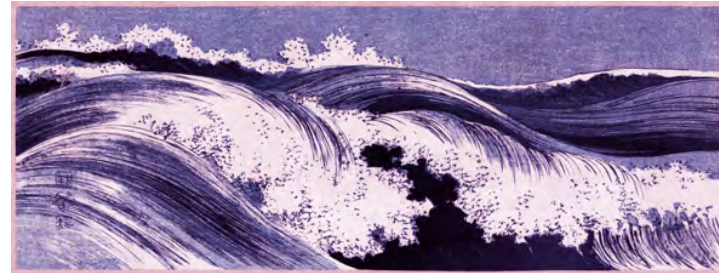


To attain the waffle union between the waves, we applied the code to a surface in order to modify the shape the way we wanted to.



The River

Design Criteria

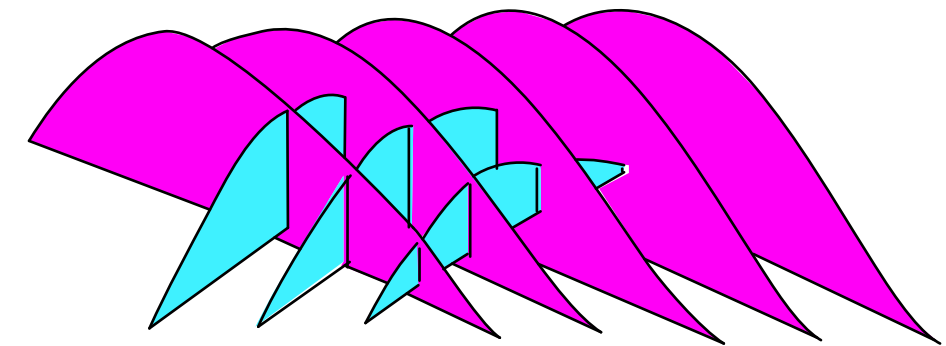
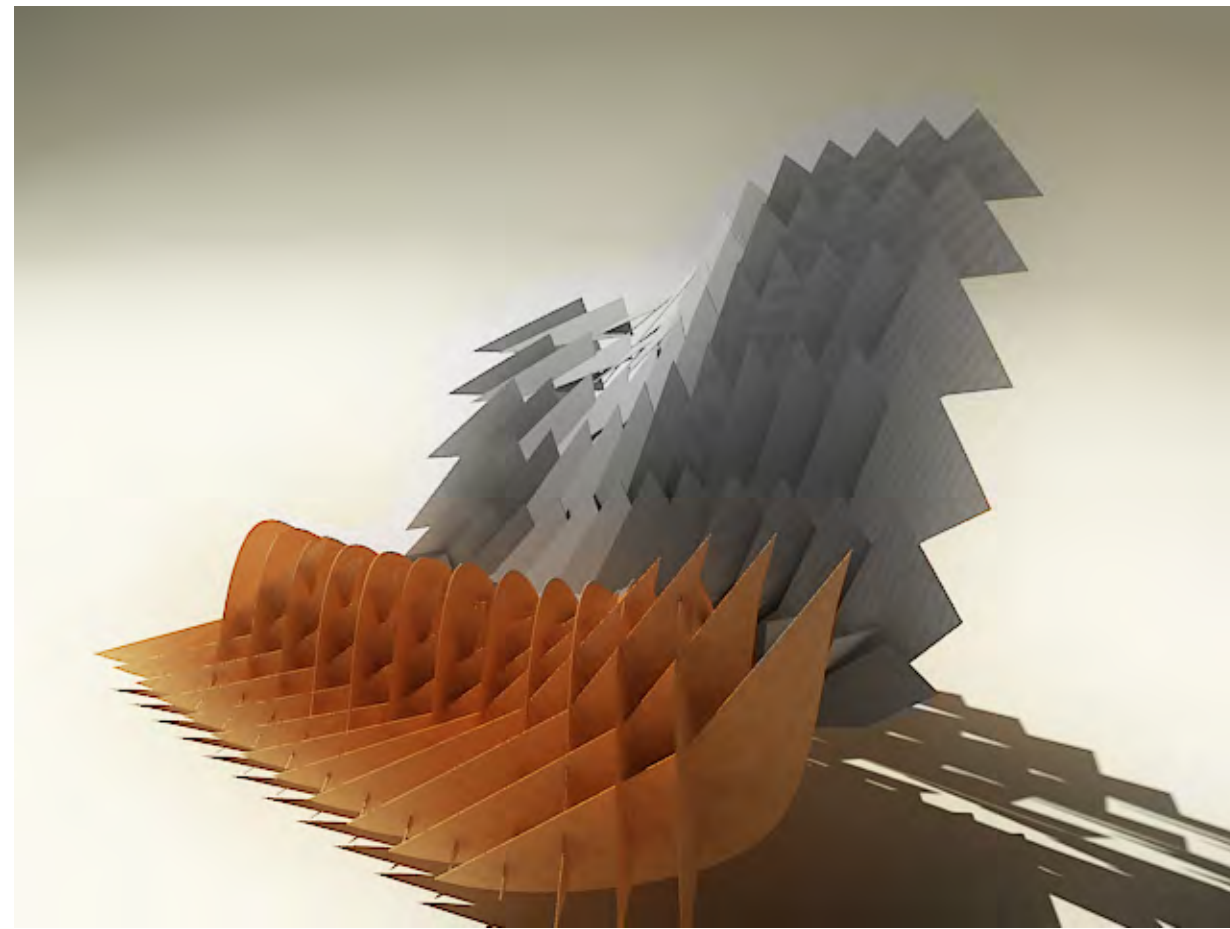
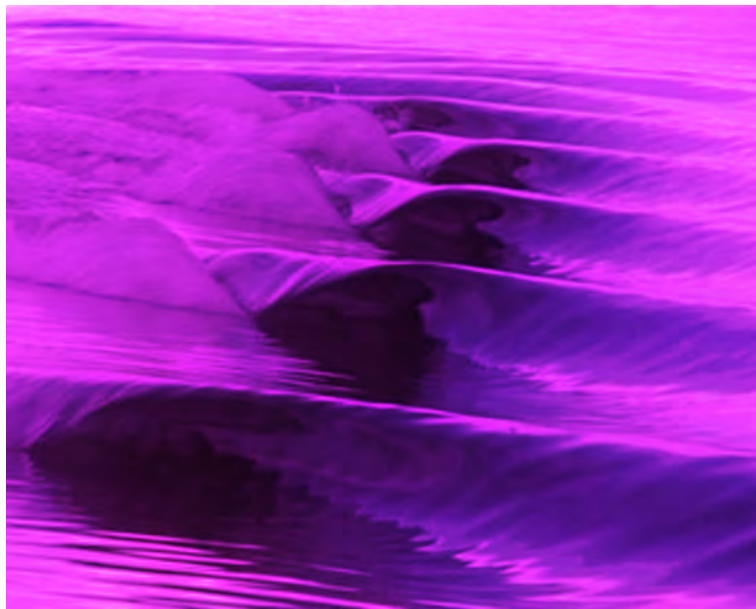
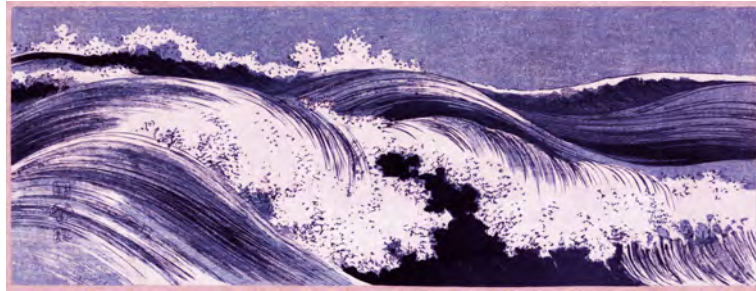


rs. print

////

A large quantity of a **flowing substance**.

////



rs. print

////

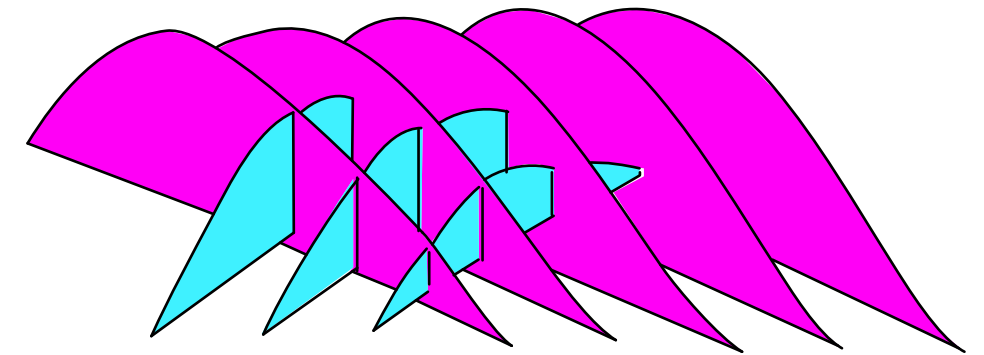
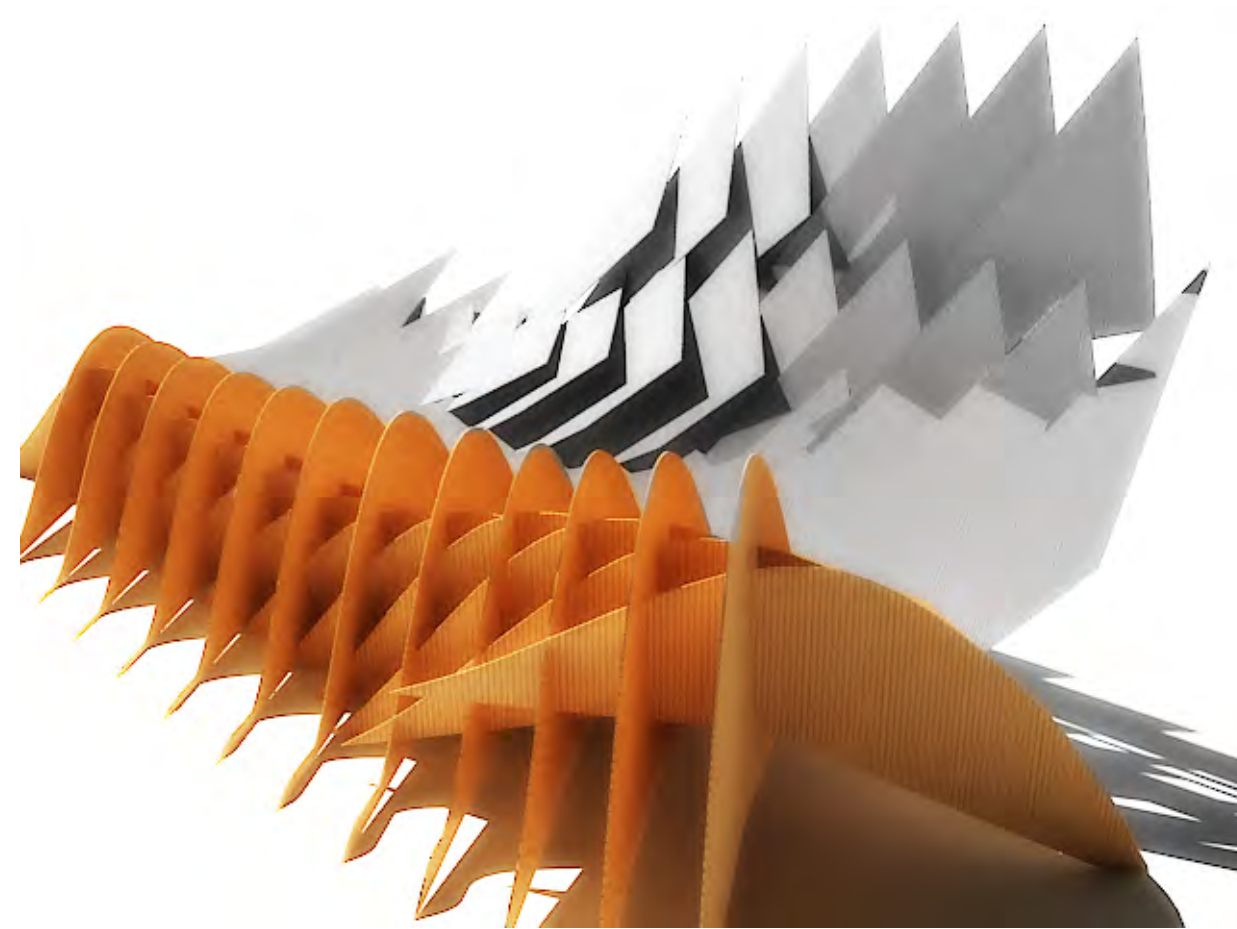
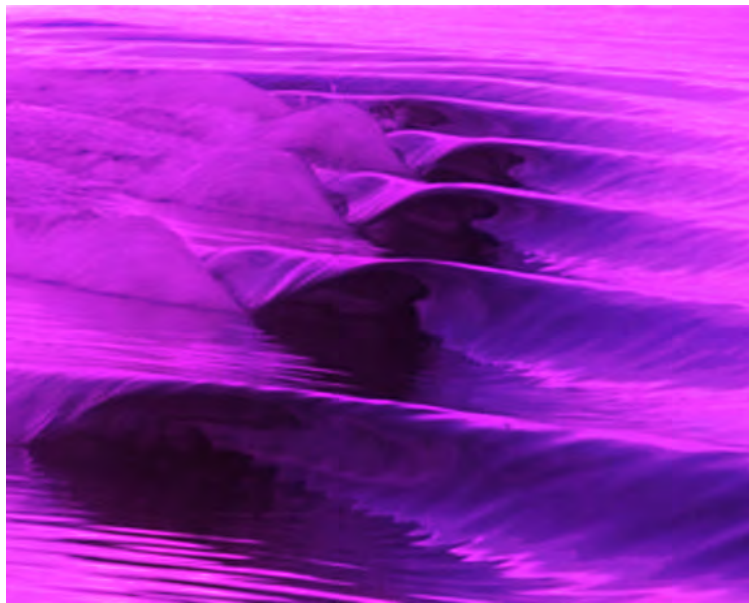
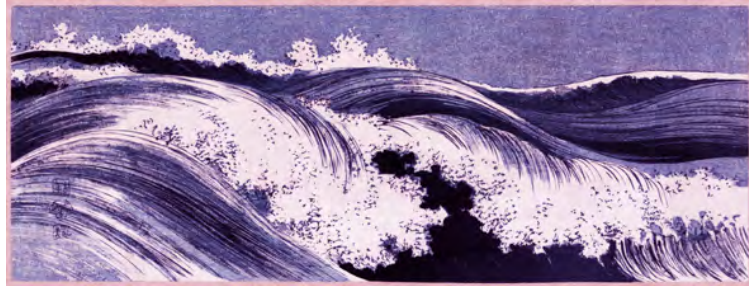
*A large quantity of a **flowing substance**.*

////

Design Criteria

The River





rs. print

////

*A large quantity of a **flowing substance**.*

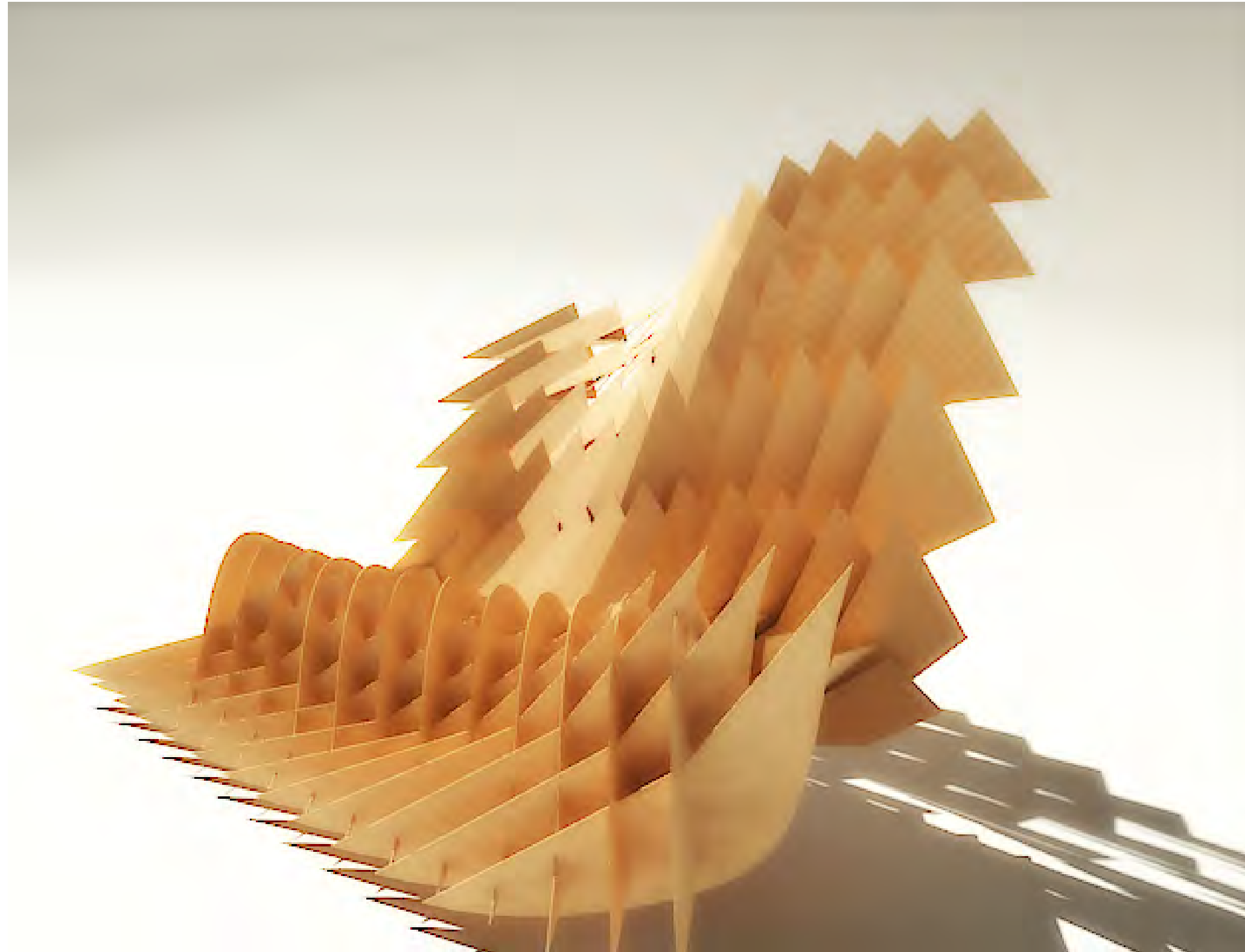
////

The River

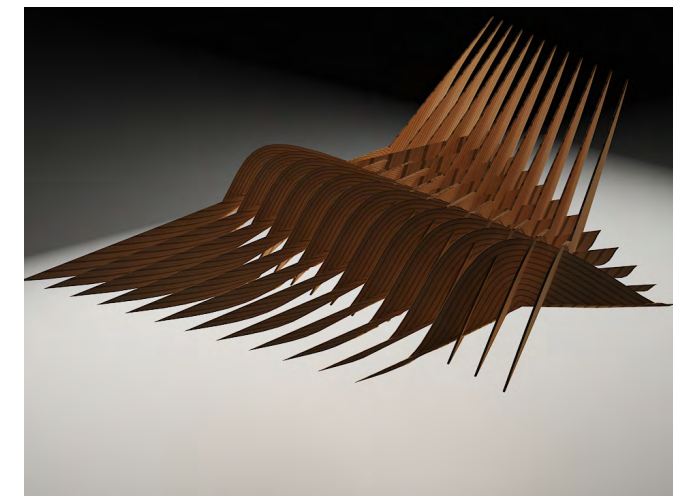
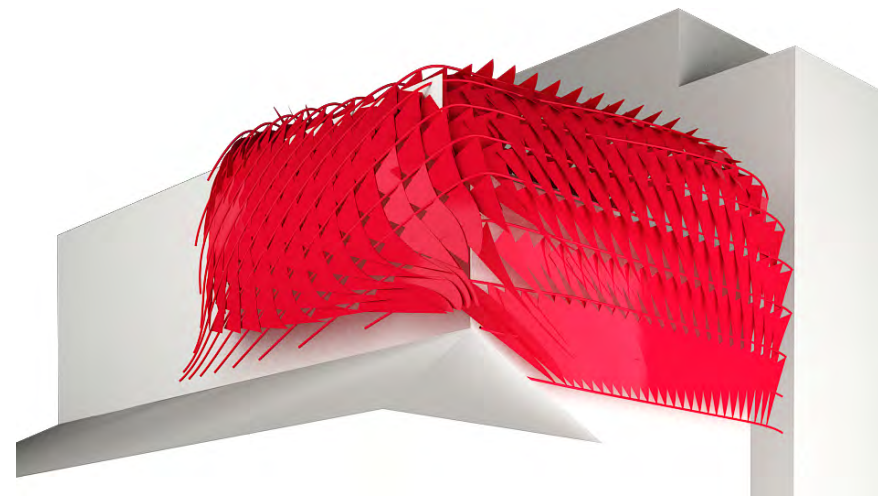
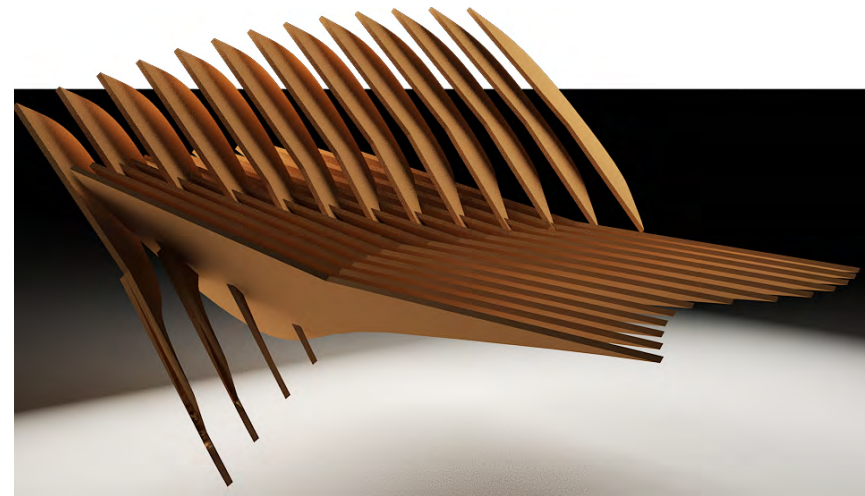
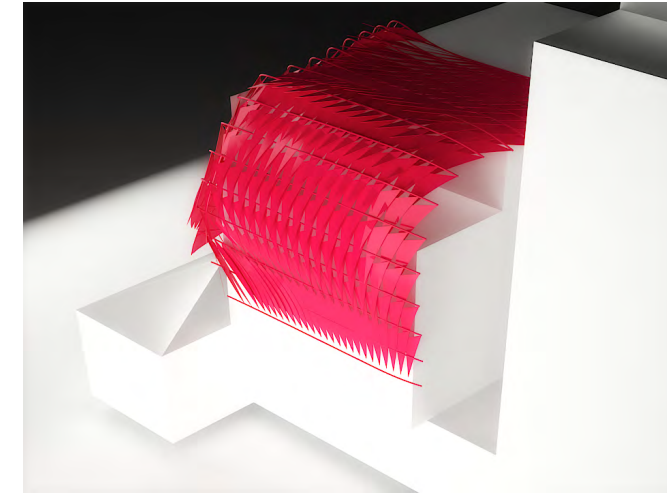
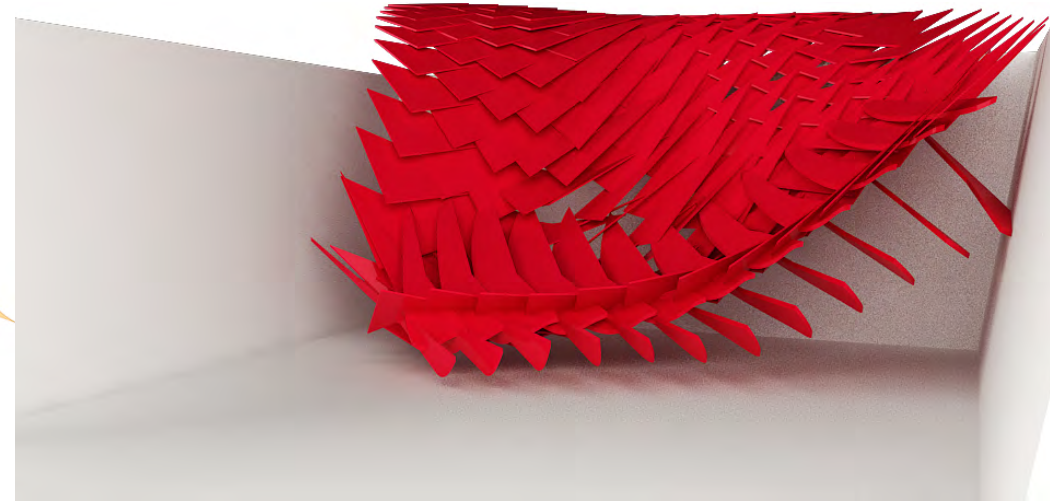
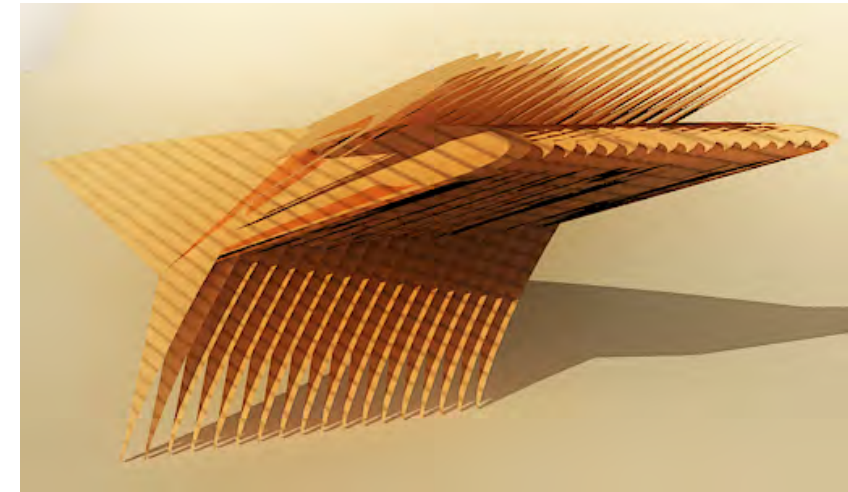
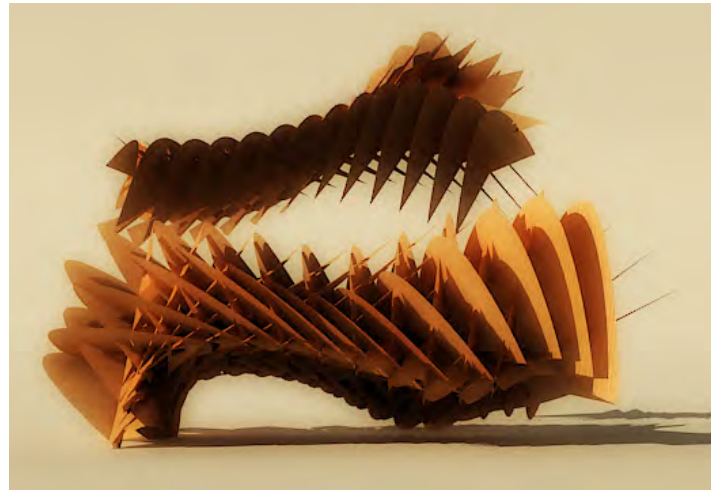
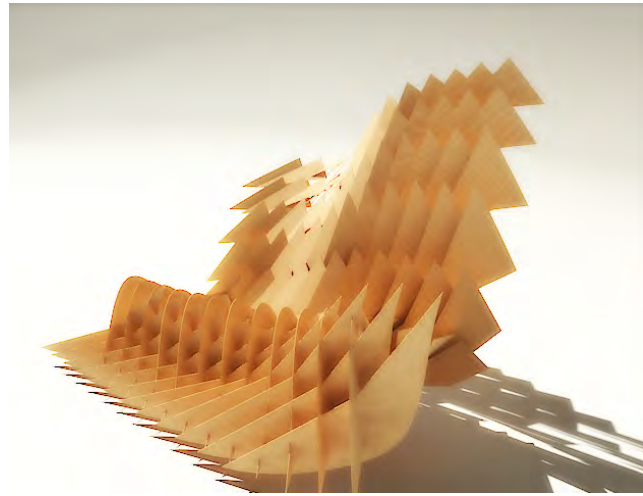
Design Criteria





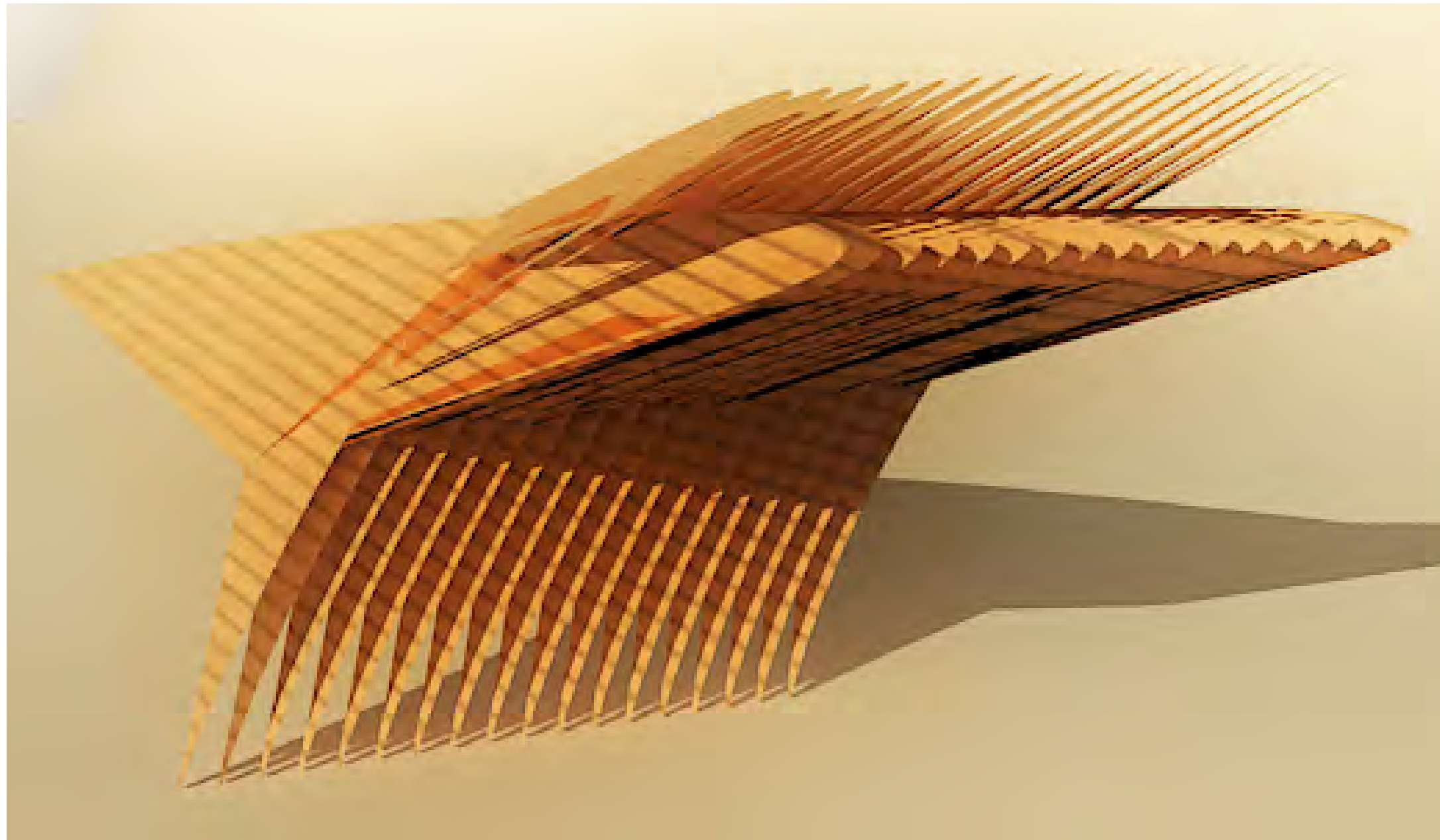


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“Up the river, Up the mountain”  
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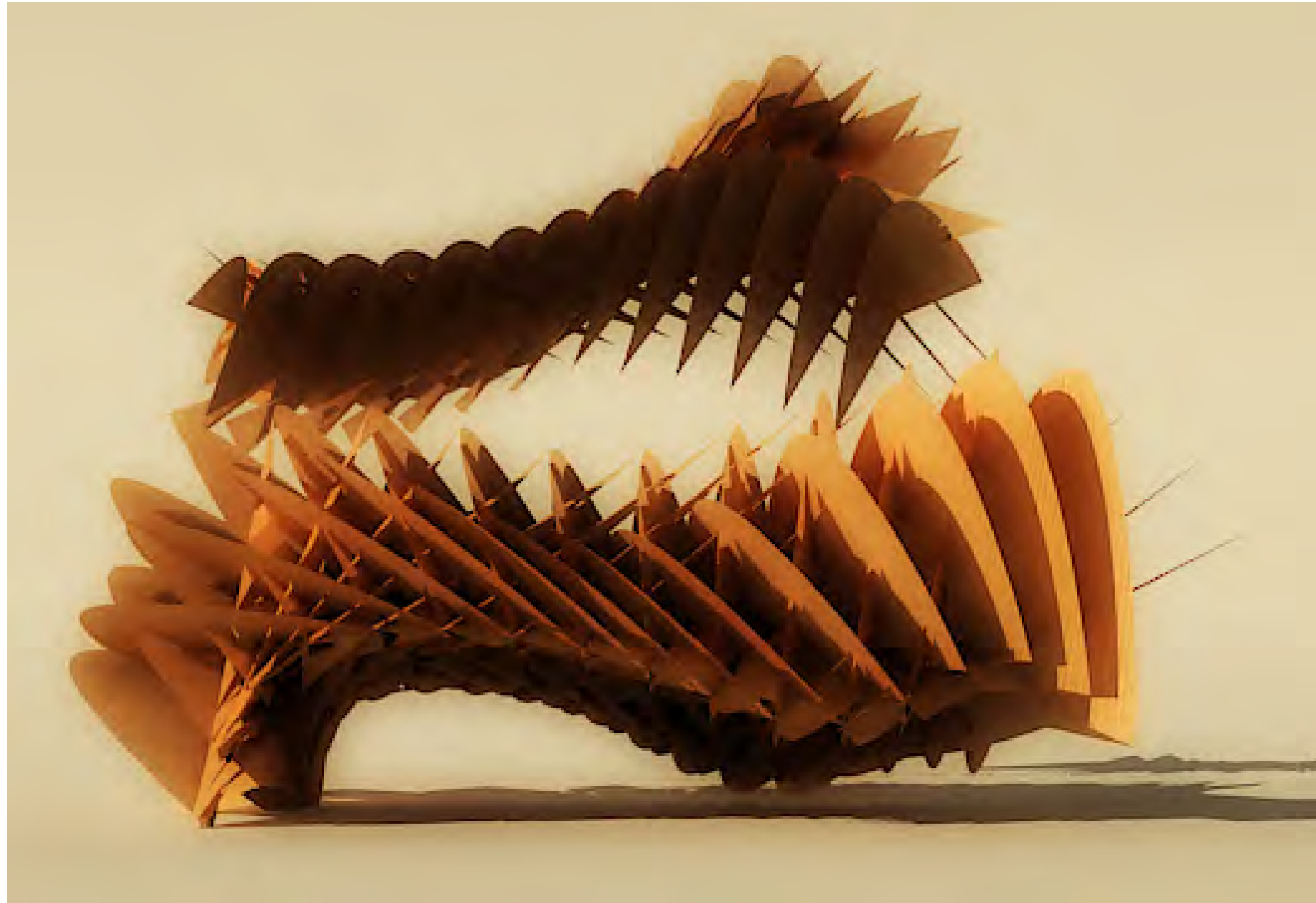


rs. print



*Arq. Eduardo Cardenas P.*





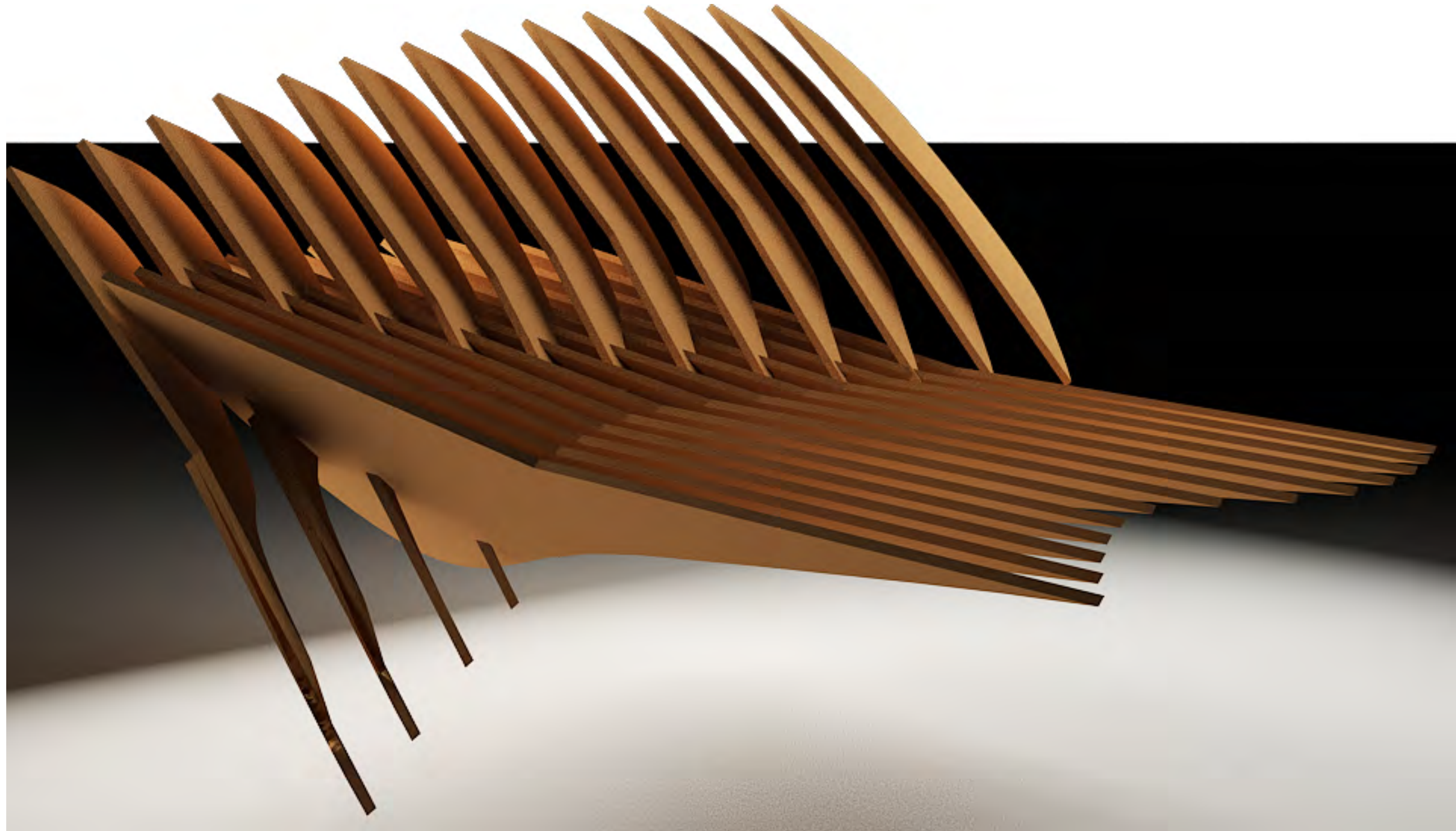
rs. print



*Arq. Nadia Mendez*





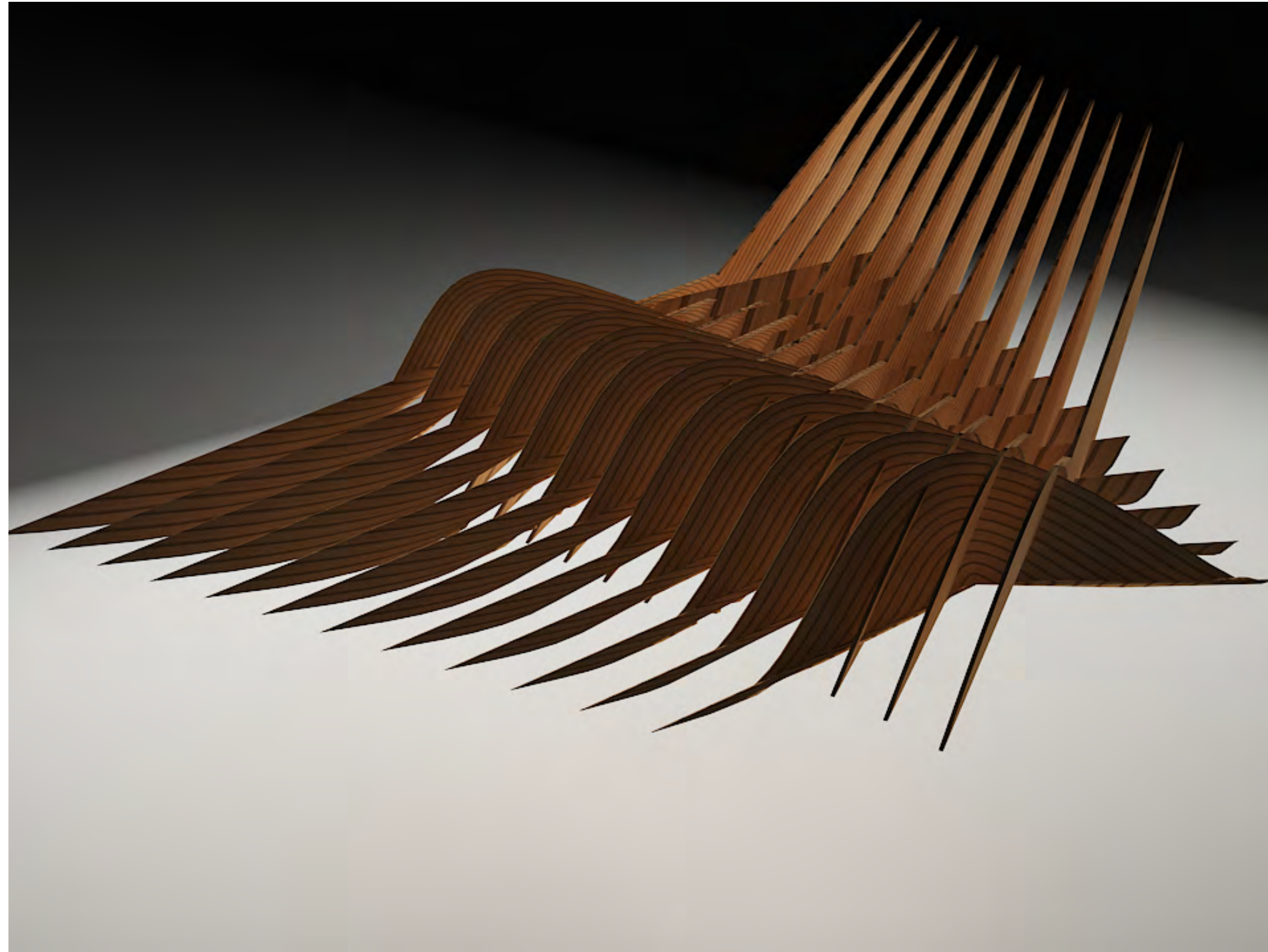


rs. print



*Arq. Daniela Vega*





rs. print



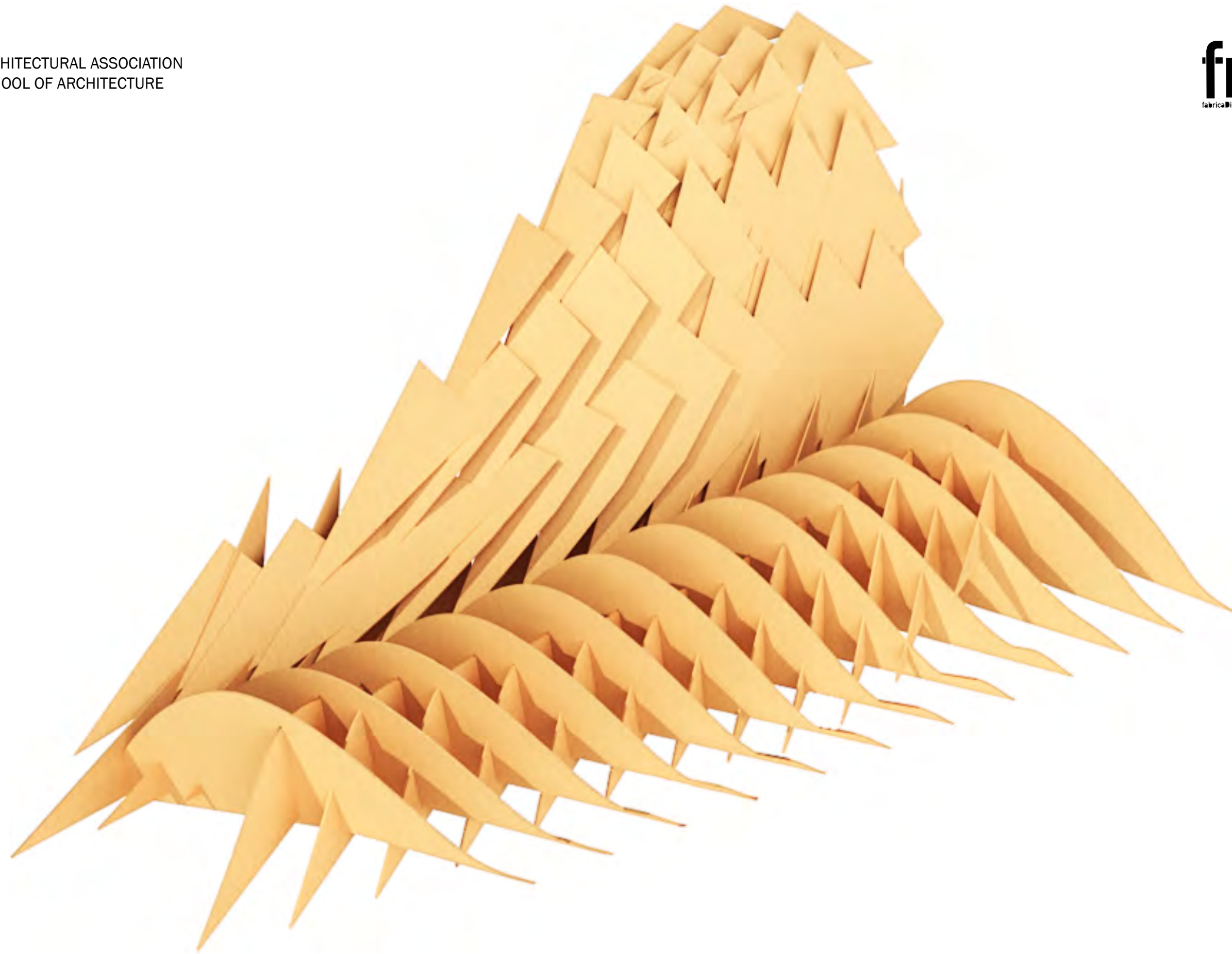
*Arq. Nicolas Díaz B.*





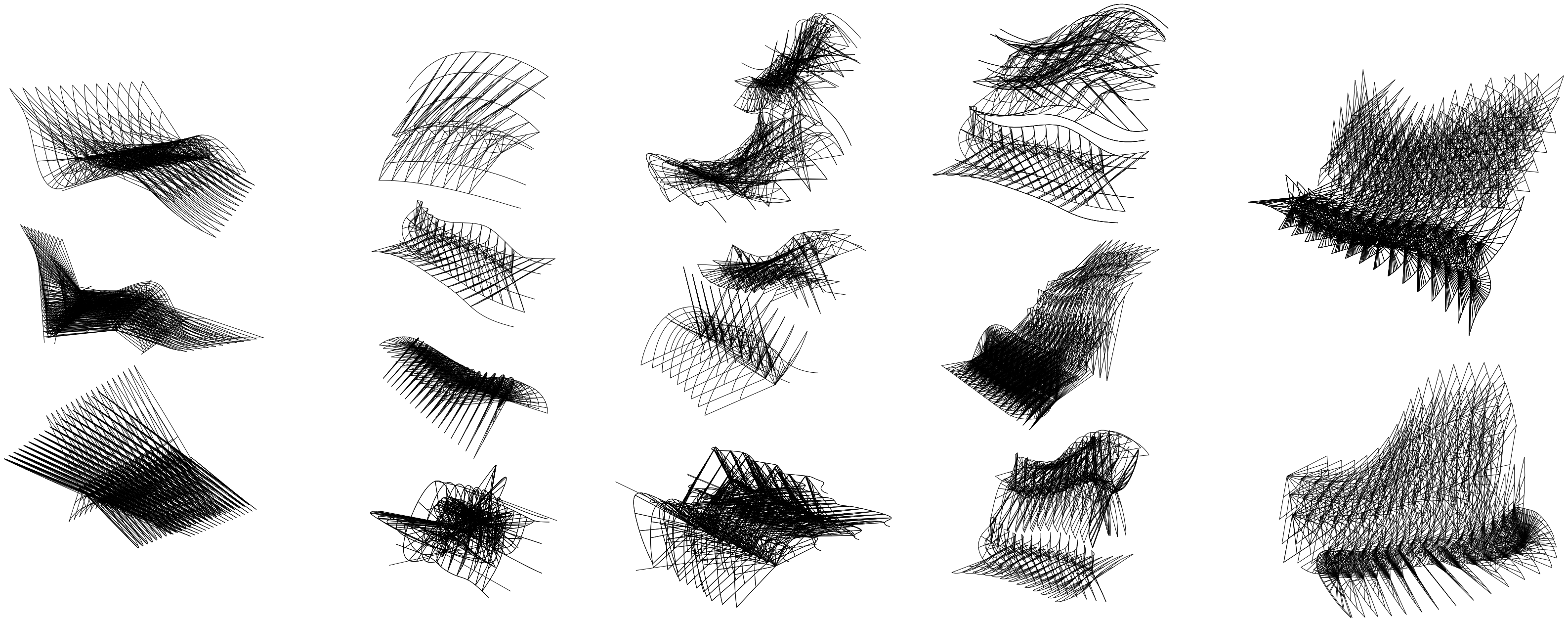


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rs. print



*Catalogue*



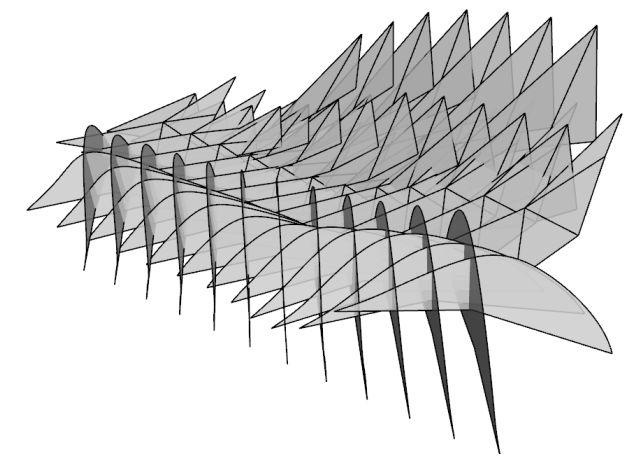
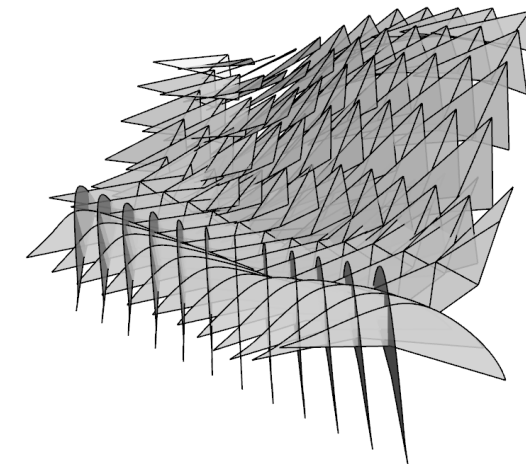
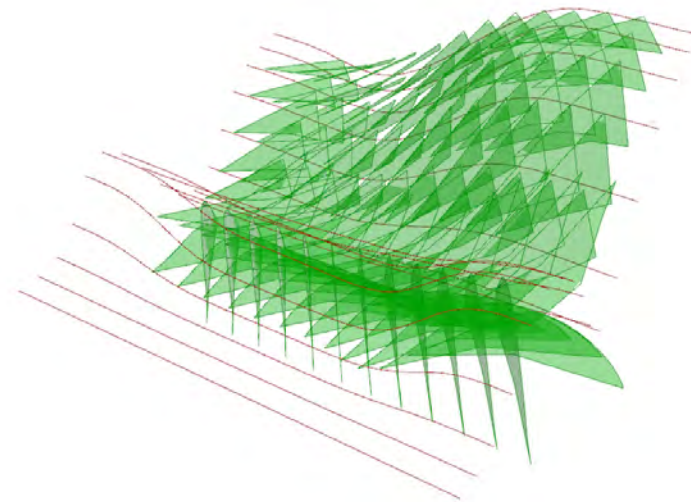
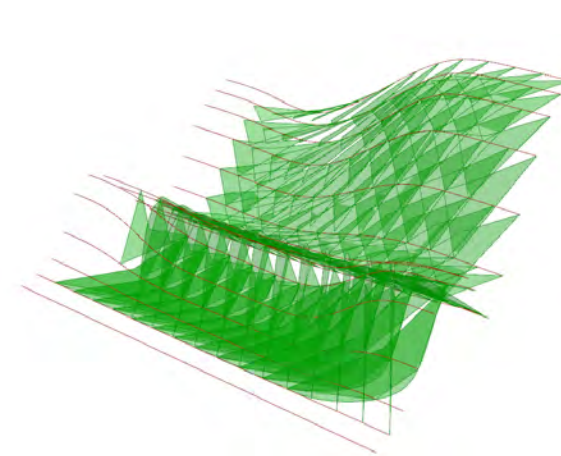


Original code output

Model after manipulation  
in Grasshopper

"Baked" model

Final Rhino model



```

import rhinoscriptsyntax as rs

divPTCoor = [[0 for i in range(100)] for i in range(100)]
divPT = [[0 for i in range(100)] for i in range(100)]

allSrf1 = []
allSrf2 = []
allSrf3 = []
allSrf4 = []
allSrf5 = []
allSrf6 = []

for i in range(len(curves)):
    div = rs.DivideCurve (curves[i], dblDIV)
    for j in range(len(div)):
        divPTCoor[i][j] = div[j]
        divPT = rs.AddPoint (divPTCoor[i][j])

for i in range(9, len(curves),3):
    for j in range(0, len(div)-5):
        if i>12:
            crv1Temp = rs.AddInterpCurve ((divPTCoor[i][j], divPTCoor[i-1][j], divPTCoor[i-2][j+1], divPTCoor[i-6][j+2], divPTCoor[i-9][j+4]),1)
            plane1 = rs.AddSrfPt ((divPTCoor[i][j], divPTCoor[i-2][j+1], divPTCoor[i-9][j+4]))
            centroid = rs.SurfaceAreaCentroid (plane1)
            rs.ScaleObject (plane1, centroid[0], (20,20,20))
            param = rs.SurfaceClosestPoint (plane1, divPTCoor[i][j])
            data = rs.SurfaceCurvature (plane1, param)
            crv1 = rs.ProjectCurveToSurface (crv1Temp, plane1, data[1])
            srf1 = rs.ExtrudeCurvePoint (crv1, centroid[0])
            allSrf1.append (srf1)

        if i>12 and i<1:
            crv2Temp = rs.AddInterpCurve ((divPTCoor[i][j+4], divPTCoor[i-1][j+1], divPTCoor[i-2][j], divPTCoor[i-3][j], divPTCoor[i-4][j]),1)
            plane2 = rs.AddSrfPt ((divPTCoor[i][j+4], divPTCoor[i-2][j], divPTCoor[i-4][j]))
    
```

More surfaces added to have new sets of pieces.

Inverting the order for curve reading.

Coordinates modified to change the shape of individual pieces.

Controlling surface sections separately

```

for i in range(0, len(curves)-8):
    for j in range(0, len(div)-5):
        if i<12:
            crv3Temp = rs.AddInterpCurve ((divPTCoor[i][j], divPTCoor[i+2][j+2], divPTCoor[i+1][j+3]),1)
            plane3 = rs.AddSrfPt ((divPTCoor[i][j], divPTCoor[i][j+2], divPTCoor[i+2][j+4]))
            centroid = rs.SurfaceAreaCentroid (plane3)
            rs.ScaleObject (plane3, centroid[0], (20,20,20))
            param = rs.SurfaceClosestPoint (plane3, divPTCoor[i][j])
            data = rs.SurfaceCurvature (plane3, param)
            crv3 = rs.ProjectCurveToSurface (crv3Temp, plane3, data[1])
            srf3 = rs.ExtrudeCurvePoint (crv3, centroid[0])
            allSrf3.append (srf3)

        if i==5:
            crv4Temp = rs.AddInterpCurve ((divPTCoor[i][j], divPTCoor[i+1][j], divPTCoor[i+2][j], divPTCoor[i-4][j], divPTCoor[i+5][j]),1)
            plane4 = rs.AddSrfPt ((divPTCoor[i+4][j], divPTCoor[i][j+2], divPTCoor[i+2][j+3]))
            centroid = rs.SurfaceAreaCentroid (plane4)
            rs.ScaleObject (plane4, centroid[0], (20,20,20))
            param = rs.SurfaceClosestPoint (plane4, divPTCoor[i][j])
            data = rs.SurfaceCurvature (plane4, param)
            crv4 = rs.ProjectCurveToSurface (crv4Temp, plane4, data[1])
            srf4 = rs.ExtrudeCurvePoint (crv4, centroid[0])
            allSrf4.append (srf4)

srf1 = allSrf1
srf2 = allSrf2
srf3 = allSrf3
srf4 = allSrf4
srf5 = allSrf5
srf6 = allSrf6
    
```

New loops in the code to generate additional sets of parts  
Curves degree changed to generate rough surfaces

Curve generated on i=5 to create the joining piece  
between the lower and upper parts

rs. print

////

Rhino Phase

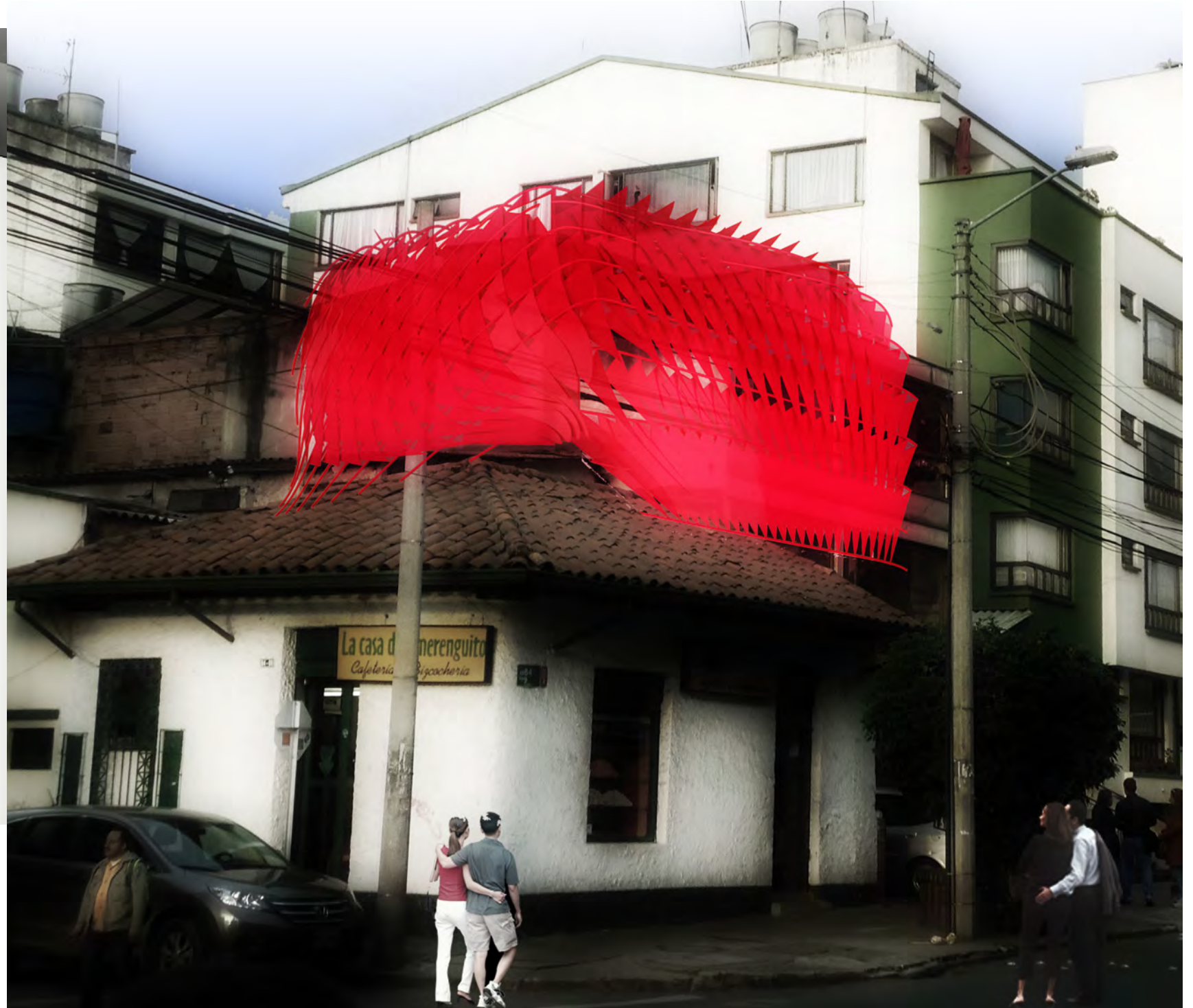
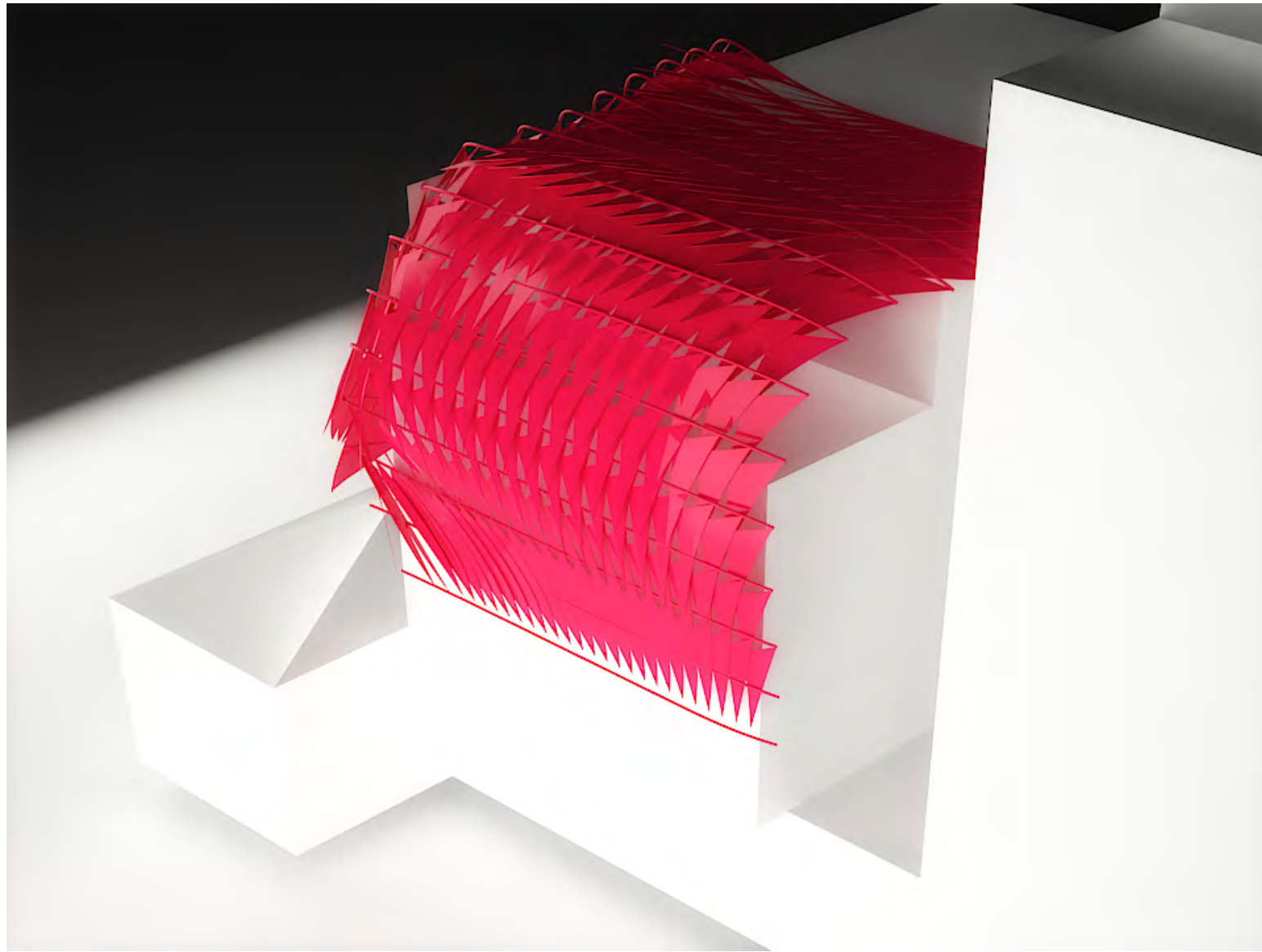
////





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rs. print



*La Agencia Proposal*







rs. print



*Belen Patio House proposal*







rs. print



*Fabrica Digital proposal*

