



AIU  
ARAB INTERNATIONAL UNIVERSITY  
DIGITAL ARCHITECTURE

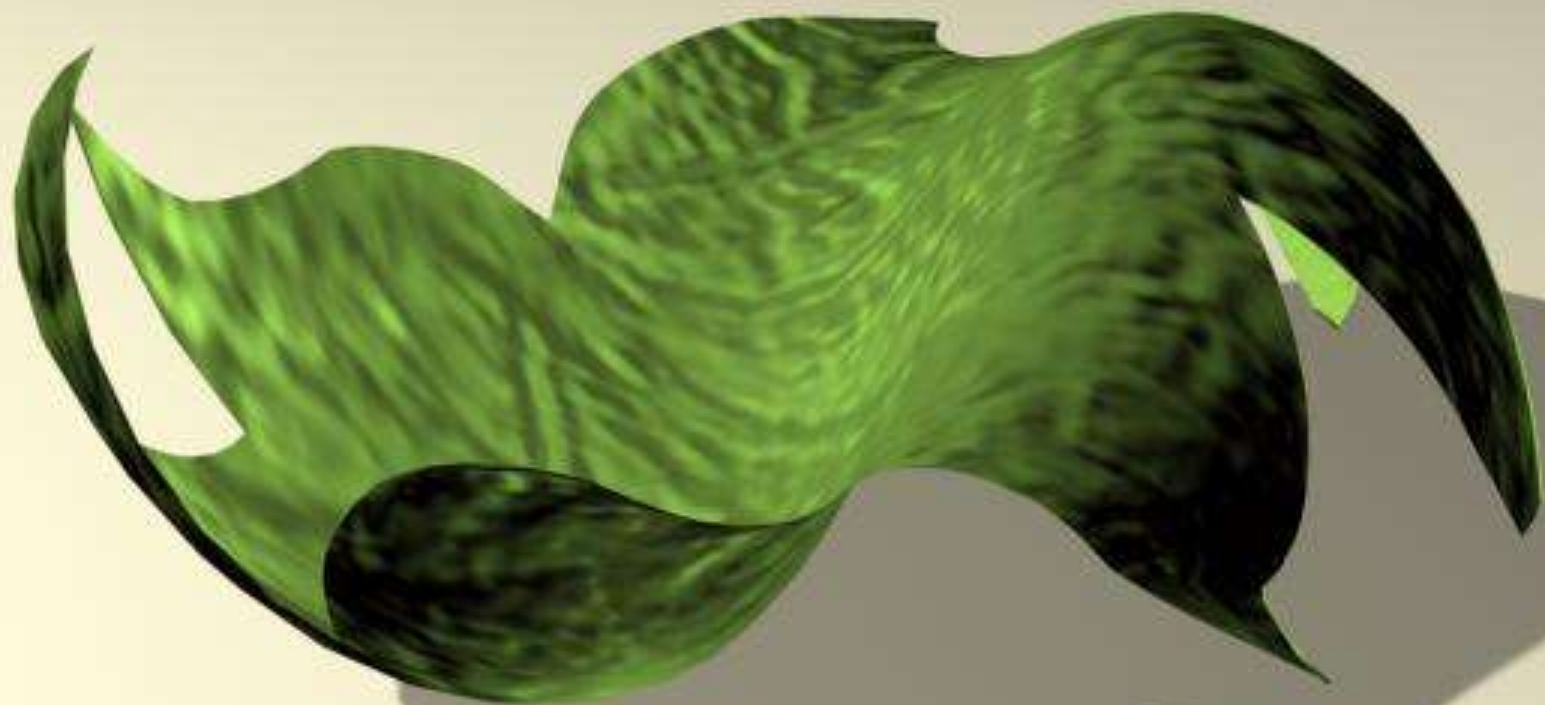
ENLIGHTENED EYES

BY :- AYA HAMOUD

BALKIS KADDOUR

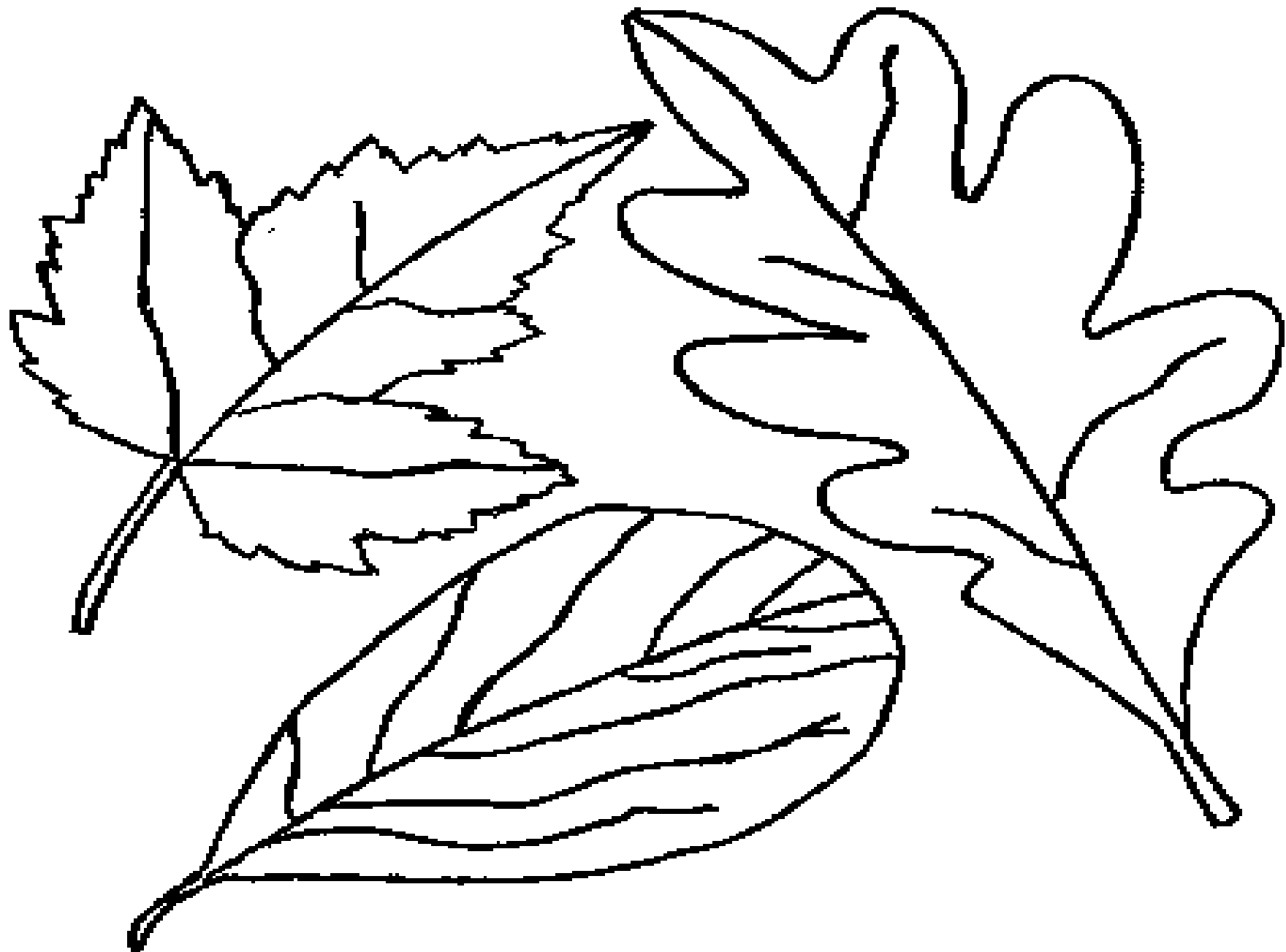
BARAA OUDAH

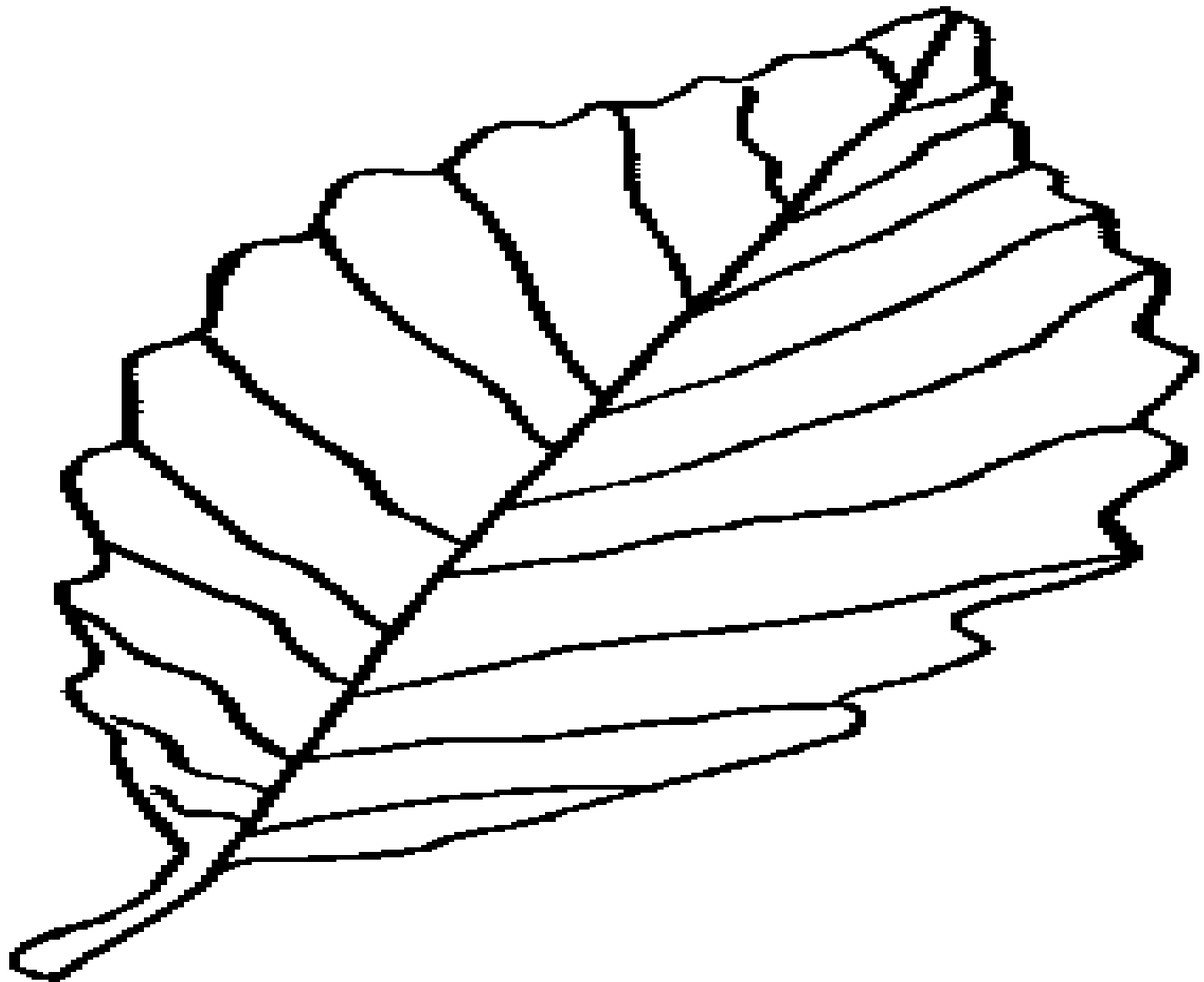













- 
- The concept : tree leaves.
  - The function : canapé .
  - The strategy of working : We've start our form with four leaves.



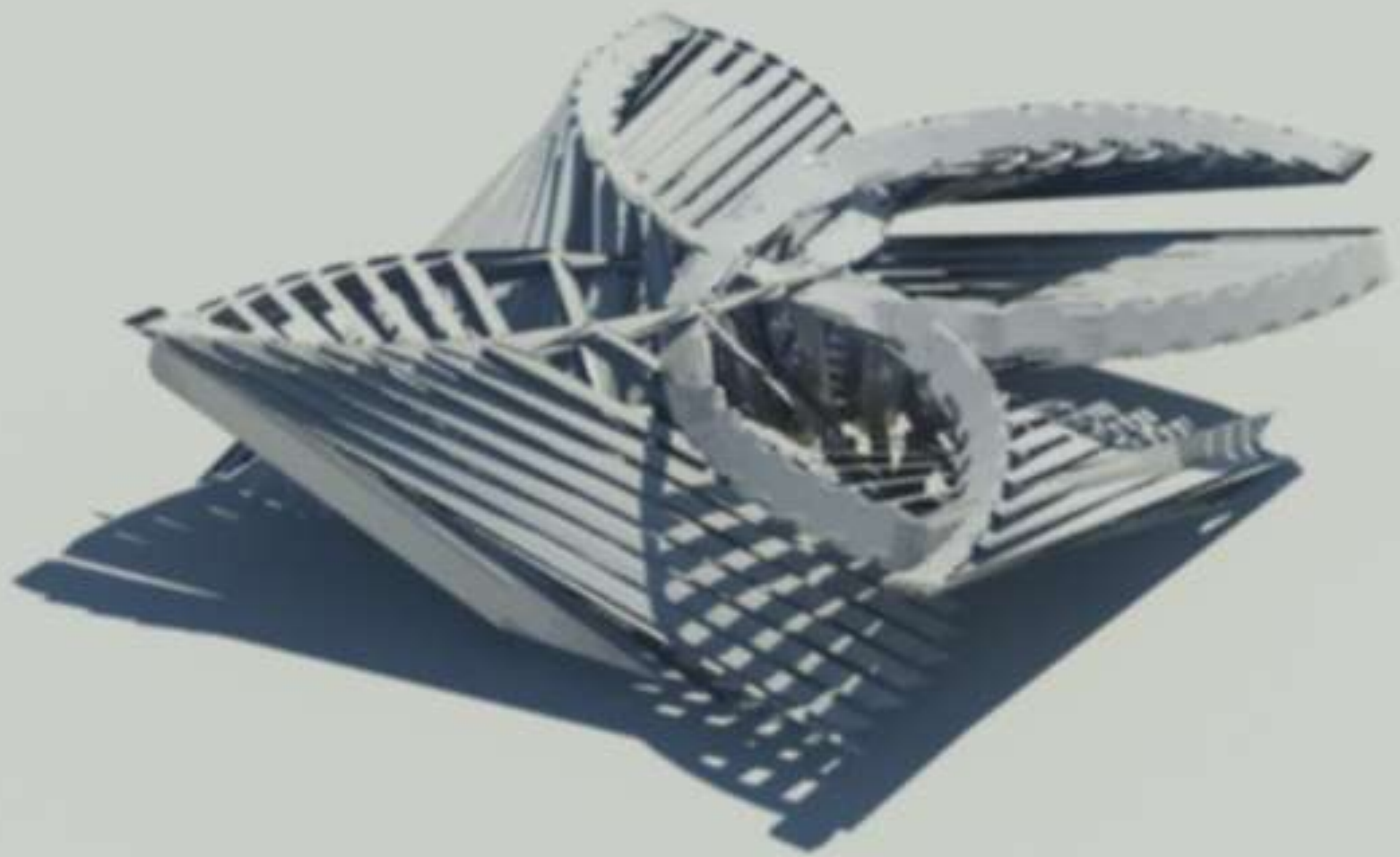
# The site

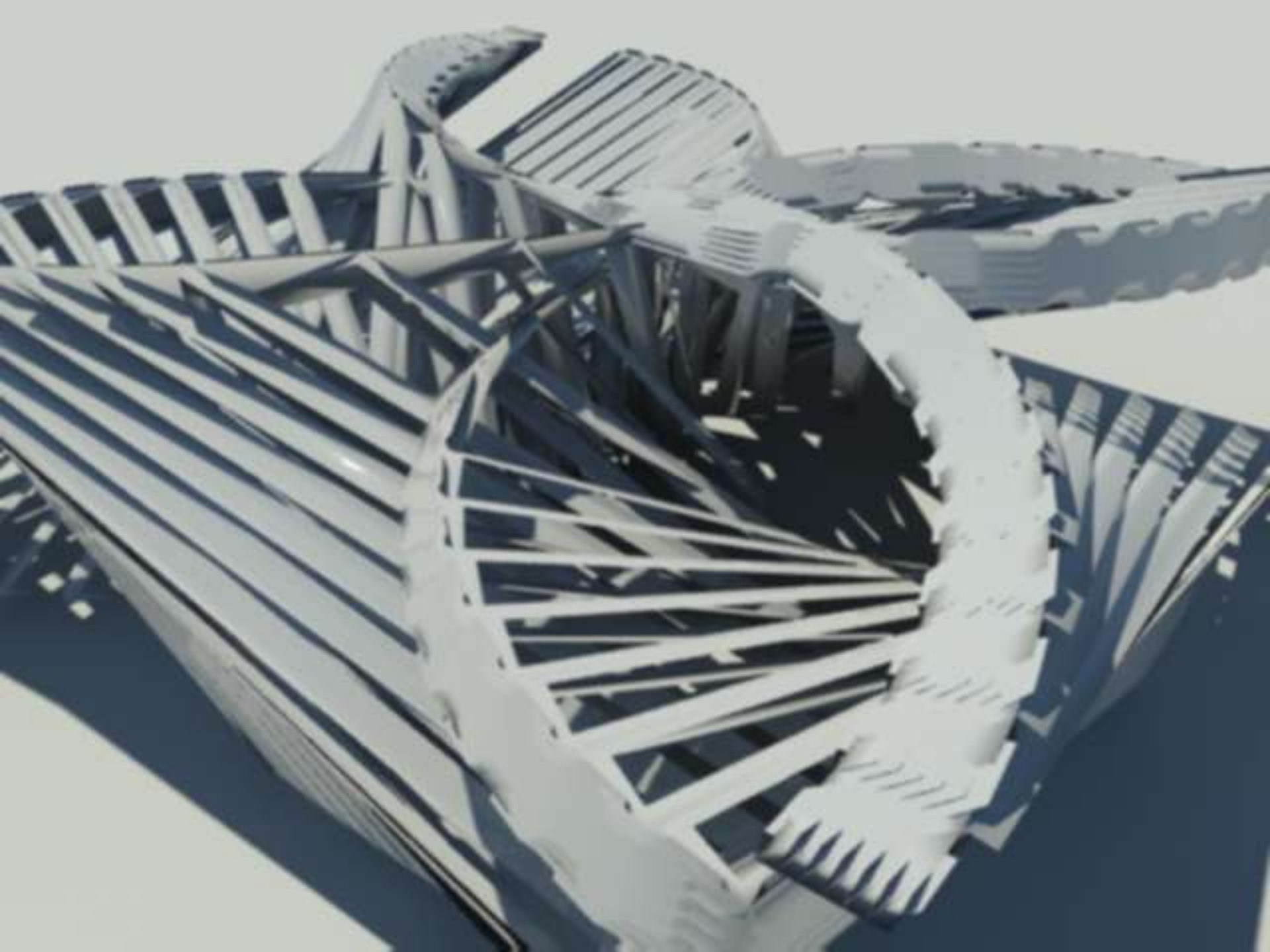




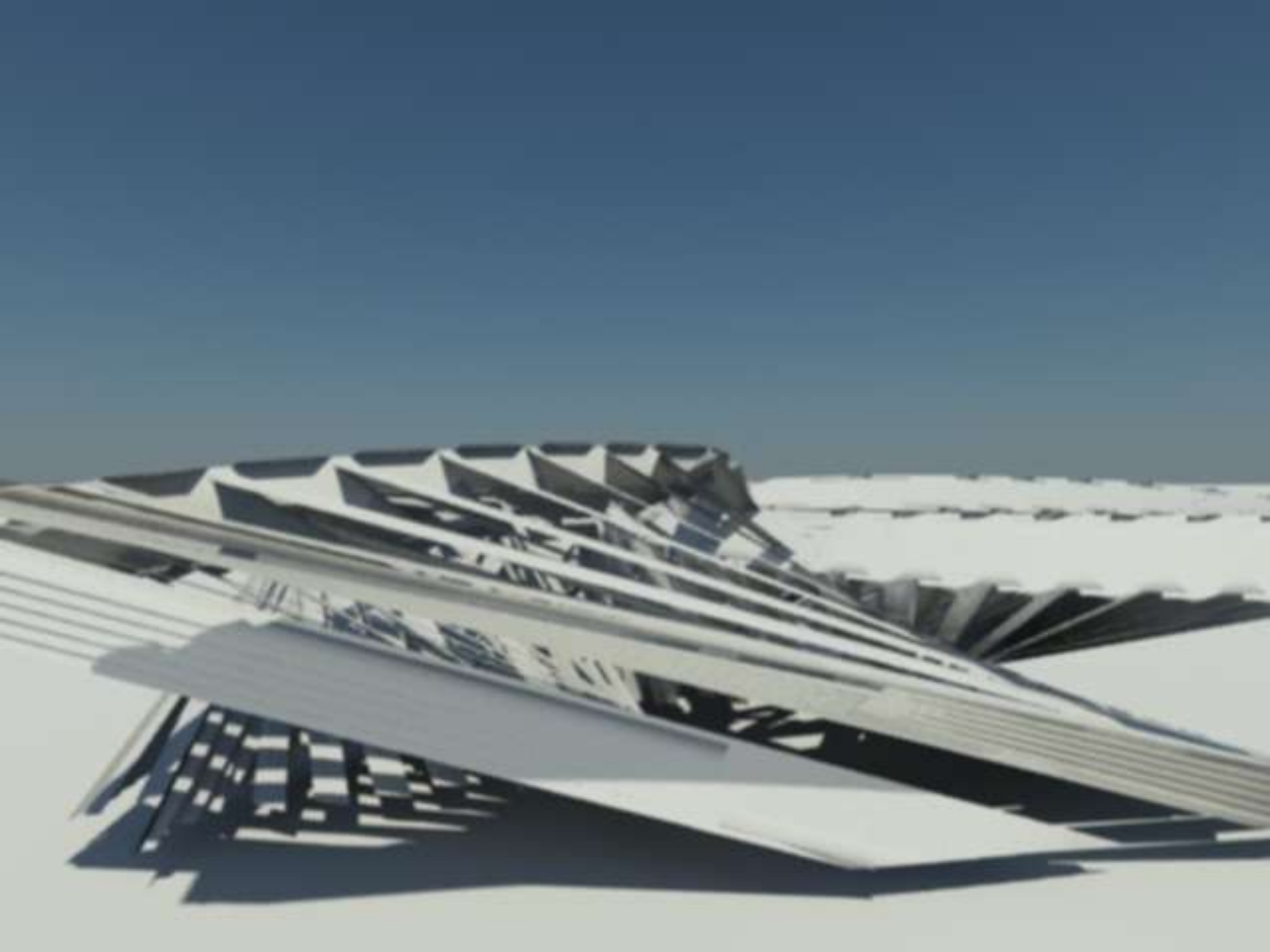












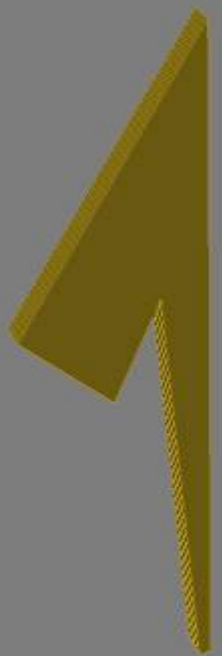


- 
- We took one leaf just for experimenting (repetition, rotation . . . etc )



Polygon Modeling  
+ [[Perspective]] S...  
Total  
Poly: 224,670  
Vert: 114,508  
FPS: 214.985

**Graphite Modeling Tools**  
For polygon modeling, these tools are available only when the selected object is an **Editable Poly**, or has an active **Edit Poly** modifier.  
Also, to enable the tools, **Modify Mode** must be active.



Standard Primitives

Object Type

AutoGrid

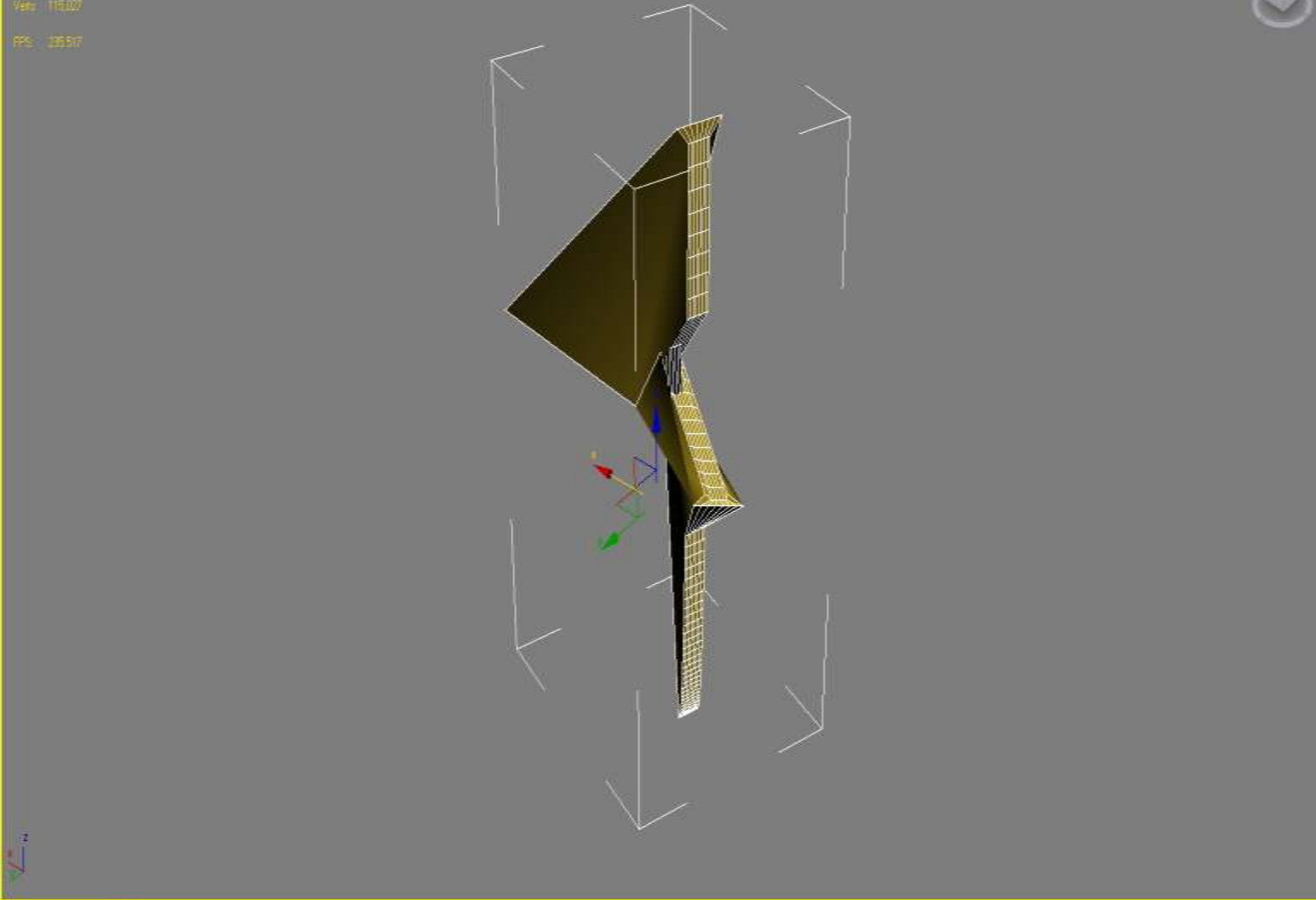
Box Cone  
Sphere GeoSphere  
Cylinder Tube  
Torus Pyramid  
Teapot Plane

Name and Color

[Color Picker]

[[Perspective]] Smooth + Highlights + EdgedFaces

Total  
 Poly: 226,642  
 Vets: 118,107  
 FPS: 236.917



Line563

Modifier List

- Editable Mesh

Buttons: Create, Delete, Attach, Attach List, Break, Turn, Extrude (0.0), Bend (0.0), Slice Plane, Slice, Cut, Split, Refine Ends

Selection

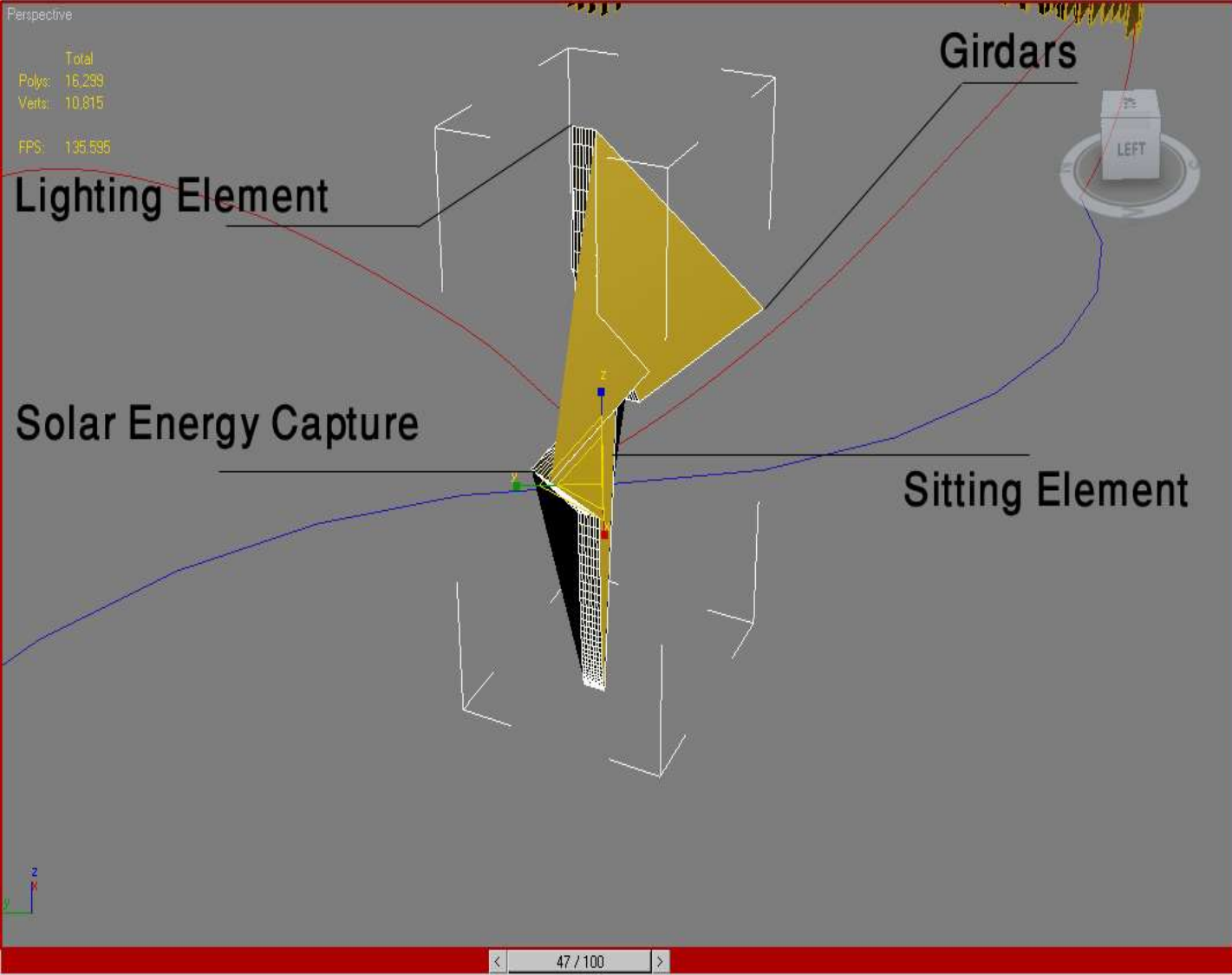
- By Vertices
- Ignore Backfacing
- Ignore Visible Edges
- Plane Tresh: 45.0
- Show Normals
- Scale: 20.0
- Delete Isolated Vertices

Buttons: Hide, Unhide All, Named Selections (Copy, Paste), Whole Object Selected

Soft Selection

Buttons: Weld (Selected: 0.1, Target: 4 pixels), Tesselate (25.0), Explode (24.0), Remove Isolated Vertices, Select Open Edges, Create Shave from Edges, New Align, Grid Align, Make Planar, Collapse

Surface Properties



Total  
Polys: 16,299  
Verts: 10,815  
FPS: 135.595

Line50

Modifier List

- Editable Poly
  - Vertex
  - Edge
  - Border
  - Polygon
  - Element

Selection

By Vertex  
 Ignore Backfacing  
 By Angle: 45.0

Shrink Grow  
 Ring Loop

Preview Selection

Off  SubObj  Multi

Whole Object Selected

+ Soft Selection

Edit Geometry

Repeat Last

Constraints

None  Edge  
 Face  Normal

Preserve UVs

Create Collapse  
 Attach Detach

Slice Plane  Split

Slice Reset Plane  
 QuickSlice Cut

MSmooth  Tessellate

Make Planar X Y Z  
 View Align Grid Align

Relax

Hide Selected Unhide All  
 Hide Unselected

Named Selections:

Copy Paste

Delete Isolated Vertices  
 Full Interactivity

Subdivision Surface

Smooth Result  
 Use NURMS Subdivision  
 Isoline Display  
 Show Cage.....

Display

Iterations: 1  
 Smoothness: 1.0

Render

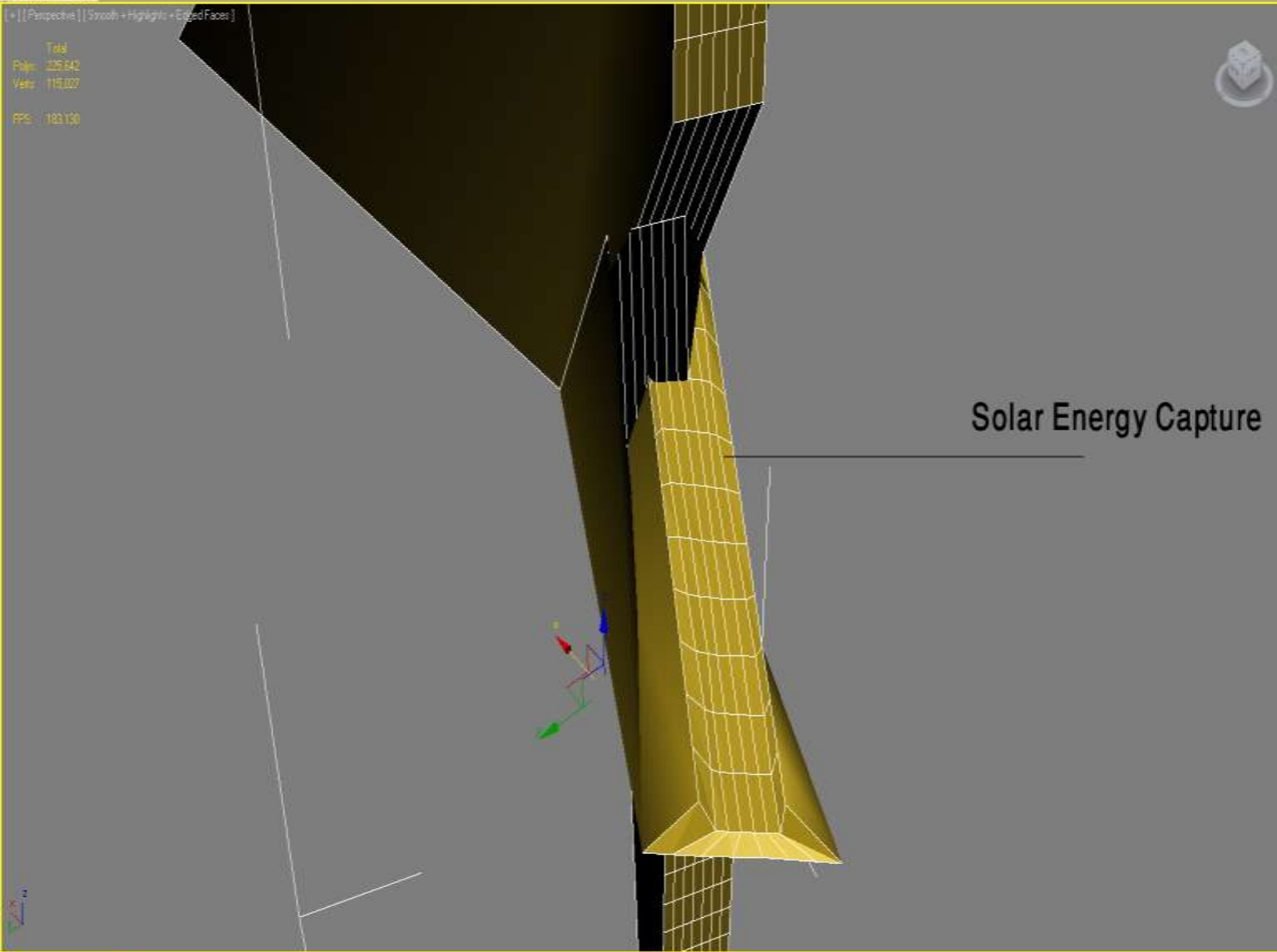
Iterations: 0  
 Smoothness: 1.0

47 / 100

1 Object Selected X: 7.068 Y: 7.068 Z: 7.068 Grid = 10.0

Constraint Click and drag to select and scale objects (uniformly) Add Time Tag

Auto Key Selected Key Filters... 47



Solar Energy Capture

Total  
 Poly: 226,642  
 Vets: 118,107  
 FPS: 183.130

Line563

Modifier List

- Editable Mesh

Buttons: Create, Delete, Attach, Attach List, Break, Turn, Extrude (0.0), Bend (0.0), Slice Plane, Slice, Cut, Split, Refine Ends

Weld

Buttons: Selected (0.1), Target (4 pixels), Tesselate (25.0)

By: Edge, Face-Center

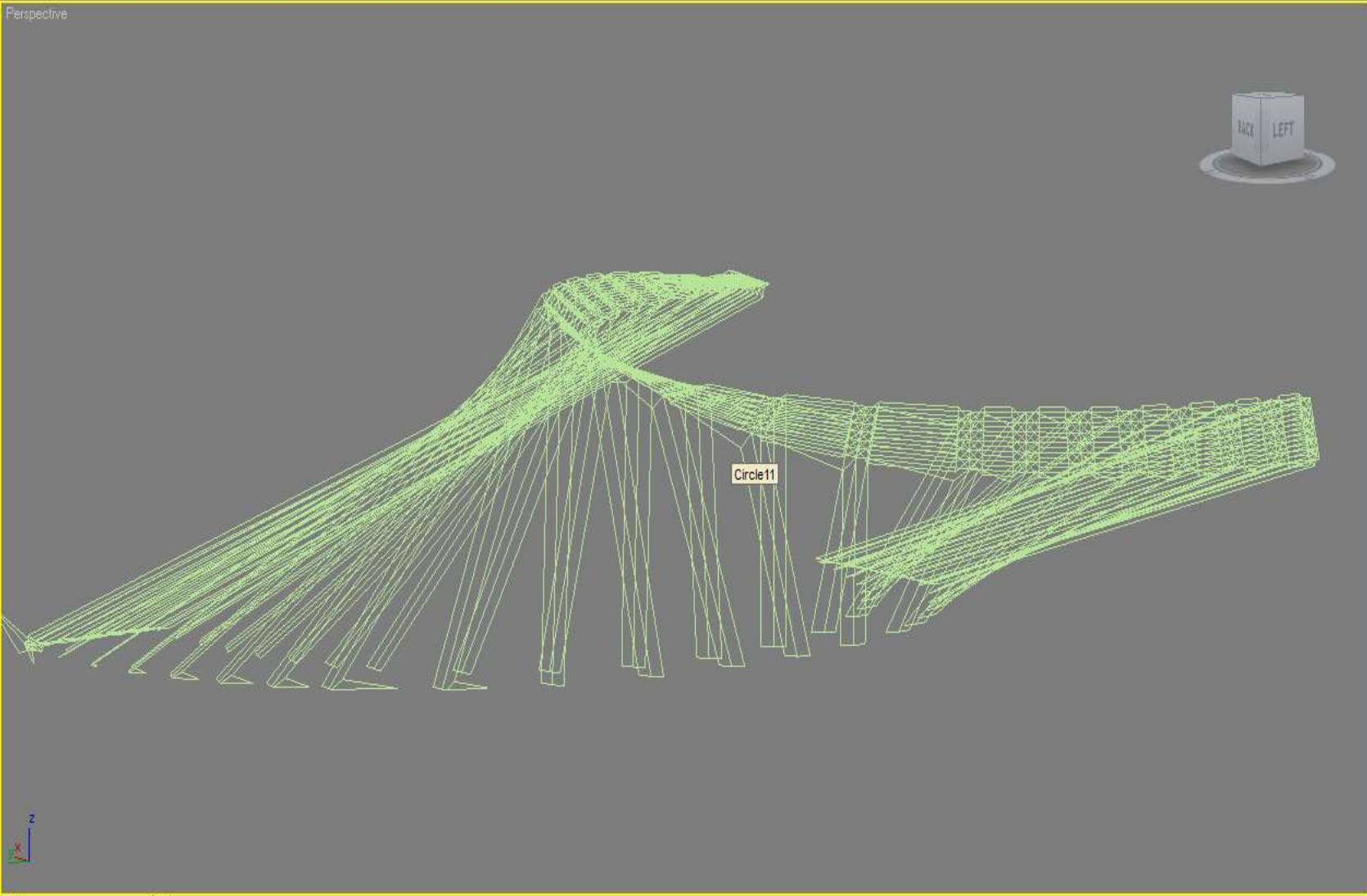
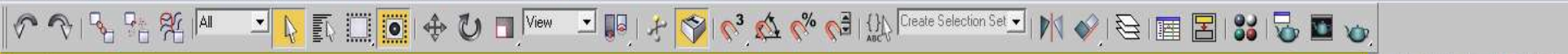
Buttons: Explode (24.0), Remove Isolated Vertices, Select Open Edges, Create Shave from Edges

Named Selections

Buttons: Copy, Paste, Whole Object Selected

Soft Selection

Surface Properties



Standard Primitives

Object Type

- AutoGrid
- Box
- Cone
- Sphere
- GeoSphere
- Cylinder
- Tube
- Torus
- Pyramid
- Teapot
- Plane

Name and Color

[Color Selection Box]

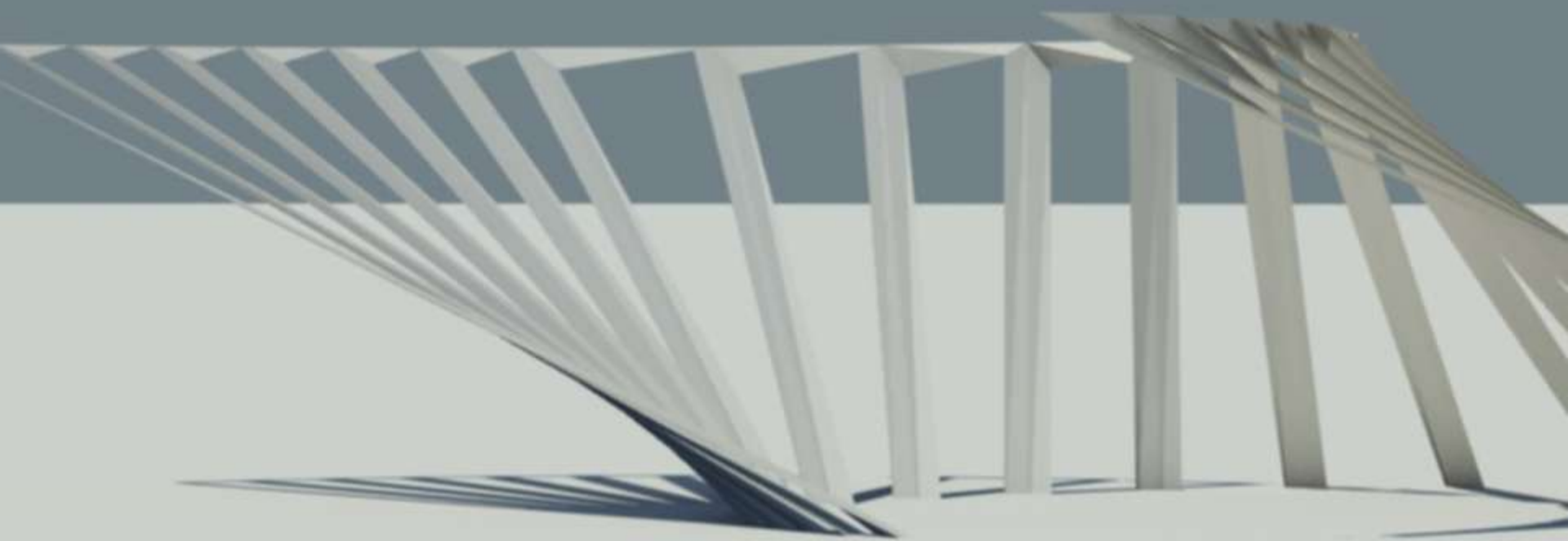


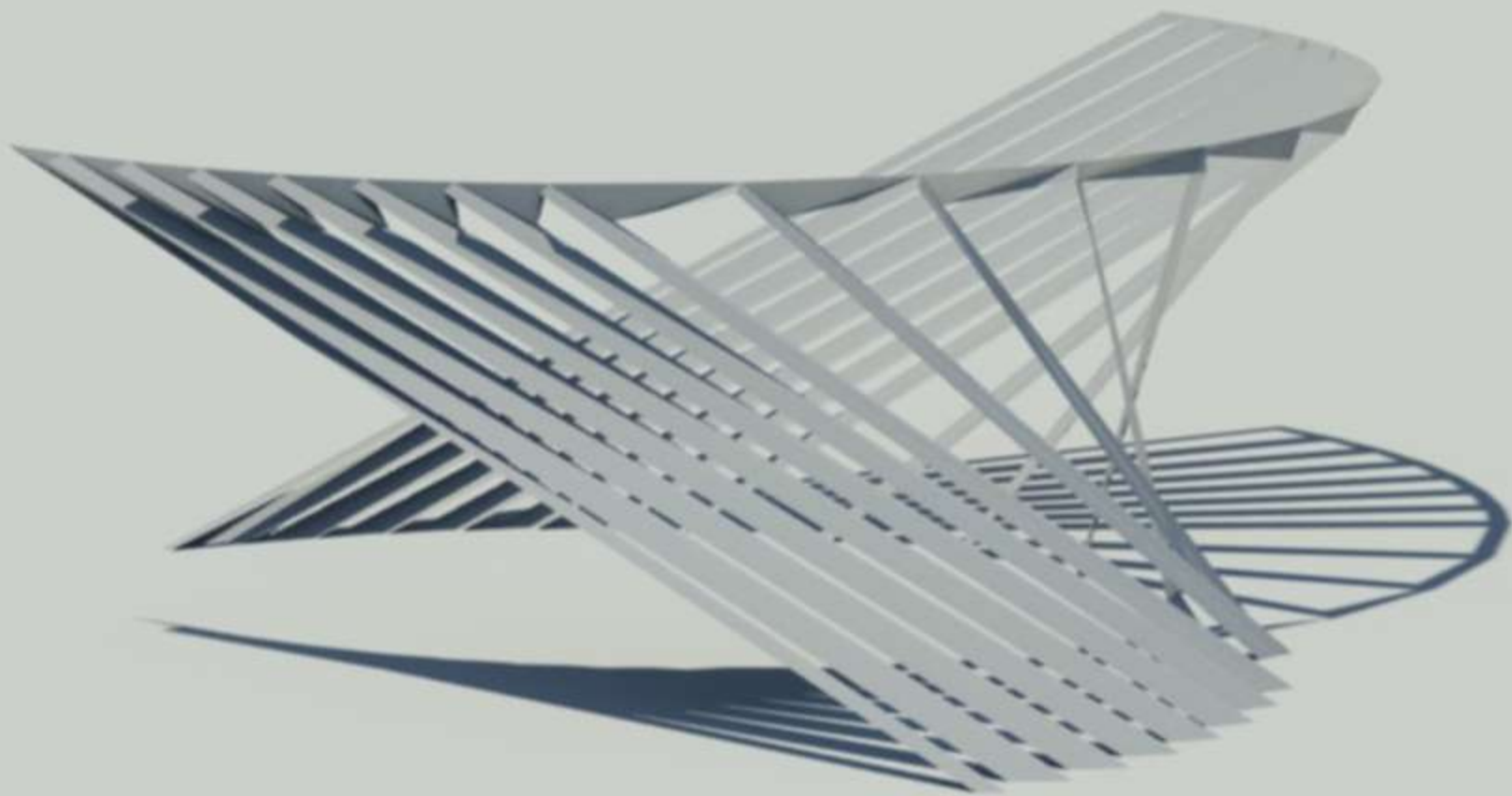
MAXScript. Click or click-and-drag to select objects

Add Time Tag

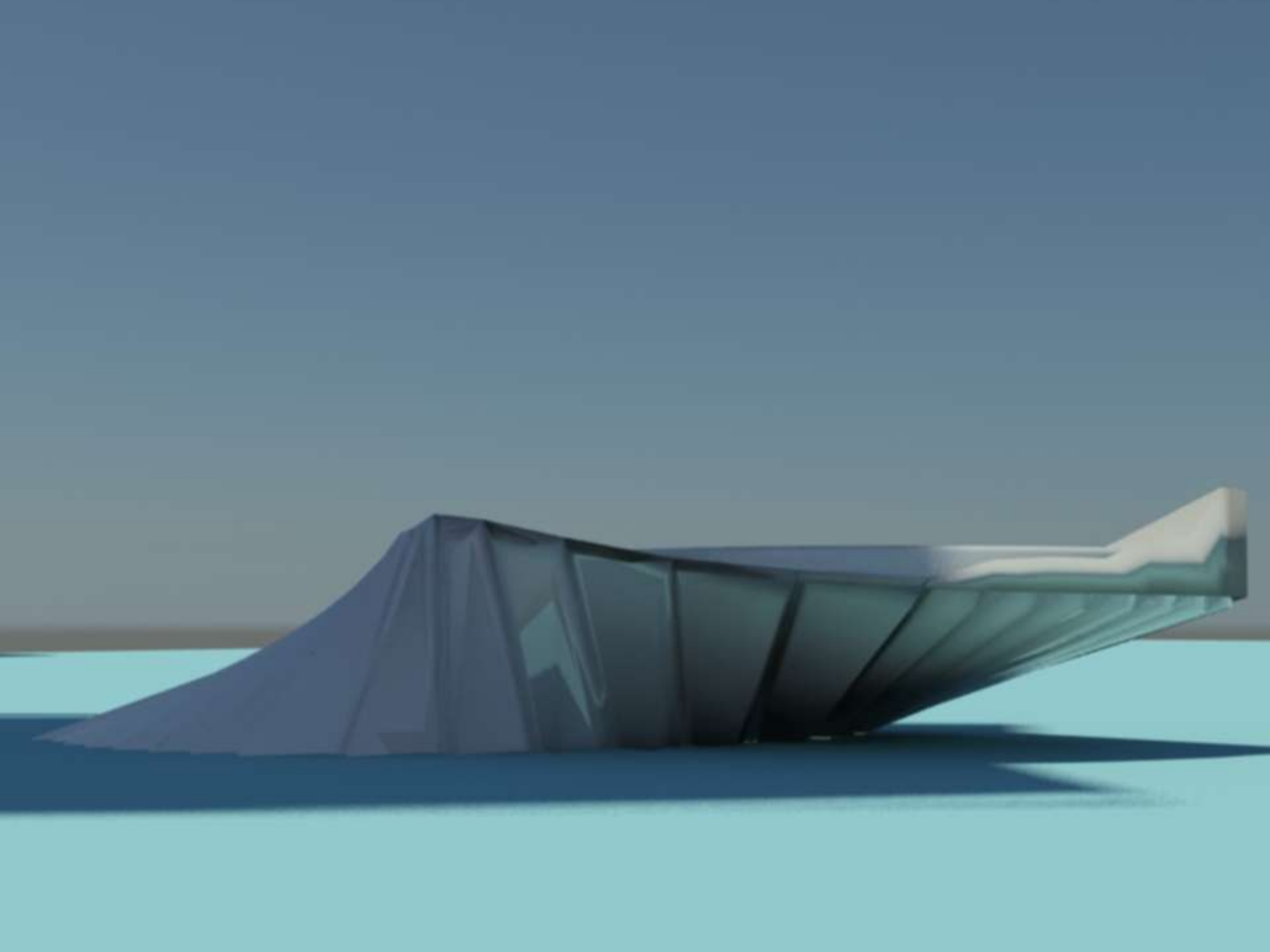
Auto Key Selected

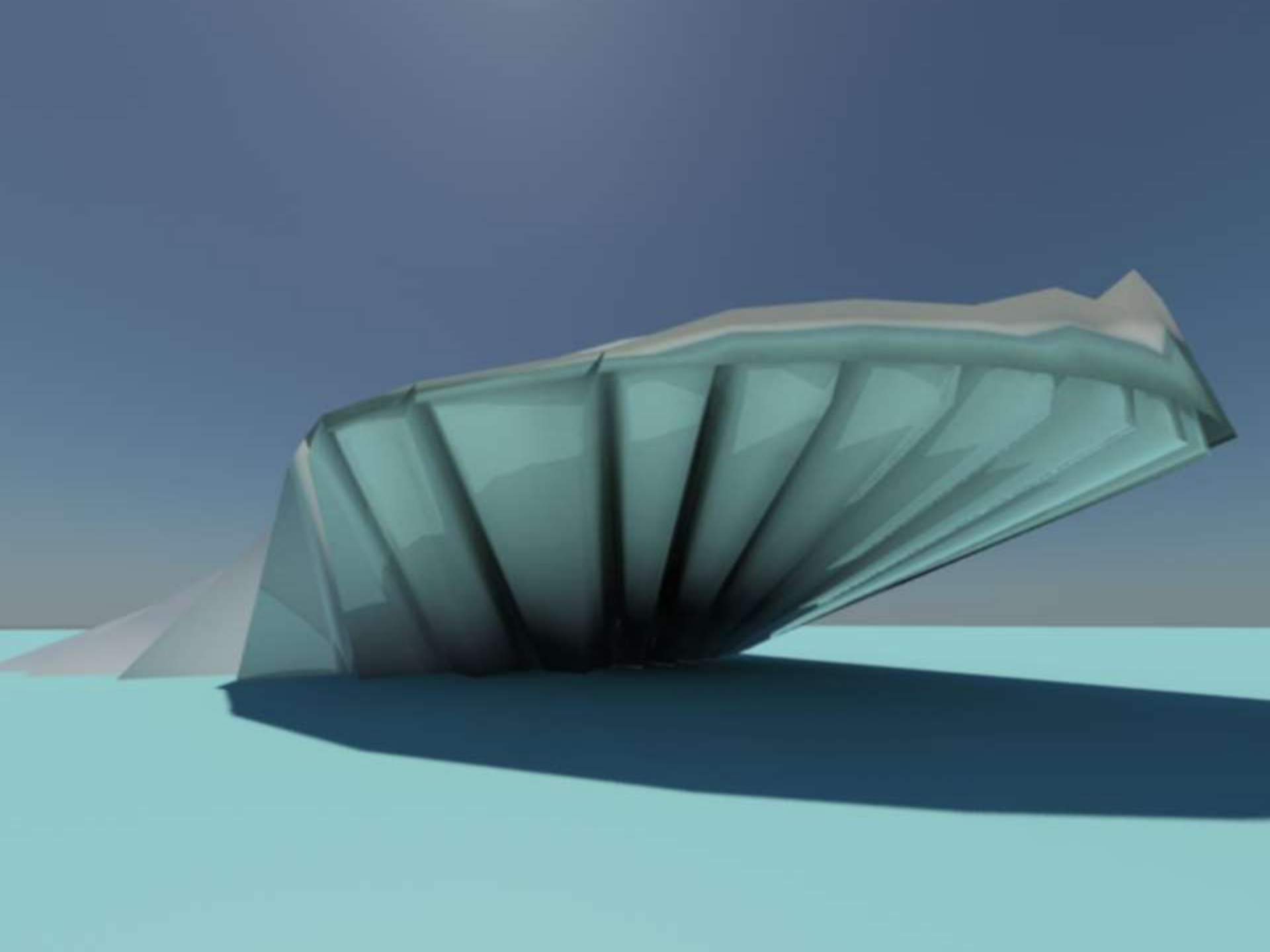
Set Key Key Filters...




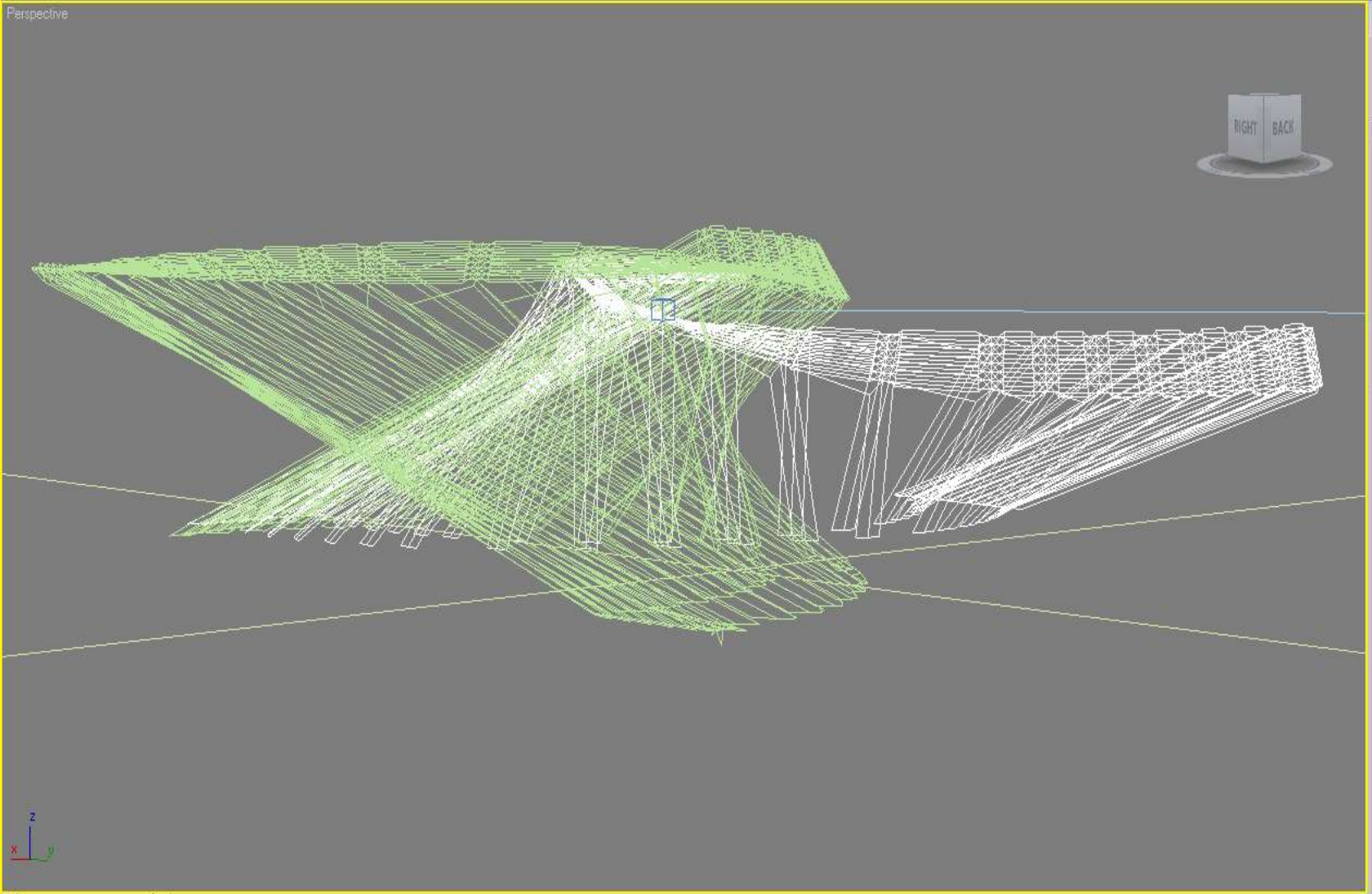








- 
- A close-up photograph of a rolled cigarette, likely a cigar or a thick cigarette, with a dark stem. The cigarette is wrapped in light-colored, textured paper and is positioned diagonally across the frame. The background is a soft, out-of-focus gradient of light and dark tones, suggesting an indoor setting with natural light. The overall mood is contemplative and artistic.
- After that we've take two leaves to achieve our form, and they gave us a very interesting body especially the part that contain bending beams which seems very clear in the façade.



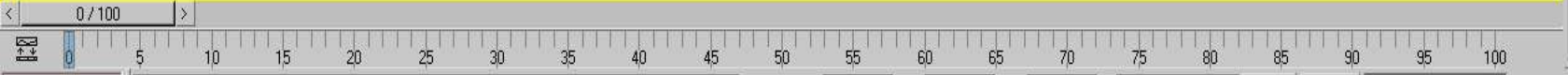
Standard Primitives

Object Type

- AutoGrid
- Box
- Cone
- Sphere
- GeoSphere
- Cylinder
- Tube
- Torus
- Pyramid
- Teapot
- Plane

Name and Color

Circle10 ■



1 Object Selected

X: -1350.138 Y: -1309.617 Z: 0.0

Grid = 10.0

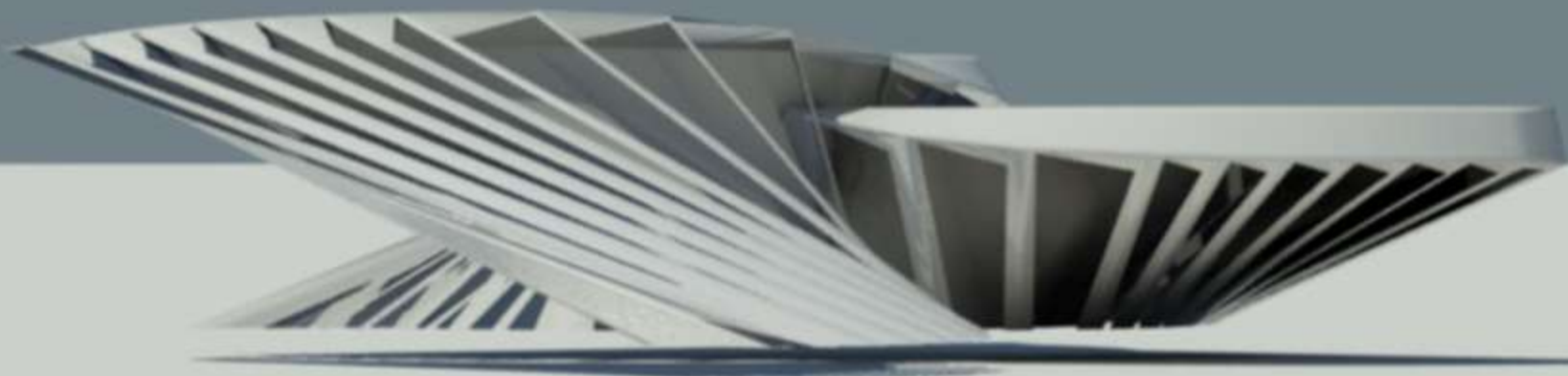
Auto Key Selected

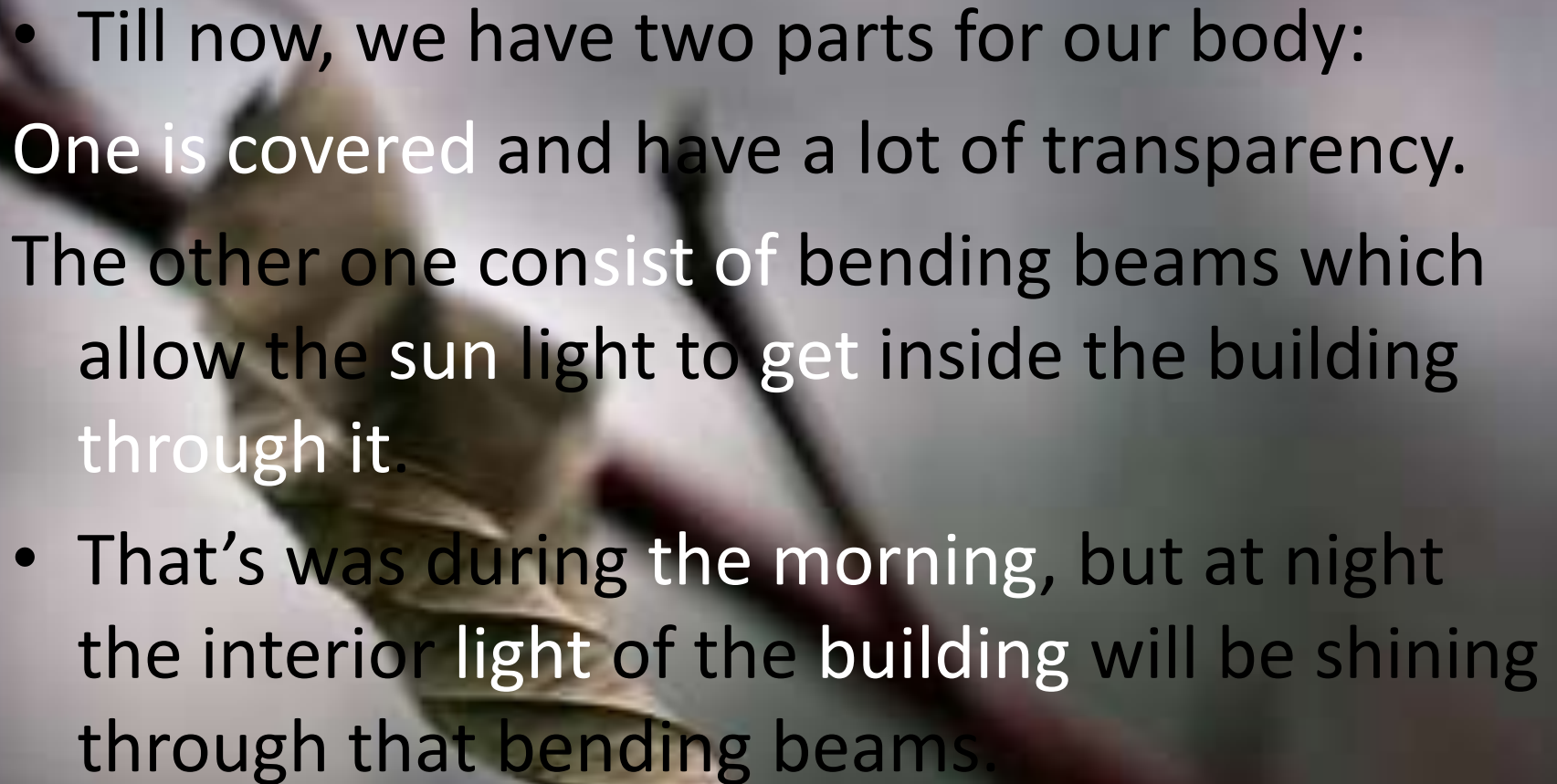
Set Key Key Filters...

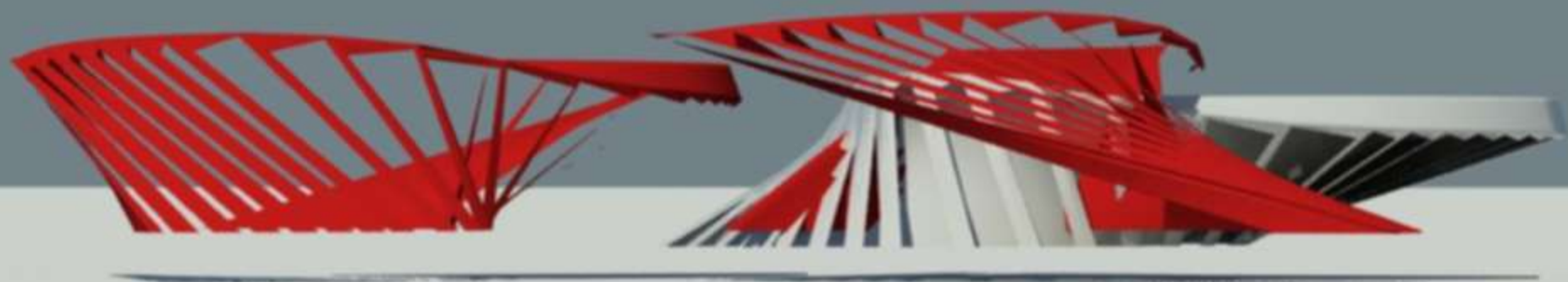
0

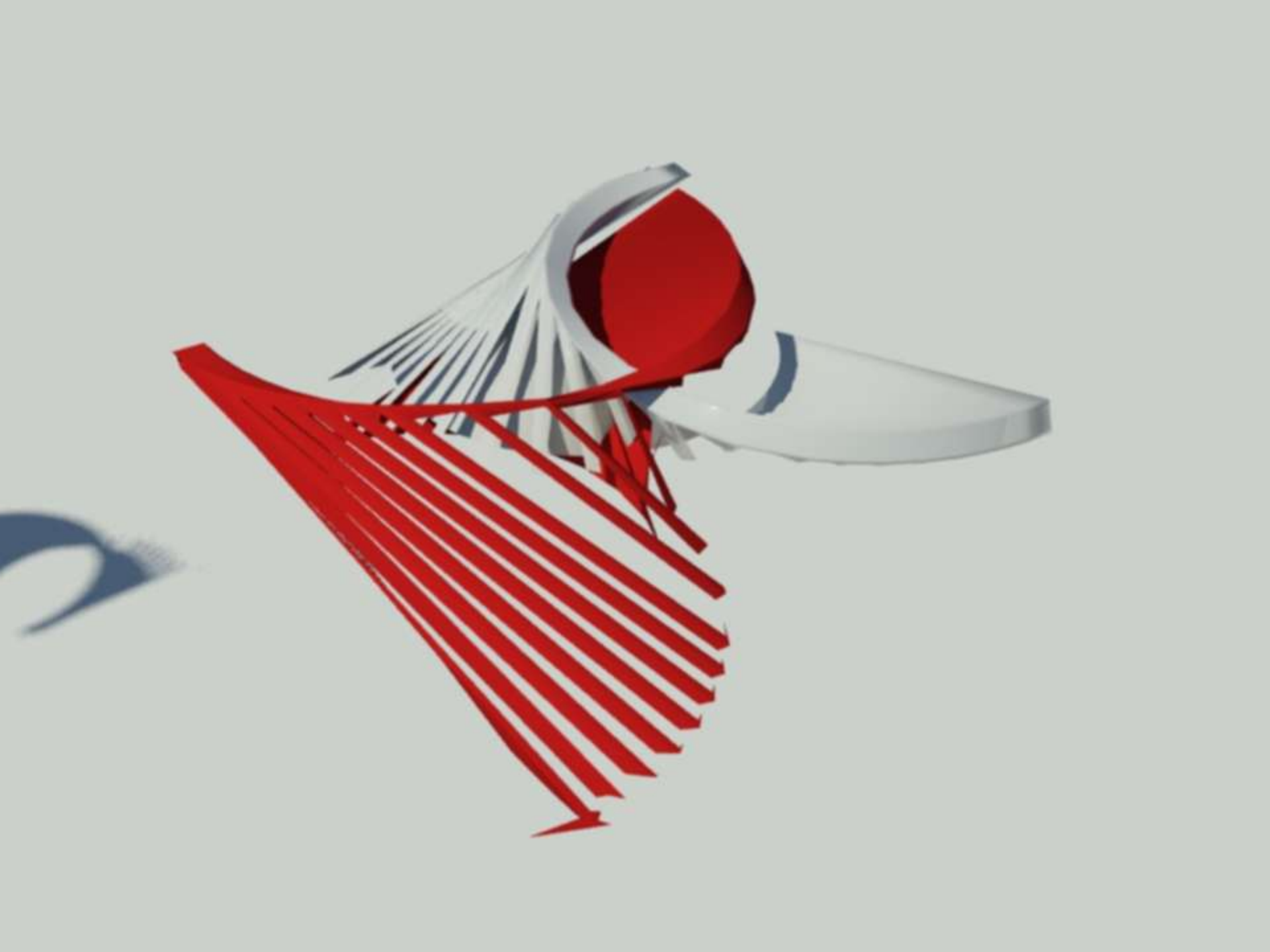
Add Time Tag



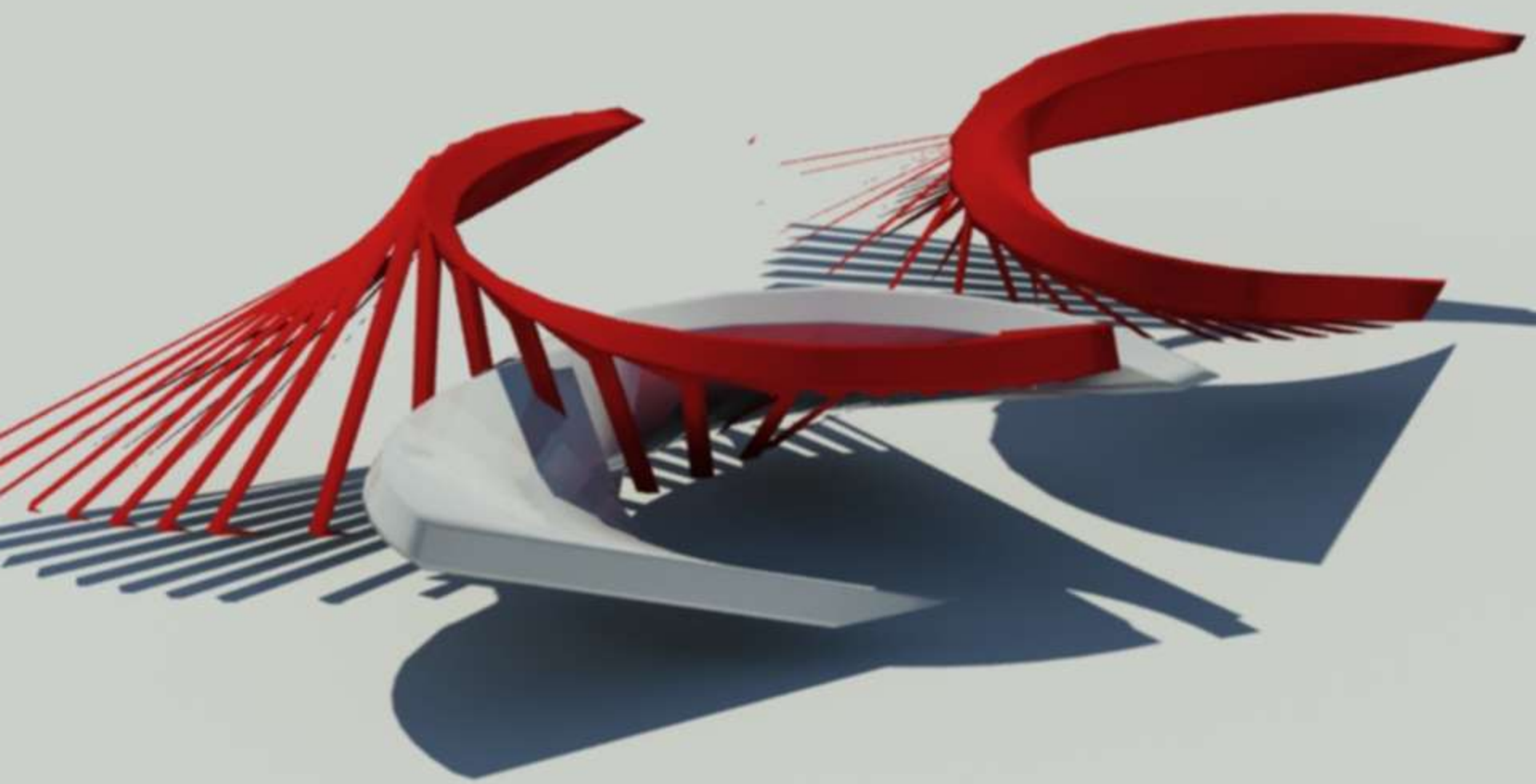


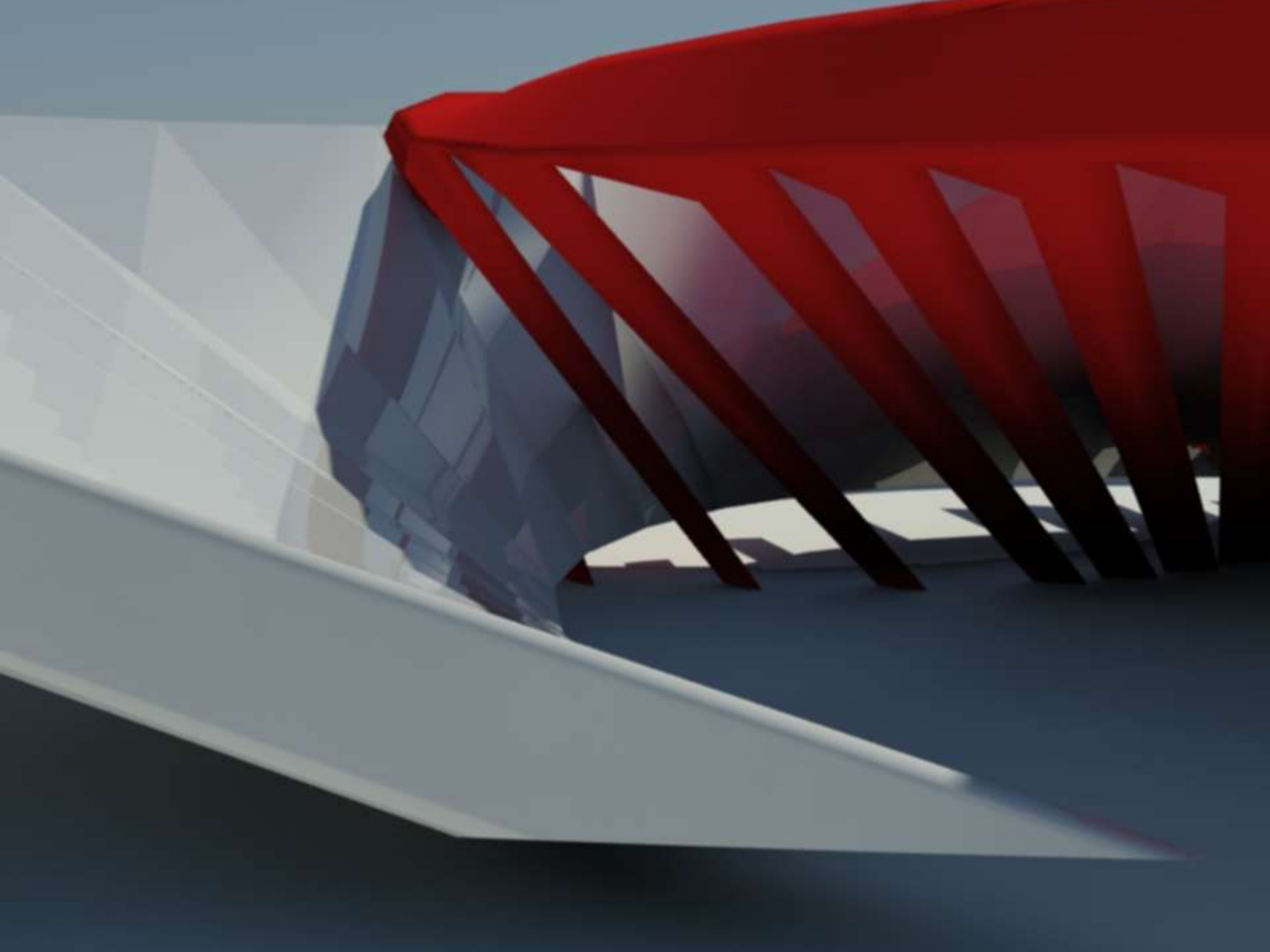
- 
- Till now, we have two parts for our body:  
One is covered and have a lot of transparency.  
The other one consist of bending beams which allow the sun light to get inside the building through it.
  - That's was during the morning, but at night the interior light of the building will be shining through that bending beams.

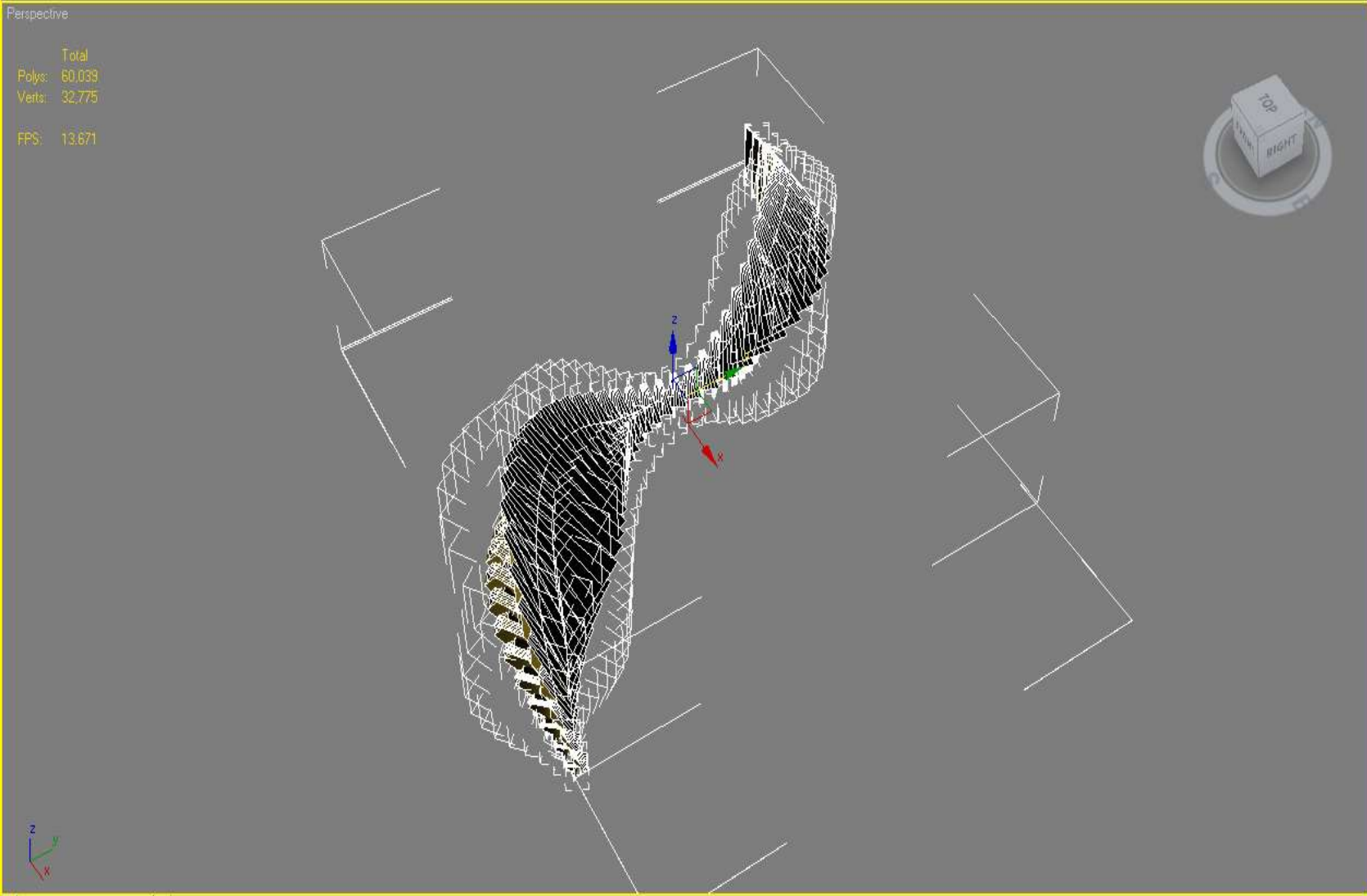












Total  
Polys: 60,039  
Verts: 32,775  
FPS: 13.671

Perspective

48 Entities Selected

Modifier List

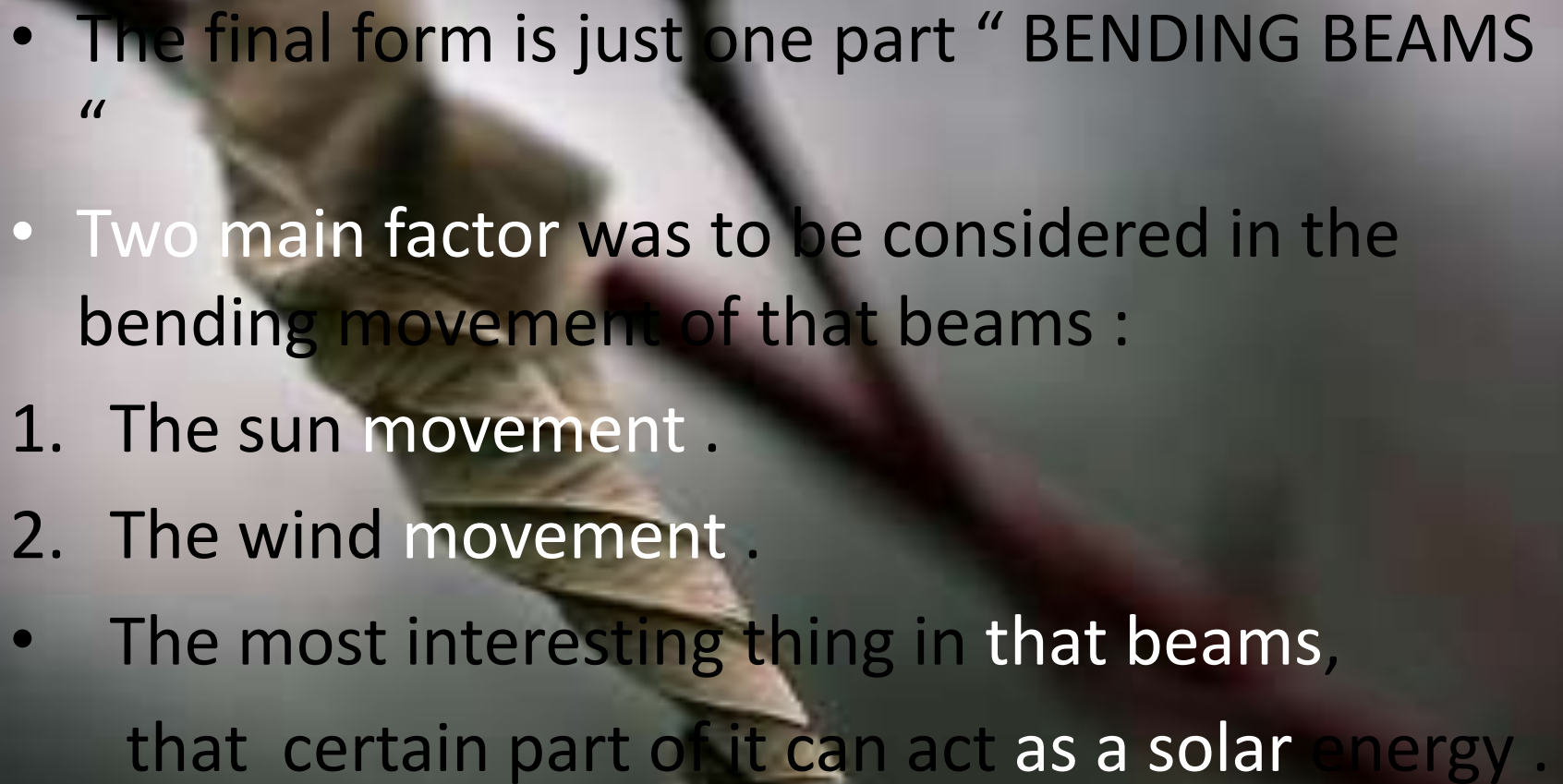


Constraint Click and drag to select and move objects

Grid = 10.0

Auto Key Selected

Set Key Key Filters...

- 
- The final form is just one part “ BENDING BEAMS “
  - Two main factor was to be considered in the bending movement of that beams :
    1. The sun movement .
    2. The wind movement .
  - The most interesting thing in that beams, that certain part of it can act as a solar energy .

