Assignment 3: PERFORMATIVE POD

Hand-in: Wednesday, Oct. 14, 1pm

For a hot climate, design a shading device using an adjustable version of your motif, using Grasshopper to vary between open and closed. The mechanism can be hinging, rotating, radius closing, changing depth, etc.: it needs to respond to a sun vector. Do not worry about the material or technology: create the adjustable geometry and assume that you could find the necessary materials and connections.

1. Start by creating a façade module that adjusts according to a slider bar.
2. Then make it change according to a moving vector. (i.e. Orient a part perpendicular to the vector OR measure the angle between a vertical line and the sun angle & ReMap it to the value range you need)
3. Use Heliotrope or Ladybug to create this sun vector.
4. Aggregate the modules into an adjustable facade, being careful about the data structure.
5. Create a catalog of the different versions of your adjustable shading device, showing it in a 2D and a 3D view. Show versions that would
   a. shade a South façade
   b. shade a West façade
   c. open to the North
6. Sketch a minimal living pod with sleeping, eating, washing/toilet and workspace, showing how your façade would attach.

For the ambitious: Visualize how the façade would impact the interior, paying attention to scale, color and material.

Required Reading: The Geometry of Environment by Lionel March and Philip Steadman, Chapter 3.