

CAROLINE JIANG

62.123 DIGITAL MEDIA II / ASSIGNMENT 3. 3D MODELING



Basic Implicit Modeling Practices

Curve-Based Model 1

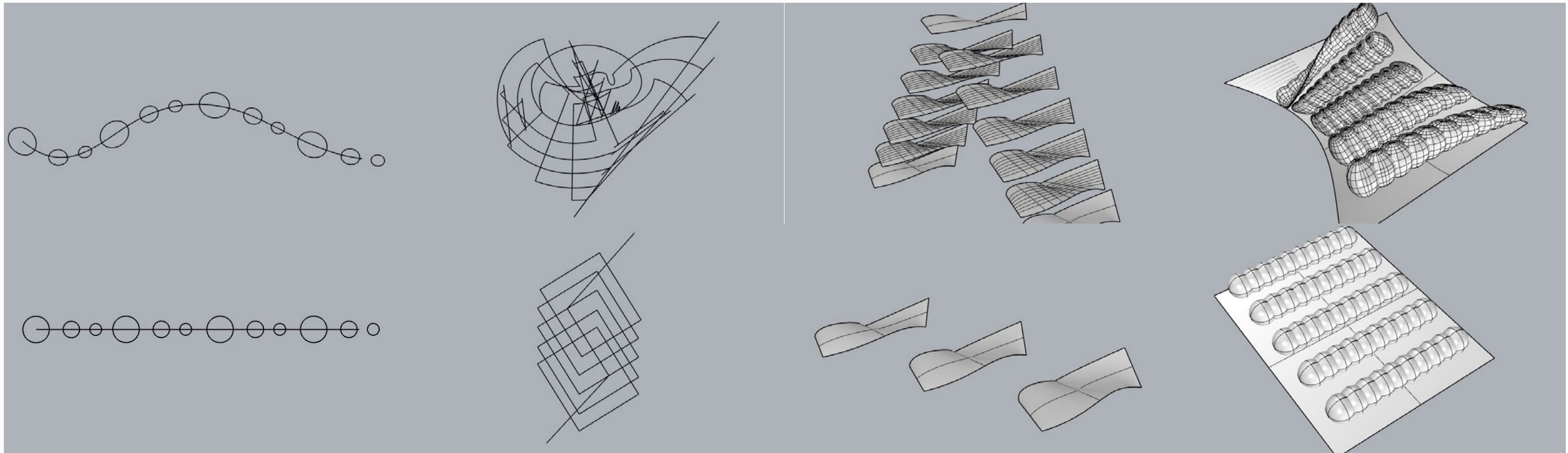
Curve-Based Model 2

Surface-Based Model 1

Surface-Based Model 2

Implicit
Result

Control
Objects



Modeling
History

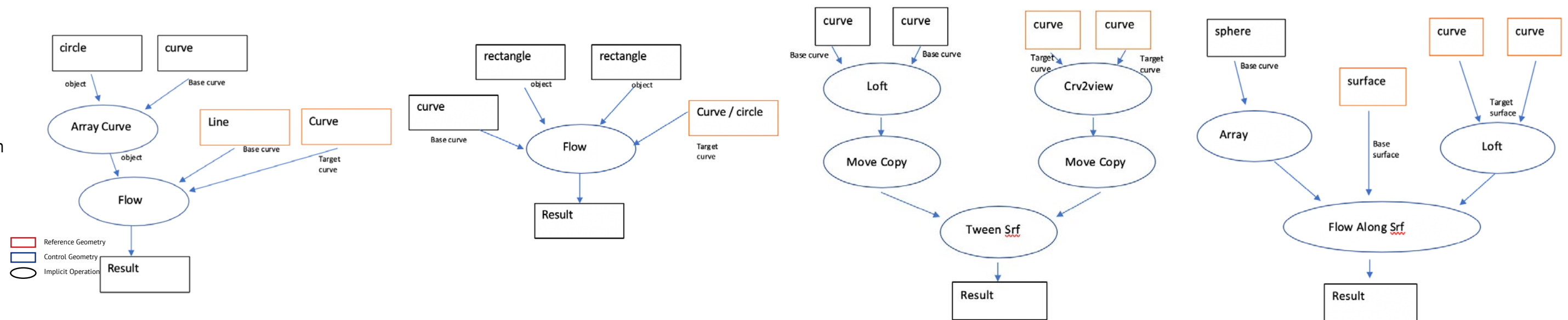
Circle → ArrayCrv → Flow

Rectangle → Copy (x4) → PolyLine → Curve → Flow

Curve (x2) → Loft → Copy(x2) → TweenSrf → Move

Rectangle → Sphere → Array → Curve(x2) → Loft → Flow

Operation
Tree

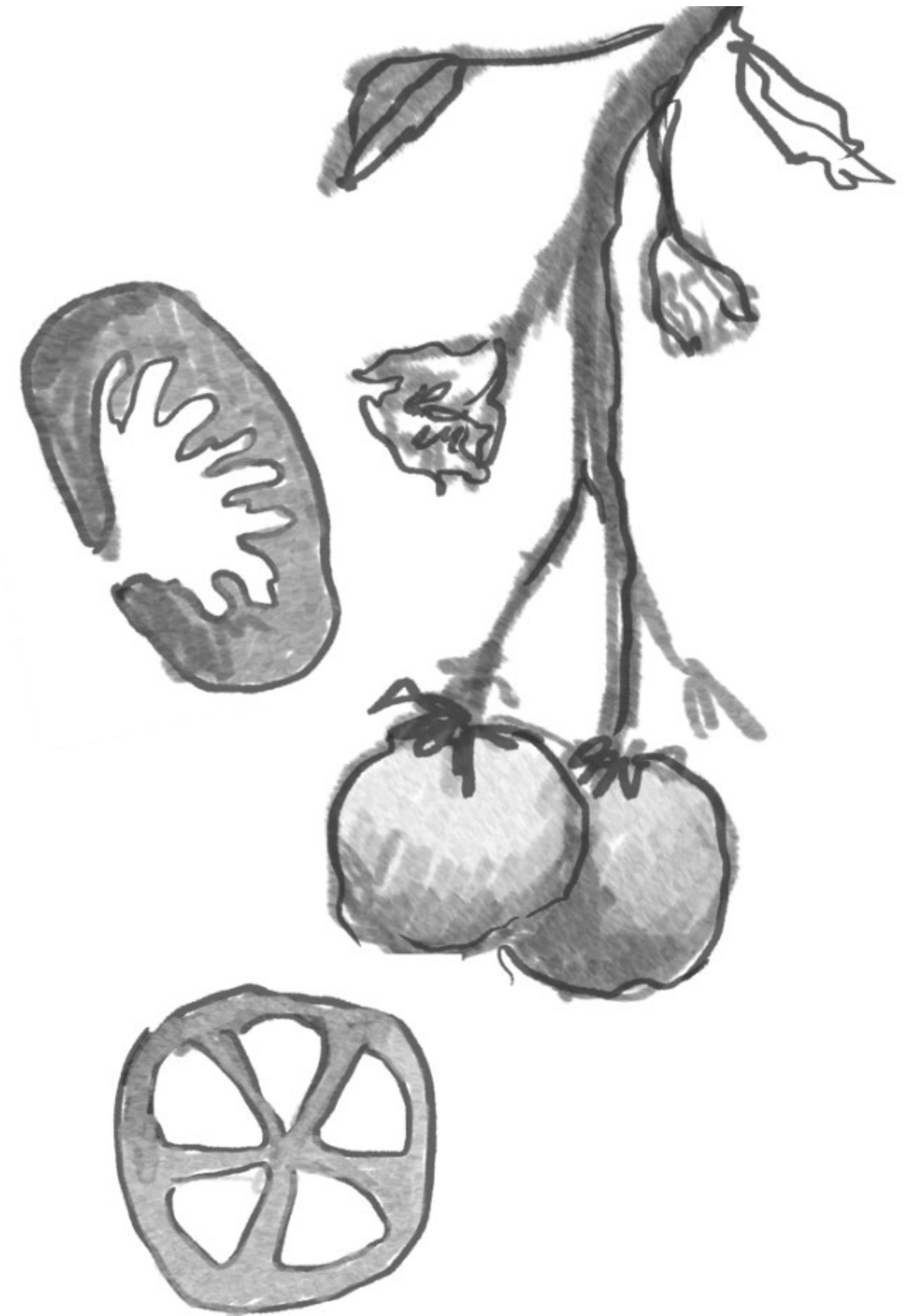
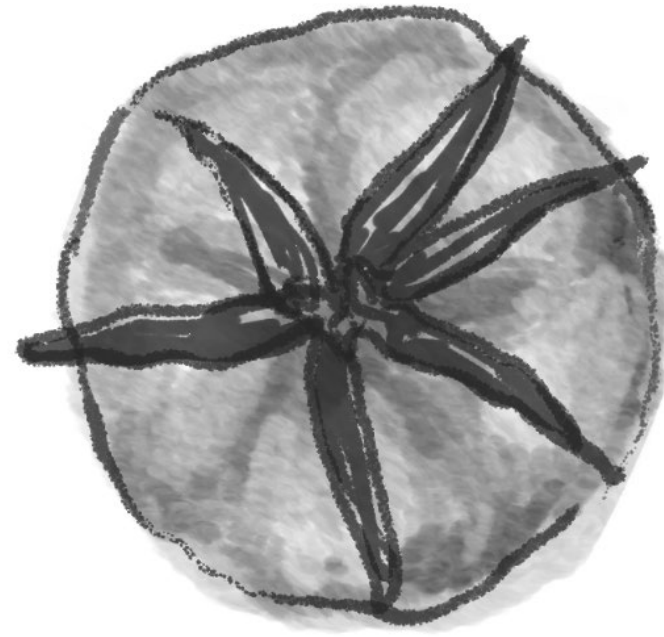


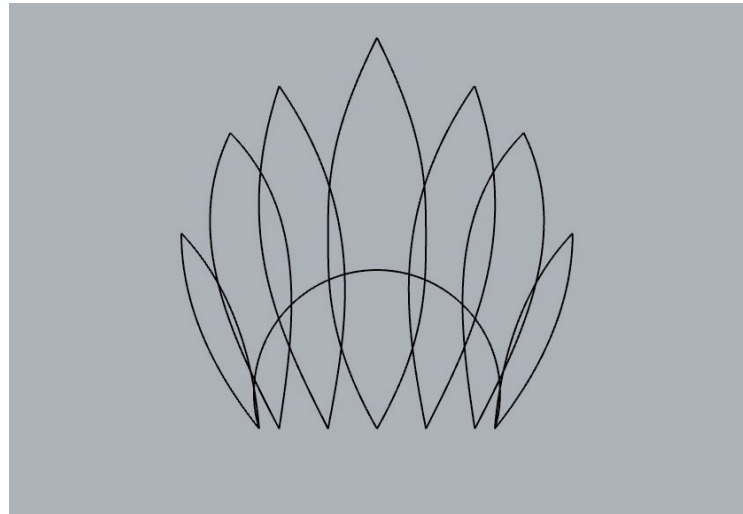


Tomato

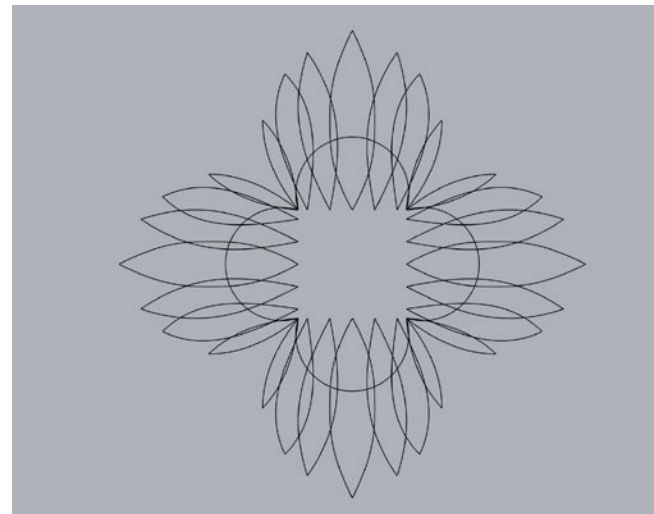
The anatomy of a tomato would classify the tomato as a berry rather than a vegetable, as its seeds lay on its interior within pockets that are separated by its fleshy walls. These pockets are called locular cavities, which are separated by locules, and most cultivated varieties exhibit four or five. The locules are surrounded by the pericarp, which includes the inner wall, the radial wall, and the outer wall. The pericarp and the placenta comprise the fleshy tissue of the tomato.

The hierarchy of analyzing the structure of a tomato seems to begin on the outside, with its soft skin that allows it give form to its fleshy interior, like a water balloon. It continues into the flesh of the tomato, which is soft but sturdy, and finishes with the seeds protected by the flesh that float in gelatinous membranes.

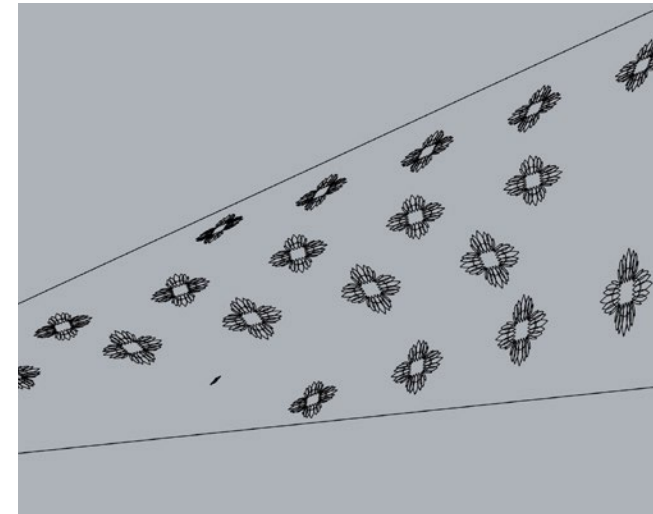




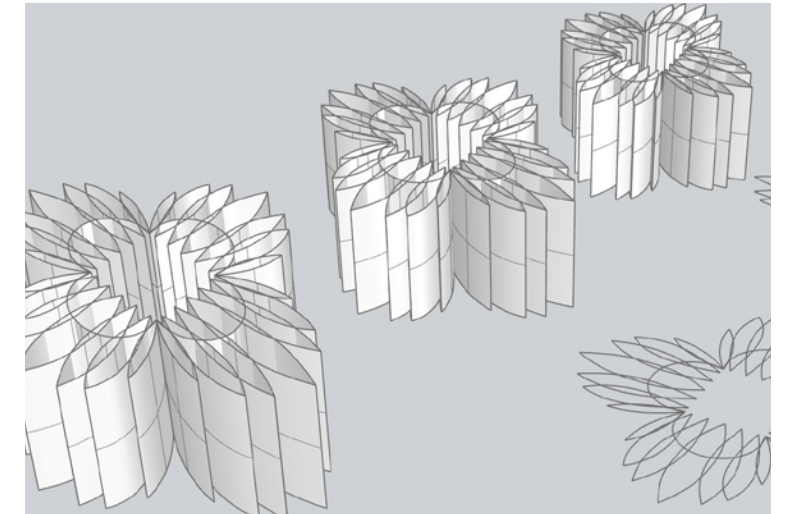
1. Curve Pattern



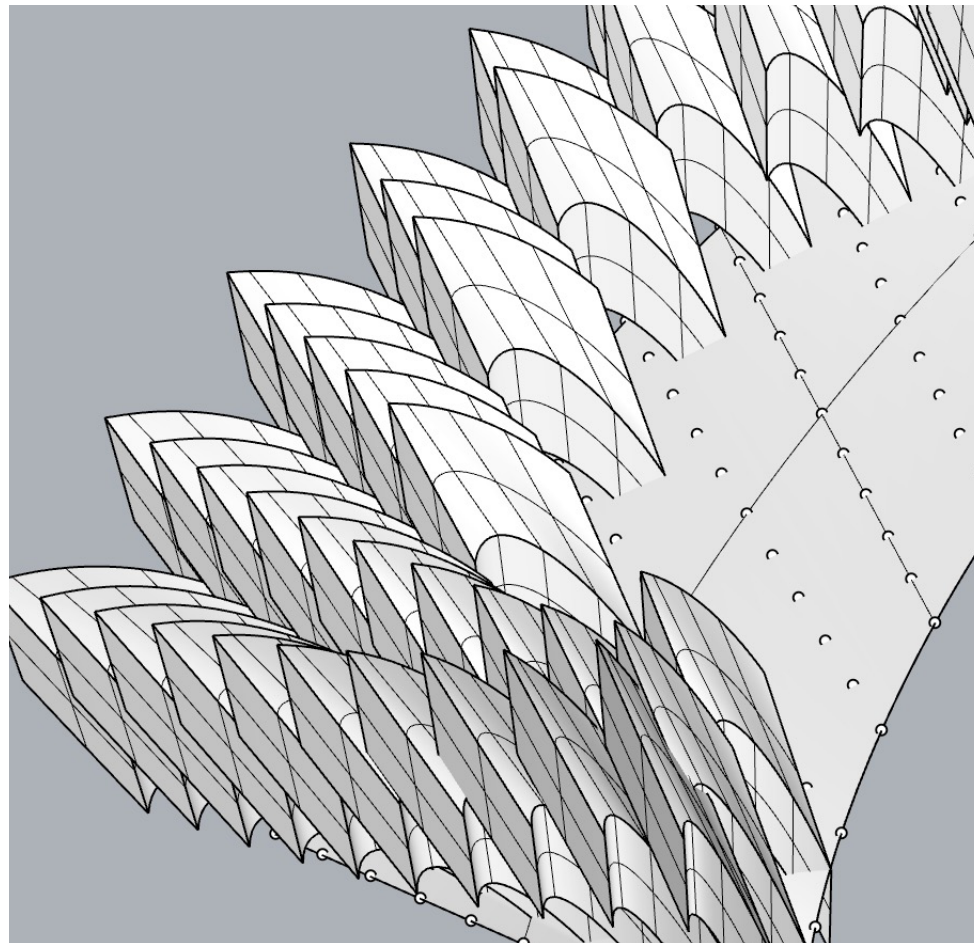
2. Unit Boundary



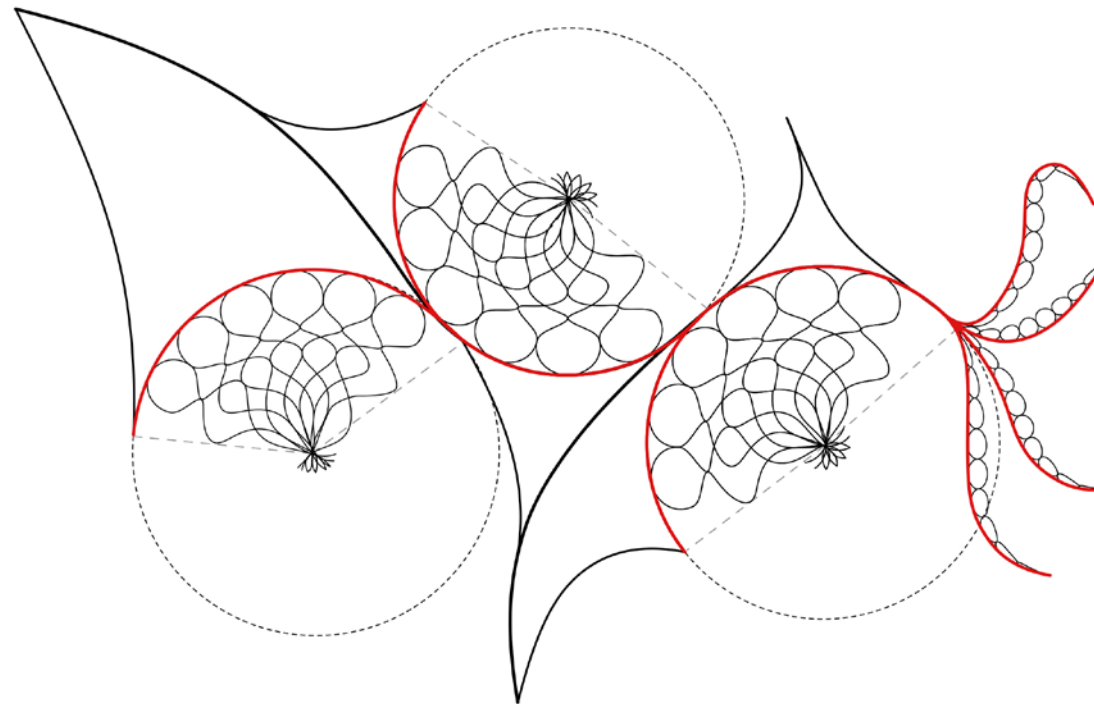
3. Transformation



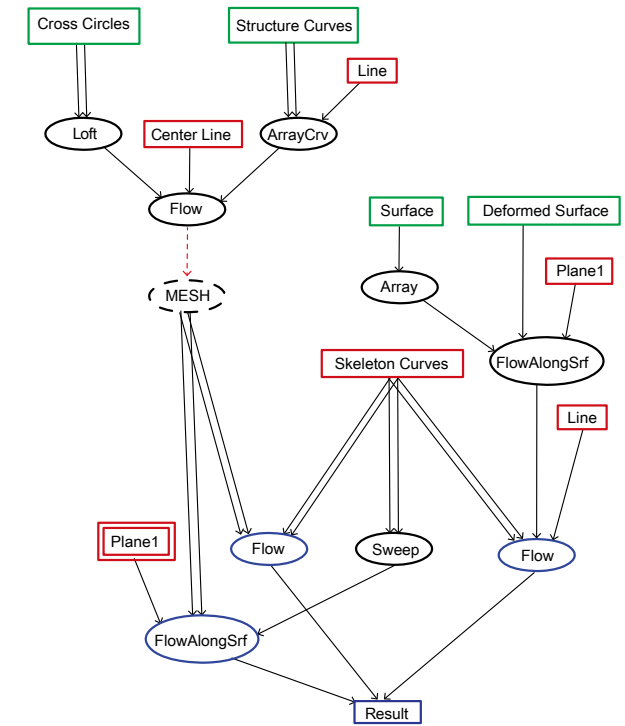
4. Thickness Variation



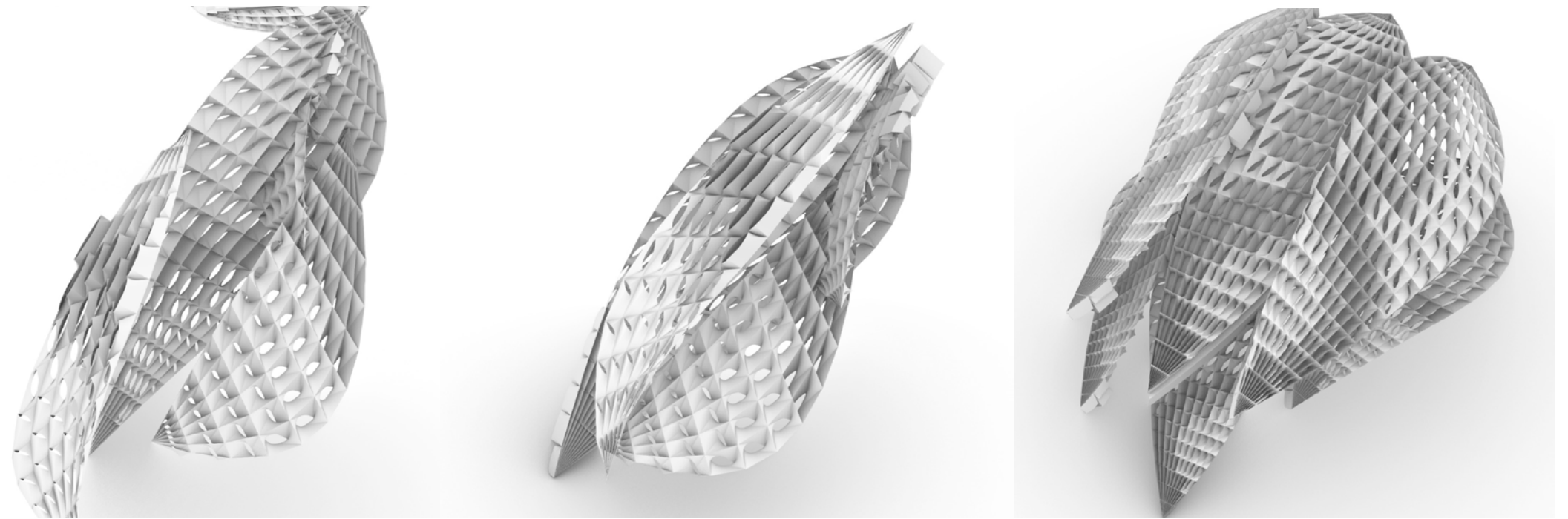
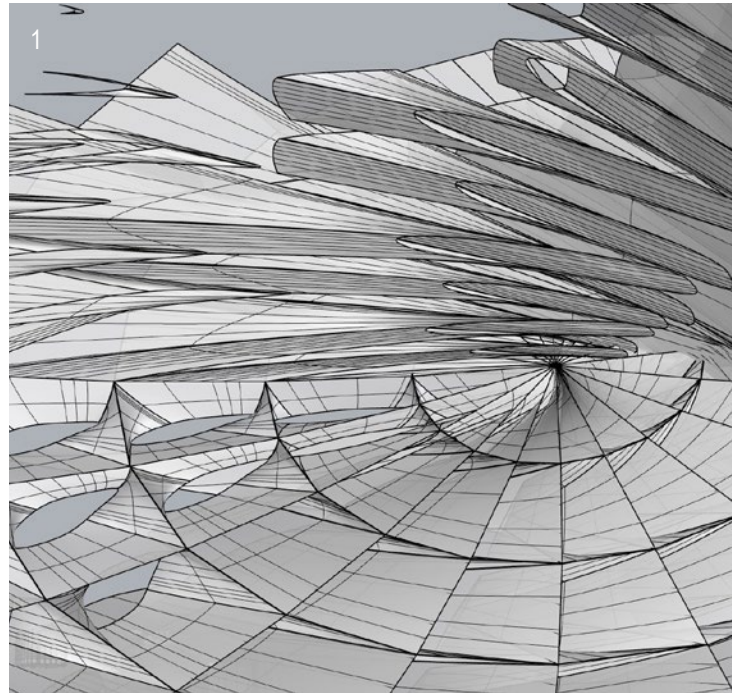
Surface Driven Transformations



Large Scale Combinations of Unit Transformations



Operation Tree



1.Final Design Variations / 2.Perspective (Building Scale) / 3.Perspective (Furniture Scale)