Subtraction or "Carving" diagrams from student Brian Sandford – Wentworth Institute of Technology - 2018

Assignment 03: Animated Carving

Introduction:

For this assignment, students will be introduced to more advanced animation and modeling techniques. Students will explore methods of volume subtraction to add an additional layer of complexity to their massing models. This exercise will force students to think about relationships between inside and outside, qualities of thickness or thinness, and the effects of *carving* into a model. Students will be asked to produce an animation that utilizes the boolean difference command to produce a subtraction effect through animation. This animation will use the massing model resulting from assignment 2.

Weekly Learning Objectives:
1. Research the effects of solid subtraction.
2. Summarize relationships between interior and exterior or mass and void.
3. Apply 3D modeling techniques to interpret architectural concepts.
4. Analyze spatial organization and architectural relationships within a 3D model.
5. Evaluate moments of continuity between different architectural elements.
6. Create an animation showing the effects of solid subtractions.

Assignment Checklist:
1. A single 10 second animation
   a. Use one massing model created from the previous assignment
   b. All videos should be 1920x1080 size @ 72 dpi
   c. Please do not add any text to your animation

Course Resources:

Please use the following link for the recorded tutorial that will help you complete this assignment:
- https://youtu.be/7-BqJjRvB2A – this will cover the following:
  o How to animate the boolean difference command

Week Review:

Students should be able to understand the effects of subtracting from a solid piece of geometry or a series of solids to establish new relationships between mass and void or inside and outside space.

Next Week:

Students will use their resulting geometry to produce animated section cuts.