Computing Drawing: Similarly Different Lines

Phase 2: Rendered Corners and the Seventh Type of Ambiguity

Part A

Amass a collection of ten corners; five found and five made. The found corners should all be parts of built architecture, each documented in a single photograph. Print these photographs on 7" x 8" portrait-oriented paper. Identifying corners is easy, so it will be important to maintain high standards during your search. Be prepared to argue for and/or prove that the architect of these corners addressed the corner as a particular "problem" or opportunity. The made corners will be submitted as digital files. Each should be comprised of no more than four surfaces. (In anticipation of questions: No poly-surfaces, no curves and no lines; "Surface" does not mandate nor preclude planarity; Scale and material are not in play. This is an exercise in geometry.)

Part B

After consultation with the studio, identify one made corner. Render this corner with lines–and no other form of mark or tone–on paper. Be sure your system of rendering, which you will design and code, articulates form and allows the reading of form in 3-D space. Then, revisit the model and make changes based on analysis of the drawing. Allow your foreknowledge of the next iteration of rendering to influence the model. Introduce more surfaces if necessary. Render the corner again with lines–and no other form of mark or tone–on paper. Repeat this cycle as many times as you determine to be necessary.

Part C

Revisit your model and make adjustments in anticipation of another rendering, but this time the rendering will be generated by light simulation software rather than articulated in a line drawing. Density of line will now be articulated by the edge of surfaces, so the quantity of those surfaces in the model will likely need to increase substantially. Likely your method of modeling will shift also to include coding to form surfaces. Reference, draw from, and learn from the found corners. Generate a rendering, make adjustments to the model then generate a second rendering.

Part D

Expand your model to include an ambiguous conception of solid/void. Introduce at least one additional corner to assist in achieving this ambiguity, which is to correspond to literary theorist William Empson's "seventh type." Consider how depth, line, pattern, shape and surface work together and in relation to one another to create this ambiguity. Render this construct with line and, if necessary, tone using any combination of techniques onto 21"x24" paper (portrait orientation). Produce a diagram that explains the two conflicting readings of solid/void.

M 3.16	Part A due. Opening discussion. Introduction to Rhino Python
Th 3.19	First iteration of part B due–rendered drawing followed by updated model. Pin up, discussion. Part two of instruction regarding Rhino Python.
M 3.30	Part B due, at least one more cycle of render-model-render complete. Introduction to Maxwell render.
Th 4.02	Progress on part C due including first draft of rendering. Small group pin up, discussion.
M 4.06	Part C due. Pin up, discussion
TH 4.09	Progress on part D due. Desk crits.
M. 4.13	Part D due. Parts A, B, C, D reviewed together. Checklist for pin up:

A selection of found and made corners; anything that is relevant from part A

At least two line-based renderings (Part B)

Two light simulation renderings (Part C)

One double corner rendering on 21"x24" paper (Part D)

One diagram (Part D)

Resources

William Empson	**7 Types of Ambiguity** (excerpts)
Jerrfrey Kipnis	**P-TR'S Progress** (note: must be read after the Rowe/Slutzky Transparency essay)
Antoine Picon	**Forward** to Algorithmic Architecture by Kostas Terzidis
Colin Rowe and Robert Slutzky	**Transparency: Literal and Phenomenal**