

Architecture Studio: 1st Year Spring

Spring 2014, CMU, Arch #48-105, M/W 12:30-4:20
Class Website: www.andrew.cmu.edu/course/48-105

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(1/15/14)

Project 1A: TECTONIC SYSTEMS: Marble & Stick

Proj.1a, ASSIGNMENT 3 - IN CLASS & HOMEWORK (due Fri. 1/17, 1:30pm)

Translate or transform your paper/plane structure into a wood/stick structure using only the 12" round bamboo skewers/sticks and wire provided. Use no glue or other materials. Make two (2) translations, highlighting different ideas and types of translation.

"Translation", whether in languages, or architecture, always implies some change of meaning and form, a "trans-formation." In moving from paper to wood, and from planes/surfaces to sticks/lines, central ideas from your marble structure will inevitably change, and new forms will arise. Think carefully about the nature of these changes, and the implications. Allow aspects of the original to get "lost in translation. Trust that new ideas and forms will emerge and become visible. Avoid copying too literally, but be sure important aspects of the original are retained, especially the "performance" of the rolling marble and your design intent is readable. Seek the elegant solution rather than the convoluted and over-wrought one.

What are the potentials inherent in each system (paper plane vs. wood stick)? How will the different properties of each affect the results? How can you exploit those differences? If working with paper involved folding, pleating, creasing, pressing, scoring, cutting, twisting, turning, wrapping, warping, piercing, hinging, weaving, compressing, balancing and unfolding, what are the "verbs" implied in the sticks? What "joinery techniques" are available for the wood/wire connections? How can the paper shapes be imitated in wood? How can you imply a plane using wooden sticks? How does one represent a fold or crease? How can you simulate a curve in straight wooden sticks? How do you recreate ephemeral qualities, affects, or concepts of your original model without copying the form?

Follow your instructor's directions, and/or choose 2 of the following translations:

1) PATH: Focus on an accurate translation of the *path of the marble* from your paper structure to a wood one. Create a stick structure that will allow the viewer to become aware of the spatial path taken by your marble. The marble does not need to be able to roll down the stick structure (avoid making a "roller coaster" or "train tracks"). Rather, your stick structure should imply and celebrate the linear path and "performance" of the marble. If needed, you can try weaving a colorful thread or ribbon into the stick structure to highlight the path of the marble; or paint or add color to some of the sticks to reveal the marble's path; or bundle some of the sticks into a thicker member that draws attention.

2) IDEA OR AFFECT: Translate the "big idea" of your marble path and/or formal structure into wood form; or build a "wood equivalent" of the affect or mood or atmosphere

3) FORM/SPACE: Focus on the 3D form, shapes, and spatial ideas in your paper structure, and translate parts or all of it using the wood sticks. Don't be too literal. Think not only about the edges of planes, but perhaps "filling in" some frames with stick patterns.

4) SCAFFOLD OR NEGATIVE SPACE/FORM: Focus on, and build the "implied" spaces in your paper structure out of wood sticks; or build the "in between spaces" of your original model; or build the scaffolding or structure that would support your paper structure; or think about figure-ground ambiguity and build the "negative spaces" of your paper structure.

5) INSIDE/UNDERSIDE: Interpret your paper original as a roof, and build the building and interior spaces "under" or "inside" your roof. How might changing the scale help?

6) OVERLAP: INNER & OUTER FORM: In any of the other translations, apply the constraint that every joint must allow the sticks to extend beyond the intersection; or consider not cutting any sticks. Then take advantage of the "bristling form," and work to distinguish the form that results at the outer edges from the "core-form" inside where the joints occur.

** You are free to change your paper structure, or build a new one that will produce stronger translations. Think about making your paper structure more "systematic" before translating.

** Think, sketch, and experiment before diving in. Avoid wasting material, either in the trial-and-error phase, or in the final projects. Avoid cutting the sticks, especially at the beginning.

