**PROBLEM 1: OUT-OF-JOINT**

Tectonics is not merely tied to the art of construction, but intertwined with the forces of labor and economy responsible for the simultaneous dematerialization of architecture and acceleration of mass material culture. While architecture discourse leans towards abstraction and immateriality, the practice of architecture remains rooted in ascribing meaning to materials and methods. The absorption of building craft into mass commercial production of both familiar and increasingly unfamiliar building materials challenges our inherited notions of material significance and signification. The term tectonics, while denoting a pre-occupation with materiality and craft, and connoting the expression or representation of those material properties, has become a mutable and unstable term. While the design of materials is not new, the recent evolution of mutant materials and their technologies has created a material culture pregnant with possibilities. Architects are now treating rigid solids as if they were liquid.

The point of departure for the studio is the mutability of material concepts as a means to critically engage the making of site and space a material process which engages transformation and time. The studio attempts to find critical positions for a material presence in our contemporary context that is neither nostalgic about craft-based tectonics nor redemptive of technology. Free of absolute frames of reference to qualify materiality, this studio provides the space to re-examine issues of tectonics in relation to duration. Students are encouraged to look at both 'new' and 'old' materials while re-examining and re-think the relationships of 'high' and 'low' technologies of production. The first exercise begins with the detail and transforms its function and materiality to explore some of the following: Time/Duration, Transformation/ Mutability, Unbearable Lightness, Authentic/ Fake, Process/ Product, Permeability/ Solidity, Impermanence/ Permanence, Expansion/ Contraction, Material/ Immaterial, Elastic/ Plastic, Friction/ Smoothness, Action/ Reaction.

**PT. 1 BREAKING THE JOINT**

1. Select one of the attached Japanese joints.
2. Model it in the computer using 3-D software.
3. Introduce a rotation about one axis. (a hinge or pivot)
4. Introduce another movement if you like.
5. You may fabricate it according to traditional or CAD-CAM methods.
6. One half must be conceived as a subtracted solid or Cast mass.
7. One half must be made of additive layers.

You may use any of the following materials for the additive process to make a solid mass:
- PlyWood or Veneers
- Chip board
- Paper
- Plexiglass
- Composite Boards
- Homosote
- Other (clear with t.a. or meejin)

You may use any of the following for the subtracted process:
- Rubber
- Wax
- Plaster
- Resin
- Wood
- Salt
- Other (clear with t.a. or meejin)

The joint and fabrication must be precise and careful. Subtle variation or transformation of the actual detail is allowed if it suits your design intention. Stay roughly within the envelope of 3" x 3" x 9".
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PT. 2 PROCESS - OUT OF JOINT

Thinking about the landscape processes presented in class, select one process. Select two materials to investigate that will transform your conceptual ideas about a process into a tangible medium. You should begin by transforming your Broken Joint, into a series of study models to investigate the topic and the relationship between two complimentary or non-complementary materials. These studies may be subtle transformations or extreme deviations from the formal characteristics of the original Japanese joint, so long as they are inspired by what you want to take on as design research.

The final construct is approximately 3 times the scale of the original joint. It must articulate an implied volume of 1' x 1' x 3' at minimum. You should not think of the construct as a piece of sculpture but a programmed piece of pre-architecture. As such, you may think about it as an abstract notion of ‘display case,’ ‘wall,’ ‘container,’ ‘shelf,’ ‘platform’ or ‘site intervention’ analog. The criteria for the design of the construct is that it has the following elements:

A clear Intention and a relationship to your selected process
A clear Intention about duration, time and transformation
A movement or series of movements that create one or more of the following: Imprint, erosion, friction, flexibility, expansion, contraction
A member or members in Tension
A member or members in Compression
A force creating Torque or Shear
A way of engaging the body (the body may actually act as the mass or force)
A way of engaging the environment (light, wind, sound, site etc.)
A 3-dimensional line that articulates the implied volume
A plane that articulates one or two surfaces
A critical mass that creates weight or force or balance
   (this can be a series of planes or your body)
A clear articulation of supporting and supported/ host and parasite

SCHEDULE
September        Introduce Studio Issues and Problem
September        Meet in AV/T at 2:30 Presentation by Saul Griffith
September        Student Process Presentations
September        Introduction to a Quarry
September        Problem 1 part 1 Due
September        Desk crits for Problem 1 part 2
September        Informal pin-up in groups of 3
September        Desk crits
September        Desk crits / Fabrication
September        Desk crits/ Fabrication
October           Desk crits/ Fabrication
October           Desk crits
October           Leave for Chicago
October           Desk crits/ Fabrication
October           Review Problem 1 part 2.