3.4

WEEK 4
SCHEDULE

monday - friday

monday

3.5a
In-Class Charrette: Due MON 5PM
The Shared Envelope

3.5b
One Giant Leap: Due TUES 1PM
Spatial Effects

3.6a
One Giant Leap: Due TUES 1PM
Material Effects

tuesday-thursday

3.7a/b
In-Class Charrettes:
Final Models & Drawings

friday

FINAL REVIEW
Time: TBD

3.4a
the usual suspects

3.5a

IN-CLASS CHARRETTE:
THE SHARED ENVELOPE

monday

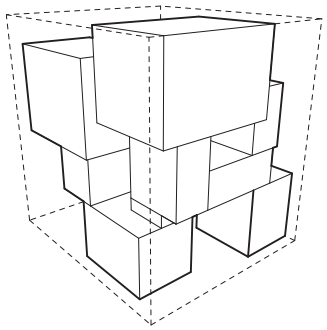
The most powerful mediator between architecture and its context is the exterior envelope. While the envelope might be limited in defining the building's internal experience (although never entirely), our task is to prove that the envelope is a necessary device that connects architecture to culture, context and time.

Already, you have produced material samples that could potentially evolve into your building's envelope. Their intention was to use similar materials to provoke radically different effects. Next, we will need to develop a strategy for merging these effects with the spatial techniques we've been developing in tandem.

Today, we are going to have a design charrette, (3-hours to generate an entire building envelope, followed by a 1-hour pin-up). By the end of the day, you will have generated the mediator between your Shared House and the context within which it exists.

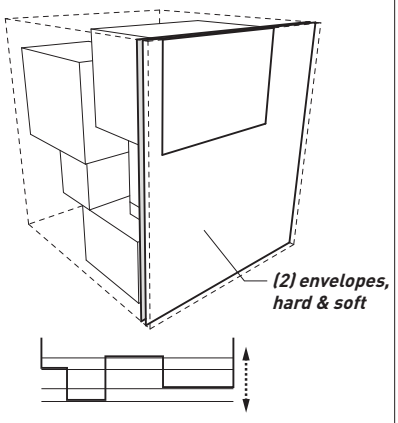
STEPS:

1



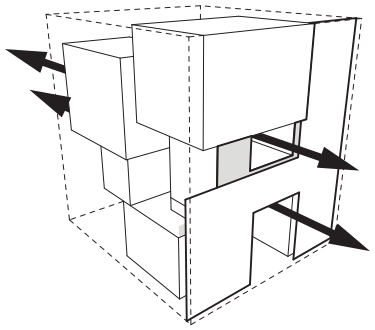
existing cube aggregation

2



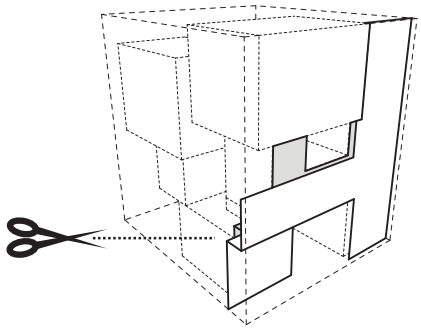
establish a primary envelope location, set into the aggregation such that it allows protrusion and recession

3



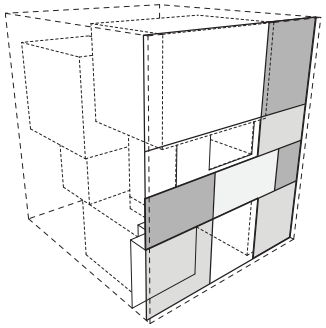
coordinate cuts of the envelopes with hard & soft houses, permit porosity

4



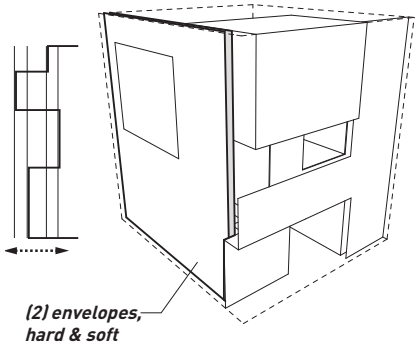
establish lines for breakage, maintaining spatial depth where it is desired

5



for both envelopes, divide the area into zones of various levels of porosity (best to divide along lines of individual rooms)

6



repeat the process for each side of the building. adjacent envelopes ***must*** align.

Finish your work by 5pm. We will meet in studio to review your individual proposals, and to present the next exercise. Good Luck!

3.5b

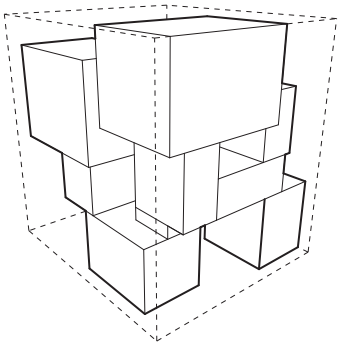
ONE GIANT LEAP:
SPATIAL EFFECTS

monday

Until now, you have been developing your Shared House as an interlocked aggregation of volumes that carry with them a logic of spatial effects. Today we are going to translate those spatial effects into the elements that make-up architecture, such as floors, walls, skins and apertures.

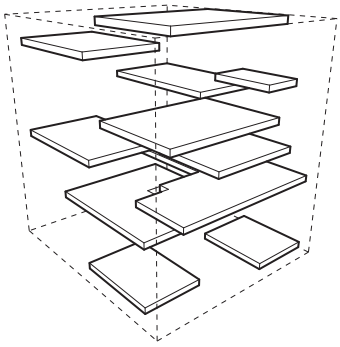
STEPS:

1



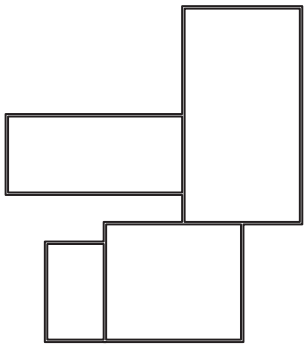
existing cube aggregation

2



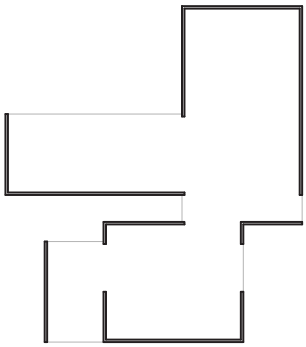
keep all floors and ceilings as givens. these will be modified according to the ***RULES*** (see left).

3



analyze your plan drawings...

4



select **load bearing** walls and **oriented volumes** (see ***RULES***). systematically coordinate porosity and apertures.

RULES:

1) staggered floors may be aligned above or below in order to maintain planar continuity.

2) floors can be no thicker than 2'-0".

3) up to 50% of the volumes for both houses may be kept solid (including "oriented" volumes with sides removed).

4) all other volumes are now to be considered floors with "load-bearing" partitions and exterior glazing.

3.6a

ONE GIANT LEAP:
MATERIAL EFFECTS

monday

Today we will also be translating our material effects into the elements that make-up architectural envelopes, such as cladding, glazing, framing, and joint-lines.

This exercise will have a drawing component and a modelling component, and both should be competed simultaneously so that they inform each other through their development.

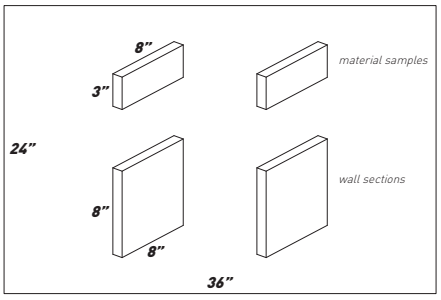
STEPS:

1) Begin by selecting the material sample pair (hard & soft) that generated the best sensorial differential using the same materials.

2) DRAW the two samples in axonometric (plan oblique) at 1:1 scale.

3) REDRAW these axons below the first set, but draw them as what the material samples could be if translated into architectural wall sections. Consider issues of **cladding, glazing, framing, joint-lines and the necessary layering of all these elements**. Remember, the wall sections are still to convey HARD & SOFT materiality.

4) MODEL both wall sections as true architectural wall sections using the materials you purchased over the weekend. **These should look like the actual skin of a building, not a material sample**.



3.6a
drawing layout explaining the leap from material sample to arhitectural wall section

ASSIGNMENT3.5b **translate the spatial effects of your interlocked volumes (rooms + circulation membrane) into floors, walls, skins and apertures. follow all steps and rules. redraw all plans & sections @ 1/4" scale.**

ASSIGNMENT3.6a **translate the material effects of your material samples into the elements that make-up architectural envelopes, such as cladding, glazing, framing and joint-lines. size/scale: 16'x16' @ 1/2" scale**

DUE DATE: **tuesday / july 10, 2007 / 1pm**

3.7

THE SHARED HOUSE: FINAL PUSH (& PULL)

tuesday-friday

In preparation for the final review of The Shared House, please reread all of the handouts from the project. We have followed a systematic series of exercises exploring both material and spatial effects, and then merged these effects into one as we took the "giant leap" into architecture.

Your present task is to finalize your work, both in drawings and models, in preparation for the final review. As always, your representation of The Shared House is to be beautifully crafted and creative, while showing an innovative proposal through the devices of architecture for how two different families can cohabitate in the same structure.

The final requirements for your presentation are as follows:

SITE PLAN	**showing house footprint in site, including driveway and parking lot information. scale: 1/8"=1'-0".**
PLANS	**documenting all levels, including interior walls, doors, windows, stairs, exterior envelopes, etc. scale: 1/4"=1'-0"** *(1/2"=1'-0" optional).*
SECTIONS	**(1) cross & (1) longitudinal** *(extra sections optional).* **chose the location of your sections carefully to show the most important features of your project. scale: 1/4"=1'-0"** *(1/2"=1'-0" optional).*
AXON	**(1) 30°-60° exploded axon showing the abstracted interlock of volumes and circulation. scale: 1/4"= 1'-0"** *(1/2"=1'-0" optional).*
PERSPECTIVES	**(1) exterior & (2) interior. one interior view per house. approximate drawing size: 18"x18".**
PROCESS WORK	**all work from the previous project exercises, including model iterations, circulation studies, material samples, material axons, wall sample models, envelope studies, etc.**
MODEL	**building model that includes all floors, walls, stairs, and exquisitely detailed exterior envelopes. materials listed at left. scale: 1/4"= 1'-0".**
FINAL REVIEW:	**friday / july 13, 2007 / time tbd**

MODEL MATERIALS:

floors	1/4"-1/2" white foam core
walls	1/8" foam core or 1/8" white museum board
stairs	white museum board (*must include risers and treads*)
envelopes	mixture of: 1/32" plexiglass light gel (grey-tone only) corrugated plastic foam core square wood (dowels, strips, etc.) chip board metal screen one material of your choice