first year: assignment twelve

A weekend retreat for a college president

Issued: Monday, November 3, 2008 @ 4.20 p.m.

The thesis of your final project this semester investigates the american tradition of the freestanding country house situated in the open landscape. Applying the spatial lessons of the prior exercises as well as the new topic of spatial transparency, you are to design a landscape in similar architectonic terms as a devise for developing and extending reciprocal spatial relationships with those of your project eleven cube.

An unmarried college president has purchased a site of extraordinary natural beauty and fine views located on the eastern edge of Lake Erie. The site contains the remnants of an existing hedge nursery. The college president, having seen the work of the first year studio, has commissioned you to adopt your 20' x 20' x 20' cube to the site. As cost is important, your project is to be made of 12" concrete block for the exterior walls and light wood frame construction for the roof and interior planes. Since this is to be a weekend summer retreat, simple insect screens will be placed within your openings and sheets of glass will be added to your roof openings.

Every attempt must be made to extend the volume of the house and it's spatial interior by means of modifying the landscape hedge. The rules which inform your strategies should take cues from both the programmatic necessities of the building as well as the unique qualities, attributes, and rituals of the client. Both are elaborated in the following narrative:

Client Narrative, Rituals and Program

Your client has a very specific daily ritual.

Arising only when its light enough to read the dial of her clock, her morning routine is one of introspective repose. Thought and writing ensue in the quiescence of the morning hours. This activity continues in either the dwelling or the garden. Her thoughts and writing flow unbroken until early afternoon at which time she receives guests for lunch and conversation. She always invites guests, colleagues and students in pairs because she prefers setting up oppositions whose conversations she can then mediate.

The afternoon is devoted to small outdoor lectures she delivers weekly to a small audience. When not lecturing or meeting guests, she enjoys a contemplative stroll in the garden. At the end of each day, she returns to introspection by viewing the setting sun.

Reiterative Issues

Spatial definition, spatial hierarchy, composition, craftsmanship

New Issues

Transparency, spatial sequence, architectonic use of landscape elements, client ritual, and program

Dwelling Program

Entry an area for greeting guests (Public)

Living/ Dining An area to seat 3 minimum (Public)

Sleeping Area An area large enough to accommodate one person (Private)

Stair A stair may be added to reach one of your three planes. It can be either a straight run or switchback with a minimum width of 30". Maximum riser 6" and a minimum tread of 12". This can be located inside or outside of the dwelling. Is it to be exposed, slipped between surfaces or concealed?

Furniture, sun control, shutters and any other design items Can be made of simple planes. These items can be added to increase the spatiality on the interior programmatic spaces.

Floor Plane Convert one of the sides of your cube to become a floor plane. The openings which once helped to define space are now to be considered the floor plane and can help to define the internal spaces as a series of relief layers used to address items of the dwelling's program.

Envelope Interior spaces are still to maintain spatial definition with the interior planes. They can as well extend and define the landscape as appropriate. In addition, a select but limited number of surfaces of the cube can either recede or extrude a maximum of 20' as long as the cube maintains its volumetric definition.

Kitchen/ Bathroom This simple volume measuring 10' wide (+/-) x 16' deep (+/-) x 10' high (+/-) can be located anywhere on the site. It is to be drawn as a volume. You can engage the dwelling "cube" using one of the following action words: beneath, inserted, adjacent or separate.

Site Program

Parking A 20' x 20' gravel area located immediately adjacent to the road. Action words: disconnected or visually connected.

Garden Spaces defined by cutting and or relocating the existing 8 foot high landscape hedge. The spaces defined by the landscape hedge is to extend the sense of cubic volume and interior spatial development. Ideas and programmatic uses should reinforce the characteristics outlined in the client narrative.

Gravel Areas or Pavers The use of gravel areas or pavers (similar to the interior flooring) can be used to extend on the exterior the interior spatial development within the garden.

Construction

The walls of your cube (20' x 20' x 20') of space will be made of 12" thick, 8" high and 16" wide concrete masonry units (CMU's) with 12" thick, 8" high by any length concrete beams spanning your rectangular openings. Interior walls and platforms (3 planes) are to be constructed of 2" x 10" framing spaced 16" o.c. covered with wood planks for the floors and gypsum board and plaster for the walls. The roof is to be constructed of 2" x 12" framing spaced 16" o.c. covered with plywood and white EPDM roofing.*

*Remember these are for reference only. All drawings are to show only the spatial profile of the walls, floor, roof and interior planes.

Required Reading

Transparency: Literal and Phenomenal, Colin Rowe and Robert Slutzky
http://www.andrew.cmu.edu/course/48-100/readings.html

The following is an introduction to transparency and is to be considered while reading the above listed essay.

If one sees two or more figures overlapping one another, and each of them claims for itself the common overlapped part, then one is confronted with a contradiction of spatial dimensions. To resolve this contradiction one must assume the presence of a new optical quality. The figures are endowed with transparency: that is, they are able to interpenetrate without an optical destruction of each other. Transparency, however implies more than an optical characteristic, it implies a broader spatial order. Transparency means a simultaneous perception of different spatial locations. Space not only recedes but fluctuates in a continuous activity. The position of the transparent figures has equivocal meaning as one sees each figure now as the closer, as well as the further one.

Gyorgy Kepes
The Language of Vision

At the beginning of any inquiry into transparency and its double nature, basic distinctions must be established. Transparency, as you may be familiar with the word, might refer to the inherent quality of any substance such as glass or mesh to admit the passage of light through its matter or intersterstices. However, as Kepes suggests transparency may also refer to an inherent quality which organizes and structures the perception of a sophisticated spatial order. For this reason, one may think of transparency in a real or literal sense, as well as in a phenomenal sense.

The use of transparency as a devise to heighten the spatial perceptions in architecture was advanced by early twenty century architects and artists. Literal transparency tends to be associated with the trompe l'oeil (to create the optical illusion that the depicted objects really exist, instead of being mere, two-dimensional paintings) effect of a translucent object situated in a naturalistic space and was initially used as a two dimensional painterly device. On the other hand, phenomenal transparency seems to occur when painters seek the articulated presentation of frontally aligned objects usually in a shallow, abstracted space. Works by such painters as Picasso, Juan Gris, Laszlo Moholy-Nagy and Georges Braque utilized phenomenal transparency as a compositional device.

When considering architectural rather than pictorial transparencies, inevitable confusions arise. While painting can only imply the third dimension, architecture cannot suppress it. It is obvious how literal transparency may appear in architecture by the use of glass. However phenomenal transparency is more difficult to achieve, and find its way into architecture through organizational patterns of the vertical surface (elevation) as well as the plan to heighten, intensify or purposely render ambiguous and contradictory, the spatial reality of a building. The Swiss architect Le Corbusier utilized phenomenal transparency to heighten the spatial readings of his plan organizations and vertical surfaces (elevations). However, this in no way suggests that his buildings are mere interpretations of paintings or visa versa. Rather, this implies that the phenomenal transparencies revealed in the pictorial sense share in common with an architectural condition of space, which extend in a purposeful way the spatial content of a building.

Process Minimums

Wednesday, November 05, 2008
Review of project eleven with switched studio faculty: Yellow students join with Blue faculty, Blue students join with Red faculty and Red students join with Yellow faculty

Friday, November, 07, 2008
Sketches and study model showing a new cube (based on and transformed from project eleven) which accommodates the program within the landscape. (scale 1/4" =1'-0") chipboard dwelling, and corrugated cardboard (hedge & site) sandpaper for gravel areas and parking.

Monday, November 10, 2008
Revised study models of both the landscape and the dwelling (minimum 2 freehand views required)

Wednesday, November 12, 2008
Revised design and draft the first level plan within the landscape and second level plan (with no landscape) on a single 23" x 29" sheet of vellum.

Friday, November 14, 2008
Revised study model

Monday, November 17, 2008
Revise design and draft two sections through dwelling and site, one section cut through site showing dwelling in elevation, and one sectional axonometric through site and dwelling.

Final Presentation Requirements

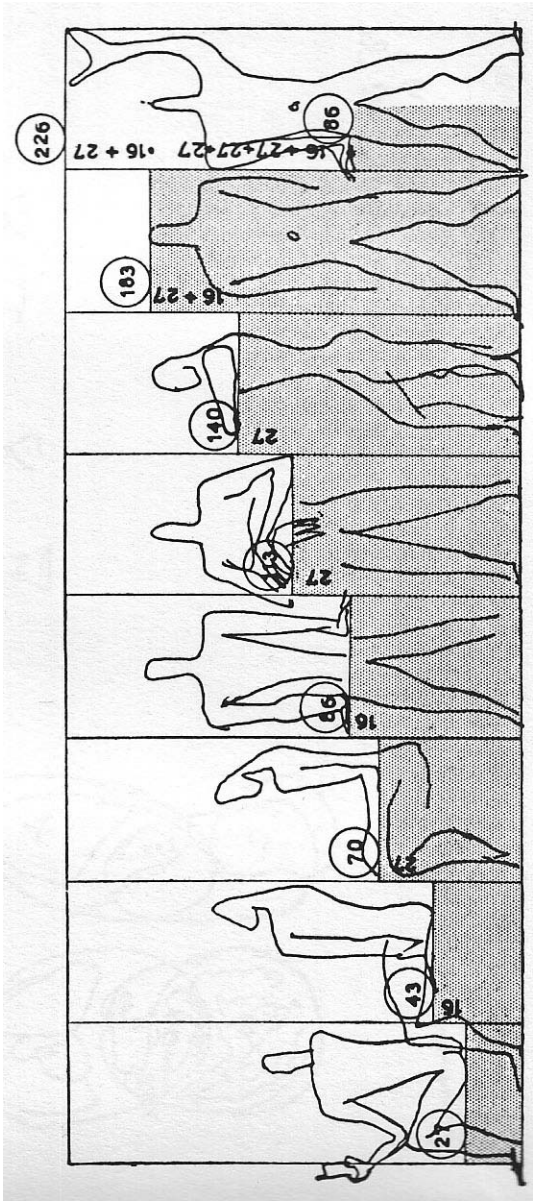
Due: Tuesday, November 25th at 10:00 pm. A faculty member will check for your project completion.

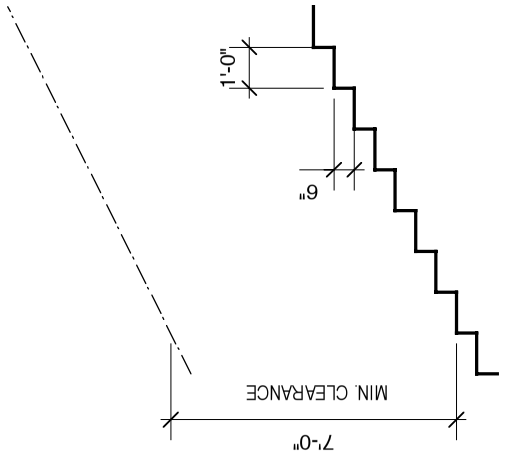
On Strathmore board 23" x 29" horizontal with mark on left bottom corner:
Board one: Site plan cut at approximately 5'-0" and upper level plan @ 1/4" = 1'-0" *
Board two: (2) sections through dwelling and site, (1) elevation showing dwelling and site @ 1/4" = 1'-0" *
Board three: Sectional axonometric through site and dwelling @ 1/4" = 1'-0" *
Board four: Project eleven axonometric and sections (previously completed)

Presentation Quality Model Dwelling made of 1/4" foam core with all exposed foam cuts infilled with 3 or 4-ply strathmore board or 1/4" plywood; 1/2" plywood base (supplied by shop); parking area and exterior gravel surfaces to be made of applied sandpaper or rubbed graphite with clear matte sealer; pavers to match interior floor materials; solid wood volumes to describe bath and kitchen (white Gesso atop solid wood or vertical stacked plywood); stair constructed of solid white museum board or wood; and hedge made of shop-supplied foam (painted) or stacked horizontal plywood (unpainted). All paint and brushes will be supplied to you. All painting is to be done in the wood shop in the dedicated painting area.

Freehand Perspective Drawing See Professor Cooper for details *

*You should consider the overall composition of all the drawings when hung for the final review.





STAIR SECTION

SITE PLAN:
SITE AREA: 80' x 80'

SITE SECTION
NOTE: HEDGE IS TO MAINTAIN ITS 8' HIGHT