

Studio Professor

Henri T. de HAHN

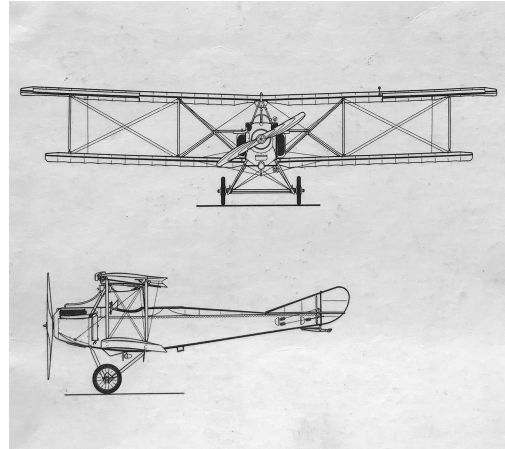
Studio: Cowgill Hall 3rd Floor Plaza side
MWF 1:00 – 4:50pm

Seminars: TBD

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“Perhaps the observation of things has remained my most important formal education; for observation later becomes transformed into memory. Now I seem to see all the things I have observed arranged like tools in a neat row; they are aligned as in a botanical chart, or a catalogue, or a dictionary. But this catalogue, lying somewhere between imagination and memory, is not neutral; it always reappears in several objects and constitutes their deformation and, in some way, their evolution.”

ROSSI, *A Scientific Autobiography*

“...Design is reading, designing is rewriting existing architecture. Design is transforming existing types, both architectural and urban, both building and place types. Design implies a dialectic between the new in relation to the memory of the old.”

DIANA AGREST

“I think sometimes architecture is like a marvelous three-dimensional chess game. Every move or decision affects every other move and decision. You have to keep thinking about the juggling all the parts at the same time. In general, if I had to say how we work, I guess it would be that we start by considering very carefully the problem of the site, the problem of the program, and the problem of the spirit of the particular job. We really try to look into these things very thoroughly. They all go on at the same time. Then we start gradually trying to put the answers to these problems together and then, with them, we start putting in the structural system.

If everything goes well and everything is really performing within one idea and the structural system is the right one, with the right materials and methods and so on, *it* becomes the thing which locks everything together. When that happens, it is a marvelous feeling. The structural system then seems to reinforce an inevitable solution to the site problem, and, at the same time, an inevitable solution to the functional problems and, at the same time, an inevitable solution to the spirit. All these things get locked together into one thing.”

EERO SAARINEN, *On his work to a student (August 20, 1960)*

PROJECT 1: A pavilion for an airplane

This exercise/project will concern itself with the establishment of a vocabulary, grammar, and syntax related to the discipline of architecture. Perhaps it is the student's first attempt to create an architectural space, thus the professor's ambition is to set in place a series of exercises that will build on the larger picture of an overall design process. The series of targeted exercises will be based on the learning of the foundational skills of architecture, yet also initiated based on the student(s) needs as they progress.

The professor assumes that the first iterations of your project will be based on the understanding of a formal coherence –one that includes a series of specific parameters. However, very quickly – in fact immediately– the notion of poetry, site, structure, proportions and architectural promenade will lead the students to appreciate that any gesture they are to do for and within the project carries meaning based on precedence. This is a *sine qua non* condition for the differentiation between building and architecture.

At last, this project, as with all other projects proposed during the year, will balance an intellectual pursuit with the pragmatic notions of space and place making; will balance formal endeavors with the art of poetry, and will balance the importance of conceptual thinking with the introduction of construction and detailing. All of these topics will allow the students to feel comfortable with their endeavors and interests in creating space for human pleasure and inhabitation.

Parallel to the project, the professor will showcase a number of seminal works of 20th century *master* architects. By briefly analyzing specific works of architecture –typically in plan, section, elevation and iconographical and research data, students train and coordinate their mind, eyes, and hands, to understand a particular mode of design. This essential *practice* to learn can lead the students on two parallel avenues. First, to discover the possibilities of how architects have handled space, and second, in abstract terms, to reconstruct and investigate the process that goes into the design of a built work. This method of instruction seems to be of interest and pedagogical merit far beyond the mere evaluation of the 'finished product'.

This in turn should set in place rules of interpretation as they pertain to our own design abilities and interests. To look at examples from history stresses the importance of examining precedents in order to find connection to our own time and work. To analyze (*de-construct*) an object or an existing building is an important learning process which without discipline and insight might at times hinder one from creating something meaningful both culturally and formally. In fact, the analysis project requires the student to capture, comprehend, and dissect the supposed reality of existing buildings within the "flat space" of orthographic drawings while understanding their three-dimensional spatial, structural and material reality.

These analysis are for us an exercise about certain truths. Drawings, sketches, photos, descriptions and verbal explanations of buildings can serve as mediums to understand relationships –a way to read and explain in order to learn. In the analysis we must grasp simultaneously meaning and observation because meaning without observation is blind, and observation without meaning is deaf. The analysis helps young designers to develop syntax and a vocabulary –perhaps the beginning of your own language!

TASK

Roger and Agnes Lüthi, whose boathouse was designed last fall by Virginia Tech architecture students as a series of conceptual projects, have now decided to select you to design a pavilion to house an airplane of your choice. The caveat is that Mr. Lüthi is an architect by education but never practiced. Instead he formed an NGO two decades ago while serving as a pilot for United Airlines. In practical terms this means that he has some very strong ideas -which are not always well thought out - but he has made the commitment to hire you as the architect, based on the strong recommendation of your former professor. Most importantly, Roger has three guiding

principles that he learned as a student and that he has used in his everyday life situations. He invites you to incorporate them within your overall attitude towards this project:

- **Search for an *economy of means***
- **Define a *principle of settlement***
- **Create a *model of life that you structure and give form***

FUNCTIONS:

Roger requests that the following items and functions be included in the airplane pavilion:

- A conceptual 60' cube above ground with an additional 60' X 60' X 20' rectangle below grade. This cube should initially guide your design but certainly may be violated in its original dimensions to accommodate your intervention
- An imaginary square 120' X 120' flat site on which to set the 60' cube
- A series of load bearing columns of your choice (i.e., square, round, oriented)
- A series of load bearing structural walls
- A series of non-load bearing walls, which will act as infill or spatial screens
- One (1) stair
- One (1) ramp compliant with the Americans with Disabilities act (ADA)
- One (1) elevator

Each of these items will assist you in creating a place to exhibit the airplane of your choice for the Lüthi's enjoyment.

PROGRAM:

Program is like a thesis, and is the underlying narrative that gives meaning to your project. For example, Kahn's program for the Exeter Library in Exeter, New Hampshire, is to seek the book in the center of the building and take it to the periphery where each individual can commune with the content of the book. John Hejduk, when renovating The Cooper Union Foundation building in New York City, devised the program for interior as an open book exhibiting all aspects of architecture. When your professor designed an elementary school while attending the IAUS, the program for the building was about self-education. What is your program for the airplane pavilion, one that will nurture your thoughts and translate your ideas into space?

As you develop a *partie* that balances program with function and concept with pragmatics, Roger Lüthi believes that the following four series of topics that will assist you your discoveries.

Research:	Primary and secondary sources
Space formation:	Mass-space
Construction:	Geometry-order of the massing
Space sequence:	Places-paths

1. Research: Primary and secondary sources

Present a brief paper that will combine text and research documenting both the history and significance of your airplane and the overall program that you wish to set in place for your project. Of course, seminal architectural works will be introduced with the request that students study them further on their own.

2. Space formation: Mass-space

Elements of your project should include the following: the relationships between the space definition and the space; the relationship between the positive and negative spaces; the spacing of space; the separation and connection of the inside and the outside; the separation and connection in the inside from top and bottom; the hierarchy of

the spatial construction of the pavilion. Suggested topics follow:

- The definition of space versus the definition of “rooms”
- Form as emptiness and form as fullness
- Spatial separation and thresholds within the pavilion and up and down
- Hierarchical construction of the pavilion

3. Construction: Geometry-order of the massing

Elements of your project should include the following: a grid of invisible lines, which bring together separate elements with the unity of the pavilion; the rules of symmetry, asymmetry; proportions; the order of the masses and their rhythms. Elevations and plans, and axonometric drawings will show the pavilion as a network of lines. The lines give the drawing a sense of understanding, the strength of geometrical manipulations such as addition, division, shearing, rotation, and mirroring what was brought together in one design. Suggested topics follow:

- The pavilion as a network of several ordering systems
- Proportions, symmetries, rhythms
- Plans, sections and elevations
- Geometrical operations: addition, subtraction, translation, rotation, mirroring

4. Space sequence: Places-paths

Elements of your project should include the following: the connecting paths of a pavilion; paths from outside to the inside, in the inside and back; articulations and connections from the inside to the outside; the hierarchy of primary and secondary paths; served and serving spaces, the sequence of the room, spaces and places: rooms of passage and room of contemplation; the strategies of the various paths and pauses; the change from light to view. The numerous knots of circulation of the pavilion and figures of passageways, similar to choreography, will be drawn up.

- Degree of enclosures of each pavilion
- Paths from outside to inside/inside to outside
- Thresholds definition, spatial, planer
- Hierarchy of primary and secondary circulation
- Sequence of rooms, their qualification as rooms of transition, rooms of repose...
- Sequence in accordance to lighting and view.