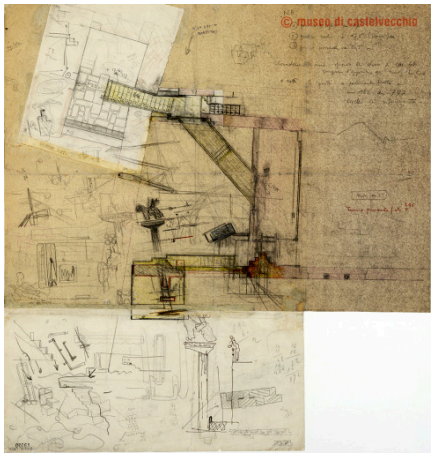
2nd Year Studio **ARCH 2015**

Studio Professor
Henri T. de HAHN

Studio:	Cowgill Hall 4th Floor -parking side MWF 1:00 – 4:50pm
Seminars:	TBD
Office hours:	MWF 11:00 – 12:00 or by appointment
Contact:	Office: 540-231-2680 Email: hdehahn@vt.edu



Carlo Scarpa, architect
Study for the entrance at the Museo di Castelvecchio, Verona, Italy (1958-74)

"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 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 2: **How do you see and understand? Case study analysis project (precedents)**
Assignment given: Monday September 13, 2019
Assignment due: Wednesday, October 9 2019 1:00pm
Review Cowgill Hall, room 300

This exercise will concern itself with the study and analysis of seminal works of 20th century *master* and *star* architects. By analyzing specific works of architecture –typically in plan, section, elevations 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 by observing and reading, can lead the students on two parallel avenues. First, to discover the possibilities of how architects have handled space and place, 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, take apart, or examine an object or an existing building (*de-construct*) is an important learning process, which without discipline and insight, might at times hinder one from creating something meaningful; 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.

The analysis is 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. This analysis project - **How do you see and understand**, helps young designers become acquainted with syntax and vocabulary –perhaps the beginning of their own language!

TASK
The analysis of works of 20th century modern architects will consist of laying down the basis for our first design project. This four-week long study is about observation - taking an existing built construction and understanding its internal logic. In some ways when analyzing an architectural object, we try to immerse ourselves in the existing imagery (plans, sections, axonometric, etc.) and certainly try in a first attempt to understand what is in front of our eyes. We see spaces defined in accordance to the architect's interpretation of the numerous variables he or she has taken into consideration. It can be the program, a specific site, or a budget constraint that dictated a possible solution out of many discarded opportunities. But if we take our investigation further, we can unravel with more intensity and depth the philosophical strategies that brought the architect to make certain assumptions, thus leading us to a visual conclusion that lies in front of our eyes. As a final result, the analysis must be concluded by condensing our discoveries and interpretation in the forms of drawings and other media of your choice.

To penetrate into these specific works, many paths can lead us to new discoveries. To conduct our analysis, I propose the following series of four topics, which are singled out with the intention to understand the totality of the house through particular areas of interest. These topics are paired as following:

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

   A brief paper will combine text, drawings/sketches, and documentary facts mixed with creative thoughts on particular aspects of the studied object. Five to seven pages inclusive of diagrams.

   - Brief history of the existing building with special concern and considerations in selection of the architect, research on the architect(s), etc.
   - Exhibit your findings of the general attitude toward the project through text and analysis drawings (plans, sections, elevations, axonometric…),
   - Paper shall include all necessary documentations of plans, sections, photographs,
   - In short, a thorough analysis of what you (as a professional) find important about the architectural event
   - Brief bibliography

2. Space formation and spatial treatment: Mass-space

   The elements of the analysis are: the relationships between the space definition and the space; the relationship between the positive and negative 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 house. Suggested topics as follows:

   - **The definition of space versus the definition of rooms versus the definition of place**
   - Form as emptiness and form as fullness
   - Spatial separation and thresholds within the house
   - Hierarchical construction of the house

3. Construction: Geometry-order of the massing

   Examined will be the grid of invisible lines that bring together separate elements with the unity of the house, and the rules of symmetry, proportions, as well as the order of the masses and their rhythms. Elevations, plans, and axonometric drawings show the house 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 as follows:

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

4. Space sequence: Places-paths

   A careful observation will be done of the connecting paths of a house; paths from outside to the inside, from 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, 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 house and figures of passageways, similar to choreography, will be drawn up.

- Degree of enclosures of each house
- 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, etc.
- Sequence in accordance to lighting and view.

GROUP EFFORT
Students are required to work in teams of 2 (10-11 projects total) to present a coordinated analysis of the building chosen from the list below, comprising investigations suggested by the above topics and including any others of your choice. The mediums for presentation will be the drawings (analog in your sketchbook /digital), text, collages, etc., on paper (i.e., 8 ½" x 11") to facilitate reviews and the commercial reproductions (booklet created by you) of the class-wide analysis to be made available to each student in the course.
A digital copy will be produced and posted on Issuu.com.
Accompanying 24x 36 composed panels will be required and content discussed in class for the final review of Project 2.

Deliverable for the final review

- Site plan and site analysis diagrams (per Edward T. White *Site Analysis* book)
- Analytical diagrams and sketches
- All necessary, plans, sections and elevations at scale
- Structural model on site contours (carboard material -one color only)
- Kitchen analysis
- Presentation drawings 2-4 24x36 vertical or horizontal panels. This phase will be discussed in class.

Project to be analyzed (one per group):

Period 1930

1. Le Corbusier. Maison Citroen 1920 – 1930 -evolution of five case study prototypes
2. Philip Johnson, Personal House, 1942-43
   9 Ash Street House, Cambridge, 02138, MA. USA
3. Mies van der Rohe: Farnsworth House, 1951
   14520 River Road, Plano 60545, IL. USA
4. Louis, I Kahn, Margaret Esherick House, 1959
   204 Sunrise Lane, Philadelphia, 19118, PA. USA

Period 1960: mid-modern Southern California *Case Study Houses* (CSH)

5. Eames, Charles and Ray, Eames House, CSH #8,
   203 North Chautauqua Blvd, Pacific Palisades, 90272, CA. USA
6. Eames, Charles and Ray, and Eero Saarinen, Entenza House, CSH #8, 1949
   203 North Chautauqua Blvd, Pacific Palisades, 90272, CA. USA
7. Ellwood, Craig, Fields House CSH #18, 1955-58
   1129 Miradero Road, Beverly Hills, Los Angeles, 90210, CA. USA

8. Koenig, Pierre, Bailey House, CSH #21, 1959
   9038 Wonderland Park Avenue, West Hollywood, Los Angeles, 90046, CA. USA

9. Koenig, Pierre, Stahl House, CSH #22, 1959,
   1635 Woods Drive, West Hollywood, Los Angeles, 90069, CA. USA

Period 1990

10. Rem Koolhaas: Maison D'all'Ava, 1991,
    Avenue Clodoald, 92210 Saint Cloud, France

11. Rem Koolhaas: Maison Bordeaux, 1998,
    Chemin des Plateaux, 33270 Floirac, Bordeaux, France