

Project 2: **LOOKING CLOSER - INTERIOR + ENVELOPE**
The Andy Warhol Foundation Building

“DETAILS ARE OLD ARCHITECTURE.”

Rem Koolhaas

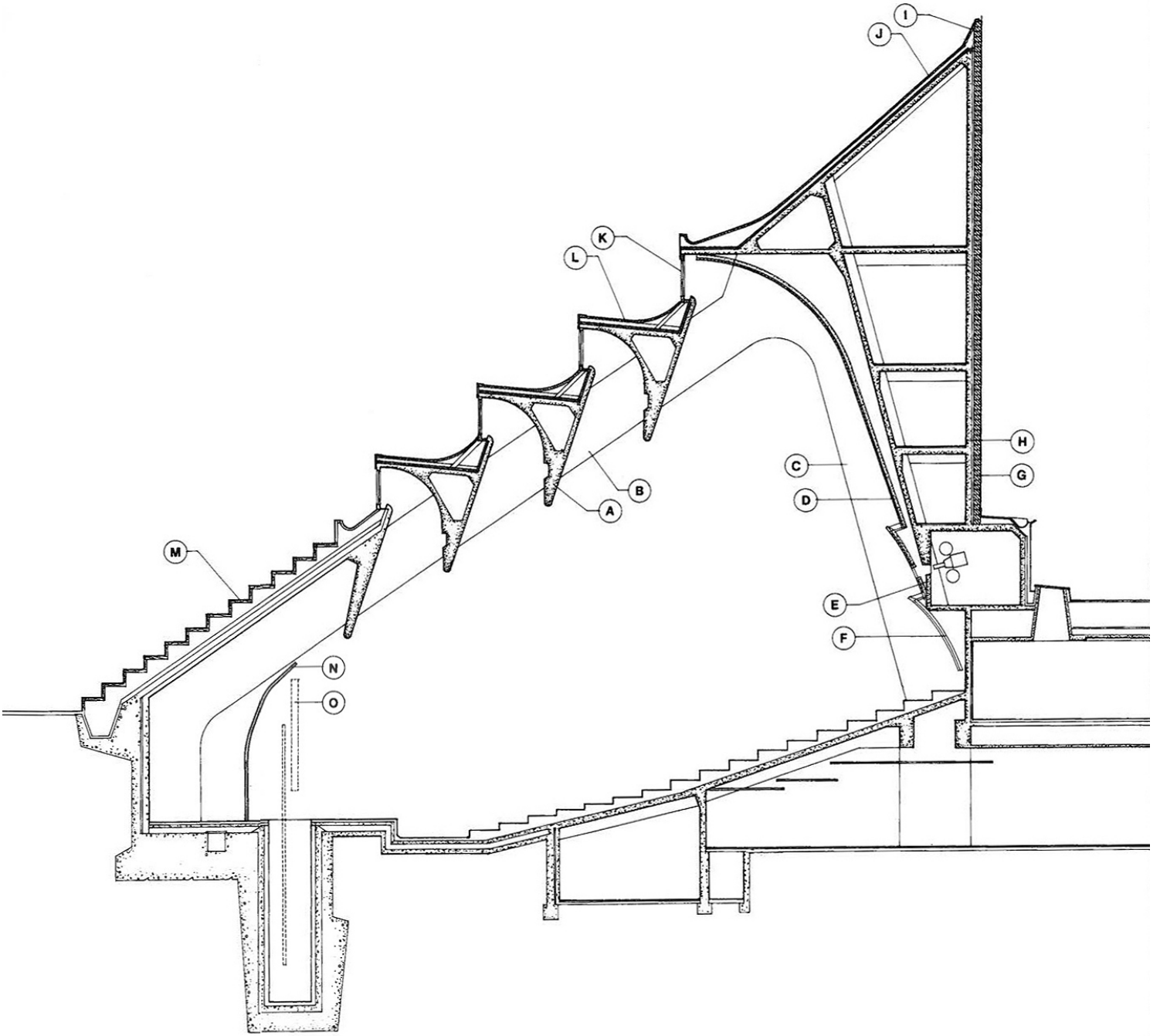
[“.....meaning by implication that they are not new architecture and in the best modern architecture they are absent”, E. Ford]

“Detailing is carrying an idea through with elegance and spirit”. Both the palette of materials and the scale of the building influence the manifestation of architectural detail. “Detailing to me is about scale, about how design changes when you get small. When do things become different?”

Edward Ford



photo: Robert Mapplethorpe



**Third Year UG Arch. Studio
DSGN 3200 - Spring 2011**

Professors:
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Project TWO is a development of the first project.

The design of buildings is much more than the overall form and plan; it is the environment of detail, material, and surface that gives the spaces their character and mood.

The design parti, basic program lay-out, building massing, position on the site, and structural system of the building have been established in the preliminary design phase; you are now asked to take a closer look at select interior and exterior areas of the building. You are NOT asked to re-design the building but continue to develop it in greater detail, thereby maintaining / reinforcing / adjusting / at times correcting conceptual ideas and strategies inherent in your proposed building.

1. Development of an INTERIOR SPACE(s)

“....Thus the third house was about the detail as structural expression, not necessarily about exposing the structure, but designing a building that explained it. It was a house where a way of making structure was the key to a way of making form. It communicated through structural empathy and not glib association, and it showed how the force of weight moved through the structure. If one understood this movement as a smaller manifestation of something much larger, either literal or metaphysical, one was thereby understanding the architecture.”

Edward Ford, from: Five Houses, Ten Details

In most projects the architect will develop ideas about the forms and materials and detailing of the major spaces - all spaces in fact. In this project you will concentrate on the major public spaces in your project, and you will study and further develop them at a larger scale in plan/section and in three dimensions.

spaces Entry / Foyer
Meeting rooms
Auditorium
Exhibition space
Related outside spaces

issues Lighting (natural, artificial; direct, indirect)
Structure (expressed, hidden; rhythm + order)
Material (texture, pattern, color, attachment details, seams, assembly)
Surfaces (floor, wall, ceiling; integration of systems - HVAC, etc.)
Architectonic elements (openings, doors, windows, “objects” (for example stairs, elevator cores)

Through detailed plan, section and perspective drawings showing material and light qualities on all surfaces and integrating structural and mechanical system elements as they occur in the select space, you will study and develop an interior space (or a sequence of spaces) in greater detail and accuracy.

2. Development of the EXTERIOR SURFACE

“The abstract detail is the opposite of the articulated detail. A detail is considered articulated to the extent to which it expresses and demonstrates the resolution of the problems of weight, material, connection, and assembly. When it expresses the opposite - absence of weight, and indifference to material, a lack of apparent connection, and an apparent disregard for the elements - it is seen as abstract.

The abstract details in the Richard Lloyd Jones House (F.L.Wright) include sills, copings, gutters, trim, and a great deal more. The technical roles they play are accomplished, but the means for doing so are hidden. Details that are visible, the articulated ones, include the tightly spaced, long, horizontal bands of steel windows, the grid of threads on which the building is woven. They physically separate the interior from the site by their presence, but they connect the house to the site by their minimal quality. In a subtle way they are Wright’s horizontal line of the prairie multiplied many times over.”

Edward Ford, from: Five Houses, Ten Details

The facade is a membrane separating inside and outside. It is a device that responds to site and interior events and program. The facade controls views and determines the environment of the spaces behind.

spaces Programmatic variety
Programmatic repetition
Inside / Outside conditions
Setbacks / Terraces
Double-height spaces

issues Light (natural, artificial; direct, indirect; filtered)
Structure (expressed, hidden; rhythm + order; relation to slab edge)
Layers (role and position of layers within the facade assembly)
Skin (material texture, pattern, color; attachment details, seams, assembly)
Interior at perimeter of building (integration of floor, wall, ceiling; integration of systems - HVAC, etc.)
Facade expression.

Through a large scale plan and corresponding section and elevation rendered in light, you will study the implications of your proposed design for the exterior of the building in greater detail and accuracy by selecting one significant aspect / area of the exterior and showing how it is constructed, how it modifies the light, and how it forms a thermal barrier for the interior of the building.

3. Research and investigation - the PROCESS OF DESIGN

Research	All relevant research (data collection, information, precedents) must be archived in a physical format, organized by topics
Web research	URL locations of relevant websites visited should be collected on sheet (with reference to subject / topic / relevance to research) and included in file
Design Process	Key drawings and sketches produced during the development of the building details - this allows you to show ideas and work that would otherwise not be presented.
Bibliography	List of books and articles consulted during your research (author, book or article title, publisher + year, pages consulted).

You are required to keep track of your research and your investigations through a process file - a careful and structured “note-taking” that demonstrates your preparation work necessary to arrive at the final drawings and renderings. This file will be presented at the final review together with your drawing boards and models.

REFERENCES

The bibliography for the first project is still applicable and you should consult the books as you develop your project. The following books have been added to the reference shelf:

- Hausladen, Gerhard: *Interiors Construction Manual* NA 2850 .H38 2010
- Capella, Juli: *Seating together (auditoriums)* NA 6821 .C35 2010
- Edward Ford: *Five Houses, Ten Details* NA 2840 .F68 2009
- Thierfelder, Anja (ed.): *Transsolar Climate Engineering* TH 6021 .T73 2003
- Wigginton, Michael: *Intelligent Skins* TH 6021 .W5 2002
- Andrew Hall: *Details in Architecture* on order

WEBSITES

Websites of facade consultants and fabricators often show construction details and give material information; here is a list but you should not limit your search to only those:

2 facade/curtainwall consultants with many high profile projects in their portfolios:

- <http://www.eharch.com/>
- <http://frontinc.com>

Ove Arup (designers, planners, engineers, consultants, technical specialists):

- <http://www.arup.com/Projects.aspx>

OMA - often in collaboration with Over Arup and Cecil Balmond:

- <http://www.oma.eu/>

2 leading European facade design companies: Josef Gardner and Schüco:

- <http://www.josef-gartner.com/>
- <http://www.schueco.com/web/de-en/partners/products/facades/aluminium>

leading international facade consultant: Büro Happold:

- <http://www.burohappold.com/BH/Home.aspx>

Transsolar is known for their innovative climate engineering:

- <http://www.transsolar.com/>

website for a conference on **commercial building facades** (check the powerpoint presentations of the speakers):

- http://gaia.lbl.gov/hpbf/design_g4.htm

this is a good website for **material research**; lost of innovative materials:

- <http://www.materia.nl/541.0.html>

FINAL REVIEW REQUIREMENTS

Each investigation - **(1) Interior space development**, and **(2) exterior surface development** - will be presented on a 36 or 42 inch wide board, any length. A third board will show a reduction of your final presentation board for the preliminary design phase of project 1. Some minor modifications as a consequence of your detail development will be allowable but the intent is that the project 1 be retained in its final form and developed in detail for project 2.

The design process **(3)** will be presented as a bound (clips or spiral) 11 x 17 inch document

board 1 PROJECT 1

- **Reduced presentation of project 1**

board 2 INTERIOR DETAILS

- **1/4 scale plan drawing of select interior space**
- **1/4 scale section(s) of select interior space**
- **(2) Section perspectives of select interior space**
- **(2) Rendered views of select interior space(s)**
- **diagrams as necessary to explain concepts and ideas**

board 3 EXTERIOR DETAILS

- **1/2 scale detailed facade section - rendered and labeled**
through all levels and beginning of foundation; depth ca. 12 ft.
- **1/2 scale detailed facade elevation - rendered, with shadows**
showing the area of a structural bay (ca. 40 ft)
- **1/2 scale detailed facade plan - labeled**
showing same area as section and elevation;
- **(2) Rendered views of facade**
- **diagrams as necessary to explain concepts and ideas**

MODEL

- **1/16 scale building model**
inset into group site model

DESIGN PROCESS FILE

PROJECT SCHEDULE

	week 1	
	Detail Investigation + Research	
03.14	intro to project #1 - lecture	
03.16	no studio - BIM course	
03.18	studio	
	week 2	
	Detail Investigation + Research	
03.21	studio	ED FORD LECTURE
03.23	studio	
03.25	studio	
	week 3	
	Detail Development	
03.28	studio	
03.30	studio	
04.01	studio	
	week 4	
	Detail development	
04.04	studio	
04.06	studio	
04.08	studio	
	week 5	
	Detail development	
04.11	studio	
04.13	studio	
04.15	studio	
	week 6	
	Final presentation work	
04.18	studio	
04.20	studio	TECH final due
04.22-25	EASTER BREAK	
	week 7	
	Presentation	
04.27	FINAL REVIEW (preliminary design + detail development)	
	week 8	
	Studio walk-trough + final documents	
05.04	FINAL DOCUMENTS due (digital documents, sketch file + sketch book)	
	Studio walk-through	