

mass & Figure / plinth & Canopy

sS 2010: Universität für Angewandte Kunst, Wien, o. Univ. Prof. Greg Lynn
assistants: Kristy Balliet, Oliver Bertram, Justin Diles, Martin Mirero



MASS (PLINTH) & FIGURE (CANOPY): COMPOSITE AND/OR INTRICATE TECTONIC

This semester we will continue the topic of producing “massive” qualities using surfaces for design while adding to this topic the task of designing a “long-span structure” with “figural” qualities and incorporating an open spatial canopy defined by a structural frame with a massive plinth.

We will replace the Neue Nationalgalerie in Berlin by Ludwig Mies van der Rohe with a new design that replicates its program, volume, entry sequence, spatial logic and urban and landscape design.

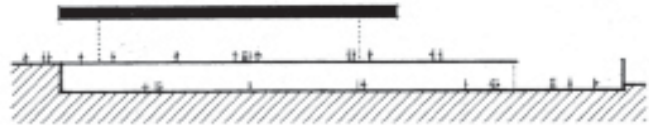
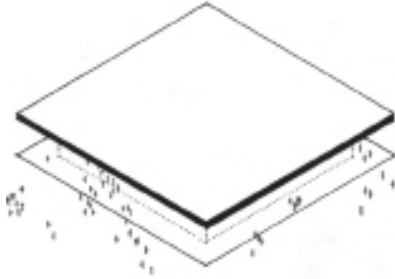
This term students will work in groups of two to thoroughly understand Mies’ building and then entirely replace it with a contemporary design.

As inspiration for an approach to structure we will look at the difference between two types of structure and enclosure: Composite versus Tectonic. A Tectonic structure is an assembly of individual components at their ends and edges one to another to form a frame or network. Contemporary Tectonic assemblies are intricate and often in structural terms monocoque, meaning the individual parts and pieces are codependent and continuously conceived as finite elements in an otherwise continuous assembly. A composite structure is a collection of elements that are placed within a matrix (or glue) and fused together—often cooked—into a single aggregate. Intricate mechanical assembly, marquetry and joinery are characteristic of Tectonics; filleting, blending and gusseting are characteristic of Composites. The figurative approach to design by each group will be derived from either an Intricate Tectonic or Composite approach to design and as well the design tools and techniques associated with these two approaches.

The semester will begin with an analysis and understanding of the site, landscape, program, spatial sequence and tectonic principles of the existing Mies building to be replaced.

mass & Figure / plinth & Canopy analysis

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WEEK 01: ANALYSIS

The semester will begin with an analysis and understanding of the site, landscape, program, spatial sequence and tectonic principles of the existing Mies building to be replaced. You should use 2 & 3 dimensional representation diagrams & physical models to discover the abstract, formal, tectonic, and spatial characteristics of the Neue Nationalgalerie.

01 INDIVIDUAL TEAMS:

Each team of two will produce a series of analytical drawings &/or models. Select from 6-9 of the techniques below (or invent new ones):

LAYERS

- * solid / void (figure / ground, poche)
- * structure &/or geometry (surfaces, etc)
- * volumetric / spatial arrangement
- * texture / pattern
- * material / coloration

ADDITIONAL TECHNIQUES

- * comparative analysis
- * speculative analysis

ORDERING DEVICES & SYSTEMS

- * Symmetry / asymmetry
- * datum / balance
- * hierarchy / proportion / scale
- * entry / circulation / procession (movement)
- * perceptual zones (views, light/dark zones, etc.)
- * rhythm / repetition
- * use patterns (space & time)
- * tectonic principles / details (macro / micro)

02 COLLECTIVE STUDIO:

- (2) Physical Wood Site Model *museum quality*
 - 1:1000 Context Model: Focusing on surrounding modernist monuments (14-16 students)
 - 1:200 Detail Site Model: Focusing on Topography and Entry Sequence (6-8 students)
 - Basswood Model of Existing Gallery

Resources:

http://www.stadtentwicklung.berlin.de/geoinformation/fis-broker/index_en.shtml

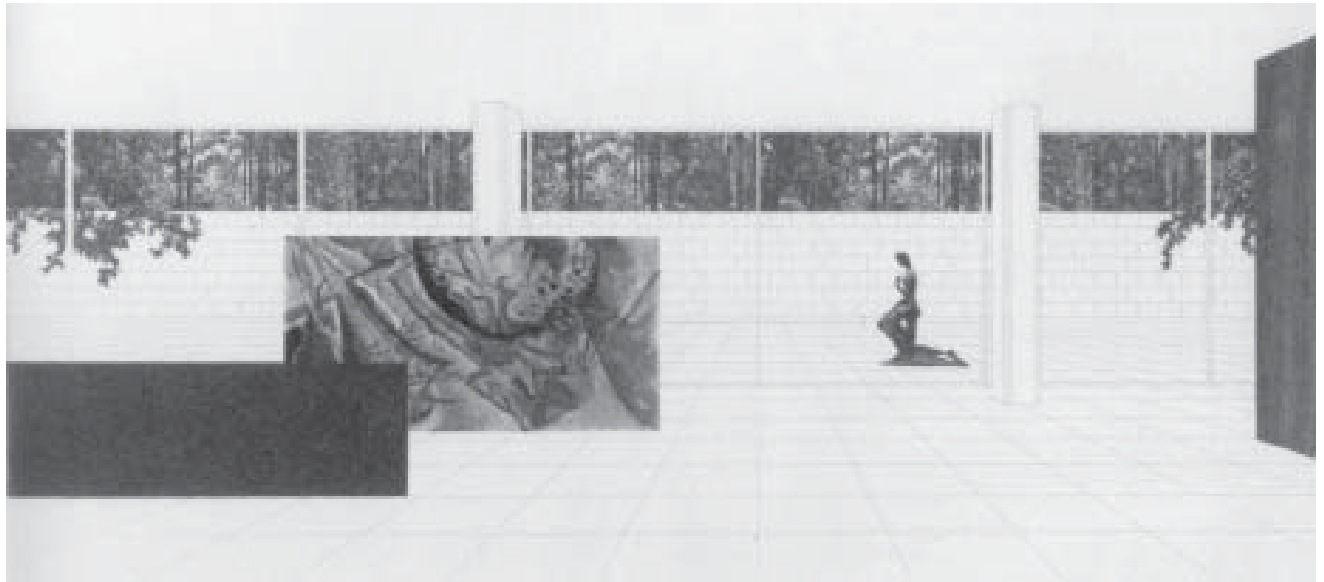
http://www.kulturforum-berlin.com/engl_index.html

<http://www.3d-stadtmodell-berlin.de/3d/en/seite0.jsp>

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program

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Program: 21st Century Museum of Art

The program consists of a permanent exhibition space, a temporary exhibition hall, and a significant outdoor exhibition garden/terrace.

Museum *front of house

*approx. 1,580 m²

- Reception Hall : 780 m²
 - Ticketing
 - Circulation
- Restaurant : 200 m²
- Shop : 300 m²
- Shop Storage : 300 m²

Exhibition Space

*approx. 5,800 m²

- Permanent Exhibition : 2900 m²
- Temporary Exhibition : 2900 m²

Museum *back of house

*approx. 2,440 m²

- Administration : 740 m²
- Library : 330 m²
- Toilet Facilities : 200 m²
- Mechanical : 500 m²
- Storage : 670 m²

Total Building Area: 11,450 m² (includes 15 % for circulation etc.)

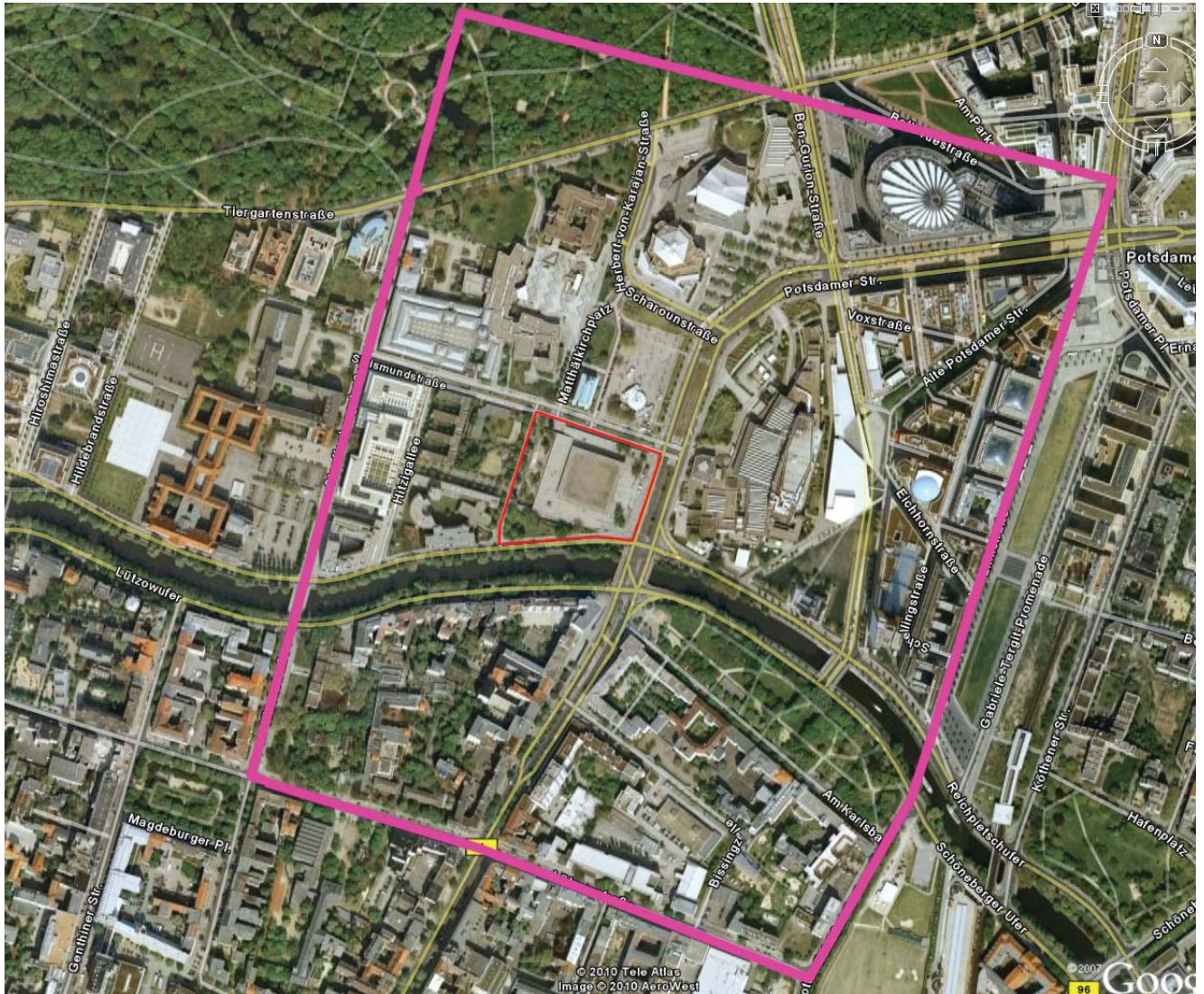
Landscape

- Sculpture Garden : 2000 m²
- Outdoor Terraces : // // // //

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site

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1:1000 Site Model



18,250 m² approximate
project footprint indicated by red square

1:200 Site Model

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Schedule

March	02.03.10	tu	2-6	Semester Kick Off and *Lecture
	04.03.10	th	9-6	Site Model Building / Analysis
	09.03.10	tu	2-6	desk crits
	10.03.10	we	10-6	MEETING with GREG
	11.03.10	th	2-6	desk crits
	16.03.10	tu	2-6	desk crits
	18.03.10	th	2-6	desk crits
	23.03.10	tu	2-6	desk crits
	25.03.10	th	2-6	desk crits
	28.03.10-10.04.10			Spring Break
April	13.04.10	tu	2-6	desk crits
	15.04.10	th	2-6	desk crits
	19.04.10 /25.04.10			Study Trip Berlin
	27.04.10	tu	2-6	desk crits
	29.04.10	th	2-6	desk crits
May	04.05.10	tu	10-5	Mid-Term w/ Greg *date tentative
	06.05.10	th	2-6	desk crits
	11.05.10	tu	2-6	desk crits
	13.05.10	th	2-6	HOLIDAY
	18.05.10	tu	2-6	desk crits
	20.05.10	th	2-6	desk crits
	25.05.10	tu	2-6	desk crits
	27.05.10	th	2-6	desk crits
	28.05.10 / 29.05.10			Architecture Live VII
June	01.06.10	tu	2-6	desk crits
	03.06.10	th	2-6	HOLIDAY
	08.06.10	tu	2-6	desk crits
	10.06.10	th	2-6	desk crits
	15.06.10	tu	2-6	desk crits
	17.06.10	th	2-6	desk crits
	22.06.10	tu	10--	Studio Final Review