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Topical Studies in Design Theory Plans Matter

INSTRUCTOR
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ISSUE

"The Plan is the generator"
"Without a plan, you have lack of order, and wilfulness"
"The Plan holds in itself the essence of sensation"
Le Corbusier

What is the matter of plan?
What does the plan matter?

DESCRIPTION

This course seeks to investigate the strategies employed in contemporary architecture for spatial organization, with a specific focus on their representation in floor plans. The use of plans as a medium for this study is particularly significant, as it reflects the emphasis that Le Corbusier placed on this aspect of architectural design. In his seminal work, "Towards a New Architecture", Le Corbusier declared that "the Plan is the generator", highlighting the importance of order and intentionality in the creation of architectural space.

Through a focused study of a curated collection of plans, this course aims to establish a comprehensive body of knowledge on the strategies employed for spatial organization in architecture. Specifically, we will examine the graphic expression of spatial organization, the relationship between spatial organization and spatial quality in our chosen design cases, and the ways in which space-organizing strategies interact with other architectural aspects, such as enclosure, structure, program, and material expression.

By engaging in this rigorous analysis of spatial organization in architecture, we target to deepen our understanding of the fundamental principles that underpin successful architectural design.

IMPACT AND SUSTAINABILITY

The creation of architectural plans is an integral part of any studio project. Engaging in critical reflection on the process of plan creation and interpretation can facilitate a deeper understanding of the underlying design strategies evident in exemplary works of architecture. This reflective process can help to reveal the unseen connections between various elements of architectural design and highlight the ways in which plans can be leveraged as a tool for achieving specific design goals. Ultimately, a critical engagement with plans can enable a more nuanced understanding of the principles and strategies that inform successful architectural design.

There are at least two aspects in the study of plans touch upon the sustainability-related issues. For instance, the climatic border and the integration of elements (minimizing numbers of components). Though the design intention may or may not be originated from a sustainable design advocacy, the results do contribute to a more sustainable environment in terms of energy saving and reduction of carbon emission. Selected building cases will showcase how skillful architects can incorporate green issues into their design articulations and deliver delightful architecture favorable not only to people, and also to our planet.

COURSE SYLLABUS

Topics includes:

Floor plans reading
Space Types
Spatial Organization
Orders in Plans
Observation1: From Free Plans to Integrated Plans
Observation2: The Lightness & Heaviness of Transparency
Organizing Strategy1: The Floor Plans “Aufräumen”
Organizing Strategy2: Aggregation-Profile-Subtraction-Hollowing Out

METHODS

As with the study of literature or music, the study of architecture ultimately involves a close examination of works of architecture. To facilitate this investigation, the course presents a carefully curated collection of 60 works from 20 architects and offices located across various continents. These works were selected based on a sustained observation of contemporary architecture and offer a diverse range of styles, approaches, and techniques. Through a critical analysis of these works, students will gain a deeper understanding of the underlying design principles and strategies that give rise to successful architectural works.

The course emphasizes the importance of plans as a primary means of representing architectural space. Plans can be viewed as a graphic representation of a building's spatial organization, and as such, they require a nuanced understanding of the complex interplay between form, structure, program, and material expression. In addition to issues of representation, the course also explores the influence of program on spatial organization in these works. For example, the course examines the dynamics between various programs and the spatial strategies applied to them in works such as museums, which are often considered a type of "loose" program.

The course encourages students to select cases that align with their individual interests and design studio project goals. Through a range of plan-analysing methods introduced and demonstrated throughout the course, students will develop their skills in critical analysis of plans. Workshops provide opportunities for students to practice plan analysis exercises collaboratively and engage in group discussions to identify and address issues that arise.

Students are invited to bring in their own plans from their studio projects, as well as plans that reflect their personal interests, for discussion. This approach facilitates peer review and constructive feedback, and enables students to gain insights into the underlying principles and strategies that inform successful architectural design.

Except for the in-class group exercises, all submissions are on an individual basis.

LEARNING OUTCOMES

This elective aims to draw students' attention to architectural plans as ends and means of architectural design.

- To critically review architectural plans.
- To realize space organizing strategies can be developed by plans and its articulations.

- To develop skills in reading and interpreting architectural plans.
- To develop a specific sensitivity in architectural plans as an expression.
- To reflect on the plans of their design studio projects.
- To develop skills in explaining a design with plans and its diagrams.
- To develop skills in composing plans from an integrative approach.

ASSESSMENT SCHEME

1_Class Participation	10%
2_Workshop Assignment	30%
3_Study Package	60%

Total: 100%

COURSE FORMAT

Teaching Days

7/1, 14/1, 21/1
4/2, 11/2, 18/2, 25/2,
4/3, 11/3, 18/3, 25/3,
1/4, 8/4, 15/4

Tuesdays 10:30am – 01:15pm
Teaching Venue: LSK Building, Zone F

Student Study Effort

1. Class Contact: 39 hrs (lectures 24 hours, tutorials 15 hours)
2. Other Student Study Effort: 100 hrs (Studio/Self Study)

Total Student Study Effort: 140 hours

DELIVERABLES

Students are required to design an integral package of their study which contains the following elements:

1. An articulated model which reveals the essence of the studied case.
2. A properly binded booklet.
3. A self-run digital presentation of the study. It can be a piece of video or animation etc.

These elements have to be packaged in one integral set but not as loose pieces.

RECOMMENDED READINGS

1. Flusser, Vilém. The Shape of Things : a Philosophy of Design. London: Reaktion Books, 1999. Print.
2. Lucan J., Raffaele C., Nicollier G. & Mivelaz P. (2001) A Matter of Art Contemporar y Architecture in Switzerland. Germany: Birkhauser.
3. Cor tés, J. A. (2009). A conversation with Kazuyo Sejima and Ryue Nishizawa. El Croquis 139: SANAA 2004-2008[Kazuyo Sejima + Ryue Nishizawa]

4. Cor tés, J. A. (2009). Architectural topology. El Croquis 139: SANAA 2004-2008 [Kazuyo Sejima + Ryue Nishizawa]
5. Ito T., (1996). Diagram Architecture. El Croquis 77 [1]: Kazuyo Sejima
6. Grinda G. E. & Moreno C. D. (2004) Liquid Playgrounds [fragments from a conversation]. El Croquis 121/122: SANAA 1998-2004[Kazuyo Sejima + Ryue Nishizawa]
7. Bafna, Sonit(2005). Symbolic content in the emergence of the Miesian free-plan, The Journal of Architecture,10:2,181 — 200
8. Bafna, Sonit(2008). How architectural drawings work — and what that implies for the role of representation in architecture, The Journal of Architecture,13:5,535 — 564

REFERENCES

For the study pack, students are encouraged to investigate the works from the following architects

1. Toyo Ito
2. Peter Zumthor
3. Herzog & de Meuron
4. Gigon & Guyer
5. Valerio Olgiati
6. Christain Kerez
7. David Chipperfield
8. Ryue Nishizawa
9. SANAA
10. Makoto Yokomizo architects
11. Fujimoto Architects
12. Aires Mateus*
13. Nieto Sobejano
14. Paulo David
15. Mansilla-Tuñón
16. Acebo X Alonso Arquitectos
17. Pezo Von Ellrichshausen
18. Johnston Marklee

IMPORTANT NOTE TO STUDENTS

Expectations for Professional Conduct

The motto of The Chinese University of Hong Kong (CUHK) is “Through learning and temperance to virtue”. This motto places equal emphasis on the intellectual and moral education of students. In addition to pursuing academic excellence, students of CUHK are expected to maintain and uphold the highest standard of integrity and honesty in their academic and personal lives, respect the rights of others and abide by the law. More information on Postgraduate studies can be found in the PG Student Handbook. <https://www.gs.cuhk.edu.hk/>

Attendance

Class attendance is required in all courses. For an excused absence, the instructor must be notified and presented with documentation of illness or personal matter. Please note: **Three (3)** or more unexcused absences may result in a failing grade for the course.

Academic Honesty

The Chinese University of Hong Kong places very high importance on honesty in academic work submitted by students and adopts a policy of zero tolerance on academic dishonesty

Attention is drawn to University policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at: <http://www.cuhk.edu.hk/policy/academichonesty/>.

With each assignment, students may be required to submit a statement that they are aware of these policies, regulations, guidelines and procedures.

Third-Party Assistance

All intellectual work essential to the design project must be completed by the student and cannot, under any circumstance, be outsourced to a third party (including, but not limited to a company, consultant, alumni, and/or friend).

In the design studio context, students may utilize external resources, such as printing services for presentation materials, and/or laser cutting and 3D printing services for prototyping purposes. Use of such third-party services constitutes non-intellectual work done by others. It is only permitted with prior written consent from the studio tutor and acknowledgment of such work done by the third party.

Assistance from other students or friends for aspects of project production also constitutes non-intellectual work done by others; this is allowed only if declared and acknowledged in a written statement attached to any such work that has received assistance.

Under all circumstances, students must declare all work done by others by completing the school's designated form before assessment. This form must include a detailed explanation of the third party's identity (name and relationship to the student), when and how they were utilized, and the specific tasks they performed in the project. The completed form, signed by the student, must be endorsed by the tutor and presented during the final review. The school will collect and retain this form for record-keeping purposes.

Failure to follow this code of conduct may be considered a case of academic dishonesty, to be reviewed by a disciplinary board, and possible failure of the course.

Artificial Intelligence

Unless approved by the Programme or School Director, any use of AI tools such as ChatGPT or image generation tools (Midjourney) etc. is strictly prohibited and may result in disciplinary action in accordance with university policy on academic honesty. Students may refer to the CUHK 'Use of Artificial Intelligence tools in Teaching, Learning and Assessments' – A Guide for Students.

GRADE DESCRIPTOR

Grade	Descriptor	Criteria	Points
A	Excellent	Outstanding performance on all learning outcomes.	4
A-	Very Good	Generally outstanding performance on all (or almost all) learning outcomes.	3.7
B+	Good	Substantial performance on all learning outcomes, OR high performance on some learning outcomes which compensates for less satisfactory performance on others, resulting in overall substantial performance.	3.3
B			3
B-			2.7
C+	Fair	Satisfactory performance on the majority of learning outcomes, possibly with a few weaknesses.	2.3
C			2
C-			1.7
D+	Pass	Barely satisfactory performance on a number of learning outcomes.	1.3
D			1
F	Failure	Unsatisfactory performance on a number of learning outcomes, OR failure to meet specified assessment requirements.	0

Term 2: 6 January 2025 (Monday) – 17 April 2025 (Thursday)

WEEK 01		
07.01	LECTURE 1	In-class exercise 01
WEEK 02		
14.01	LECTURE 2	In-class exercise 02
WEEK 03		
21.01	LECTURE 3	In-class exercise 03
WEEK 04		
28.01	NO CLASS	Chinese New Year
WEEK 05		
04.02	LECTURE + WORKSHOP	In-class exercise 04
WEEK 06		
11.02	NO CLASS	BSSc T2 Review 01
WEEK 07		
18.02	LECTURE + WORKSHOP	In-class exercise 05
Week 08		
25.02	LECTURE + WORKSHOP	In-class exercise 06
Week 09		
04.03	NO CLASS	Reading Week
Week 10		
11.03	LECTURE + WORKSHOP	In-class exercise 07
Week 11		
18.03	LECTURE + WORKSHOP	In-class exercise 08
Week 12		
25.03	LECTURE + WORKSHOP	In-class exercise 09
Week 13		
01.04	LECTURE + WORKSHOP	In-class exercise 10
Week 14		
08.04	CONSULTATION	Final Study Package Preparation
Week 15		
15.04	NO CLASS	BSSc T2 Review 03
Week 16		
22.04	CONSULTATION	Final Study Package Preparation
23.04	CONSULTATION	Final Study Package Preparation
Week 17		
29.04	FINAL SUBMISSION	Study Package

Written Feedback to Students

Term: _____

Grade: _____

Course: _____

Date: _____

Assignment: _____

Student Name: _____

Studio Tutor: _____

Student ID: _____

Feedback from Studio Tutor:

Achievements:

Challenges: