



TYPOLGY

INSTRUCTORS

CHOW, Kelly
ENDRIZZI, Raffaella
MOK, Charis.
SHINJI, Wataru
SHINOHARA, Hiroyuki

chow@cuhk.edu.hk
raffaellaendrizzi@gmail.com
charismok@gmail.com
watarushinji@cuhk.edu.hk
hiroyukishinohara@cuhk.edu.hk

ISSUE

One of tenets of modernist architecture was the proposition that the form of each building should emerge spontaneously from the specifics of its program and its site in a process analogous to scientific analysis and without reference to precedents or norms, which many Modernists considered little more than habits and prejudices. The premise of this theory is that modern culture is fundamentally different from previous cultures.

L' Architettura Della Città by Aldo Rossi, first published in 1966, established a foundation for an urban science within the context of the human sciences. In this urban science, the city – or the construction of the city over time – is understood as the embodiment of architecture as a whole – its history, technology, and building types.

Rafael Moneo defined type in his seminal essay “On Typology” (1978) as “a concept used to describe a group of objects characterized by the same formal structure.” At one level, it is the understanding and classification of building forms and functions as a form of disciplinary knowledge. But against the failure of the Modern Movement, Moneo emphasizes how certain types “embody specific cultural, social, and functional characteristics that are intimately connected with reality – with a vast hierarchy of concerns running from social activity to building construction.” From this point of view “architecture was considered neither as the single artistic event proposed by the avant-garde nor the industrially produced object, but now as a process, in time, of building from the single dwelling to the total city.”

Moneo further states that to understand the question of type is to “understand the nature of the architectural object today. It is a question that cannot be avoided. The architectural object can no longer be considered as a single, isolated event because it is bounded by the world that surrounds it as well as by its history. It extends its life to other objects by virtue of its specific architectural condition, thereby establishing a chain of related events in which it is possible to find common formal structures.”

If architectural objects allow us to speak about both their singleness and their shared features, then the concept of type is of value, although the old definitions must be modified to accommodate an idea of type that can incorporate even the present state. We are therefore left to question the possibilities of re-investigating design, based on types with revised historical and cultural significance.

KEYWORDS

type, typology
classification, taxonomy, repetition, differentiation, reinvention
variation, adaptation, transformation
origins, history, time, urban artifacts

DESCRIPTION

Within architectural discourse, the first typological approach developed out of the rationalist philosophy of the Enlightenment as can be found with the French archaeologist and art writer Quatremère de Quincy in his work *Encyclopédie* (1789). The result of this corpus of work has since been influential and it has become the subject of debate in architectural discourse of the twentieth century. But within the modernist architectural discourse, the concept of type suffered a loss of significance. For example, in modernism the notion of type was reduced to the notion of stereotype. However, we see a reemergence of the significance of type and typology during the 1950s as reflected in the writings of Aldo Rossi, mainly *The Architecture of the City* (1982).

Fundamental to creative composition is *knowledge* and *understanding*. One needs to acquire cultural and technical knowledge and acquire *insights* into relevant design options and the effects of design *decisions*. Designing is a process of *searching* for a ‘correct’ result. This quest can be considered ‘empirical’ only in so far as that it tends to follow a path of *trial and error*. In a design process there is not one ‘correct’ outcome. The designer can come up with a *variety* of potential solutions, each of which would lead to considerably different environmental qualities and spatial experiences, if built.

Although the design process itself is clearly not ‘scientific’ in nature, the designer does make use of many sources of knowledge and information, which contribute to shaping the end product. In [design], a proven method of acquiring knowledge and insight is the study of *precedents*, to be analysed systematically. Recurring formal themes and characteristic forms of variety make it possible to identify specific *types* of design artefacts. These can be organised systematically in design *typologies* which may in turn contribute to understanding and appreciation of *specific* design artefacts.

One of the most effective compositional structuring devices was traditionally the architectural *style*. In the Renaissance, the renewed orientation on ‘classical’ architecture of Romans and Greeks led to a set of stylistic rules which would not necessarily lead to the same result, but could be applied with a certain amount of freedom and inventiveness by different designers. After the emergence of the modern movement in the early twentieth century, the classical rules were declared obsolete. No generally accepted stylistic framework has taken their place. Although designers frequently refer to their knowledge of historical examples, and may at times *re-interpret* previous themes or even borrow directly from design examples, designers frequently attempt to cross – or at least to ‘stretch’ – existing boundaries. Design practitioners are constantly ‘re-inventing’ what was conceived before, within the shifting cultural (and technological) climate of the moment.

The cultural climate of the twentieth century *fin-de-siècle* seems to have given rise to a tendency amongst leading designers to keep surprising their audience with ‘original’ solutions in order to stay in the limelight. In contemporary architecture there is a tendency not to adhere to any pre-determined, binding themes – or indeed *methods* - of design, but rather to make choices within a framework of plan-specific design rules developed *per project*. The contemporary architectural ‘landscape’ offers both the familiar and the innovative. We bear witness to a constantly shifting ‘parade’ of architectural forms and themes. There is no generally accepted architectural style, no standard set of *rules*.

Designing is essentially an activity of conceiving futures. Instead of looking back, designers are inclined to look towards ‘what might be’, they seldom look back in order to understand what has come to be and why. They apply their knowledge in a pragmatic way, but they are also inclined to ‘bend the rules’ for aesthetic effect whenever they consider it necessary. Such ‘poetic licence’ may be at the root of persistent objections to architectural design and research activity by conventionally inclined academics. However, it is precisely this tension between logical and aesthetic considerations that makes architectural compositions so *complex* – and therefore so challenging.

The city is an “organism in the making,” an entity in constant transformation, not a complex of immutable elements. The city represents the entire human experiential field of the world, considered as expression of a “fundamental movement of existence” in its completeness and historicity, expressed by the formative structure of tissues and building types, by the urban hierarchies, by the relations with the territory, by the social relations, and by the values and criticalities. This studio aims to establish a consideration for the use of types and precedents as a basis for design.

IMPACT AND SUSTAINABILITY

The form of urbanisation in emerging cities in the developing countries, and in particular in Asia, Africa, Latin America and the Caribbean, has departed from the Western models of centralised organisation and planning. The relentless speed and colossal scale of urbanisation, with the current level of around 50 per cent increasing to approximately 69 per cent by 2050, has resulted in the profession merely responding to these rapid changes and challenges in retrospect.

The architecture of this new urbanisation, fuelled by the market economy, is predominantly driven by the regime of difference in search of novelty. Macau built the world's biggest casino and Dubai the tallest skyscraper, with its Burj Khalifa beating the recently completed Shanghai World Finance Center of 2008 to this superlative. With this increasing stultification, the discipline's inability to confidently and comprehensively describe, conceptualise, theorise and ultimately project any new ideas of architecture in relationship to the city must be confronted and rethought.

METHODS

We will study the issue of type within the architecture of the library, which coincidentally relates as an institution that has as its basis the rationalist notion of knowledge; that "knowledge" in any field is "knowable" through its collection, organization and, therefore, comprehensibility. The Library historically began with the first efforts to organize collections of documents. The first libraries consisted of archives of the earliest form of writing – the clay tablets in script discovered in Sumer, some dating back to 2600 BC. Private or personal libraries made up of written books appeared in classical Greece in the 5th century BC. In the 6th century, at the very close of the Classical period, the great libraries of the Mediterranean world remained those of Constantinople and Alexandria.

This history has culminated in a questioning of "What is a library?" How can a reading of the accumulated history of this institution suggest an appropriate type that continues the process of building the city.

Students will be asked to explore these questions through the design of library of 2,500 sq m (GFA).

The context of the project will be Sai Ying Pun, Western District, Hong Kong. The study area is selected based on the following criteria:

- the selected area is rich in historical and cultural background;
- the selected study area includes a varied degree of urbanity;
- the selected area has a rich urban pattern that includes several periods of urbanization;
- the area is affected by numerous planning and design decisions throughout historical development;
- the planning of the study area is also a situation where the characteristics and impact of the district should be questioned.

The work study will be carried out in five (5) phases:

01_Phase 1: Typologies as historic and material reality.

Group, 2 weeks. (02.09 – 12.09)

An in-depth study on the topic of 'type' and 'typology – the science of type' – will commence with looking at historical and contextual precedents related to various definitions of 'type' by way of the "Library." The phase opens with a short seminar on *type* and how these have been historically and

contextually understood through social use and design practice vis-à-vis Jean-Nicolas-Louis Durand (1760-1834).

Outcome: taxonomy of libraries and associated spatial types. Analysis through the lens of plan/sectional issues of library precedents will demonstrate an awareness of the concept of type; the various ways in which types can be identified. In addition, an awareness of the history of the library should be developed. This taxonomy will be developed through drawings – both analogue and digital – and developed into a composite drawing.

02_Phase 2: Contextual analysis, use and understanding of types in Hong Kong

Group, 2 weeks. (16.09 – 26.09)

An in-depth study on the Hong Kong SAR context will commence with looking at the geographic nexus of Sai Ying Pun, and its configuration as various ‘types’. In addition, the focus of this phase will be to identify and examine the types specific to Hong Kong’s cultures and possible varieties of spatial settings. The discussion will be further supplemented by a seminar with reference to such examples of types in the city by Saverio Muratori.

Outcome: taxonomy of Hong Kong types which provides a catalogue of contextual urban artifact for further exploration into a design proposition.

03_Phase 3: Conceptual development, a Hong Kong Type

Individual, 2 weeks. (30.09 – 10.10)

Conceptual development of one given focus within the theme to work on for the remainder of the semester, to develop and integrate new and appropriate forms from the type. We will explore the flexibility/adaptability of the type, where the issue of programme specific to the understanding of the Library is considered. Critical to this phase is a point of view of how the proposed type fits into the lexicon. The key TimeLine drawing should form part of the explanation.

Explorations to be done through the mediums of quick conceptual models, tessellation and iterations. A number of models/drawings will be used and scrutinized as a basis and foundation for design development.

Outcome: conceptual scheme for the library to form the model for development.

04_Phase 4: Design Development: Material and scalar integration, material crafting and explorations

Individual, 2 weeks. (14.10 – 24.10)

Development and material integration at various scales for the *model* development through the design of the specifics of the Library. Composition, massing, tectonics, surfaces and other aspects to be considered in the development.

Outcome: Schematic Design of the Library.

05_Phase 5: Consolidation + Detail Design

Individual, 4 weeks.(28.10 – 27.11)

Consolidation is the synthesis of the first 4 phases into one final and singular design. Focus of the synthetic process (synthesis) is not solely on a “beautiful” design but on the detailing and technical documentation of the design proposal in terms of working drawings, models and explanatory details.

Outcome: Documentation in the form of drawings (plans, sections and elevations) that meet with the standards widely accepted by the profession, supplemented by well-articulated models.

DELIVERABLES

00_Key Drawing

TimeLine Drawing

Drawing that demonstrates your understanding and point of view of type and how your proposition fits into the disciplinary knowledge (series/taxonomy). It is recommended that this work be considered a study that is worked on throughout the semester’s exploration, in various media and forms, which helps to clarify the issue and proposition for the design.

In terms of technique, collage, assemblage and bricolage are suggested.

01_Review 01

1. Phase 1: Composite drawing – types of “Libraries”
2. Phase 2: Taxonomy of “Hong Kong Spatial Types”
3. Project Book (draft to date) A3 hardcopy – digital submission to the BlackBoard

02_Review 02

1. Research output of Type as evidence of the Idea of the City (Review01)
2. Concept Design of Library
 - parti model/drawing (analytique)
 - “TimeLine” analysis
3. Project Book (draft to date) A3 hardcopy – digital submission to the BlackBoard

03_Final Presentation

6 nos. A1 Panel (portrait)

1. TimeLine Drawing (key drawing)
2. Site Plan
3. General Arrangement Plans
4. Section(s)
5. Elevation(s)
6. Site Model with Project Scheme (concept model) indicated
7. Design Development Model (ie: final model)

04_Project Book

Physical printed and bound portfolio document with a common format across all students within the studio to be started at the beginning of the year and kept updated and available throughout the semester. This will include:

1. Written Statement on your overall project position (500 words)
2. Graphic Collection of your design process, including any sketches, progress models, design drawings, references, case studies, etc. – annotated and organized as appropriate
3. Documentation of the Final Review Submission (as presented)
4. Documentation of Previous Work Submitted

LEARNING OUTCOMES

1. **Understanding** of the need to critically review precedents relevant to the function, organization and technological strategy of design proposals.
2. **Understanding** the cultural, social and intellectual histories, theories and technologies that influence the design of buildings.
3. **Knowledge** to apply the influence of history and theory on the spatial, social, and technological aspects of architecture.
4. **Knowledge** to apply appropriate theoretical concepts to studio design projects, demonstrating a reflective and critical approach.
5. **Awareness** of the theories and methods of inquiry that seek to show the relationship between human behaviour and the physical environment.
6. **Understanding** of the needs and aspirations of building users.
7. **Awareness** of the impact of buildings on the environment, and the precepts of sustainable design.
8. **Awareness** of the way in which buildings fit into their local context.
9. **Understanding** of the methods of investigation and preparation of the brief for a design project.
10. **Ability** to use appropriate representational media, such as drawings, models, diagrams, charts, including computer technology, to convey essential design information at each stage of the programming and design process.
11. **Understanding** of the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design, architectural composition, and urban design. (design-formal ordering systems).
12. **Ability** to create architectural designs that satisfy both aesthetic and technical requirements.

ASSESSMENT SCHEME

1_Reviews (30%)

1. Review 1, (15%)
2. Review 2, (15%)

2_Final Review (50%)

1. Final Presentation (verbal) (15%)
2. Final Presentation (visual) (35%)

3_Project Book (20%)

Total: 100%

Each assessment result will be promptly released to students upon completion accompanied by written comments based on student progress and performance.

COURSE FORMAT

01_Teaching/Learning Methodology

1. **Lecture:** Lecture series on fundamental ideas of the studio to develop students' awareness of issue and ability to explore spatial and architectural design through experimental methodologies.
2. **Tutorial:** Group tutorials to facilitate idea exchange among students in order to learn from one another.
3. **Critique:** Develops students' ability in articulating concepts in front of an audience and to learn by receiving comments.
4. **Project:** Develops students' ability to identify, understand, conceptualise and design with attention to contextual concerns.
5. **Project Book:** Develops students' ability in reflecting their thought processes after the class activities and self-study.

02_Group Work

1. Students may work in groups on various assignments and projects throughout the course calendar.
2. Final projects must be based on individual building design proposals. If the preliminary work shown was developed in partnership with other students – this must be explicitly stated and assessed accordingly.

03_Teaching Days

1. Design Studio is taught on Monday and Thursday 13:30 to 18:00. Students must be in a studio for F2F teaching during these teaching hours.
2. Students must attend School Lectures scheduled 12:30 – 13:30.
3. Field trips, lectures, and other learning activities may be scheduled outside of teaching days.
4. Online (synchronous or asynchronous) activities will be advised as necessary.

04_Studio Spaces

1. Each Studio will have their own space, accommodating a desk for each student.
2. Layouts will be issued at the start of the academic year.
3. The school has made studio space and use a priority. Students should maximise the use of their space by conducting design work in studio.
4. Working in the studio creates an opportunity for peer learning and collaboration – take advantage of this valuable resource.
5. Studio space should be respected – especially with consideration of food, drinking, material use, personal safety, disruption to others, and building safety regulations. Areas relating to fire escape should be always kept clear.

FIELD TRIP

1. Sai Ying Pun – a Group field trip will be coordinated.
2. Libraries (various) – informal visits to libraries in Hong Kong.

REQUIRED READINGS

- Lee, C. C., & Jacoby, S. (2011). Typological Urbanism and the Idea of the City. *Architectural Design*, 81(1), 14–23. <https://doi.org/10.1002/ad.1184>
- Moneo R. (1978). “On Typology.” *Oppositions*, *MLT Press*, 13:22-45.

OTHER REFERENCES

- Balmer, J., & Swisher, M. T. (2012). *Diagramming the big idea : methods for architectural composition*. Routledge.
- Jenkins, E. (2012). *Drawn to Design : Analyzing Architecture Through Freehand Drawing*. Birkhäuser,.
- Lathouri, M. (2011). The City as a Project: Types, Typical Objects and Typologies. *Architectural Design*, 81(1), 24–31. <https://doi.org/10.1002/ad.1185>
- Rossi, A., & Eisenman, P. (1982). *The Architecture of the City*. MIT Press.
- Vidler, Anthony. (1977). “The Third Typology.” *Oppositions Reader*, Princeton Architectural Press.

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.

Student Work

Submission of studio documentation must be complete and correctly formatted. Missing or incomplete submission of the documentation folder will result in the grade for the course being withheld. This will prevent registration for the following term or delay graduation. In addition, a grade deduction of *one letter grade* will be made.

SCHEDULE

Important Dates

Review 01	26 SEP 2024	(THU)
Review 02	21 SEP 2024	(MON)
Final Review	27 NOV 2024	(WED)
Project Book	TBC	

Term 1: 2 September 2024 (Monday) – 30 November 2024 (Saturday)

WEEK 01		
02.09	PHASE A Library Taxonomy	Seminar on Type and Typology
06.09		Studio
WEEK 02		
09.09		Seminar on Library
12.09		Drawing Exhibition
WEEK 03		
16.09	PHASE B HK Taxonomy	Seminar on Adaptability
19.09	Site Visit	Sai Ying Pun
WEEK 04		
23.09		Studio
26.09		REVIEW 01
WEEK 05		
30.09	PHASE C Concept Design	Seminar on Parti
03.10		Studio
WEEK 06		
07.10		Studio
10.10		Studio
WEEK 07		
14.10	PHASE D Design Development	Seminar on Concept – Plan
17.10		Studio
WEEK 08		
21.10		Review 02
24.10		Studio
WEEK 09		
28.10	PHASE E Consolidation + Detail Design	Seminar on Detail Considerations
31.10		Studio

WEEK 10	
04.11	Studio
07.11	Studio
WEEK 11	
09.09	Studio
12.09	Studio
WEEK 12	
18.11	Studio
21.11	Studio
WEEK 13	
25.11	
27.11	Final Review – Year 3
WEEK 14	
02.12	
25.12	
WEEK 15	
09.12	
TBC	Project Book Submission

BSSc Studio Review

Written Feedback to Students

Term: _____

Grade: _____

Review: _____

Studio Tutor: _____

Student Name: _____

Student ID: _____

Feedback from Studio Tutor:

Achievements:

Challenges:

Academic Honesty Statement

*Please print out and pin-up next to your works on your allocated panels

Relating to the 2024-25 Studio Review pin-up (BSSc students)

Please tick one of the following:

All the work and models presented at the Final Review were made by me personally

All the work and models presented at the Final Review were made by me.

with the exception of the following:

Under all circumstances, students must declare all work done by others by completing this form before the review. Provide 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.

Student's Name: _____

Date: _____

Signature: _____

Tutor's Name: _____

Date: _____

Signature: _____

Grade	Descriptor	Criteria	Points
A	Excellent	Comprehensively excellent performance on all aspects of the design intention, development, technical resolution and presentation. Achieving all learning outcomes with distinction.	4
A-	Very Good	Generally outstanding performance on the design intention, development, technical resolution and presentation. Achieving all learning outcomes with merit.	3.7
B+	Good	Substantial performance on the design intention, development, technical resolution and presentation. Achieving all learning outcomes satisfactorily.	3.3
B			3
B-			2.7
C+	Fair	Fair performance on the design intention, development, technical resolution and presentation. Achieving all learning outcomes at a passing standard.	2.3
C			2
C-			1.7
D+	Pass	Barely satisfactory performance on the design intention, development, technical resolution and presentation. Achieving all learning outcomes at a barely satisfactory standard.	1.3
D			1
F	Failure	Unsatisfactory performance on the design intention, development, technical resolution and presentation. Not achieving all learning outcomes.	0