# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
<td>i</td>
</tr>
<tr>
<td>Chapter 1 Qualities and Main skills of an Interior Designer</td>
<td>1</td>
</tr>
<tr>
<td>Chapter 2 History and Interior Design – The Orient and the Occident.</td>
<td>5</td>
</tr>
<tr>
<td>Chapter 3 Interior Design Education</td>
<td>21</td>
</tr>
<tr>
<td>Chapter 4 Part 1 Interior Design Education—2-year Higher Diploma program</td>
<td>23</td>
</tr>
<tr>
<td>Chapter 5 Part 1 + Part 2 Interior Design Education—4-year Bachelor’s Degree program</td>
<td>32</td>
</tr>
<tr>
<td>End Note</td>
<td></td>
</tr>
<tr>
<td>About the Authors</td>
<td></td>
</tr>
</tbody>
</table>
At present, there are no formal educational materials for Hong Kong interior design learning, and educators can only rely on ad hoc literature produced overseas (particularly in the West), or architectural-based materials to learn about interior design. Given that interior design has already established a unique and well-defined body of professional knowledge, and is firmly rooted in the cultural and social practices of a place, there is a need for interior design textbooks to reflect this context and allow interior design students to keep pace with rapid development of the industry. This series of interior design textbooks is aimed at satisfying the needs of Hong Kong interior design students at different academic levels from diploma, higher diploma to bachelor’s degree. Filled with case studies of award winning works from across the Asia-Pacific region and beyond, as well as interviews and articles written by well-known professionals and academics from Hong Kong and around the world, these are the first interior design textbooks researched and written in Asia.

The series contains six books, related to the 6 body of knowledge areas well-defined in the Interior Design Professional Guideline, published by the Hong Kong Interior Design Association (HKIDA) in 2014. Based on research of reputable international standards and confirmed by surveys of local interior design educators and practitioners, this guideline sets out in a systematic way the knowledge and skills that Hong Kong interior designers should possess. The 6 body of knowledge areas covers and follows the typical process of any interior design project, which includes:

- Human Environment Needs
- Design
- Products and Materials
- Communication
- Interior Construction, Codes and Regulations
- Professional Practice

Book 2 focuses on the required knowledge related to Interior Design Thinking: topics include the Definition of Interior Designer’s Qualities & Values, Interior Design History & Development in Western Countries and South China Region, Pedagogical Approaches of Interior Design Education in Sub-Degree and Degree Levels in Hong Kong (Part 1 & Part 2 levels defined by HKIDA).

Our greatest challenge in compiling this book series was deciding which key content to select from the vast pool that is relevant to not only global but also local context and become useful teaching resources & materials for educators’ future elaboration. For this reason, choosing examples to fit within the physical constraints of a book required a rigorous edit. We hope it will be of enormous benefit to interior design students, educators and practitioners and inspire everyone to look for more.

Horace Pan
Project Chief Investigator
Those who choose design as a profession likely wish to innovate, to think, to create and to make changes to the world and the way they live. The life of a designer is interesting because the act of designing has multiple embodiments: the job of designers is to identify questions and creatively seek solutions. Questioning, therefore, is the core of a designer’s work.

“If the sun rises from the east every morning, how should I design a shading device so that it may prevent the sun’s glare from waking me up in the morning?” Simple questions are the most difficult to answer. To answer this question, firstly one must know where east is vis-à-vis my current location, and then design a device that would shade me from the morning sun.

Design is a plan, and subsequently, a result of a plan that would be executed in answer to a raised problem. Thus, the design is merely a plan to be executed. This is a central notion of design education because, within the above definition of design, both the identification of the question and the product/answer of the question are equally important. Some great designers may successfully raise questions but not provide succinct answers. The 18th century architect Étienne-Louis Boullée or Lebbeus Woods (May 31, 1940 – October 30, 2012) built very few buildings, but their influences on the design world still echo. Asking good questions as well as providing good solutions to the questions that you have raised is, in essence, the core value of design education.
Why does interior space need to be designed?

Why does interior space need to be designed? The reasons may lie within a spectrum where pragmatism and subjectivity are on opposite ends.

• Organization values (the most pragmatic reason)
• Psychological values
• General aesthetic values
• Personal preferences (the most subjective reason)

Organizational values

This refers to the act of dividing larger internal spaces into smaller spaces and/or to furnish the space according to its functional and ergonomic needs. This is the beginning of interior design.

Psychological values

Once the functional need of the space is fulfilled, the spatial quality of interior spaces needs to be catered for because they would affect the well-being of the users psychologically. For example, low partitions that engulf library desks allow the reader to have more privacy; a darker room will encourage its inhabitant to fall asleep, while a restaurant styled with Art Nouveau decoration may evoke nostalgia, etc.

General aesthetic values

Judging aesthetic merits can be a subjective process, but there are commonly accepted norms which may define a quality space. For example, a room which offers a sea view is generally popular even though the personal preferences for individuals may vary. Thus, it is important that designers learn about these norms through our learning and practical work experiences so that their design may relate to these norms.

Personal preferences

Everyone has different opinions about their needs and wishes. For instance, some people prefer a smaller bedroom rather than a larger one because it gave them a sense of warmth, and so personal preferences can sometimes contradict general aesthetic values.

Interior Design Training

With proper training, anyone can be an interior designer. Interior designers, however, are commonly particularly sensitive towards the ergonomics of the human body, abstractions (narratives and similes), lighting, materiality, and proportions.

“Style” and “taste” are not prerequisites of being an interior designer; rather, one’s “taste” and “style” will develop through time along with the maturity of one’s career.

Interior designers should be equipped with the following skills and knowledge in their training:

• Spatial planning skills;
• Project managing skills: interior designers are time and budget conscious;
• Understanding of construction: the sequence and the logistics of the assembly of materials;
• Communication skills, both verbally and graphically;
• Knowledge about the world around them including culture, society, economy, sustainability, etc.;
• Problem solving skills.

Good interior designers, no matter if they are young or old, are full of curiosity. They will conduct research on issues before engaging a project, and they like dealing with people, to learn and empathize with others’ needs. Finally, they are open to new ideas; they like technologies and the knowledge of new materials.
Personal Specification

In conclusion, the personal qualities and skills that interior designers should possess can be summarized according to the following table.

<table>
<thead>
<tr>
<th>INTERIOR DESIGNER: PERSONAL SPECIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Motivation and Commitment</strong></td>
</tr>
<tr>
<td>• To have the desire to change, restore and improve the environment.</td>
</tr>
<tr>
<td>• To be a visionary in pursuing dreams of self-fulfilment as well as satisfying the client.</td>
</tr>
<tr>
<td>• To have good management skills.</td>
</tr>
<tr>
<td>• To realise powers of expression and meaning in one’s work.</td>
</tr>
<tr>
<td><strong>Holistic Approach</strong></td>
</tr>
<tr>
<td>• To be sensitive and perceptive about people’s needs and to ask the right questions.</td>
</tr>
<tr>
<td>• To maintain a creative driving force.</td>
</tr>
<tr>
<td>• To make strong value judgements concerning quality and costs and meeting the budget.</td>
</tr>
<tr>
<td>• To have good verbal and written communication skills and clarity of intent.</td>
</tr>
<tr>
<td><strong>Organisation Abilities</strong></td>
</tr>
<tr>
<td>• To be able to handle a vast range of materials, products and services, as well as being resourceful in finding them.</td>
</tr>
<tr>
<td>• To be able to organise and store information for reference and for applied use when necessary.</td>
</tr>
<tr>
<td>• To be a team player – with other colleagues as well as with consultants.</td>
</tr>
<tr>
<td>• To be able to work to a programme and meet deadlines.</td>
</tr>
<tr>
<td><strong>Hands-on Skills</strong></td>
</tr>
<tr>
<td>• To have good analytical and problem-solving skills. To be competent in handling three-dimensional forms, spaces, colours and textures.</td>
</tr>
<tr>
<td>• To have a feeling for materials and be able to put things together in construction.</td>
</tr>
<tr>
<td>• To be proficient in drafting by hand and using computer-aided design (CAD).</td>
</tr>
<tr>
<td>• To be able to sketch and draw to facilitate one’s own design process from conception to completion, and to aid communication and the presentation of ideas.</td>
</tr>
<tr>
<td>• To be competent with latest technological/ graphic aids that assist with the design process and presentation).</td>
</tr>
<tr>
<td>• To have good analytical and problem-solving skills.</td>
</tr>
</tbody>
</table>
History and Design

History is part and parcel to the discipline of design. History of design or the history of the environment remains central to foundational knowledge of any design discipline, interior or exterior in nature. In a broad sweep, the position of history has over years and decades changed from, on the one hand, being a mirror of the past, whilst on the other, an instrument to formulate future tendencies and a source from which designers draw inspiration.

To understand the history of interior design, one should understand the history of its context, or in other words, the history of the city. The city provides a context by which one can understand how social and technological factors influence interior styles. The interior is as much part of the city as the city is to the interior. Everything that the city produces, documents or designs, is either made within, or is drawn into the lived interior. Interior and exterior is therefore indisputably fused into a coherent whole.

In the beginning, human settlements consisted of singular one or two room dwellings, fenced in for protection. Interiors in this sense were multi-functional spaces, serving several uses at any given time. Gradually, single houses became collections of dwellings, generating the first cohesive settlements, villages, towns and, in time, fully fledged cities that we recognize today. In a similar light, the interior’s development was from a sparse space, minimal in nature, to intricate spaces molded from volumes, sculpture and geometries, off-set with specific effects of light and mirroring. In its present format, interiors have returned to either a minimalist setting or as spaces that have become obsessed with excess and opulence.

Architecture and interior design developed in tandem in the East and West, evolving according to the changing needs and prevailing cultural influences. The chart below offers a comparative perspective on the development in cultural, architectural and design in both the Orient (East) as well as the Occident (West). Contextually aligning the history of the interior to both European and Asian narratives offers a parallel understanding of history that allows for cross referencing mutual conditions within the historical streams. Global events may cause certain transformations to occur in design, but the actual response within both cultures may differ in significant ways.

The overview provided here, however brief, steers clear from stylistic emphasis of one style over another. Each stream is to be read in relation to design development occurring in three distinct periods; the pre-industrial (1500 -1800), industrial (1800 -1900) and post-industrial period (1900- present).
### Pre-industrialization

<table>
<thead>
<tr>
<th>West/European</th>
<th>East/Chinese/Vernacular Lingnan/Canton</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antient Greece:</strong> (900 – 30 BCE)</td>
<td><strong>East – Chinese wooden frame construction (more than 4000 years ago)</strong></td>
</tr>
</tbody>
</table>
| A cultural style expressed in painting, art and architecture that has had fundamental impact on Western cultures and their approach to the built and decorative arts. | Common Chinese wooden frame systems include the *post and lintel construction* (抬梁式木結構), which was more popular in North China, and the *column and tie construction* (穿斗式木結構), which was a more vernacular practice in South China. The latter was similar to Tudor Revival style in terms of material and structure.

The mainstream wooden frame construction involved a relatively fixed set of architectural vocabularies and grammars (especially in the case of the post and lintel construction) for a very long time. It thus contributed to similar/coherent built circumstances (both interiors and exteriors), which were rare in other civilisations.1 Due to its permanence and prevalence, the wood structural system became a prominent representation/icon of Chinese culture. |

**Spatial layout:**

The geometric periods gave rise to the canonical typologies of the Greek temple, with double portico’s and central ‘Cella/Naos’ surrounded by a series of single row columns. Stylistically Greek spatial layouts followed the Egyptian post and lintel method of construction.

**Architectonic:**

Most noticeable is the development of the and Ionic orders of construction, with the later addition of the Corinthian Order.

**Spatial layout:**

Building complexes are characterized by groups of individual buildings connected by courtyards, covered walkways and porches, resulting in rich layers and transitions of interior spaces. The corresponding spatial hierarchy is socially and politically significant as it reflects the house owner’s family structure and social status.

**Architectonic:**

The wooden frame construction gives the freedom in walling and fenestration, which is comparable to Le Corbusier’s Dom-ino system (1914). By adjusting the proportion between walls and openings, the wooden system can adapt to different climates.2
Aesthetics:

Interior detailing is richly detailed in full colour palette, off-set with the use of translucent marble roofs and prominent buildings.

ROMAN PERIOD: (753 BC – 337 CE).

Spatial Layout:

Taking precedence from the Greek building orders, the Roman added to the spatial oeuvres with the development of Roman Concrete. The construction of vaults and arches typified Roman technology and the construction of Barrel (Tunnel) Vaults, Groin (Cross) Vaults and Hemispherical Domes.

In addition, the possibilities of fenestration and clearstory windows improved light qualities, with friezes, wall murals and sculptural development influencing both the civic and domestic interiors.

Civic buildings such as forums and public baths became larger in scale, forming complex spatial arrangements.

Domestic interiors followed the courtyard or atrium layout with peripheral spaces arranged around central yards and water features.

Aesthetics:

The post and lintel construction was well documented in Yingzao Fashi “The State Building Standards” of the Song dynasty (1103). Known as the official pattern book, it is a systematic document characterized by rules and formulae based on a modular system (i.e., the Cai system) for determining the positions and modellings (e.g., dimensions, shapes, forms and details) of wooden elements, which essentially express the unique aesthetics of Chinese buildings. For example, the rule of juzhe determines the elegant curvy and up lifting shape of the Chinese roof (which is the quintessential symbol of Chinese culture).

The bracket system/dougong, which is a complexification of the Chinese corbel invented more than 2,000 years ago, also deserves attention for its aesthetic quality:

The dougong was originally conceived as a structural element, but its decorative potentiality was soon discovered and exploited to the utmost degree.

Functionally, the bracket system acts as a cantilever system for the roof eave. Aesthetically, it borrows the natural form of a flower to express the pleasant visual effect of ‘a flower coming into bloom’, which is comparable to the visual effect of Greek/Roman capitals. All in all, the bracket system involves a significant synthesis of functional and aesthetic considerations. Its modelling relates to an appropriate composition of well-formed parts, exemplifying the fact that the architectural and interior design is essentially “an art of the ensemble”.

Fig.2.3 - Chinese column orders

Fig 2.4 & 2.5 Chinese Dougong Column detail.

Fig 2.6 Greek classical orders, Ionic column analysis

Fig 2.7 & 2.8 Doric and Ionic column footing, Athens, Greece.

Fig 2.9 Typical Greek peripteral temple plan.
Aesthetics:

Although dimly lit in some instances, rooms have sufficient ventilation. Geometric proportioning is emphasized within the paneling and decorative aspects of the interior, in rich colour usage and detailing. Apart from the panels and murals depicting nature, sculptures and relief friezes added to the aesthetic quality of spaces.

Period of importance following the Roman period include:

Early Byzantine Period (324–726),

Middle Byzantine Period (843–1204),

Late Byzantine Period (1261-1453),

Early Medieval Period (1261-1453),

Romanesque Period (1000 -1200),

Gothic Period (1140 – 1500),

Later Medieval Period (1200-1400),

The Renaissance Periods (1385–1500),

The Baroque Period (1600 – 1700),

Rococo & Neo Classical Periods (1700 – 1800),

Fig 2.10 Elemental analysis, Gothic church interior.

Fig 2.11 Groin vault, Gothic interior, Spain.
Industrialization

Modernism

With the refusal of ornamentation in Architecture, modernism’s stylistic tone exiled excessiveness in interior and architectural design. With the mass scale production of steel, concrete and the further development of reinforced concrete, the ideals were to strip buildings bare to their essence and material ‘nakedness’.

Adolf Loos’ essay “Ornament and Crime” (1908) formulated the stylistic minimalism mantra for spatial design. Working across the decorative and spatial arts, the minimalist agenda advocated an honesty of materials, primary colours and a return to the platonic shapes.

In an urban sense, the spatial grid delivered a universal design instrument. As developmental tendency, especially in the USA, the grid become a unifying factor across space and time. In due course, what was meant to act as unifying elements resulted in the functional separation of urban functions, architectures and spaces.

West + East (juxtaposition) - Chinese Renaissance style:

The modernization of Chinese architecture was first conducted in North China against the political background of attempting to strengthen China’s national power through Westernization after the Opium Wars. Chinese craftsmen and builders, when exposed to modern knowledge from the West via different channels, began to speculate that Chinese architectural practice ‘might benefit from technical and engineering innovations made beyond China’s borders’. 17

Since then, mergers between Chinese and Western building techniques/elements of different extents had been attempted. The key issue was how the Chinese identity can be retained during this process. This resulted in the Chinese Renaissance style in the first half of the 20th century.

According to its methodologies and features, the Chinese Renaissance style can be subdivided into two categories: the adaptive approach of concrete construction and the stylistic adaptive approach (or revivalist style).

Fig.2.12a & 2.12b Adaptive approach using concrete construction: Ten Thousand Buddhas Hall of Miu Fat Buddhist Monastery, Tuen Mun, Hong Kong.
Spatial layout:

With functionality being the driving force, spatial and interior design saw a simplification based on either Loos’ spatial (Raum) plan or on Le Corbusier’s Free plan. The spatial plan opened all spatial layout to focus on the interior, with limited fenestration within the perimeter walls. The free plan opened all aspects of the design, layout, structure, fenestration and functional arrangements. Principles of the free plan was later formalized by Le Corbusier in his treaty of Architecture under the 5 points of Architecture: pilotis, free ground plan, free façade, horizontal windows and roof garden principles.

Architectonic:

Influence of reinforced concrete opened architectonic expression of buildings and spaces. The return of platonic shapes and volumes delivered cubic volumes in architectural sense, with interiors being spare and open. Windows became expressive features opening all perspectives into as well as out of the spatial forms. Furthermore, the ‘free’ plan brought a new sense of design freedom to space. Both the spatial and architectonic expression of the free plan delivered unsymmetrical layouts, emphasised by the functional qualities of each part and its elemental arrangements: columns, ramps, staircases and building edges.

The adaptive approach of concrete construction:

This approach mainly involved the realization of the spatial layout and form of traditional Chinese wooden frame construction in Western concrete construction. This approach is comparable to the Beaux-Arts’ attempt to integrate Classical styles with engineering. Key examples of the adaptive approach of concrete construction include the campuses of Yenching University in Beijing (1919) designed by Henry Murphy, and Ginling College for Girls in Nanjing (1921) and Ten Thousand Buddhas Hall of Miu Fat Buddhist Monastery in Tuen Mun (1973).

Architectonic and aesthetics:

This approach may not be quite successful because it was conceptually inconsistent to use reinforced concrete on the outset as concrete buildings were not “Chinese throughout” from a structural viewpoint. 18 Moreover, aesthetically the change of material and the corresponding craftsmanship often lead to the distortion of proportions, detailing, visual appearances and compositions of building parts of traditional Chinese wooden frame construction.
Aesthetics:

With most buildings painted white, their characteristics were of light filled interiors, accent of colour and the openness of flow of the interior plan. Columns varied in scale but were circular in preference and of reinforced concrete. A strong influence in the approach to the free plan was the mechanistic approach (automobiles, airplanes, and ship liners) to design, giving expression to all functional components of the space.

Bauhaus School:

Founded by Architect Walter Gropius in Weimar (1919), the Bauhaus School of thought reconceptualise the all forms of art, architecture, graphic design, interior design, industrial design and typography.

As one of the most influential schools in Europe of the 20th Century, Bauhaus’ ideas and concepts was an off-set against the Beaux-Arts movement, free from historical reference or precedent.

Documented in its official manifesto, the school advocated strong basic design – which included strong principles of composition, the development and application of colour theory and two and three-dimensional explorations.

With the ‘simplification’ of design, new materials were explored, with the infusion of disciplines with one another. Or rather “the coordination of all creative efforts” 16, as for example pottery, weaving, painting and the design of space was seen as a “collective work of art…in which no barriers exist between the structural and the decorative arts” (ibid).


The stylistic adaptive approach (Revivalist style):

This approach is characterized by a juxtaposition of a Western-style main body (e.g., the classical revival, classical eclecticism, Art Deco, modern/ International Style) with a Chinese-style roof structure (which represents the Chinese identity). This kind of composition was first introduced and practised by forerunners including Western missionaries and educationalists in the late 19th century, with the intention of expressing their respect for the Chinese culture. Key examples include the Main Hall (1879) and Science Building (1923) of St. John’s University in Shanghai). This approach was then practiced by foreign and local architects.

Since the 1930s, the stylistic adaptive approach has been continued and modified particularly by the Beaux-Arts design method (of the American Tradition) practiced by the Beaux-Arts trained Chinese graduates who studied abroad. Significant examples include the Yale-in-China campus in Changsha designed by Murphy (1914), the Friendship Hotel in Beijing designed by Zhang Bo (1954) and the Morrison Building of Hoh Fuk Tong in Tuen Mun (1936).

Spatial layout:

The Western-style main bodies of buildings constructed according to the stylistic adaptive approach did not necessary follow the interior layout of the traditional wooden frame construction.
Key buildings and interiors representative of modernism include: Robie House, Chicago designed by Frank Lloyd Wright (1907 – 1909), The Bauhaus, Dessau designed by Walter Gropius, (1925 – 1926), Villa Savoye, Poissy-sur-Seine designed by Le Corbusier (1929) and Schröder House, Utrecht designed by Gerrit Rietveld (1924).

Other influential European school of thought of the period includes: Supermatism, Constructivism, the Art Deco Movement, Surrealism and De Stijl.

Aesthetics:
It seems as though most of the buildings of this approach wear “a Western suit and a Chinese skullcap”. The two parts simply do not match – the approach had not succeeded... in giving to the lower portions of the buildings a sufficiently Chinese look to be in harmony with the strongly defined Chinese character of the roofs. Since then, many practitioners of this trend have gradually shifted their design approach by adopting the modern style/International Style.

West/East(synthesis)
-Vernacular Lingnan architecture

The geographic condition of South China or Lingnan region (including Canton and Guangxi provinces) gave birth to an ocean culture, which had an “open and inclusive” attitude toward overseas cultures. This resulted in the intended and active syntheses of overseas elements, and hence a cultural process of “glocalization”, upon which the cultural identity of the Lingnan region largely depended. This “glocalization” relates to “a complex interaction of global [Western] and local [Lingnan vernacular] elements”, leading to a cultural/architectural ‘hybridity’ that “cannot be reduced to clear-cut manifestations of a total ‘sameness’ or ‘difference’” neither mere East nor West.
Western styles were commonly appreciated in the region. The import of Western building and interior elements were mainly caused by trade and emigration: i) contact with Western (building) culture via the Ocean Silk Road; ii) building precedents in the region, e.g., the Western style buildings of the Thirteen Hongs of Canton built for foreign traders in the 1820s; iii) architectural knowledge brought back by overseas Chinese workers in the 20th century. These contributed to the emergence of the vernacular Lingnan architecture, which was mainly designed and built by the local people and builders.

Vernacular Lingnan architecture was characterized not by direct copying but innovative syntheses of various building elements, which were largely driven by the aesthetic sense of the locals. The syntheses involved distinctive execution of details, skilled craftsmanship (such as moulding) and harmonious compositions of elements by breaking established architectural rules. Its aesthetic achievement is thus comparable to that of the architectural eclecticism that was adopted in the West from the late 19th century to the early 20th century. Moreover, its preference for plants, flowers, leaves and fruits for the pattern design adopted on the interiors and exteriors is similar to the practice of the Arts & Crafts movement.
Three typical examples of the vernacular Lingnan architecture are listed below.

1. **Arcade buildings (1920s-1930s)**

   **Typology**

   The Lingnan arcade building type is well represented by the aligned arcade buildings of the Chikan ancient town, Kaiping. The type is characterized by a modification of the existing narrow bamboo houses via the addition of a Western arcade structure (may be inhabitable) at the front façades. It served as the means for urban development (as adopted by the Canton government as early as the 1910s) by introducing rich layers of space from exteriors (public) to interiors (private) for communal and commercial activities.

   **Aesthetics:**

   The interiors of the arcade buildings are mainly characterized by Western-style fanlight windows (often covered by colourful Manchurian glass panels), Western artefacts (e.g., imported clock), Lingnan-style partitions and furniture (which are well articulated by Lingnan patterns). The exteriors featured harmonious and eclectic compositions of Eastern (e.g., Manchurian glass panels, Lingnan-style patterns and column-niche pediments) and Western elements (e.g., Baroque-style pediments, Palladian arches, Islamic arches, Doric and columns).

   **Materials:**

   The ‘three carves’ of Chinese construction tradition (i.e., wood, brick and stone) and imported concrete and steel (e.g., from Britain, Netherlands and Germany) were used.
2. Watchtowers (1910s - 1930s).

Typology and aesthetics:

Kaiping, Canton is representative of the Lingnan watchtowers, which consists of the bottom part, cantilevered part and roof. It relates to the modification of traditional Chinese watchtower type (which were highly functional defensive structures) via the incorporation of Western elements. The articulation of the bottom part is mainly two-dimensional due to functional considerations – a plain surface with fewer projections can probably prevent bandits from clambering up and invading the building. The watchtower type thus involved a prominent synthesis of functional and aesthetic considerations. The watchtowers' exteriors often involve harmonious eclectic compositions among various Western elements and a few Eastern elements (e.g., Lingnan-style patterns). The interiors of the cantilevered parts of the watchtowers are often characterized by rich Western elements (e.g., Greek/Roman colonnades). The interiors of the lower parts (which were regularly used as living areas) are relatively plain and may be articulated by fanlights, Western artefacts, Lingnan-style partitions and furniture (which are articulated by Lingnan patterns).

Materials:

Imported concrete was largely used for defensive reasons. The concrete walls were often made thick (from 0.3 to 1m) and served more than load-bearing function.
3. Ancestor hall

Feng Chai Ancestor Hall (in San Bu Town, Kaiping), which was built from 1906 to 1914, is a prominent example of the Lingnan ancestor hall type.

**Typology:**

The spatial arrangement of Feng Cai Ancestor Hall is a three-row-of-three-block planar layout (similar to the traditional Chinese courtyard house setting), with a lane between every two rows.

**Aesthetics:**

The interior and exterior of the ancestor hall are characterized by an outstanding synthesis of different elements – harmonious eclectic compositions of Eastern (e.g., 'horse-head' walls, Chinese tile roofs, Lingnan-style murals) and Western elements (e.g., Greek/Rome colonnades, pediments, balustrades and Victorian cast iron pavilion). Moreover, innovative adoptions of elements are found in the interior. For example, on the interior walls of the inner halls, embedded composite-order capitals replace Chinese beams and posts in such a way that the function of the composite-order capitals is transformed – they are now serving as Chinese corbels to provide space for wooden beams of the roof structure to sit on.

**Materials:**

The ‘three carves’ of Chinese construction tradition (i.e., wood, brick and stone) and imported concrete and cast iron are used.
West - Hong Kong as a colony

From the 19th to the mid-20th century, the mainstream building and interior design of Hong Kong depended on the import of Western building types (e.g., the arcade building type) and styles (e.g., Victorian and neo-classicism), mainly expressed in a kind of revivalism of Western styles in the context of Hong Kong with some spatial modifications, e.g., the adoption of veranda of the Colonial style. Examples include the arcade complexes along Queen’s road in late 19th century and the ‘Government Offices, St. John Place’ constructed from 1847 to 1848, which was a two-storey high and fifteen-bay wide building largely influenced by the Italian renaissance style. The interior and exterior of the first floor featured classical elements such as the veranda, which was articulated by ‘classical columns and a stone balustrade’.

Aesthetics and Cultural Identity

The buildings in Hong Kong mainly related to the aesthetics of Western classical architecture. As a colony, Hong Kong had no explicit cultural identity of its own being expressed by architecture in its early colonial era.

‘Minus ‘West

Since the mid-20th century, buildings in Hong Kong largely adopted the modern style/International Style/Art Deco/brutalist style, which replaced Western classical elements and aesthetics.
Aesthetics and Cultural Identity

The modern style expresses “the spirit of the modern age” – progress and marching into the future. Against this background, the design of interiors and exteriors in Hong Kong generally identified the functional beauty of the modern style as its cultural expression, representing/symbolizing its economic progress since the 1970s.

Key examples include: i) modern style exterior and modular interior design (i.e., the mass-produced logic of industrialization) of the Central Government Office complex built at the Government Hill, Central in the 1950s and ii) the public housing block types of Hong Kong (both interiors and exteriors), which mainly adopted brutalism (largely for low cost construction) or functionalism.
Post-industrialization

**Post Modernisms:**

No attempt to understand the post-modern can be made without deeper understandings of post-industrialization of the late 1900’s. The global move, in economic terms, saw the transformation of industrial dependency gradually deindustrializing, transforming production economies into knowledge and service industries. What were industries now became centres of information technology or services to other industries.

Design had to accommodate professionals and technical workforce, and their emphasis of information systems and artificial intelligence. In this light, the urban context witnessed greater diversity in types of urban settings, ranging in the gentrified city, the suburban city, the tenement city and the luxury city.

Stylistically, Postmodernisms took a similar course, as a reaction against the philosophies of Western Modernism.

Best summarized under the term ‘counter culture,’ the movement produced a radically different take on philosophy, human rights, social movements, literature, art, and spatial design.

(……..)<-(re-infusing) ‘Chinese-ness’

Since the late 20th century, many dominant modern-style forms are informed or modified by concepts related to ‘Chinese-ness’, which seems to result from the search for the historical root– a longer-lasting value being upheld in the fast-changing postmodern world. People are indeed seeking more symbolic or cultural associations from our built environment as part of their cultural identity, resulting in the “aesthetic fictions” (storytelling) of interiors and exteriors.

Key building and interior examples include:

i. The Boao Canal Village houses in Hainan, China (2002), designed by Rocco Yim– its form and spatial composition are informed by traditional gable/“horse-head” walls of vernacular houses in Chinese water villages.

ii. Guangdong Museum in Guangzhou, China (2010), designed by Rocco Yim – its spatial layout is inspired by/associated with the layering of traditional Chinese treasure boxes. The apertures of the museum façades are thought to be the abstraction of motifs/patterns of traditional Chinese treasure boxes.

iii. Tin Shui Wai Leisure and Cultural Building in Hong Kong (2013), designed by Architectural Services Department – the surfaces (exterior and interior) of the modern-style building relate to the surrounding contexts. They are modified by materials/patterns/textures associated with the traditional Chinese village houses and ancestral halls of Ping Shan Village (e.g., bricks and timbers) and the surrounding recycling yards (e.g., rusty iron bars, nettings and plates).
As a refusal of modernism’s ‘certainties’, postmodernism is seen to operate through possibility, sorting through the wealth of complexity that emerges in each option and each direction. The substitution of “less is more” with the phrase, “less is a bore” gave agency to rethink the bland design proposition so characteristically of modernism.

Spatial layout:

In rejection to modernisms functional sterility, postmodern design advocated site specific and designs generated from within the local context of city, neighbourhood, street or culture. Unlike modernism’s unifying take on design, the postmodernism approach diversified style, taste and interpretation. Where modernism advocated purism, postmodernism called for plurality, eclectic expression and complexity, setting the tone for an inclusive period of design.

The emphasis of eclectic expression, brought together pre-modern and modern stylistic devices, merged through form, shape and colour. Although still functional in nature, postmodernism and its interiors took artistic freedom in any capacity, scale or form deemed fit.

Architectonic:

Architectonically, postmodernism had no rules. Reinforced concrete used in the modernisms articulated divisions of beam, roof, window, column, or door, in the same manner gave freedom of expression within postmodernism. In the deliberate break from typologies, walls became waves, windows doors and columns mere decorations. Contrasting heavy elements with those of light weight stylistically challenged the understating of what designs were meant for or how it was meant to operate.

Fig.2.41 Tin Shui Wai Leisure and Cultural Building, Hong Kong.

Fig.2.42 Interior space of Tin Shui Wai Leisure and Cultural Building, Hong Kong.

Fig.2.43 Marina City, 1968, Bertrand Goldberg, Chicago.

Fig.2.44 Cathedral of Brasília, Brasilia, Oscar Niemeyer, 1970.

Fig.2.45 Centre Georges Pompidou, Paris, Richard Rogers, 1977.
Aesthetic:

Architectonic ‘rules’ meant for either civic or domestic use were muddled within design assemblages. Domestic roof shapes on tall skyscrapers, the use of Egyptian or classical stylistic elements were means to a ‘playful’ end. Oversized features as keystones two stories in size, exaggerated elements of windows ten stories high, or the symbolic referencing of Roman and classical stylistic elements, resulted in critics referring to designs as “humorous”, “camp”, “an oversized Christmas package”, “marzipan monstrosity”, or a “histrionic masquerade”.

Colour-wise, designs represented technicolour and reflective surfaces. Natural and manmade was placed side by side. Complementary and monochromatic colours employed in one perspective. To this effect the result of colour, shapes and material collectively contributed to the playful and illusionary aspects of design in all scales or formats.

Key building and interiors representative of post modernism include:


Other influential European school of thought of the period includes: Matabolism, Deconstructivism, New Urbanism and Neo-Historism.
Over the last few decades, interior design has progressed into a full-fledged spatial design profession in its own right. Previously in Hong Kong, interior design was more limited to a functional role, where fit-out and surface treatment were the main outcomes. In today's context, this is no longer the case. In recent years, interior design has seen the integration of diverse spaces into complex and varied interior environments, for example in the integration of shopping malls and transport interchanges that we inhabit daily, which parallels societal changes in Hong Kong in which people spend the majority of their time in interior environments. Therefore, interior design and the ways we design needs to adapt to these changing values, linking society, culture, human experience and emotions, history and tradition, context and use within an interior context. These changes affect the profession of interior designers and place higher expectations on the future role of interior designers.

What does this mean for the study of interior design? This means that new skills are required for the next generation of designers, for instance, to design and structure complex or innovative new spaces. These skills include aspects of design thinking, design process, design analysis and design synthesis in order to help the student's progression from concept into design. Also, the student of interior design must adequately understand relations between body, space and ergonomics, be aware of site, context, history and culture, and show an understanding of function, users and designed functions. This book outlines some of the most important skills as Core Knowledge and Contextual Knowledge. The Core Knowledge for interior design includes the studies of tectonics, form, space and light; abstraction, concept and diagram; organization, planning and layout; tactility, materiality and articulation; ergonomics, and behaviour patterns; and process and development. Contextual Knowledge includes studies of society and culture; history and precedent; economics, constraints and clients; educational cycle and with a focus on design research.

The study of interior design differs from professional practice in notable ways, given that it is lacking in real world conditions such as actual clients, construction and building codes, legal and practice based commercial factors. Fundamental to these differences is the design studio, where different skills, knowledge and experience are brought together into designs for a given site, issue or brief. This is where the students can rehearse design processes, develop skills, understand conventions, learn spatial languages and develop their own approach towards design.

Interior design education plays an important future role in the development of the profession in Hong Kong. Forthcoming changes to the profession in terms of interior design accreditation proposed by the Hong Kong Interior Design Association will serve to better position interior designers to meet future challenges of a changing profession. These changes will impact both the ways the profession works and the ways that interior design education is taught.
The following chapters outline the necessary skills for Part 1 and Part 2 of the interior design education system as proposed by the Hong Kong Interior Design. Part 1 includes foundational skills that focus on how students can learn the basics of interior architecture. For Part 2, the emphasis is on advanced skills, underscoring the research basis of higher level design concepts that allow students to design with greater depth, meaning and cultural specificity so that as professionals, they will be able to cope with the needs of a rapidly changing society.
In Hong Kong, many interior design students partake in 2-year higher diploma programs. Such programs are structured to equip students with technical and communication skills to develop and convey design ideas effectively. Students also cultivate conceptual thinking and theory which are essential in producing innovative designs.

The two-year programs are usually enhanced by electives that seek to give students contextual knowledge as well as optional study trips to broaden students’ horizons. The goals of such programs are usually vocationally based, and seek to train future interior designers who could synthesize and apply all the knowledge, theory and skills to the workplace. Therefore, other than academic training, higher diploma programs in interior design also place great importance on internship or job placement in which students are assigned to receive practical training at design offices or to have design projects sponsored and assessed by companies in the role of a client, enabling students to get accustomed to client or user-oriented design experience in the industry.

The program structure of an exemplary higher diploma program offered at the Hong Kong Design Institute can be summarized as follows:

1. Technical & Communication Skills
   - Communication
   - Whole Person Development
   - Design Drawing and Visualization
   - Architectural Graphics
   - Computer-aided Design

2. Conceptual Thinking and Theory
   - Aesthetics and Semiotics
   - Cultural Studies
   - Creative Thinking

3. Professional Knowledge
   - Interior Materials and Finishes
   - Interior Lighting and Colours
   - Building Services and Design Business
   - Portfolio and Career Management for Interior Design
   - Furniture and Construction Details

4. Expanded Studies
   - Great Masters Studies
   - Building Types in Hong Kong
   - Design Research Methodologies
   - Enrichment Modules
   - Study Trips (Optional)
   - Industrial Attachment

5. Interior Design Studies
   - Semester 1 / Three Dimensional Design Studies
   - Semester 2 / Interior Design Studies: Residential
   - Semester 3 / Interior Design Studies: Commercial
   - Semester 4 / Interior Design Studies: Recreational
   - Semester 5 / Graduation Project

Fig 4.1 Three dimensional studies.
Fig 4.2 Interior design studio project: Residential

Fig 4.3 Interior design studio project: Recreational
Fig 4.4 Interior design studio project: Commercial

Fig 4.5 Interior design studio project: Recreational
Fig 4.6 Interior design studio project: Graduation Project
Project-Based Learning as Core, Integrating Knowledge & Skills

Higher diploma programs in interior design typically adopt a project-based approach as the core of study and expect students to integrate knowledge and skills acquired in other modules in the project development process. Projects in interior design studios may be conducted in collaboration with companies or organizations acting as clients, giving students chances to design according to client and users’ needs.

Learning and teaching is achieved interactively in a learning-by-doing format, including structured lectures, demonstrations, tutorials, and critiques. Group critiques and individual assessments are conducted to encourage peer group learning and self-reflections.
Sample of Student Works

The following Graduation Project from HKDI illustrates the process of project-based learning.

**Project Title:**
Music Therapy Tea House

**Student Name:**
Chu Ka Wing, Hong Kong Design Institute (Academic Year 2016-2017 / Year 2)

**Design Statement**

Among the five human senses, sight, hearing, smell, taste, and touch, the sense of sight is often the most emphasized human factor in environmental design. Aesthetic elements of spatial design, form, scale and proportion, colour and lighting, are all based on visual elements while the other senses are often neglected. This project tries to explore the relationship between user and space in the sense of hearing in interior design.

**Stage 1: Building Analysis**

![Fig 4.7]
Stage 2: Concept Development (Hand Sketches)

Stage 3: Concept Development (Model)

Stage 4: Spatial Planning (Circulation Study)
Stage 5: Final Floor Plans

Stage 6: Final Perspectives

Fig 4.11

Fig 4.12
Stage 7: Final Building Exterior and Section

Fig 4.13-14
Four-year bachelor’s degree programs in interior design typically aim to develop students to become effective spatial designers and future innovators in their profession. Students gain knowledge of how interior design intersects with other spatial and environmental disciplines including architecture, landscape and urban design. Such programs equip students with fundamental skills in the initial years before progressing to more advanced skills, guiding students’ creative development in the manipulation and mastery of spatial design with a structured progression throughout the four-year programme.

Bachelor’s degree programs deliver a series of design-related knowledge in combination with contextual knowledge in order to equip students with a holistic professional training. Such knowledge can be categorized into the following areas:

Core knowledge on design fundamentals:

- Tectonics, form, space and light
- Abstraction, concept and diagram
- Organization, planning and layout
- Tactility, materiality and articulation
- Ergonomics and behavior patterns
- Process, development and narrative

Contextual knowledge:

- Society, culture and history
- Environment, context and sustainability
- Economics, constraints and clients

Fig. 5.1 Tectonic studies
1. Core knowledge on design fundamentals

A. Tectonics, form, space and light

The study of tectonics is a core skill for space making and spatial relationships. From an interior design perspective, tectonics is often constrained by the external form or envelope within which the interior architect works. Tectonics helps the interior design student to understand how to create spaces of different scales and relationships, and allows for the exploration of orders and sequences, positive and negative spaces as well as sequence and movement. Tectonics also gives presence to the rhythm, modularity and the repetition of structure, allowing for hierarchy and proportion manipulation depending on the individual designer’s ideas and concepts. Light and shadow can also be explored using tectonics. As Le Corbusier emphasized, “Architecture is the masterly, correct, and magnificent play of masses brought together in light. Our eyes are made to see forms in light; light and shade reveal these forms.” For the student, the study of tectonics is an essential part of the spatial, formal, compositional and proportional language of the interior designer. Mastery of this is essential for the interior designer’s skill-set.

However, tectonics is not simply the extrusion of shapes from the basic plan layout, an approach that tends to result in a two-dimensional outcome for the design of buildings. Tectonics should also not be confused with technics which refers to the technical solutions for the design of space.

Tectonic exploration is often done using the sculptural or the plastic arts, whereby solids and voids generate spatial concepts for the design. A student’s tectonic skills are developed using a range of different exercises that include the exploration of imaginary cities through making to casting and form making in concrete or plaster on the one hand, and on the other by making variations of forms and spaces in card and paper at a range of different scales. Normally, these are tested through photography, sectioned, analyzed, drawn and further variations made based on initial findings. As prototypes, these increase the spatial abilities of the student in early stages of the design process. Higher levels of tectonics understanding seek the integration of design concepts, spatial language employed, materialization and finalized design in the creation of spaces of delightful and novel experience. The study of tectonic systems requires a capability to play, reconfigure, reflect and explore. This is even more essential given the ease of access and the powerful integration of 3D modelling programs and the rise of custom-made or parametric approaches to design. The student’s ability to pass from more primitive forms of tectonics to sophisticated systems and back again allows them to become a strong designer.

Fig. 5.2 Tectonic studies in sculptural and pictorial forms
B. Abstraction, concept and diagram

Abstraction, concept and diagram are fundamental tools for idea generation for the student of interior design. The student uses these to help define and communicate the core ideas of their project. As we know, a strong project will usually have a carefully worked out concept that guides many of the key decisions in the project. This is often true whether the project is a student project or a built design.

The word abstract means to extract the essential out of the totality of something. Therefore, abstraction is a process of refinement and distillation that we do in a design project until a concept becomes clear. The processes of abstraction are therefore essential to give focus to a project’s main idea. This is developed at the beginning of a project and it enables the designer to go back to this idea throughout the project development to check if it still matches the concept. Abstraction is derived from observation and analysis of site, brief, users and context, and tectonic idea. Furthermore, abstraction often is the first step of analysis which removes unnecessary information and extracts essential information for the designer. This process allows for the development of diagrams, which are themselves a tool of abstraction. Other aspects of design also use abstraction: the plan for instance is a form of abstraction of the final three-dimensional design. Training students’ abilities and understanding in abstraction is therefore very important, and a good interior design student will be able to develop their own approaches to this.
A strong concept provides the foundation of good design. It structures the project as well as gives meaning and coherence to design ideas, and guides the development of the design towards completion. Strong concepts are usually deeply embedded within the design at all scales and stages of the design and relate the parts of the project to the whole design. By way of contrast, in a project with a weak concept, the relationship between the parts and the whole is not fully thought through and it is too easy to change any part of such a project. Often concept, like analysis, needs to be carefully refined, developed and made clear in the early stages of the design and reviewed at later stages.

A diagram is a drawing that helps the student to analyze and develop concepts. The diagram can explain a range of different issues such as the analysis of programme, site, users, plan and section, circulation, environmental factors and concept. The rigorous development of good diagramming skills of course depends on the interior designer’s drawing ability, but also on the capacity for abstraction and analysis. There are many types of diagrams used at different stages in a design, and often these are a series of related diagrams rather than one-off diagrams. The interior design student should be encouraged to develop their own forms of diagrams appropriate to their design approach, concepts and skills.

Analysis, concept and diagram are often understood as two dimensional, as with a sketch, collage or circulation diagram, yet it does not need to be limited to two dimensions but can explore three dimensionality in models, objects, as well as time-based media. Students, especially in later years, are encouraged to develop deeper analysis, stronger concepts and integrated diagrams of their designs. As they move towards their capstone project, students need to learn how to develop these as integrated parts of their chosen project.
C. Organization, planning and layout

The organization, programming and planning of spaces for interior design projects is often referred to as layout. This design process arranges the spatial requirements by developing the project brief into organisational diagrams and sketch plans, and finally into scaled completed layout plans. Also, the planning of the spaces, the programming and layout should structure the functional requirements for the spaces. Planning organisation also needs to consider the hierarchies, symbolic relationships and organisational structures of the designed spaces as well as the arrangement of different spaces, as sequence, circulation and functional adjacencies, giving order and hierarchy to the spaces. Often this process is aided by models to test the spatial arrangements. Consideration may be drawn to the ways in which the other spatial disciplines such as furniture design or architecture design relate to that space.

Developing workable layouts requires repeated iterations, refinement and adjustment. Often, analysis between the different layout versions or options is used in order to refine the plan. Conventionally, layout plan development requires an orthogonal approach in which the plans are scaled and developed to requirements, taking into account ergonomics, human behaviors and cultural issues. Often, layout also needs to occur on more than one scale, for instance when dealing with detailed furniture or technical requirements. Layout should also be cross-referenced with sections and elevations where appropriate to illustrate how these impact the layout decisions made. While the layout plan structures spaces on a horizontal plane, it is important that similar attention be paid to the sectional aspects of a space as well as other aspects of the interior spaces such as the reflected ceiling plan. The integration of layout plans and sections is critical to a resolved design. Attempts to model this in three dimensions or using computer models are often poorly resolved, but can work with careful attention to detail.
For the interior design student, layout planning is a fundamental ability that requires both analytic and synthetic skills, engaging many aspects of other skills such as tectonics, abstraction, ergonomics and materiality whilst always keeping in mind the key concepts driving the project. A stronger plan often will relate to clear concepts that link the layout to other ideas in the project. Effective mastery of this requires practice and skill, and it is rare that the first attempt will be the one that is used for a design.
D. Tactility, Materiality and Articulation

As interior architecture is a profession based on the materialization of spatial ideas, tactility plays a crucial role in spatial design. Tactility can take a number of forms, for example, tactility as materiality is primarily associated with issues such as place, physicality, sensuousness, and craftsmanship. This provides an opportunity for exploration of form and texture as hardness, softness, smoothness, roughness and other physical experiences. Tactility can be visual as well, and designers can use the play of materials in light and shadow to create different effects. For the user, tactility and materiality provide a palette of different experiences that combine into sensory experience so that they not only see the space but feel it.

Sense, tactility and materiality refer not only to the idea of touch but to all the senses; we feel visual tactility, solidity and well-designed spaces. We hear the resonance of an acoustically designed place, touch the textural richness in spaces we might visit, see how the light or use of light in a beautiful space is integral to the understanding of that space. Tactility occurs in ways that go beyond the functional requirements and task lighting, for instance, reaching into the heart of the fundamental design concepts and the body and soul of the space itself.

For the student of design, it is necessary to cultivate an awareness of the sensory and the tactile. While one can find this in well-designed space, access to these may be limited during the studies. Additionally, computer design tools do not offer the understanding of materiality and tactility that is required by the student of design. How can this be done? Through actual engagement of material and tactility at different scales in the design process, students gain a hands-on understanding of texture, mass, solidity, flexibility, material properties, as well as comprehend issues such as patterning, granularity, juxtapositions, material contrast and composition.
How spatial and material edges come together to define form is often described as "articulation", and the understanding of material is essential for this. The treatment of edges, corners, surface articulation of windows and the visual weight of a building all contribute to the articulation of the form. These help to define the key details of a space, for instance how a handrail feels and how to design a threshold, which require technical knowledge.

**Fig. 5.12 Material study**

**Fig. 5.13 Material study: edges and corners**

**E. Ergonomics and behavior patterns**

Ergonomics describes the patterns of behavior, the relation of human proportions and spatial requirements for the utilization of furniture, fittings and spatial devices such as doors, windows, wash rooms and kitchens. It is concerned with human anatomy, physiological and bio mechanical characteristics as they relate to design. Usually ergonomics codifies these into a series of guidelines and measured data for design, providing the designer with proportions, measurements and functional requirements. For example; how high does one reach for a cupboard? What is the appropriate height for a bench? How big should a bed be? What is the comfortable distance for tables in a particular type of restaurant? What is the workable angle for a disabled ramp? These are all questions the designer may need to know to make a comfortable and well-designed environment.

**Fig. 5.14 Ergonomics study**
Student awareness of ergonomics and behavior patterns can be gleaned from existing data, or fostered through specific studio-based exercises that can generate individual responses. This kind of creative process is often more useful within the early years studies. For example, photo sequencing and drawing allow a hands-on understanding of the body and behavior as a basis for design, while furniture making, the articulation of design tasks at specific scales and the understanding of spatial and material constraints and of scale issues provide other opportunities for learning.

Cultural and social behavior also affects ergonomics. Whilst the most commonly used ergonomics data is generalized based on common use, a particular cultural or behavioral solution to a design may need to be tailored to suit the design problem required. For instance, a unique cultural condition or a client with highly specific needs or special behavior may require the further study of behavior patterns in order to develop specific ergonomic solutions. Such approaches necessitate the interior designer to work out a unique solution for the problem. This is often done through direct observation and intuitive or constructed ergonomic study, allowing specific solutions to be developed and worked into the design itself.
F. Process, development and narrative

The design process is the main way that students get to practice and develop their designs from concept design, site and programme investigations, schematic and detail design to final resolution. Within the academic context, this usually happens through design studio courses. During this process, students build up their experience in making design decisions, choosing how they develop their designs, as well testing their skills in diagrams, drawings, models and other representations. This is an iterative process, the repeated design cycles helping the student to see where they have come from and in what ways they can improve their design. Together with public reviews, presentations and continual tutorial input, this process allows critical reflection to occur at each stage and helps students to generate unique and individual approaches to design problems and projects. Ultimately, the design thinking processes show how well-equipped a student is to becoming a designer in the real world.

For the interior design student, the design process, together with the final design presentation, represent the entire project. Normally, the student will not construct their project as a full-scale space. Student projects often do not have real world constraints, real clients, briefs, or final built outcomes. In the studio process, the studio tutors therefore evaluate the student’s representations and processes rather than the realized project. Additionally, when a student’s process becomes transparent, they can see the decisions they are making in the design development, thus contributing to the process of self-reflection, which facilitates self-learning.

For lower level courses (part 1) and lower years, the design process takes the form of a design problem and solution. For higher level courses and advanced students, the design process often follows an enquiry and research-based approach where students investigate a specific issue and generate a critical body of work around that issue, in which the issues investigated are underpinned by a body of research. This is a growing tendency in more active design practices, the expertise and competency of interior designers are supplemented by professional research and development. A related idea is how design narrative and design storytelling can be an aid to design development.
2. Core knowledge on design fundamentals

A. Society, Culture and History

Interior design exists in a social and cultural context. Therefore, issues of lifestyle, culture, changing demographics, social behaviors and patterns impact the design of interior spaces. Interior design students ought to develop cultural and contextual understanding for the projects they are working on. This includes understanding both the social and cultural context and how these impact in the related fields of history and design history.

The translation of this knowledge from lived or studied experience to design knowledge requires awareness and careful observation, analysis and understanding. This is because the imposition of a new design into a context may disrupt, alter or modify the existing patterns, but the longer term success of a project depends on its contribution to the ongoing history of a context. Therefore, all design projects should have an awareness of the history of their context as well as an understanding of how the design project fits into design history. One traditional way to understand history is the case study analysis of a historical precedent. This can be supplemented by other approaches that can deepen the students learning in context, for example study trip visits or actively working on projects in an unfamiliar context, which requires the student to gain a deeper understanding of its context.

The history of design, architecture and interior design provides a series of case studies and design knowledge for the student, which helps them to understand the evolution of interior design and how this contributes to culture, society towards the development of design in the future. This learning happens on two levels, as design history and as contextual history. For contextual history, study and understanding provides awareness of how a built environment or context has changed and developed across a number of different scales and time scales, as well as an understanding of how this environment intersects with culture and society and the values this reveals. For example, it is useful to understand how shop houses have developed through history if a student is designing for that context. The understanding of the history of significant concepts, milestones, typologies, innovations, and cultural differences as well as the examples of excellence can help to enrich designs.
B. Environment, Context and Sustainability

The environment is an increasingly vital aspect for the profession of interior design. Previously, interior design placed less importance on the surrounding conditions and factors; however, in recent years as interior design becomes part of more complex integrated environments, it needs more than ever to consider how a design location connects to adjacent contexts. Often, this maybe because an interior space such as a shop or restaurant will have interiors connecting to external environments, which in turn has links to the larger urban context through infrastructures and other conditions such as walkway systems.

These conditions provide both constraints and opportunities for interior designers. Since most common interior design sites are adaptive re-use rather than new building, there is a need to understand both the specifics of a site or location and its relation to other spaces and environmental contexts. For example, consideration of how design is embedded within other spatial contexts, be they urban, landscape, or architectural, and the issues of the impact of design on the environment, not to mention the principles of sustainable design, are increasingly required. Sustainability issues in terms of materials, artificial lighting or ventilation versus natural approaches, resource usage, renewable resource materials and waste disposal are newer factors design students need to engage with.

Students therefore need to know and evaluate these aspects on a variety of scales and using both site survey and analytic skills, diagrammatic skills. For Part 1 students, a basic understanding is sufficient, however for higher level students, an approach that develops the supporting research and deeper understanding of issues of context, environment and sustainability can help guide student projects towards more comprehensive and holistic designs. Complex sites are often better understood through model fabrication and detail diagrammatic analysis of both the constraints and opportunities.
C. Economics, Constraints and Clients

The real world issues of economics and clients are generally difficult to relate to a student’s learning context. However, there is a need for engagement with real world conditions, no matter whether these are legal, economic, or client related constraints and relationships. For instance, the translation of design ideas into buildable reality requires an understanding of detail coordination, material sourcing, construction management and on-site works supervision. Client engagement requires brief development, contract negotiation, design stage presentations and reviews including concept, schematic, detail design and specifications, often necessitating budgeting, design variations, specification writing and managing design changes. It can also be difficult for a student to understand design values in relation to other values a project is often measured under, such as costing, area and use value, function and other measures.

For advanced level students, these factors can be tested through courses that engage the profession and context of the real world in various ways, such as with internship or job placement with carefully selected partners. Another way is through ‘live’ projects that use real world clients that the students need to deal with in the design project development. A third possibility is through an entrepreneurial approach in which students establish ‘simulated’ offices or start-ups to conduct real projects as a part of their studies.
3. The educational cycle and design research

Interior design education has traditionally focused on the teaching of vocational skills rather than design thinking. This has privileged the visual and the problem solving as the job of the conventional interior designer rather than the exploration of new possibilities in design. Although the educational cycle describes an iterative learning trajectory, it is not enough to produce innovation and development within the education of design students.

One of the ways design evolves is through having underpinning research that supports the design beyond the aesthetics and appearance of design itself. This can occur on many levels, for instance, in allowing students to develop their designs through a better understanding of the typologies and possibilities of their designs. It can also be through a study of the cultural use, material or technical aspect of their design, which can provide a more solid foundation for their eventual design. Often this knowledge is from other fields and disciplines such as the social sciences, engineering or art practices. Therefore, for Part 2 students, the integration of design research into their studies encourages this innovation to occur. As students become professional designers, a research-based approach to design will allow them to continually develop their expertise and knowledge.

![Fig. 5.26 Student research on roof top usage and shapes](image-url)
Chapter 2

3. Liang, Chinese Architecture, 3.
22. Liu Run-he, XianggangZouGuo de Dao Lu (The Roads Passed by Hong Kong) (Xianggang: Sanlian Shudian (Xianggang) You Xian Gong Si, 2007), 56, 62.
23. Purcell Miller Tritton LLP., Central Government Offices, Historical and Architectural Appraisal (Hong Kong: The Antiquities and Monuments Office, 2009), 70.
24. Purcell Miller Tritton LLP., Central Government Offices, Historical and Architectural Appraisal, 84.
25. The types include Mark I to VI, Twin Tower type, Slab type, Old Cruciform type, H and Double H block type, Trident type.
Chapter 3

1. The HKIDA (Hong Kong Interior Design Association) adoption of an accreditation model for interior designers is based in part on the long established RIBA (Royal Institute of British Architects) part 1, 2 and 3 system. The proposed HKIDA system identifies part 1 as 2-year sub degree studies, and recognises the higher level comprehensive full degree approach (part 2) and the post-professional experience and logbook that leads to Part 3.

Chapter 4

Figures & Charts

4.1 HKDI, Ching Man: Three Dimensional Design Studies
4.2 HKDI, Chan Yui Pan: Interior Design Studies: Residential
4.3 HKDI, Kwok Hiu Tung: Interior Design Studies - Residential
4.4 HKDI, Ho Pak Yeung: Interior Design Studio Project: Commercial
4.5 HKDI, Kwok Chin Fung: Interior Design Studies: Recreational
4.6 HKDI, Chan Ngo Kong: Interior design studio project: Graduation Project
Bibliography:


About the Authors

Penny, Chan Ka Wai
Mr. Chan is a design educator and a teaching member at the Hong Kong Design Institute (HKDI). He had been part time lecturer in Caritas Bianchi College of Careers focusing in teaching Technical and Computer Module of the Courses, and became a full time educator in 2005. He served as a program leader on the college's junior level design course in 2011, and currently acts as the course leader of applied learning course – interior design of Hong Kong Design Institute (HKDI) / VTC. He attained his Master Degree related to Multimedia and Entertainment Technology from Hong Kong Polytechnic University and Bachelor Degree (Hons) in Interior Design from the University of Central England in Birmingham (United Kingdom. He also attained memberships in various professional associations and organizations, such as professional member in Hong Kong Interior Design Association (HKIDA) and member in Hong Kong Designer Association and Autodesk University. His work experience includes residential, event and exhibition, retail and consignment, restaurant and office design projects, as well as architectural 3D modelling, rendering and animation, digital video and microfilm production, computer graphic design and game art design.

Ryan, Ng Siu Hong
Mr. Ng has been a lecturer in Hong Kong Design Institute since 2006. Before joining HKDI, he worked in architectural consultant offices, property development project office, Antiquities and Monuments Office on historical architecture research projects and youth social organization on cultural projects. He attained his M. Architecture and BA (Architectural Studies) from The University of Hong Kong. His work experience includes: development master planning, residential, sample flats, club houses, hospitality, shopping malls, commercial, retail, F&B, public entertainment and exhibition & fair, including new development and a&a, local, mainland & overseas. Also he has experience in historical architecture research & cultural education projects. His experience in both professional practice and cultural education enable him to cover wide range of teaching modules in a broader sense of holistic approach in interior design education.

Manfred Yuen
Manfred is the founder of Groundwork Architecture + Urbanism London in 2007 and Groundwork Architects + Associates Hong Kong in 2010. Manfred has been a visiting lecturer at the Hong Kong Polytechnic University School of Design and Hong Kong University SPACE architecture program: teaching architecture design and history. Prior to founding Groundwork, Manfred has received his architectural training from the University of Cambridge and the University of Hong Kong (with First Class Honour), and had worked with Coop-Himmelb(l)au, where he was responsible for construction projects in China.

Peter Hasdell
Peter Hasdell is an architect, urbanist, artist and academic. A graduate from the University of Sydney and the prestigious Architectural Association in London. He has lived, taught and practiced in Australia, UK, Sweden, Netherlands, Canada, Japan and China. He has been based in HK since 2007 where he is a co-director of the architectural practice D+A h.q. Ltd. focusing on architecture and urban (masterplanning) projects in China and SE Asia. Peter has taught in Europe, North America and Asia for 20 years at schools including the Bartlett School of Architecture (University College of London), The Berlage Institute in Amsterdam, KTH Architecture School in Stockholm, Columbia University Architecture School (New York), School of Design at The Hong Kong Polytechnic University, HKU Architecture School and University of Manitoba. 2010, including air conditioning system optimization, building energy audit, building energy audit and simulation, daylighting analysis, green building assessment, air ventilation assessment.
**Dr. ir. Gerhard Bruyns**
Dr. ir. Gerhard Bruyns is a South African born architect and urbanist. DrBruyns has lectured at a number of universities globally, and acted as invited jury member to architecture schools in South Africa, Asia, South America, the US and Europe. Previously DrBruyns held tenure as faculty member of the Delft School of Design, Faculty of Architecture, Delft University of Technology [TU Delft], the Netherlands. He has previously worked in practice in South Africa before joining the Urban Renewal and Management Chair of the TU Delft's Department of Urbanism. He presently holds the position of Assistant Professor of Environment and Interior Design, School of Design at the Hong Kong Polytechnic University, Hong Kong.

**Dr. Tung Kwok-wah Henri**
Dr. Tung Kwok-wah Henri an architectural theorist and designer. He holds a PhD in Visual Studies (LU) and a Master of Architecture (CUHK). His thesis involved an interdisciplinary research covering the discussions of architectural and aesthetic studies. Henri has taught at School of Design at The Hong Kong Polytechnic University, the Department of Visual Studies at Lingnan University and the College of Humanities and Law at HKU SPACE. His courses include philosophy of architecture, design history and theory, designresearch methodology, design studio, visual communication and so on. He received several local and overseas design awards, including the Honorable Mention of the Archiprix International Glasgow 2004.
PROJECT TEAM

PROJECT-IN-CHARGE
Horace Pan

RESEARCH ASSOCIATE
Simon Chung

EDITOR
Jackie Cheung
Cheung Man-yi
Wendy Lee

RESEARCH INSTITUTION
School of Design, The Hong Kong Polytechnic University

PROJECT PUBLISHER
Hong Kong Interior Design Association

LEAD SPONSOR
Create Hong Kong of the Government of the Hong Kong Special Administrative Region

ACKNOWLEDGEMENT
The Hong Kong Design Institute
School of Design, The Hong Kong Polytechnic University

Disclaimer:

The Government of the Hong Kong Special Administrative Region provides funding support to the project only, and does not otherwise take part in the project. Any opinions, findings, conclusions or recommendations expressed in these materials/events (or by members of the project team) are those of the project organizers only and do not reflect the views of the Government of the Hong Kong Special Administrative Region, the Communications and Creative Industries Branch of the Commerce and Economic Development Bureau, Create Hong Kong, the CreateSmart Initiative Secretariat or the CreateSmart Initiative Vetting Committee.

ISBN 978-988-18618-8-7
©2020 Hong Kong Interior Design Association & The Hong Kong Polytechnic University. All rights reserved