

# Unit 4

## Building Design



### Study Objectives

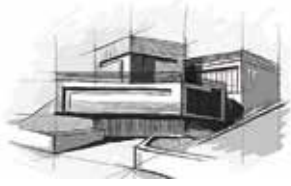
*After learning this unit, you are able to:*

- master the terms and expressions about building design
- master some sentence patterns describing building design
- know about the building design process
- write an announcement



## Professional Preparation

I. Please write down the English expressions of the following drawings.



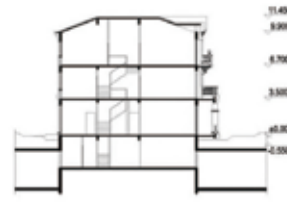
1. 设计草图 \_\_\_\_\_



2. 平面图 \_\_\_\_\_



3. 立面图 \_\_\_\_\_



B3号楼剖面图

4. 剖面图 \_\_\_\_\_

II. Match the pictures with the English names given to you, and describe their main features.

A. Gothic architecture

B. Chinese style architecture

C. Baroque architecture

D. Landscape architecture



1. \_\_\_\_\_



2. \_\_\_\_\_



3. \_\_\_\_\_



4. \_\_\_\_\_

## Professional Conversation

**A:** How are you getting on with your latest design?

**B:** Very badly. I find it quite difficult.

**A:** Why?

**B:** As you know, the project I undertake is so complicated. I'm always at a loss and find it impossible



to do.

**A:** Have you talked with your client?

**B:** Yes, but my client couldn't express his requirement very well.

**A:** Well, maybe this is where the question lies.

**B:** What do you mean?

**A:** Whenever I try to start with my design, I will know exactly what my clients really want.

**B:** Do you mean I should have a further talk with my client?

**A:** Yes. When chatting with your client, you're expected to understand your client as much as possible. For instance, the interest, character, temper of your client. So you can understand what he really needs.

**B:** That's a good idea. Thanks for your advice.



### Sentence Patterns

Many good architects employ a series of analytical and creative thinking steps referred to as the “Design Process” to arrive at a built site design that correctly meets all the necessary requirements.

很多杰出的设计师都要经过一系列反复分析和创作思考的过程，也被成为“设计过程”，才能使其设计方案正确地满足一切必要条件。

The design process also sometimes termed a “problem to solving process” includes a series of steps which usually follow a sequential order.

设计流程有时也作为一种“问题解决流程”，它包括一系列步骤，这些步骤通常是有次序的。

Do not try to design a house for somebody until all the information regarding the site has been assembled.

在收集完所有有关场地的信息之前，不要试图去为某人设计住房。

A house that works well when faced north might be unsatisfactory when faced west.

一套朝北的住房一旦朝向西面，可能就无法令人满意。

The client's needs and desires must be the starting point in planning, as the house will be for him.

甲方的需求和期望必须是规划的出发点，因为这套住房是为他设计的。

The amount of money available for building will affect the quality and size of the entire project.

楼房的可用资金将影响整体工程的质量和规模。

Standard-sized furniture will not cause much trouble, but oversized pieces can create problems.

常规尺寸的家具不会造成什么麻烦，但是超尺寸的家具会造成问题。

Durable, easily cleaned walls and floors are necessary if the family likes to entertain and give parties often.

喜欢经常娱乐和举办宴会的家庭适合耐用、易清洁的墙壁和地板。

## Reading A

### An Introduction to Design Process

It is important for a novice designer to understand the fact that beautiful and practical design solutions do not appear out of thin air like magic. There are no esoteric form or secret states of mind that produce good designs effortlessly. And designs are not created by only using a pencil on a piece of paper. Designs that work well and affect our emotions require a great deal of sensitive observation, analysis, studying, thinking and restudying as well as some degree of inspiration and creativity. It should be noted here that production a design does involve both rational aspects (invention, analysis, program development, construction knowledge) and intuitive aspects (the feeling of putting forms and shapes together, aesthetic appreciation, etc.).



Due to the significance of the design process, it is crucial, especially for the novice designer, to thoroughly cover each step. This is necessary to prevent any factor from being forgotten or any possibility overlooked. Therefore, the novice designer should record and document each step carefully as a reference and a learning tool. Thus, the design process may be somewhat laborious and time-consuming. For an experienced designer, some steps of the design process can be covered rather rapidly without extraordinary effort. Having utilized the process a number of times, it can seem almost automatic to proceed through the various phases.

**New Words**

- esoteric [ˌiːsəˈterɪk] *adj.* 深奥难懂的  
 inspiration [ˌɪnspəˈreɪʃn] *n.* 灵感  
 intuitive [ɪnˈtjuːɪtɪv] *adj.* 直觉的  
 significance [sɪɡˈnɪfɪkəns] *n.* 意义, 重要性  
 time-consuming [ˈtaɪm kənˈsjuːmɪŋ] *adj.* 耗时的  
 automatic [ˌɔːtəˈmætɪk] *adj.* 自动的

**Phrases & Expressions**

- |                       |            |
|-----------------------|------------|
| out of thin air       | 无中生有; 凭空捏造 |
| sensitive observation | 敏锐的观察      |
| design process        | 设计过程       |

**Read and Complete****I. Fill in the blanks with referring to the original passage.**

It is important for a novice 1. \_\_\_\_\_ to understand the fact that beautiful and practical design 2. \_\_\_\_\_ do not appear out of thin air like magic. There are no 3. \_\_\_\_\_ form or secret states of mind that produce good designs effortlessly.

Due to the 4. \_\_\_\_\_ of the design process, it is crucial, especially for the 5. \_\_\_\_\_ designer, to thoroughly cover each step. This is necessary to prevent any factor from being forgotten or any possibility 6. \_\_\_\_\_.

**II. Complete the sentences with the proper words given below. Change the form where necessary.**

esoteric	inspiration	intuitive
significance	automatic	design

- Many poets and artists have drawn their \_\_\_\_\_ from nature.
- I asked, but he said he couldn't tell me the recipe because it was \_\_\_\_\_.
- The \_\_\_\_\_ was picked out in the bright red.
- This heating system has an \_\_\_\_\_ temperature control.
- Few people realized the \_\_\_\_\_ of the discovery.
- He had an \_\_\_\_\_ sense of what the reader wanted.

## Read and Translate

### I. Translate the following sentences into English.

1. 这个项目一定会得到成功。

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2. 关于这个工程项目，你有参照资料吗？

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3. 你能告诉我们关于这个工程项目的技术特性吗？

---

4. 请对这个工程项目作一种论述阐明。

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### II. Translate the following sentences into Chinese.

1. There are no esoteric formulas or secret states of mind that produce good designs effortlessly.

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2. And designs are not created by only using a pencil around on a piece of paper.

---

3. This is necessary to prevent any factor from being forgotten or any possibility overlooked.

---

4. Having utilized the process a number of times, it can seem almost automatic to proceed through the various phases.

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## Reading B

### How Do We Design?

The seed of a plant contains the directives for its future form, in its roots, stem, branches, leaves and flowers. The embryo of animal prefigure the incredibly complicated growth which makes it a viable creature.

Preliminary architectural design must have some of the same characteristics. Each aspect of the ultimate building must be included in this first stage of creation if the building is to, measure up to the requirements society will make of it.

#### Usefulness

What we call it “function” or “purpose”, covers everything about the use which spaces will be put: their



names and minimum dimensions (the program), the functional relationships between them, and their environmental characteristics.

### Strength

This includes the structural, screening, and surfacing materials which constitute the fabric of the building, the methods by which these are put in place, their cost, their strength, and durability; also the technical devices by which heating, cooling, ventilation, lighting, etc., are mechanically achieved.

### Beauty

Now very ponderously called the aesthetic, beauty covers all that make us glad (or sorry). Beauty is not something stuck on after the practical considerations of function and materials have been solved but is intrinsic to the whole design. It lies in how the problems are solved and in the direct sensuous and perceptual experience of the building by people who use it—how a person feels in a space, how he feels moving from one space to another, and how he feels in it on sunny days or in a storm, in the winter or in the summer. It is what “make a building sing”.

#### New Words

- directive [də'rektrɪv] *n.* 指令  
 embryo ['embriəʊ] *n.* 胚胎  
 viable ['vaɪəbl] *adj.* 活的  
 ultimate ['ʌltɪmət] *adj.* 最后的, 最终的  
 ventilation [,ventɪ'leɪʃən] *n.* 通风  
 intrinsic [,ɪn'trɪnzɪk] *adj.* 内在的, 本质的

#### Phrases & Expressions

- measure up to 符合, 达到  
 lie in 存在于

### Read and Think

#### I. Decide whether the following statements are True or False according to the text.

- ( ) 1. Preliminary architectural design is the first step of creation.  
 ( ) 2. Preliminary architectural design must have some different characteristics.  
 ( ) 3. What we call today function or purpose, covers everything about beauty.  
 ( ) 4. Beauty must be achieved in the design when cost is the primary consideration.  
 ( ) 5. Beauty is intrinsic to the whole design.

## II. Match the words on the left with the English meanings on the right.

- |                |  |
|----------------|--|
| 1. preliminary | a. what something is used for                    |
| 2. stage       | b. denoting an action or event preceding         |
| 3. framework   | c. taking delight in beauty                      |
| 4. function    | d. a particular point in the course of a process |
| 5. sensuous    | e. a structure supporting something              |

## Speaking

Design is the art of combining different elements in a pleasing way. The five basic elements of design in decorating a house are color, texture, line, form and space. Each element has its unique characteristics.

Please describe in detail of one element of them according to the tips given below.

### Tips of Describing Building Design

Important consideration of each element

Characteristic of each element

Usage of each element

## Grammar

### Sentences

根据句子的结构，英语中的句子可分为简单句（**simple sentence**）、并列句（**compound sentence**）和复合句（**complex sentence**）。

**简单句**：含一个主语（或并列主语）和谓语（或并列谓语）的句子。基本句型（**pattern**）包括：

1. 主语 + 系动词 + 表语（**SVP**）：He is a student.
2. 主语 + 不及物动词（**SV**）：My tooth aches.
3. 主语 + 及物动词 + 宾语（**SVO**）：Henry bought a dictionary.
4. 主语 + 及物动词 + 双宾语（**SVOO**）：My father bought me a car.
5. 主语 + 及物动词 + 宾语 + 宾语补足语（**SVOC**）：Tom made the baby laugh.

注：其他各种简单句都可由这五种基本句型扩展、变化或省略而成。

**并列句**：由并列连词（**coordinator**）把两个或两个以上的简单句合并而成的句子。并列连词主要有 and、but、so、for、or、nor、yet。例如：

I asked her to have dinner together, but she was too busy.



He studied hard, yet he failed.

**复合句：**含有一个或一个以上从句的句子。从句一般由从属连接词（subordinator）、关系代词（relative pronoun）或关系副词（relative adverb）等引导，这些从句包括名词性从句（主语从句、宾语从句、表语从句及同位语从句）、定语从句和状语从句。例如：

Who will be our monitor hasn't been decided yet. (主语从句)

I am interested in what she is doing. (宾语从句)

This is what we should do. (表语从句)

He made a promise that he would never come late. (同位语从句)

He is the man who wants to see you. (定语从句)

If you are not too tired, let's go out for a walk. (状语从句)

### Comprehensive Exercises

#### Task 1 Make sentences with the words and tips given.

1. the local school / attends / my son Tim

SVO

---

2. went to his school / my wife and I / yesterday

SV

---

3. we / to his teachers / spoke

SV

---

4. Tim's school report / the teachers / gave us

SVOO

---

5. very good / wasn't / Tim's report

SVP

---

6. in every subject / were / his marks / low

SVP

---

7. made him / Tim's report / very anxious

SVOC

---

8. to try harder / my wife and I / told him

SVOC

---

9. seems / Tim's friend Jimmy / very clever

SVP

---

10. good marks / he got / in all subjects

SVO

---

**Task 2** Decide whether the following sentences are Simple, Compound or Complex.

1. Sara began planning her summer vacation in December. \_\_\_\_\_
2. Because I left the play early, I missed the surprise ending. \_\_\_\_\_
3. Tanya was invited to a party, so she wanted to buy a new dress. \_\_\_\_\_
4. Because of rain the baseball game was postponed. \_\_\_\_\_
5. English is not easy, but I like it very much. \_\_\_\_\_
6. Duane didn't pass the test, although he studied hard last week. \_\_\_\_\_
7. They won the match last year and wanted to win it again. \_\_\_\_\_
8. She sold her house, yet she can't help regretting it. \_\_\_\_\_
9. He is the man I saw in the park yesterday. \_\_\_\_\_
10. Stepping carelessly off the pavement, he was knocked down by a bus. \_\_\_\_\_

**Task 3** Fill in the blanks with appropriate coordinators, subordinators, relative pronouns or adverbs.

Dear Sir,

I wish to complain about the villa holiday 1. \_\_\_\_\_ I booked with your company. The brochure described it as "in a peaceful setting", 2. \_\_\_\_\_ this was not the case. In fact, the villas were next to a building site, 3. \_\_\_\_\_ were noisy throughout the day.

4. \_\_\_\_\_ the villa was comfortable, one of the chairs was broken, 5. \_\_\_\_\_ the kitchen was dirty. We also expected a daily maid service, 6. \_\_\_\_\_ this did not happen. In fact, we only saw the maid twice during our holiday, 7. \_\_\_\_\_ her service was not good.

8. \_\_\_\_\_ the holiday did not live up to the promises 9. \_\_\_\_\_ you offered in the brochure, I think 10. \_\_\_\_\_ I'm entitled to compensation.

I look forward to hearing from you soon.

Yours faithfully,

Dr. Brown

## Writing

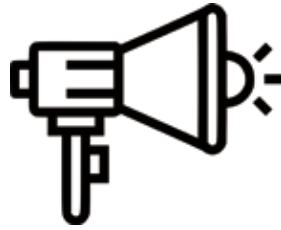
### Announcement

通知 (Announcement) 一般用来公布即将发生或已经发生之事, 如宣布举行各种比赛, 放映电影或录像, 举办晚会, 召开研讨会, 等等。通知的格式一般包含以下几部分的内容: 时间、地点、活动、其他细节。

格式:

1. 标题: 写在正文上方的正中位置。可以每个字母都大写, 也可以首字母大写。

2. 正文：写明通知事情的具体时间、地点、概括性的内容、出席对象及有关事项。
3. 落款：即发出通知的单位名称及日期：一般写在标题的上方或在正文后面的右下角。



### Sample 1

#### Announcement

The Ping-pang competition which is to take place this Sunday has to be put off because of the heavy snow these days. All students are required to come to school on Sunday morning as usual, but there will be no class that afternoon. Weather permitting, members of the school ping-pong team must come to the ping-pong hall at 3:30 this Sunday afternoon when Ping-pong stars from Wuhan come and give special training and coaching.

Office of Physical Education  
18th December, 2021

### Sample 2

#### Announcement

The Student Union is going to organize a “Music Week”. It will be held in the second week of June. The activities include singing pop songs, playing classical and folk music, and a musical competition. If you want to play classical and folk music, please bring musical instruments with you, as no instruments are supplied. In the musical competition you will be asked to listen to part of a song and then tell where it is from. If you are interested in these activities and want to join in any of them, please come to the Student Union to sign up before May 30th. The place for the “Music Week” will be announced later.

Come and have fun.

Student Union  
May 15, 2021

## Writing Practice

### I. Write an announcement according to the following information given in Chinese.

假如你是班长，你们要举办英语讲座（lecture）。

1. 时间：4月20日星期三下午2点至4点；
2. 地点：阶梯教室（lecture theatre）；
3. 讲座人：清华大学张力教授；
4. 报告的内容：怎样学英语；
5. 要求大家准时出席（attend），并且可以向他咨询有关英语学习的问题。

### II. Write an announcement according to the following information given in Chinese.

我们班在这周末有一次参观活动，参观民俗博物馆。集合地点是学校大门口，出发时间是上午7:30。要求随身带上笔记本并做笔记，以准备下周二班会课堂讨论。请准时参加。

## Cultural Reading

### The Forbidden City

The Forbidden City is the largest and most well-preserved ancient palatial building complex in the world. It is a reflection of the highest architecture level in ancient China.

The Forbidden City used to be the imperial palace since the Ming Dynasty. The construction began to be built in 1406 AD and completed in 1420 AD with the toilsome work of a lot of laborers.

The building complex is classified as “the Outer Court” and “the Inner Court”. Taihe Palace, Zhonghe Palace and Baohe Palace are the center of the Outer Court, where the emperor would hold meeting and exercise of power. Qianqing Palace, Jiaotai Palace and Kunming Palace are the center of the Inner Court. Feudal emperors and princess lived here.

It has a rectangle shape, which is 961 meters from south to north and 753 meters from west to east. The Forbidden City covers an area of 725,000 square meters and the building area is 155,000 square meters with nearly 10 thousand rooms.

Red color is used on the palace walls and yellow color on its roofs. In Chinese culture red color stands for happiness, good luck and wealth while yellow is an imperial color representing power, royalty and prosperity. On its roofs there are some animals such as dragon, lion and other mythical animals which are symbols of good fortune and dignity. Besides, some ancient pine trees and cypress trees and the pavilions make the place beautiful and quiet.

Ancient Chinese palatial architecture has a long history which can be traced back to the Xia Dynasty (21st century BC–17th century BC). It has its own principles of structure and layout. In the long history of China, Chinese people have created many palatial architecture wonders.

