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Unit 1 What Is Architecture

In this unit, you are going to have a basic idea about what architecture is and get to know some historical architectural books. In **Part 1**, you will learn what architecture means; In **Part 2**, after reading the text, you will think about the question that what we talk about when we talk about architecture; in **Part 3**, to improve your language skills, you are to learn how to skim while having a glimpse of what it is like to make architecture a career; and in **Part 4**, you can enlarge your understanding of architecture by reading about some historical architectural books and people behind them. Enjoy!



Part 1 Lead-In

What Is Architecture

- **Exercise 1:** Watch the video and answer the following questions.
 - 1) According to the video, what do people mean when they talk about architecture?
 - 2) Is a cup the work of architecture?
- **Exercise 2:** Depending on your understanding of the following text, you might use the word "architecture" to describe any number of things. $Tick(\sqrt{\ })$ the items listed below which you would call architecture.

What Architecture Means

The word "architecture" can have many meanings. Depending on the context, the general idea is that architecture can refer to:

- ny man-made building or structure;
- * a man-made building or structure that is important, large, or highly creative;
- a carefully designed object, such as a chair, a spoon, or a tea kettle;
- a design for a city, town, park, or landscape;





- the art or science of designing and building buildings, structures, objects, and outdoor spaces;
- a building style or method;
- * a plan for organizing space;
- the flow of information on a Web page;
- the planned design of any kind of system;
- * a systematic arrangement of information or ideas.

However, when it comes to define what architecture really is, even great architects don't agree. Can we call a bicycle shed architecture? How about a grand temple? As we can see, people really vary in their ideas as to what architecture means. In real life, these differences in ideas can lead to great differences in what they produce. So, what is your definition of architecture?

| A circus tent | An egg carton | |
|------------------|----------------|--|
| A roller coaster | A steel bridge | |
| A skyscraper | A city park | |

Exercise 3: Write down your definition of architecture. Compare your notes with your partner and discuss with him/her about any difference you might have.



Part 2 Reading in Depth

Architectural Words and Expressions

architecture: (建筑学) n. the art and science of designing and making buildings

architect: (建筑师) n. a person whose job is to design buildings and make certain

they are built correctly

ambience: (气氛) *n*. the character of a place or the quality it seems to have

cost-estimating: (成本预算) a guess of what an amount of money might be

urban-design: (城市规划) the arrangement, appearance and functionality of towns

and cities, and in particular the shaping and uses of urban public space

landscape architecture: (景观建筑) the branch of architecture dealing with the arrangement

of land and buildings for human use and enjoyment

contract administration: (合同管理) meeting the requests for information, managing change

order and handing in reviews and scheduling site visits and review

meeting



land-use planning: (土地规划) a branch of public policy which encompasses various

disciplines which seek to order and regulate the use of land in an

efficient and ethical way

project-management: (项目管理) the process by which a project is brought to a successful

conclusion

Reading 1

What Do We Talk About When We Talk About Architecture?

Frank Lloyd Wright, the American architect, had to say about Architecture: "What is architecture anyway? Is it the vast collection of the various buildings, which have been built to please the varying taste of the various lords of mankind? I think not. "Wright believed that architecture was life itself, or, in his words, "at least it is life itself taking form and therefore it

is the truest record of life as it was lived in the world yesterday, as it is lived today or ever will be lived." He believed that "Architecture is that great living creative spirit, which, from generation to generation, from age to age, proceeds, persists, creates, according to the nature of man and his circumstances as they change. That is really architecture".



While we can appreciate Wright's passion for architecture, a more objective description of architecture is needed. Architecture is both the process and product of planning, designing and construction. Architectural works, in the material form of buildings, are often seen as cultural symbols and as works of art. Historical civilizations are often identified with their surviving architectural achievements.

Generally speaking, architecture can mean: the art and science of design and erecting buildings and other physical structures; a general term to describe buildings and other infrastructures; a style and method of design and construction of buildings and other physical structure; design activity, from the



macro-level such as urban design and landscape architecture to the micro-level such as construction details and furniture. It can also refer to the practice of an architect, where architecture means to offer professional services in connection with the design and

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construction of a building, or group of buildings and the space within the site surrounding the buildings, which have as their principal purpose human occupancy or use. Nowadays, besides describing the activity of designing any kind of structural objects, the term "architecture" has been commonly used in describing information technology.

- 4 The practice of architecture consists of the provision of professional services in connection with town planning as well as the design, construction, enlargement, conservation,
 - restoration, or alteration of a building or group of buildings. These professional services include, but are not limited to:
- planning and land-use planning;
- shurban design;
- provision of preliminary studies, designs, models, drawings, specifications, and technical documentation;
- coordination of technical documentation prepared by others (consulting engineers, urban planners, landscape architects, and other specialist consultants)
- construction economics:
- contract administration;
- monitoring of construction (referred to as supervision in some countries);
- project management.
- From above, we can say that architecture is a passion, a vocation, a calling as well as a science and a business. It has been described as a social art and also an artful science. Architecture must be of the highest quality of design, while providing a sense of place and support of all types of human activity. Architecture helps the man-made fit in harmony with the environment while promoting health and well-being, enriching our lives, providing economic opportunities, and creating a legacy that reflects and symbolizes culture and traditions.

(519 words)

New Words and Expressions

vary ['veərɪ] v. 改变,使多样化
objective [əb'dʒektɪv] adj. 客观的,真实的
symbol ['sɪmbəl] n. 符号,象征
identify [aɪ'dentɪfaɪ] vi. 认为…和…密切相关
achievement [ə'tʃi:vmənt] n. 成就,成绩
term [tə:m] n. 术语

appreciate [ə'pri:ʃɪeɪt] vt. 领会,意识到 material [mə'tɪərɪəl] n. 材料,原料 civilization [ˌsɪvɪlaɪ'zeɪʃən] n. 文明,开化 survive [sə'vaɪv] vi. 活着,继续存在 erect [ɪ'rekt] vt. 使竖立,建立,建造 infrastructure ['ɪnfrə'strʌktʃə] n. 基础设施



principal ['prɪnsəpəl] adj. 主要的,首要的 conservation [ˌkənsəː'veɪʃən] n. 保存,保护 alteration [ˌɔːltə'reɪʃən] n. 改变,变更 preliminary [prɪ'lɪmɪnərɪ] adj. 初步的,预备的 specialist ['speʃəlɪst] n. 专家 supervision [ˌsjuːpə'vɪʒən] n. 监督,管理 take form 成形,变得明显 macro-level 宏观层次 consist of 由…组成

occupancy ['ɔkjupənsɪ] n. 占有,占用 restoration [ˌrestə'reɪʃən] n. 恢复,复位 provision [prə'vɪʒən] n. 供应 coordination [kəu'ɔːdɪ'neɪʃən] n. 协调 monitor ['mɔnɪtə] v. 监视,监督 information technology 信息技术 micro-level 微观层次 urban planner 城市规划师 in harmony with 与…协调一致

Proper Names



Frank Lloyd Wright: 弗兰克·劳埃德·赖特 (1867年6月8日—1959年4月9日),20世纪上半叶最有影响的建筑师之一。在他超过70年的建筑师生涯(从1887年到1959年)中,不仅设计了一系列具有个人风格的高质量作品,还影响了整个美国建筑的进程。直到今天,他可能还是美国最著名的建筑师。

Background Information

建筑学是研究建筑物及其环境的学科,它旨在总结人类建筑活动的经验,以指导建筑设计创作,构造某种体形环境等等。建筑学的内容通常包括技术和艺术两个方面。传统建筑学的研究对象包括建筑物、建筑群以及室内家具的设计,风景园林和城市村镇的规划设计。随着建筑事业的发展,园林学和城市规划逐步从建筑学中分化出来,成为相对独立的学科。

中国古代把建造房屋以及从事其他土木工程活动统称为"营建"、"营造"。"建筑"一词是从日语引入汉语的。汉语中的"建筑"是一个多义词。它既表示营造活动,又表示这种活动的成果——建筑物,也是某个时期、某种风格建筑物及其所体现的技术和艺术的总称,如隋唐五代建筑、文艺复兴建筑等等。

建筑设计是建筑学的核心,指导建筑设计创作是建筑学的最终目的。有关建筑设计的学科内容大致可分为两类。一类是总结各种建筑的设计经验,按照各种建筑的内容、特性、使用功能等,通过范例,阐述设计时应注意的问题以及解决这些问题的方式方法。另一类是探讨建筑设计的一般规律,包括平面布局、空间组合、交通安排,以及有关建筑艺术效果的美学规律等等。后者称为建筑设计原理。室内设计是从建筑设计中分化出来的,它主要研究室内的艺术处理、空间利用、装修技术及家具等问题。

建筑构造是研究建筑物的构成,各组成部分的组合原理和构造方法的学科,主要任务是



根据建筑物的使用功能、技术经济和艺术造型要求提供合理的构造方案,指导建筑细部设计和施工,作为建筑设计的依据。

从上世纪60年代以来,建筑艺术、建筑科学技术和建筑设计理论方面都取得了前所未有的重大进展。随着电子计算机辅助建筑设计,系统论、控制论、信息论以及行为科学、环境科学等渗入建筑领域,更孕育着建筑学的新突破。

Check Your Comprehension

Exercise 1: Match the following Chinese words with their English equivalents. One pair has been matched for reference.

| | city management |
|------|-------------------------|
| 建筑师 | architecture |
| 建筑设计 | project management |
| 景观建筑 | contract administration |
| 土地规划 | urban planning |
| 合同管理 | landscape architecture |
| 城市规划 | architectural design |
| 项目管理 | land-use planning |
| | architectct |
| | |

Exercise 2: Fill in the blanks with the words given. Make changes if necessary.

| | erect vary consist | material symbol specialist | civilization occupancy conservation | infrastructure restoration coordination | identify alteration provision | | |
|----|---|----------------------------------|---|---|-------------------------------|--|--|
| 1) | 1) They the war memorial to remember those who died in World War Two. | | | | | | |
| 2) | The earthquake | had badly dan | naged the city's | · | | | |
| 3) | 3) The family's of their new apartment lasted only three months, with their son | | | | | | |
| | leaving and their daughter getting married. | | | | | | |
| 4) | 4) The housing habits in different areas because of factors such as climate, | | | | | | |
| | culture and local building materials. | | | | | | |
| 5) | 5) Architecture is regarded as an important of human achievements on this planet. | | | | | | |
| 6) | 6) This kind of metal is the best to be used in bridge building. | | | | | | |



| | 7) The company board plans to hire a in land-use planning for their real estate |
|----|---|
| | program. |
| | 8) Not only did the of Ancient Egypt, Ancient Greece, and Ancient Rome |
| | influence us in the areas of government, recreation, education, religion, theater, and the |
| | arts, but they also had a great influence on architecture. |
| | 9) After attending Professor Frank's lecture on the architectural styles in ancient Greece, |
| | Helen had a Greek style building near her house. |
| | 10) Only when people realize the importance of the old buildings in our city can they |
| | understand why we should invest time and money in their and |
| | 11) means physical changes to a building or plans for a building, which are |
| | forever, not just decoration. |
| | 12) The team four European architects and two African architects. |
| | 13) To be a good project manager, you have to know how to different interests. |
| | 14) The reason why this firm is so popular among local customers is their of |
| | excellent service. |
| Ex | ercise 3: Read the text carefully and decide whether the following statements are true (T) |
| | or false (F). |
| | 1) Frank Lloyd Wright saw architecture as a huge collection of different styles aiming to |
| | make people happy. () |
| | 2) Frank Lloyd Wright believed that architecture could stand for life itself. () |
| | 3) Architectural works are an important part of human civilization. () |
| | 4) Architecture is more a science than an art form. () |
| | 5) Urban planning does not belong to architecture because it is about politics. () |
| | 6) For architects, the uppermost purpose for their work is human occupancy. () |
| | 7) Contraction administration is not included in the practice of architecture. () |
| | 8) It is architecture that helps the man-made fit in harmony with its environment. () |
| Ex | ercise 4: Read the text carefully again and answer the following questions. |
| | 1) What was Frank Lloyd Wright's belief about architecture? |
| | 2) Why are historical civilizations identified with their surviving architectural achievements? |
| | 3) What does the practice of architecture include? |
| | |



| 4) | What is the monitoring of construction also referred to in some countries? |
|----|--|
| 5) | Define what architecture is based on the information given in the text. |

Exercise 5: Read and talk

The three pictures we use in **Reading 1** are in fact the works of Frank Lloyd Wright. How much do you know about him and his works? Do you like his work? Which architectural work do you think is beautiful or ugly? Why? Discuss with your partner. **You may start your talking as** "I really think that the Great Wall is beautiful because it still fits into its surroundings so harmoniously even after 2,000 years!"



Part 3 Language Skills

阅读技巧——略读

阅读能力主要包括阅读速度和阅读理解两个方面,实际上也是现在专业学习工作中不可缺少的一项技能。这一节我们主要学习常用阅读方法之略读(skimming)。略读是一种浏览性阅读,是指阅读者用能达到的最快速度浏览一篇阅读材料。略读不要求通读全文,只是跳跃性地略读主要部分,以了解全文的主要论点和主要内容。略读特别适合用于在有限时间内对大量参考资料的浏览。需要注意的是,略读一般不会省略第一部分和最后一部分。因为一般而言,第一部分常对全文做出简介和概述,而最后一部分则多为归纳和总结。

Before You Read

Before reading the following text "What Makes Architecture a Promising Career?", survey it quickly. Surveying is skimming something in order to make predictions. Here are the steps for surveying an article:

| teps for sur | veying an article: | |
|--------------|----------------------|---|
| 1. Check to | see how long the tex | xt is. Guess about the time it will take you to read it once. |
| | words | minutes |
| 2. Skim and | underline the follow | ving: |
| Title | | |
| | | |

First sentence Last sentence

- 3. Skim the text very quickly, circling any subtitles, boldface or italicized words, special punctuation.
- 4. Underline the first sentence in each paragraph. Skim those sentences only. Now try to



predict the content. Which of the following is the closest to your prediction?

- a. It is about the architectural history.
- b. It is about the latest development in architecture.
- c. It is about the reasons why we should choose architecture as a career.

Reading 2

What Makes Architecture a Promising Career?

- 1 Architecture is the art and science of designing buildings and other physical structures.
- Architecture is about the making of places where people spend their lives. Architects are not just concerned with the exterior and interior design of a building, but the environment as a whole. Architecture is mostly about human beings living in a "better" way than before. Social sciences and psychology is as important as the latest technology breakthrough in sustainable materials.



- It is true that architecture students work very hard to get that "edge" over others. They work day and night, often with little sleep, just so they can design the best project portfolio. Life of an architecture student is hard. And yet, this field attracts the most creative and romantic minds in the world.
- Why does architecture appeal to so many? What are the merits of choosing architecture as a career over other professions? Here are the seven reasons that could convince anyone to take up architecture as a profession.
 - 1. An architect is a sort of an inventor. Like an inventor who goes about making and designing new gadgets, you go around designing new buildings. Architecture is a very satisfying profession. You'll get a lot of delight after your concepts on paper transform into real buildings. You'll know the joy of creation in this field of architecture.
 - 2. A course in architecture is a lot of fun. Unlike traditional colleges where you must lock



- yourself in study halls and libraries, reading and writing all the time, a course in architecture gives you the liberty to use the right side of your brain, the creative part. You get a lot of opportunities to showcase your creativity and ingenuity while designing structures.
- 3. Architecture is a very high paying field. Once you



get through the course and pass out with good grades, you'd be pursued by large firms looking for fresh talent and new ideas. And compared to most other fields, architects make a lot more money.

- 4. It is easy to define architecture but the word has far deeper meaning than it implies. While you study architecture, you get to study various fields of human endeavor, including Art, History, Material Science, Physics, Engineering... anything and everything that can help improve the living environment of human beings. It is the most diverse subject you can find.
- 5. The work of an architect is one of the most challenging and enjoyable. Every building is different. Every project is different. There is absolutely no dullness in life. The adventure and the challenge of work are exhilarating to say the least.
- 6. If you're the kind of people who likes to work with his (or her) hands, then architecture is the right profession for you. In architecture study course, you get to work with your hands. It's not just about reading and writing all the time, but you must have a hands-on approach on many assignments such as building scale models, making surveys, and talking to people. It's a very active field.
- 7. Architecture may sound like a 9 to 5 office job, but it's not. It's a lot more than that. Even as a student of Architecture, you get to work on real-life problems of designing functional buildings. If you like to hit the road every now and then, you're in for some luck. In this profession, you get to travel a lot. You have to put your feet on the ground, and visit construction sites.

(582 words)

Check Your Skills

Exercise 1: Skim the text in Reading 2 again. Which of the following best describes its main idea? Tick your choice.

- a. It is mainly about the seven reasons that make architecture an appealing career.
- b. For those who hate traveling, architecture is not a good choice.
- c. Architecture students need to work really hard, so those who are creative and romantic are less likely to choose architecture as a future career.

Exercise 2: Choose the one which best expresses the meaning of underlined words.

| 1) | Architects are not ju | st concerned with the | he exterior and inter | rior design of a building, but |
|----|-----------------------|-----------------------|-----------------------|--------------------------------|
| | the environment as a | whole. | | |
| | a. inside | b. outside | c. front | d. extra |
| 2) | Like an inventor w | ho goes about mak | ing and designing 1 | new gadgets, you go around |
| | designing new build | ings. | | |
| | a. equipment | b. devices | c. plans | d. ideas |



| 3) | | get a lot o tures. | of opportuni | ties to she | owcase yo | our crea | ativity a | and ingenuit | ty while designing | 3 |
|--|---|-----------------------|---------------|-------------|------------|----------|-----------|---------------|---------------------|---|
| | a. us | e | b. explore | e | c. d | isplay | | d. prove | | |
| 4) | Whi | ile you s | tudy Archit | ecture, y | ou get to | study | variou | s fields of | human endeavoi | |
| | inclu | iding Ar | t, History, | Material | Science | , Phy | sics, l | Engineering | g anything and | ł |
| | every | ything tha | t can help ir | mprove th | e living e | nvironn | nent of | human bein | igs. | |
| | a. act | tion | b. effort | | c. b | ehavio | r | d. discove | ery | |
| 5) | The | adventure | and the cha | allenge of | work are | exhilar | ating to | say the lea | ast. | |
| | a. str | ressful | b. encour | raging | c. e | xciting | | d. terrible | 2 | |
| Exerci | | | text again, | , then dec | cide whet | her the | follow | ing stateme | ents are true (T) o | r |
| | | false (F). | | | | | | | | |
| 1) | | | | ology are | not neces | ssary if | one wa | ants to pursu | ue the study in the | 3 |
| | | | ecture. () | | | | | | | |
| | 2) Architecture can be delightful when one is able to invent new gadgets. () | | | | | | | | | |
| 3) Learning Architecture can give one more chances to develop his/her right part of the | | | | | | | | | | |
| brain. () | | | | | | | | | | |
| 4) Architecture study mainly involves with the use of the right side of the brain, so architecture students rarely work with their hands in the courses. () | | | | | | | | | | |
| 5) | | | · | | | | | | n office job. () | |
| | | | | • | | • | • | | ntent? If you were | |
| | | • | • | • | | • | _ | | rong in your firs | |
| | skimming of the text? Make notes and compare it with your partner. | | | | | | | | | |
| | _ | | | | | | | | | _ |
| | _ | | | | | | | | | _ |
| | _ | | | | | | | | | _ |
| | _ | | | | | | | | | _ |
| <u>.</u> [] | | | | | | | | | | |

The Architectural Treatises on History

Part 4 Further Reading

The earliest surviving written work on the subject of architecture is *Ten Books on Architecture*, by the Roman architect Vitruvius in the early 1st century. According to Vitruvius, a good building should stand up robustly and remain in good condition, be useful and function well for the people using it and delight people and raise their spirits. Roman architects were skilled in engineering, art, and craftsmanship combined. Vitruvius was very much of this type.

建筑英语 1

He covered a wide variety of subjects that he saw as touching on architecture. This included many aspects that may seem irrelevant to modern eyes, ranging from mathematics to astronomy, meteorology, and medicine. In the Roman conception, architecture needed to take into account everything touching on the physical and intellectual life of man and his surroundings.

The notion of style in the arts was not developed until the 16th century, with the writing of Vasari. The treatises, by the 18th century, had been translated into Italian, French, Spanish and English. In the early nineteenth century, Augustus Welby Northmore Pugin wrote *Contrasts* (1836) that, as the title suggested, contrasted the modern, industrial world, which he disliked, with an idealized image of neo-medieval world. Gothic architecture, Pugin believed, was the only "true Christian form of architecture." The 19th century English art critic, John Ruskin, in his *Seven Lamps of Architecture*, published 1849, was much narrower in his view of what made



up architecture. Architecture was the "art which so disposes and adorns the edifices raised by men... that the sight of them" contributes "to his mental health, power, and pleasure".

The great 19th century architect of skyscrapers, Louis Sullivan, promoted an uppermost concept to architectural design: "Form follows function". While all people didn't accept the idea that function was the most important factor in architectural design back then, it did introduce the concept of "function". "Function" came to be seen as the guiding principle of a building, not only practical but

also aesthetic, psychological and cultural.

On the difference between the ideals of "architecture" and mere "construction", the renowned 20th century architect Le Corbusier wrote: "You employ stone, wood, and concrete, and with these materials you build houses and palaces: that is construction. Ingenuity is at work. But suddenly you touch my heart, you do me good. I am happy and I say: This is beautiful. That is Architecture". By contrast, the le Corbusier's contemporary, Ludwig Mies van der Rohe said that architecture begins "when 2 bricks are put together."

Among the philosophies that have influenced modern architects and their approach to building design are rationalism, empiricism, structuralism, post-structuralism, and phenomenology.

In the late 20th century, a new concept was added to those included in the compass of both structure and function, that is, the consideration of sustainability. To satisfy the contemporary morals, a building should be constructed in a manner which is environmentally friendly in terms of the production of its materials, its





impact upon the natural and built environment of its surrounding area, and the demands that it makes upon non-sustainable power sources for heating, cooling, water, lighting and waste management.

(520words)

New Words and Expressions

treatise ['trixtɪs] n. 论文,论述 **function** ['fʌŋk[ən] vi. 运行,起作用 engineering [ˌendʒɪˈnɪərɪŋ] n. 工程学,工程 combine [kəm'baɪn] v. 使结合,结合 irrelevant [ɪ'relɪvənt] adj. 不恰当的,不相干的 meteorology [,mixtjə'rɔlədʒɪ] n. 气象学 intellectual [ˌɪntə'lektʃuəl] adj. 智力的,聪明的 industrial [ɪn'dʌstrɪəl] adj. 工业的,产业的 **critic** ['krɪtɪk] n. 评论家,批评家 adorn [əˈdɔːn] v. 装饰 contribute [kən'trɪbjuːt] vi. 是原因之一 **principle**['prɪnsəpl] n. 原理,原则 psychological [,saɪkə'lədʒɪkəl] adj. 心理(学)的 philosophy [fi'losəfi] n. 哲学 rationalism ['ræ[ənəlɪzəm] n. 理性主义 structuralism ['strʌktʃərəlɪzəm] n. 构造主义 phenomenology [fi,nomi'nolədʒi] n. 现象学 **sustainability** [sə'steməbəlɪtɪ] *n*. 可持续性 range from 从…到…变动,从…到…范围 touch on 触及, 简略提到

robustly [rəu'bʌstlɪ] adv.稳固地 delight [dɪ'laɪt] v. (使)欣喜 craftsmanship n. 工艺 aspect ['æspekt] n. 方面,方位 **astronomy** [əˈstrɔnəmɪ] n. 天文学 **conception** [kənˈsepʃən] n. 概念 **contrast** [kən'træst] v. 对比,成对照 idealize [aɪ'dɪəlaɪz] v. 理想化地描述 dispose [dɪ'spəuz] v. 清除,解决 edifice ['edɪfɪs] n. 大厦,大建筑物 skyscraper ['skaiskreipə] n. 摩天大楼 **aesthetic** [iːs'θetɪk] *adj*. 美学的,审美的 renowned [rɪ'naund] adj. 有声誉的 approach [ə'prəutʃ] n. 途径,方法 empiricism ['empirizəm] n. 经验主义 post-structuralism n. 后构造主义 **compass** ['kʌmpəs] n. 圆规,范围 take into account 考虑…的因素 in terms of 就…而言,在…方面

Cultural Notes

- 1. **Vitruvius:** 维特鲁威(约公元前80年或前70年 约公元前25年),是古罗马的作家、建筑师和工程师,他的创作时期在公元前1世纪。他写了一部《建筑十书》,并献给奥古斯都,这是一部用拉丁文写的关于建筑的论著,是目前西方古代唯——部建筑著作,他在书中为建筑设计了三个主要标准: 持久、有用、美观(firmitas, utilitas, venustas)。
- 2. Vasari: 瓦萨里(1511 1574),瓦萨里年幼即被派往佛罗伦萨学艺,后终身服务于美第奇家族的各公爵,尤以晚年任大公爵科西莫一世的宫廷建筑师及画师时影响巨大。他博闻强识,绘画、建筑兼工,艺术上崇拜米开朗基罗,以其门生自居。但他的艺术风格杂芜,追求形式主义,属于样式主义流派。

建筑英语 1



3. Augustus Welby Northmore Pugin: 奥古斯都·威尔伯·普金(1812—1852),在19世纪初的建筑理论中,普金有着不可忽视的地位。普金对于哥特复兴的观点深植与其对宗教的狂热,尤其是他在1835年转信天主教后,他一直致力于将基督教和哥特式建筑融为一体,对后来的建筑家影响深远。《对照》一书反映出普金对于有共同信仰的中世纪的向往,他认为只有回归中世纪的精神信仰,英国才能拥有较佳的社会状态。普金选择哥特式作为其大力提倡的建筑风格,即此道理。



4. John Ruskin: 约翰·罗斯金(1819 — 1900),19世纪英国杰出的作家、批评家、社会活动家。他的有关艺术问题的重要作品有《现代画家》(第1卷,1843)、《建筑的七盏灯》(1849)、《威尼斯之石》(1851 — 1853)以及论文和演讲稿。他认为艺术不能脱离生活,因此在探讨艺术问题的过程中,他总是密切注意社会的实际问题。



5. Louis Sullivan: 路易斯·沙利文(1956 — 1924),被认为是美国最有影响力的建筑师之一。1873 年,他来到芝加哥,受雇于素有"摩天大楼之父"之称的建筑师威廉·勒巴隆·詹尼(William Le Baron Jenney)。在巴黎学习一年之后,他返回芝加哥,成为约翰·埃德尔曼(John Edelman)的绘图员,后者奢华有机的装饰设计对他产生了深远的影响。1879 年,他进入丹克马尔·阿德勒(Dankmar Adler)的事务所,后者是芝加哥最著名的结构工程师之一。在此后15年的合作过程中,他们在美国建筑史留下了许多重要的、颇具影响力的建筑。他与阿德勒大胆地抛弃先辈公认的建筑惯例,创造出新颖的、来源于每个项目功能需求的设计方案,同时利用当时的材料与技术,在实施过程中,他形成了别具一格的装饰风格,将自然的形式融为一体。



6. Le Corbusier: 勒·柯布西耶 (1887 — 1965 年),是对当代生活影响最大的建筑师,是20世纪文艺复兴式的巨人,是毕生充满活力,永无休止进行创造的设计大师、建筑大师和艺术大师,在现代建筑运动中,他最有效地充当了前后两大阶级的旗手: 20年代的功能理性主义和后来更广泛的有机建筑阶段。



7. Ludwig Mies van der Rohe: 路德维希·密斯·凡·德·罗(1886 — 1969),20 世纪中期世界上最著名的四位现代建筑大师之一。密斯坚持"少就是多"的建筑设计哲学,在处理手法上主张流动空间的新概念。他的设计作品中各个细部精简到不可精简的绝对境界,不少作品结构几乎完全暴露,但是它们高贵、雅致,已使结构本身升华为建筑艺术。



Exercise 1: Skim the text very quickly and circle the names, the dates, the titles of books, and proper terms.

Exercise 2: Match the author with his book.

Vitruvius Seven Lamps of Architecture

Louis Sullivan Contrasts

John Ruskin Ten Books on Architecture

Augustus Pugin

Exercise 3: The sentences below are taken from the text. Use the context provided to decide on the meaning of the underlined parts. You may go back to the text for more information if necessary.

- 1) Roman architects were skilled in engineering, art, and craftsmanship combined. Vitruvius was very much of this type. He covered a wide variety of subjects that he saw as touching on architecture. This included many aspects that may seem irrelevant to modern eyes, ranging from mathematics to astronomy, meteorology, and medicine.
 - a.他包含了很多他觉得让他感动的建筑课程。
 - b.他涉及到了很多他认为和建筑相关的内容。
- 2) In the early nineteenth century, Augustus Welby Northmore Pugin wrote *Contrasts* (1836) that, as the title suggested, contrasted the modern, industrial world, which he disliked, with an idealized image of neo-medieval world.
 - a. 就如题目而言,在《对照》一书中,普金比较了他不喜欢的现代工业社会和他理想中完美的新中世纪世界。
 - b. 题目建议对照比较他不喜欢的现代工业社会和完美的新中世纪的形象。
- 3) While all people didn't accept the idea that function was the most important factor in architectural design back then, it did introduce the concept of "function". "Function" came to be seen as the guiding principle of a building, not only practical but also aesthetic, psychological and cultural.
 - a. "功能"这一概念后来无论是从实用的角度,还是从美学、心理学和文化的角度,都被认为是建筑的指导原则。
 - b. "功能"被看成是一栋楼的指导原则,这栋楼不仅要很实用,还要很美,有想法,有 文化。
- 4) By contrast, the le Corbusier's contemporary, <u>Ludwig Mies van der Rohe said that</u> architecture begins "when 2 bricks are put together."
 - a.密斯·凡·德·罗说建筑诞生于"两匹砖放在一起的时候。"



b.密斯·凡·德·罗说当"两匹砖放在一起的时候",就是开始修建了。

- 5) In the late 20th century, a new concept was added to those included in the compass of both structure and function, that is, the consideration of sustainability.
 - a.结构和功能的指示之下,又多了一个新概念,
 - b.在结构和功能这一范围内,又增加了一个新概念,

Exercise 4: Read the text and answer the following questions.

- 1) Which is the oldest book recorded on the subject of Architecture?
- 2) What are the main principles of Vitruvius on Architecture?
- 3) According to Pugin, which architectural form stands for his belief in Christianity?
- 4) Which architectural concept did Louis Sullivan introduce to the world?
- 5) According to the text, what does sustainability mean in terms of architecture?

Exercise 5: There are certain proper terms mentioned in the text, such as *rationalism*, *empiricism*, *structuralism*, *post-structuralism*, and *phenomenology*. Do you know what they mean? And what architectural styles have they influenced? Check it out after class and report back.



Unit 2 Architectural History

In this unit, you are going to have a brief understanding about architectural history both in the West and China. In Part 1, you will get to know how architecture develops over history; In Part 2, after reading the text, you will learn about what architecture is like until the time of Renaissance; in Part 3, to improve your language skills, you are to learn how to scan while learning about how Chinese houses changed over time; and in Part 4, you can enlarge your knowledge of western architectural history by studying the architectural timeline. Enjoy!



Lead-In

Architecture History

Exercise 1: Watch the video and answer the following questions.

- 1) According to the video, what have people needed special places for?
- 2) According to the video, do we have the most important and popular architectural style nowadays?

Exe

| rcise 2: Watch the video carefully and till out the blanks. | entra de la constante de la co |
|---|--|
| Since ancient times, large buildings such as | |
| these have required materials and organization of | The state of the s |
| labor. Timber frames and clay bricks houses, but | |
| monuments required stone blocks and large gangs of labors | s to them. Bricks and |
| stone blocks the basic building material of | most European and American |
| architecture until the modern era. | |
| had become the dominant structures in the ce | nter of most cities in the world |
| Exciting new architectural have made use of radica | l new materials and |
| visual styling. | |
| Churches, art galleries and performing arts halls | the architect with ar |
| opportunity to stretch creative powers. They have often h | pecome of particular |



cities, as the famous opera houses become a distinctive emblem of Sydney, Australia.

The ground area ______ buildings is often designed specially by ______ architects.

Parks, water fountains and sculpture gardens provide _____ and visually interesting areas within the city core.

Exercise 3: The following are some words from the video, describing different kinds of buildings. Choose 5 buildings that interest you most and explain your choices to your partner.

shelter cave hut castle palace government building monumental building ceremonial site public arena cathedral skyscraper art gallery performing art hall church tomb temple



Part 2 Reading in Depth

Architectural Words

brick: (砖) *n.* a rectangular block of hard material used for building walls and houses

concrete: (混凝土) n. a hard building material made by mixing together cement,

sand, small stones and water

square: (正方形) *n*. a flat shape with four sides of equal length and four angles of 90°

rectangle: (长方形) n. a flat shape with four 90° angles and four sides, with opposite

sides of equal length

symmetrical: (对称的) n. having parts that match each other, esp. in an attractive way

vertical: (垂直的) adj. standing at an angle of 90° to a horizontal surface or line

axis: (基准线) *n*. a line which divides a symmetrical shape into two equal halves

column: (柱子) n. a tall vertical stone post used as a support for a roof or for

decoration

arch: (拱门) *n*. a structure consisting of a curved top on two supports, which

holds the weight of something above it

vault: (穹顶) *n*. a ceiling or roof supported by several arches

dome: (穹顶建筑) *n*. a rounded roof on a building, or a building with such a roof

apse: (半圆形殿) *n*. the rounded or many-sided part of especially the east end of

a church

facade: (建筑物的正面) *n.* the front of a building, esp. a large or attractive building

Reading 1

A Brief Introduction to Architectural History up to Renaissance

- Architecture is the art of building. Sometimes people build small buildings like sheds or their own houses. Other times people build very large buildings. These are sometimes temples or churches or mosques for the gods, or tombs for important kings or heroes, or palaces for kings and queens, or public buildings like theaters or sports stadiums. The first houses were built around 7000 BC in West Asia, but the first big buildings were built much later, around 3000 BC. In West Asia the first big buildings were the Ziggurats, and in Africa, in Egypt they were the Pyramids.
- A little later on, about 1800 BC, both the Egyptians and the Babylonians began to build big royal palaces, richly decorated. Soon the people of Crete and Greece began to imitate these palaces for their own kings and queens. In Egypt, the Pharaohs also built big temples for their gods.
- Around 1000 BC a Dark Age kept people from building for a while, because they were too poor and worried, and when the Dark Age ended there were no more kings in Greece, and so no more palaces. The Greeks built a lot of temples for their gods at this time, especially the famous Parthenon. But in West Asia, the Assyrians, the Neo-Babylonians and the Persians all built palaces for their kings. Egypt was not rich enough anymore for big buildings.
- 4 Because Alexander the Great conquered Egypt and West Asia in 331 BC, Greek architecture spread all over his empire, and even beyond it into India. Theaters and gymnasia, as well as temples, were built wherever Alexander had fought.
- When the Romans conquered their own Empire, they also built Roman buildings all over it. The Romans brought some new ideas to architecture: they built in brick and concrete, and they used the arch, the barrel vault, and the dome. They built theaters and amphitheaters, temples, palaces, basilicas, bath buildings, apartment blocks, restaurants and houses all over, from England to Iraq. They used apses in the ends of their buildings. The conversion of the Empire to Christianity about 350-400 AD also inspired the Romans to build a lot of churches. It was also about this time that people in India began to build Hindu temples, many of them cut out of the living rock.
- 6 With the fall of Rome about 450 AD architecture also collapsed for a while, and only small churches were built in Europe. In the Islamic Empire, however, many beautiful mosques were built from Spain to India, and also many big palaces. Hindu temples also continued to be built.





- By the time of Charlemagne in 800 AD, big buildings were going up again in Europe, like Charlemagne's own palace at Aachen. Soon big Romanesque churches were built all over England and France and Italy.
- Around 1200 AD, people changed from the old Romanesque architecture style to a new Gothic style: first in Italy, with the churches at Florence and Pisa, then in France, with the cathedrals of Laon, of Paris, of Chartres, of Rouen, of Reims, of Amiens, and finally in England with Westminster Abbey, in Germany with Munster, Regensburg, Bremen, Freiburg, and Cologne and in Italy



with Milan. The Capetian kings of France built two castles in Paris: the Louvre and the Conciergerie, with the Sainte Chapelle, and another castle outside of Paris, Vincennes. In Germany, the Holy Roman Emperors built a castle at Heidelberg. After the Reconquista took over Spain from its Islamic rulers, a Gothic cathedral was built in Seville as well. The Gothic style lasted until the Renaissance ended the Middle Ages.

- During the Renaissance architects began to look back to the Romans and Greeks for inspiration when designing buildings. Much of Renaissance architecture style was taken from Ancient Rome and Greece and then altered to fit their current lifestyle. Renaissance architecture had some distinct features that were fairly common to major construction: many buildings were built as square or rectangle symmetrical shapes; the front or "facade" of the buildings were generally symmetrical around the vertical axis; they used Roman type columns; arches and domes were popular, which was again taken from Roman and Greek architecture; the ceilings of buildings were generally flat. Previously in the Middle Ages ceilings were often left open.
- Beginning in the 1300s, people in Italy and Germany branched out from churches and castles to also build big town halls for public meetings, like the town halls in Germany and the famous Old Palace in Florence, Italy.
- While people were building these castles and cathedrals and town halls in Europe, they were also building more mosques and palaces in the Islamic Empire at the same time.

(783 words)

New Words and Expressions

shed [ʃed] n. 小屋

church [tʃəːtʃ] n. 教堂

stadium ['steɪdɪəm] n. 运动场

imitate ['ɪmɪteɪt] vt. 模仿

decorated ['dekəreitid] adj. 装饰的

gymnasia [dʒɪm'neɪzɪəm] n. 健身房

temple ['templ] n. 神殿,庙宇

mosque [mɔsk] n. 清真寺

royal [ˈrɔɪəl] adj. 皇家的

richly ['rɪtʃlɪ] adv. 丰富地

conquer [ˈkɔŋkə] vt. 征服

brick[brik] n. 砖,砖块