



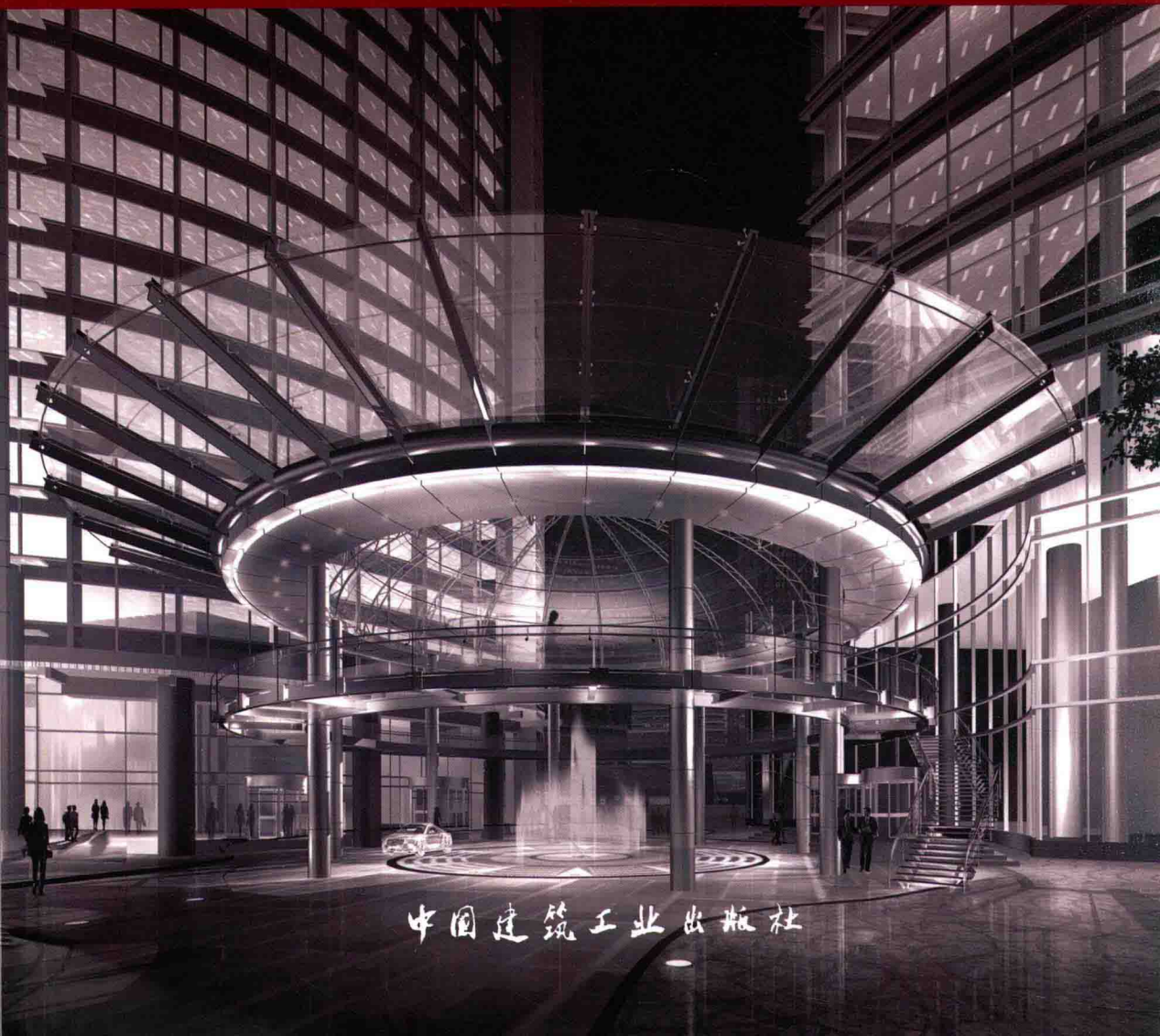
高等学校规划教材

GAODENG XUEXIAO GUIHUA JIAOCAI

建筑学专业英语

(第二版)

蒋山 应宜文 主编



中国建筑工业出版社

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对于建筑学专业的本科生及研究生,除了提高专业文献阅读能力外,还特别需要有效地运用英语获取专业知识和科技信息,了解建筑学领域最新发展动态,而本书正是一本融实用性和前瞻性于一体的教学用书。

本教材共分7章,内容包括建筑设计精读、建筑类招标投标书、施工图表解析、建筑历史与评论、建筑经济与管理、园林建筑设计以及专业文献阅读,并包含建筑学专业英语词汇表、图文并茂的建筑施工图等。

本书的写作目的是使学生对建筑学英语理论体系有一个总体的认识,旨在培养和提高学生们专业英语运用能力。

本书可作为高等院校建筑学、城市规划、园林景观等专业的专业英语教学用书,也可供其他建筑相关专业参考使用。

* * *

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第二版前言

当代建筑学在传承我国历史文脉与发扬地域文化特色的同时,国际交流日益频繁。编者深深体会到,在 21 世纪的国际招投标过程中,专业英语交流、采用标准英文施工图与设计说明是展示建筑设计师构思、方案、设计水平、参与国际竞争的桥梁。我国建筑及环境设计的专业人才不仅需要扎实的专业知识与理论基础,更需切实提高专业英语水平,拓展国际合作与交流。然而,专业英语水平很难在短时间里突击提高。从长远来看,需要从本科教学抓起,我们培养的大学本科毕业生应该具有熟练阅读英文施工图、设计图、英文工程项目说明书、英文招投标书以及英文专业文献的能力,以此来获取更多更广的专业知识与科技信息,这样才能适应时代发展的需求。

目前,《建筑学专业英语(第二版)》关键在于解决目前建筑学本科生及研究生专业知识结构完善而专业英语运用脱节现象的问题,为建筑类相关专业的本科生及研究生提供一本既能掌握建筑专业英语术语,又能培养和提高专业文献阅读能力,并介绍建筑学领域最新发展动态,融实用性和前瞻性于一体的教学用书。通过学习本教材,可开发创新思维,开拓专业视野,为日后从事相关的建筑管理工作和理论研究打下坚实的基础。

新版教材共有 7 章,包括建筑设计精读、建筑类招投标书、施工图表解析、建筑历史与评论、建筑经济与管理、园林建筑设计和专业文献阅读。在保留第一版教材特色与优势的基础上,对内容进行一些扩充与提升。其一,新增加“园林建筑设计”专题,结合中外经典园林建筑范文及实例,一方面可从中国园林建筑中真切领会到山水的优雅意境,另一方面可了解西方园林建筑设计理论,掌握西方园林建筑设计的基本特征、特殊的设计技巧与方法。其二,更新“建筑类招投标书”的范文,采用国外最新建筑业务正式招标书,使内容新颖、语言规范、要点明晰。其三,新版教材经过编者仔细校对,改进了第一版教材在编写过程中的“误漏欠妥”之处。本教材能够使读者对建筑学理论体系有一个系统全面的认识,是对学生专业课知识的最好补充。

教学安排提示:本教材适合于建筑学专业 2~3 年级学生使用,建议 32 课时或 48 课时教学。采用 32 课时的教学时,以第 1 章、第 2 章、第 5 章和第 6 章内容为重点;采用 48 课时的教学时,在掌握教材内容的基础上,教师可以加强学生专业英语运用能力,可选择教材第 6 章的范文让学生中英文互译,也可结合教材的精读范文,以“校园建筑一景”、“我最欣赏的城市建筑”等为主题,指导学生英文设计说明的写作训练,并进行课

堂讨论。

本教材的修订过程中，编者征求了在校师生、本学科教授专家以及建筑设计工程技术人员等各方面建议，使新版教材更具有专业性、实用性、时代性、新颖性。美国乔治亚大学 Lili Bruess 教授、美国格兰戴尔大学 Weyne Qian 教授、北京外国语大学全昀在教材编写过程中提供了宝贵的支持与帮助。本教材的编写得到了浙江工业大学重点教材建设项目的资助。在此，编者致以诚挚的谢忱！

本教材不足之处，期待广大读者批评指正。

第一版前言

作者编写《建筑学专业英语》的目的在于为建筑类相关专业的本科生及研究生提供一本既能使读者掌握建筑专业英语术语，又能培养和提高读者专业文献阅读能力，并了解建筑学领域最新发展动态，融实用性和前瞻性于一体的教学用书。通过使用本教材，读者不仅可以提高理解专业文献的综合能力，还可以开拓专业视野，为日后从事相关的建筑管理工作和理论研究打下坚实的基础。

专业英语是大学生必须掌握的实用工具。不少学生在学了十多年英语以后，仍不能有效地运用英语获取专业知识和科技信息，更不用说用英语进行专业交流了。根据这种情况，并结合大学英语教学现状，我们在《建筑学专业英语》的编写过程中力求改革创新，拒绝应试教学，摒弃从语法到语法、死记硬背的陈旧教学方法，强调大量实践，主张阅读准确性和阅读速度并重，兼顾英语表达能力的提高。

我们认为，大学高年级专业英语教学应以培养和提高英语运用能力为根本目的。我国大学生并不缺少语法知识，而是缺少实践。他们甚至很少读过专业方面的英语资料，没能掌握丰富的表达形式，缺乏正确的语感。我国学生语法基础普遍较好，但在阅读中往往过分依赖语法分析。他们不了解语法的作用应是内在的和深层的，而不是表面的。依赖语法分析不仅阅读速度上不去，而且即使看懂了句子，读完全文可能还是抓不住要点。这种现象相当普遍。实际上，学习专业英语课程并不是为了研究语言，而是要运用语言，因此应以感性认识和反复实践为主，语法知识学习为辅。基于这一认识，我们在课文注释中尽量避免使用语法术语，以期学生在阅读实践中提高阅读能力。只有这样，学生才能逐步做到顺序阅读而不用回头看，达到理解准确性和阅读速度的统一。

教材共有6章，包括建筑专业精读、国际建筑类招标、欧美建筑施工图表解析、建筑历史与评论、建筑经济与管理以及专业文献阅读。教材范文主要选自近几年国外出版的教材、著作和论文，内容新颖、信息丰富、知识覆盖面广，并附有大量的建筑学专业英语术语和专业表达，能够使读者对建筑学理论体系有一个系统、全面的认识，是对学生专业课知识最好的补充。

本教材的特色在于选用了美国建筑师学会推荐的最新文献以及欧美国家建筑业务实践招标书等正式文书，并展示具有代表性的欧美建筑施工图表。全书语言规范、结构清晰、难度适中，能够更好地提高学生阅读和理解专业英文资料的能力。本教材适用于建筑学二、三年级学生，建议采用

32 课时或 48 课时教学。采用 32 课时的教学时，以第 1 章、第 2 章、第 4 章和第 5 章内容为重点；采用 48 课时的教学时，在掌握教材内容的基础上，教师可以结合教材第 1 章的精读范文，指导学生观察身边的建筑物进行说明文写作练习。编者曾采用“校园一景”、“我最熟悉的城市建筑”等题目进行教学实践，取得了较好的教学效果；为加强学生翻译理解能力，可选择教材第 4 章建筑历史与评论的若干章节让学生笔译，并进行课堂讨论。

在本教材的编写过程中，我们征求了部分建筑学专业教授和建筑设计研究所的工程技术人员等的建议，使教材更具有专业性、实用性、时代性、新颖性。美国乔治亚大学 Lili Bruess 教授以及美国格兰戴尔学院 Weyne Qian 教授在教材编写过程中提供了宝贵的支持与帮助。教材的编写也得到了北京外国语大学全昀的大力协作。中国建筑工业出版社的朱首明主任和吕小勇编辑在本书的出版过程中也提出了许多中肯的意见。在此，编者向他们表示由衷的感谢！

由于编者水平所限，教材中若有误漏欠妥之处，敬请读者指正。

本教材的编写得到了浙江工业大学重点教材建设项目的资助。

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CHAPTER 1 Intensive Reading of Architecture

第 1 章 建筑设计精读

本章导读：介绍建筑学精读文章的学习步骤、学习重点和有效学习方法；选取 6 篇建筑学英语文献作为教学范文。原文内容新颖（美国建筑论文竞赛中获奖的原文，欧洲最新建筑学范文）、专业性强、涵盖专业知识面广，使学习者能够了解建筑行业国际最新发展状况；通过专业词汇和词组注释、建筑专业术语解析、范文要点注解、阅读理解问题全面分析，使学习者理解并掌握知识要点。

1.1 Melting of cultures in the new architecture

Part One: Original Text

Since the 1990s, China has obviously speeded up its steps to open the architectural field to the outside world. That is fully testified by its extensive adoption of the competition mechanism, introducing international bidding for some important constructions.^① As a result, visions of domestic architects have been expanded, their mentality updated, and a number of prominent masterworks created.

The successful bidding for quite a few major projects by foreign architects marks the beginning of China's integration into the international community in the architectural sector.

Just like the country's accession into the World Trade Organization, which originally provoked controversies among some Chinese people who worried about the fate of domestic enterprises, only a temporary sacrifice of domestic architectural sectors can create chances for their future success in ever-increasing international competitions.

We still remember the words signed out by a participating Chinese group of architects after the first round of review of the designing bidding for the National Center for the Performing Arts. "We admit our inferiority to foreign competitors," they said.

Paul Andreu, a renowned French architect, finally won the tender of the project. In its following layout improvements and construction, a lot of Chinese architects were involved. Such kinds of interactions and cooperation with foreign architects are undoubtedly helpful for our domestic counterparts.

The Water Cube, the National swimming center especially built for the Beijing Olympics, was also the product of cooperation between Chinese and foreign architects. But the designing inspiration of the marvelous building originally came from our Chinese architects and it won a prize in the 2004 **biennial architecture exhibition** held in Venice. This was a persuasive example that Chinese architects, once integrated into international environment, can also come up with world-class works.

Another example is the Tianjin-based 350 meter-high Sinosteel International Plaza. Chinese architect Ma Yansong overpowered competitors in the competitive international bidding for the building.

Architecture is a kind of art, which knows no national boundary. The successful tenders for Chinese projects by foreign architects in recent years are mostly the world's first-class ones. Just like artists, modern architects hate to imitate others' works. Creativity and uniqueness are the ultimate pursuit for world's top architects and duplication is regarded to be the work of commonplace craftsmen.

There is no doubt that the beauty of the modern arts, including architecture, is not the synonym for a new, unique or bizarre appearance, but modern aesthetics often contains

these elements.^②

The well-known Sydney Opera House is the paramount masterpiece among a lot of excellent post-modern architectures. Its new-type architectural style and inspiring shape have received encomiums from across the world. The 30-year-old architecture was listed by the United Nations as a human heritage, marking itself as the youngest human heritage among the world's architectures.^③

Over the past decade, hundreds of China's architectures have been erected with the designs of foreign architects. Among these high-rise constructions, some are worth praising. They include the towering Jinmou Mansion in Shanghai's Pudong New Area. The inspiration for the skyscraper comes from the shape of Chinese ancient pagodas.

Rem Koolhaas, chief designer of the China Central Television twin towers, like Jacques Herzog, designer of the Bird's Nest, **the National Stadium** as the venue of the Beijing Olympics track and field items, is a winner of the renowned Pritzker Architecture Prize. The successful connection of the twin towers' heavy cantilever steel-structure can be a new breakthrough in the history of human architecture.

The construction of the National Center for the Performing Arts once caused great controversies, which mainly involved its egg-shaped, round exterior.^④ Some critics thought this kind of shape is in disharmony with neighboring buildings.

However, it creates a contrasting visual effect with the surrounding historical architectures, such as the imposing Great Hall of the People, mysterious Zhongnanhai, which accommodates the headquarters of the Communist Party of China and the State Council, and the serene Rear Lake, Shichahai, and Beihai Lake, all historical spots yards away.

The Water Cube is one of the high points of the sprawling Beijing Olympics constructions. The square architecture was also built in an aesthetic, visual perspective. Lying in a lower profile with the more imposing and higher Bird's Nest, the Water Cube leaves more room to the more marvelous steel construction, thus achieving a kind of harmony between the two.^⑤

The Bird's Nest can be considered a symbol of the new architectures built in the capital. Its marvelous, complex steel structure has also created a wonder in architectural history. It will forever stand in Beijing like a resplendent jewel for people to visit and appreciate after the end of this summer Olympics.

The author is a researcher with the Chinese Academy of Social Sciences.

Part Two: Words and Phrases

testify

v.

证实, 声明, 表明

adoption	<i>n.</i>	采纳, 正式通过
mechanism	<i>n.</i>	机械, 结构
mentality	<i>n.</i>	智力
integration	<i>n.</i>	整合, 集成
controversy	<i>n.</i>	辩论
domestic	<i>adj.</i>	国内的
inferiority	<i>n.</i>	劣势, 自卑感
interaction	<i>n.</i>	交互作用, 交流
cooperation	<i>n.</i>	合作, 协力
inspiration	<i>n.</i>	灵感, 妙计, 好办法
boundary	<i>n.</i>	界限, 范围
creativity	<i>n.</i>	创造力, 创造
uniqueness	<i>n.</i>	独一无二, 独特性
duplication	<i>n.</i>	副本, 复制
synonym	<i>n.</i>	同义字, 同物异名
paramount	<i>adj.</i>	最重要的, 至上的
masterpiece	<i>n.</i>	杰作, 名著
encomium	<i>n.</i>	赞辞, 赞美, 称赞
pagoda	<i>n.</i>	宝塔
perspective	<i>adj.</i>	远景, 透视
profile	<i>n.</i>	侧面, 外观, 轮廓
construction	<i>n.</i>	建筑, 结构
resplendent	<i>adj.</i>	辉煌的, 灿烂的
jewel	<i>n.</i>	珠宝, 贵重物
appreciate	<i>v.</i>	赏识, 鉴赏

Part Three: Glossary

- | | |
|-------------------------------------|-------|
| 1. Biennial architecture exhibition | 建筑双年展 |
| 2. The National Stadium | 国家体育场 |
| 3. The Water Cube | 水立方 |

Part Four: Notes

1. That is fully testified by its extensive adoption of the competition mechanism, introducing international bidding for some important constructions. 此句可译为: 通过广泛采用竞争机制所充分证实, 为一些重要建筑物引入国际招标。

2. There is no doubt that the beauty of the modern arts, including architecture, is not the synonym for a new, unique or bizarre appearance, but modern aesthetics often contains these elements. 此句可译为：毫无疑问，现代艺术之美，包括建筑，并非是一个新颖、独特或奇怪的外观的代名词，但现代美学往往包含这些内容。
3. The 30-year-old architecture was listed by the United Nations as a human heritage, marking itself as the youngest human heritage among the world's architectures. 此句可译为：这座现存至今 30 年的建筑被联合国列为一项人类文化遗产，使之成为全世界建筑中最年轻的人类文化遗产。
4. The construction of the National Center for the Performing Arts once caused great controversies, which mainly involved its egg-shaped, round exterior. 此句可译为：国家大剧院的建设曾经引起巨大争议，主要与其蛋的造型和圆形外观有关。
5. Lying in a lower profile with the more imposing and higher Bird's Nest, the Water Cube leaves more room to the more marvelous steel construction, thus achieving a kind of harmony between the two. 此句可译为：横卧在一个地势较低的位置，旁边有壮观的鸟巢建筑，水立方到非凡的钢铁建筑之间展示出更大的空间，从而实现了一种两者之间和谐的关系。

Part Five: Comprehension Questions

1. What did the author tell us in the text?
2. When did China speed up its step to open the architectural field to the outside world?
3. Who did finally win the tender of the National Center for the Performing Arts project?
4. Which building did win a prize of biennial architecture exhibition held in Venice in the 2004?
5. Why did the author say architecture is a kind of art?
6. Please give some examples of contemporary Chinese architectures have been erected with the designs of foreign architects.
7. Why the Bird's Nest could be regarded as a symbol of the new architectures?
8. How many kinds of architectural materials used in the Water Cube?

1.2 The architecture of housing

Part One: Original Text

Any discussion about housing design must involve concepts of beauty and how beauty is evaluated. Because beauty is thought of as an elusive idea we are reluctant to acknowledge it. Some aspects of beauty and design can only be dealt with subjectively, however,

most are easily understood and can be reviewed objectively. ①

Beauty is not abstract, it is real. Beauty is not necessary in the eye of the beholder, it is largely objective and quantifiable. There are three criteria which Sir Henry Wotton paraphrased in the seventeenth century, from the first century BC writings of Vitruvius, that are still applicable today and are the basic measuring blocks of housing design. These criteria are:

Commodity,
Firmness,
Delight. ②

Commodity poses the question, is the building suitable for its purpose and does it look like what it is? We are talking about housing so ask yourself, does it look like a Canadian house and not like a Swiss **Chalet** or a Jacobean **Manor** or a California Cinderella **Bungalow**? Are the materials appropriate to the location and are they arranged so that they respect the existing surroundings? The honest use of building materials does not mean building houses only with wood and stone; glass and aluminum may be more appropriate, indeed, may be more natural in some circumstances. Suitability for purpose also affects the floor plan and this is particularly critical in small house. Does the circulation work well? Is the house zoned to provide both living and quiet areas? Is there adequate space for cooking, cleaning, and all the activities connected with bringing up a family? ③

Firmness deals with the adequacy of the construction. Are good materials used and are they used technically correctly and with good workmanship? Do the walls and the roof give suitable protection from the weather? Is there no undue maintenance? A building that is falling to bit because of its poor construction cannot be an object of beauty.

Delight is a wonderfully chosen word; it means to give pleasure to the beholder. Again, we are not talking about abstract concepts but about quantifiable realities. Delight has to do with scale, proportion, harmony, rhythm, and unity-with what the building, in its setting, looks like. ④

Scale concerns the size relationship between people and buildings or places. When we look at a building we want clues about how to interpret its size. Our eyes seek out things we know. We are familiar with the size of a brick and the dimensions of an ordinary door and we are comfortable when the sizes turn out to be what we anticipate. Another aspect of scale involves our feeling of importance as individuals. If we appear large in relation to our surroundings we feel that we can cope with the elements of our environment.

Proportion is the comparable relationship between the sizes of number of things, or between the sizes of parts of one thing. A window has a size relationship of width to height. A room has a size relationship of width to length to height. The side of a house is related in size to the sizes of the windows or doors which it may contain. At a large scale, proportion deals with the size of an open space, such as a play yard, compared with the height of the buildings around it. ⑤ Some proportions are more pleasing to the eye than others. And there have been many attempts to formulate rules that will give satisfying size re-