

English for Architecture and Urban Planning

普通高等教育建筑与环境艺术类
“十二五”规划教材

建筑学与城市规划 专业英语

姜乖妮 李春聚◎主编



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内 容 提 要

本书分为城市规划与建筑学两大部分,每部分各8个单元,共16个单元,每个单元围绕同一主题设置一篇课文(Text),两篇阅读材料(Reading Paragraphs A & B)。全书48篇文章均选自国外著作、刊物和网站等,在内容选择上注重专业理论与相关实践的结合,既有专业经典理论,又有学界新理念、新动态。主要内容包括:城市的演变、城市规划历史与视角、城市规划理论、城市规划等级体系、城市规划实践、城市空间、城市设计、公众利益与公众参与、建筑学介绍、建筑文脉、建筑设计过程、建筑形式、建筑结构与材料、建筑经济与管理、著名建筑师及其作品、现代建筑思潮。

本书可供从事城市规划与建筑学专业英语教学的教师、在校大学生以及相关专业人员使用。

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前 言

本书编写的目的在于使城市规划和建筑学专业的学生在具备了一定的语法和书写能力的基础上，能够利用英语这个工具，通过阅读去获取国外与本专业相关的新知识、新理论，了解学界的前沿动态。通过使用本书，读者可以提高专业文献的阅读能力，学习相关专业理论知识，拓宽专业视野，为日后的工作和学习打下坚实的语言基础。

本书分为城市规划与建筑学两大部分，每部分各 8 个单元，共 16 个单元，每个单元围绕同一主题设置一篇课文 (Text)，两篇阅读材料 (Reading Paragraphs A & B)，文章选材广泛，涵盖了两个专业所涉及的重要内容。在编写中突出了以下特点：

(1) 本书所有文章均选自国外著作、刊物和网站等，在内容选择上注重了专业理论与相关实践的结合，既有专业经典理论，又有学界新的发展理念；

(2) 所节选的每篇文章都标明了出处，为学生进一步阅读提供了信息引导；

(3) 全书共有 48 篇文章，为学生提供了充足的专业信息量；

(4) 难度适中，适用性强，每个单元的课文部分提供了参考译文，并配有相应的练习题，阅读材料部分提供了中文导读，有助于学生熟悉该单元的主题内容，掌握相关的专业词汇和知识；

(5) 内容安排上，充分考虑了专业外语教学的特点和需要，每个单元的课文部分主要供课堂教学使用，阅读材料部分可根据学时安排进行选择，灵活性强；

(6) 本书在结构安排上既充分考虑了专业外语课堂教学的内容需求和学时的有限性，又考虑了每一单元主题内容的完整性与丰富性以及课外自学的自主性与灵活性。每一单元的课文 (Text) 部分供课内教学使用，主要包括词汇、专业词组、注释和练习题，并附有参考译文。阅读材料 (Reading Paragraphs A & B) 部分包括词汇和中文导读，作为课外补充阅读可进一步加深学生对相关主题内容的了解，拓宽视野，提高自学能力。

本书由河北建筑工程学院姜乖妮、李春聚任主编，河北建筑工程学院李孟波、河北科技师范学院金莉、中南大学建筑与艺术学院贺亦周任副主编。所有英文课文和阅读材料的收集与编写由李春聚完成；课文翻译、阅读材料导读及课后练习的编写分工如下：第 1、2、5、6、7、8 单元由姜乖妮完成；第 9、10、11、12、13 单元由李孟波完成；第 3、4、14 单元由金莉完成；第 15、16 单元由贺亦周完成。在编写过程中，编者查阅、参考了大量的文献资料，在此谨向这些文献的作者表示衷心的感谢。

本书可供从事城市规划与建筑学专业英语教学的教师、在校大学生以及相关专业人员使用。

本书的编写在内容组织上作了一些新的尝试，由于受时间和编者水平的限制，书中疏漏与不足之处在所难免，恳请读者指正。

编者

2011年10月

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Part I Text

What Is a City?^①

Most of our housing and city planning has been handicapped because those who have undertaken the work have had no clear notion of the social functions of the city. They sought to derive these functions from a cursory survey of the activities and interests of the contemporary urban scene^[1]. And they did not, apparently, suspect that there might be gross deficiencies, misdirected efforts, mistaken expenditures here that would not be set straight by merely building sanitary tenements or straightening out and widening irregular streets.

The city as a purely physical fact has been subject to numerous investigations. But what is the city as a social institution? The earlier answers to these questions, in Aristotle, Plato, and the Utopian writers from Sir Thomas More to Robert Owen, have been on the whole more satisfactory than those of the more systematic sociologists.

It is with no hope of adding much to the essential insight of this description of the urban process that I would like sum up the sociological concept of the city in the following terms:

The city is a related collection of primary groups and purposive associations: the first, like family and neighborhood, are common to all communities, while the second are especially characteristic of city life. These varied groups support themselves through economic organizations that are likewise of a more or less corporate, or at least publicly regulated, character; and they are all housed in permanent structures, within a relatively limited area. The essential physical means of a city's existence are the fixed site, the durable shelter, the permanent facilities for assembly, interchange, and storage; the essential social means are the social division of labor, which serves not merely the economic life but the cultural processes. The city in its complete sense, then, is a geographic plexus, an economic organization, an institutional process, a theater of social action, and an aesthetic symbol of collective unity^[2]. The city fosters art and is art; the city creates the theater and is the theater. It is in the city, the city as theater, that man's more purposive activities are focused, and work out, through conflicting and cooperating personalities, events, groups, into more significant culminations.

Without the social drama that comes into existence through the focusing and intensification of group activity there is not a single function performed in the city that could not be performed—and has not in fact been performed—in the open country^[3]. The physical organization of the city may deflate this drama or make it frustrate; or it may, through the deliberate efforts of art, politics, and education, make the drama more richly significant, as a stage-set, well-designed, intensifies and underlines the gestures of the actors and the action of the play. It is not for nothing that

① This text is from: Lewis Mumford. *Architectural Record*. 1937.

men have dwelt so often on the beauty or the ugliness of cities: these attributes qualify men's social activities. And if there is a deep reluctance on the part of the true city dweller to leave his cramped quarters for the physically more benign environment of a suburb—even a model garden suburb—his instincts are usually justified: in its various and many-sided life, in its very opportunities for social disharmony and conflict, the city creates drama, the suburb lacks it.

One may describe the city, in its social aspect, as a special framework directed toward the creation of differentiated opportunities for a common life and a significant collective drama. As indirect forms of association, with the aid of signs and symbols and specialized organizations, supplement direct face-to-face intercourse, the personalities of the citizens themselves become many-faceted: they reflect their specialized interests, their more intensively trained aptitudes, their finer discriminations and selections: the personality no longer presents a more or less unbroken traditional face to reality as a whole. Here lies the possibility of personal disintegration; and here lies the need for reintegration through wider participation in a concrete and visible collective whole. What men cannot imagine as a vague formless society, they can live through and experience as citizens in a city. Their unified plans and buildings become a symbol of their social relatedness; and when the physical environment itself becomes disordered and incoherent, the social functions that it harbors become more difficult to express.

One further conclusion follows from this concept of the city: social facts are primary, and the physical organization of a city, its industries and its markets, its lines of communication and traffic, must be subservient to its social needs. Whereas in the development of the city during the last century we expanded the physical plant recklessly and treated the essential social nucleus, the organs of government and education and social service, as mere afterthought, today we must treat the social nucleus as the essential element in every valid city plan: the spotting and inter-relationship of schools, libraries, theaters, community centers is the first task in defining the urban neighborhood and laying down the outlines of an integrated city.

New Words

cursory /'kɜ:səri/ <i>adj.</i>	匆匆忙忙的, 草率的, 粗略的
sanitary /'sænitəri/ <i>adj.</i>	卫生的, 清洁的, 公共卫生的
utopian /ju:'təupiən/ <i>adj.</i>	乌托邦式的, 梦想的
purposive /'pə:pəsiv/ <i>adj.</i>	有目的的, 故意的
plexus /'pleksəs/ <i>n.</i>	丛
culmination /,kʌlmi'neiʃən/ <i>n.</i>	顶点, 最高潮
deflate /di'fleit/ <i>v.</i>	放气, 紧缩(通货), 降低(重要性)
benign /bi'nain/ <i>adj.</i>	仁慈的, 温和的, 良性的
intercourse /'intə:kɔ:s/ <i>n.</i>	交往, 交流, 中断期间
aptitude /'æptitju:d/ <i>n.</i>	资质, 才能, 自然倾向
discrimination /di,skrimi'neiʃən/ <i>n.</i>	差别, 辨别力, 歧视
disintegration /dis,inti'greiʃən/ <i>n.</i>	碎裂, 蜕变, 瓦解, 崩溃, 衰变
incoherent /,inkəu'hiərənt/ <i>adj.</i>	不连贯的, 无伦次的
subservient /səb'sə:viənt/ <i>adj.</i>	有帮助的, 奉承的, 有用的
recklessly /'rekli:li/ <i>adv.</i>	不在乎地, 不顾一切地, 鲁莽地

Phrases and Expressions

social function	社会功能
irregular street	不规则的街道
social institution	社会制度
economic organization	经济组织
permanent structure	永久性建筑物, 永久性结构
social division of labor	社会分工
come into existence	出现, 存在, 产生, 形成, 成立
economic life	经济生活, 经济寿命, 经济年限
garden suburb	园林(化)郊区

Notes

[1] They sought to derive these functions from a cursory survey of the activities and interests of the contemporary urban scene.

【译文】设计者们只是通过做一些非常简单的调查, 比如考察一些同时代其他城市的活动及其影响力, 就想当然地认为这些就是城市功能。

【分析】they 指前句所提的“those who have undertaken the work”, 即设计者们; derive ... from ... , 意为“引申出, 推知, 取得, 得到”。

[2] The city in its complete sense, then, is a geographic plexus, an economic organization, an institutional process, a theater of social action, and an aesthetic symbol of collective unity.

【译文】整体而言, 城市是一个涵盖了地理丛、经济组织、制度进程、社会活动的剧场以及艺术象征等各项功能的集合体。

【分析】in its complete sense 介词短语后置修饰 the city, 谓语是 is, 其他为并列的宾语。

[3] Without the social drama that comes into existence through the focusing and intensification of group activity there is not a single function performed in the city that could not be performed—and has not in fact been performed—in the open country.

【译文】社会戏剧的出现需要借助于各种集体活动的汇集和加强。如果没有社会戏剧的存在, 即使是最单一的功能都无法在城市中得到实现。事实上, 即便是在一个开放的国度中, 也面临着同样的问题。

【分析】句子的主干为 Without the social drama there is not a single function performed in the city, 第一个 that 从句修饰 the social drama, 第二个 that 从句修饰 a single function。

Exercises

Exercise 1 Answer the following questions according to the text.

1. Which function of the city is the author mainly analyzed in the article?
2. Why most of our housing and city planning has been handicapped?
3. What is the essential social means of a city's existence?
4. Tell the relationship between the physical environment and the social relatedness of a city.

Exercise 2 Fill in the blanks according to the text.

Most of our housing and city planning has been ____ because those who have ____ the work have had no clear

notion of the ____ functions of the city. They sought to derive these functions from a ____ survey of the activities and interests of the ____ urban scene. And they did not, apparently, suspect that there might be gross ____, ____, efforts, mistaken expenditures here that would not be set ____ by merely building ____ tenements or straightening out and ____ irregular streets.

Exercise 3 Translate the following phrases into Chinese or English.

1. social function _____
2. economic organization _____
3. social drama _____
4. 城市功能 _____
5. 住宅和城市规划 _____
6. 社会劳动分工 _____

Homework

1. Make sentences with the phrases below.

- a) ... be subject to ...
- b) ... sum up ...
- c) ... be subservient to ...

2. Translate the sentences into Chinese or English.

a) Most of our housing and city planning has been handicapped because those who have undertaken the work have had no clear notion of the social functions of the city.

b) The city is a related collection of primary groups and purposive associations: the first, like family and neighborhood, are common to all communities, while the second are especially characteristic of city life.

c) The city fosters art and is art; the city creates the theater, that man's more purposive activities are focused, and work out, through conflicting and cooperating personalities, events, groups, into more significant culminations.

d) 城市存在的本质社会意义在于社会劳动分工,这不仅仅是经济生活,更是文化进程。

e) 社会现实是第一位的,而城市的各种物质组织,包括产业、市场、通信与交通业,都必须服从于社会需求。

f) 在确定城市街道和城市整体轮廓时,首要的任务便是确定学校、图书馆、剧院、社区中心的位置及其相互联系。

参考译文

城市是什么?

我们的住房和城市规划多数都是不完善的,因为那些承担规划工作的设计者们,对城市应负担哪些社会功能缺乏明确的概念。设计者们只是通过做一些非常简单的调查,比如考察一些同时代其他城市的活动及其影响力,就想当然地认为这些就是城市功能。显然,他们从不怀疑自己的做法可能存在着许多缺漏之处,付出的努力完全可能将他们引向误区,甚至导致全局性的错误。因为,社会功能不是仅仅通过建造卫生的廉租房,或者是延展、拓宽不规则的街道,就能直接解决的。

作为一个纯粹的物质存在,城市一直是被调查的对象;但是作为一个社会组织,城市又是什么呢?整体而言,早期对城市的理解各有不同,亚里士多德、柏拉图以及《乌托邦》的作者托马斯·莫尔和罗伯特·欧文,他们对城市的回答远比那些系统性很强的社会学家的回答更令人满意。

我并不想再强调或者描述城市的发展进程，我只想用术语来概括社会学意义上的“城市”。

城市是原始集体与具有特定目的的团体的合成。首先，在所有社区中，家庭和邻居是相当普遍的。第二点也是城市生活的特征，不同的团体通过各种经济组织得以维持，这些经济组织的性质大多是公共的，或者至少是由公共管理的；而且在限定区域中，这些团体的结构是固定不变的。

城市存在的本质物理意义在于为聚集、内部交换和储备活动提供固定场所、结实耐用的房屋以及永久性设施；城市存在的本质社会意义在于社会劳动分工，这不仅仅是经济生活，更是文化进程。整体而言，城市是一个涵盖了地理丛、经济组织、制度进程、社会活动的剧场以及艺术象征等各项功能的集合体。城市不仅培育出了艺术，本身也是艺术；不仅创造了剧院，本身就是剧院。正是在城市中，在城市剧场中，人的各种活动得到关注，得以完成，人、事、团体通过不断地冲突与合作，达到更高的契合点。

社会戏剧的出现需要借助于各种集体活动的汇集和加强。如果没有社会戏剧的存在，即使是最单一的功能都无法在城市中得到实现。事实上，即便是在一个开放的国度中，也面临着同样的问题。城市机构总会试图降低城市戏剧的重要性，甚至阻挠其发展；否则在艺术、政治以及教育的推动下，精心设计的舞台会突出演员们的表演，强化演出的效果，戏剧也将会更加富有意义。显然，人们在城市中都有着各自的目的，但是城市的属性却限制了人们的社会活动。一位市民在城市中的住处可能是非常狭小的，但即使如此，如果要他离开城市到郊区去，即便郊区的生活环境更舒适些，甚至是环境良好的园林化郊区，他也会非常不情愿、犹豫再三。因为他的直觉会立刻作出判断：城市生活是丰富多样的，城市生活在社会的分歧和冲突中总是充满着机遇，城市创造了戏剧；而这些正是乡村生活所缺乏的。

从社会化的角度，我们可以将城市视为一种特殊的结构。不论是普通的个体，还是那些杰出的团体，都能在城市中获得发展的机会。在各种标识符号和专业组织的辅助下，以社团作为间接形式，城市为人们提供了更多面对面直接交流的机会，城市人的个性也就更具有多面性：显示出更专业化的兴趣爱好，更精深的受训态度，并且具有更杰出的辨别力和更广泛的选择力：整体而言，人们在面对现实时不再表现出顽固的传统性。个体的崩溃也就顺理成章了，于是个体就会产生通过更广泛地参与社会活动来融入其中的需求。但是，人们无法想象，作为市民生活在一个模糊的、不定型的社会。人们将各种统一的规划和建筑物视为他们社会关联性的标志，一旦这些外在的环境变得混乱、不连贯，那么它们所包含的社会功能也就很难被表达清楚了。

从城市概念出发，可以引申出意义更深远的结论：社会现实是第一位的，而城市的各种物质组织，包括产业、市场、通信与交通业，都必须服从于社会需求。然而，在近一个世纪的城市发展中，我们肆意扩建工厂，却将社会核心、政府机构、教育和社会服务这些基础工程仅仅作作为后续项目。如今，我们应将社会核心作为每个有效城市规划的基本要素：在确定城市街道和城市整体轮廓时，首要的任务便是确定学校、图书馆、剧院、社区中心的位置及其相互联系。

Part II Reading Paragraphs

Reading Paragraph A The Urban Revolution^①

【导读】“城市”的概念很难界定。本文的目的在于把城市放在历史甚或史前史的地位上，把城市当成在社会进化过程中开创了新经济时代的“革命”的结果和标志。上一世纪的社会学家和人种学家把现存的

^① This text is from: V.Gorgon Childe. *The Urban Revolution*, *The City Reader* (2nd ed.). Routledge T. Legates, Frederic Stout, London and New York, 2008: 24-30.

前工业社会划分为三个进化阶段，并分别称之为“蒙昧”、“野蛮”和“文明”。从语源学上看，文明一词与城市相关，很可能城市生活就开始于文明时代。十个以考古学资料演绎出来的抽象标准，可以把最早的城市与过去的或当代的村庄区别开来。

The concept of “city” is notoriously hard to define. The aim of the present essay is to present the city historically—or rather prehistorically—as the resultant and symbol of a “revolution” that initiated a new economic stage in the evolution of society. The word “revolution” must not of course be taken as denoting a sudden violent catastrophe; it is here used for the culmination of a progressive change in the economic structure and social organization of communities that caused, or was accompanied by, a dramatic increase in the population affected—an increase that would appear as an obvious bend in the population graph were vital statistics available.

Sociologists and ethnographers last century classified existing pre-industrial societies in a hierarchy of three evolutionary stages, denominated respectively “savagery”, “barbarism” and “civilization”. Savages live exclusively on wild food obtained by collecting, hunting or fishing. Barbarians on the contrary at least supplement these natural resources by cultivating edible plants and—in the Old World north of the Tropics—also by breeding animals for food^[1].

Throughout the Pleistocene Period—the Palaeolithic Age of archaeologists—all known human societies were savage in the foregoing sense, and a few savage tribes have survived in out of the way parts to the present day. In the archaeological record barbarism began less than ten thousand years ago with the Neolithic Age of archaeologists. It thus represents a later, as well as a higher stage, than savagery. Civilization can not be defined in quite such simple terms. Etymologically the word is connected with “city”, and sure enough life in cities begins with this stage. But “city” is itself ambiguous so archaeologists like to use “writing” as a criterion of civilization; it should be easily recognizable and proves to be a reliable index to more profound characters. Note, however, that, because a people is said to be civilized or literate, it does not follow that they all lived in cities^[2].

We have seen that a revolution as here defined should be reflected in the population statistics. In the case of the Urban Revolution the increase was mainly accounted for by the multiplication of the numbers of persons living together, i.e., in a single built-up area. The first cities represented settlement units of hitherto unprecedented size. Of course it was not just their size that constituted their distinctive character. We shall find that by modern standards they appeared ridiculously small and we might meet agglomerations of population today to which the name city would have to be refused. Yet a certain size of settlement and density of population is an essential feature of civilization.

Now the density of population is determined by the food supply which in turn is limited by natural resources, the techniques for their exploitation and the means of transport and food-preservation available^[3]. The last factors have proved to be variables in the course of human history, and the technique of obtaining food has already been used to distinguish the consecutive stages termed savagery and barbarism. Under the gathering economy of savagery population was always exceedingly sparse.

...

The Neolithic Revolution certainly allowed an expansion of population and enormously increased the carrying capacity of suitable land ... It had other consequences besides increasing the population, and their exploitation might in the end help to provide for the surplus increase. The new economy allowed, and indeed required, the farmer to produce every year more food than was needed to keep him and his family alive. In other words it made possible the regular production of a social surplus. Owing to the low efficiency of Neolithic technique, the surplus produced was insignificant at first, but it could be increased till it demanded a reorganization of society.

...

About 5,000 years ago irrigation cultivation (combined with stockbreeding and fishing) in the valleys of Nile, the Tigris—Euphrates and the Indus had begun to yield a social surplus, large enough to support a number of resident specialists who were themselves released from food-production. Water-transport, supplemented in Mesopotamia and the Indus valley by wheeled vehicles and even in Egypt by pack animals, made it easy to gather food stuffs at a few centers. At the same time dependence on river waters for the irrigation of the crops restricted the cultivable areas while the necessity of canalizing the waters and protecting habitations against annual floods encouraged the aggregation of population. Thus arose the first cities—units of settlement ten times as great as any known Neolithic village. It can be argued that all cities in the old world are offshoots of those of Egypt, Mesopotamia and the Indus basin. So the latter need not be taken into account if a minimum definition of civilization is to be inferred from a comparison of its independent manifestations.

...

Nevertheless, ten rather abstract criteria, all deducible from archaeological data, serve to distinguish even the earliest cities from any older or contemporary village.

(1) In point of size the first cities must have been more extensive and more densely populated than any previous settlements, although considerably smaller than many villages today.

(2) In composition and function the urban population already differed from that of any village.

(3) Each primary producer paid over the tiny surplus he could wring from the soil with his still very limited technical equipment as tithe or tax to an imaginary deity or a divine king who thus concentrated the surplus.

(4) Truly monumental public buildings not only distinguish each known city from any village but also symbolize the concentration of the social surplus.

(5) All those not engaged in food-production were of course supported in the first instance by the surplus accumulated in temple or royal granaries and were thus dependent on temple or court. But naturally priests, civil and military leaders and officials absorbed a major share of the concentrated surplus and thus formed a “ruling class”.

(6) They were in fact compelled to invent systems of recording and exact, but practically useful, sciences.

(7) The invention of writing—or shall we say the inventions of scripts—enabled the leisured clerks to proceed to the elaboration of exact and predictive sciences—arithmetic, geometry and astronomy.

(8) Other specialists, supported by the concentrated social surplus, gave a new direction to artistic expression.

(9) A further part of the concentrated social surplus was used to pay for the importation of raw materials, needed for industry or cult and not available locally.

(10) So in the city, specialist craftsmen were both provided with raw materials needed for the employment of their skill and also guaranteed security in a State organization based now on residence rather than kinship.

...

These ten traits exhaust the factors common to the oldest cities that archaeology, at best helped out with fragmentary and often ambiguous written sources, can detect.

...

Words and Expressions

notoriously /nəu'tɔ:riəsli/ *adv.*

臭名昭著地，众所周知地

initiate /i'niʃieit/ *v.*

开始；传授；发动