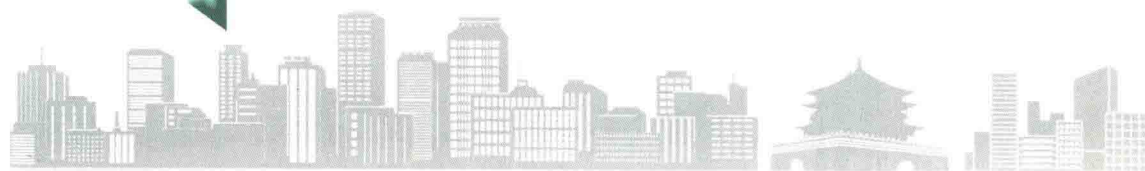


校土木建筑类“十三五”应用型规划教材



建筑学专业英语

陶燕 金樾◎主编

HEUP 哈尔滨工程大学出版社

普通高等学校土木建筑类“十三五”应用型规划教材

建筑学专业英语

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内容简介

《建筑学专业英语》是为了适应建筑学专业英语教学需要而编写的一本教材。全书围绕3大主题：建筑理论篇、建筑设计篇和建筑技术篇，共编写了14个单元：建筑与建筑师、建筑美学、古典建筑、现代建筑、建筑设计、住宅设计、办公建筑设计、博物馆设计、高层建筑设计、建筑设计图纸、绿色建筑、建筑信息技术、建筑实验、建筑技术与艺术。每个单元由主课文 Text A、课后练习、世界知名建筑师简介以及课后阅读课文 Text B 组成。

本教材结合实际，内容翔实，可供高等院校建筑学专业学生使用，也可供建筑行业的技术人员提高专业英语能力使用。

图书在版编目(CIP)数据

建筑学专业英语 / 陶燕, 金樾主编. — 哈尔滨:
哈尔滨工程大学出版社, 2017.7

ISBN 978-7-5661-1558-4

I. ①建… II. ①陶… ②金… III. ①建筑学—英语
—高等学校—教材 IV. ①TU

中国版本图书馆CIP数据核字(2017)第151237号

出版发行 哈尔滨工程大学出版社
地 址 哈尔滨市南岗区东大直街124号
邮 编 150001
发行电话 0451-82519328
传 真 0451-82519699
经 销 新华书店
印 刷 北京紫瑞利印刷有限公司
开 本 850mm×1168mm 1/16
印 张 9.5
字 数 274千字
版 次 2017年7月第1版
印 次 2017年7月第1次印刷
定 价 29.00元

<http://www.hrbeupress.com>

E-mail: heupress@hrbeu.edu.cn

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随着建筑产业规模的不断发展,建筑行业已成为国民经济的支柱产业。《中华人民共和国国民经济和社会发展第十三个五年规划纲要》提出“建设现代高效的城际城市交通”“加快城市群建设发展”“加快新型城市建设”“构建全方位开放新格局”等方针,既明确了建筑业未来的发展目标,也对建筑业的发展提出了更高的要求。

与此同时,“一带一路”战略提出的基础设施建设也给建筑业带来了机遇和挑战,新型城镇化进程中涌现出的建筑从业人员、建筑类新型服务人员的发展,进一步扩展了建筑行业教育的发展空间。在这种背景下,建筑产业现代化和信息化都需要培养大量的新型复合型人才,要求建筑业不断优化人才队伍结构,加强人才队伍建设。为了更好地贯彻落实《国家中长期教育改革和发展规划纲要(2010—2020年)》及建筑业发展规划,进一步深化高等教育教学改革,提高土木与建筑专业人才培养质量,满足建筑业对人才的需求,我们在充分调研的基础上,联合高校及企业,共同策划出版了普通高等学校土木建筑类“十三五”应用型规划教材。

本系列教材的编写原则及特点为:

1. 充分体现土木与建筑专业的特色,结合建筑业发展趋势,融入“绿色建筑、节能建筑、科技创新、可持续发展”等行业理念,紧扣土木与建筑专业教育教学改革精神,培养高素质、高质量的专门人才和拔尖人才。
2. 以适应社会实际需要为宗旨,注重理论与实践结合,力求教材内容实用,重点突出,深入浅出;围绕高等教育的培养目标和教学要求,注重学生基本技能的培养。
3. 与建筑业相关执业资格考试紧密结合,与建筑业最新的标准、规范一致,突出应用型特点,围绕工程生产实际,紧扣当前行业需求,更好地为人才培养服务。
4. 理论知识体系完整,引用大量实例,根据不同课程需要设置学习目标、小结、思考题等,同时穿插“知识链接”“课堂讨论”“小提示”等栏目,激发学生的学习兴趣,增强趣味性。

本系列教材是为推动土木建筑类教材建设,体现教学改革成果及行业新理念,融合时代背景下行业发展新趋势的一种探索和尝试。希望本系列教材的出版,能促进土木与建筑专业教育的发展,为建筑业人才培养做出贡献。

近年来,随着中国社会经济的高速发展,社会对建筑学专业人才的需求与日俱增。建筑专业人员除了应拥有扎实的专业知识之外,还应具备良好的专业英语水平。编者花费了大量时间和精力,甄选出适合大学生现有英语水平的建筑专业英语素材,编写了这本旨在开拓学生视野和提高学生专业英语应用能力的教材。通过本教材的使用,学生能够掌握以下知识和技能:

(1) 专业英语常用的阅读技巧。基本能读懂本专业及相关专业的英文资料,会查阅英文资料。

(2) 建筑学专业英语中常用的专业词汇、术语及常用表达。

(3) 科技英语常用的语法和句式,如被动语态、定语从句、名词从句、状语从句以及公式和数词的表达等。

(4) 科技英语常用的翻译技巧。

本教材有如下特点:

(1) 题材系统全面。本教材围绕建筑理论篇、建筑设计篇和建筑技术篇3大主题,共编写了下列14个单元:建筑与建筑师、建筑美学、古典建筑、现代建筑、建筑设计、住宅设计、办公建筑设计、博物馆设计、高层建筑设计、建筑设计图纸、绿色建筑、建筑信息技术、建筑实验、建筑技术与艺术。

(2) 难度层层递进。每个单元由主课文Text A、课后练习、世界知名建筑师简介和课后阅读课文Text B组成,形成难易不同的阅读层次。课文Text A 练习由问答题、英译汉、汉译英和选词题四部分组成,融语言训练与专业知识为一体。世界知名建筑师简介专题有助于学生了解世界不同的建筑流派及特色。本教材还选用了常用建筑专业词汇中英文对照表和历届普利兹克奖获奖者名单,供学生阅读及翻译专业文献时查阅使用。为帮助学生理解课文难句和提高专业翻译技巧,本教材还提供Text A和世界知名建筑师简介的中文参考译文,以及特别为课后练习题编写的答案解析,学生可通过扫描教材中的二维码参考学习。

本书由桂林理工大学陶燕、金樾担任主编,南华大学熊国凯,安徽工业大学周天旭担任副主编,齐齐哈尔工程学院李安琪,桂林理工大学博文管理学院白鸽、张莹参编。本书由陶燕、金樾统稿,审定。

编者对本教材引用的参考文献的原作者和出版单位表示衷心的感谢!由于编者的知识水平有限,本书还有不尽合理的地方,希望广大同人给予批评指正!

编者



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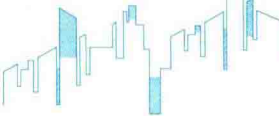
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Unit 1 Architecture and Architect

Text A Understanding Architecture

Architecture is a general term to describe buildings and other physical structures. Architectural works, in the material form of buildings, are often perceived as cultural symbols and as works of art.

Understanding architecture does not require specialized knowledge or skill but rather begins in the everyday experiences of inhabitation. Our experience is both the most important and the most appropriate means of evaluating architecture. Architecture has meaning, and matters to us only when it is experienced, when all our senses are simultaneously engaged in its inhabitation, and when it provides the settings in which the acts and rituals of daily life take place. Architecture that endures in human history and in the memory of its occupants is often inspired by human experience. Architecture that engages our senses and shapes our experience, draws us near, rewards our repeated encounter only reveals its full character incrementally over time.

The Finnish architect Alvar Aalto stated, “It is not what a building looks like on its opening day, but what it is like thirty years later that matters.” On the other hand, buildings that engage only a single sense in isolation—today typically vision—are not experienced in the same profound and moving manner, but rather become a spectacle whose novelty is exhausted in an initial visit, or on first viewing a photograph. We live in a time dominated by images, a time when what a building “looks like” is often all that matters in our evaluation of architecture. We feel we “know” architecture and the places it makes, both old and new, through the photographs. We see in magazines, books and online, without ever inhabiting their spaces. The Viennese philosopher Ludwig Wittgenstein stated, “Ethics and aesthetics are one,” and this dominant focus on architecture’s exterior appearance over its interior spatial experience as a primary means of evaluation reveals an inversion of the ethical ideal that internal values are more important than external appearances. Today, it has become necessary to restate what would appear to be obvious: the experience of inhabitation is the only valid means of evaluating a work of architecture.

Applicability of architecture experience does not have to do with what a building looks like, but rather with how it engages in the landscape, climate and the light of its place; how its spaces are ordered to appropriately house the activities that take place within them, how it is built; how it is structured and what materials it is made of; that is to say, how all these affect what the building is like to be in the experience of those who inhabit it. It is important to recognize that architecture is not generally the object of our focused attention. But rather as the American architect Frank Lloyd Wright noted, architecture is the “background or framework” for daily life, its spaces and forms determined by the “comfort and use” of its inhabitants. Yet this seemingly humble definition should not lead us to underestimate the power of architecture.

Through giving us a place in the world, architecture is fundamental to the establishment of our sense of existence and identity. As the American philosopher John Dewey wrote, architecture allows man to feel “at home, since he is in a world that he has participated in making”. In this way, architecture defends the authenticity of human experience.

The interpretation of architecture presented here originates in our understanding of inhabitation and experience as non-static events. Henri Bergson, the French philosopher, wrote, “We attribute to motion the divisibility of the space which it traverses, forgetting that it is quite possible to divide an object, but not an act. Rather than the static moment represented in a photograph, people inhabit architecture with their entire and imagination shadow, sound and texture, the heavens and horizon are woven together in our experience to become the responsive setting for our daily lives.” As Dewey noted, “We are accustomed to think of physical objects as having bounded edges...Then we unconsciously carry over this belief in the bounded character of all objects of experience...into our conception of experience itself. We suppose the experience has the same definite limits as the things with which it is concerned. But any experience the most ordinary, has an indefinite total setting.”

Memorable architecture involves an embodied experience, determined by the reach and grasp of our hand, the touch of our fingers, the feeling of heat and cold on our skin, the sounds of our footsteps, the stance we have taken and the position of our eye. And our eye is never fixed and focused only on one point, as is suggested by the photographs of buildings. More powerful than focused vision in our everyday experience is peripheral vision, with which we navigate through space and perceive the constantly moving horizon. As the American philosopher Ralph Waldo Emerson wrote, “People forget that it is the eye that makes the horizon.” Architecture that endures engages the embodied experience, involving all our senses acting in concert, including the haptic sense of bodily position, balance and movement. The American architect Louis Sullivan noted, “It is that perfect concrete analysis by the senses and the sympathies which serves as a basis for the abstract analyses of the intellect.”

The binding of space and sensorial experience—embodied experience—comes through the agency of the particular materials used to build a work of architecture. The buildings we remember are those that provide us with more than an image by enclosing us in space that engage all our senses simultaneously. Memorable works of architecture can be visited not once but many times, even every day, as they allow as many different experiences as there are times of day, seasons of the year, varieties of activities taking place within them and people visiting them.

The experience of a memorable building is to a great degree characterized by the marks of its making: the joints, patterns, textures and colors of its materials and the various methods employed in its materials and the various methods employed in its construction—what the American architect Louis Kahn called, “the marks that reveal how a thing was done”. In this we recognize the craft, the work of others’ hands that went into the making of this place, and it is important to recall that, even today, with digital construction management and component fabrication, architecture continues to be almost entirely built by hand.



课文译文

Words and Expressions

- architecture [ˈɑːrkɪtektʃər] *n.* 建筑; 建筑学
- architect [ˈɑːrkɪtekt] *n.* 建筑师
- structure [ˈstrʌktʃə] *n.* 结构; 构造; 建筑物
- specialized [ˈspeʃəˈlaɪzd] *adj.* 专业的; 专门的
- experience [ɪkˈspɪəriəns] *n.* 体验; 经验
- inhabitation [ɪnhæbəˈteɪʃən] *n.* 居住
- sense [sens] *n.* 感官; 感觉
- engage [ɪnˈɡeɪdʒ] *vt.* 吸引; 使参加
- setting [ˈsetɪŋ] *n.* 背景; 环境
- endure [ɪnˈdjʊə] *vi.* 持久
- ritual [ˈrɪtʃuəl] *n.* 仪式; 典礼
- occupant [ˈɒkjepənt] *n.* 居住者
- character [ˈkærəktər] *n.* 特征
- isolation [aɪsəˈleɪʃn] *n.* 隔离; 孤立
- vision [ˈvɪʒn] *n.* 想象力
- spectacle [ˈspektəkl] *n.* 景象; 奇观
- novelty [ˈnɒːvlti] *n.* 新奇; 新颖
- image [ˈɪmɪdʒ] *n.* 形象; 图像
- evaluation [ɪvæljuˈeɪʃən] *n.* 评价
- ethics [ˈeθɪks] *n.* 伦理学
- aesthetics [esˈθetɪks] *n.* 美学
- applicability [æplɪkəˈbɪləti] *n.* 适用性
- spatial [ˈspeɪʃl] *adj.* 空间的
- landscape [ˈlændskeɪp] *n.* 风景; 环境
- structure [ˈstrʌktʃər] *vt.* 建造
- inhabit [ɪnˈhæbɪt] *vt.* 居住于
- framework [ˈfreɪmwɜːrk] *n.* 框架
- comfort [ˈkʌmfət] *n.* 舒适
- underestimate [ʌndərˈestɪmeɪt] *vt.* 低估
- existence [ɪgˈzɪstəns] *n.* 存在
- identity [aɪˈdentəti] *n.* 身份
- authenticity [ɔːθənˈtɪsəti] *n.* 真实性
- interpretation [ɪntɜːprɪˈteɪʃn] *n.* 解释; 阐述
- non-static [ˈnɒnstˈætɪk] *adj.* 非静态的
- motion [ˈmoʊʃn] *vt.* 移动; 运动
- divisibility [dɪˌvɪzəˈbɪləti] *n.* 可划分性
- traverse [trəˈvɜːrs] *vt.* 穿越
- object [ˈɑːbdʒekt] *n.* 物体

static ['stætɪk] *adj.* 静态的; 静止的
 imagination [ɪmædʒɪ'neɪʃn] *n.* 想象; 想象力
 texture ['tekstʃər] *n.* 质地; 纹理
 horizon [hə'raɪzn] *n.* 地平线; 视野
 bounded ['baʊndɪd] *adj.* 有界限的
 peripheral [pə'rɪfərəl] *adj.* 周围的
 embody [ɪm'bɑ:di] *vt.* 使具体化; 体现
 navigate ['nævɪgeɪt] *vi.* 通过
 haptic ['hæptɪk] *adj.* 触觉的
 balance ['bæləns] *n.* 平衡
 movement ['muvmənt] *n.* 运动
 sympathy ['sɪmpəθi] *n.* 同感
 intellect ['ɪntələkt] *n.* 理智
 agency ['edʒənsi] *n.* 工具
 joint [dʒɔɪnt] *n.* 接缝
 texture ['tekstʃ] *n.* 质地; 纹理
 pattern ['pætərn] *n.* 图案
 construction [kən'strʌkʃn] *n.* 施工; 建造
 craft [kræft] *n.* 工艺
 digital ['dɪdʒɪtl] *adj.* 数字的
 component [kəm'pɒnənt] *n.* 构件
 fabrication [fæbrɪ'keɪʃn] *n.* 制造
 physical structure 构筑物
 material form 物质形态
 specialized knowledge 专业知识
 exterior appearance 外观
 focused vision 焦点视觉
 peripheral vision 周边视觉
 construction management 施工管理

Proper Names

Ludwig Wittgenstein 路德维希·维特根斯坦(1889—1951, 奥地利哲学家)
 Henri Bergson 亨利·柏格森(1859—1941, 法国哲学家)
 Alvar Aalto 阿尔瓦·阿尔托(1898—1976, 芬兰建筑师)
 Frank Lloyd Wright 弗兰克·劳埃德·赖特(1867—1959, 美国建筑师)
 Ralph Waldo Emerson 拉尔夫·沃尔多·爱默生(1803—1882, 美国作家)
 Louis Sullivan 路易斯·苏利文(1856—1924, 美国建筑师)
 Louis Kahn 路易斯·康(1901—1974, 美国建筑师)

Exercises

I. Answer the following questions according to the text.

1. What is architecture?
2. When does architecture have meaning, and matter to us?
3. How do you understand Ludwig Wittgenstein's saying "Ethics and aesthetics are one"?
4. Why can memorable works of architecture be visited not once but many times?
5. By what is the experience of a memorable building to a great degree characterized?

II. Translate the following sentences into Chinese.

1. Understanding architecture does not require specialized knowledge or skill but rather begins in the everyday experiences of inhabitation.

2. Architecture has meaning, and matters to us only when it is experienced, when all our senses are simultaneously engaged in its inhabitation, and when it provides the settings in which the acts and rituals of daily life take place.

3. Architecture that endures in human history and in the memory of its occupants is often inspired by human experience.

4. We live in a time dominated by images, a time when what a building looks like is often all that matters in our evaluation of architecture.

5. The buildings we remember are those that provide us with more than an image by enclosing us in space that engage all our senses simultaneously.

III. Translate the following sentences into English.

1. 建筑作品以其物质形态经常被看作文化象征和艺术作品。
2. 居住体验才是评价一个建筑作品的唯一有效手段。
3. 在我们日常生活中，周边视觉比焦点视觉更强大，它能让我们浏览空间和感知不断移动的视野。
4. 然而这个看似不起眼的定义不应该让我们低估了建筑的力量。
5. 建筑为我们这个世界提供了一处居所，是我们建立存在感和身份感的基础。

IV. Select one word for each blank from a list of choices given in a word bank following the passage.

A key part of design is that the architect often consults with 1, surveyors and other specialists throughout the design, ensuring that aspects such as the 2 supports and air conditioning elements are coordinated in the scheme as a whole. The control and planning of construction 3 are also a part of these consultations. Coordination of the different aspects involves a high degree of specialized communication, including advanced computer technology such as BIM (Building Information 4), CAD, and 5 technologies.



参考答案

A. Management B. cloud-based C. engineers D. structural E. costs

World Famous Architect—Ieoh Ming Pei

Ieoh Ming Pei (1917—), commonly known as I. M. Pei, is a Chinese-American architect. Pei's style is described as thoroughly modernist, with significant cubist themes. He is known for combining traditional architectural elements with progressive designs based on simple geometric patterns, and also known for his dramatic use of concrete and glass. He was the winner of the 1983 Pritzker Prize for architecture.



建筑师译文

Representative Works:

John F. Kennedy Library, Boston

East Building, National Gallery of Art, Washington (see Figure 1.1)

Louvre Pyramid, Paris

Bank of China Tower, Hong Kong

The Hotel at Fragrant Hills, Beijing

Suzhou Museum, Suzhou

Museum of Islamic Art, Doha

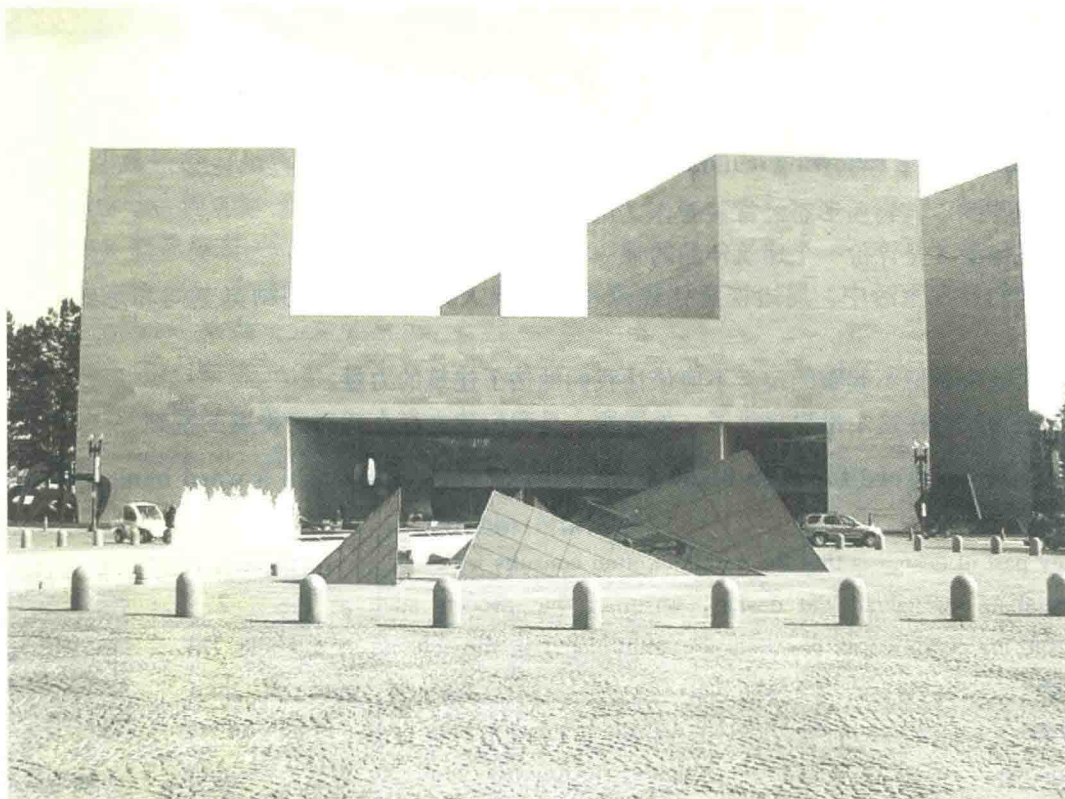


Figure 1.1 East Building, National Gallery of Art, Washington

Text B Architect

An architect is someone who plans, designs, and reviews the construction of buildings. To practice architecture means to provide services in connection with the design of buildings and the space within the site surrounding the buildings, that have as their principal purpose human occupancy or use.

Design role

The architect hired by a client is responsible for creating a design concept that meets the requirements of that client and provides a facility suitable to the required use. In that, the architect must meet with and question the client to ascertain all the requirements and nuances of the planned project. Often the full brief is not entirely clear at the beginning, entailing a degree of risk in the design undertaking. The architect may make early proposals to the client which may rework the terms of the brief. The program or brief is essential to producing a project that meets all the needs of the owner—it is a guide for the architect in creating the design concept.

It is generally expected that the design proposal(s) is both imaginative as well as pragmatic, but the precise extent and nature of these expectations will vary, depending on the place, time, finance, culture, and available crafts and technology in which the design takes place.

Design buildings is a very complex and demanding undertaking, no matter what the scale of the project might be. A strong degree of foresight is a prerequisite. Any design concept must at a very early stage in its generation take into account a great number of issues and variables which include qualities of space(s), the end-use and life-cycle of these proposed spaces, connections, relations, and aspects between spaces including how they are put together as well as the impact of proposals on the immediate and wider locality. Selection of appropriate materials and technology must be considered, tested and reviewed at an early stage in the design to ensure there are no setbacks (such as higher-than-expected costs) which may occur later. The site and its environs, as well as the culture and history of the place, will also influence the design. The design must also countenance increasing concerns with environmental sustainability. The architect may introduce (intentionally or not), to greater or lesser degrees, aspects of mathematics and architecture, new or current architectural theory, or references to architectural history.

A key part of design is that the architect often consults with engineers, surveyors and other specialists throughout the design, ensuring that aspects such as the structural supports and air conditioning elements are coordinated in the scheme as a whole. The control and planning of construction costs are also a part of these consultations. Coordination of the different aspects involves a high degree of specialized communication, including advanced computer technology such as BIM (Building Information Management), CAD, and cloud-based technologies.

At all times in the design, the architect reports back to the client who may have reservations or recommendations, introducing a further variable into the design.

Means of design

Previously, architects employed drawings to illustrate and generate design proposals. While conceptual sketches are still widely used by architects, computer technology has now become the industry standard. However, design may include the use of photos, collages, prints, linocuts, and other media in

design production. Increasingly, computer software such as BIM is shaping how architects work. BIM technology allows for the creation of a virtual building that serves as an information database for the sharing of design and building information throughout the life-cycle of the building's design, construction and maintenance.

Environmental role

As current buildings are now known to be high emitters of carbon into the atmosphere, increasing controls are being placed on buildings and associated technology to reduce emissions, increase energy efficiency, and make use of renewable energy sources. Renewable energy sources may be developed within the proposed building or via local or national renewable energy providers. As a result, the architect is required to remain abreast of current regulations which are continually tightening. Some new developments exhibit extremely low energy use. However, the architect is also increasingly required to provide initiatives in a wider environmental sense, such as making provision for low-energy transport, natural daylighting instead of artificial lighting, natural ventilation instead of air conditioning, pollution, and waste management, use of recycled materials and employment of materials which can be easily recycled in the future.

Construction role

As the design becomes more advanced and detailed, specifications and detail designs are made of all the elements and components of the building. Techniques in the production of building are continually advancing which places a demand on the architect to ensure that he or she remains up to date with these advances.

Depending on the client's needs and the jurisdiction's requirements, the spectrum of the architect's services during construction stages may be extensive (detailed document preparation and construction review) or less involved (such as allowing a contractor to exercise considerable design-build functions).

Architects typically put projects to tender on behalf of their clients, advise on the award of the project to a general contractor, facilitate and then administer a contract of agreement which is often between the client and the contractor. This contract is legally binding and covers a very wide range of aspects including the insurances and commitments of all stakeholders, the status of the design documents, provisions for the architect's access, and procedures for the control of the works as they proceed. Depending on the type of contract utilized, provisions for further sub-contract tenders may be required. The architect may require that some elements are covered by a warranty which specifies the expected life and other aspects of the material, product or work.

In most jurisdictions, prior notification to the relevant local authority must be given before commencement on site, thus giving the local authority notice to carry out independent inspections. The architect will then review and inspect the progress of the work in coordination with the local authority.

The architect will typically review contractor shop drawings and other submittals, prepare and issue site instructions, and provide Certificates for Payment to the contractor (see also Design-bid-build) which is based on the work done to date as well as any materials and other goods purchased or hired. In the United Kingdom and other countries, a quantity surveyor is often part of the team to provide cost consulting. With very large, complex projects, an independent construction manager is sometimes hired to assist in design and to manage construction.

Unit 2 Architectural Aesthetics

Text A Architectural Detailing

A building should please the eye. It should go beyond function and constructibility to engage the mind, and even the heart. Its details play a large role in this important function. Every truly great building has great details: details that contribute to the aesthetic themes of the building, that harmonize with one another, and that create beauty out of the ordinary materials and necessities of construction. A building with a splendid thematic idea can fail as architecture if it has poor details that are badly matched to its primary aesthetic, that do not relate strongly to one another, and that fail to lift their materials above the ordinary.

The detail patterns that relate to aesthetics are few in number, but each is powerful and far reaching, and they require greater effort and insight to implement than any of the patterns relating to function and constructibility.

The foremost aesthetic requirement for detailing is that all of the details of a building should contribute to its formal and spatial theme. Aesthetic features of details should be as appealing in future years as when they were built. These requirements are developed in the detail patterns:

Contributive Details

Timeless Features

Geometry and Proportion

Details may be elaborated to feature certain inherent characteristics, or they may be decorative, for purely visual or experiential effect:

Hierarchy of Refinement

Intensification and Ornamentation

Sensory Richness

Lastly, details may be developed whose role is to unify and give order to the visual composition of building elements that otherwise might seem disjointed or unrelated. This role is introduced in the patterns:

Formal Transitions

Didactic Assemblies

Composing the Detail

These nine patterns serve to focus the detailer's attention on some important aesthetic issues that arise in detailing. They constitute a small part of a much larger field of study—architectural composition—that will amply repay as much as the time that detailer can devote to its study.

The body of built architecture from antiquity to the present provides evidence of the importance of the link between art and craft. Classical Greeks originated the notion of *techne*, derived from the Greek verb *tikto*,

meaning “to produce”. This term means the simultaneous existence of both art and craft, deliberately avoiding distinction between the two.

Architectural details can convey to the observer in literal terms the facts about the form and how it is made. They can also reveal what is latent within the form, features so subtle that they are not consciously noticed by the casual observer. In the following patterns, the term “aesthetics” will be used to describe features that recognize the inextricable link between art and craft, between the ideal and the circumstantial, and between the concept and its tangible embodiment. In architectural detailing, ideas must be made real.

The detailer is challenged to find solutions that solve the specific technical requirements of a given detail, while also showing affinity with the building’s central aesthetic themes. Some details may seem to have no solutions; others may have many. The best solutions are functional, convey meaning, and reward the senses.

Although the emphasis in this text is on the visual qualities of a building and its details, the detailer should always look for opportunities to delight the other human senses. Tactile qualities of materials and details are important: the feel of a carpet or polished marble underfoot; the satiny smoothness of polished wood handles on a cabinet; deep, luxurious cushions on a bench; a nubby texture in a wallcovering. Auditory qualities are also vital: Should a particular architectural space seem hushed and quiet? Should it be vast and echoey? Should one’s footsteps resound throughout a room, or would it be more appropriate that one tread softly, as if floating noiselessly? Would it enhance the architectural experience if one heard the sounds of splashing water, of birdsongs, of wind in trees, of children chattering, of machines working productively? And consider the opportunities for olfactory delight in a building: the fragrance of cedarwood, the perfume of flowers, the freshness of grass growing, the moist breezes off a pond, the waxy smokiness of candles, the musky scent of leather. Once again, the designers of the greatest buildings have considered these possibilities and have often used them to their advantage.

Details embody all that we know from the past, they respond to the certainty of the present, and they will serve an unknown future. They should be designed with this broad time frame in mind, not focused too narrowly on the present.

1. Nothing expires faster than a trendy detail or material treatment. The longer the life expectancy of the building, the more timeless its materials and details should be. A 100 – year building should not be detailed using the fleeting fashion of the day. Well-designed details, made using durable materials, and installed using appropriate workmanship, have a timeless quality.

2. Timeless details are more likely to be understood and appreciated by people in the future, much as good literature or music is appreciated by successive generations in a culture. A building with well-proportioned forms and spaces, an ordered plan, and meaningful and well-made details will live a long time, almost certainly longer than the initial program. Owners in the future will become the building’s stewards, maintaining it as necessary, introducing new elements with care, and being respectful of its basic ordering principles. Such buildings should not be made with features that become aesthetically obsolete in a short period of time.

3. To be timeless, a detail does not need to have been done previously, or selected from a catalog of stock solutions. Innovation remains essential. New details and materials will always be part of an architect’s work. New details should be based on sound compositional principles, should demonstrate a grasp of the relevant physical phenomena, and should not waste human or material resources. If this is done, the details will likely achieve this timeless quality.