74206 Cttb

建筑系学生优秀作业选

SELECTIONS OF OUTSTANDING WORKS FROM ARCHITECTURE DEPARTMENT

深圳大学专辑 VOLUME OF SHENZHEN UNIVERSITY

权

Chief Editor Cheng Quan



中国建筑工业出版社 China Architecture & Building Press

图书在版编目(CIP)数据

建筑系学生优秀作业选: 深圳大学专辑/程权主编. - 北京: 中国建筑工业出版社, 1999 ISBN 7-112-04069-8

I.建… Ⅱ.程… Ⅲ.建筑设计 - 建筑方案 - 汇编 Ⅳ. TU206

中国版本图书馆 CIP 数据核字(1999)第 64673 号

本书选录了深圳大学建筑系自1984年成立以来的优秀课程设计和毕业设计方案。每个方案收入模型照片、效果图及平、立、剖面图。在每个年级的课程设计前面,还各有一篇任课教师对该年级设计课教学进行的总结。

本书既为建筑学专业学生提供了直观的学习材料,便于学生互学所长,拓宽思路,提高设计能力;又反映出深圳大学建筑系建筑学专业设计课程的教学特色及教学经验和成果,以利促进校际交流,提高建筑设计教学质量。

This collection consists of excellent schemes from curriculum and graduation projects since the establishment of the Architecture Department of Shenzhen University. Each scheme is attached with model photos, perspective drawings, plans, elevations and sections. Before the curriculum projects of each grade are the summaries by teachers on each project.

This book provides Architecture major students with learning materials so that they can learn from each other, widen their thinking and improve their designing skills, and also reflects the teaching characteristics, experience and achievements of the architectural design curriculum in the Architecture Department of Shenzhen University for the purpose of inter college communication and improvements of teaching quality in the field of architectural design.

策 划: 王伯扬 董苏华

顾问: 覃力 责任编辑: 董苏华

建筑系学生优秀作业选

——深圳大学专辑

程 权 主编

中国建筑工业出版社出版、发行(北京西郊百万庄)

新华书店经销

深圳雅昌彩色印刷有限公司印刷

开本: 889 × 1194 毫米 1/16 印张: 11 字数: 400 千字

2000年4月第一版 2000年4月第一次印刷

印数: 1-2,500 册 定价: 95.00 元

ISBN 7-112-04069-8 TU · 3192 (9472)

版权所有 翻印必究

如有印装质量问题, 可寄本社退换

(邮政编码 100037)

前 言

——成长的记录 许安之

深圳大学建筑系刚满16岁,坐落在中国发展速度最快的"窗口"城市。

努力向上,比较活跃,勇于创新,不太成熟,可能是这个年轻建筑系的特点。

从建系开始,深圳大学建筑系就走上了一条与深圳大学建筑设计研究院紧密结合共同成长的道路,走上了一条与深圳特区建设共同成长的道路。

在这样一个教学环境下,在一批勇于探索和创新的教师们指导下,学生的作业有一定特色,如1992年的毕业设计"深南花园"八幢高层住宅已耸立在深南大道,1993年毕业设计"深圳大学学生活动中心"已建成并获得了广东省优秀建筑设计奖,近两年又有两个毕业设计获得了"洪四川奖",1999年还有一个同学获得全国建筑系学生设计竞赛一等奖、等等、说明这些优秀学生作业已得到了社会和同行的认可。

深圳大学建筑系学生作业的特点,除了结合特区建设实践和构思比较活跃外,在表现方法上善用模型和计算机辅助设计也是一个特色。

在这本书和读者见面的时候,已经进入 21 世纪了,新世纪对于建筑教育提出了新的要求,除了传统的基本要求外,可能对绿色、环保、节能、生态、信息等更为广泛领域内的知识和技能有一定要求或更高的要求,建筑学将越来越像一个"没有'专业'的专业"了、但无论建筑师们在新世纪将面临什么新挑战,建筑师首先必须会设计房子和环境,会动手画图做设计,相信这是不会改变的,新概念、新技术、新材料也需要通过设计图来体现。从这个意义上说,这本书和其他兄弟院系的学生作品集一样,有一定的参考意义和收藏价值。

正如全国许多人关心深圳特区建设一样,全国也有许多同行和同学关心深圳大学建筑系的成长,这本书在某种程度上是本系成长的记录,再过十年或更多一些时间,深圳大学建筑系将从成长的过程走向成熟的过程,到那时,一定会有"成熟的记录"再与各位见面。

许安之

1999年9月

PREFACE

—— A Record of Growth

Xu Anzhi

Located in the most dynamic "window" city in China, the School of Architecture at Shenzhen University (SUSA) has just celebrated its 16th anniversary. Hard-working, energetic, innovative and immature are probably accurate descriptions of this young faculty.

From its inception, SUSA has been intimately linked with the Shenzhen University Institute of Architectural Design & Research (SUIAD). The growth of SUSA has been accompanied by SUIAD, and is parallel to development of the Shenzhen Special Economic Zone.

Under the tutoring of a group of daring and creative teachers, design submissions by the students have often presented highly original features. A number of graduation thesis designs have been realized, including Shennan Garden and Shenzhen University Students' Center, in year 1992 and 1993 respectively. Moreover, two graduation thesis designs have won the Hong Sichuan Prize in recent years and another student took the first prize in the National University Students' Competition for architectural design in 1999. These awards demonstrate that outstanding designs by our students are recognized by society and professional circles alike.

Apart from being innovative and closely oriented toward the development of the special economic zone, our students are also accomplished in using models and the computer to present their designs. By the time this book is published, we will find ourselves in the 21st century. The new century will impose a higher demand on architectural education—in addition to the traditional requirements, it will call for greater attention on and better knowledge of a wide array of issues such as landscape design, environmental protection, energy efficiency, ecology, and information technology. Architecture is becoming a subject no longer confined within the four corners of its traditional practice. Whatever challenges they will face in the new era, architects must be able to design the built environment, and to present their design in drawings. We believe that this situation will change. New ideas, technologies and materials will still need drawings for presentations. In this sense, this volume together with other volumes by fellow architectural faculties are of remarkable reference value.

Just as many people are concerned with the development of the Shenzhen Special Economic Zone, a great many of our fellow colleagues and students are interested in the progress of SUSA. To a certain degree, this volume is a record of the formative years of the School. In ten years or more, SUSA will enter into its adulthood. By then, there will be a new record depicting the "mature years" of the School.

更上一层楼

——为建筑系的发展齐努力 黄莘南

深圳大学建筑系的发展,就像是一株小树苗成长为参天大树的过程一样。自 1983 年播种以来,在深圳经济特区这块肥沃的土地上,经过一批人的辛勤耕耘,茁壮成长,现已是根深叶茂,繁花似锦,果实累累。建筑系共送出了11 届五年制的建筑学专业毕业生。

十几年前,一批著名的建筑教育专家、学者,放弃了原有的工作环境,先后投入到深大建筑系的创业工作。包括多届有才干的领导和不少现已退休离岗的优秀教师,他们用心血和汗水铺平了深圳大学建筑系的发展道路。一批年轻的教师,把青春献给了深大,深大与他们一同成长。建筑系十几年来,师资队伍不断地扩大,现在已拥有一大批高素质、高学历的人才,充实了建筑系的力量。同时,深圳大学建筑系的教学设备先进,图书资料充足,教学管理规范,已具备了良好的办学条件,并取得了显著的教学成果。近几年,建筑系被广东省高教局定为重点扶持学科,1996年通过了全国建筑学专业教育评估,并获得了硕士研究生的招生权和硕士研究生的学位授予权。现在正为创办高水平、现代化、有特色的建筑学专业而努力。

以"务实、开拓、创新"的精神办学,走产学研结合的道路,这是深圳大学建筑系办学的特点。

经过十几年来的教育实践与探索,证明了这是非常正确的。我们注重学生全面素质和多方面能力的培养,特别是创造性能力的培养。通过课程安排和课程内容的实际要求去提高学生的思维能力、设计能力、表达能力、外语能力和综合能力等等,培养适应社会主义市场经济发展的需要,有扎实的专业基础、知识面广、适应性强的建筑专业人才和注册建筑师。

从十多届毕业生的工作、学习情况来看,他们就业于多种岗位,表现良好,有的做出了可喜的成绩,受到单位好评;有的在国外深造或在他国工作,也表现得较为出色;在设计院和做设计工作的93届以前的毕业生,考取一、二级注册建筑师的比例也高于平均水平。

为了进一步发展建筑学专业教育,我们仍须继续努力,发扬成绩、纠正偏差、弥补不足。 从提高教学的整体水平入手,进一步完善教学管理,充分发挥教师的主导作用,加强与兄弟 院校交流,集国内外同行教学之所长,以充实我们的教学内容和更新我们的教学手段.搞好 各门课程的建设,扎扎实实地为教学再上一个台阶努力工作。不断地努力,沿着教学、科研、 生产三结合的道路继续奋勇前进,让我们一起为建筑系的发展而努力。

FORWARD

— Unified Efforts to Develop the Architecture Department

Huang Xinnan

The development of Architecture Department of Shenzhen University is just like the process of a small sapling growing up into a towering tree. Founded in 1983, on the fertile soil of Shenzhen Special Economic Zone, with the industrious cultivation of a group of people, it grows quickly. Being well established, it is vigorously developing and fruitful. Classes of 5 year Architecture Students graduated from the Architecture Department more than a decade ago. A group of well-known Architectural educators and scholars left their original working environment behind and plunged themselves into the establishment of Architecture Department of Shenzhen University. These talented leaders and retired teachers paved the way with their painstaking labor for the development of the Architecture Department of Shenzhen University. A group of young teachers dedicated themselves to Shen Da and grew together with it.

In the past decade, teachers have gradually increased and now the Architecture Department possesses talent with high qualifications and high degrees, which strengthens the Architecture Department. Meanwhile, with advanced teaching equipments, sufficient reference books in the library and standard teaching management, the Architecture Department of Shenzhen University has made outstanding teaching achievements. Recently, the Architecture Department was selected as a supporting branch of learning by Guangdong High Education Bureau. In 1996, it passed the National Architecture Educational Evaluation and acquired postgraduate admissions and diploma issuance authority. And now we are working on the establishment of a high level, modern and unique architectural specialty.

The running of the Architectural Department of Shenzhen University is characterized by the aim of "implementing theory and work, pioneering spirit, being innovative and combining production, learning and research together." More than a decade's educational practice and exploration proves this combination is quite right.

We lay stress on training of the students' overall quality and various abilities, especially training of their creative abilities. Through the arrangement of curriculum and the demanding of course contents we improve the students' abilities to think, design, and abilities of expression, foreign language and comprehension. To train architectural talent and registered architects who can adapt to the demand of the social market economic development and have a good command of fundamentals, they need broad knowledge and strong adaptability. The graduates work on different positions, have made great achievements and receive favorable comments. Some are studying and working abroad, and are quite outstanding.

The percentage of first, and second grade registered architects is above the average for those students graduated before 93, now doing design work in the Design Institute.

In order to improve architecture education, we should continue to work hard, enhance achievements, correct mistakes and remedy defects.

Starting with the improvements of teaching levels, we should further make teaching management perfect. Teachers need to play their leading roles, strengthen inter-college communication, absorb the merits of the same occupation home and abroad in order to enrich our teaching contents and renew our teaching methods, course improvement programs and work hard to improve teaching step by step. Let's work hard for the development of the Architecture Department by combining teaching, research work and production!

走向新时代

——建筑设计课教学模式探索

覃 力

根之茂者其实遂,膏之沃者其光晔。(韩愈《答 李翊书》)

建筑设计课是建筑学专业的主干课,也是最受重视的课程,其教学方法直接影响着教学的效果。随着时代的进步和社会经济的发展,我们已经清醒地认识到传统建筑设计课教学中存在着的不足,国内许多学校都对建筑设计课的教学进行了不同程度的改革,并取得了不少的成功经验。

深圳大学建筑系,近年来也在原有的基础上,探索着建筑设计课教学的新模式,并提出了:"以学生为主体,注重培养综合分析问题、解决问题能力,以及空间创造性能力和操作能力,强调过程训练的教学方法。"记得有位著名的学者曾经说过:"教学的重点是方法",而我国与国外现代建筑教育之间差异最大的,就是设计课的教学方法,所以我们的设计课教学改革,便一直围绕着这一中心问题展开。

一、板块式教学框架体系

传统的建筑设计课,指的是从二年级到五年级的设计课。一年级的建筑初步课为人门课程,以讲授有关建筑知识、教授建筑表现技巧为主。这样,建筑初步课的教学内容和教授方法,就往往与后面的设计课脱节。虽然经过了一年的学习,但是学生们并没有接触到多少有关建筑设计的基本知识,对于建筑设计应该怎样操作也多是不知如何下手。针对这些弊病,我们在研究、吸收国外先进经验的基础上,对建筑设计课进行了整体优化组合,提出了将建筑设计课从一年

级至五年级一体化的、板块式框架教学体系。所谓"一体化",就是将一年级至五年级作为一个整体、使"设计"贯穿始终; 所谓"板块",则是将这一整体分成3个阶段,每个阶段都各有侧重,既强调循序渐进的连贯性,又自成体系。一、二年级为"设计基础训练阶段",三、四年级为"综合设计能力培养阶段"、五年级为"专业技能深化拓展阶段"。

在"设计基础训练阶段",我们提早加入了设计内容,从一年级学生们便开始接触建筑语汇空间设计,并接受空间概念、形体概念和建筑设计最基本的操作方法方面的训练,至二年级结束,通过两年的设计练习,使学生们能够初步形成对建筑空间、材料和形式的认识,掌握建筑设计的基本方法。在这里、我们除了训练认识能力和表达能力之外,主要是强调培养同学们的空间创造能力和形象思维能力。

"综合设计能力培养阶段",注重素质的培养和综合分析问题能力、解决问题能力的训练。在这一阶段、课程设计的内容已由浅入深,设计的运作也开始需要考虑更多的东西,如技术问题、社会问题、文化问题、环境问题、美学问题等等。因此,我们即尝试着将各方面的知识讲授融入到课题训练之中,鼓励学生运用所学的知识,通过调查、分析等手段去解决问题、全面提高学生的综合素质。

"专业技能深化拓展阶段"是学校培养建筑师的 最后阶段,在这一阶段中,我们强调教育与实践相结 合。除了按照《建筑学专业本科(五年)设置基本条 件》的要求,安排有设计院实习之外,还利用系、院



建筑系系馆设计

一体制(建筑系与设计院一体化)的优势,使毕业设计结合生产实践。学生的毕业设计直接用在工程建设上的为数不少,其中已经建成的有:深圳大学学生活动中心、深南花园和清远市人民医院门诊大楼等。

二、以学生为主体的启发式教学

我国的建筑教育,长期以来受到"师徒相授"式教学方法的局限,学生的才华会由于某些客观因素的影响往往得不到发挥,而且这种教学方法也不太有利于创造性思维方式的培养。启发式教学方法则是以学生为主体,通过启发和诱导,充分调动学生的内在潜力和主体意识,培养学生的动手能力、理解能力和分析能力。这种方法有助于摆脱思维定式,克服认识上的局限,从而提高学生们的想像力和创造力。

以学生为主体的教学方式十分注重观察和体验。 对于建筑设计课而言, 教师讲授的内容会形成概念 性的东西, 难于融会贯通, 而最终只有通过学生自 己的观察和体验, 才能真正地把握建筑本质。所以 我们在设计课的教学中, 就非常重视培养学生的观 察能力和分析能力,注重教师与学生之间的交流,以 及学生与学生之间的交流。

为了加强建筑体验这一教学环节,从一年级到 三年级我们开设了多种认识实习课。不仅实地考察 国内的一些优秀建筑作品,而且还组织学生去香港 和新加坡等地参观,要求学生独立写出调研报告和 心得体会。每个设计题目,教师也都带领学生去现 场调研,并组织学生参观同样类型的建筑,参观调研之后,要求学生写出书面报告,将亲身体验记录下来,运用学过的知识去加以分析,提出自己的看法。同时,还采取小组讨论的方法对设计题目进行剖析。实际上,在近几年的设计课教学中,小组讨论和集体评图的方法一直被贯彻始终。教师把教学的重点放在思考方法的引导和构思立意的启发上,鼓励学生参加讨论,积极发表见解,学生在答辩过程中也得到了锻炼,这种以学生为主体的交流活动,还可以使课堂上的教学气氛活跃起来,增加同学们的学习兴趣。

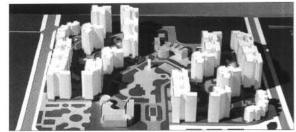
三、重视教学过程和教学环节

以学生为主体的教学方式,并不等于完全放羊, 任由学生自由发挥,教师在整个教学过程中,还是起着非常重要的把关作用,而且根据设计题目的不同, 教师也会调节各个设计环节所占的比重。在近几年的 设计课教学中,我们已经开始尝试着由感性色彩较浓 的重视结果的教学方式,向理性色彩较重的重视教学 过程和教学环节的方向转变,以期逐渐完善新型的教 学模式。

与传统的教学方式相比,这种教学方法是把每个设计作业看成一个完整的教学过程和学习过程,并将 其过程划分为:前期调研、环境分析、构思立意、设 计推敲、小组讨论、设计表达和最后的公开评图等7 个环节。教师会根据各个环节的特点,提出不同的要求,一方面可以突出训练的重点,另一方面还可以按









小区规划设计

照设计题目的不同,调整侧重点和把握设计进度。而 学生对整个设计过程的运作方式也会有一个比较清晰 的概念,学生学习的重点是整个设计过程。教学中所 强调的也是学习过程各个环节中的收益大小,而不仅 仅是最后设计图纸的好坏。所以与此相应,我们对评 分标准也进行了一些改革,一是变最后一次性给成绩 为"过程分",也就是将整体过程中的各个环节按照 一定的比例打分。二是提高过程的分值,降低最后评 图的成果分的分值,强调中间环节,以体现学生在整 个学习过程中的学习效果。

四、强调空间创造性能力的培养

建筑艺术是空间造型艺术,所以建筑设计思维方式的培养,从某种意义上说,就是空间思维方法的训练。这种空间思维方法的训练,需要借助于某种手段才能够进行,就我国目前的情况来看,大多数学校的设计课教学,主要还是依靠"草图思维模式",即通过绘制构思草图,并一次次地修改草图来进行造型创作,用二维的图形表达三维的空间。这种训练方法操作起来简便易行,但是也存在着局限性,特别是对于初学者来说,抽象性较强,在平面上进行三维空间构思有一定的难度,而且容易注重"形象"忽视"空间",养成空间构成简单化、概念化的习惯,对今后从事的建筑设计工作产生不良的影响。

为此,我们在近年来的教学改革中,便借鉴国外 建筑教育的先进经验,提倡在设计课教学中采用"模 型思维模式",对学生进行空间思维和空间设计能力 的训练。所谓"模型思维模式",就是利用工作草模 来帮助构思,方案设计从做模型开始,边想边做,边 做边想,自始至终地通过反复操作模型,使设计方 案得到发展和深化,从三维空间入手进行空间设计 创作。当然,在教学当中我们也并不排斥构思草图 的作用,而是引导学生一面绘制构思草图,一面利 用草模推敲,一边进行构思设计,将制作草图和操 作模型的行为融入在设计构思之中,使思维与操作 结合在一起。

为了使学生能够在设计中尽快地掌握这种空间 思维方法,我们在一年级的教学中,就较早地引入 了"模型思维模式",从第二学期开始便鼓励学生运 用模型来思考问题。为了加强空间思维能力训练的 力度,配合设计课我们还开设了构成课及一些辅助 讲座,如"空间书法"、"模型的制作与作用"等等。 系统地讲授模型的制作方法、种类和作用,并从纯 粹的空间角度帮助学生认识事物的本质,通过形态 构成操作,了解空间结构和空间生成的规律,为令 后的建筑设计打下良好的基础。

通过几年来的教学实践,我们在设计课教学改革方面的尝试,已经收到了一定的效果,学生们大多已经养成了独立思考问题、分析问题和解决问题的习惯,掌握了空间思维方法。当然,我们的这些做法有很多地方还不够成熟,还需进一步地探讨。而值此世纪之交,而对21世纪我国的建筑教育将如何改进,我们愿与建筑教育界的同仁们一起共同为之奋斗。

TOWARD A NEW CENTURY

— In Search for Excellence in Architectural Education Qin Li

Design studio courses are of prime importance in an architectural curriculum and its teaching methods have direct impact on the quality of architectural education. Traditional teaching methods find if increasingly difficult to come to terms within a world of rapid social and economic development. Numerous reform attempts have been carried out by departments of architecture throughout the country, achieving much success.

The School of Architecture at Shenzhen University has been constantly searching for new models in teaching design studio courses. The objectives are "to foster the students' abilities of analyzing and solving problems, and make three-dimensional creations, as well as achieve skills in the design process." Method is said to be the key of education. It is precisely the teaching of the teaching methods in design studio classes that comprise the largest deficiency in architectural education in China when compared with our international counterparts. Therefore, our teaching reforms have focused on this issue from the very beginning.

More Coherent and Integrated System

Traditionally, design studio classes are taught in the second year and upward. The first year students have architectural fundamentals courses instead, which provide rudimentary knowledge of buildings and techniques of architectural drafting and rendering. The content and teaching methods of these two types of

courses are very different. Consequently, even after one year's study, the students still lack a working knowledge of architectural design and the necessary skills to manage the design process. Hence, a more coherent and integrated program was proposed, linking design teachings in all five years.

The new program treats the teaching in year one through year five as a whole, underlining the teaching of design. The program is divided into three continuous and yet distinct phases: phase one, fundamental training in design, covers the first and second academic years; phase two, further development of design skills, the third and fourth years; and phase three, professional education, the fifth year.

In the fundamental training phase, first year students are given design assignments in the second semester and receive training in the use of architectural vocabulary, manipulation of space and form, and managerial skills for the design process. By the end of the second year, after two years' study, the students are expected to acquire a basic knowledge of space, material, and form, as well as essential skills of architectural design. In addition to cognitive ability and drafting/rendering skills; the teaching of this stage emphasizes such abilities as composing three dimensional creations and figurative thinking.

The further development phase stresses the ability of analyzing and solving problems in a synthetical







建筑文化研究中心

manner. Design assignments get increasingly difficult both in terms of scope and complexity; the students are required to address a wide range of problems such as technological, social, cultural, environmental and aesthetic issues. Lectures on the above topics are arranged parallel to the design assignments. The students are encouraged to solve the design problems using the knowledge they have learned.

The professional education phase is the last stage in which the School is responsible for the education of architects. Preparing the students for professional practice is emphasized in this stage. Being closely linked with the Shenzhen University Institute of Architectural Design and Research, the School enjoys the advantage of being able to arrange more practice opportunities for the students apart from what is normally required by the educational authorities. A number of graduation thesis designs have thus been realized, such as the Shenzhen University Students' Center, Shennan Garden, and Qingyuan People's Hospital to mention few.

Heuristic Method with Students as Center of Focus

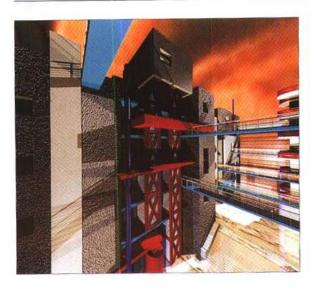
Architectural education in China has long been confined to the master-apprentice model, which impairs the students to explore the full potential of their talents and the school to foster creative thinking. Through encouragement and elicitation, the heuristic method is able to stimulate the full potential and

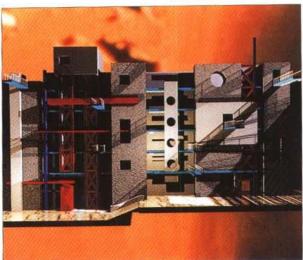
selfconsciousness of the students. It helps them get rid of fixed modes of thinking, and overcome perceptual limitations, and cherishes their imagination and creativity.

Personal observation and experience are of particular importance. For design studio courses, matters dealt with in lectures and discussions can be highly conceptual and difficult to grasp for novices.

Architecture can only be fully understood through substantial personal observations and experiences. Therefore, much weight is attached to developing the abilities of observation and analysis, and promoting communications between teacher and student, as well as between student and student.

In enriching architectural experiences, a number of study trips are arranged for the students to visit significant sites and buildings in China, Hong Kong, and Singapore. Students are required to submit reports after each trip. For each design assignment, the teacher will also take the students to see the actual building site and study similar buildings. Here again, reports and group discussions are required. In fact, group discussion and collective critique have been the most commonly used method of evaluating design submissions at our school. The teacher acts as leader and counselor and critic, and encourages the students to defend themselves or air their views in the discussions.





少年宫设计

Emphasis on Teaching Process and Teaching Modules

Even for the more liberal teaching model, teachers still play an important supervisory role and are responsible for modulating the weight of each subordinate task according to the nature of the design assignment. In recent years, our teaching philosophy has shifted from a result oriented, perceptual one towards one that is more rational and emphasizes the teaching process and teaching modules.

In contrast to traditional teaching philosophy, this approach views each design assignment as a complete teaching and learning procedure, and accordingly, divides the procedure into seven categories modulessurveying/investigation, environmental analysis, conceptual development, physical design/deliberation, group discussion, drafting/rendering, and finally, open critique. The teacher is able to concentrate on a particular problem or problems in these modules, and by doing so, direct the students' attention to different aspects of design as well as control the progress of their design work. This method emphasizes the value of each and all steps within a complete design process, not the final presentation, which often demonstrates more of the drafting/rendering skills of the student instead of his or her design ability. We want to teach the students to appreciate the significance of a complete design circle or process. And our scoring system is also adapted to reflect this teaching philosophy, measuring progresses of the whole learning process.

Emphasis on Three Dimensional Creations

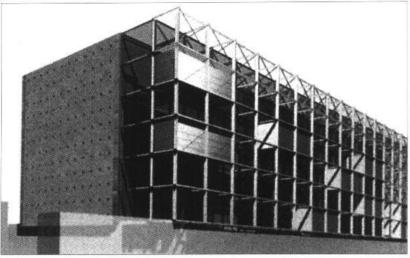
Architecture is the art of space modeling. To a certain degree, the teaching of architectural design is the training of space or three dimensional thinking. In China, most departments of architecture rely heavily on freehand sketching to train their student. This method is a simple and effective one; however, it has a number of drawbacks, particularly that it is two dimensional representations of three dimensional creations. It is more difficult for novices to visualize spaces by twodimensional means. The danger is that they might tend to focus on graphic image instead of space creation in their subsequent design works.

Therefore, in recent years we advocate model thinking in our teaching. Model thinking refers to the use of working models to assist space creation throughout the entire design process.

Of course, it by no means denies the importance of freehand sketch. Instead, we encourage the students to use model and freehand sketch alternately throughout a design circle.

The use of models is introduced as early in the first year, so that the students are able to quickly master this tool to assist their design. Accordingly, a number





建筑艺术展览馆设计

of support courses, such as "space calligraphy" and "model making", are held parallel with design studio classes. These courses are very helpful for the students to understand the structure and formation of spaces.

After years of educational reform, we have gained many valuable experiences. Most students are now capable of independently reflecting on, analyzing, and solving design problems, as well as having mastered the essential skills of space creation. However, much of what we are doing now needs more elaboration and serious discussions. Upon the threshold of a new century, we are committed to further our efforts in improving architectural education in China in the 21st century together with our fellow colleagues.

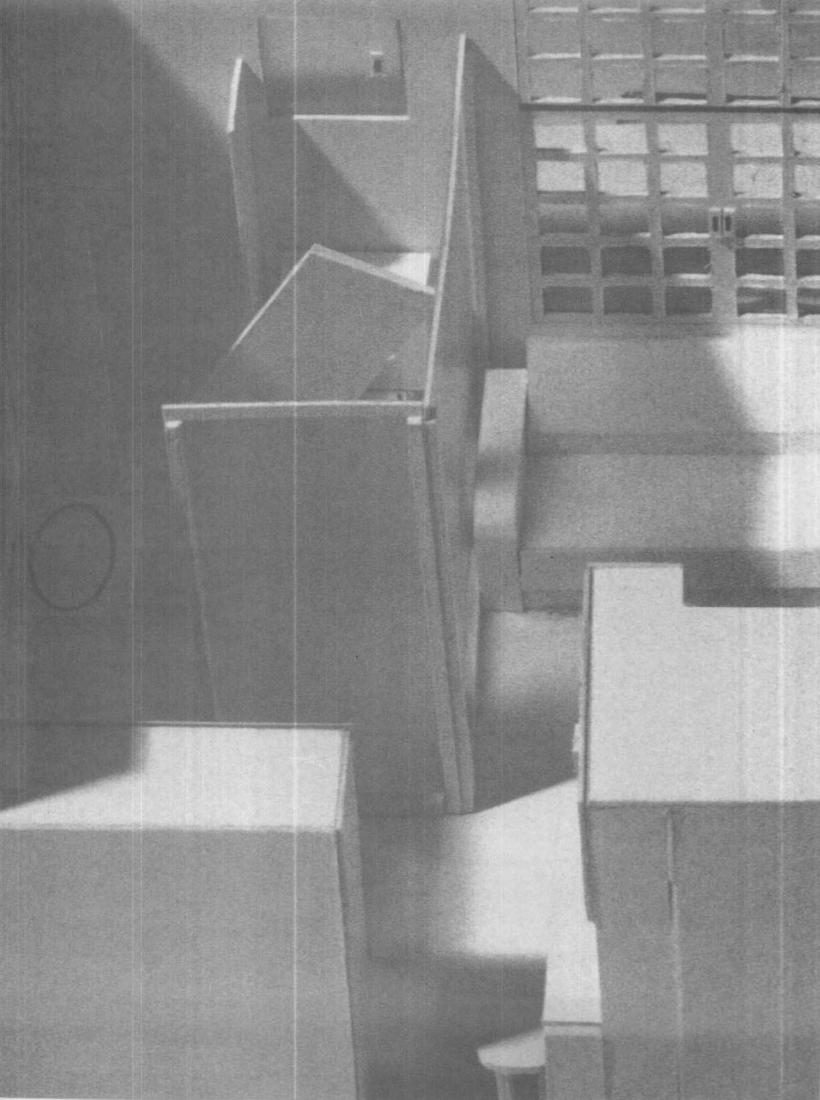


附: 建筑学专业建筑设计课教学计划

年级	学期	阶 段	名 称	学时	1 111 46: 12 65	主要内容与要求	构 造 内 容	题 目 举 例	教材和 参考书	备注
一年级	1		建筑设计基础(1)	8 × 14	认识建筑师的职业 特点,了解建筑学知识结 构,建筑制图训练,掌握 最基本的表现方法和构 图原理	建筑学知识结构介绍,讲解设计 诸要素。中西方建筑发展简介。建筑 制图训练;工程字、铅笔、墨线线条、 铅笔、钢笔徒手表现、色彩渲染		线条练习 工程字练习 徒手画练习 单调渲染 复调渲染	《建筑初步》 《建筑画表现法》 《建筑表现图集》	系重点课程
	2	设	建筑设计基础(2)	8 × 18	了解建筑形式、空间、 形体尺度的构成及基本概 念、培养建筑意识和建筑 感觉、继续进行制图基本 功训练、初步了解建筑设 计的过程和正确方法	讲解建筑空间构成、建筑尺度、 人的活动与空间的关系,运用人体工 程学、行为科学有关知识进行流线分析,家具组合设计。空间构成及形体 构成的练习。建筑测绘,绘制建筑平、 立、剖面图		空间的象征意义 空间构成 学生宿舍室内设 计 建筑形体构成 建筑测绘	《建筑初步》 《建筑设计原理》 《建筑:形式、空间 和秩序》 《建筑空间论》	系重点课程
	3	计 基 础 训 练	建筑设计与构造(1)	8 × 16	建筑设计入门:了解建筑设计必须满足物质和精神方面的不同需求;了解理性的建筑设计方法和基本设计理论;了解设计与构造的关系,注意构造的重要性	1. 小建筑设计(7周) 建筑面积150m²左右,理解人体尺度、活动空间及建筑构成要素、各阶段的草图示范与训练 2. 简单功能建筑设计(8周) 建筑面积250m²左右,有三种以上大小不等的空间,有较简单的环境要求。建筑设计理论系列讲座	墙体与隔墙、门窗	小餐厅建筑设计 传达室设计 幼儿园建筑设计 小别墅设计	《公共建筑设计原理》 《建筑:形式、空间和秩序》 《建筑设计方法论讲义》 《建筑构造》第一册	深圳大学重点课程
年级	4	阶段	建筑设计与构造(2)	8 × 15	了解适用、经济、技术、环境、美观诸因素对建筑的决定作用及它们之间的辩证关系、继续培养正确的设计方法、强化空间造型能力、提高语言和文字表现能力、培养环境意识。学习建筑构造知识	3. 中小型公共建筑设计(12周) 建筑面积1500m²左右,应有不小于200m²较大空间和不少于五种用途 的基本单元。选择地段在城市街区中 通过这个功能性较强的题目、培养理 性的设计方法。按照类型研究→方案 分析→深化设计→表现几个阶段进 行训练,通过制作工作模型来构思空 间,注重原创性。继续建筑设计理论 的系列讲座 4. 快题设计(3周) 建筑面积200m²左右,功能单一建 筑,在教师指导下完成	楼面、地面、楼梯与台阶	社区图书馆设计海滨浴场设计	《图书馆建筑设计》 《建筑:形式、空间和秩序》 《公共建筑设计原理》 《建筑设计资料集》 《建筑构造》第一册	深圳大学重点课程
三年级	5	综合设计能力培养阶段	建筑设计与构造(3)	8 × 16	个体、群体对周围环境的 影响	5. 自然环境中群体空间设计(8周) 建筑面积2000m²左右,场地选在 山边或海边,使用功能要求严格。理 解建筑设计与使用者的关系,一切为 用户着想。通过抽象一形象—抽象的思 维训练,培养学生创造性思维的能力 6. 快题设计(1周) 建筑面积500m²左右,独立完成, 老师只在事后给予总结 7. 城市环境中群体空间设计(7周) 建筑面积3000m²左右,有一个 300m²的大空间。训练以一个大空间 为中心的建筑设计,注意协调城市环境的各种关系	屋顶、门窗、地基与基础	100床风景区旅游旅馆设计公园茶社设计海滨餐厅设计社区文化中心设计	《旅馆设计规划经营》 《建筑师手册》 《图式语言》 《建筑师学术、职业、信息手册》	

续表

年级	学期	阶段	名称	学时	训练目的	主要内容与要求	构 造 内 容	题 日 举 例	教材和 参考书	备注	
年级	6	综合	建筑设计与构造(4)	8 × 15	继续培养处理复杂 功能和环境的能力,了解 建筑设计相关的结构、设 备、法规等问题 能运用科学的方法 从事资料收集和调查研究 培养分工协作精神 与外校外专业的学生联 合设计、评图	8. 高层建筑设计(8周) 建筑面积10000 m²左右,高度为 100 m²以下,底层(1—5层)为商业中心,上面为办公楼,地处城市中心区 讲解高层建筑设计原理、高层建筑发展史、垂直交通设计、结构选型、防火规范、建筑设备等 9. 全国大学生设计竞赛统一题目(7周)	变形缝及 抗震设施 高层建筑 特殊构造 问题	高层办公综合楼 设计 高层公寓式办公 楼设计 建筑师之家 建筑系馆设计 大学生活动中心	《高层建筑设计》 《建筑构造》第二 册	香港高层建筑考察	
四年级	7	设计能力:	设计实践		了解建筑设计的全部过程、设计相关的经营管理活动,掌握施工图的基本要求。理解设计的全过程都要依靠团结协作的重要性,并能在实际工作中虚心听取各方面的不同意见	讲课: 现行建筑工程设计程序与审批制度、与设计有关的组织机构、体制和管理制度。建筑设计收费标准、签订合同的手续、合同格式、职业道德规范。设计院的运作方式、各专业间的分工与协调。施工图的绘制(<500 m²)	建筑构造 总复习, 新材料、 新构造		《建筑构造》第一 册、第二册 《建筑制图标准》 《房屋建筑制图统 一标准》		
	8	培养阶段	居住区规划与住宅设计	8 × 15	了解国内外居住区 规划与住宅问题的历史、 现状,掌握居住区规划和 大量性城市住宅设计的 基本原理和方法 理解联系实际、调 查研究,群众参与的重要 性,理解城市规划与城市 设计对建筑的要求,有能力 因时、因地、因事制宜,并 考虑到今后的发展,确定 总体布局	讲课: 10. 住宅设计(7周) 住宅问题、高层住宅设计理论、住宅设计历史与实例研究 城市规划理论、城市规划的概念、城市规划和建筑环境的相互关系 11. 居住小区规划设计(8周)	坡屋顶	多层住宅设计 高层住宅设计 居住小区实例调 查分析 花园式住宅设计 居住小区规划设 计	《城市住宅建筑设计》 《住宅建筑设计规范》 《居住区规划设计规范》 《居住区规划设计规范》 《集合住宅》 《建筑总平面设计》 《都市意象》	计算机辅助制图	
五年级	9	专业技能深化拓展阶段	业技能	建筑设计与构造(5)	8 × 8	综合技能的全面训练、建筑设计专业技能的深化拓宽 理解结构及设备等各专业的要求,初步具有综合和协调能力 掌握特殊类型建筑中技术性设计的有关知识及设计方法	12. 综合性建筑设计, 掌握建筑与城市景观、市政、交通的关系, 对建筑结构、建筑技术、设备材料、消防、法规等全面理解与掌握。含厅堂设计的内容, 技术性设计的重点包括视线设计、声学设计及人流疏散 13. 快题设计(研究生试题模拟)	多层均筑、大型公均原。 层型公均原域。 是现分,是一个,是一个,是一个。 是一个,是一个,是一个。 是一个,是一个,是一个,是一个。 是一个,是一个,是一个,是一个。 是一个,是一个,是一个,是一个,是一个,是一个,是一个,是一个,是一个,是一个,	剧场设计 电影院设计 文化活动中心设 计 科技馆设计 会展中心设计	《建筑构造》第二 册 《剧场建筑设计》 《电影院建筑设 计》	
	10		毕业设计	8 × 20	综合技能的全面训练,构思研究的深化。在理解城市规划对个体建筑限定的前提下,全面考虑适用、经济、技术、环境、美观诸因素,比较诸方案优劣并作出正确决策	14. 毕业设计 专题研究、实际工程	结合设计、因材施教	大空间公共建筑 博览空间建筑 综合医院建筑 城市综合体 居住规划		毕业论文、毕业设计图、设计模型	







建筑学专业一年级 ARCHITECTURE MAJOR FIRST YEAR





