

# 北京四合院建筑

马炳坚 编著



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The Architecture of the Quadrangle in Beijing

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谨以此书献给  
第二十二届世界建筑师大会

DEDICATED TO  
THE XXII UIA CONGRESS BEIJING 1999

盡力編寫成了一本迄今為止最為  
全面介紹北京四合院的巨著，文圖  
並茂，洋洋大觀，即將同世，不勝之  
喜。謹贅數言，以致祝賀。

一九九九年三月

羅哲文



四合院是中國傳統建築布局構成的基本形式，不僅有其發生發展的悠久歷史而且有著豐富深邃的文化內涵。而北京四合院則堪稱為代表。如何保護研究這份珍貴的文化遺產，弘揚其優秀傳統是當代建築學人和執心同道們十分關注的課題。茲有馬炳堅等同志費心

## 作者简介

马炳坚，1947年生，高级工程师，从事中国古建筑施工、设计、研究、教学、办刊三十余年，业绩显赫，著述颇丰。1983年与同仁共同发起创办《古建园林技术》杂志，并在其中担任重要工作，为继承、弘扬中华传统建筑文化做出了突出贡献。他所设计的古建园林工程遍布国内外，深受各界人士的好评。其代表著作《中国古建筑木作营造技术》被海内外学者誉为“近代对中国古建筑最有分量的书”，并多次获奖。现为北京市第二房屋修建工程公司(北京古代建筑工程公司)古建筑研究咨询部主任，并兼任《古建园林技术》杂志编委会委员、常务副主编，中国建筑学会建筑史学分会学术委员，中国文物学会传统建筑园林委员会常务理事等。



## About the Author

Mr. Ma Bingjian, born in 1947, senior engineer, engaged more than 30 years, in the design, construction, research, and teaching of ancient buildings with striking achievements and fruitful writings. In 1983 Mr. Ma and his colleagues started publishing a journal named TRADITIONAL CHINESE ARCHITECTURE AND GARDENS and has played an important part in the editing work and made great contributions to the inheritance and advance of the Chinese architectural culture. The landscape gardens designed by Mr. Ma can be found in many cities in China and other countries and have been well received by visitors. His representative work THE BUILDING TECHNOLOGY OF THE TIMBERWORK OF THE ANCIENT BUILDING IN CHINA is considered by Chinese and foreign scholars as the monumental work on Chinese ancient architecture and has been rewarded many times. Mr. Ma is now the director of the consultative department of the ancient building, No.2 House Building Engineering Corporation of Beijing Municipality (Beijing Ancient Architectural Engineering Corporation) and concurrently the vice-editor-in-chief of the editorial committee of the journal TRADITIONAL CHINESE ARCHITECTURE AND GARDENS, the academic member of the Society of the History of Architecture under China Society of Architecture, and member of the standing committee of Traditional Landscape under the Society of Cultural Relics of China.

## 内容简介

《北京四合院建筑》一书是作者在多年从事北京四合院保护、研究、设计、施工的基础上写成的一部学术、技术专著。全书涉及四合院的历史、文化、格局、风水、空间、构造、装修、装饰、设计、施工、保护、修缮等全部内容，是迄今为止包含内容最全，技术、艺术信息含量最大，涉及方面最广的一部四合院建筑专著。本书不仅内容翔实，文字叙述流畅，通俗易懂，而且选用了大量照片和墨线图配合文字内容，使读者一目了然，使用方便。

本书的出版，对继承、弘扬中华传统建筑文化、保护古都风貌，对北京四合院及其它传统民居的保护、研究、开发利用均有重要意义。

本书适合于从事古建筑文物保护、建筑历史研究、古建园林设计施工的广大科技人员及大专院校建筑系师生、中外建筑学工作者、房地产开发经营者、广大的古建筑爱好者阅读和参考。

## Synopsis

THE ARCHITECTURE OF THE QUADRANGLE IN BEIJING is an academic and technical work based on the author many years of work on the research, design and construction of the quadrangle. It covers the history, culture, pattern, fengshui (localization), space, structure, design, fitting, decoration, protection and repair of the quadrangle. It is a monograph on the quadrangle, comprehensive in content, complete in the information about technology and art. Its statement is full and accurate, easy to read, and it is richly illustrated with photos and drawings. The appearance of this book will have great significance in the work on the inheritance, and dissemination of Chinese architectural culture, the protection of the style and reature of the ancient capital—Beijing, and the protection, research, development of the quadrangle and other forms of traditional folk dwellings.

This book will be valuable to the departments in charge of the protection of architectural relics, study on history of architecture, design and construction of landscape gardens. Teachers and students of the architecture faculty in universities, researchers on architecture at home and abroad, and investors of real estate, and readers interested in ancient buildings, will benefit from this book as well.



## 前 言

北京四合院是老北京人世代居住的主要建筑，是中国传统居住建筑的典范。

北京四合院有着十分悠久的历史，它的雏形产生于商周时期，元代时作为主要居住建筑大规模出现在北京，明清两朝得到长足发展。

北京四合院有优于其他任何住宅形式的居住环境，它有宽绰疏朗、起居方便的中心院落，有高度的私密性和亲合性，非常适合独家居住。

北京四合院以东、西、南、北四面房屋及其围合的院落为基本单元，可向纵深和两侧任意发展，适合于各种不同规模的家庭居住。

北京四合院的建筑格局和空间构成体现着以家长为中心的封建家庭秩序，是中国封建社会的基本组成细胞。

北京四合院有着地道的京韵京味儿，展示着老北京人传统的民风民俗，具有浓郁的民族风格和地方特色。

北京四合院的建筑构造和工艺技术，反映出我国民居建筑技术所达到的高超水平，是一部生动的中国居住建筑技术史。

北京四合院的建筑装饰具有极高的艺术价值和观赏价值，它反映出中国传统民居建筑装饰艺术的辉煌成就。

北京四合院有丰富的文化意蕴，它的每一块砖石构件、每一处雕饰彩绘、每一幅匾额楹联，都与社会的伦理道德、行为规范、人们的信仰追求、文化修养有直接的联系。

作为中国传统建筑重要组成部分的北京四合院，近年来受到各方面越来越多的关注。政府和规划部门关注着它——它是体现北京六朝古都传统风貌的重要内容，要保护古都风貌，必须认真保护北京传统四合院；文物部门、旅游部门关注着它——它是北京重要的文物遗存和不可缺少的旅游资源，受到中外人士的青睐；旅居海外的华人关注着它——在祖国日益强大的今天，他们渴望落叶归根，并想重新住进心目中留有深刻印象的四合院；改革开放中先富起来的酷爱中国传统文化的人们关注着它——他们不惜重金，购买旧院，建造新宅，过起独门独院的安逸生活；对中华文化情有独钟的外国人关注着它——他们以能住进中国传统四合院为时髦和荣耀，纷纷在京城买地建宅，心安理得地当起了“北京人”；房地产商也关注着它——他们看准了北京四合院这具有中国民族风格的高档住宅的潜在市场，纷纷投资，改造旧街区，开发新街区，把资本转向四合院的开发建设……凡此种种都表明，在高楼大厦林立的都市中，正涌动着一股传统民居四合院复兴的热流。

这种情况要求我们对传统民居四合院应当进行全面的、系统的、深入的研究；对它的价值应当重新认识；对它的营造、保护技术以及深刻的文化内涵应当加以继承；对四合院在新的历史条件下的发展趋势要作出科学的分析和展望。

自1980年以来，我们在从事古建筑研究的过程中，对北京四合院进行了大量的实物调查和资料收集工作，在从事传统建筑设计的工作中，又进行了不少四合院的修缮、复建设计，并从中学到了许多知识，悟出了不少道理，积累了一定经验，同时也感受到人们对四合院的深深眷恋和对四合院文化断层的无比痛惜。于是萌生了要写一本全面介绍四合院的书籍的想法，以使这一优秀的传统建筑文化得到继承和弘扬。这个想法得到领导和同行们的普遍赞同，于是，将这个课题列入计划之中，并拟于2001年完成付梓。

1998年年初，天津大学出版社的同志找到我，向我了解出书计划。当听到有关北京四合院的选题时，他们尤感兴趣，并向我约稿。由于当时承担着繁重的仿古建筑设计任务，未敢贸然答应。5月，天大出版社又找到我，并表达了要将这个选题作为向第二十届世界建筑师大会献礼项目的意向。将中国优秀传统建筑文化介绍给世界，是我们多年来奋斗不息的事业。第二十届世界建筑师大会在北京召开，是一个千载难逢的机会。此时，我们承担的设计工作也基本完成，时间安排上有了一些松动。我考虑再三，决定接受出版社的稿约，提前两年实施《北京四合院建筑》的出版计划。

《北京四合院建筑》一书内容涉及四合院的历史、文化、风水、格局、空间、构造、装修、装饰、设计、施工、保护、修缮等全部内容，是迄今为止包含内容最全，技术、艺术信息含量最大的一部专业学术技术专著。它不仅能帮助一般人士了解和认识四合院，而且能帮助专业技术人员、大中专学生学习和了解四合院，并对四合院的设计、营造、保护、维修也有着重要参考价值。

本书共分九章，第一章介绍传统四合院住宅产生、形成、发展、衰败的历史以及在新形势下复苏的状况。第二章介绍四合院的基本格局，其中既有理想的标准院落，又有不甚规则的实物例证，可使读者对四合院的类型、布局有比较全面的认识。第三章讲述有关风水方面的一些常识，对其中比较实用的内容作了较为详尽的介绍。这三章，对于介绍四合院的书籍来说，是必不可少的内容，但它们不是本书的重点。这些内容，许多先行者都已做过深入研究，并发表过不少论著，本书只是根据内容需要将前人的成果进行了摘引和重新组织。第四章分析了四合院的建筑空间组合模式，以及这种模式与封建制度之间的内在联系，将读者的视线由表象引向深层。第五章和第六章是本书的重点章节。第五章讲述四合院建筑及其构造，其中用了三节篇幅介绍四合院的主要建筑及附属建筑，如正房、厢房、

耳房、倒座房、后罩房、宅门、垂花门、屏门、游廊、影壁以及上马石、拴马桩等的构造、尺度、色彩、建筑造型和艺术特点；用两节篇幅对室内外木装修作了详细介绍。第六章，四合院建筑的装饰和室内陈设，主要谈四合院的建筑装饰以及艺术成就，重点写四合院的砖雕、石雕、木雕、油饰彩画以及室内家具与陈设。通过对这些艺术形式和内容的介绍，揭示其中的文化内涵，给人们以有益的启示和借鉴。其中家具和彩画两节，分别聘请对家具陈设及油饰彩绘有精深造诣的王希富、蒋广全二位先生执笔，使本书大为增色。第七章讲述私家园林和庭院绿化，专门介绍从属于四合院民居的私家园林的规模、功用、造园手法、艺术特色及文化内涵；对庭院的绿化种植及其讲究也作了必要的阐述。五、六、七三章内容比较详尽，配合文字选用了大量实物照片和墨线图，给人以具体形象、深入确切的感受和印象。第八章，四合院的营造与保护，也是本书的重点，它的内容对四合院的设计、施工、保护、修缮将提供具体的帮助。最后一章是对四合院现状分析和对未来的展望。在这一章中，我们结合近年的工作体会和对四合院的社会需求状况，分析了四合院的发展前景，做出了新的历史条件下四合院不仅可以保留，而且还会继续发展的客观估计。

《北京四合院建筑》一书的编著工作是异常紧张的。从与出版社签约到完稿仅有近半年的时间。这期间，除著书之外，还要兼顾工程设计、课题研究、《古建园林技术》杂志的编辑和其他日常工作，可谓杂事繁冗，重负难堪，加之本人学识所限，难免论证失当、谬误失察、挂一漏万。尤其对四合院文化内涵的发掘更显肤浅单薄。欠缺之处，敬希广大读者和专家、同仁赐教斧正。

我们是怀着对祖国优秀传统建筑文化的挚爱之情撰写本书的。我们希望通过它能使更多的中外人士了解北京四合院，不仅了解它的形式和艺术，更了解它的内容和价值，珍惜它的存在和发展，使这一优秀的传统居住形式更好地服务于今天的社会，使中华传统建筑文化在中国、在世界得以更加广泛地传播和弘扬。这就是我们奉献此书的主要目的。

马炳坚

1999年3月

于北京营宸斋

## Preface

The siheyuan (quadrangle) is the main architectural form of dwelling houses where elder Beijing inhabitants live from generation to generation and the paradigm of Chinese residential buildings.

The quadrangle has a very long history. It took shape in the Shang-Zhou Periods(c.16th century-256 B.C.). It appeared on a large scale as the principal dwelling in Beijing in the Yuan Dynasty (1271-1368) and developed rigorously in the Ming and Qing Dynasties (1368-1911).

The quadrangle has a living environment superior to any other forms of dwellings for its central courtyard, spacious and convenient to live, high privacy and affinity fit for a family to reside by itself.

The basic units of the quadrangle are the rooms in the east, west, south and north of the quadrangle and the courtyard enclosed by the above-mentioned rooms. It can develop in depth and on both sides, suitable for families of different sizes. The building pattern and spatial composition of the quadrangle embody the order of a feudal family with the head of the family as the core, and the quadrangle is the basic cell of the Chinese feudal society.

The quadrangle exhibits the traditional folk custom, the typical taste of Beijing inhabitants and national style and local features.

The structure and technology of the quadrangle reflect the high level which the building technology of folk houses has ever reached in China. The quadrangle is the vivid history of technology of Chinese architecture.

The decoration of the quadrangle has high artistic value to view and admire. They represent the brilliant achievements of the architectural decoration of the Chinese folk houses.

The quadrangle possesses rich cultural connotation. Every brick and stone member, every carving and colored drawing, every horizontal inscribed board and the couplets hung on the pillars of a hall are all directly associated with social ethics and morality, codes of conduct, people's belief and pursuit, and artistic appreciation.

As an important integral part of Chinese traditional architecture the Beijing quadrangle is attracting more and more attention from all walks of life. The government and planning departments are concerned with it — it is the important entity which embodies the traditional style and features of the ancient capital of six dynasties. To preserve them the quadrangle must be preserved in earnest; the departments of cultural relics and tourist administrations attach importance to it — it is the vital cultural monument and the indispensable tourist resource which is admired by Chinese and foreign tourists; the oversea Chinese have a tender feeling for it — when the motherland is becoming increasingly strong and rich they are longing for returning to their birthplace and living once again in the longcherished quadrangles; those who have become wealthy thanks to the Party reform and open policy and have a deep love for the traditional culture pay attention to the quadrangle, spare no money to buy

old quadrangles to reconstruct new ones, living a comfortable life in a detached house which has its own entrance and courtyard; those foreigners who show affection for Chinese culture take interest in the quadrangle — they are proud of living in the traditional Chinese quadrangle. They are busy buying land to build their quadrangle and feel at ease and justified to become 泻eijing citizen 押 The real estate investors set store by the quadrangle — they find the potential market in the high-grade residence — the quadrangle of national style and invest their money in the transformation of old blocks and the development of new blocks, in the construction of quadrangles, ... all these show that a surge of reviving the traditional quadrangles is welling in Beijing — the metropolis which has already had throngs of high rise buildings and magnificent mansions.

Such a situation requires that we should carry out comprehensive, systematic and deep studies on the traditional folk houses — quadrangle; re-appraise the value; inherit its technology of construction and protection and its profound cultural connotation; make scientific analysis and prospect of its developmental trend under the new historical conditions.

Since 1980 along with studying the ancient architecture we have made extensive on-the-spot surveys and information gathering work. In the course of designing, repairing and reconstructing historical buildings we have learned and realized a great deal and accumulated a certain amount of experience. Having been impressed by people's deep affection for the quadrangle and strong pursuit, we decided to write a book on the quadrangle in detail to the end that the excellent traditional architectural culture can be inherited and expanded. Our idea was supported by the leadership and colleagues and the topic was included in our plan. It was scheduled to come out in 2001.

At the beginning of this year (1998) editors of Tianjin University Press came to me and asked me for our plan of publication. When they heard of the topic of the quadrangle in Beijing they were interested and asked us to give them the manuscripts. As we were engaged in the heavy task of designing buildings in imitation of ancient buildings we did not make hasty decision. In May they came to me again and told me that they would offer this book as a gift to the XX UIA Congress Beijing 1999. Introducing the excellent traditional architectural culture to the world is the cause we have incessantly struggled for. The convening of the XX UIA Congress in Beijing will be a golden opportunity for architects coming from all over the world to know Chinese architecture. By that time the designing work we are doing will come to a close and the time will not be pressing. I thought over again and again and finally accepted the offer. The publication of THE ARCHITECTURE OF THE QUADRANGLE IN BEIJING would be realized two years ahead of the schedule.

THE ARCHITECTURE OF THE QUADRANGLE IN BEIJING deals with the whole contents of the history, culture, fengshui (localization) theory, space, pattern, structure, fitting, decoration, design, construction, protection, and repair. It is an academic and technical work covering all fields of the quadrangle, and providing information available about arts and technology. It helps common readers to know the quadrangle. It will also prove valuable to

the professionals and students of technical schools in the design, construction, protection, and repair of the quadrangle.

This book consists of nine chapters. The first chapter introduces the history of the birth, growth, development, and decline of the quadrangle and the revival under the new conditions. The second chapter gives the basic patterns of the quadrangle, in which there are both ideal standard courtyard and practical examples of less regular real quadrangles. They provide readers with relatively all around knowledge of the type and layout of the quadrangle. The third chapter tells about some common sense about fengshui theory and a detailed description of some of the practical points. Though the first three chapters are fundamentals of those books on the quadrangle they are not the focal points of this book. These contents have been studied by many forerunners, and many papers have been published. This book is only the quotations and re-organization of their fruits according to the needs of content. The fourth chapter analyzes the combination mode of building space and the internal relation between this mode and the feudal system, leading readers from the superficial phenomena to internal connotation. The fifth and sixth chapters are the key chapters. The fifth chapter describes the building and structure of the quadrangle. Three sections are devoted to the structure, scale, color, modelling and artistic features of the principal and subordinate buildings, such as the principal room, wing rooms, side rooms, rear rooms, houzhaofang (the last row of rooms), gate, decorative door, screen door, veranda, screen wall as well as shangmashi (a stone block for ascending a horse) and horse post; two sections are devoted to the detailed description of the indoor and outdoor wooden fitting. The sixth chapter dwells on the ornament and interior design of the quadrangle, with stress placed on the ornaments and their artistic attainments, for example, brick carvings, stone carvings, wood carvings, colored drawings and the indoor furniture. Through the description of these artistic forms and their contents we reveal the cultural connotation and present people helpful inspiration and reference. The two sections about the furniture and colored drawings written by two experts of great attainment Mr. Wang Xifu, and Mr Jiang Guangquan, do credit to this book. The seventh chapter specializes in the study of the scale, function, techniques of gardening, artistic features and the cultural connotation of the private garden in a quadrangle; it also gives necessary guidance and particulars about the trees and flowers to be grown in the garden. Chapters 5, 6, and 7 are full of detailed statements and rich in illustrations of photos and drawings. They will impress the readers with concrete images, exact experience and understanding. The eighth chapter discusses the design, construction, protection, and maintenance of the quadrangle in three sections. This chapter is also the focal point of this book. What is included in this chapter can be useful to the design, construction, protection and repair of the quadrangle. The last chapter of this book ends with the analysis of the present situation and the future prospect of the quadrangle. In this chapter basing on what we have realized in our work and what we know

about the social demand for the quadrangle in these years, we analyze the developmental prospect of the quadrangle and make objective estimates that the quadrangle should be not only retained but will be developed under the new historical conditions.

The preparation of THE ARCHITECTURE OF THE QUADRANGLE IN BEIJING is a strenuous work. Tight was the time — half a year from the signing of the contract with Tianjin University Press to the completion of the manuscripts. During this period in addition to writing we were required to give consideration to the project design, topic study, the editing of the journal TRADITIONAL CHINESE ARCHITECTURE AND GARDENS and other routines. We were swamped with work. Fortunately we have successfully accomplished our task.

It was with the sincere love for the excellent architectural culture of our motherland that we prepared this book. We hope that this book will help more Chinese and foreign readers to know the quadrangle, about its form and art, its content and value, treasure its existence and development so that the excellent traditional form of residence can better serve the society and the traditional architectural culture of China can be disseminated more widely. This is the main aim of our offer of this book.

Beijing, March 1999

Ma Bing-jian



北京四合院雪景  
李有杰 摄影



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