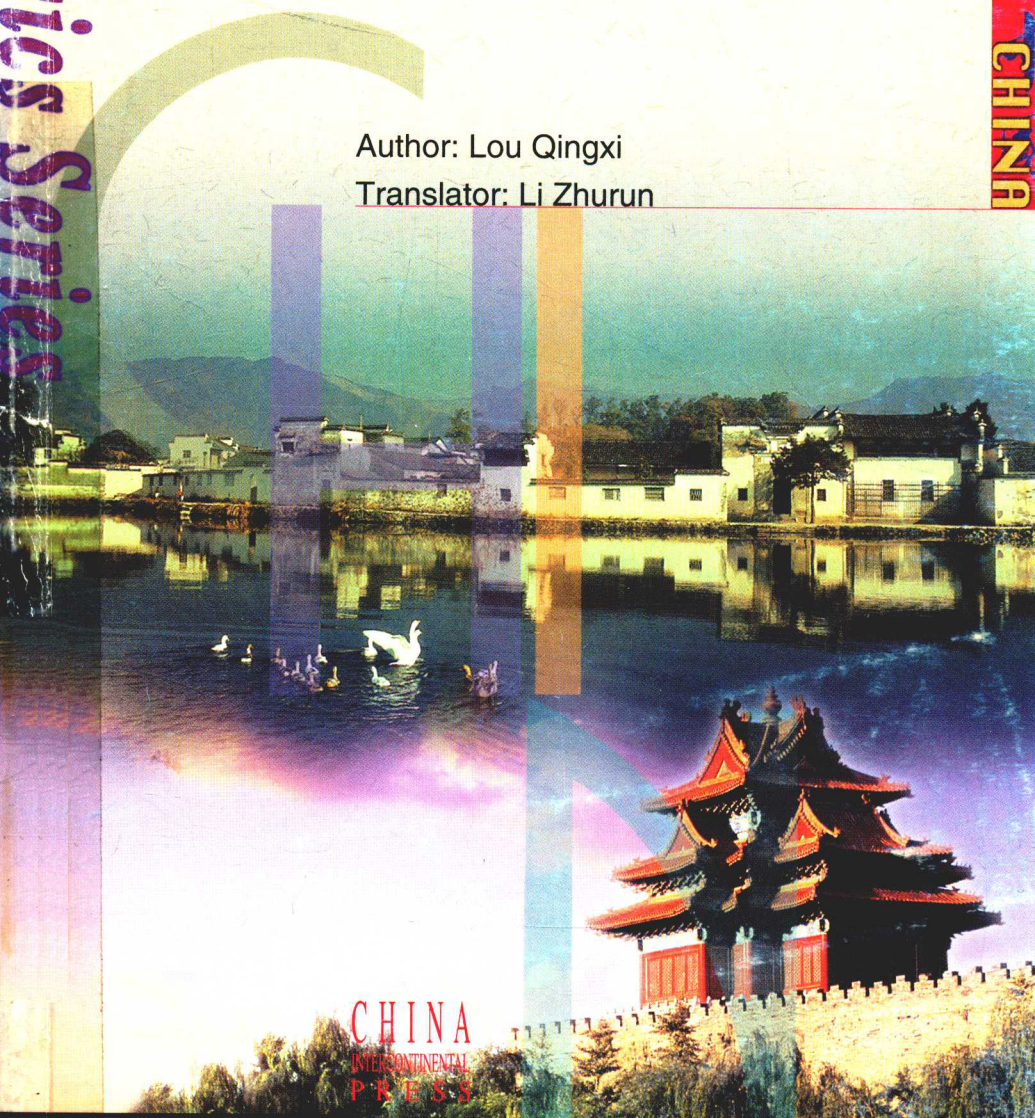
中 国 基 本 情 况 丛 书

China Basics Series

THE ARCHITECTURAL ART OF ANCIENT CHINA

CHINA

Author: Lou Qingxi
Translator: Li Zhurun



CHINA
INTERCONTINENTAL
PRESS

中国基本情况丛书

顾　　问　李　冰　赵少华
主　　编　郭长建
副 主 编　宋坚之(执行)　吴　伟
装帧设计　宁成春

本册责任编辑　冯凌宇

图书在版编目(CIP)数据

中国传统建筑／楼庆西著. －北京：五洲传播出版社，2001.2
ISBN 7－80113－822－8
Ⅰ.中…
Ⅱ.楼…
Ⅲ.建筑艺术－中国－古代－英文
Ⅳ.TU－092

五洲传播出版社出版发行
北京北三环中路31号　邮政编码 100088
HTTP://WWW.CICC.ORG.CN
*
2001年10月第1版　第1次印刷
889×1194毫米 32开 5.5印张 47千字
004500

TABLE OF CONTENTS

Chinese Civilization — Origin and Development 4

Palace Structures 14

Altars and Temples 50

Tombs and Mausoleums 74

Religious Buildings 98

Traditional Chinese Gardens 126

Religious Buildings 154

CHINA BASICS SERIES

THE ARCHITECTURAL ART OF ANCIENT CHINA

Author: Lou Qingxi
Translator: Li Zhurun

2002.7

CHINA INTERCONTINENTAL PRESS

中国基本情况丛书

顾　　问　李　冰　赵少华
主　　编　郭长建
副 主 编　宋坚之(执行)　吴　伟
装帧设计　宁成春

本册责任编辑　冯凌宇

图书在版编目(CIP)数据

中国传统建筑／楼庆西著. －北京：五洲传播出版社，2001.2
ISBN 7－80113－822－8
Ⅰ.中…
Ⅱ.楼…
Ⅲ.建筑艺术－中国－古代－英文
Ⅳ.TU－092

五洲传播出版社出版发行
北京北三环中路31号　邮政编码 100088
HTTP://WWW.CICC.ORG.CN
*
2001年10月第1版　第1次印刷
889×1194毫米 32开 5.5印张 47千字
004500

此为试读，需要完整PDF请访问：www.ertongbook.com

TABLE OF CONTENTS

Chinese Civilization — Origin and Development 4

Palace Structures 14

Altars and Temples 50

Tombs and Mausoleums 74

Religious Buildings 98

Traditional Chinese Gardens 126

Religious Buildings 154

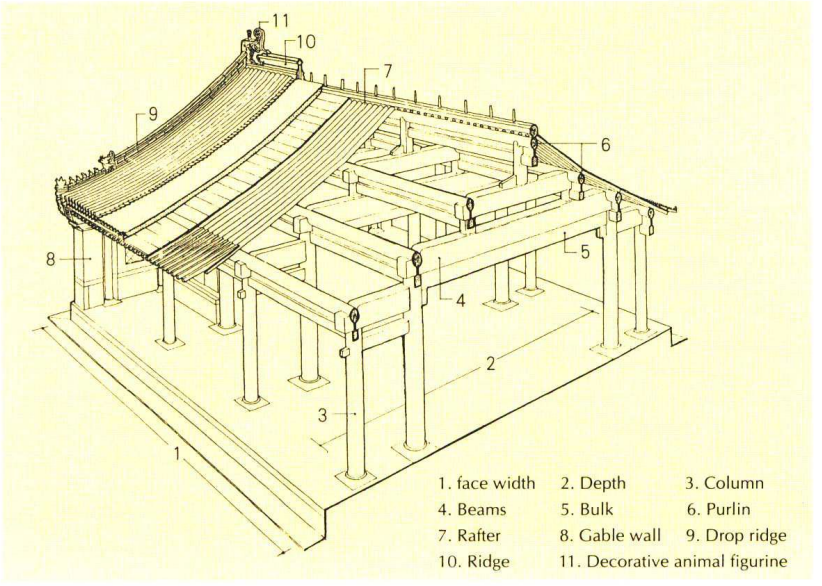
A Summary of Ancient China's Archifectural Art

China, one of the most ancient countries in the world, has a history of more than 5,000 years. At the mention of the Chinese civilization, its architectural achievements in particular, we customarily call to mind monuments like the Great Wall, the Forbidden City and the Temple of Heaven. As we see them, these structures indeed represent the essence of traditional Chinese architecture. But it has to be noted that other ancient structures in countless numbers can also be found on the vast land of China. To name just some: cities and towns of classical beauty, imposing palace complexes, magnificent tombs and mausoleums, awe-inspiring temples and altars, gardens that feature a harmony of natural and artificial beauty, and residential buildings beautiful with a primitive simplicity. These provide ample material evidence to the development of the Chinese civilization over the milleniums. Whatever it is, an ancient structure enlivens the spirit of China's traditional culture and, in one way or another, represents ancient China's accomplishments in construction techniques and architectural art.

Of the numerous schools of architectural art in the world, the Chinese school of architectural art strikes a line for itself. What are its most salient features? Here is a summary:

Wooden framing is the basic feature of ancient Chinese structures

Ancient Egyptians had to their credit those pyramids, and ancient Greece and Rome built those pits, arches and temples. These are all stone structures. In comparison, ancient Chinese structures, ranging from a simple residential building to a magnificent palace hall or a mausoleum, are mostly built with timber. The process of construction was basically the same. The first step was to erect some wooden columns on the foundation. Then wooden beams and bulks were fixed on the



Diagrammatic sketch of the structural framing of an ancient Chinese building.

columns, which, together with the purlins, would form the frame of the roof. The last step was to lay tiles on the frame of the roof. Walls of bricks or rammed earth were built at the same time, round the columns. It has to be noted that the upright columns, not the walls, are the supporting parts of the building, hence the old saying, "walls may collapse, houses – never."

Wooden frame structures were popular for a variety of reasons. In the first place, materials for constructing such structures were easily available and the construction methods were relatively simple. Ancient China had abundant forest resources, and felling of trees was certainly easier than quarrying. Through centuries of practice, ancient Chinese architects and workmen developed a modularized system for construction. To put it in plain language, the system called for using a key part of the wooden structure as the standard or as the basic unit of measurement, by which the architect would decide, through computation, the proper sizes of the columns, beams, purlins, doors and windows. Then workmen would build the different parts of the structure according to the prescribed sizes and standards, which they

Wooden frame structures without walls - waterside pavilions, corridors, etc.

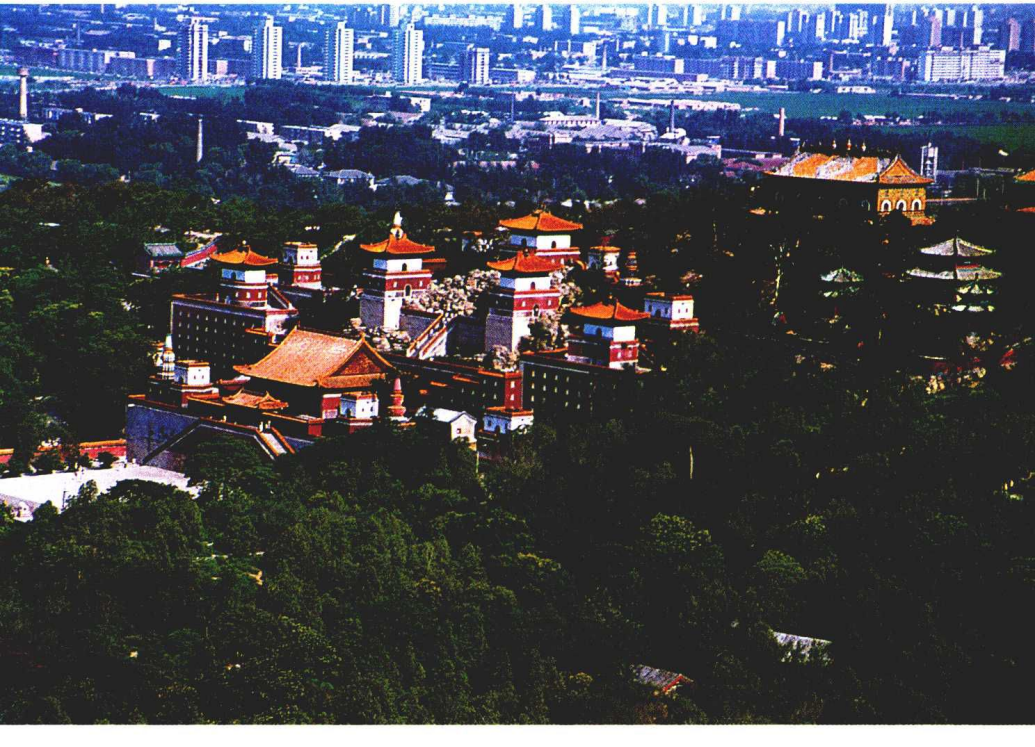
pieced together on the construction site at a later stage. This way of doing things made it possible for construction to proceed despite adverse weather conditions and other natural odds. A striking example is the construction of the Forbidden City that began in 1407 under the third emperor of the Ming Dynasty (1368-1644). It took just 13 years for the entire complex - nearly 1,000 halls, chambers and gardens in an area of 720,000 square meters - to be completed. In contrast, it took Italian workers nearly 30 years to complete just the grand stone dome of the Florenze Cathedral. Secondly, wooden frame structures are safer in earthquakes. The different parts of a wooden frame structure are connected with joggles and mortise joints. The flexibility of the joggles and mortises, plus the strength of the timber, helps prevent the structure from breaking up or collapsing when a strong tremor strikes. In Yingxian County, Shanxi Province, there is a wooden Buddhist pagoda built 900 years ago. The structure has remained intact even though several strong earthquakes have struck the area since it was built. Thirdly, as we have mentioned, walls are not the supporting parts of a wooden frame structure. And because of this, walls can be built in ways that best suit local conditions. In north China where it is cold, structures normally

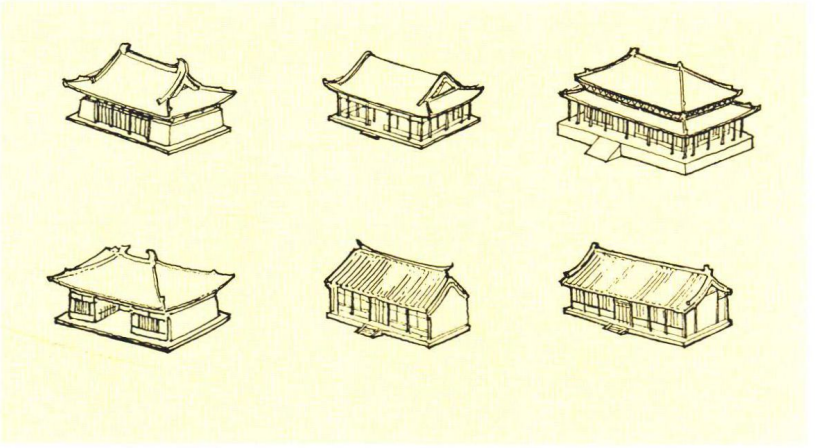
have thick, solid walls. In south China where it is hot, walls of houses are often built with wooden boards or woven bamboo mats. There are even structures without walls, such as *ting* (pavilions), *xie* (pavilions on terraces), *lang* (corridors) and some of the halls we find in traditional gardens and scenic spots. Moreover, a large room may easily be partitioned into chambers with wooden boards or screens. Solid walls can, of course be built to partition the room if its owner likes it.

But wooden frame structures are not as strong as brick or stone structures. Few ancient buildings of wooden frame structure have remained intact to this day because timber is easy to burn and become moth-eaten or rotten. In fact countless ancient buildings of wooden frame structure were destroyed in fires caused by lightning. The Hall of Supreme Harmony, the most important structure in the Forbidden City, was destroyed this way the year after it was built. In the following centuries, it was destroyed again and again in fires, and again and again it was rebuilt.

Ground plan of ancient structures

A neat cluster of buildings that form a Buddhist temple on the back of the Longevity Hill in the Summer Palace.





Roofs in different forms denote differences in ranking between the occupiers.

In most cases, ancient Chinese structures are in neat groups or clusters, whether they are palace complexes, temples or residential buildings. Few ancient Chinese structures have so complicated a plane layout and so imposing an outlook as those cathedrals and mansions in the West, but in groups or clusters they look equally magnificent, if not more. Just take residential buildings, for example. In north China, *si he yuan* are the most popular housing buildings in traditional style. A *si he yuan* is a rectangular compound formed with four neat rows of one-story rooms of gray tiles and bricks. The head of the family and his wife occupy the room in the middle of the row facing south, which is flanked by rooms for junior members of the family on either side. In most cases the rooms are not really large, but as a group, they are sufficient to satisfy the needs of all family members.

Wall led compounds like *si he yuan* are, in fact, typical of all ancient Chinese structures in terms of ground plan or plane layout. In other words, palace complexes and temples are much the same as *si he yuan*, the difference being that the former are much larger, consisting of courtyards and building not only greater in numbers but also more requisitely decorated. Rooms with four columns as the supporting parts are the basic units for ancient Chinese wooden frame structures. Several rooms built together form an independent row, and it is rows of rooms

此为试读,需要完整PDF请访问: www.ertongbook.com

that form compounds or courtyards, large or small. A city in ancient China was, as a matter of fact, formed with clusters of compounds and courtyards serving different purposes.

Buildings in neat clusters or groups that form compounds or courtyards represent the predominant artistic pattern for traditional Chinese structures. But it has to be remembered that traditional Chinese structures are diverse in style and plane layout. In mountainous and other areas with complicated landforms, people have had to take into full account of the local topographical conditions in planning the layout of the different structures in a compound. In such places, structures,

Decorative figurines on the roof of a Buddhist temple in Yunnan Province.

compounds and courtyards do not necessarily feature a bilateral symmetry. In south China, for example, clusters of residential buildings with and without courtyards can both be found.

The principle for design and construction of gardens of classical style can be summarized as "attainment of natural beauty by means of

The roof (partial) of a building in the Forbidden City, Beijing.
Pay attention to the decorative pattern.

painstaking human labor", which aims at creating landscapes producing a variety of visual effects. In other words, bilateral symmetry that characterizes traditional courtyards and compounds does not apply to classical gardens. Meanwhile, it needs to be noted that buildings in mountainous areas and classical gardens are not independent of themselves. Instead, such buildings are integral parts of a given architectural complex.

Artistic treatment of traditional Chinese structures

Exteriors of traditional Chinese structures are invariably decorated for artistic effects. To be precise, the entire buildings are decorated along with their exposed parts such as eaves, tiles and beams. When building a structure, ancient Chinese always worked painstakingly to make everything in its exterior -- even those eaves and tiles -- highly decorative. The roof of a typical ancient building is, in fact, an elaborate system of wooden beams and purlins and, as such, it may look heavy. But in no way does it look clumsy as the four tips curve up. Through centuries of practice, Chinese workmen and engineers developed ways to ensure that the roof of a structure assumes the form commensurate with the purpose of the structure or the its owner's social status.

Moreover, the various construction members of the ridgepole are invariably in the shape of small animals, and floral and animal designs are carved even on those tile-ends, making the entire building look even more enchanting. To prolong the life of a building, the exposed parts of the eaves and purlins are invariably painted, culminating in a unique art form known as *cai hua* or decorative paintings. Besides, carvings are always done on the stone terrace of an ancient structure, as well as its wooden windows and brick doors.

Such decorations are beautiful, carrying a great deal of cultural messages. The Chinese have always seen the legendary dragon and phoenix as auspicious. Besides, in ancient times the dragon and phoenix were associated to the imperial power, and were taken as the "logos" of the emperor and the queen, respectively. That explains why so many imperial buildings left over from the past are decorated with dragon and phoenix designs and patterns. The Chinese also regard some other animals as auspicious, as their names and certain auspicious words are homophonic. One best example is the bat. The characters 福 (happiness) and 蝠 (bat) are homonyms, both pronounced as "fu". Just for that, the

Decorative patterns of dragons, clouds and spirals painted on the beam of a building in the Forbidden City, Beijing.

The Chinese character 寿 (longevity) on a screen wall. The character is formed with five bats. The bat is seen as an auspicious animal.

bat is seen as an auspicious animal and often appears in folk paintings and handicraft articles. Windows of traditional housing buildings are often decorated with a pattern of five bats forming a circle round the character 寿 (pronounced as "shou", meaning "long life"). There are also animals and birds seen as auspicious for being symbolic or their natural characteristics. The tortoise, for example, is taken as a symbol of long life because it does live long. Mandarin ducks are the very embodiment of love, of mutual loyalty cherished by a couple, because the male and female birds in a pair are often seen "fondling" each other with their pecks, reminiscent of the husband and wife intoxicated with love. Natural characteristics of plants can be used to refer to people's social characteristics. For their elegance and luxuriant beauty, peony is referred to as the "queen of all flowers" and seen as the symbol of riches and honor. The pine and cypress are evergreen and always stand erect in defiance of wind and snow, thus seen as a symbols of strength, willpower and moral integrity. In addition to auspicious and symbolic animals, birds and plants, historic figures and stories are often the themes of decorative

patterns painted or carved on traditional structures. To sum up, decorative patterns and designs, in their own ways, enlivens the cultural side of the Chinese nation while adding artistic beauty to traditional structures.

Ever since its birth, the Chinese nation has comprised numerous ethnic groups. In the 1950s, work was done to identify the different ethnic groups living in the country. And in the following decade, nationwide investigations were made into the history and society of each ethnic minority group. The country has 56 ethnic groups. The ethnic Han people are the majority, accounting for 93% of the national population. Over the milleniums, the various ethnic groups have together built up the brilliant Chinese culture through exchange and communication. Meanwhile, each ethnic group has been able to retain its own cultural identity. Structures of the ethnic Tibetans are a strong expression of the Tibetan school of Buddhism. Though some artistic techniques of the Hans are used in their construction, ethnic Tibetan structures are imposing in outlook, bright in color and beautiful with a primitive simplicity. The Uygurs are proud of their architectural accomplishments in Islamic style which, as an independent architectural system in China, are simple and vigorous enough to create an artistic conception of magnificence and tranquility. The ethnic Dai people living in Yunnan Province, southwest China, believe in the Sthaviravada school of Buddhism, hence the similarity between religious shrines there and those in Myanmar and Thailand where the same school of Buddhism dominates.

Structures of the Han ethnic majority are the mainstream of China's traditional architectural art. Meanwhile, it has to be remembered that all the minority ethnic groups have contributed to the development of traditional Chinese architecture. Now we' like to provide a brief account of traditional structures which, according to conventional methods for classification of ancient buildings, fall into the categories of palace structures, altars and temples, religious structures, tombs and mausoleums, gardens and residential buildings.

Palace Structures

The story goes back to the year 206 BC when Liu Bang, leader of the most powerful peasant rebel army, overthrew the tyrannical Qin Dynasty (221 BC - 206 BC), established a new Dynasty which he chose to call "Han", and named himself "Emperor Gao Zu". Immediately after the new Dynasty was inaugurated in Chang'an (what is now Xi'an of Shaanxi Province), his ministers and generals proposed that a large palace complex be built for him. The new emperor, however, was hesitant, knowing that so much needed to be done as the country was far from being pacified. "Why is it that we should use so huge an amount of financial and human resources on such a thing when the country is still in turmoil?" he asked Xiao He, his prime minister. Xiao He, legendary for wisdom, replied: "The Son of Heaven reigns supreme over all land within the Four Seas. His majesty's might won't be known to his subjects if he does not have an imposing enough palace complex."

The story is sufficient to suggest that while serving the imperial needs for accommodation and work, palace structures were symbolic of the imperial might and power, the supremacy of the emperors. That explains why throughout China's history of feudalism, the founding emperor of any dynasty would spare no effort to have a magnificent palace complex built for himself. The best architects, engineers and workmen would be called in for the job, and the best materials available in the country would be used. That is why the palace structures were always the largest and the best in quality, representing the highest achievements made under the dynasty in architectural art and construction engineering.

此为试读,需要完整PDF请访问: www.ertongbook.com