Homes

TO THE TEACHER

OBJECTIVES OF THIS UNIT: To enable students to think about how Chinese homes were built and furnished. To encourage discussion of the connections between material culture and social organization. To provide concrete examples of regional variation in Chinese culture.

TEACHING STRATEGIES: Because students all have lived in homes, they should find it easy to think about the ways organizing space shapes interactions or reflects social relations. The technical detail on how houses were constructed should be of interest to anyone who has ever tried to build anything, and certainly some students will find this approach to the material side of Chinese culture more interesting than a more strictly aesthetic approach.

Because of its emphasis on climate and on regional variation, this unit complements the one on geography at a more sophisticated level. To make this unit more challenging, students could be asked to relate the aesthetic principles of Chinese houses and furniture to the aesthetic principles they have seen in other units (especially Ancient Tombs, Calligraphy, and Painting).

WHEN TO TEACH: This unit relies heavily on modern and contemporary photographs, but aims to document features of traditional architecture that date back many centuries, giving the teacher considerable leeway on when to use it.



HOUSE ARCHITECTURE

By the Ming dynasty, we have substantial evidence of how people lived. Not only do some houses survive, but we also have thousands of items of furniture from the period, numerous illustrations of homes in novels and plays published in the period, and even manuals describing how to build houses and furniture. Besides, we know enough about what houses were like in Ming times to know when photographs of modern buildings can be used to illustrate features of Chinese houses already present in Ming times.

How people constructed, decorated, and furnished their homes tells us a lot about their resources, aesthetic preferences, and social habits. This unit covers building structure and the interiors of homes. It offers material to think about both class and regional variation. In China, as in most other societies, houses are a form of material culture with strong connections to family structure. Indeed, like the English word house, the Chinese word *jia* can be used to refer both to the physical building and the family that occupies it.



INTERIORS

Think about the following questions as you look at each aspect of the home environment:

- What can we infer about people's lives from the spaces they created to live in?
- How did geography shape how people met the need for shelter?
- What aspects of house design and furnishing cannot be explained by climate?
- Are there features of Chinese furniture that make it especially suited for use in a Chinese house?
- What were the biggest differences in the ways the rich and the poor lived? Are these the same sorts of differences one would have found in Europe of the same period?

Suggested Reading

Home Architecture



A five-bay house in Zhejiang Province

SOURCE: Photograph courtesy of Ronald G. Knapp, 1987, Cangnan xian, Zhejiang Province

Homes all over China in pre-modern times had a lot in common. The way of laying out a house was similar among the rich and poor, both in earlier and later times. Certain materials and techniques, such as pounded earth foundations, timber framing, and use of bricks and tile were present throughout the country. Nevertheless, houses were by no means identical in all parts of China. If we look at houses in different regions we can see much that differed from place to place.

Although few examples of Chinese homes have survived from antiquity, using archeological evidence, scholars have determined that many of the basic principles of Chinese house design, such as the emphasis on orientation, layout, and symmetry go far back in Chinese history. In this unit we will examine first the basic elements of a Chinese house, then look at how houses varied by wealth and regional variation.



Detail from the Ming dynasty *Carpenter's Manual* showing the best places to site a house. The text for the house to the right says: "If there is a rock resembling a wine jar, the house changes into a 'site of fullness.' The family will be rich and as soon as a wish is pronounced, gold and silver will come pouring out."

SOURCE: From the *Lu Ban jing*, as found in: Ruitenbeek, Klaus. *Carpentry and Building in Late Imperial China: A Study of the 15th Century Carpenter's Manual <u>Lu Ban jing</u>* (London: E.J. Brill, 1993), section 3, page 5.

Orientation

One of the most striking aspects of Chinese domestic architecture is the practice of making houses face south. Archeologists have found that many Neolithic-period houses were rectangular with a south-facing door. Zhou period settlements were also organized on a north-south axis. These early dwellings no longer exist, but houses in China, the earliest of which date from the Ming dynasty, also show a tendency to face south. Houses built today are also built facing south, if space allows.

South-facing houses have several advantages. Can you think of some of them?

HINT: Besides issues related to sunlight, think of the direction of prevailing winds, especially cold winds.

The importance of orientation developed into the practice of *feng-shui* which literally means "wind and water" but is often translated as geomancy.

<u>Click here to learn more about feng-shui (geomancy)</u>. Feng-shui concepts also dictated the kinds of material used in buildings. Combined with the location of the building, the proper building materials were thought to re-direct beneficial energy for the inhabitants. The most common building materials for houses in China are earth and wood, both of which have positive associations.

The foundation of a house generally is made of pounded earth, and in some situations where wood was rare, earth was used in the construction of walls. Earth can be pounded into shape or made into bricks for walls. <u>Click here to see how buildings</u> <u>are made of pounded earth and how bricks</u> <u>are made.</u>

For roofs, depending on the wealth of a family, the material could vary. Clay is a fairly common material for making tiles for roofing. <u>Click here to see how tiles are</u> <u>made.</u> In some areas, for poorer people,

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thatch and bamboo were also common material.

How do these building materials differ from ones found in your environment?



SOURCE: Sung, Yingxing (b. 1587) *Tian gong kai wu* (Beijing: Zhonghua shuzhu, Xinhua shudian zongjing xiao, 1959), vol. 2, leaf 1.



Where wood was available and affordable, it was used to frame houses, providing support for the roof. The wood framework systems for Chinese homes and other buildings were standardized by the Ming dynasty and differ from wooden frameworks used in other parts of the world. Ordinary people could do much of the construction, but often experts were needed for framing. <u>Click here to see examples of</u> wooden framing.

Woodblock print from the Ming dynasty *Carpenter's Manual,* showing a carpenter at work

SOURCE: From the *Lu Ban jing*, as found in: Ruitenbeek, Klaus. *Carpentry and Building in Late Imperial China: A Study of the 15th Century Carpenter's Manual <u>Lu Ban jing</u>*. (Leiden: E.J. Brill, 1993, appendix 1, page 17.

Wood framework systems are important to consider because they determine the size of the house. The basic building block of Chinese architecture is the bay or "the space between," which is the space defined by roof supports. Chinese houses almost always consist of an odd number of bays; an even number of bays is considered unlucky. Therefore, three- or five- bay houses are common.



Home Architecture

A diagram of the supports for a three bay house



SOURCE: Courtesy Ronald G. Knapp

A south-facing three bay house in Inner Mongolia SOURCE: Photograph courtesy of Ronald G. Knapp, 1982.

The three-bay house can be understood to be the basic unit of Chinese homes. Depending on the size and the wealth of the family, these houses were added on to, often in standard ways. One common extension of the three-bay house was the creation of a courtyard dwelling. Traditionally, one family would share a courtyard space.



Courtyard houses epitomize traditional Chinese architecture. In Beijing, depicted here, such courtyard residences have been typical since the Yuan dynasty.

Can you identify a basic three-bay unit in this courtyard home?

How many bays do you think are found in this dwelling?

ANSWER: There would three bays in each unit, so there would be at least nine in the whole home, not including the small side extension at the front center of the picture.

Bird's eye view of courtyard house in Beijing

SOURCE: *Beijing gu jianzhu*. (Beijing: Wenwu chuban she, 1959), pl. 139.



A notable feature of the courtyard house is that the complex is fully enclosed by buildings and walls. There are no windows on the outside walls, and usually the only opening to the outside is through the front gate.

Why do you think there are no windows on the outside of the compound?

What would be the appeal of living in this sort of courtyard compound?

SOME THOUGHTS: The walls around the house not only give privacy and some protection from burglary, but also create a sharp distinction between "inner" and "outer." Inside the walls, especially in the rear or inner quarters, one is in a protected environment, where women, for instance, can move about freely, without worries about being observed by strangers. For men, the outer world can be a burden, making the space within the walls something of a sanctuary.

Ming dynasty woodblock print

SOURCE: Exhibition of Graphic Art in Printed Books of the Ming Dynasty (Taibei: National Central Library, 1989), page 217. Woodblock print from Yugui yuanzhai ren baiyue ting (4 chuan). It was not easy to see what a house contained by peeking through the front gate. Courtyards were constructed so that when one looked through the first doorway of the house only a brick screen was visible. Access to the rest of the house required first turning a corner. Ideally, the main door did not line up exactly with the inner quarters.

What kind of impression would this type of entry give the visitor?

MORE: Privacy was a main concern. This is also why walls had few if any windows. In addition, according to Chinese folk beliefs, bad spirits can only move in a straight line, so a screen blocks their access to interior living space.



A doorway of a Beijing courtyard house, showing the screen wall

SOURCE: Yan Chongnian, ed. *Beijing: The Treasures of an Ancient Capital.* (Beijing: Morning Glory Press, 1987), p. 247.

The sizes of courtyard houses vary greatly depending on the wealth, size, and the taste of the family, but generally the compounds had an inner courtyard (or a series of inner courtyards) and were built on a north-south axis. Like the simple three-bay house, the door of the main building faced south. The line drawings below show how the courtyard shape could vary while retaining balance.



Diagram of a three-sided courtyard house

SOURCE: Adapted From: Liu Dunzhun, ed. *Zhongguo gudai jianzhu shi*. (Beijing: Zhongguo gongyue chubanshe, 1984), p. 12.

Diagram of a four-sided courtyard house

SOURCE: Adapted From: Liu Dunzhun, ed. *Zhongguo gudai jianzhu shi*. (Beijing: Zhongguo gongyue chubanshe, 1984), p. 12.



Diagram of a two-courtyard house

SOURCE: Adapted From: Liu Dunzhun, ed. *Zhongguo gudai jianzhu shi*. (Beijing: Zhongguo gongyue chubanshe, 1984), p. 12.

As the two-courtyard house diagram above shows, new courtyards could be added creating a multi-courtyard dwelling. Doorways to the east or west could open into a garden.

Uses of rooms in a typical two-courtyard house plan at left:

1. Main entrance

2. Rooms facing the rear. The rooms facing the back, those near the entrance to the courtyard were reserved for the servants if the family was well-off.

3. First courtyard. Cooking was carried out here, and the second courtyard was a living space.

4. East and west-side rooms, for the sons and daughters, or the sons' families.

5. Inner Hall. Where the members of the family greeted guests or where family ceremonies were held.

6. Main building. Living space for parents.

7. Small side rooms. These used for children and extended family members.



SOURCE: Yan Chongnian, *Beijing, The Treasures of An Ancient Capital* (Beijing: Morning Glory Press: 1987), p. 247.

What can the diagram tell us about the organization of Chinese families?

Why do you think the rooms at the very back of the courtyard (number six on the diagram) are reserved for the older family members?

ANSWER: Family hierarchy is followed in the courtyard layout. Buildings at the rear, for the senior members of the family, are in the most private space of the courtyard home. The building facing the main gate also faces south, making it the warmest space during the winter months.



The courtyard was not only the basis of design for Chinese homes, but was also used in the design of more complex structures such as palaces and temples.

The courtyard layout can be clearly seen in the overview of the temple at left.

Fayuan Temple, Beijing. This temple is toured in the <u>urban</u> temples section of the Buddhism unit

SOURCE: Fayuansi (Beijing: Fayuansi liutongchu, 1981), inner cover illustration.

Although the three-bay house and its elaboration in the form of courtyard houses were the basic module of Chinese architecture, there was a great deal of regional variation. Looking at the variation of house design can tell us a lot about climactic differences throughout China, as well as the different aspirations of people from different regions.

Continue with **Regional Variation.**

There has also been a great deal of variation in interior design and the decorative elements used in houses.

Move on to Decorative elements in Chinese homes.

Home Architecture

Move on to Interiors



In China, those building both the most humble dwelling and the most extravagant house-and-garden compound sought to optimize the benefits and minimize the risks of the surrounding natural environment, based on a belief that some surroundings are luckier than others. *Fengshui*, or wind-and-water, also known as geomancy, is an ancient practice that uses almanacs, charms, and complex compasses to coordinate the interactions of people, their living spaces, and the natural environment. *Fengshui* regulates two dimensions of the environment - the spatial (the physical configuration of the land), and the temporal (determining the most favorable time to build). According to these principles, humans change the environment when they build habitation sites, with a potential to alter the flow of beneficial energy or *qi* in a positive or a negative way. The best sites allow energy or *qi* to flow freely, but not too rapidly. The placement of earth (hills) and water (streams) was seen as especially crucial.

The garden, like the home, was ideally ringed by hills but left open to the front, with tall mountains serving a protective purpose at the back of the compound, always the north side. Water was a critical element, and was often forced to take a circuitous path around the buildings, pooling in front of the main hall. In the highly populated urban centers, garden builders liked to use what they called "borrowed views," or glimpses of plants, trees, or architecture that could be seen beyond the garden walls because they had little freedom to choose the larger setting of their retreat.



Woodblock print illustration of one of the compounds in the Summer Palace, Qing dynasty

SOURCE: Wang Bomin, ed., *Zhongguo meishu quanji, Huihua bian 20: Banhua* (Shanghai: Shanghai renmin meishu chubanshe, 1988), pl. 184, p. 191.

Geomancers used visible landscape features to choose good sites that modulate the flow of *qi*. The ideal was something like the example above, with mountains ringing the habitation in a horseshoe shape, higher in back (to the north). The ideal hill formations were said to curl around the dwelling in a formation called a "dragon's lair," and have deep folds in their surface topography.

What else about this layout would you consider favorable?

Why would this configuration be thought of as protective?

The three images below are from a Ming dynasty carpenter's manual, the *Lu ban jing*; they enumerate favorable and unfavorable ways of siting, or locating, a house on land with particular features. The example on the far left, for example, says: "If there is a rock resembling a toad, and the grass looks like rice sprouts, weird things will happen in the house. Cripples and hunchbacks will be born, and the sons will have an ugly appearance."

Fengshui



Ways to site a house, from the Lu ban jing

SOURCE: Klaas Ruitenbeek, *Carpentry and Building in Late Imperial China: a Study of the Fifteenth Century Carpenter's Manual Lu Ban Jing* (Leiden and New York: E.J. Brill, 1993), p. 287, Figures 57, 58 and 59, Vol. 3.

The far right example is cited as a favorable one, allowing the house to produce heroes, while the example in the center is said to bode ill for maintaining a harmonious household.

What do you think might be the flaws or benefits in each of these sites that favor such readings?

HINT: In the site on the right, the pile of rocks suggests a mountain, a source of good yang energy, and the item on the top appears to be a screen often used to inhibit or re-direct energy. The site in the center is wide open to all directions, and in fact has paths that could lead bad influences directly to the house as well as good things away from the house.

Most of these environmental determinations required the expertise of a professional, and while this could be quite costly, even poorer families valued the services of the *fengshui* practitioner enough to scrape some money together to hire a geomancer before building a house.

Some of the principles of *fengshui* stemmed out of practical concerns. For example, siting a house so that it faces south is the general rule throughout China. This is discussed more in the Homes main page.

What do you think people could do to improve the conditions of their property if the local geography lacked necessary features such as mountains and hills?

ANSWER: The addition of strategically located plants and rocks would be considered. Screens of varying size and height, erected close to a house or in a village, could alter the flow of energy, and charms mounted on walls and doors could also help chase away bad spirits.

The balance of *yin* and *yang* traits was one of the main goals of the *fengshui* master. Also considered were the abundance and proximity of the five elements - wood, fire, metal, earth, and water. Water and fire were undesirable elements to associate with the home.

Finding ways to balance out pre-existing conditions could bring good fortune to the inhabitants of a dwelling, or at the very least, ensure that they did not invite adversity.

Fengshui



Earth has been a common building material through Chinese history. During the Neolithic period, people lived in caves or built their homes above ground using wattle and daub technique. More substantial, load-bearing walls can also be made of pounded earth, a technique that also has a long history in China. Here is an example of how these houses are made.



A wooden frame is constructed to hold the earth, and then the dirt is pounded into place.

In terms of actual construction, what might be some of the advantages of building with earth?

Using a log frame to build an earthen wall, Xian area, <u>Shaanxi</u> Province SOURCE: Photograph courtesy of Ronald G. Knapp, 1983, Xian area, Shaanxi Province

SOME THOUGHTS: Building with earth involves technology that is straightforward enough to be applied by many people. Construction can be done cooperatively, without the need for the presence of an expert. In addition, earth is available everywhere, and so is an affordable building material for people with lower incomes.

After the earth dries, the wooden frame is removed. The mold is being removed here, revealing an earthen wall that is free-standing. The impressions left by the mold can hold plaster after the wall dries.

Not all earthen walls are plastered.

In what regions might plastered walls be preferred?

ANSWER: In the south, plaster protects earthen walls from rain, and also radiates the sun's heat away from a building.

How do you think the wall is given stability?

ANSWER: Without a rigid frame such as wood to hold it up, the wall must have a firm base; note how wide the bottom of the wall is compared to the top.

Extra materials could also be added to strengthen the composition of the earth, such as straw, paper, oils, lime, shells, or sand, depending the region.



Building an earthen wall, Xi'an area, Shaanxi Province

SOURCE: Photograph courtesy of Ronald G. Knapp, 1983, Xi'an area, Shaanxi Province





Earth is also used to make bricks. There are several ways that bricks are made. In general, dirt or clay can be formed by frames and dried. Sometimes the earth is fired to make the bricks harder, but other times the earth is just left to dry in the sun.

Earth being used to fill frames for bricks in <u>Gansu</u> province

SOURCE: Photograph courtesy of Ronald G. Knapp, 1981, Lanzhou, Gansu Province

In Southern China, bricks can also be cut directly from a field after harvest and left to dry in the sun before they are fired. Here are some examples of this process from Guangxi province.



SOURCE: Photograph courtesy of Ronald G. Knapp, 1984, Yangshuo area, Guangxi Province



SOURCE: Photograph courtesy of Ronald G. Knapp, 1984, Yangshuo area, Guangxi Province

After the earth is smoothed into place, the bamboo handles are used to lift up and move the mold.

Roof Tiles



This image from a Ming dynasty manual shows how roof tiles are formed using a round circular wooden mold.

Can you match the activities in this print to those pictures below?

Woodblock print showing how tiles are made

SOURCE: Sung, Yingxing (b. 1587) *Tian gong kai wu*. (Beijing: Zhonghua shuzhu, Xinhua shudian zongjing xiao, 1959), vol. 2, leaf 5.

Woodblock print showing how tiles are made.

This method is still used today throughout China.

Some automation of the process has made more tile styles available.

After a flat rectangular piece of clay has been formed to the desired shape, it is placed on a wooden mold which has been covered with a moistened cloth.

What do you think the block at the bottom of the picture is used for?

ANSWER: Clay is rolled and given a general shape on this block, before it is placed on a mold.



SOURCE: Photograph courtesy of Ronald G. Knapp, 1987, Shifuxiang, Zhejiang Province

After the clay has been placed on the mold, it is tamped into shape.



Roof Tiles

The mold is mounted on a wheel, so the clay can be smoothed quickly to a uniform shape and size.



SOURCE: Photograph courtesy of Ronald G. Knapp, 1987, Li village, Jiande xian, Zhejiang Province

SOURCE: Photograph courtesy of Ronald G. Knapp, 1987, Li village, Jiande xian, Zhejiang Province



The wooden frame is taken out, and the cylinders of clay are left to air dry. After the clay has dried, it is broken into four segments. These are then fired in a kiln.

Look at the roofs of other houses in the Homes section, especially at the eaves. You can see the undulating line of roof tiles.

How would the tiles at the left be arranged on a roof for maximum protection?

SOURCE: Photograph courtesy of Ronald G. Knapp, 1988, Shuanglin zhen, Huzhou shi, Zhejiang Province



The Chinese have developed a distinctive wooden framing system to support the roof. Tile roofs are very heavy. Rather than bringing all the weight down onto the walls, which is how the triangular truss common in Western construction works, the system developed in China distributes gravitational forces downward and then out through the wooden frame. The weight-bearing frame provides flexibility for the placement of walls, windows, and doors. Non-load-bearing walls can be made of many different materials, such as brick, earth, wood, bamboo, or even corn or cotton stalks.

Two main kinds of framing systems developed: pillars-and-beams (*tailiang*), and pillars-and-transverse-tie-beams (*chuandou*). Examples of these framing systems can be seen below. The *tailiang* framing system is on the left, and the *chuandou* system is on the right.

The main components are vertical pillars that begin at ground level, short vertical supports called purlins, and horizontal beams connecting the purlins.

Can you identify these three basic components and determine their function in the diagrams below?



Wooden Framing

Diagrams of framing systems from a Song dynasty building manual

SOURCE: Li Jie, (1035-1110), *Yingzao fashi zhushi*. ed. Liang Sicheng (Beijing: Zhongguo jianzhu gongye chubanshe, 1983), p. .

Can you describe how either system might be adapted to support curved roofs? What would change to support roofs with pronounced curves?

How do you think these types of framing systems are better suited than the Western triangular truss to support a curved roof ?

HINT: The distance between purlins can be altered according to specific ratios.



Pillars-and-beams wooden roof support system, from a building in the

Beijing area

SOURCE: Photograph courtesy of Ronald G. Knapp, 1987, Lugouqiao area, Beijing

Can you see how the weight is distributed from this photograph of the inside of a roof?



Whereas building rammed earth walls required little technical skill, carpenters often needed to be called in to construct the framing system. To the left, carpenters in the still relatively well-forested <u>Sichuan</u> province work on a beam for wood framing.

Carpenters at work preparing a beam

SOURCE: Photograph courtesy of Ronald G. Knapp, 1981, Emeishan area, Sichuan province

Wooden Framing

A pillars-and-transverse-tie-beams system under construction in <u>Sichuan</u> province is shown to the right. This *chuandou* system is often used in the south where the houses are deeper.

Note the beam that extends past the frame.

Why might it be so long and wide?

ANSWER: This beam will support the weight of extended eaves at the corner.



SOURCE: Photograph courtesy of Ronald G. Knapp, 1981, Emeishan area, Sichuan province



Brick house with timber structure exposed in <u>Guangxi</u> province SOURCE: Photograph courtesy of Ronald G. Knapp, 1985 Guilin, Guangxi province

In frames of buildings for wealthier families, or for use in palaces or temples, the function of the cantilevered beam shown two pictures above might be replaced by complex, or corbelled, brackets, shown below. They are the layered green pieces below the eaves.



What function do you think the corbelled bracket serves?

ANSWER: The bracket braces the upward lift of the heavy eaves. In more expensive buildings, eaves are frequently extra heavy because they are tipped with decorated drip tiles to keep water away from the walls. Brackets also add ornamental accents to a building. Wooden Framing

Corbelled brackets and drip tiles,

Hall of Celestial Piety, Forbidden

City, Beijing

SOURCE: Photography courtesy of Lenore Hietkamp, 1998. Hall of Celestial Piety, Forbidden City, Beijing.

Regional Variation

Climate has a huge impact on the construction of Chinese homes, both because it shapes the materials available and because it determines the kind of shelter people need. Houses in the north respond to the colder, drier climate, while in the south, heat and humidity are major factors influencing design. (<u>Click here to review China's geography</u>). Some regional variation, however, is a matter of style, unrelated to geography.

Courtyards of houses in the north, such as seen on the left, are often much larger than those in the south, on the right.

What might account for these differences?



Overhead view of a courtyard located in the north

SOURCE: *Beijing gu jianzhu*. (Beijing: Wenwu chuban she, 1959), plate 139. SOURCE: Photograph courtesy of Ronald G. Knapp 1988, Bihu zhen, Lishui xian, Zhejiang Province

ANSWER: In the north, where it is colder, larger courtyards offer more exposure to the sun. In the south, skywells draw fresh breezes down into the living area, while overhanging eaves block the vertical rays of the summer sun.



In this photograph of recently built houses, look closely at the type of courtyard and the way the eaves are sometimes flush with the walls. These are visual clues to the location of this village.

Can you explain why these are clues, and whether this village is in the north or the south?

ANSWER: The size of courtyards and the depth of eaves are clues because they are designed to temper weather conditions. This village, with its large courtyards and modest overhangs is found in the north where cold is a bigger problem than heat.

An overhead view of a village

SOURCE: Zhongguo renmin gongheguo nongmu ye bu xuanchuan si, waishi si, Zhongguo nongxue hui, eds. *Zhongguo nongye* (Beijing: Nongye chubanshe, 1983), p. 190. Shandong province

Both of the dwellings below are rectangular and face south, as do the majority of dwellings in China, but otherwise they show distinct regional styles.

What are some of the differences in style that you see?

Where do you think these houses are found?





Three-bay house

Three-bay house

SOURCE: Photograph courtesy of Ronald G. Knapp, 1982, Inner Mongolia SOURCE: Photograph courtesy of Ronald G. Knapp, 1981, in the vicinity of Mt. Emei, Sichuan Province

Compare the three images below.

What distinguishes them from each other in terms of materials, shapes of roofs, and construction of walls?

Can you see what solutions these builders used to accommodate hot summers in these three houses?

ANSWER: In the top images, overhanging eaves block the sun. The also shield a central room whose wide opening invites breezes. In the others, small windows allow air circulation and minimal sunshine. White-painted walls reflect heat.



A five-bay house in <u>Zhejiang</u> Province

SOURCE: Photograph courtesy of Ronald G. Knapp, 1987, Cangnan xian, Zhejiang Province



Compare the differences in windows and openings in the houses here and below with the houses above.

How do you think the window openings change the interior space?

Yi xian village, <u>Anhui</u> Province

SOURCE: Photograph courtesy of Ronald G. Knapp, 1987, Yi xian, Anhui province

Notice how the end or gable walls rise above the rooflines of these houses. The feature is called a "horse's head wall" because of its shape.

Can you guess what might be the purpose of these walls?



Houses in southern Anhui Province

SOURCE: Photograph courtesy of Ronald G. Knapp

ANSWER: These walls originally served as fire barriers between houses, preventing the spread of flames that would catch in the wooden roof supports. Most fire walls are now decorative.



Houses built along canals are common in the south of China.

What advantages are there to building houses along a canal or a body of water?

Anchang zhen, Shaozing, <u>Zhejiang</u> Province

SOURCE: Photograph courtesy of Ronald G. Knapp, 1983, Anchang zhen, Shaoxing, Zhejiang province

Below are two views of dwellings in Fujian province in a region where Hakka live in single-lineage dominated villages. When these houses were built, different lineages were often engaged in armed feuding with each other.

Why do you think these compounds are built as single units that open inward?



View of a village in Fujian province

SOURCE: Photograph courtesy of Ronald G. Knapp,

1990, Hekeng village, Nanjing Xian, Fujian Province

Why do you think each dwelling is so large?

ANSWER: In this region lineages often had to protect themselves, which accounts for the fortress-like appearance of these dwellings. Each dwelling housed several related families. All structural requirements for daily living, including storage of food and implements, could be collected under one roof for added protection.



An interior view of a large circular Hakka dwelling in Fujian province

SOURCE: Liu Yuanting, Yang Gusheng, eds. *Minzhu jianzhu, Zhongguo meishu quanji, Jianzhu yishu pian, vol. 5* (Beijing: Zhongguo jianzhu gongye chubanshe, 1988), 182, pl. 164.



A village in Yunnan where many Dai people live.

How do these houses differ from those in the photographs above?

Village in Yunnan Province

SOURCE: Liu Yuanting, Yang Gusheng, eds. *Minzhu jianzhu, Zhongguo meishu quanji, Jianzhu yishu pian*, vol. 5 (Beijing: Zhongguo jianzhu gongye chubanshe, 1988), p. 152, pl. 142.



The building to the left-hand side of the picture, a yurt, is a traditional dwelling of Mongolians.

Traditional dwellings in <u>Inner Mongolia</u>

SOURCE: Photograph courtesy of Ronald G. Knapp, 1983

What are the major differences between a yurt and other houses seen thus far?

What reasons could you suggest for the use of a yurt in Inner Mongolia?

HINT: People in Inner Mongolia lead nomadic lifestyles.



Building a yurt in Inner Mongolia

SOURCE: Zhongguo shaoshu minzu diqu huaji congkan, Neimenggu, ed., Zhongguo shaoshu minzu diqu huaji congkan zong bianji weiyuan hui. (Beijing: Minzu chubanshe, 1986), p. 55. Although most of the houses pictured here were constructed above ground, other people have dug into the ground to create their dwellings. The tradition of living in caves has a long history that continues to this day in China. Click here to learn more about <u>cave</u> <u>dwellings</u> and to look at some contemporary examples of cave dwellings.



Cave dwellings are common in certain areas of northern China where they serve as homes for more than 40 million people. In the provinces of <u>Shaanxi</u> and <u>Shanxi</u> where the yellow earth (called loess) is quite compacted, cave houses have been in use for centuries. Below is a picture of this terrain in Shaanxi.



Loessal terrain in Southern Shaanxi

SOURCE: Photograph courtesy of Ronald G. Knapp

1977, southern Shaanxi Province

There are two main kinds of cave dwellings, both of which are shown below.

What are the advantages and disadvantages of living in cave dwellings?

ANSWER: Advantages: The construction of cave homes requires low technology. They are protected from the elements, and are insulated from the extremes of heat and cold.

Disadvantages: Caves dwellings lack light, have poor ventilation, and are often associated with poverty.



The first type of cave dwellings are those carved out of the side of a cliff. Cliffside dwellings are often south-facing, and the facades are sometimes faced with bricks or stone.

Why are the exterior openings framed with arches?

Cave dwellings with stone facing in Suide, Shaanxi Province

SOURCE: Wang Yongyan, *Zhongguo huangtu*(Loess in China) (Xian, Shaanxi: People's Art Publishing House, 1980), n.p.

ANSWER: The vault shape of a cave dwelling determines the shape of a facade.



The second type of cave dwelling is built where there are no hills. In this situation, people create sunken courtyards. After digging a courtyard that is usually about 10 meters deep, rooms are dug off the main courtyard. A large sunken courtyard complex, or pit dwelling, can have a courtyard as large as one hundred square meters.

The courtyards of cliff dwelling are usually larger than those of pit dwellings, because they are easier to create than sunken courtyards which must be excavated.

What problems might be encountered in living in a pit dwelling?

A boy walks along the top of a sunken courtyard home in Shaanxi Province

SOURCE: Photograph courtesy of Jerome Silbergeld, 1982

ANSWER: Drainage must be addressed in a sunken courtyard, unlike courtyards for cliffside homes.

As you look at the pictures below, think about where the family members might spend most of their time.



Courtyard of pit dwelling, Shaanxi Province

SOURCE: Photograph courtesy of Ronald G. Knapp, 1984, Qianxian



View upwards from a sunken courtyard in Shaanxi Province SOURCE: Photograph courtesy of Ronald G. Knapp, 1984, Qianxian Cave Dwellings



The decoration of houses can be traced to a combination of practical concerns, folk beliefs, and pure ornamentation. Walls and eaves are often decorated, but particular attention is paid to doorways and windows because these are places where good or evil spirits were thought to enter. Elegant decorative schemes would also provide ventilation or shading.

Many openings would be covered with latticework in an endless variety of patterns that "shape the wind" or alter the way air flows into a home.

In the image at right, the lattice in the doors serves several functions.

Can you think of some of them?



Doors in Sichuan Province

SOURCE: Photograph courtesy of Ronald G. Knapp, 1994, Langzhong, Sichuan Province



One way to summon good fortune is to invoke the character *fu*, seen on the wall to the right. *Fu* can be translated as "happiness," "good fortune," "blessings," or "luck."

"Fu" on wall in Shaoxing, <u>Zhejiang</u> Province

SOURCE: Photograph courtesy of Ronald G. Knapp, 1987, Dongpu zhen, Shaoxing, Zhejiang Province

Not only is the character *fu* auspicious, but representations of homonyms of *fu* are also good luck.

Because Chinese people honor age and desire long life, the character representing longevity *shou* is also often seen on Chinese houses. A stylized form of *shou* can be seen in the middle of the door to the right.

Can you guess why bats decorate this door?

ANSWER: The Chinese word for bat sounds the same as *fu*.



Door decorations found in **Zhejiang** province

SOURCE: Photograph courtesy of Ronald G. Knapp, 1987, Zhuangshi zhen, Zhenhai qu, Zhejiang Province



Another character thought to express longevity is *wan* which means "ten thousand." This character is often represented stylistically as a backwards swastika, such as on the lattice work to the left.

What triple function does this carving provide?

Lattice found in Sichuan Province

SOURCE: Photograph courtesy of Ronald G. Knapp, 1994, Langzhong, Sichuan Province

Other symbols of longevity are the peach, the tortoise, the deer, the crane, and evergreen trees.

Fish symbolize abundance because the two words are homonyms. Fish are often seen on Chinese houses.

In addition to happiness, wealth, and longevity, the Chinese also desire harmony at home. This is represented by a pair of fish swimming or pairs of geese, cranes, or ducks.

Things with many seeds, such as lotus pods and watermelons, reflect a desire for many children.

How many of the decorative elements described above can you find on the door to the right?



Detail from carved wooden doors

SOURCE: Liu Yanting, Yang Gusheng, eds. *Minzhu jianzhu, Zhongguo meishu quanji, Jianzhu yishu pian, vol. 5.* (Beijing: Zhongguo jianzhu gongye chubanshe, 1988), 137, pl. 126. Doorway with wooden bird carving, Yunnan province, Dali, Bai minority home.



To the left is a picture of a tiger with the eight trigrams. This is often hung above doors. In some parts of China, particularly Fujian province, the word for tiger is pronounced "fu." The eight trigrams are thought to ward off evil influences. In combination with the tiger's fierce face, this image makes a powerful amulet.

A tiger hanging above a door in <u>Zhejiang</u> province

SOURCE: Photograph courtesy of Ronald G. Knapp, 1987, Qianlang village, Shengxian, Zhejiang Province

Mirrors are also thought to deflect evil influences.

Can you guess why there is a pair of scissors hung with a mirror in the picture to the left?

ANSWER: Scissors cut off bad luck.



This combination of mirror and scissors is hung

above an entryway facing an oncoming lane SOURCE: Photograph courtesy of Ronald G. Knapp, 1987, Shexian, Anhui Province.



SOURCE: Photograph courtesy of Ronald G. Knapp, 1988, Jinxiang zhen, Cangnan xian, Zhejiang Province.

How many decorative elements can you find in the image to the left?

The banners can be translated as:

Every time I hear of good deeds, my heart is happy.

Interiors



Interior view of a courtyard in Beijing

SOURCE: Ma Bingjian, *Quadrangles of Beijing* (Beijing: Beijing Arts and Photography Publishing House, 1995), p. 6, pl. 4.

One of the most impressive features of courtyard homes is the flexibility of the courtyard space. Traditionally, much time was spent in these courtyards. Plants and trees often grew in courtyard spaces, providing shade from summer sun. Courtyards could be used as a place for carrying out household tasks, or as a place to relax.



What factors might influence the use of this space?

HINT: Both men and women might have used the space. It also would also used differently by people in different classes or occupations.

INTERIOR LIVING SPACES

One of the most important spaces in Chinese homes was reserved for the family's ancestors. Chinese families encompassed the dead as well as the living. As a result, traditionally Chinese families, rich or poor, devoted a space to the ancestors of the family.



A wooden ancestor from a home in <u>Fujian</u> Province

SOURCE: Liu Yanting, Yang Gusheng, eds., *Minzhu jianzhu, Zhongguo meishu quanji, Jianzhu yishu pian, vol. 5* (Beijing: Zhongguo jianzhu gongye chubanshe, 1988), 171, pl. 158.

In ordinary homes this usually consisted of a small shrine set up in the main room of the house. In richer families, an entire hall may have been made into the ancestral shrine. Shrines might take the form of tables, upon which tablets were set. Families would also hang couplets on either side.

Often offerings of food and incense are placed on this table to show reverence to the ancestors. The table underneath, as in the image above, would serve as extra surface area to hold offerings.

SLEEPING AREAS

As in the west, homes in China have places where people eat and sleep.



Chinese sleeping areas often had at least one bed, but the style and the quality of beds could differ greatly.

Why are these curtains around the bed?

Why might the table be so much higher than what you are used to?

The answer to the above question about table height refers to the uniquely Chinese piece of furniture at the back of the picture. In many northern homes, the living quarters are dominated by this *kang*, a raised platform with flues underneath for heating. Inhabitants slept on the *kang* and in the winter much of the daily activity took place there. <u>Please click here to see examples of *kangs*.</u>

A bedroom from a Ming dynasty woodblock print

SOURCE: Exhibition of Graphic Art in Printed Books of the Ming Dynasty (Taibei: National Central Library, 1989), p. 219. "Attending a sick mother-in-law," woodblock print from Zhongjiao wulunchuan xiangniang ji (2 chuan). Click here to see more beds from the Ming period.

What other types of household furnishings can you identify?

Most items of furniture, such as tables and chairs, are also common to Western usage but often have different designs that respond to specific customs or practical considerations. <u>Please click</u> here for more examples of furniture from the Ming dynasty.



Eating was not confined to a single room. People could eat in courtyard, garden, or inside. During the winter, people often took their meals on the *kang*.

Screens were used to divide space in Chinese homes.

In the images to the left and below, what purpose do you think the screens serve?

ANSWER: Screens separate male and female space.

Ming Dynasty woodblock print illustration

SOURCE: Exhibition of Graphic Art in Printed Books of the Ming Dynasty (Taibei: National Central Library, 1989), p. 53. "Wife of Po Tsung of the Chin dynasty," woodblock print from Nu fan pian (4 juan). Interiors

KITCHENS

Chinese kitchens are different from Western kitchens. Often kitchens were not included in house plans. For richer families, cooking was done in the servants' quarters. In poorer families, cooking was done in the main room of the house or in a separate shed. In general, Chinese kitchens are more compact than Western counterparts. In the Chinese kitchen, the focus of activity generally centers on the stove, which dominates the kitchen space. In the space above the stove, there was often a nook for the kitchen god, who was said to protect the home.

Can you find the nook for the kitchen god in the photograph to the right?

MORE: The kitchen god guaranteed domestic harmony. His image is on paper because it is burned each Chinese New Year, so that he can take a report of the family to the Emperor of Heaven.



SOURCE: Photograph courtesy of Ronald G. Knapp, 1987, Tonglu xian, Zhejiang Province

Interiors



A kitchen in Jiangsu province

SOURCE: Chen Congzhou, *Zhongguo minju* (Hong Kong: Xuelin chubanshe, 1993), p. 89, pl. 124. *What elements of these kitchens are different from Western kitchens?*

What can a kitchen tell us about Chinese daily life?

Notice how clear of objects the floors are.

Why might this be important?

SOURCE: The prevention of mold is a primary reason for keeping things off the ground. Hanging things up also reduces clutter and so allows more space in which to move.



Bedrooms in colder parts of China are dominated by raised platforms known as *kang.* During the winter, the *kang* provides a heated area that is warmed by hot air vents connected to adjacent stoves. The *kang* and the stoves were the only sources of heat throughout the cold months. In the summer, the *kang* were fairly cool places to spend time, and as a result the *kang* was a scene of household activity throughout the year.



SOURCE: Jianzhu xuebao (Beijing) 1962, vol. 10, p. 3.

Kang



The existence of a raised platform as the main focus in Chinese houses led to a certain kind of furniture design.

From the pictures to the left and below, can you describe what effects the prevalence of a raised platform has on furniture design?

A kang found in Shanxi Province

SOURCE: Liu Yuanting, Yang Gusheng, eds. *Minzhu jianzhu, Zhongguo meishu quanji, Jianzhu yishu pian, vol. 5.* (Beijing: Zhongguo jianzhu gongye chubanshe, 1988), p. 18, plate 18.



Woodblock print of a kang

SOURCE: Zou Ya, Ling Pingfan, eds. *Jiefang qu muke* (Beijing: Renmin meishu chubanshe, 1962) plate 127. Woodcut print by Zhang Wang, circa 1950.

Beds



A woodblock print from a Ming dynasty novel showing a woman relaxing in her bed.

SOURCE: Chang Bide, ed. *Mingdai banhua xuan* (Taibei: Guoli zhongyang tushuguan, 1969), vol. 2, plate 146. Woodblock print from *Wusao ji*.

Before the Ming dynasty, most fine furniture was made of lacquered softwoods. In the Ming hardwood furniture became more and more fashionable. Most of the highly desired wood for furniture came from South East Asia. As hardwood furniture was more durable, most of the examples of classical Chinese furniture that now exist come from the Ming period or later.

How does this canopy bed differ from the one seen below?



How would sleeping in this bed differ from sleeping on a kang?

To see a bed of this sort still in use in a peasant household in the 1980s, <u>click here</u>. [In the guide, below]

Ming bed with table

SOURCE: Wang, Shixiang, ed. Zhongguo meishu quanji, gong gui meishu pian, vol. 11. (Beijing: Xinhua, 1987), 169.

A bed in the 1980s:



Below is a picture of a Ming Dynasty "*Luohan* bed." This piece of furniture might be placed in a reception hall or in a studio for relaxation during the day. A *kang* table could be used on top of it for enjoying refreshments.



Why are the back and sides carved in an open-work pattern?

ANSWER: Carving allows air to circulate (particularly warm air if it faces away from a *kang*). It also has aesthetic appeal, since the carving makes this bench appear lighter than if it were a solid piece of wood. Ming Beds

Ming dynasty luohan bed

SOURCE: Wang, Shixiang, ed. *Zhongguo meishu quanji, gong gui meishu pian, vol. 11* (Beijing: Xinhua, 1987), 164, plate 196.

Certain kinds of beds such as the one seen to the right resemble platforms more than beds.

What would be the advantage of such a piece of furniture?



A Ming Dynasty woodblock print showing a man on a daybed

SOURCE: Chang Bide, ed. *Mingdai banhua xuan* (Taibei: Guoli zhongyang tushuguan, 1969), vol. 1, no plate #. Woodblock print from *Wu Yan tangshi huapu*.



During the Ming dynasty, Chinese furniture received much greater attention than in previous times. Interior design became a sophisticated practice in which furniture was intended to complement a home. The aesthetic value of tables and chairs was part of the development of specific designs corresponding to specific functions. In addition, construction techniques and materials used were as appreciated as the design of furniture.

What different shapes and sizes of tables can you find in the images on this page? What functions do you think might be specific to different designs?





A Ming dynasty woodblock print

SOURCE: Fu Xihua, ed. *Zhongguo gudian wenxue banhua xuanji*. (Shanghai: Shanghai renmin chubanshe, 1981), vol. 1, p. 207. Woodblock print from the Ming novel *Hong Fu ji*.

Wood block print

SOURCE: Chang Bide, ed. *Mingdai banhua xuan* (Taibei: Guoli zhongyang tushuguan, 1969), vol. 2, plate 146. Woodblock print from Wu Sao ji.

Notice that in the woodblock prints above, the furniture is bare.

The material of these tables is *huanghua li* or "yellow rosewood."

Why do you think this type of wood was highly favored by Chinese carpenters and homeowners?

ANSWER: Yellow rosewood is very strong and has a clear grain and vivid color.



A Ming dynasty table

SOURCE: Wang, Shixiang, ed. *Zhongguo meishu quanji, gong gui meishu pian, vol. 11.* (Beijing: Xinhua, 1987), 146, plate 73.

Ming Furniture

Why might the table below be so short?



A Ming period kang table

SOURCE: Wang, Shixiang, ed. Zhongguo meishu quanji, gong gui meishu pian, vol. 11. (Beijing: Xinhua, 1987), 136, plate 159.

ANSWER: Many such tables with short legs could be picked up and moved onto the high beds typical in Chinese homes. These high beds, called *kang*, were heated below and so people spent a lot of day time hours on them.

If you haven't already looked at the kang and its furniture, click here.



An important feature of much classical Chinese furniture is that it is made without nails.

If nails were not used, how do you think these tables and chairs might have been constructed?

Ming dynasty armchairs

SOURCE: *Classical Chinese Furniture*. (San Francisco: San Francisco Craft and Folk Museum, 1992), p. 27. Armchair, huanghuali wood, ca. 17th c. Dimensions: height, 106.5 cm.; length of seat, 55.2 cm.; width of seat, 43.5cm.

ANSWER: By the Ming period, Chinese furniture makers had developed a highly sophisticated system of joinery, or interlocking wood pieces, such as tongue and groove. Many different kinds of joints evolved that allowed a wide variety of furniture types and shapes. For example, the "giant's arm brace" joined a table top to legs, giving ample leg room while making the table very strong.

Note the similarities and differences between the chairs in the print at right and the chairs above.

How many different types of chairs do you see in the images on this page?



High-back chairs as seen in a Ming dynasty woodblock print

SOURCE: Fu Xihua, ed.*Zhongguo gudian wenxue* banhua xuanji. (Shanghai: Shanghai renmin chubanshe, 1981), vol. 1, p. 131. Woodblock print from the Ming novel Shuang bei ji.



Round drum stool from the Ming dynasty

SOURCE: Wang, Shixiang, ed. *Zhongguo meishu quanji*, gong gui meishu pian, vol. 11. (Beijing: Xinhua, 1987), 114, plate 135.



Ming dynasty woodblock print from the novel A Pair of Fishes

SOURCE: Fu Xihua, ed. *Zhongguo gudian wenxue banhua xuanji*. (Shanghai: Shanghai renmin chubanshe, 1981), vol. 1, p. 212.

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