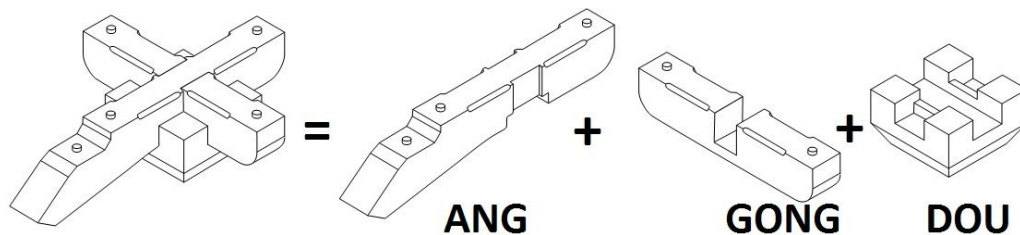




Dǒugǒng Architectural Model

Dǒugǒng – It is a unique structural element of interlocking wooden brackets and blocks and is essential to the timber frame structure of traditional Chinese building.

This model of dǒugǒng shows how an interwoven system of brackets and blocks fits together without glue or nails. As an architectural construction, dǒugǒng connects the building's pillars and columns to the roof and forms a structural network that distributes the weight and binds the roof and the pillars together.



The upward curving bracket arm (gǒng) extending from the pillar or beam supports the outwards thrust of the eaves. In turn, the bracket arms are supported by bearing-blocks (dǒu).

Due to the precision of the carpentry, the brackets and bearing-blocks are fit together by joinery, without glue or nails. The non-rigid wooden joints allow the buildings to slide and hinge while absorbing shock and vibration. This has made these structures very earthquake-resistant, and why many dǒugǒng constructed buildings have survived for so long.

Dǒugǒng structure was invented in late centuries before the common era, and further developed throughout Chinese history. Dǒugǒng construction was widely used in the China as early as the Spring and Autumn period (770–476 BCE) and developed into a complex set of interlocking parts by its peak in the Tang (618–907) and Song (960–1279) dynasties. After the Song Dynasty, dǒugǒng bracketing became more ornamental than structural. Chinese architectural dǒugǒng construction had a major influence on the architectural styles of Korea, Vietnam, and Japan.

Dǒugǒng construction short video

<https://www.youtube.com/watch?v=6EMJ8sOzjrc>

PBS NOVA Secrets of The Forbidden City

<https://www.youtube.com/watch?v=QgNmbaCKQw4>

Power and Beauty Connections

Imperial Throne – Room 5

Made during the Qianlong period (r. 1736–95), this rare piece of court furniture is one of the larger and more fully decorated thrones outside China. Few lacquered thrones have dragons and celestial landscapes like those found here, painted in gold lacquer across the entire expanse of the seat. The composition and iconography of the five-clawed imperial dragons cavorting among clouds and flaming pearls above the ocean is an official insignia and similar to the decoration of court robes and other official court textiles of the period. The cabriole legs, aprons, and openwork back and side panels are all carved in relief with scrolls and lacquered in green, red, and gold. The panels of the removable back and side rails are decorated with stylized dragons and *shou* (longevity) medallions emblematic of imperial rule and long life.

Imperial Throne, 18th century, polychrome lacquer over a softwood frame, 93.32.a-d

<https://collections.artsmia.org/art/4546/imperial-throne-china>

Collection Connections

Prosperity Gate, China, 1858, Qing dynasty, yu and pine woods, stone, earthenware tiles, pigments, mortar, 2017.152

<https://collections.artsmia.org/search/prosperity%20Gate>

Wu Family Reception Hall, China, early 1600s, wood, ceramic, tile, plaster, lacquer, stone, 98.61.1

<https://collections.artsmia.org/search/Wu%20Reception%20Hall>

Model of a Watchtower, China, 1st-2nd century, low-fired earthenware with green glaze, 2002.90.4

<https://collections.artsmia.org/art/62040/model-of-a-watchtower-china>

Military Watchtower, China, 1st century, low-fired earthenware with green glaze, 98.69A,B

<https://collections.artsmia.org/art/5799/military-watchtower-china>