HIMEJI CASTLE

Architecture 5320

Daren Willden

Himeji Castle

Located in Himeji City about 50 miles west of Kobe in Hyogo Prefecture, Himeji Castle is considered one of the master works of Japanese castle construction. It's age, size and historical context give it an importance unlike any other castle in the country. It is rated with Nagoya and Kumamoto Castles for its representation of the peak of Japanese castle building. But unlike those, Himeji is largely original and not a reproduction, containing one of only twelve surviving donjons (castle tower) from Japan's feudal period. It is in fact the largest extant castle in Japan.

From an historical perspective, Himeji represents both the height of castle building technology and the height of the need for castles. During the period that Himeji was "modernized", there were over 4,000 castles in Japan, literally creating a national industry. Built in its present form after a decisive battle towards a central Japanese government, the need for such massive castles soon disappeared. The site is considered a national treasure, having escaped the ravages of fire, earthquake and war (particularly WWII). Noted film maker, Akira Kurasawa filmed his epic '*Ran*' at Himeji and It was designated a UNESCO World Heritage Site in 1992.

The site of Himeji Castle was originally fortified in 1346 by Akamatsu Sadanori, a lord in charge of security for the Himeji area. The castle was in a strategic area on the way to the western provinces and was key to helping subdue feuding lords.

The castle (actually more of a fort at that time) switched hands several times, eventually falling to Toyotomi Hideyoshi who invaded the area in 1581. The castle was used as a headquarters for Hideyoshi during a period of violent and protracted civil wars between feuding daimyos (lords). Hideyoshi had an interest in architecture and constructed several large castles, including castles at Osaka & Jariaka-Dai. It was Hideyoshi who began "modernizing" the castle by adding a moat and a three story donjon.

in 1601, shortly after Hideyoshi's death, his heirs were defeated in the landmark battle of Sekigahara that switched control of the central government to Tokugawa Ieyasu, who's Shoguns would reign for the next 270 years. At that time the castle was given to Ieyasu's son in law Ikeda Terumasa. The castle was needed to keep competing daimyos in check. Not all the daimyos, particularly in the west, were ready to support the new Shogun. It is Terumasa who is credited with building Himeji castle in its current form.

Terumasa tore down the three story donjon and added a five story, seven floor donjon. He added two additional moats. Also added were a triple keep with turrets and two to three story fortified tower corridors. The construction program lasted nine years and consumed 50,000,000 (yes, that's million) man-days. The construction was so intense that a shortage of stones was experienced. The government resorted to confiscating stones, resulting in some rather unusual building materials.

In the stone walls of Himeji can be found; ancient stone coffins and lids, temple lanterns, Buddhist sculptures and millstones. Masons often signed their work so they could be summoned in a hurry should repairs be necessary. The castle was partially restored in the 30's and a full restoration was completed in 1964 with a mere 20,000 workers.

37 extant structures remain inside the one kilometer of plastered wall. The main donjon is 147' tall from base to ridgepole and connects to four other towers. It tapers with each successive story being 21% smaller than the previous, culminating in a fifth story that is 29.5' X 49.25'. All towers are connected by a two to three story bridge corridor. The castle has been largely absorbed into the city with a freeway contained in the last of its remaining moats.

It is a timber frame structure with bamboo lathe and clay infill, several feet thick. In most Japanese structures, walls were prefabricated and erected on site. In the castle however, the irregular foundation caused by the wall, and the rapidity of construction necessitated the use of master carpenters on site to fit joints as construction progressed. Two massive timbers over 80' tall support the structure, running from the foundation to floor beneath the seventh story.

Several things define a Japanese castle. Castle technology developed along similar paths in both Europe and Japan. There was a basic progression from simple wooden defensive structures that relied heavily on natural land forms, to forts that relied more heavily on man made defenses. From there the progression was made to the more elaborate and more symbolic castle. Both European and Japanese castles relied heavily on technology previously utilized in religious architecture. Finally, both European and Japanese castles developed in response to unstable social & political conditions and disappeared when strong central governments made them obsolete.

While castles in Japan developed in the same way and for the same reasons as their European counterparts, the form of these castles diverged based on differing needs. While their purpose is defense, the methods are different. Japan, as an island nation was rarely attacked by a foreign power. As a result there was no need for the walled city that was so traditional in feudal Europe and even in mainland Asia. Wars were generally between rival daimyos. The castle was heavily fortified, but the city that usually grew up around the castle was not. The warriors lived in the city rather than inside the fortified castle.

Battles were usually fought away from the castle, with the castle as a last retreat for the daimyo. If enemy warriors breached the security of the castle, there was usually a network of defenses to repel them. You first encountered a courtyard where you would be fired upon from every conceivable angle. Maze-like corridors, false corners and warrior hiding places (Kakushi) were some of the defenses an enemy warrior might face if they breached the castle. If defeated, the losing daimyo was expected to commit ritual suicide after setting the donjon on fire with straw stored for just such a purpose.

Like their European counterparts, Japanese castles were well prepared for siege warfare.

Most castles were fireproofed in some manner. Himeji took this to the extreme, coating every wooden surface in plaster and whitewashing the plaster. This gives the castle its unique appearance, earning its nickname of White Heron Castle or Shirasagijo. After the introduction of flintlock muskets by Portuguese castaways in 1543, walls had to be made thicker and moats wider. Loops (Hazama) in the walls designed for archers could not be used by a sharpshooter in a prone position. Hazama began to appear at varying levels to accommodate both musket and arrow.

Security was of the utmost importance, so at Himeji window frames were wrapped in metal to prevent ninja spies from sawing through them. To further confuse enemies, these frames were then fireproofed to make them look like wood. Gates were set low to hide them from view of the enemy. One of the most unusual features however is the concealing of two additional floors inside of a five story structure. Said to confuse the enemy and allow hiding space for more warriors, it may be that difficulties with the foundation made this a necessity as well.

Like European castles, the Japanese castle made use of projections over castle walls that allowed defenders to use various weapons, such as stones or boiling oil against invaders attempting to scale the walls. In the Japanese castle the windows in these projection were known as ishiotoshi, literally “stone dropping window”.

The single most important characteristic to the Japanese castle however, is the castle wall. The walls of the Japanese castle while serving the same function as the European castle do so in a much different way. Instead of surrounding a compound, the wall becomes the base on which the castle stands. This result was that the walls had to resist immense loads. The weight of the main donjon at Himeji was 5700 tons. These loads meant that a vertical wall was impossible with the technology of the time. In fact any wall was in danger of collapsing that did not have an angle of at least 40Ø. It also meant however, that the main donjon would be visible for miles.

With such a large structure, on such a massive wall, why is it that these castles don’t look Oppressive and clunky? The walls had parabolic curve that gives them their graceful appearance. This curve was the result of design for earthquake resistance, a force the French, British and Germans did not have to contend with. These forces were also dealt with by using dry masonry. The absence of mortar allowed movement at the joints. This kept the walls from cracking during tremors.

The shape is not merely a functional however. The castle wall is a"sublime aesthetic statement", reflecting a long Asian tradition of graceful shapes and an expression of high technology. The walls are often called ogi no kobai (folding fan shape). These lines were reflected in the roof line of the castles. The curved roof was a natural projection of the curved wall beneath it. The castle walls were usually built in haste and utilized natural land forms. Combined with the irregular nature of the building material, the walls were seldom square. At Himeji, the walls are off by 70 cm from back to front. The result is a first floor plan that is trapezoidal, with no right angles. Hipped and gabled roofing helps conceal this.

The roof was also a design feature designed to project an image. The large eaves were difficult to build and did not shed water well at the intersecting planes, but they made a statement. As the castle transformed from a defensive structure to a statement of power, the curving roof line and tall eaves became more of a symbol of authority and accomplishment, than a functional element.

Himeji castle is often called White Heron Castle, or Shirasagijo. This is a reference to both its stark whitewashed exterior and its form that resembles a great White Heron poised for flight. Foreign visitors never ceased to be amazed at the scale and beauty of Shirasagijo-White Heron Castle.

"As the visitor travels across the Harima Plain, he notices a structure that dominates the whole area. It appears almost as a mirage."

Morton S. Schmorlietz

Everything about Himeji is of magnificent proportion. It was built during the pinnacle of castle development and has stood largely as it was built, for almost 400 years. It was built out of necessity, utilizing master craftsmen, cutting edge technology and a unique Asian aesthetic. Through its sheer size, colorful history and elegant form, Himeji castle remains the epitome of the Japanese castle.

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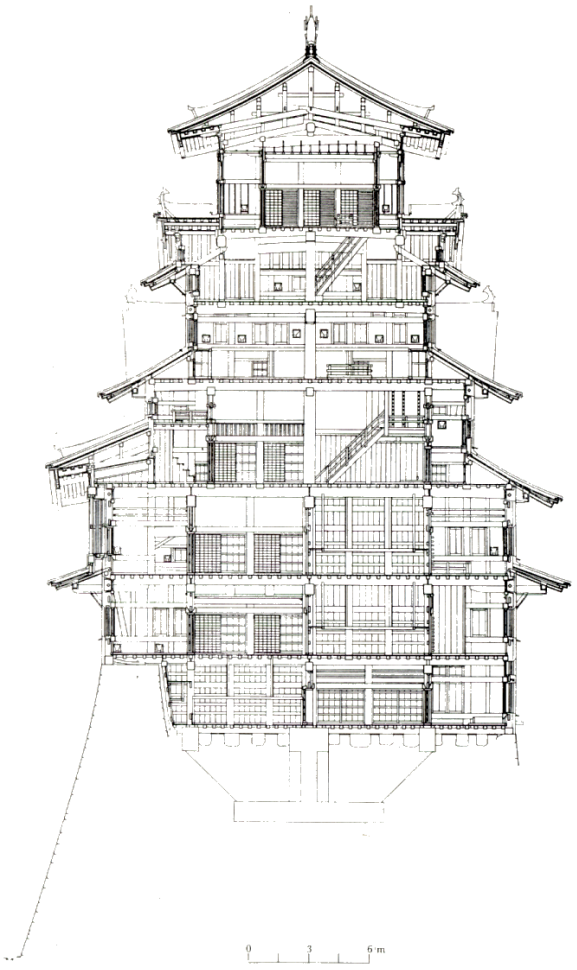

72. Section of Great Tenshu, Himeji-jō.