

The Golden Fort (Sonar Qila), 1156

- **Size:** 460m (1,500ft) long and 230m (750ft) wide on 76m (250ft) hill
- **Site:** Trikūtā Hill, Jaisalmer, Hindustan (now Rajasthan, north-west India)
- **Materials:** Sandstone
- **Series:** one of 9 Rajput forts
2005 World Heritage Site



Left Jaisalmer Fort or Sonar Quilla, Jaisalmer. Digital image courtesy of Swairik Das

Art historical terms and concepts

The Golden Fort – named after the colour of the sandstone – is the supreme example of an early desert fortress (a fortified complex designed to surround and protect an entire city) built for a strategic, defensive purpose on a major trade route. Warfare was a constant feature of this desert region so forts required tall, thick walls, strengthened by projecting bastions, defensive gateways and barbican enclosures for defence in the centuries before artillery. The prominent imposing site, scale, and formidable, impregnable, massive curvilinear concentric rings of walls were designed to impress the enemy with a sense of awe from a great distance, sending a message about the power and affluence of the absolute ruler, the *Raja* (king). To its inhabitants, the defended space offered physical and psychological security behind the serried ranks of gateways. During times of peace it also offered refuge to travellers and caravans of traders.

The ground plan of the fort is defined by its location on Trikūtā Hill (named after its triangular shape) 76m (250ft) above the surrounding countryside, the undulating curvilinear outer walls following the

scarped sides of the hill with natural rock exposed. The foundation stone was laid on 12th July 1156 and the structure took 7 years to build with 7 bastions and one gateway. The fort is 460m (1,500ft) long and 230m (750ft) wide and is enclosed by two concentric rings of crenellated sandstone walls with battlements (made up of merlons with an open space – crenel – between, forming the characteristic notching). These have two tiers of loopholes – the upper piercing the merlons and the lower dipped down from the wall-walk to appear on the outer wall below the parapet. The lowest/basement level of the fort has a 4.6m (15ft) wall encircling it, within which is a 9m (30ft) high wall with bastions (projecting tower at the angle of two walls of the fortification). By 1647 there were 99 bastions and hanging *jharokhās* (balconies) to use as gun-platforms.

These higher inner fort walls are now reached by a steep ramp through another set of *Pol*s (gateways): Suraj Pol (1594), Ganesh Pol and Hawa Pol which were added in the second stage of building from 1577 to 1623 after the Muslim invasion of 1570. Each gateway would have had a strong teak door studded with rows of heavy iron spikes 23cm (9 inches) apart to deter elephants from battering it down.

Through the entrance the 3m-wide streets meander snake-like around the fort to ensure defensive back-up. All the 469 historic buildings inside the fort have high plinths to keep off the sand, and balconies and windows with wide eaves to break up the solid plane of the walls and give protection from the intense heat. Although its primary purpose was military defence, the fort was also an architectural and social centrepiece of Rajput culture with an opulent palace for the Raja and his court.

Unlike British and European castles of the same period, there are no machicolations, no portcullis and no moat. However, the fort would have been attacked with the same boiling pitch, stones, darts and other missiles as well as by fire.

Cultural, social, technological and political factors

Major features of Indian forts were laid down in *Shastras* (treatises) compiled from the literature of the *Puranas* (Hindu religious texts), epics such as the *Ramayana* (c. 500-100 BCE) and the *Mahabharata*, and the *Vedas* (oldest Sanskrit texts) which mention a *pur* (a rampart, fort or stronghold). Writing in the 4th BCE Kautilya classified forts according to site: (i) the water and mountain forts best for defence of populous towns; (ii) the desert and forest site as “habitations in the wilderness”; (iii) the open plain – with land cleared for a *maidan* (open field of fire); (iv) protected by humans, i.e. the *Nara Durg* – a fort within a town. Jaisalmer’s Golden Fort is on a hill/acropolis, in a desert of open plains.

The strength of all ancient forts depended on the ramparts and the materials used, in this case local sandstone. Kautilya also recommended three ditches, and ramparts planted with poisonous bushes and crowned with several concentric ring walls, graded in height. Gates between twin towers (for cover fire, such as catapults, crossbows and boulders) should be big enough for elephants and before these should be a wide range of defences such as right-angle bends and zig-zag deflections in the pathways.

Shastras and Vedas also laid down town plans. These were usually based on a rectangle with two major axial routes (north-south and east-west) with a central crossing with a sacred sacrificial enclosure where sculptures of the gods were placed. To the north was the King's house/palace with a path around this and then another ring behind the ramparts. The Bactrian invasion in the 2nd BCE brought Hellenistic planning to northern India with the central citadel isolated on an acropolis which used the natural terrain.

Between the Indus Valley and the fertile plains of northern India lies the Thar Desert or "the abode of death" – 800 x 320 km (500 x 200 miles) of hot barren sand with temperatures of 50 degrees centigrade in summer and –4 degrees in winter and with only 150mm rain a year. The remotest place in India, the undulating dunes are swept by dry winds from the north-east and the few trees are leafless and thorny. Originally an oasis – the Gadhisar tank still exists to the south-east of the city walls – Jaisalmer was a trading post between Hindustan/India and the West. Trade routes of camel trains came from Africa, Egypt, Arabia, Persia and Europe to Jaisalmer, where the gateways to the city were carefully controlled. Tolls were collected and merchants flourished as civic and caste pride grew.

The fortress town was founded in 1156 by the Bhatti Rajput ruler *Rawal* (Prince) Jaisal (d.1167), after he met a sage who told him Krishna had prophesied a kingdom would be built on this *meru* (hill) – hence Jaisalmer. The *Rajput* (meaning 'sons of kings') dynasty controlled northern Hindustan and claimed to descend from Lord Krishna and be protectors of the Hindu faith. The *Brahmins* gave them royal lineage and accorded them *Kshatriya* (warrior) status which means that they were bound by strict codes of honour, they would never acknowledge defeat even when faced with overwhelming odds. Much like medieval European knights, Rajputs organised themselves into the equivalent of a feudal martial system, with the Raja owning all the land, and leasing some to office holders and some to peasants for cultivation. They grew wealthy through trade. Rajputs showed great bravery, chivalry and heroism with unquestioning loyalty to their state and were known as the 'defence wall of the North'.

For a long time Jaisalmer was protected by its remote location. In 1286 after attacking a caravan of 3,000 horses and mules belonging to the ruler of Delhi, Gujarat and Malwar, the Rajputs carried out a scorched earth policy, collected a supply of food and withstood an eight-year siege until 1294. Rather than surrender, the 3,800 warriors opened the gates and fought to their death, while the 2,400 women and children committed *jauhaur* (mass suicide by burning).

Rajputs were devout Hindus yet permitted Jainism within their states. The earliest Jain temple, the Parshwanath Temple, which dates from the C12th, and the original Hindu Temple in the Maru-Gurjara form, were at the centre of the fort. Even when the Mughal Emperor Akbar's forces finally conquered Jaisalmer in 1570 the three faiths survived.

Materials, techniques and processes

The design and ground plan of the fort was determined by the triangular hill, which was later surrounded by an irregular polygon of city walls in the desert. The fort was probably built in mud and then from 1156 in the local golden sandstone. Sandstone is a good insulator yet poor conductor of heat. It is relatively easy to cut and to carve by masons (*gajdhars*) with basic tools. The architect (*suthar*) would have made the measurements using thread (*sutra*) and the blocks were cut on site with grooves and niches to fit into the wall using a dry masonry technique without clay or mortar. This technique was appropriate to the environment with modular cubic blocks for the interior walls. The cylindrical blocks for the bastions of the outer walls gave order and harmony to the fort. The porous nature of sandstone was used to maximise ventilation and the dry climate has preserved the intricate details for centuries. No Mughal (Islamic) features were added to the actual fort, only the palaces and gateways.

Ways it has been used and interpreted by past and present societies

The Golden Fort is an iconic desert fortress whose aesthetic features – the dominance of scale, curvilinear triangular plan and rhythm of the walls – despite being the result of functional needs set the standard for all other Rajput fortifications before the Mughal invasions. Built both to fulfil a religious prophecy and to consolidate power and wealth, it was shaped by conflict. The craft skill of the original builders working for the honour of the Rajputs, and the choice of local sandstone, mean the Golden Fort looks like a giant sand-castle emerging out of the desert, especially in the golden light of dawn or dusk. Agarawala described it as “*a golden tiara in the morning sun*”, while at other times as “*a scruffy old lion lying in wait for its prey*”.

Jaisalmer is now famous for its later architectural embellishments, namely the merchants' houses or *havelis*. The lower storeys have few openings and little decoration but the upper floors have "a spectacular skyline of balconies, kiosks, cupolas, turrets and crenulations, the product of incremental additions and accretions over many generations". These subsidiary secular buildings are none the less symbols of power and prestige.



Arundel Castle, 1068, Sussex, Britain; Chittorgarh Fort, 7th -17th, Rajasthan; Fasil Ghebbi Castle, 1632–67, Ethiopia

Left Arundel Castle in Sussex. Digital image courtesy of Miles Sabin

Centre A view of Chittorgarh Fort, Rajasthan. Digital image courtesy of Wikimedia

Right Fasilides Palace in the Fasil Ghebbi, Gondar, Ethiopia. Digital image courtesy of Wikimedia

Bibliography

Agarawala, R.A. History, Art and Architecture of Jaisalmer Delhi 1979

Rudolph, S.H. 'The Princely States of Rajputana: ethic, authority and structure' in The Indian Journal of Political Science Vol. 24 No. 1 Jan-Mar 1963

Toy, S. The fortified cites of India Heinemann 1965

The Cambridge Encyclopedia of India, Bangladesh, Sri Lanka Cambridge 1989

<http://www.oxfordartonline.com>

<http://www.webpages.uidaho.edu/arch499/Jaisalmer/jaisalmermain.htm>

Extension: In 1974, Satyajit Ray directed a film adaption of the detective book, *Sonar Kella*, filmed in Jaisalmer. It was released in the USA as ***The Golden Fortress***.