Season's Greetings, and a Report on the Culture Landmarks



Thanks to Wikipedia for many pictures and details. $_{\rm L2/17/2010}$

From Charlie and Yini Wu

On Stone Architectures



Egyptian mastered the art of stone constructions, yet for lack of civil utilities, they discontinued these massive projects long time ago.

A giant granite pillar in Alexandria, Egypt.

Greeks picked up the art of precision masonry, and succeeded in building their Parthenon and others, in 500 BC.



The Romans' Innovations in the Stone Architectures

The Romans perfected their skill in stone and masonry structures and use of concrete. In AD126, they built their own Parthenon in Rome. It has a Greek front entrance, followed by a domed temple on the back. The dome provides a large and un-obscured floor space for the temple.





Almost two thousand years after it was built, the Pantheon's dome is still the world's largest unreinforced concrete dome.

Hagia Sophia, Istanbul, Turkey

Using the dome architectural design, the Rome Empire constructed the Hagia Sophia in Constantinople. Famous in particular for its massive dome, it is considered the epitome of Byzantine architecture and is said to have "changed the history of architecture



From the date of its dedication in 360 until 1453, it served as the cathedral of Constantinople, except between 1204 and 1261, when it was converted to a Roman Catholic cathedral under the Latin Patriarch of Constantinople of the Western Crusader established Latin Empire. The building was a mosque from 29 May 1453 until 1934, when it was secularized. It was opened as a museum on 1 February 1935.

Hagia Sophia is one of the greatest surviving examples of Byzantine architecture. Of great artistic value was its decorated interior with mosaics and marble pillars and coverings. The temple itself was so richly and artistically decorated that Justinian proclaimed, "Solomon, I have outdone thee!" (Nενίκηκά σε Σολομών). Justinian himself had overseen the completion of the greatest cathedral ever built up to that time, and it was to remain the largest cathedral for 1,000 years up until the completion of the cathedral in Seville in Spain.

Amazing faces of the Hagia Sophia





The Sultan Ahmed Mosque is a historical mosque in Istanbul. The mosque is popularly known as the Blue Mosque for the blue tiles adorning the walls of its interior. It was built between 1609 and 1616, during the rule of Ahmed I. The design of the Sultan Ahmed Mosque is the culmination of two centuries of both Ottoman mosque and Byzantine church development. It incorporates some Byzantine elements of the neighboring Hagia Sophia with traditional Islamic architecture and is considered to be the last great mosque of the classical period.

Ceiling of the Blue Mosque: The Center Dome is surrounded by Four Semi-Domes



After the Blue Mosque of 1616, one design variation is the Taj Mahal of 1632





In 1631, Shah Jahan, emperor during the Mughal empire's period of greatest prosperity, was grief-stricken when his third wife, Mumtaz Mahal, died during the birth of their fourteenth child, Gauhara Begum. Developer retained engineers who worked on the Blue Mosque. Variation of the dome shapes and height of the side domes yielded the Taj Mahal Architecture. Construction of the Taj Mahal began in 1632, one year after her death.



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What the Roman Parthenon has Inspired



How were Chinese doing on the Stone Architecture? Bridge of 600 AD



The **Zhaozhou Bridge** 趙州橋 is the world's oldest open-spandrel stone segmental arch bridge. Credited to the design of a craftsman named Li Chun, the bridge was constructed in the years 595-605 during the Sui Dynasty (581–618). Located in the southern part of Hebei Province, it is the oldest standing bridge in China.

Li Chun's innovative spandrel-arch construction, while economising in materials, was also of considerable aesthetic merit. An inscription left on the bridge by Tang Dynasty officials seventy years after its construction reads: "This stone bridge over the Jiao River is the result of the work of the Sui engineer Li Chun. Its construction is indeed unusual, and no one knows on what principle he made it. But let us observe his marvellous use of stone-work. Its convexity is so smooth, and the wedge-shaped stones fit together so perfectly... How lofty is the flying-arch! How large is the opening, yet without piers!.. Precise indeed are the cross-bondings and joints between the stones, masonry blocks delicately interlocking like mill wheels, or like the walls of wells; a hundred forms (organised into) one. And besides the mortar in the crevices there are slender-waisted iron cramps to bind the stones together. The four small arches inserted, on either side two, break the anger of the roaring floods, and protect the bridge mightily. Such a master-work could never have been achieved if this man had not applied his genius to the building of a work which would last for centuries to come.""

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How am I doing on Architecture? Gazebo in my backyard 1998

