1334-4521

Angkor Wat, Cambodia, time of the photograph

Tasking:
Move to the optimum position/location and describe the target focussed on in the photograph. Describe ONLY the target in detail.
Angkor Wat is one of the forgotten wonders of the world. By far, it is the largest religious monument in the world. This shrine is located in the heart of Cambodian, Siem Reap. It was built to honor the Hindu god Vishnu, with whom the king was identified, and for eventual use as the king's burial site. Angkor Wat is surrounded by a moat 570 feet wide and about four miles long. The mass of bas-relief carving is of the highest quality and the most beautifully executed in Angkor.

Originally, all buildings in Cambodia including temples were made of wood. Obviously none of these have survived until today, but they were probably built in much the same way as the later simple brick temples. Bricks of a high quality were manufactured in Cambodia from early Funan times, but very little stone was available. These temples dating from around the sixth century were little more than single brick towers with one door. The doorway was often made of stone which was carved with simple designs. Inside was a small room in which was kept the statue representing the god, usually Siva or Vishnu. Between the ninth and 13th centuries, laterite and sandstone were the chief building materials. Laterite is a soft stone which can be easily cut and dries in the sun into a very hard material. It is not easily carved and was used by the Khmers for strong foundations and city walls.

During the seventh and eighth centuries larger temples were built. The stone doorways of these larger temples were carved for decoration. Sandstone was much more readily available in the Kingdom of Chenla which had access to hills where the stone could be quarried. While bricks make a solid foundation, it is impossible to carve them. Sandstone is very easily carved, and already by the seventh century, carvings of good quality and detail were being executed on the lintels of these early temple doorways, for example at the temples of Sambor Prei Kuk, south of Angkor. Towards the end of this period, some small temples were being built entirely of stone. Some of these tall single tower temples survive in parts of Indo-China including Cambodia.

Khmer architecture was culminated in the creation of some of the greatest religious monuments the world has ever known. Like many other aspects of their culture, the Cambodians inherited Indian methods of architecture and then absorbed them into their own architectural style. Once the Indian influence on the kingdom was no longer significant, by the seventh to eighth centuries AD, Khmer architecture began to develop independently. It flourished under ambitious kings who ruled an empire rich in manpower and wealth. Both these factors were essential in bringing about the larger building projects undertaken at Angkor in the 11th and 12th century.

Khmer building evolved from the single brick tower to the vast pyramid temples of Angkor Wat and the Bayon. There were, however, significant problems which the architects had to overcome and some of their building methods contributed to the early collapse of their temples. Sandstone blocks were prepared carefully to fit together, but vertical joints were allowed to run on top of one another making wall very unstable. So, often a whole wall fell if one stone near the base became dislodged. No mortar was used; just a good fit, weight and gravity were thought sufficient.

The Khmers never learnt how to build an arch. European architects who built the vaulted Gothic cathedrals used complex arches to cover a space, a technique which had been handed down to them from the Romans over centuries of development. The Khmers had no such example to copy. In order to overcome this difficulty, they used the false arch, or corbelling. Large stones were piled on top of one another, reaching inwards as far as possible and touching at the top. An arched roof over a space was thus formed, but it was not as stable as the real arch, and these vaults often collapsed in the centuries after Angkor was abandoned.

The Angkor temples that remain today are spread over a large area which representing various cities built by successive kings. Suryavarman's Angkor was a carefully planned system of plazas, avenues, temples, terraces and causeways in which he, his court and nobility lived. The city was irrigated by a series of canals and large reservoirs called barays, a program begun under Indravarman I. This irrigation system was vital
for supplying a growing population and for agriculture and it was one of the most important factors contributing to the expansion of the city.

Resources
Angkor Wat Information Pages, http://angkorwat.org/