



Figure 3 : Localisation des sites fouillés à Roluos

Map courtesy of the Ecole française d'Extrême-Orient

Excavation at Roluos has focused on three sites since 2004: around Bakong temple; the area near Prei Monti temple, believed to be the location of the royal palace and a village site near Trapeang Phong temple. Early tests to find the palace were done at Preah Ko temple near the Lolei Baray reservoir.



Photo courtesy of the Ecole française d'Extreme-Orient

Searchers dig near Prei Monti temple at Roluos in 2007, uncovering for traces of the royal palace.

Searching for Jayavarman II's Palace

BY MICHELE VACHON • THE CAMBODIA DAILY

Although numerous Khmer temples built before the 13th Century can be found throughout Cambodia, no vestige of a royal palace had ever been found outside the walled city of Angkor Thom in Siem Reap's Angkor park.

None, that is, until now.

After five years of excavation at Roluos on the outskirts of Siem Reap town, an archeological team has turned out traces of large and lavish wooden buildings as well as fragments of Chinese and Middle Eastern ceramics. The team believes it has located Jayavarman II's royal palace of the late eighth century.

"The quality of construction of those buildings is truly exceptional...far above the quality of ordinary houses found elsewhere," said Christophe Pottier, an archeologist with the Ecole française d'Extreme-Orient and the project's director.

The ceramic fragments found at the site show that the house was occupied by social elites with the means to own ceramics from either Iran or Iraq, and researchers believe these could only have been the king and his court at the time, he said.

Located today about 15 km southeast of Angkor on the other side of Siem Reap town, Roluos was the capital of Jayavarman II who is considered the first king of the Angkorian era.

According to a stone inscription carved in 1050, Jayavarman II became "universal monarch" through a ritual in 802 and settled at Hariharalaya—now Roluos—historian David Chandler writes.

Roluos would remain the kingdom's capital until the 890s when

Yasovarman I built Phnom Bakeng temple on top of a hill in today's Angkor park and moved his court near the temple. Angkor served as the Khmer capital until the mid-15th century.

"The problem was that we knew only of one royal palace, and it's the one of Angkor Thom. We had never looked for the royal palaces of previous capitals," Pottier said.

The walled city of Angkor Thom was built by Jayavarman VII toward the end of the 12th century with the Bayon temple in the middle and his royal palace nearby.

And the only reason why French explorer Henri Mouhot could identify the structure now known as Terrace of the Elephants as part of the palace when he "discovered" Angkor nearly 150 years ago was that local residents remembered where the palace used to stand and told him.

"The memory of it had endured," Pottier said.

But this was not the case at Roluos. For various reasons, the archeological team decided to search for the palace about 1.5 km south of the Roluos-era Bakong temple, where three small brick towers stand inside a moat.

"It's in fact a very long moat that demarcates an area of approximately 800-by-530 meters. It's gigantic but empty. It's in the forest and rice fields, with no sign of anything above

ground," Pottier said.

Work started with a topographic survey.

"This clearly showed that the space within this compound was organized geometrically," Pottier said. "There was a large pond similar to the royal palace's one in Angkor Thom. But above all, in the center of the compound, there was a very large platform about 2-meter high...more than 400 meters long by 200 meters wide."

Armed with the knowledge that these elements could only be man-made, excavations started in 2007 and resumed in March 2008, involving about 20 test pits and a number of long trenches, the longest one being 230 meters.

"The site is enormous. Therefore we had to dig fairly long sections in order to understand how this vast space was organized," Pottier said.

This was hard work, said Chea Socheat, an archeologist with Apsara Authority's Department of Monument and Archeology who has been involved in the project since 2005.

"Excavation in forest is somewhat difficult because a backhoe cannot get in and therefore we must dig by hand. Roots also slowed down excavation," Chea Socheat said.

The archeological team, which had also been researching the Bakong and village sites at Roluos since 2004,

consisted of specialists from the Apsara Authority—the government agency managing the Angkor park—the University of Sydney, the University of Singapore and other international organizations. Team members included about 10 foreign and Cambodian archeologists, three ceramic experts, and several metal restorers from the National Museum in Phnom Penh.

Excavation uncovered building bases in laterite, brick, and wood, the pieces of wood far bigger than those found at village sites in the area, Pottier said.

Searchers were able to identify galleries and courtyards, canals and drains, charcoal and cooking fires, which showed that the site had been inhabited.

But they could only uncover traces of those buildings, and this year the team discovered why.

"Many of those structures had been destroyed, demolished, this probably as soon as Roluos ceased to be the capital," Pottier said.

"This made it difficult at times to understand those structures because we could only find their ghosts, so to speak, since the buildings had been destroyed, demolished and all materials salvaged," he said.

In addition to traces of major buildings and courtyards that pointed to the compound having possibly been the

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Palace...
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palace of Jayavarman II, searchers unearthed thousands of fragments of roof tiles, local ceramics and some pearls.

But they also found fragments of Chinese ceramics dating from the Tang dynasty, which began in the early 600s and ended around 907.

"This is exceptional because, while it is found in Southeast Asia, it was never discovered at Angkor. Only Chinese ceramics from later periods, from the 10th century on, was found at Angkor," Pottier explained. But even more unexpected was the discovery of ceramic fragments from Iran or Iraq.

Such ceramics have been found in Asia, especially in China, but also at archeological sites of ports along the Thai peninsula and on a Vietnamese island where merchants traveling between China and the Middle East would stop, Pottier said.

But Roluos was no harbor and no Middle Eastern ceramic fragment has ever been found at Angkor, he said.

Moreover, in four years of previ-

ous excavations at pre-Angkorian 8th and 9th century sites, Pottier's team had only found two Middle Eastern ceramic fragments, each one no bigger than one square centimeter, he said.

At the Roluos site, however, searchers found more than 100 fragments, with pieces large enough to determine their country of origin and indicate the wealth of people who had lived there, which pointed to the king and his court in the ninth century, Pottier said.

All the data and artifacts collected are now under analysis, a process that will take about one year. Carbon-14 dating tests must be done to determine the age of fragments, which will be catalogued and their origins determined.

Sediments gathered during core sampling in the pond are also being studied to learn about the vegetation and environment at the time, as well as to determine when the area reverted to rice fields and forest, Pottier said.

This portion of the research is being handled by palynologists, or pollen experts, from the University of Sydney.

The excavations have raised a major question regarding the founding of Roluos as the capital, Pottier said.



Photo courtesy of the Ecole française d'Extrême-Orient

Archeologist Bernard Farago surveys the remains of a gallery that is part of Roluos' royal palace.

The first mention of Jayavarman II, who probably came from eastern Cambodia, was in 770, and details on the beginning of his reign are scarce, according to historian Michael Vickery.

The 11th century inscription may state that Jayavarman II was crowned and founded his capital in 802, but data collected during excavation point to the city having been established in the 780s, Pottier said.

Roluos, Chea Socheat said, "is a very important site with a long and complex history that is unfortunately hardly known."

Its infrastructure included hy-

draulic and road networks of a complexity unequalled at the time, and which warrant further study, he said.

Although believed to have been a large city, determining the population in Jayavarman II's capital would take a great deal more research and further digs throughout the site, Pottier said.

The capital's area is estimated at 20 square km, huge for an archeological site, he said.

"After all, this was the capital of the Khmer kingdom," the first capital of the Angkorian Empire, which would dominate the region for centuries to come, he added.

CROSSWORD Edited By Will Shortz

- ACROSS**
- 1 Legree's creator
 - 6 Pants part
 - 10 Grain container
 - 14 They may crunch when you bite into them
 - 15 Mound
 - 16 One
 - 17 Providers of excellent service?
 - 18 Hungarian city known for its thermal baths
 - 19 Frozen dessert chain since 1981
 - 20 Printer's type: abn
 - 21 Colossus
 - 23 Part that's cut off and thrown away
 - 24 Conn summer house
 - 25 Singer Easton
 - 28 Carnival food
 - 31 Law partner?
 - 32 Coral reef dweller
 - 33 ___ flakes (ceramic)
 - 35 It may be found in the basement
 - 36 Subject of this puzzle
 - 40 Subway fare?
 - 41 Club ___
 - 42 Cathedral city in Cambridge
 - 43 More men do this than women, studies show
 - 45 Raises, as a suffix
 - 49 Treeless area
 - 51 EU: Abbr
 - 52 Walked
 - 54 As expressly said
 - 56 Macbeth or Lady Macbeth
 - 57 Beautiful race
 - 58 HG Wells novel
 - 59 Israeli flag color
 - 61 Author L Frank Baum
 - 62 Jamaica or Barbados
 - 63 ___ shooting
 - 64 Word often prefixed with kilo-
 - 65 Snipers' place near
 - 66 Bit of sleepwear
- DOWN**
- 3 It may lead to a change
 - 3 El Atlántico, popular
 - 4 What each of several
 - 36-Across events at 2008 Olympics ended in
 - 5 Tee preceder
 - 6 Brand name associated with 36-Across
 - 7 Singular achievement by
 - 36-Across at the 2008 Olympics
 - 8 Protected from the wind
 - 9 Provisions
 - 10 One technique used by 36-Across
 - 11 Increased slowly
 - 12 Pen point
 - 13 Pen
 - 21 Madhouse
 - 22 Comment of surprise
 - 26 Tight end?
 - 27 Go for, in price
 - 29 OT book
 - 30 Chump
 - 46 The Baltimore (nickname of 36-Across)

PUZZLE BY DAVID J. KAHN

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ANSWER TO PREVIOUS PUZZLE

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D	A	N	T	E		W	E	E	P		R	O	N	A			

- 36 List of alternative fuels
- 37 Smooths over
- 38 Wide shoe spec help
- 39 Chicago carrier
- 40 Pres elected in 534
- 44 Procter & Gamble detergent
- 46 The Baltimore (nickname of 36-Across)
- 47 Wake some banks
- 48 Performed without help
- 50 Didn't do takeover
- 53 Saturn or Venus
- 55 Anything ___?
- 57 Decline
- 58 Set (down)
- 60 Bygone aircraft, briefly

THE NEW YORK TIMES