

Part 1. Research of the Krang Kor Site

Chapter 1. Background and Outline of Research

Section 1. Background of the Study

Studies of the Angkor Monuments comprise the mainstream of studies in Cambodia, and little attention has been given to studies of the post-Angkor period. Nara National Research Institute for Cultural Properties, however, has conducted archaeological researches on the Post-Angkor period with Ministry of Culture and Fine Arts, since 2003. This study, focused on the royal capital sites of the post-Angkor period, and was implemented with the Ministry of Culture and Fine Arts as the counterpart, under the subsidy of Networking Core Centers for International Cooperation on Conservation of Cultural Heritage by of the Agency for Cultural Affairs, JAPAN. In addition to cultural heritage conservation, the study also aimed to develop human resources mainly among students and alumni of the Royal University of Fine Arts in Phnom Penh.

Field work was carried out at royal capital sites in Oudong and Longvek, located near Phnom Penh. Among such sites, the Krang Kor site, which was discovered in recent years, is garnering attention as a burial site of the post-Angkor period. Based on field work at these sites, human resource training was implemented with an emphasis on three points: i.e., geophysical survey, archaeological excavation and public archaeology. The study team visited the Cambodian Ministry of Culture and Fine Arts in January 2010, and had the opportunity to view a number of artifacts that have been discovered from the village of Krang Kor. Accompanied by H.E.Mr.Ouk Socheat, Minister's Secretariat, the team visited the site on the following day, and confirmed many artifacts that have been excavated from them, with the cooperation of local villagers. However, taking into account that the site was discovered as a result of burial rooting, the necessity of urgently assessing the expansion and state of the site and defining a policy for its protection was discussed. The scope of the exchange project for international cooperation initially included only the post-Angkor sites of Oudong and Longvek, but the Krang Kor site was decided to be investigated at the same time, in consideration of its significance and urgency of conservation.



Fig.1 Inspection by Minister of Culture and Fine Arts



Fig.2 Meeting with H.E.Mr.Ouk Socheat



Fig.3 Scattered ceramics at Krang Kor site



Fig.4 The situation of burial rooting

Section 2. Overview of the Study

First survey

From November 27 to December 4, 2010, exploration and excavation activities were implemented at the zone No. 4 and No. 6. The geophysical survey performed at the two locations respectively yielded good results. The analysis results of the survey are shown below. There were small responses here and there at zone No. 4, which seemed to indicate the possible presence of burials, but no burials were found in the excavation. At zone No. 6, a wide, circular ditch shape was detected on the north side of the survey area. The No. 1 trench was located there. However, the response had actually come from deposits of manganese in the soil, and no noteworthy remains were found. A cluster of responses was acquired from the south side of the survey area, and bricks that were dismantled during the burial rooting lay scattered in the vicinity. From this area, brick remains were found that are assumed to be of a cremation, as will be discussed in the next section.

Second survey

From February 16 to 21, 2011, additional surveys were conducted at zone No. 4, and a new excavation survey was launched at zone No. 8. An artifact survey was also carried out of artifacts owned by the villagers. At zone No. 4, one of two areas where a pit was made by burial rooters was selected, and a trench was dug around the pit. As a result, what appeared to be two trace of coffin burials were found, and traces of wooden coffins were found from one of the burials. This survey suggested the possibility that burial remains from where no large cinerary urns are found might be a coffin burial. Zone No. 8 is located within a village, unlike zone No. 4, 6 and 7 surveyed so far. According to the villagers, a Khmer brown-glazed stoneware jar with four lug-handles was discovered from an area immediately north of the survey area, and that it contained human bones. The survey was thus conducted near the house where the discovery was made. No burial sites were found, however, although the entire strata were confirmed. Nevertheless, by conducting the survey, exposed surface items in the area were able to be sampled, surface artifacts that were collected by nearby villagers were able to be surveyed, and other artifacts that have so far been excavated were able to be examined.

Third survey

From July 27 to August 9, 2011, a survey was conducted in the primary school zone of the Krang Kor site and at the Longvek site. To take wide-area photos of the sites, the team obtained the cooperation of Mr. Nishida from Nihon Chisui Fukuoka



Fig 5. Geopenatrating Rader Survey



Fig 6. Excavation in Zone No. 6



Fig 7. Excavation in Zone No. 4



Fig 8. Drawing of objects

Corporation in taking aerial photos using a multi-rotor helicopter. At the Krang Kor site, a ground penetrating radar survey and aerial photo were conducted, followed by an excavation survey at zone No. 7 and the school zone. The survey of the school zone yielded a relatively large number of artifacts and a burial. At the Longvek site, aerial photo were mainly taken of the conditions of mounds and moats.

Fourth survey

From February 8 to 13, 2012, local surveys were conducted, and on February 22, the results of the surveys were presented to the Ministry of Culture and Fine Arts in Phnom Penh. As a burial was discovered in the school zone in the third survey, a trench was dug on the east side of the discovered burial to further explore the surrounding area, and another trench 15m long was dug on the east side of a burial zone from where many pieces of earthenware ware have been found.

Fifth survey

The fifth survey ran over the period from August 12 to 19, 2012. In response to the discovery of Burials 1 and 2 in the third and fourth excavation surveys, trenches were dug in four locations near the previous excavation areas, to confirm the possible presence of more burials in the fifth survey. However, instead of discovering burials from the four new trenches, a thick layer of earthenware fragments was confirmed. This layer was accumulated from a depth of 20cm to 100cm from the ground surface, and the fragments discovered from the layer were determined to be of earthenware production in the region. Additionally, 25 pieces of paddling tools used in making earthenware, 59 pieces of terracotta bracelet fragments and 4 pieces of stone bracelet fragments were also found from the sedimentary layer.

Also included in the sedimentary layer of earthenware fragments that was discovered in this survey were Si Satchanalai celadon fragments, believed to date from the mid to late 15th century. Considering the fact that Si Satchanalai celadon from the same period was also in Burial No.1, the sedimentary layer of earthenware that was discovered in this survey could be assumed to date from roughly the same period as the already discovered burials. The excavation survey revealed the existence of a thick earthenware layer of near Burials No.1 and No.2. Judging by the dates of imported ceramic items that were excavated, the two burials and the earthenware layer are estimated to date from the mid-15th century to the late 15th century or early 16th century.



Fig 9. Aerial photo of school zone



Fig 10. Aerial photo of school zone from school zone to zone No.4,6,7



Fig 11. Explanation for the villagers



Fig 12. Geopenatratin Rader Survey in the school zone

Participants for the research (Then)

Hiroshi SUGIYAMA (International Cooperation Section)
 Tsuyoshi OZAWA
 (Archaeological Research Methodology Section)
 Akihiro KANEDA
 (Archaeological Research Methodology Section)
 Tomo ISHIMURA (International Cooperation Section)
 Akiko TASHIRO (International Cooperation Section)
 Yuni SATO (International Cooperation Section)
 Yasushi NISHIMURA
 (Cultural Heritage Protection Cooperation Office Asi-Pacific
 Cultural Centre for UNESCO)
 Kensuke NISHIDA (NihonChisui FUKUOKA)

Lam Sopheak
 Loeung Ravvattey
 Sok Keo Sovannara
 (Nara Institute, Cambodian Office)

 Ouk Socheat
 Heng Sophady
 Heng Kimson
 Pen Phiwath
 Chea Sopheary
 Ros Sythoun
 Ouk Sokha
 Sar Sovan
 (Ministry of Culture and Fine Arts, Cambodia)

Students from Faculty of Archaeology
 (Royal University of Fine Arts)



Fig.13 Excavation in the scool area



Fig.14 Symposium in the Ministry of Culture and Fine Arts



Fig.15 Excavation of burial No.2



Fig.16 Excavation of burial No.2