

Research of No.129-b House Tomb at the North Necropolis in Palmyra, 2010

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I. Introduction (pl.1-5)

Our goal of research in Palmyra is to understand “Funerary practices in Palmyra” and we have carried out several excavations to accomplish our goal since 1990. We have amassed the information and data on funerary practices with those excavations. We have engaged on the excavation of No. 129-b House Tomb to comprehend Palmyrian funerary practices and their social background more with generous understanding in the Director General of Antiquities and Museums of Syria since 2006. This work is situated as the cooperated work with our mission and Syria by the Director General of Antiquities and Museums of Palmyra.

No.129-b House Tomb named by Weigand and Krencker (1932) is situated at the north necropolis and is located near the city site (Acropolis). This tomb was taken in the Zenobia Wall which was constructed in the Diocretianus period and played for the defensive wall. Recently this defensive wall has been made restoration and reconstruction by Palmyra Museum and this work provides some information that there is the difference of elevation between inside and outside of the wall. It indicates that the wall was changed by some geographical circumstances especially around No.129-b because of water flow from a moat about 8m wide and about 4m deep outside the wall. Therefore, a north side foundation of 129-b house tomb was exposed by that.

II. Contents of past researches (Saito 2010, Saito and As'sad 2011)

A. House tomb (No.129-b) (pl.6-13)

Since 2006 we have scanned collapsed stones by 3D laser scanner to understand the situation of the heap of stones and have removed them with archaeological methods after scanning over and over. Through the work we realized the rough process of the collapse of the tomb. The north wall fell down first and then the east, south and west wall consecutively fell down by some natural disasters.

No.129-b House tomb has a plan of square about 12.25m and about 13m high. In front of the west side foundation stairs was attached to extend to west. A gate was built in the west wall with attaching stairs. The stairs attached to the west side of the foundation extending to the westward and was 6.72m long, 6.76m wide and about 2.20m high and consisted of 12 steps. Each step was 16cm high and 36cm wide.

Each wall was formed with four columns consisting of two corner-columns and two

middle inter-columns. Each capital of the column was the Corinth style. Between the capital and the column base seven stones were piled. Each wall was formed with seven piled stones of each 75cm – 85cm high except for the foundation and roof structures. The height of the wall was 675cm. The shape of the roof in No.129-b House tomb was a gable style that the German mission reconstructed and the gable faced to west and east (Schmidt-Collnet 1992). There were three pseudo-windows in each wall. The pseudo-windows consisting of two types eaves such as a regular triangle gable eaves and a gable built in a canopy-type eaves. The location of the pseudo-window was between the capitals. An approximate height of the eaves of niches was 8.3m from the top of the foundation. One of the characteristics of this house tomb could be seen on the surface of the stone blocks for walls. Comparing with stone blocks in other house tombs, these stone blocks were finished with smooth treatment on both sides (outside and inside against the wall).

There were interior finishing materials as parts of pillars and girders forming as a space like a court yard on the stone floor in the center of the inside tomb. A court yard was a square, 3m to 4m. A pillar was a square.

The floor was covered with a rectangle stone, about 280cm long x 120cm to 140cm wide x about 35cm thick, in the central area, but the size of the floorboard along walls has not been known yet. The floor was set up the level of the tenth steps from the ground and was about 170cm high from the ground level. The floor was sustained by loculi as a burial facility along a surround wall of the foundation of the tomb and four rectangular pillars under pillars compositing a courtyard-shape square space. Those facilities were constructed with soft limestone. However, most of stones formed loculi were taken away.

In the south side foundation of this tomb the gate was set up and two lines of Greek inscription which were eroded at the some part existing on the lintel, however the place of the gate was located in the center of the south side foundation which a well was constructed in front in early-modern times. The gate was filled with rectangular stone panels with plaster to protect leakage water from the well. The beginning and end of the inscription were covered with a framework of the well. The well was a trapezoid and was 94cm wide in the side of the inscription.

In the west and south side of stairs the ground was formed an upgrade incline from south to north to use as a workshop carrying stones for the defensive wall. The ground was covered with clay, plaster and fragments of stones. During the construction of the wall infants were buried into holes out the back of a step stone for stairs was taken away. They were put into jars for burial.

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B. Infant Graves (pl.29)

Infant graves were found at the working slope for constructing the defensive wall as supplemental evidences in 2007. In 2008 the whole stairs of the house tomb, about 19 infant graves (A-T except for J) were newly found and four of them were dug up. These infants were buried during constructing the slope for the defensive wall. Every infant grave was existed in different stratum. It shows us that these graves were set up on the slope which was constructed for working place of the defensive wall. These infant graves consisted of a grave with a jar, pit grave and a sepulcher. Especially a sepulcher-type grave before the Islamic period was found for the first time in Palmyra. A sepulcher (a notion of "LAHED" in Arabic) forms L letter shape in the section and consisted of a part of shaft and a space for the dead in the bottom. Three dead were under one year old. Pottery was a jar dated late third century A.D.¹ All infant graves around the stairs were constructed in the late third century A.D.

C. Supplemental research

We also focused on finding out the facts of causes of destruction of No.129-b House Tomb with geoarchaeological method. We have assumed that one of causes of the collapse of No.129-b House Tomb was a natural disaster like earthquakes because stones forming the house tomb partially showed collapse in a regular manner with the research in 2006.

We observed sedimentation and found some traces caused the collapse of the tomb with layers at the west end and south end of the research area. Some traces were caused by liquefaction in earthquakes.

III. Research in 2010

A. House Tomb (pl.14-28)

This season we removed about sixty stones and put those on the spaces for every direction of the walls, interior stones and stones for a floor inside the tomb with identifying the stones to the original position after scanning those stones with 3D laser system like past four years. The interior finishing materials and floorboards were

¹ Instruction by Dr. Christiane Romer-Strehl of the German mission.

mainly removed this year.

A structure of a courtyard in the center of the floor became definite. The courtyard was a square of side 3.4m. At the four corners of the courtyard a pillar of a right-angled hook shape was fixed on the same shape pedestal. A side of each pillar facing to the north and south walls of this house tomb had brackets for loculi consisting of six tiers as burial facilities. Two lines of loculi were built between the courtyard pillar and the wall and faced inside of the tomb. However, a structure inside the courtyard is still unclear at present.

Most important matter this year is to find a lintel stone which was fixed on the main gate. The existence of the lintel is important to comprehend the size and structure of the main entrance. The size of the lintel is 260cm long, 80cm wide and 80cm high. Two holes for the double door posts were bored in the side of this stone.

Last year we assumed that the floor was sustained by loculi as a burial facility along walls of the foundation of the tomb and four rectangular pillars under pillars compositing a square courtyard. However this year we unearthed a straight corridor² leading to a gate in the foundation of the south side. It means that a facility as a courtyard formed four rectangular pillars same as the Funerary Temple did not exist under the floor in this tomb. This corridor was 227cm wide and paved with stone slabs and was 282cm deep from the top of the foundation. Both walls of the corridor were constructed with soft limestone formed loculi, but most of them were taken away. The corridor leading to the gate reached to the gate with two steps. Though stones of the west side of steps were taken away, from the corridor the first step was 18cm high and 30cm wide and the second step was 23cm high and 30cm wide.

In the south side foundation of this tomb the gate was built into and two lines of Greek inscription were carved on the lintel but some parts were eroded. This gate was located in the center of the south side foundation which was utilized as a north side wall of a well constructed in front of the gate before collapse of this tomb. The beginning and end of the inscription were covered with a framework of the well. The inscription tells us that this tomb is related to a Roman who was Gaius Julius Bassus³

Some fragmental bones including animal bones and many pottery sheds were mixed in the soil. Several fragments of funeral sculptures including a fragment of funerary male bust-type sculpture incising "HBL NBW YHB"⁴ and many fragments decorated

² Same facility was excavated at No.173 House Tomb by Mr. Aumar As'sad of the Palmyra museum.

³ Instruction by Dr. Gawlikowski, Michal of the University of Warszawa.

⁴ Instruction by Dr. Gawlikowski, Michal of the University of Warszawa. This name is the first appearance as a person except for "NBW" of the Nbw Temple in Palmyra.

interior finishing materials were also found.

B. Infant Graves (pl.29-41)

Last three years infant graves were found on the working slope for constructing the defensive wall as supplemental evidences in the excavation of No.129-b House Tomb. Within twenty three infant graves (A-W) nineteen graves (A, B, C, D, E, F, G, H, I, K, L, M, N, O, P, Q, R, S, T) were dug up for three years. This year three graves (J, V, W) were unearthed. Every infant grave existed in different stratum forming the working slope. These infant graves consisted of a grave with a jar (J), and sepulcher-type grave (V, W).

Grave J was a jar-type grave and the north part of this grave was destroyed by Grave E. Grave J was used an earthen pipe as a coffin instead of a jar and this was put in the center of a pit of 110cm long, about 50cm wide and 54cm deep. The earthen pipe was laced in an upright position and the male connector was the upper side. It was 28cm diameter and 40cm high and was covered by two stones. This earthen pipe was fixed with four stones about the size of 20cm-30cm long in the bottom of the pit and then was filled with earth. An infant skeleton of zero - two month old was unearthed from about 10cm thick sand accumulated at the bottom of the pipe. The burial feature of the infant could not be certified from the depositional situation of bones. There were no burial goods in this grave.

Grave V was a sepulcher-type grave and was located at the southeast side of Grave Q. This grave was 99cm long, 45cm wide and 36cm deep in the shaft part and 68cm long, 30cm wide and 7cm deep in the sepulcher part. The sepulcher was dug in the north sidewall and was covered with mud bricks and stones. A fetus was buried with the body extended and oriented to the west. There were no burial goods in this grave.

Grave W was a sepulcher-type grave and was located at the east side of Grave V. This grave was reused Grave U. This grave was 101cm long, 45cm wide and 55cm deep in the shaft part and 55cm long, 45cm wide and 45cm deep in the sepulcher part abutting on the east side of a cist of Grave U. The sepulcher was dug in the north sidewall and was covered with some organic material like a wooden board. The shaft was covered with three mud bricks and pebbles. An infant who was one year – one year six months old was buried with the body extended and oriented to the north. There were no burial goods in this grave.

IV. Summary

Since 2006 the excavation of No. 129-b House tomb has carried out with a great cooperation of the Directorate of Antiquities and Museum of Syria. This year we

continued to analyze the depositional situation of stones of this tomb with 3D laser scanning system. After 3D laser scanning we removed about hundred stones.

At present we have understood the following points in four-year research on No.129-b House tomb.

1. No. 129-b House tomb is a regular square plan of side 12.25m at present.
2. The shape of the roof is gable and the height of this tomb is about 13m.
3. Acroterion might be on the roof.
4. Three niches are set up on every wall except for the west side as pseudo-windows consisting of two types.
5. The main vestibule is set up in the west side and a stairs is installed.
6. The gate of the main vestibule was fitted up double doors.
7. The surface of stone blocks for walls is smoothly finished up on the both sides. This treatment is aware of the visibility of the inside wall.
8. The north – south line in the center of the floor over the foundation consists of six large stone.
9. A facility as a courtyard was set up in the center of the floor over the foundation. This facility consists of four right-angled hook-shape pillars.
10. Two lines of loculi were built between the courtyard and the north and south walls and faced inside of the tomb.
11. The gate was set up in the center of the south side foundation.
12. Under the floor consisting of six large stone there was a straight corridor of 227cm width leading to the gate inside the south side foundation.
13. Two steps leads to the corridor from the gate.
14. The corridor was paved with stone slabs.
15. Whole facility under the floor is constructed with soft lime stones.
16. Two lines Greek inscription incised on a lintel of the gate of the south side foundation is related to a Roman who was Gaius Julius Bassus.

Other results

1. An up-grade incline from south to north to use as a working area carrying stones for the defensive wall is set on the stairs.
2. The working area for the construction of the defensive wall is used for infant graves. These infant graves mainly consist of a grave with jar grave and a sepulcher-type grave. Most of infants are under one year old.
3. The sepulcher-type grave is close resemblance to the present Palmyrian grave with the notion of “LAHED” in Islamic world.

4. Some traces of earthquakes are found with sedimentation of layers around 129-b House Tomb.

Above results will be essentially changed with future works.

Acknowledgement

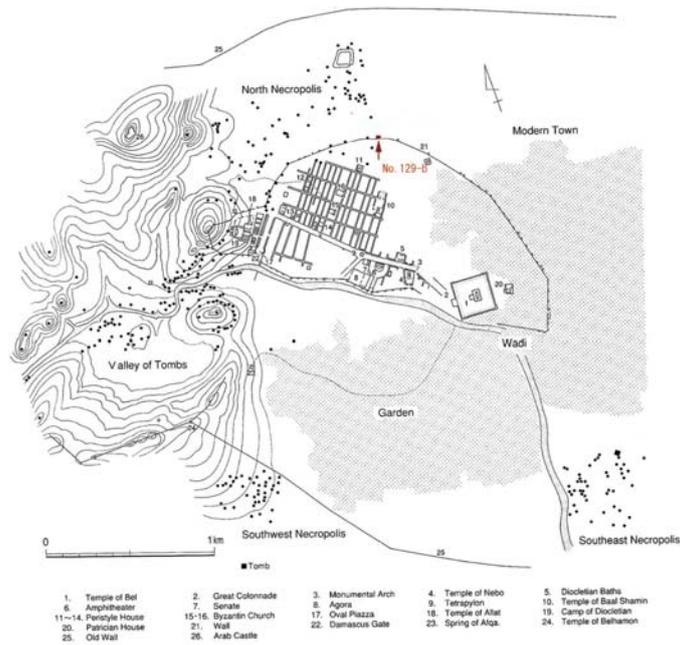
We would like to express our deepest gratitude to all Syrian authorities, especially Dr. Bassam Jamous, Director General of Antiquities and Museums of the Syrian Arab Republic, Dr. Michil Maqdesi, Director of the Archaeological Excavation Department are greatly acknowledged the most kind permission and cooperation to us. In Palmyra Mr. Waleed As'sad, Director of the Directorate of Antiquities and Museums of Palmyra and Dr. Khaleil Hariri, Director of Palmyra Museum gave us a great help to our excavation.

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pl.1. Location of No.129 –b House Tomb in Palmyra



pl.2. View of No.129-b from the Arab castle



pl.3. View of No.129-b from the north before the excavation in 2006



pl.4. Whole view of No.129-b from the west before the excavation in 2006



pl.5. Whole view of No.129-b from the north before the excavation in 2006



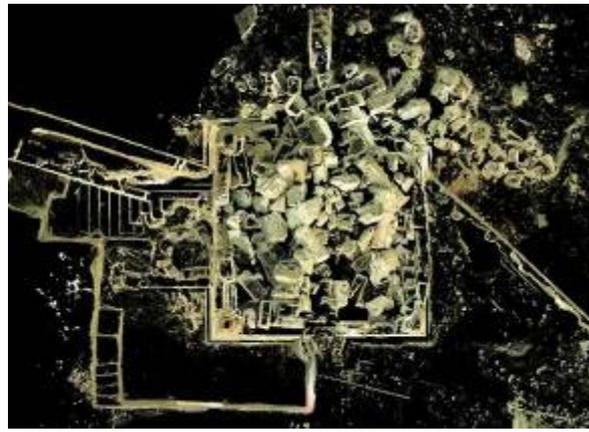
pl.6. Whole view of No.129-b from the south upper part before the excavation in 2006



pl.7. 3D Image of No.129-b House Tomb from the upper part in 2006



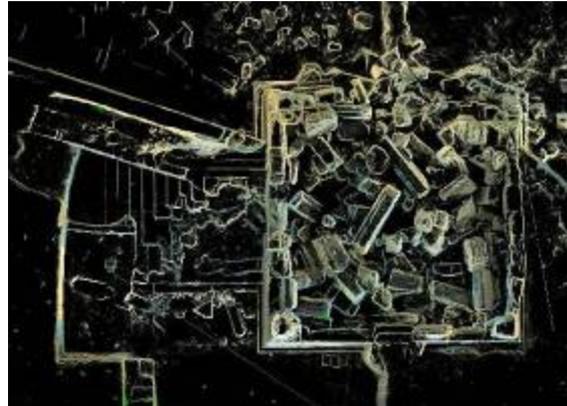
pl.8. Whole view of No.129-b from the south upper in 2007



pl.9. 3D Image of No.129-b House tomb from the right upper part in 2007



pl.10. Whole view of No.129-b from the south upper part in 2008



Pl.11. 3D Image of No.129-b House tomb from the right upper part in 2008



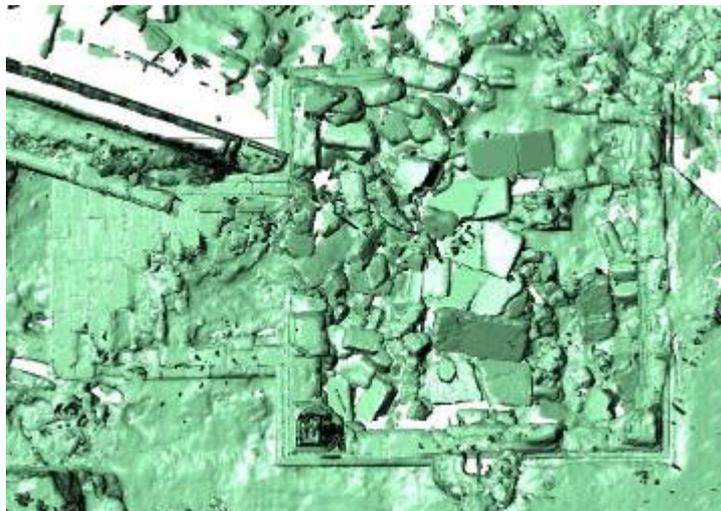
pl.12. Whole view of No.129-b from the southern upper right part in 2009



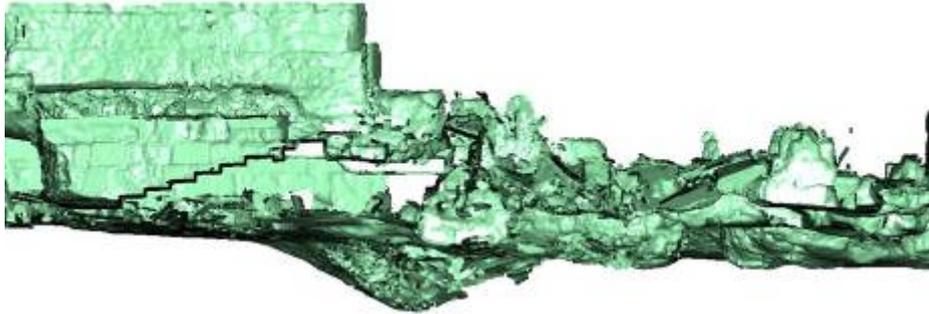
pl.13. 3D Image of No.129-b House tomb from the upper part in 2009



pl.14. Whole view of No.129-b from the upper part



pl.15. 3D Image of No.129-b House tomb from the right upper part in 2010



pl.16. Section by 3D Image of No.129-b House tomb from the south in 2010



pl. 17. Removing a lintel



pl.18. Lintel of the main gate



pl.1920. Beams over pillars in a court yard



pl.20. Capital of a pillar in a court yard



pl.21. Pillar in a court yard



pl.22. Base of a pillar in a court yard



pl.23. Semicircular shape
pillar between loculi



pl.24. Greek inscription on the lintel of the gate in the south side foundation
(left: the beginning of a sentence / right: the end of a sentence)



pl.25. A gate and a stairs attached to the south side foundation (from the inside)



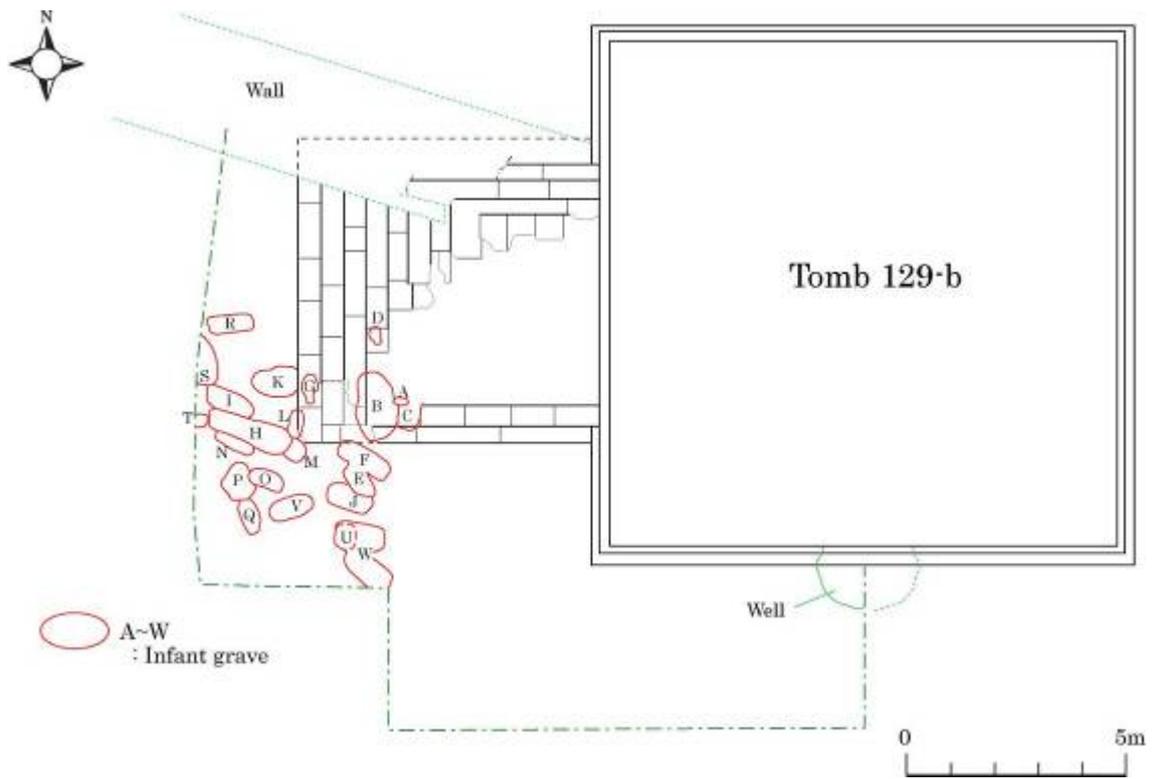
pl.26. Corridor leading to the gate in the south side foundation (from the south)



pl.27. Whole view of 129-b House Tomb (from the upper part)



pl.28. Whole view of 129-b House Tomb (from the west upper part)



pl.29. Distribution map of infant graves



pl.30. Cover stones of Grave J



pl.31. Depositional situation of cover stones and a coffin of Grave J



pl.32. Depositional situation of an earthen pipe as a coffin inside



pl.33. Depositional situation of skeletal remains the earthen pipe



pl.34. Depositional situation of the cover in Grave V



pl.35. Depositional situation of skeletal remains



pl.36. Depositional situation of the cover in Grave U
(Large stone in the left) & W(mud bricks in the right)



pl37. Depositional situation of the first cover
in Grave W (cover for shaft of Grave W)



pl.38. Depositional situation of the second cover in Grave W



pl.39. Whole view of the shaft part of Grave W



pl.40. Depositional situation of the cover in Grave U and
the place over a burial part of Grave W (left side of a large stone)



pl.41. Depositional situation of skeletal remains of
Grave W