SAFEGUARDING MY SON WORLD HERITAGE

- Demonstration and Training in the Application of International World Heritage Standards of Conservation at My Son Group G Monuments -

- 2005 –

Enclosing wall

Preliminary Technical Report
June 2005
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Preliminary Technical Report, June 2005

by Mauro Cucarzi
International Project Coordinator

1. Introduction

During the month of June the main activities have been:

- Continuation of archaeological excavations on east side of G area, around G5 and G1. (see Zolese’ Report)
- Continuation of geometrical survey of G2, G4, G5 and continuation of G3 restoration (see Condoleo’ Report)
- Geomorphologic survey of G Group excavated area (see Rosa’ Report)

The archaeological excavation has been completed in east side of G area and around G5 and G3 buildings. All balks have been removed and western, northern and part of eastern side of the enclosing wall has been brought to light ready to be drawn.

Fig. 1 North side of G: exposed wall and drawing activity.
This area is now cleaned and raining water can flow through some open part in the wall and through two ancient Cham drainage.

Fig. 2. Ancient Cham drain

Restoration work in G3 and G5 (see Condoleo’ Report) are in progress according with schedule proposed during the Scientific Board Meeting. A technical meeting has been held on July 20th with Mr. Mauro Cucarzi, Mr. Pierre Pichard, Mr. Hoang Dao Kinh, Mr. Le Vinh and the international and national experts present in the Site. During the meeting the state of art of the project has discussed, mainly the procedure for the consolidation and restoration of the laterite enclosing wall.

On June 8th an Italian delegation from Italian Embassy visited the Site. The delegation has been composed by the Ambassador Mr. Mattacotta and his wife, Mr. Sequi from Italian Cooperation Office with Miss D’Allessandro and two TV operators.

In the meantime My Son GIS continued to be improved and many maps have been geocoded:
1. Vietnam Map from Mekong Commission
2. Franch Maps: 1:100,000
   a. 1: 50,000
3. Vietnamese Maps: 1:500,000
   1:100,000
   a. 1: 50,000
   b. 1: 25,000

Several aerial photos have been geocoded and using TIN function G Group map has been produced.

During this period the following Vietnamese experts participated to the research and consolidation activities:
Arch. Dang Khanh Ngoc, chief architect, and Arch. Nguyen Anh Tuan, Institute for Conservation and Restoration, Hanoi
Arch. Nguyen Anh Dung, Arch. Tran Dinh Thanh, and Arch. Khim Duc Department of Cultural Heritage Ministry of Culture and Information.
Mr. Le Van Minh draftman and Arch. Tuan Sy, Quang Nam Province
Preliminary Technical Report on archaeological Activity carried out in My Son, Group G - June 2005

By Patrizia Zolese
(Lerici Chief Archaeologist, UNESCO CTA)
Introduction:

The archaeological team has been composed by:

- Dr. Patrizia Zolese (CTA, UNESCO Project- Lerici Field Director);
- Dr. Caterina Brunelli (archaeologist, Lerici Foundation);
- Dr. Federico Barocco (archaeologist, Lerici Foundation);
- Dr. Silvia Pozzi (archaeologist, Lerici Foundation)
- Mr. Amphol Sengphachahn (architect, Lerici Foundation)
- Mr. Sinthewa Xayasane (engineer, Lerici Foundation)

According with the decision delivered by the scientific committee, composed by Unesco, Ministry of Culture and Provincial authorities, the archaeological research has been mainly aimed to remove the balks between the trenches, in order to expose the entire perimeter of the enclosing wall. Due to the good condition of this important architectural feature of the monumental area, the committee proposed an extra project conservative intervention, mainly devoted to maintain and to keep the wall. The removal is also necessary to prevent water pools, before the next arrival of monsoon season.

For the same reason, three new trenches have been opened along the northern slope to facilitate the water evacuation.

The removal has been carried out following the stratigraphy so far detected during the excavation, to avoid the loss of important information, being archaeological material still buried. The present campaign is concentrated on northern and eastern sides of G area to expose the entire wall perimeter.

The activity during June 2005, was articulated on the following points:

- Opening of trenches C9-C10-C11;
- Removal of balks included between trench C1 to trench C11.
- Removal of the collapsing related to G1 sanctuary, found out in trenches B1-B6-B7-A6-A7
BALK REMOVAL IN TRENCHES C1-C8

The archaeological balks left between the trenches opened on the northern side of the hill (trenches D2-C8), have been removed progressively according with the stratigraphic sequence.

1. N area, enclosing wall NW corner: balk removal

At first has been removed the superficial rubble, cumulated after the American bombing of 1969 and the clearance carried out during the 80’s, to then proceed to remove the dump resulted from the excavation performed at the beginning of XX century by the H. Parmentier. Six different layers have been recognised: S6 the last, is related to the original ground used during Cham period. The northern and eastern areas of the hill have been in this way cleared till the original exposed surface, in use during Cham period, in order to prevent the stagnation of water during the coming rainy season.
During the removal of the balk left between trenches C1-C2, in the layer corresponding to the site’s abandonment, has been found an iron knife.

6-7. Balk C1-C2, iron knife blade
Accomplished the removal of the balks dividing the northern trenches in S-N direction, the N side of the laterite enclosing wall has been completely exposed and documented. In this first phase the balk in the picture below, going in W-E direction for a length of about 30 m, has been left to have a complete view of the excavated cross-section.

8. C area, N side: accomplishment of balks removal
At the same time has been started the removal of the balk between trenches A5-A6, where the excavation exposed the collapsing of G1’ northern side, still in primary deposition (see previous reports). After the removal of the superficial filling, have been found numerous bricks still connected, related to the same collapsing. The collapsing has been documented by pictures and grid restitution and then removed.

Accomplished the levelling of the whole northern area, has been finally removal W-E balk, after the section documentation and drawing. During the soil removal have been exposed, in the eastern side of the balk, some incoherent bricks filling a recent hole, probably made during the American war. The same evidence was found during the excavation of the hill’s eastern area, corresponding to trench B3 (see map), where the archaeological work exposed a recent trench, going in S-N direction and filled by bricks.
13-15. Balk WE. General view and the filling of the recent trench

During the removal of the same balk, in the W area, have been found some sandstone slab fragments, probably belonging to the path linking the gopura G2 to the main shrine.

The same path, still in its original location, was exposed in the past months in the area between G2 and the kalan’s main access (see previous reports).

16-17. Balk WE, sandstone slab fragments

After the cleaning in NE area, has been moreover exposed part of the enclosing wall collapsing.
The collapsing, mainly composed by bricks and laterite blocks, has been documented and then removed. In this way also the E side of the enclosing wall has been completely exposed and the E area of the hill flattened, to let the water flow freely during the rainy season.


In correspondence of the enclosing wall’s NW corner, were was the balk, has been also exposed a collapsing related to the wall itself. Numerous laterite blocks have been found, both inside than outside the precinct, together with some brick fragments.
20-21. Enclosing wall, NW corner. Laterite collapsing

The collapsing has been documented and removed.

22. Collapsing removal
OPENING OF TRENCHES C9-10-11

To complete the excavation on the N side of G1, in the area comprised between the enclosing wall and the northern slope of the hill, have been opened the three new trenches C9, C10, C11.


After the removal of the superficial filling have been exposed the first incoherent bricks, related to the dump resulted by the general cleaning made by H. Parmentier around G1. The dump resulted mainly concentrated in the western and central parts of N side.
26. Trenches C9-10-11, first filling removal

Under the first incoherent bricks has been then exposed part of the enclosing wall collapsing. Numerous laterite blocks still connected have been found out, together with brick fragments and terracotta artefacts. Floral accents, antefixes, a finial and a fragment of globular necklace have been documented and removed. The necklace is probably belonging to the Nandin head previously found in the excavation inside trench C4 (see Inv. No. 0895).

27. Trench C11, enclosing wall collapsing
The excavation has shown the natural bedrock of the hill. Many other decorative accents have been exposed, documented and inventoried. On the bedrock, as already noticed during the excavations all around the laterite wall, have been recovered many pottery sherds, belonging to gritty, “common” ceramic, together with some green glazed fragments.
During the excavations in trench C9 have been found many fragments related to Kala masks decorating the basement of G1 and G2. One complete mask has been recomposed. The Kala masks have been found together with many other terracotta accents, and probably resulted probably to ancient spoliations.
BALK REMOVAL IN TRENCHES C9-C11

Accomplished the excavation in trenches C9-11, and after the documentation and the drawing of the vertical sections, has been started the balk levelling. After the removal of the surface filling has been then exposed the same incoherent layer of bricks already noticed in the trenches, mainly concentrated in the central and western part of the S balk.
In the prosecution of the balks removal have been recovered many other terracotta artefacts, including the triangular-shaped antefixes, probably topping the enclosing wall. These archaeological artefacts have been found in the collapsing of the enclosing wall itself.
On WE balk have been exposed many pottery sherds, as well as a lotus-leaf shaped terracotta decoration. Other samples of this kind of decoration have been already found in the excavations inside the mandapa and around the gopura.
PHOTOGRAPHIC GRID RESTITUTION AND COLLAPSING REMOVAL IN TRENCHES B1-B6-B7-A6-A7

After the accomplishment of the photographic documentation and grid restitution in the trenches B1-B6-B7-A6-A7, has been started the removal of G1 collapsing, still in primary deposition, previously exposed in trench A7. During the removal have been recovered numerous floral accents, and a fragment of terracotta decoration belonging to a doe’s body.
46-47. Trench A7: G1 collapsing removal
48-49. Trench A7: decorative material found in G1 collapsing
Foto 50-51. Trench A7: fragment of a doe’s body
The collapsing removal clearly showed the limits of Parmentier’s trenches, around G1 sanctuary.

52. Trench A7: The filling of Parmentier’s trench

At the same time has been started the removal of the collapsing related to G1 and G4 monuments, exposed the E side of the hill. The study and documentation of the trend and deposition of the bricks showed that the first structure to collapse was G4. The collapsed masonry belonging to the monument’s N side has been then covered by the collapsing of G1’ E side.

53-54. Trench B7: G1 and G4 collapsing removal
G1 collapsing has been documented and removed. In a second phase has been performed the photographic documentation of the collapsing underneath, related to G4. The collapsing has been then removed and reconstructed on earth, after the numbering of each brick.

1. G GROUP: ON SITE ACTIVITIES

During the month of June, all the architectural activities on the site have been led by the architects of DIS: P. Condoleo and F. Landoni. They supervised the following of the conservation and restoration works on G3 monument, the geometrical survey of G2, G4 and G5 monuments, the storage of all the bricks found during the excavation carried out by the archaeological team, the tests made on new materials chosen to continue the restoration of G group monuments and the survey and Cad drawings of E7.

1.1 G3: state of art

The works on Mandapa have progressing in the North-West corner, in the whole West side, in the South-West corner and in the first part of South side. (Fig.1)

![Fig. 1 – West side of G3, general view at present time.](image-url)

The fixing of the bricks of the external layers of the walls has been carried out with natural resin, and the internal layer has been fixed with bricks and mortar composed by
lime and brick powder of three different granulometries (Figs. 2-3): all the materials and all the steps and phases of the work have been described in the previous reports.

The way of numbering the bricks has been modified in order to make the operation easier and quicker: bricks on the original wall are numbered with chalk and permanently marked with ink. They are stored nearby the building waiting to be replaced in their original position (Figs.4-5), avoiding a further numeration.
All the damaged bricks have been substituted with original bricks (coming from the archaeological excavations) that take place and number of the damaged bricks.

1.2 North-West corner of G3

At present, the fixing phase of the bricks, carried out using resin and mortar, on this corner of the wall has reached the main mould of the external and internal facades. Only the upper part courses are fixed only by resin (at present from the 13th till the 16th layer) and still to be jointed with mortar, because the study of the final profile of the wall is still in progress. (Figs 6-11)
Fig. 6 – Internal layer of S-W corner during dismantling

Fig. 7 – N – W Corner, fixing of the laterite foundations

Fig. 8 – N - W Corner during the replacing of the layers
Fig. 9 – N – W Corner: general view with the upper part fixed only by resin.

Fig. 10 – N – W Corner: general view with the upper part fixed only by resin.
1.3 West side of G3

The west side of G3 has been partially dismantled: some parts were indeed in still good conditions, especially close to the North-West corner, but some other parts were seriously damaged, especially under the threshold and close to the big tree taken out from South-West corner (Figs) so the bricks had to be removed and fixed back (or substituted) with mortar and resin (Figs.14-15).
At present the reconstruction with natural resin and mortar has reached the top of the main mould of the facades (Fig.16), but the upper part bricks in the central area of the side are still to be fixed in order to leave the room for the sandstone threshold (Fig.17): it will be put back in its original position.

Some single damaged blocks of laterite have been replaced by a thin joint of mortar composed by lime and fine brick powder.(Fig18)
1.4 South-West Corner of G3

The reconstruction of the wall is still in progress. The tree in this corner has destroyed even the foundation and they had to be replaced (Fig.19) The fixing of the bricks with natural resin and mortar has reached at present time the 12th course above the laterite basement. (Figs 20-23)
Fig. 19 – South side of S-W corner before dismantling

Fig. 20 – Fixing of the laterite foundations of the South – West Corner.

Fig. 21 – South – West Corner general view.

Fig. 22 – South – West Corner, South prospect.
The fixing of the final part of the corner towards South side has been made in order to have a better joint once the south side wall will be connected to this corner. (Figs 24-25)