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 -

Preliminary Technical Report
September 2005
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Technical Report, September 2005

by Mauro Cucarzi
International Project Coordinator

1. Introduction

During the month of September the main activities have been:

- Conclusion of restoration of G3 (see Condoleo Report)
- Conclusion of restoration of G5 (see Condoleo Report)
- Conclusion and Restoration of enclosing laterite wall (Dang Khanh Ngoc Report is in progress).
- Drainage system in G3, G5 and those of Laterite wall (Dang Khanh Ngoc Report is in progress).
- Closing Field Season Meeting

Approaching the raining season and still because a lot of work has to be done I asked to M. Phan Thanh Bao to put at our disposal 7 more workers. In this condition 57 workers have been present on the field.

During this month at least two very strong typhoon hit My Son area forcing to stop the work for some days, therefore we made up for lost time working some Saturday and Sunday.

At the end of September very little remains to be done: cleaning the area, dismantle some temporary roofing and some other minor works.

Drainage system have been laid on in G3, G5 and in the northern site of Laterite wall according with the project already presented in August Technical Report.

UNESCO Bangkok Office, on the beginning of September assigned to Lerici Foundation the task to restore the most significant terracotta objects found during the archaeological excavation campaigns.

This task will be carried out during November 2005 by a team led by Dr. Patrizia Zolese Chief Archaeologist and CTA of My Son Conservation Project, together with Dr. Caterina Brunelli, archaeologist and one restorer from Italian Istituto del Restauro, Italian Ministry of Cultural Heritage, to be assigned.

At 28th of September a Closing Field Season Meeting has been organised with the participation of Dr. Dang Van Bai, Mr. Than Anh, Arch. Dang Khanh Ngoc, Arch. Pierre Pichard and my self.

Here after is the report of the Meeting.
REPORT OF MEETING IN MY SON
- SEPTEMBER 28TH, 2005 -

On 28th September 2005 a Closing Field Season Meeting of G Group Conservation Project has been held in My Son. The participants have been as follow:

Dr. Dang Van Bai, Director, Department of Cultural Heritage, Ministry of Culture Hanoi,
Mr. Tran Anh, Deputy Director of Centre of Conservation National Heritage, Quang Nam Province
Mr. Pierre Pichard, Architect, EFEO and UNESCO Consultant of My Son Conservation Project
Mr. Mauro Cucarzi, Director Lerici Foundation, University Polytechnic of Milan and International Project coordinator of UNESCO My Son Conservation Project

During my last visit to Ministry of Culture and Information, Hanoi, I informed Dr. Dang Van Bai, director of Department of Cultural Heritage, of the state of art of My Son Conservation Project.

In this occasion we spoke also discussed the possible and desirable future developments of this Project and I invited Dr. Dang Van Bai to come to My Son on September 28th being at the end of the field Project activities drawing on the raining season.

On September 28th Dr. Dang Van Bai arrived to My Son accompanied by Mr. Tran An, Deputy Director of Centre of Conservation National Heritage, Quang Nam Province. Very soon we went to the site together with Pierre Pichard and Dang Khanh Ngoc. Pierre Pichard and I started to inform them about the on going work.

Pierre Pichard then explained to Mr. Dang Van Bai different aspects of the conservation work done in G Group, the drain system applied on G3 and G5 monuments. Paola Condoleo informed the Director concerning the work done in G3 and Mara Landoni did the same for G5 and Dang Khanh Ngoc explained the consolidation and restoration work carried out on laterite enclosing wall and the rehabilitation of the ancient drains and a technical solution to facilitate the drainage in the north-eastern corner of the G area.

The works of both monuments and of laterite wall are near to be finished but with a significant delay compared with the schedule proposed. This is due because necessary materials (new bricks, laterite blocks, etc.) for the conservation work have arrived very late and consequently not in time in spite of repeated requests to the Management Board.

Pierre Pichard and Dang Khanh Ngoc informed also about temporary solutions to support the North-eastern and North-western of G 1. Sand bags have been already put around G 2 to protect the monument during the raining season.
Dr. Dang Van Bai expressed his appreciation on the work already done together with the necessity to make the large time consuming process of restoration work of Cham Monument known to the main parties involved in the Project.

In fact conservation and restoration works have been done following the international standards that in this case mean stratigraphic archaeological excavation, appropriate documentation of all phases of work, cataloguing all archaeological objects, anastylosys of monuments to be consolidated and restored, use of ancient materials and building techniques, laboratory analyses to test the compatibility of the materials used in the restoration.

After the visit to the site started the meeting dedicated mainly to discuss and explore the conditions and the possibilities to continue the activity in G Group.

Dr. Dang Van Bai opened the meeting with the following questions regarding the programme for 2006:

1. How to continue the conservation activity on G Group
2. The necessity to organize a Conference presenting the results of the Three Years UNESCO Project and the future activity (to be held preferably in Hanoi)
3. Necessity to produce a Manual for Archaeology and Monument Conservation in Cham Towers.
4. Necessity to organize a training course (two or three weeks) in Archaeological Conservation and Monumental Techniques of Cham Towers (preferably in My Son).

1. How to continue the conservation activity on G Group

Concerning this issue Mauro Cucarzi reminded that during the 3rd Scientific Board Meeting held in My Son 12\textsuperscript{th} – 13th May, high attention has been drawn to the necessity to guarantee the prosecution of Conservation activity of G Group.

All participants were aware that UNESCO cannot provide any financial support for 2006, being concluded the first phase of the project on December 31\textsuperscript{st}, 2005.

But UNESCO Bangkok Office has already prepared a project proposal for the 2\textsuperscript{nd} Phase to be submitted to Italian Government in the next meeting.

Inside the programme agreed by the 3\textsuperscript{rd} Scientific Board Meeting there were two points concerning the strategy to guarantee the continuation of conservation activity in G Group. These stated:

- \textit{“The Ministry of Culture and Information will source out funds to finance work activities in E Group for 2006 and 2007. The Ministry will also provide national experts, local workers, other facilities and supplies for E and G Group work activities.”}
- \textit{The Provincial Government of Quang Nam will endeavour to provide in-kind contribution (staff house, electricity and water, car/driver/petrol, local workers and other resources to be identified) for work activities in E and G Group for 2006 and 2007”}.
If this commitment will be ensured it is possible to ensure the participation of different actors already engaged in the Project and none:
Lerici Foundation, Polytechnic of Milan and EFEO, Paris.

In this case the activity programme for 2006 could be as follow:

- **Conclusion of G3 and G5 restoration posing the last course of bricks.** (Polytechnic of Milan)
- **Archaeological excavation of the remaining part of G Area - South/ South-eastern sector.** (Lerici Foundation)
- **Consolidation and restoration of the remaining part of Laterite enclosing wall** (Lerici Foundation, Ministry of Culture - Institute of Conservation Monuments)
- **G2 Conservation and Restoration** (EFEO, Polytechnic of Milan, Ministry of Culture - Institute of Conservation Monuments)
- **G1 local Consolidation and restoration of unstable parts** (EFEO, Polytechnic of Milan, Ministry of Culture - Institute of Conservation Monuments).

### Tentative Work Plan and Schedule 2006

<table>
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In this frame:

- **Lerici will provide Italian archaeological experts for the excavation** (travel expenses, food and beverage will be covered by Lerici Foundation).
- **Polytechnic of Milan should provide Italian architects for conclude the work in G3 and G5** (travel expenses, food and beverage will be covered by Polytechnic of Milan).
- **EFEO, Paris and Polytechnic of Milan should provide International architects for restoring work of G2** (travel expenses, food and beverage will be covered by Polytechnic of Milan and EFEO, Paris).
- **Ministry of Culture should provide national architects, draftsman and workers for G2 and Laterite wall consolidation.**
• Quang Nam Province should provide for all period – 7 months - staff house, electricity and water, car/driver/petrol, 30 local workers, necessary materials and tools for restoration work, such: new brick, new laterite blocks, “dau rai” resin, shell lime, etc.
• Lerici Foundation will provide the International coordination and the chief technical advisor as in the UNESCO Project.
• UNESCO Bangkok Office will be involved at any rate in the general coordination supervising and monitoring.

Other decisions

All participants agree about the suggestions proposed by Dr. Dang Van Bai.

Mauro Cucarzi in particular propose that Ministry of Culture and Information should organize a Conference at the end of March 2006, inviting the most representative organisations and scholars in Cham Conservation and at the end it can be organized a Press conference concerning the results of UNESCO Project and future needs and proposals.
Preliminary Report on the Architecture Survey and Research carried out on G Group –September 2005

By Chief Architect P. Condoleo, Arch. F. Landoni and Arch. M. Landoni

SCIENTIFIC UNIVERSITY POLITECNICO DI MILANO, DIS, ITALY

1. G GROUP: ON SITE ACTIVITIES

During the month of September, all the architectural activities on the site have been leaded by the architects of DIS: P. Condoleo, F. Landoni and M. Landoni. They supervised the progressing of the conservation and restoration works on G3 monument, G5 monument and the North-West corner of G1 temple.

1.1 G3: state of art

The reassembling works on Mandapa have progressed in all sides and corners of the building until the final profiles (Figs.1,2).

The drainage system for the rain water has been carried out following the project by Arch. P. Pichard and carried out by Arch. Dang Kanh Ngoc.

Fig. 1- G3: general view of South-West side
1.2 Drainage of G3

The project for draining the rain water out of G3 consists in conveying the water inside the building by a smooth slope to two pipes that channel it to a central drain and than from here sent out by two plastic pipes passing under the foundations of the North and the South sides (Fig.3).
Fig. 3- Draining project: drawings

The central part of the South side has been excavated under the foundations in order to lay the draining pipe and in the North side a tunnel has been dig under the foundations without removing the internal layer of the wall as described in the previous report.

The following pictures show all the phases of the works for the drainage of G3 monument (Figs.4-10):
North side  South side  side foundations

Fig. 7- Central internal drain  Fig. 8-External drain with pipe, North side  Fig. 9- Internal drain with pipe, East part

Fig. 10-Pressing of the first sand layer in South side (left) and pressing of the second clay layer in North side (right)

1.3 North Side of G3
Works on the North side of the building concerned only in the supporting wall made by new bricks. Only the external layer of the internal side of the wall were in fact originally preserved and it needed to be supported (Fig.11).

Fig. 11- North side: external view after reassembling work of the original internal layer

The profile of the supporting wall followed, as the 3D picture of the project shows (Fig.12), the profile of the original preserved part of the North side.
The technique used to build the external supporting wall of the North side of G3 (Fig. 15) has been followed the same procedure as the rest of the conservation works in G group buildings: the new bricks of the external layer has been glued by natural resin (Fig. 13) and the layer inside the wall has been made with bricks and mortar (Fig. 14).
1.4 West side of G3

The West side of the building needed only little adjustments because the final profile was already set in the previous months (Fig.16).
1.5 South side of G3.

The reassembling works during the month of September concerned mostly to the South side of G3 (Figs.17,18).

The hole in the wall left to lay the draining pipe has been reassembled (Figs.19-22) as well as the other parts of the side until the final profile (Figs.23,24).
The South side has been finally conclude until its final profile (Figs.23,24)
1.6 East side of G3

Only few courses of bricks of the final profile, especially close to South-East corner, had to be fixed, as well as the parapets of the threshold, built with the new bricks (Figs.25-29).
Fig. 25- Rebuilding works of the parapets of the threshold with new bricks

Fig. 26- Threshold with parapets partially reconstructed

Fig. 27- East threshold: internal view with final profiles

Fig. 28- Parapet: detail

Fig. 29- East side: general view with final profiles

2 G1 (kalan) building: state of art
Works on the North-West corner of G1 proceeded in order to put back the statue in its original position and to fix it back to the corner; the bricks of the external layer of the corner have been reassembled with mortar and natural resin with the same procedure of G3 and G5 monuments (Figs.30,31).

After the reassembling and the fixing of the corner (Figs.32,33), the stone statue has been put back in its original position (Figs.34,35).
The wall beside the statue has been reassembled with original bricks and fixed with the usual procedure (Figs.36,37,38).
3 New bricks

The new bricks coming from Kiem Lam factory (Figs.39,40) has arrived almost one month later of the required time. A big percentage of them were full of cracks and inclusions, and all of them were over fired and very hard to cut and smooth (Fig.41), so that they had to be previously selected one by one before using them for the conservation works (Fig.42).
Fig. 41- Brick with cracks and inclusions

Fig. 42- Bricks selection

4 G5 building (posha): state of art