### Report

# of Egyptian-Chinese Mission at Montu Temple, Karnak

(2018-2019)

In the cooperation between Ministry of Antiquities of Egypt (MoA) and the Institute of Archaeology, Chinese Academy of Social Sciences (CASS), the first Egypt-China joint archeological mission took place on 25 November 2018 to 30 January 2019. Under the co-direction of Dr. Ayman Ashmawy (Head of Egyptian & Greco-Roman Antiquities Sector, MoA) and Dr. Wang Wei (Academician, Institute of Archaeology, CASS), the team was composed of multiple specialists from the two parties, and supervised by two executive directors on the field (see list). Two Inspectors were also represented from the Ministry of Antiquities on the field during the whole mission: Abd Hassan and Ahmed Tahrir. The workmen were organized by Rais Mohammed Farouk.

Dr. Mostafa al-Saghir	Executive director	Director of Karnak Temple	
Dr. Jia Xiaobing	Executive director	Director of Prehistory Departement, Institute of Archaeology, CASS	
Team Members (Alphabet order)			
Mr. Cao Huiqi	Archaeologist	Institute of Archaeology, CASS	
Dr. Gao Wei	Egyptologist	Institute of Archaeology, CASS	
Dr. Guo Zilin	Egyptologist	Institute of World History, CASS	
Mr. Hosny Abdel Wahab	Egyptologist	Director of the Montu Temple	
Mr. Ibrarim Mostafa	Photogrammetry surveyor	MoA	
Dr. Li Xinwei	Assistant Director	Director of Prehistory Departement, Institute of Archaeology, CASS	

Mr. Saad Bakhit	Egyptologist	Director of excavation, Karnak Temple
Dr. Wen Zhen	Archaeologist	Institute of Archaeology, CASS

We like to, first of all, express our deep gratitude to Dr. Khaled El-Enany - Minister of Antiquities, Dr. Mostafa Wazeri - the Secretary General of the Egyptian Supreme Council of Antiquities, and Dr. Ayman Ashmawy - Head of Egyptian & Greco-Roman Antiquities Sector, for their trust, support and help throughout the mission. We like to thank also Mr. Mohamed Abdel Aziz - Director of Antiquities of Upper-Egypt and Mr. Mohamed Yahyah - Director of Antiquities of Luxor. Divers supports we got from the CFEETK team (Centre franco-égyptien d'étude des temples de Karnak) and other egyptologists, Prof. Francesco Tiradritti, Prof. Peter J. Brand, François Larché, Emmanuel Laroze...we want to express our gratitude to them.

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#### **General Cleaning**

The Montu Temple Complex and its surrounding area are located in the northern part of the Karnak, therefore also known as "Karnak North" in the papers. This area is accessible by the gate of Ptah opening on the north enclosure wall of the Amun Temple, linked by an ancient alley to the famous Hypostyle hall of Karnak. From 1940 to 1951, a series of excavations has been done by IFAO. From the year of 1969, Jean Jacquet consecrated his whole life to study the Treasure of Thutmosis I which is a building located outside of the south-east corner of the enclosure wall of the Montu Temple. An architectural and epigraphic survey led by the French Egyptologists L. Gabolde and V. Rondot made in the Montu temple during 1990-1996. These studies en general at Karnak North provide a background of the first season of the mission, and we could say the majority of this area has not been cleaned since almost seventy

years.

The site was full covered by vegetation, including the palm trees, a kind of strong wild grass, and also the domestic trashes all year long, the rests of wild animals, some mounds in height 2-5m which was made by the old excavations. The main job of this season is indeed cleaning the surface of the whole site to provide a suitable situation for the archaeological surveys and other necessary works forthcoming (Fig. 1).

# BEFORE AFTER











Fig. 1 The photos show views before cleaning (left) and after cleaning (right). ©MTP

As a part of the plan made by Egyptian - Chinese team, the cleaning work carried out on the following parts of the site during this season:

- Inside the enclosure walls of the Montu Temple, the wild grasses have been cut and moved out of the site; fifty-seven different size palm trees have been all cut down and removed for an open view of the site and also for the aerial photos which we expect to take during the next season.
- The place between the gate of Ptah and the ruin of the gate of Thutmosis I, outside of the west wall of the enclosure, the wild grasses have been cleaned and the trash has been moved out of the site.
- The office area, between the south enclosure wall of Montu temple and the north enclosure wall of Amun temple, the wild grasses have been cut and moved out of the site; the palm trees in this area have not been cut down but pruned.
- Outside of the north enclosure wall of Montu temple, around the northern gate, the wild grasses have been cut and removed. Some fragments of the colossal statue revealed on the ground.
- The place located on the east side of the office area, outside of the north enclosure wall of Amun temple, used for depositing the excavated blocs, has also been cleaned for building a mastaba.

This work of removing the vegetation and the trash on the ground shows us a complex of temples which has mentioned in the volumes published by IFAO, and also completed our knowledge of this area. These following structures could be observed clearly after cleaning:

• The enclosure walls and the gates opened on it: the monumental gate on

the north, a gate on the east, six gates of Osirian chapels and one gate of Maat temple on the south, and a modern gate on the west wall.

• Three temples: the Montu temple, Maat temple and Harpre temple (Fig. 2).



Fig. 2 South view of the three temple after cleaning. ©MTP

- A high structure, also named "High temple", with its mud bricks foundation and a sacred lake with structure of steps nearby (Fig. 3: Left).
- Six Osirian chapels behind the six gates on the south wall, only two of them rest upper structures on the ground: Chapel of Nitocris and Chapel of Amenardis.
- The gate of Thutmosis I outside of the west wall, on the same axis as the southern gate (foundation only) and the gate of Ptah (Fig. 3: Right).
  - The gathered blocs and mastabas lay on the site and its surrounding area.





Fig. 3 Left: North-east view of the "High temple". Right: South view of the gate of Thutmosis I.

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Previous reports published by IFAO show us that, during the 1940s, French missions carried out trenches around the buildings, and the site was covered by sands and dust after their leaving. For understanding the situation of the site today, we employed some methods more carefully. In order to record all information during the cleaning, a grid system has been set up specially on two zones: the west joint part of Montu temple and Maat temple and the two Osirian chapels (Fig. 4). This grid system (5 x 5 m), based on the local topographical system, is the same used by the other teams working in Karnak. The cleaning also facilitated the documentation by 3d modeling of these buildings.

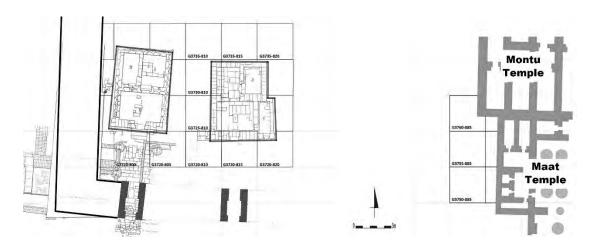


Fig. 4 Presentation of the grid system of two zones. The two Osirian chapels (Left) and the west joint part of Montu temple and Maat temple (Right). ©MTP (after Karnak-Nord III, 1951)

#### West joint part of Montu temple and Maat temple

3 grids (5m x 5m) are set up in this zone, ceramics and some sand stone blocks are gathered. During the cleaning, we discovered the French trench around the south-west corner of the Montu temple (in the grid G3760-885), but the trench seems very deep and we only reach the surface level (Fig. 5). A small mud-brick wall has been also found on the west side of the Maat Temple (in the grid G3750-885).



Fig. 5 View of the south-west corner of the Montu temple after cleaning show the modern trench.

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#### **Two Osirian Chapels**

20 grids (5m x 5m) are set up in this zone, ceramics and some sand stone blocks are gathered. The limits of old excavation led by IFAO are identified benefit from the cleaning work, which are 20-50cm wide outside of the walls. For the chapel of Nitocris, we noted that the gate and the entrance of the chapel are not exactly on the same axis; 4 bases of the columns don't have the same diameter. For the chapel of Amenardis, it seems has another structure on the west side of the chapel, some foundations reveal out after cleaning. In front of the chapel's entrance (in grid G3720-815), some granite fragments with a half cartouche is discovered, it seems to belong to the dorsal pillar of the statute. The owner of this statute should also be a priestess (Fig. 6).



Fig. 6 Granite fragments show a cartouche probably related to a female name, found in front of the Amenardis's chapel. ©MTP

#### **Photogrammetry**

The photogrammetry is the science of making measurements from photos. This technique has been widely applied for recording different information at archaeological sites. Based on this technique, we can also build the 3D model that allows all information to present in a system dimensional. Three 3D models (Fig. 7-9) are made during this season by Ibrarim Mustafa (MoA).



Fig. 7 Statue of Amenhotep III with three different views based on a reconstruction on 3D models.

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Fig. 8 Orthoprojection view of the two Osirian chapel based on 3D modeling. ©MTP

#### **Restoration and Conservation**

A huge number of blocks, which was discovered during the old excavations, could be found on the site, the majority of them made of sandstone and directly lay on the ground. This collection of blocks could be separated on six zones located inside the area: 1.the place near the south-west corner of the Montu temple, there are a hundred blocks lay on four mastabas; 2. the northwest part of the area inside the enclosure; 3. the place beside the monumental gate, inside the north wall, there are blocks from the obelisk of Amenhotep III and fragments of the doorway; 4. the place between Harpre temple and the est wall, the blocks are probably coming from the Harpre temple on mastabas; 5. the place between the south wall of Montu temple and the north wall of Amun temple; 6. the surrounding area of the storerooms, a great number of fragments probably belong to the statutes and decorations lay on here.

These blocks are damaged ceaselessly because of soil corrosion and wind erosion. One big mastaba and other smaller one are built on the place (5) during this season for the purpose of conservation. A sunshade is also built between the two



Fig. 9 Orthoprojection view on Maat temple, based on 3D modeling. ©MTP









Fig. 10 Three new mastabas built during this season for conservation and some emergency measure. @MTP

#### Improvements of the site

Cleaning the office area; Six modern buildings in the place of the south wall built by IFAO have been emptied and removed; one wooden storeroom has been removed; improved the condition of the kitchen and reused it; new lights have been installed (Fig. 11).



Fig. 11 A clear view on the office area after cleaning and remove the modern buildings. ©MTP

#### Preparation for the next season

Being an Egypt-China joint mission, we, Egyptian and Chinese, are working together, and all the decision to come from an agreement of the two teams. This is our first season, and we planned to work together for a long time. Thus we had several meetings, during the whole season, with all team members to prepare our works forthcoming. We already settle down several points together like methods of the excavation by using the grids, recording system with different kinds of sheets in English and Chinese, conservation and restoration with new installations and new long-term project, and also, improvement of working space, etc. (Fig. 12)

# 2018.12.3



## 2018.12.14





# 2018.12.23



# 2019.1.23





Fig. 12 Some photos from our work meetings during the season. ©MTP