

NOTE ON THE ACTIVITIES OF THE ITALIAN ARCHAEOLOGICAL MISSION IN THE KINGDOM OF SAUDI ARABIA IN THE FRAMEWORK OF THE SAUDI-ITALIAN-FRENCH ARCHAEOLOGICAL PROJECT AT DŪMAT AL-JANDAL

Romolo Loreto, Università degli Studi di Napoli "L'Orientale"

*Introduction*

The 2015 archaeological campaign at Dūmat al-Jandal took place between 15th October - 16th November 2015. Participants were: Romolo Loreto (archaeologist, Università degli studi di Napoli "L'Orientale" - UNO), Bruno Marcolongo (National Research Council of Italy, Inst. of Applied Geology (I.R.P.I.), Padova), Roberto Bottiglieri (student, UNO), Vincenzo Regine (student, UNO), Simona Berardino (student, UNO) and Marilena Polosa (student, UNO). The activities carried out by the Italian team at Dūmat al-Jandal focused on the main research topics: extensive excavation in the historical core of the oasis, activated since 2009, and prehistoric survey devoted to the paleoenvironment for the detection of Neolithic and Bronze Age sites in the al-Jawl region.

In detail, both in the historical area and along the wādī al-Sirhān surroundings several activities took place:

1) the enlargement of Trench 1, at the foot of the Mārid Castle, in order to improve the extensive archaeological area and to define a perimeter around which develop an open air museum. The work involved both archaeological and restoration issues. Of course the enlargement of the trench is a crucial point for a better definition of the oasis' stratigraphy and in preparation of restoration activities (first consolidation's walls interventions took place during this season);

2) the excavation of new trenches inside the Mārid Castle, in order to improve 2014 sounding and investigate the whole surface which is still available for excavation;

3) the beginning of a detailed study of the Islamic pottery from the Sector A area, both from the extensive trench at the foot of the Mārid Castle and from its inner excavated trenches.

4) geoarchaeological and geomorphological survey of the wādī al-Sirhān, in particular the Dūmat al-Jandal area and its southern area, within a range of 60km;

5) development of a pre-historic GIS project for the study of the al-Jawf landscape evolution

during the prehistory and the naissance of the Dūmat al-Jandal oasis.

*Enlargement of Trench 1 at the foot of the Mārid Castle*

Excavation in Trench 1 took place along the North side of the trench, in a 15 × 10 m area (Fig. 1). We had confirmation of what has been detected during the previous excavations: after the Islamic levels of reoccupation, related to Omayyad and Early Abbasid era, the Nabataean levels were identified. In particular, it is now possible to recognize a second Nabataean building "Building B", made of the same walls technique recognized in Building A, i.e. pseudo-isodomic masonry and white plaster above walls and floors. Building B seems to be a functional structure related to storage purposes, in which both solid and liquid could be stored, instead of the residential vocation of Building A.

Among the most interesting features came to light during the excavation we present the first inscription identified since 2009 (Fig. 2). According to Macdonald's classification, the inscription can be add to the Oasis North Arabian, although we cannot be sure of the attribution to the Dumaitic dialect, dated from the 5th century. BC (Macdonald 2004). Moreover, the inscription is quite damaged and only the first word of the first line could be read as "L-MŠD" a proper name attested in Ancient North Arabian (Lankester Harding 1971).

*Inscription found below Qaṣr Mārid, in Trench 1, at Dūmat al-Jandal (M.C.A. Macdonald)*

A broken inscription apparently carved in the Taymanitic script, to judge from the form of the *ṣ* which is the only diagnostic letter-shape in the surviving text. What remains are two lines, each running from right-to-left, the lower one broken so that only half of each letter remains. At the left there is a vertical line which appears to mark the left border of the text.

Text

1. {l} mšd
2. {b} {n}{b}{r}

#### Translation

1. {By] Mšd
2. {son of} {Nbr}

#### Commentary

Although the name *mšd* has been found nine times in Safaitic, this is the first time it has been found in Taymanitic. At the end of line 2, it is not possible to know whether the text continued after the *r* onto a third line and possibly subsequent lines, and thus whether the patronym was *nbr* or a longer name. *Nbr* is found some eight times in Safaitic and once in a Thamudic C text behind the rocks called al-Maḥaḡḡah near Taymā' (Huber 1891, 286, 53 = Euting 1974: plate 20, nos 363+362).

#### *Excavations inside the Mārid Castle*

Trenches 8 and 9 (both 5 × 5 m) were opened inside the castle, in the open courtyard. The excavations brought to light the very first Nabataean structure inside the Castle's area, what now can be definitely defined as the ancient acropolis.

In Trench 9 the Nabataean structure is part of a huge room defined by three impressive walls 0.65 m thick (Fig. 3). The room, as well as the walls, were covered by white mortar, like the buildings A-B at the foot of the acropolis. The floor preserved a rich amount of Nabataean pottery in addition to that collected in trench 8: Nabataean "egg shell" pottery of luxury trade from Petra, dated to the 1st century AD and *terra siggillata orientale*, dated to the 2nd century BCE.

#### *Study of the Islamic pottery from the Sector A*

The study of the Islamic pottery is going on started from the Omayyad materials identified in the first reoccupation after the collapse of the Nabataean buildings.

After a first summary calculation, 140.000 sherds have been collected from the excavated trenches. The vast majority of them are related to Islamic periods. It is now obvious that one of the aims of the Saudi-Italian-French Archaeological Project in Dūmat al-Jandal must be to proceed with a complete analysis of this huge collection, in order to obtain information about chronology, production techniques and commercial relations between the oasis and the surrounding regions. Then, it was decided to resume the study started in 2009 by the author and P. Siméon (Loreto 2012; Siméon 2014),

focused on the pre-Islamic pottery. Some frequent shapes were identified based on the fabrics, in light of a more exhaustive picture of the pottery production during the centuries. What can be stressed is the presence of similar forms from the Nabataean to the Islamic era, mostly related to common ware locally made, with same fabrics that confirm the assumption that the core of the oasis was continuously occupied at least from the I cent. BCE until the 16th century.

Also the autoptical analysis was widened on the surface treatment of the fragment, from the aesthetic and functional point of view, allowing to the glazed pottery to be part of the treatment

#### *Geoarchaeological and geomorphological study of the wādī al-Sirhān area*

A first survey has been conducted on November the 7th in the at-Tawīl region, south of Dūmat al-Jandal. The survey was directed to the south-west limit of the as-Sirhān formation in order to investigate Neolithic proto settlements related to paleoclimate condition in al-Jawf.

The chosen area presents itself as an isolated environment of limestone mountains that define the western boundaries of the northern al-Nefūd palaeo-lakes: a rocky region cut by an articulated net of palaeo-rivers.

Starting from what was seen during 2014 in northern al-Jawf (Loreto 2015), in the Harrat al-Harra, by satellite images and Remote Sensing analyses, we chose to survey the area in which settlements made of multiple circular structures, or compound, are recognizable and easily reached from Dūmat al-Jandal at a distance of no more than 60 km (Fig. 4). The architecture and lithic suggest a Neolithic community of seasonal hunter-gatherers developing first attempts of settlements. The opportunity to study this culture in northern Saudi Arabia regions will allow us to better understand the northern al-Nefūd Neolithic culture in the wider context of the Levantine Neolithic.

The area is also rich in rock art and it will require a devoted campaign because of the huge amount of them.

#### *Development of a prehistoric GIS*

Since 2014 a GIS mapping of the evidence related to the Neolithic in al-Jawf has been carried out, including both anthropic aspects (architectural and material culture) and

paleoenvironment (palaeolakes and paleowadis) in order to define an exploitation's model of the territory during the Holocene.

The Geographic Information Systems (GIS) are used in various fields and disciplines to summarize and analyse spatial patterns, with the aim to understand how geographical and non-geographical entities interact between them in space and time. The software used to geo-referencing is Quantum GIS (QGIS version 2.4.0-Chugiak). It includes the main program QGIS Desktop, the QGIS Browser for data management, and a variety of optional plugins that provide functionality specifics.

Currently, within the project, we have been created six shape files, vector layers that represents discrete features in space in the form of points, lines and polygons. They are static and

immutable entities without spatial or temporal information.

Five of them are related to anthropic aspects:

- single structure: single round facility, which presents a distance of no less than 20/25m from a further structure
- compound: multiple rounded structure that define a proto-village;
- desert kite: hunters stone structures, sort of traps in shape of hundred meters long stone walls;
- funerary structures: most of them tumuli large enough to be detected from satellite images;
- undefined object: unclear structures;

two of them concern the geomorphological evidence:

- palaeo-river and palaeo-lakes related to the anthropic features.

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Fig. 1 - General view of the Trench 1 (2009-2015). View from North



Fig. 2 - DJ.15.A.I/1. Ancient North Arabian inscription found in Trench 1



Fig. 3 - Plan of the Trench 9 in which the Nabataean structures were found. Ortho-restitution of a Photogrammetric 3D photographic mapping



Fig. 4 - Neolithic compound from Jabal Najma, south of Dūmat al-Jandal on the northern borders of al-Nefūd desert