



# The Pottery Productions from Dūmat al-Jandal. An Outline from the Assyrian to the Islamic Era

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# Abstract

Since 2009, the University of Naples L'Orientale has conducted archaeological activities in the historical core of Dūmat al-Jandal, al-Jawf region (Saudi Arabia). Among the various objectives pursued over these years, spanning from prehistory to the Islamic periods, the primary focus has been on defining the historical core of ancient origins, particularly through identifying material evidence of the ancient 'arab mentioned in Assyrian sources from the 9th to the 7th centuries BC. Between 2009-2017 the excavations focused among the Nabataean settlement (Trench 1) and first test probes outside 'Umar ibn al-Khaṭṭāb mosque. In this context, the excavation outside the western side of the 'Umar ibn al-Khaṭṭāb mosque uncovered a collection of late Neo-Assyrian ware from the 8th-7th centuries BC. This discovery, for the first time, confirms the identification of Dūmat al-Jandal as the ancient Adummatu and provides material evidence contemporaneous with the earliest Arabs. Further materials related to later periods were also collected, displaying a continuous stratigraphic sequence in Trench 10, Soundings 1-3.

Thus, in light of the 2009-2017 excavation seasons in the historical core of the oasis and having identified its very first historical phase, here it is introduced a first comprehensive chronological sequence based on the material culture emerged, in particular the pottery assemblages identified up to now, stretching from the late Neo-Assyrian period to the Nabataean era and the Islamic centuries. A particular focus is devoted to the definition of the locally made classes, as well as to the identification of the imported items, in order to understand the socio-economic context of the oasis and to plan the future archaeological investigations inside the historical core of Dūmat al-Jandal.

Keywords: Assyrian; Nabataean; Pottery; Arabian Peninsula; Dūmat al-Jandal

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# Introduction (R. Loreto)

In the framework of the 2010-2017 Saudi-Italian-French archaeological project at Dūmat al-Jandal, a preliminary typological overview of the pottery productions from the historical core of the oasis can be proposed. The *corpora* took shape on the basis of the pottery collected from the excavations of the urban area carried out mainly from Trench 1, the wider ancient urban sector; the Mārid castle; and the Hay ad-Dira' excavation outside the 'Umar ibn Al Khaṭṭāb mosque.

The analysis, which offers a wide field of investigation, helps us to better understand a site of strategic importance and, thanks to the discovery of the Assyrian occupational phase, to define a stratigraphy that covers almost the entire 1st millennium BC up to the whole Islamic Era. The proposed interpretation of the ceramic data helps to provide a key to the definition of the history of the oasis within the Ancient Near East context, with particular attention to the Assyrian, Nabataean and early centuries of the Caliphate. It testifies of an oasis which held the role of a commercial hub in northern Arabia during specific periods of time.

The historical core of the oasis is composed by several urban areas: the acropolis (where the Mārid Castle stands, above at least a Nabataean phase and a Byzantine one); a residential area spread around the foot of it, both along its western side, where the main Nabataean and Islamic structures have been identified, and its western side; and a huge agricultural area composed by industrial structures, a complex system of wells and *ganawāt* and a widespread cultivated area of palm trees surrounding the ancient urban area.

Eleven excavation trenches were open from 2009 to 2017 (Fig. 1, Loreto 2018, 2019). Trench 1, that identified the main residential area, east of the castle; Trench 2, a test probe at the lower level of the *wādī* alluvium. Trenches 3-6, that allow to identify an industrial area close to the residential buildings in Trench 1; Trenches 7-9, probes inside the courtyard of the castle; Trench 10, outside the western flank of the 'Umar Mosque. Finally, Trench

along the whole western flank of



11, is an extensive excavation area Fig. 1 - The 2009-2017 excavations in the historical core of Dumat al-Jandal (photo Thomas Sagory)

the Mārid castle. The Acropolis has seen the first excavation probe opened in the courtyard during the '80s by Khalil Al Mu'aykil (1994). At that time, a stratigraphy comprised between the Byzantine and Early Islamic phases was recognized. New probes were done between 2014-2016, always inside the courtyard, the only area that can be investigated without the removal of the later construction. The obtained results were quite promising: the foundation layer of a structure related to the Nabataean-Roman period was identified, associated with Eastern Sigillata shards (2nd-1st cent. BC) and a collection of pottery items of Nabataean tradition (1st-2nd cent. AD). The residential area along the eastern side of the acropolis appears to be a huge urban context. At least two main pre-Islamic buildings dated to the 1st-6th cent. AD were recognized: a residential building composed of an open courtyard bordered by porticoes and rooms -Building A-, and part of a second building whose function is not clearly identified -Building B- (Loreto 2018).

# The pottery corpora for the definition of a comprehensive typological classification (R. Loreto)

Up to now three main *corpora* were identified: the late Neo-Assyrian *corpus*, mostly composed by locally made ware imitating the Neo-Assyrian models; the Nabataean corpus, made of both imported luxury ware and local productions; and the Islamic corpus, the latter by far the most abundant one, stretching from the early Islamic period up to the 17th century and mostly composed by locally made common ware.

Among these well identified *corpora*, some sherds related to different traditions emerged: the Sana'iye Pottery type from the cemetery of Tal'a/Area S, a ware imported from Taymā' and dated to the 8th-5th cent. BC (Hausleiter 2014, 417; Tourtet et al. 2021, 61-64), both from Trench 1 and Trench 10, in Sounding 3; carinated bowls and cuneiform decorated bowls that recall the Assyrian or post-Assyrian tradition (Kreppner 2008, fig. 5e; Anastasio 2011, fig. 4d) were found associated to the 4th-2nd cent. BC stratigraphic unit identified in Trench 10, in Sounding 1;<sup>1</sup> the eastern Terracotta Sigillata from the probes inside the Castle of Mārid, dated to the 2nd-1st cent. BC; the Sigillata Africana and the Byzantine ware dated to the 1st-7th cent. AD (Loreto 2012), from the Nabataean and post Nabataean occupational phase in Trench 1; the so-called Parthian ware, turquoise jars of Mesopotamia origin dated to the 2nd cent. AD (Schenk 2007, fig. 2), among the Nabataean assemblage from the excavation of the residential area in Trench 1. According to the stratigraphic sequences after the excavations, one suggests that the oasis was never abandoned, neither a single clear level of abandonment was identified nor a destruction level: what can be documented is a continue occupation of the urban area with dismantle and re-usage of previous buildings. Then, a key-factor in the interpretation of the archaeological sequence is the relative abundance of the pottery items and the variety of its traditions in each stratigraphic level.

For these reasons this paper introduces the most abundant assemblages of pottery traditions identified in the oasis, in order to start to define a clear material sequence that can allow to reconstruct the history of one of the main north Arabian oases.

Following the preliminary typological classification of the Nabataean ware introduced at the 43<sup>rd</sup> ARAM Society for Syro-Mesopotamian Studies, titled Arabs before Islam, the updated typological classification here proposed is based on both the technical features and the most common morphological, dimensional and functional classifications of the same chronological and cultural horizon (Negev 1986; Schmid 2000; Durand, Gerber 2014). Apart from the well-known types, such as the Neo-Assyrian carinated ware or the imported Nabataean fine painted ware, and the peculiar technical features of the glazed ware, considering the different nomenclatures used in the different languages, we chose to adopt the naming types (suggested in English, French and Italian) of the pottery assemblage found in the houses of the market square in Tamna' (Buffa 2016, 447-450). Consequently, the materials have been organized according to formal and dimensional features in a system based on geometric criteria. Thus, the typological classification is based on corpora, classes, shapes and types according to the standard Italian TMA (Tabelle Materiali Archeologici).<sup>2</sup> The corpus identifies a peculiar manufacturing tradition typical of a well-defined historical period. The class identifies a group of individuals that share common features (fabric, technology, typological repertoire). For example, the class of the Neo-Assyrian imitation ware or the Nabataean imported fine painted ware, the class of the local fine ware or the decorated local ware, the local common ware (the latter is the vast majority), and the glazed ware. The shape identifies a group of vessels that share typological features linked to a peculiar function. For example, bowls, jars, etc. The type identifies the specific articulation of every shape. For example, carinated bowls, truncated-conical bowls, etc. Finally, the sub-type could identify the variability and articulation of the types. For example, carinated bowls with rounded or everted rim or low, medium or high carination, etc.

<sup>&</sup>lt;sup>1</sup> Charcoal sample, laboratory number: DJ.16.B/60; conventional radiocarbon age: 2150±30; calibrated 2013 INTCAL, 2 sigma; calibrated results: 68% probability, 14C CAL: 340–325 BC, 205–170 BC; calibrated results: 98% probability, 14C CAL: 350–295 BC, 230–220 BC, 210–105 BC).

<sup>&</sup>lt;sup>2</sup> http://www.iccd.beniculturali.it/index.php?it/473/standardcatalografici/Standard/74.

# The late Neo-Assyrian ware, 8th-7th centuries BC (R. Loreto)

The Neo-Assyrian *corpus* was collected from Sounding 3 in Trench 10, in a domestic structure close to the western side of the 'Umar mosque's hall. In this excavation area three main levels were recognized, according to the pottery collected: an early Islamic level dated to the 8th-9th centuries AD;<sup>3</sup> a first pre-Islamic level from where mostly Nabataean tradition ware came to light; and an Assyrian level where an assemblage of 8th-7th cent. BC late Neo-Assyrian ware was identified. In fact, the pottery assemblages collected from the upper levels found comparisons in the collected ware from Trenches 1-9 and 11. On the contrary, the pottery emerged from the very bottom of the soundings appear to be unique in the context of Dūmat al-Jandal.

Mostly from Locus b1a, in a very limited space of  $2\times3m$ , a significant number of sherds was collected. Circa 300 fragments were counted, made of six different fabrics: five of them are frequent in the later periods, both pre-Islamic (Nabataean) and Islamic; one of them is unique up to know and, considering the shape and type of the related vessel as well as the surface treatment, polished and smoothed, it could be an imported ware.

At this stage of the research the pottery collected can be preliminarily classified into two classes: I. the imported ware and II. imitation ware, i.e. the locally made ware.

The class of the imported ware comprises only a single shape: a diagnostic large carinated bowl type with flaring lip, grey fabric Imported ware

Fig. 2 - Imported ware types (Neo-Assyrian and Sana'iye Pottery) and Neo-Assyrian imitation bowls types from trench 10 (Missione Archeologica Italiana in Arabia Saudita - MAIRAS)

(Fig. 2.1-2); it is an index fossil, a typical table ware production of the 8th-7th cent. BC, «by far the most common type from Nimrud» (Oates 1959, 132; Curtis 1989, 47).<sup>4</sup>

Finally, the class of the imported ware comprises a fragment of ware imported from Taymā', a Sana'iye Pottery from the cemetery of Tal'a/Area S type (Fig. 2.3), dated to the 8th cent. BC

<sup>&</sup>lt;sup>3</sup> Charcoal sample, laboratory number: DJB1710; conventional radiocarbon age: 1190±30; calibrated 2013 INTCAL, 2 sigma; calibrated results: 89% probability, 14C CAL: 766–898 AD.

<sup>&</sup>lt;sup>4</sup> For comparisons with Qasrij Cliff (Mosul), see Curtis 1989, fig. 24.33; for comparison with Assur, see Hausleiter 1996, pl. 13.m, pl. 57.15.2; for comparisons with Nineveh, see Hausleiter 1999, fig. 5.17; for comparisons with Nimrud, see Oates 1959, fig. 5.18.

(Hausleiter 2014, 417), supporting the identification of the late Neo-Assyrian (8th-7th cent. BC) material from Dūmat al-Jandal.



Fig. 3 - Neo-Assyrian imitation bowls types from Trench 10 (MAIRAS)

1996, pl. 1.n; pl. 13.m; pl. 25.b; pl. 58.19.1; Lumsden 1999, fig. 5.17-23; Schmidt 1999, pl. 6a); small shallow carinated bowl with round or flat lip (Fig. 3.14-17, see Curtis 1989, fig. 8.18-25; Anastasio 2010, fig. 95.3-5); medium to large shallow carinated bowl with bulging edge (Fig. 3.18-21, see Curtis 1989, fig. 7.4-8; Hausleiter 1996, pl. 38.7793f; 1999, fig. 5.26).

Among the jars the following types occurred: small to medium jars with long neck and everted rim (Fig. 4.22-23, see Curtis 1989, fig. 37. 230-234; Hausleiter 1996, pl. 107; Lumsden 1999, fig. 6.35.); medium to large jars with everted or vertical neck and thick lip (Fig. 4.24-28, see Curtis 1989, fig. 37.239; Hausleiter 1999, fig. 3.5; Anastasio 2010, 165.1-2); large jars with folded rim (Fig. 4.29, see Curtis 1989, fig. 11.52-53); jars with long neck and sharp-cut lip (Fig. 4.30, see Schneider 1999, fig. 13.2); jars with long neck and curved lip (Fig. 4.31, see Curtis 1989, fig. 35.205); small rounded jar (Fig. 12.32, see Curtis 1989, fig. 10.45; Hausleiter 1996, pl. 81.5.1).

The class of the local ware imitating Neo-Assyrian models comprises two shapes: bowls and jars, subdivided in 10 types, for a total of 32 sub-types.

Among the bowls the following types occurred: small bowl (cup) with round base and everted lip (Fig. 2.1, For comparisons see Curtis 1989, fig. 10.41-42); small carinated bowl (cup) with bulging edge (Fig. 2.2-3, see Hausleiter 1996, pl. 8.d); small to medium bowl with rounded walls and everted lip (Fig. 3.4-6); small to large flat carinated bowl with sharp-cut lip (Fig. 3.7-8, see Curtis 1989, fig. 24.20-21; Anastasio 2010, fig. 101.4-5.); small to medium shallow carinated bowl with everted sharp-cut or rounded lip (Fig. 3.9-13, see Curtis 1989, fig. 10.26-31; fig. 24.26-41; Hausleiter



Fig. 4 - Neo-Assyrian imitation jars types from Trench 10 (MAIRAS)

The majority of the pottery ascribable to this *corpus* is represented by the bowls, i.e. the table ware, suggesting the social practice to imitate the foreign élite, in this case the very Assyrian court by the 'arabs of Qedar in the city of Adummatu.

# *The Nabataean ware, 1st-2nd cent, AD* (R. Loreto)

The materials considered in this preliminary definition of *corpora* come from 2009-2017 excavations; the dataset is composed by circa 5000 sherds related to a Nabataean tradition and collected from the excavations inside the oasis, from all the excavated trenches. Up to know ca. 3000 fragments collected from the excavation of the residential Building A in Trench 1 were analyzed, in order to propose a preliminary typological classification: 1227 diagnostic fragments were recognized and grouped in 5 classes and 15 shapes, for a total of 190 identified types and sub-types (variants of a type). The following pottery items are made of the most common fabric, a fine reddish-orange one with white nodules, related both to the fine ware and, in a coarse variant, to the common ware; less common is a whitish-yellow fabric made of vegetal inclusion. All these fabrics are already attested in the Assyrian corpus.

The imported ware (class I) can be divided in four shapes, on the base of morphology and the types of decoration identified: Nabataean fine ware from Jordan (Fig. 5.1); red painted ware (Fig. 5.2); red painted and impressed ware (Fig. 5.3); impressed and incised ware (Fig. 5.4-5). All this ware can be dated to the first quarter of the first century AD (Schmid 2000, Abb. 62-65) and finds clear comparisons in the Nabataean contexts in Petra (Schmid 2000, fig. 98; Tholbecq, Durand 2012, fig. 8), Oboda (Negev 1986, 62-72) and Aila (Dolinka 2003, 134, no. 32).

The local fine ware (class II) is very small, fine and differing from coarse tableware production. The clay seems to be the same as the coarse tableware local production, only with less mineral inclusions. The ware is beige/orange, in some cases engobed. The class is Fig. 5 - Nabataean ware, classes I-III (MAIRAS)

characterized by three shapes: carinated



bowls (Fig. 5.6-8), cups (Fig. 5.9), and jugs (Fig. 5.10). The morphological features (shape of vessels, rim, etc.) of this class find comparisons in the Nabataean fine ware from Petra (Schmid 2000, Abb. 112-114) and Oboda (Negev 1986, 90, nos. 740, 747, 91-92, 109, no. 948). Due to the fine nature of some items of this class (Fig. 5.9) chemical analyses are ongoing in order to determine if all the types of this class are local or there are some imported vessels from Jordan.

The local decorated ware (class III) comprises all fragments of jars with impressed, incised or rouletted and stamped decoration. These jars are almost all the same as the undecorated local production: long neck jars (Fig. 5.11); ovoid jars (Fig. 5.12); globular jars (Fig. 5.13). According to the recorded forms and fabrics (the latter frequent during the Islamic periods) this class is recognized as local production. The naturalistic motifs (i.e. the palmette motif) suggest that this class is an imitation of Nabataean models in the local pottery repertoire,<sup>5</sup> also the strong comparisons with at-Tuwayr ware could confirm a local production (Al Mu'ayqil 1994, 207-215).

The common ware (class IV) is the most abundant and locally made class (Fig. 6). The shapes repertoire includes bowls (IV.A),<sup>6</sup> jugs and bottles (IV.B), jars (IV.C), and lids (IV.D). The bowls present many similarities with Nabataean pottery from Jordan. The glazed ware (class V) identified within the Nabataean materials also comprises the so-called Parthian ware of Mesopotamia origin (Schenk 2006, fig. 2) with only turquoise jars attested.

# *The Islamic ware, 7th-17th cent. AD* (S. Berardino)

The Islamic ware, dated between the 7th and the 17th cent. AD, present several issues in defining a typology. First, we are at the very beginning of the study: ca. 4.000 fragments from 2009-2017 excavations were analyzed out of almost 90.000 so that only a very preliminary



Fig. 6 - Nabataean common ware (MAIRAS)

sketch of the *corpus* can be proposed. Also, most of the pottery collected comes from not *in-stratum* 

<sup>&</sup>lt;sup>5</sup> Comparison in household jars from Oboda, Type VIIC2, are in Negev 1986, 115; comparisons of the decoration pattern are in Al Mu'ayqil (1994, 207-215) and in Negev 1986, 72, nos. 542, 545.

<sup>&</sup>lt;sup>6</sup> For the shallow bowls type see Schmid 2000 *Gruppe 1* Fig. 7, n. 15 and *Gruppe 6* Fig. 7, no. 14. For the tronconical bowls type see Negev 1986, 99. Also, there are comparisons in the shapes of Nabataean local production of Hegra and Oboda, see Durand, Gerber 2014 and Negev 1986, 99. For the convex profile bowls type and sub-types see type E7a26 in Schmid 2000, Abb. 118-119 and 157-158; type VB2c in Negev 1986, 90 no. 749, in Tholbecq, Durand 2012, 210, fig.7, A-E and Negev 1986, 7, nos. 24-25. For the carinated bowls type and sub-types see Gazdar *et al.* 1984, pl. 70, no.18; type VA1div in Negev 1986, 79, 112, nos. 980, 982; *Gruppe 6* in Schmid 2000, Abb. 44-51; Bikai, Perry 2001, 70, fig. 5 nos. 1-6; Sidoroff 2013, fig. 3. For the trilobated jug type and sub-types see type VIIA1 and type VIIA3b in Negev 1986, 100, no. 837, 102, no. 860; 112, no. 978; Schmid 2000, G26c339. For the jars types and sub-types are quite much attested, most probably locally produced and similar to the productions of Oboda and Hegra. In particular, the short-neck jar type (Fig. 6.29) is attested in numerous variants/sub-types well-defined by rim (incurving, vertical, funnel, etc.), handle (with one or more grooves), body shape (globular, ovoid, etc.) trends. This group presents close parallels with the Nabataean cooking pots from Hegra, see Durand 2011, fig. 2, cooking pots. Jars with high neck and storage jars are also attested (Fig. 6.30, 32). These two types represent the common forms for storage; the fabric is often coarse and the diameters range from 20 to 30 cm and more. Jars with angled profile neck type can be compared to Type G10a 118 or G10c 294 in Schmid 2000, 262, 264.

contexts, i.e. the upper levels of Trench 1, vast amounts of discarded stone fragments covering the whole area, from where a mixture of materials dated from the 6th cent. BC to the 17th cent. AD have been collected.<sup>7</sup> Thus, considering the continuous occupation of the site, with re-occupation and buildings dismantled, the *in-stratum* materials are very few: approx. 15%.

Then the pottery itself shows different problems: there are many fabrics (apparently 19, if we minimize) of poor quality and bad firing techniques, with different degrees of firing on the same pottery items, that make it difficult to identify matching productions. The occurrence of the fabrics is continuous throughout the whole Islamic period, so that there is a strong continuity in the production technique, without any real difference at least in the common ware. The shaping can be done by hand, on a fast wheel, on a slow wheel, or using a combination of these methods. Surface treatments are very different, often with differences being seen in the same pottery item. There are no matches up to now between shapes, fabrics and surface treatments that can help us to identify manufacturing styles and not a single kiln was located inside or around the historical core of the oasis. The only traces to suggest local productions come from the continuous occurrence of the fabrics in the layers as well as only a single collected tripod (Patitucci, Uggeri 1984, 287-288, pls. LV, XCVI; de Cardi *et al.* 1994, 61-63, pl. XV; Keblow Bernsted 2003, 53-59) used in kilns to separate over-imposed vessels during the firing process.

Finally, up to now there are no clear imports, nonetheless chemical analysis is ongoing to identify the local clay sources and possible local productions.

At the present state of the research and in order to start to define a typological sequence, as well as to organize the material in a coherent way to go on with the study, one can introduce a work in progress classification. Four classes could be proposed: glazed ware (class I), very rare; unglazed fine ware (class II), also rare; common ware (class III), the vast majority; and decorated common ware (class IV). Up to now these classes present three shapes: bowls, juglets and jars. The classes cover all the domestic needs: food consumption, food processing, and storage. Among the common ware, up to now only a few amphoras with pointed bottom were found (Fig. 8.25), to be associated to transport activities.

Due to the poor condition of the glazed ware as well as the collected items (less than 50) neither shapes nor types can be identified in this class, only fragments. Three different kinds of glaze can be identified: green, *sgraffiato* and turquoise. The green one is represented by very few sherds. The *sgraffiato* is only represented by less than 10 sherds. The turquoise, also only a few fragments, can be referred to the Parthian to early Islamic traditions (Schenk 2007, fig. 6, f-i).

Regarding classes II, III, and IV at the present stage of the analysis only the *in stratum* materials from the no mixed levels will be introduced. Then of a total of 800 diagnostic fragments, only 120 are suitable for an analysis of *in situ* materials, all of them coming from early Islamic contexts.

Then, the collected materials come from the earliest reoccupation of Building A after its collapse. Of the 120 diagnostic fragments recorded, a total of less than thirty types can be identified.

Class II is represented by tableware: jugs (Fig. 7.1), bowls (Fig. 7.2-3), and jars (Fig. 7.4-12). Among the jars, one type (Fig. 7.10) seems to continue the tradition of the Nabataean globular jars.

<sup>&</sup>lt;sup>7</sup> For details in small findings from Trench 1 not *in situ* see Loreto 2018, 152-153.



Fig. 7 - Islamic ware, class II (MAIRAS)

Class II is composed of all-wheel-made small vessels covered by red, white or black and white slip. Except for a couple of small bowls with curved wall (Fig. 7.2) or oblique wall (Fig. 7.3), with a subtype characterized by horizontal rim, and a long-neck jug (Fig. 7.1) the great part of the class is composed of closed shapes. It is about small jars with neck: flared neck jars (Fig. 7.4), long neck jars with folded rim (Fig. 7.5), long neck jars with horizontal cut rim (Fig. 7.6), jars with furrowed rim maybe for the lid (Fig. 7.7). Jars can be globular (Fig. 7.8) or ovoid (Fig. 7.9). Medium-size jars have small neck and everted rim (Fig. 7.11), or without neck and thickened rim (Fig. 7.12) always characterized by red slip. Big-size vessels, quite rare, are composed of red, white or orange slip-covered jars without neck with everted round rim, in some sub-types with a horizontal rim or with button handles. Bases associated to these ceramic types are disk or ring feet. All the fabrics seem to be local.

Class III is represented by bowls (Fig. 8.13-16), very few, and jars (Fig. 8.17-24), quite

abundant. Again, among the jars one type seems to continue an earlier Nabataean tradition, the one of the globular or ovoid short-neck jar type with handle (with one or more grooves) (Fig. 6.29 and Fig. 8.20). It has been recognized as small bowls with curved walls and simple rims (Fig. 8.13) or with an everted rim in a sub-type, and bowls with oblique walls (Fig. 8.14). Middle-size bowls are characterized by the absence of surface treatment or burnishing or covered by a white slip. Those bowl's types



have Fig. 8 - Islamic ware, class III (MAIRAS)

vertical walls, button (Fig. 8.15) or tongue handles (Fig. 8.16), with subtypes linked to different kinds of rims, thinned or not. Jars are without any surface treatment and are sometimes characterized by poorly controlled lightening, or they are covered by white or red slips. Types recognized are: jars with thickened rim and very small mouth (Fig. 8.17), a sub-type with tongue handles (Fig. 8.19), sometimes substituted by button handles. This seems to be associated to the Julfar Ware (Kush), at least for the shape and empirically for the paste (Kennet 2004, 70-73, fig. 20, CP6). Also attested are: small jars with long neck and vertical handle (maybe a jug, or a container used for liquids) (Fig. 8.21), jars without neck with everted horizontal rim (Fig. 8.24), medium-size jars without neck (Fig. 8.18), medium size jar with everted semicircular rim (Fig. 8.22), big-size jars without neck and with thickened rim (Fig. 8.23). Flat or disk bases are the only associated with the types.

Finally, Class IV, the common decorated ware. Recognized types are: carinated jars without neck, painted (dark red, brown) wavy/zig-zag irregular lines parallel to the rim and crisscross lines inside triangles (Fig. 9.26); jars with neck and painted (dark red/brown), wavy/zig-zag irregular lines parallel to the rim (Fig. 9.27); ovoid jars with applied and impressed decoration consisting of a strip of clay applied to the vessel and impressed with an instrument (Fig. 9.28). The painted jars (Fig. 9.26-27) are both polished or covered by a very thin yellow-brownish slip. Furthermore, the same pattern is visible on walls that seem to be linked to big bowls with oblique walls, but with a lighter red color on red slip. This kind of decoration seems to be highly diagnostic for the period, being characteristic of the late Umayyad-early Abbasid Syria-Palestine area (Whitcomb 1995, 494). The same pattern is attested in pottery found at  $w\bar{a}d\bar{a}$  Haqīl linked to a quite later period (Stocks 1996, 152-153, fig. 5), and also at Yadhghat (Rougeulle 2007, 240-241, 244, figs. 3.15, 4, 9.12.). While considering applied and impressed decoration (Fig. 9.28-29), it is general on vessels without any surface treatments or with double slip (white and red), both in globular jars or in ovoid jars with neck. This type of plastic



Fig. 9 - Islamic ware, class IV (MAIRAS)

decoration on naked pottery can be compared with Failakah types and has been dated, according on Susa's pottery sequence, between 7th-9th cent. (Patitucci, Uggeri 1984, 382-384, pls. XXXI, XXXII, LX).

# Conclusion (R. Loreto and S. Berardino)

According to the amount of the imported materials (Nabataean most of all) and the high number of ware imitating the Assyrian models, it seems that the oasis lived two main socio-economic periods linked to the exploitation of the caravan routes, at least during the pre-Islamic period, both the northeastern one leading to the Assyria during the 8th-7th cent. BC and the northwestern one leading to the Nabataean Kingdom during the 1st cent. AD.

Although Dumata is quoted by the classical authors as a rich city in Arabia, and the epigraphic evidence attest the strong link with the Roman eastern provinces, the materials related to the Hellenistic and the Roman world are quite few up to now, both from the historical core of the oasis and from the western enclosure, the latter only supposed to be a Nabataean or Roman military encampment. Nonetheless, few materials and C14 evidence allow us to observe a continuity in the occupation of the oasis from the 6th cent. BC to the Nabataean period (Loreto 2018, 153-154).

Concerning the period comprised between the end of the *Provincia Arabia* and the advent of Islam, the textual sources refer of a period of richness, mainly due to the commercial role of the oasis (Veccia Vaglieri 1991; Al Sudairī 1995, 37-41). On this regard, the archaeological evidence ascribable to this period emerged from the excavation of the western outside of the 'Umar Mosque, from where Christian liturgical evidence came to light, and from the inner courtyard of the Mārid castle, from where late Roman style mosaics came also to light (Loreto 2018, 154, 162). Moreover, the amount of pottery collected from all the stratigraphic sequences in Trenches 1-11 is impressive and mostly related to local productions, difficult to identify when one lacks comparisons due to the still ongoing development of the archaeological studies in late antique Arabia, so that the main issue is the identification of their chronological horizon for a better definition of each historical period's productions.

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