Title: Preliminary report on the 2008 and 2009 excavation seasons at Jiyeh (Porphyreon)

With appendices: 1. Sunken vessels in late Roman and Byzantine Houses in area D
2. Preliminary remarks on thresholds from private houses in Jiyeh (Porphyreon)

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PRELIMINARY REPORT ON THE 2008 AND 2009 EXCAVATION SEASONS AT JIYEH (PORPHYREON)

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Keywords: Jiyeh, Lebanon, housing quarter, late Roman–early Byzantine, Iron Age, thresholds, “milk-bowl”
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Excavations in Jiyeh in 2008 and 2009 followed two years of forced inactivity in the field, fieldwork in 2006 having been cancelled at the last minute due to political circumstances and 2007 being organized as a study season alone. The PCMA team, which has been working at Chhîm in Lebanon since 1996, had undertaken limited investigations at Jiyeh in 1997 and then again in 2003 when a geophysical survey was carried out in the late Roman necropolis and the Byzantine basilica area. This was followed by salvage excavations on the late Hellenistic pottery production center and late Roman necropolis, conducted in 2004 and 2005. In 2008 the team was able finally to launch full-fledged excavations at Jiyeh, recording in the first season the remains of ancient dwellings in the central part of the site (Area D) and in 2009 studying the stratigraphy of this part of the ancient settlement.

The late antique habitation area situated east of a Christian basilica constitutes only a small section of a vaster complex, different parts of which were mentioned several times by early researchers of the 19th and 20th century (Renan 1864:...
509–514; Contenau 1920: 295–305). The site of Jiyeh (most probably ancient Porphyreon) had been excavated by the Directorate General of Antiquities once, between May and September 1975 (Saidah 1977), when this quarter was discovered. It suffered extensively from illicit digging after civil war broke out. The large basilica was discovered in effect of clandestine digging in 1988 and the mosaic pavements from the church were lifted and taken to the museum in Beiteddine Palace.
pam 21, research 2009

Fig. 1. Residential district and east wall of Byzantine basilica in Jiyeh (Porphyreon): kite-aerial view at the beginning of excavations in 2008 (Photo K. Trela)
Fig. 2. Plan of area D of the residential quarter in Jiyeh (Porphyreon) and kite-aerial view at the close of excavations in 2008 (Plan J. Juchniewicz; photo K. Trela)
by narrow winding lanes [Figs 1, 2; for
digital models and orthophotomaps of
the excavation area, see Bogacki 2012, in this
volume].

The street grid followed no regular plan
and was erratic in surface level. The lanes
were rather narrow (1–2 m) and paved
in the parts overlying the sewage canals
[Fig. 3]. Several streets were identified:
9 and 50 going N–S and 8, 57, 59, 37
going E–W. The longest street is more than
20 m long in the preserved part. Different
structures featured in these alleys included
a more or less rectangular stone platform at
the bend in street 59 and a bench of sorts
between the entrances to units 12 and 34.

The walls of buildings constructed
of local sandstone (referred to locally as
ramleh) stood more than 2.50 m high in
places (rooms 4, 17, 18). House ground-
plans, while not standard, shared features,
such as a main room with mosaic floor,
and smaller mortar-floored rooms and
presumably also open stone-paved
courtyards organized around it. Mosaics
were simple, made of big white cubes,
approximately 1.3 cm to the side, laid in
mortar mixed with gravel on a pebble
substrate [Fig. 4] The only mosaic floor
with a simple geometric pattern of scales
drawn with red and black cubes was found
in room 63. House walls were coated on the
inside with gray plaster, seldom adorned
with inscriptions painted in red, mostly
quotations in Greek from the Psalms.1
Exterior walls were plastered and, in street
59, additionally reinforced and protected
by gravel covered with plaster, the coating
applied more thickly at the bottom of the
wall. Remains of staircases (rooms 61, 46)
attest to the storeyed character of this
architecture at least in places, while rains
in the streets and under the paving of the
house courtyards points to simple, but
effective ancient sewage in the village.

At least eighteen complexes of rooms
were identified in the excavation area
(including units cleared in 2009: 1) rooms 1–2–3–4–7–21; 2) rooms 23–24;
3) rooms 48–25–26; 4) rooms 45–?; 5) rooms 47–?; 6) rooms 60–69–?; 7) rooms
32–33–34); 9) rooms 10–27–28–68–19;
10) rooms 30–31; 11) rooms 51–53–
54–55–66–58; 12) rooms 67–56–?; 13)
rooms 44–65; 14) rooms 52–63; 15)
rooms 62–?; 16) rooms 38–?; 17) rooms
42–?; 18) rooms 39–40–41. Several
phases of change could be observed in
each of the complexes. Evidence of some

1 Studied by epigraphist F. Alpi from the Institut Français du Proche-Orient in Beirut.
Fig. 4. Top view of the floor surfaces in units 31 (top) and 30, the latter a plain white mosaic floor (Photos K. Trela)
Fig. 5. Rooms around complex 8 in area D, kite-aerial view
(Photo K. Trela)
of these phases is fragmentary and difficult to discern. No significant chronological appraisal is possible at the moment. Most of the pottery finds came from secondary fill. The forms and fabric of the pottery from this layer are characteristic of vessels from the 6th to the early 7th centuries. The course of the sewage system was dictated by the layout of the rooms on the ground, but some structures were also identified below, indicating at least a partial change of alignment and a rebuilding of the existing rooms between the Roman and Byzantine periods. The exact nature of these alterations will be clear once the stratigraphic record of the site is examined in detail.

The architecture was cleared and documented (for remarks on storage vessels found in position inside the units and for a preliminary appraisal of stone thresholds see the appendices to this report).

One of the most imposing houses is Complex 8 ([Fig. 5]) and it can be described as a model example of the architecture uncovered in 1975 by the Lebanese DGA. It has a central room (12) with mosaic paving featuring a three-tessera-wide border around its perimeter laid out in a different pattern from the rest of the floor. Running along each of the longer sides of this room was a line of pillars supporting the ceiling. The shorter north wall was provided with a centrally located, rectangular niche. The central room was flanked by rooms 11, 32 and 33 from the east, and 34 from south. Rooms 32 and 33 had mortar floors, while 11 and 34 were paved with stone slabs. At this stage (the phase associated with the mosaic flooring) access to the building was probably gained via the stairway entrance leading to room 12 from street 59. This entrance was located some 60 cm higher than the mosaic floor level, as was the entrance leading from room 12 to room 34. Both entrances appear to be associated with the mosaic floor of room 12; however, there are no traces of any stairs leading down to the mosaic level and thus facilitating passage between the rooms under discussion. The complex could also be entered through the courtyard (room 11). This entrance was remodeled and blocked during the next occupation phase. Room 11 was paved with stone slabs covering the sewage canal which ran below. Another entrance was located in room 34, leading directly out to street 59, the surface of which was some 60 cm below the stairs leading to room 12.

Excavations in 2009 cleared an additional two rooms (79, 80) to the west of the complex. The first room abutted a narrow passage dividing it from rooms 76 and 57. A stone sewage channel, approximately 0.40 m wide and 0.45 m deep, covered with flat slabs, constituted the walking level of the street. Interestingly, it runs off toward the east wall of the Byzantine basilica, suggesting the existence of a bigger collecting channel somewhere between the dwellings and the wall of the church. The room was rectangular (approximately 3.90 m by 3.05 m). The walls, built of local sandstone, are preserved only to the first course of stone blocks above floor level. The mortar floor itself is preserved only in some places and is generally in very bad condition. The other room was considerably bigger and also rectangular (9.10 m by 3.05 m). It sided with room 67 and street 56, but the actual relationship with the street is yet unknown. No evidence of a floor was found and the only feature is a rectangular structure constructed of small stone blocks, presumably sunk into the floor in the eastern
and central part of the room. The unit may have been in fact a courtyard linked to street 56 and used for some kind of industrial activity taking advantage of the basin.

The simple, double masonry building technique used for the walls, their random structure and the winding, narrow streets demonstrate the general simplicity of the architecture, reminiscent of some of the present-day houses seen in villages and cities in the region. The most striking similarities are provided by a nearby site at Khan Khalde (Saidah 1975), situated some 20 km north of Jiyeh, and the site of Kfar Samir (probably ancient Porphyreon South), uncovered during rescue excavations just south of modern Haifa (Finkielstein 2005), both within the limits of the late antique province of Phoenicia Maritima.

Further work is required on the borders of this quarter, in houses to the south and on the lanes running along the northern and eastern sides. The huge sand dune between the last line of units (including rooms 79 and 80) and the Byzantine basilica [see Fig. 1] should also be removed in order to complete the first stage of the archaeological project.

[TW]

**STRATIGRAPHIC TESTING IN AREA D**

In the meantime work concentrated on testing inside the habitation quarter in an effort to establish the stratigraphy of the site. Five pits were excavated in the course of the 2008 and 2009 seasons.

**TEST-TRENCH AT THE TURN OF STREET 37**

Test pit D37 was excavated in 2008 to test the stratigraphy of the site. It was located in the southern part of the quarter, at the intersection of lanes, its size, 3.23 m by 2.63 m, corresponding to the width of the lanes. The walls of rooms 33 and 34 constituted its northern boundary.

The bedrock in this trench featured characteristic round openings very much like geological drillings [Fig. 7]. At least three major phases of occupation, starting with the Iron Age, which is associated with the oldest walls (22+23) at the bottom of the trench, were distinguished during the excavation. The underlying layers (contexts 24 and partly 26) were dated by potsherds, including a so-called milk-bowl, to the late Bronze /early Iron ages (see also Wicenciak 2012, in this volume) [Fig. 6; see also Fig. 1:1 on page 448].

Next came a broadly understood Persian-Hellenistic phase which corresponds to the continued use of the wall (3) running N–S and the units on either side of it. A wall (3) belonged to a “pillar-and-fill” construction

![Fig. 6. “Milk-bowl” sherd from test pit D37 (Photo K. Juchniewicz)](image-url)
Fig. 7. Bedrock seen in test trench D37  
(Photo K. Juchniewicz)

typical of so-called Phoenician building techniques from the Iron Age. The pier of stone blocks is flanked by sections of walls made of pebbles to the north and south [Fig. 9, top] The wall underwent some alterations later on, although the early Roman period is hardly attested, at least in the architecture.

Context 5 distinguished just under the topsoil to the west of the wall was characterized by a mixed pottery assemblage, dated provisionally between the 1st century BC and the 1st century AD. The walls of area 33 erected on top of the Iron Age structures belong to late antiquity and could be indicative of extensive rebuilding of this part of the habitation quarter.

[KJ]

Fig. 8. Stone wall (21) of Iron Age date in trench D44 (Photo K. Juchniewicz)
TEST-TRENCH IN ROOM 44  
(AREA D)

The test trench in room 44 in the southern part of the habitation quarter, at the intersection of lanes 37 and 77, was aimed at establishing the extent of the work done by Roger Saidah in 1975. The trench, measuring approximately 5 m by 2.50 m, was bordered on the north, east and west by standing walls, and on the south by

Fig. 9. “Pillar and fill” wall (context 3) from test pit D37 (top) and from trench D44  
(Photos K. Juchniewicz)
the archaeological dumps of the Lebanese expedition.

Phasing of the results achieved in this trench confirmed the general sequence. The site was settled in the Iron Age. A stone structure (21) under layer 17 [Fig. 8] turned out to be a wall built of unbonded stone blocks. It ran perpendicularly to the north wall of room 44, at a slight angle, disappearing under context 20, which is the foundation. The context associated with the structure was dated provisionally to the early Iron Age by the ceramic finds.

The next layer which filled the entire trench (context 17), consisted of loose red-brown earth. A possible hearth (18) and a layer of small gravel (19) superimposed on this layer by the eastern trench wall, suggests that it was a habitational level. On the north this layer was bordered by a stone structure which was probably the foundation of the north wall of room 44. In the upper parts of this wall it was built of local sandstone blocks, but lower down the wall demonstrates a characteristic ‘Phoenician’ bonding [Fig. 9, bottom]. The layer produced a mixed Persian/Hellenistic and Roman pottery assemblage.

A layer (3) of reused blocks of local sandstone appeared under the topsoil in the western part of the trench, attesting to a modern attempt at protecting the

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Fig. 10. Layer of reused ramleh blocks in Room D44 at the beginning of the season in 2008 (Photo K. Juchniewicz)
archaeological layers uncovered most probably during excavations in 1975 [Fig. 10]. Two of the blocks bore traces of wall painting, including a cross painted red on a lime ground. The channel that reached the room from the north turned out to be a drain discharging rainwater from the roof. It was not continued under room 44.

Excavations were abandoned in the eastern part of the trench because of the limited space and threat of baulk collapse. A boulder found under layer 39 appeared to be part of the bedrock. The considerable depth of the trench, limited space and absence of archaeological material determined the end of work in the trench.

TEST-TRENCH IN ROOM 20 (AREA D)
The test trench in room D20, excavated in 2009, aimed at a better understanding of the chronological phasing of settlement in the village. The room is situated at the end of a cul-de-sac in the northeastern part of the habitation quarter. The trench, in the western part of this room, was rectangular, limited on the north, west and south by the room walls.

The following interpretation has been proposed for the recorded stratigraphic sequence based on a preliminary consideration of the ceramic finds. A terminus ante quem for the wall in the lowest part of the trench together with the superposed limestone boulders was provided by the pottery from context N dated provisionally to the Iron Age II. Later, but still in the Iron Age II, the stone pavement (L) was constructed; this is attested by pottery from both under and above the pavement. The overlying thick rubble layer (K) can be dated to the Persian period. A new pavement (J) was laid in the end of the Persian period or in early Hellenistic times. Walls of the “pillar-and-fill” type, also referred to as a Phoenician bond [see Fig. 9], were built (on this kind of structure, see Elayi 1996); later walls, now standing on the ground surface, were aligned with these remains. The pavement was covered with a thick deposit (I) and a thinner one (H). Both deposits contain considerable quantities of early and late Hellenistic ceramics, mixed with Roman amphorae from the 3rd century AD. The top of fill I reached the preserved crests of the so-called Phoenician wall, which served, presumably in the Roman period, to raise new walls made solely of evenly cut sandstone blocks bonded in regular masonry mortar. Layer I must have served...
as bedding for stone pavement G, which can be dated based on the pottery to the early Roman period. In the next century it was sealed with a mortar floor (D) which was associated with the lower edges of wall plaster on the north, west and south walls of room D20 [Fig. 11].

The appearance of fill I and leveling layer H containing mixed pottery dated from the Early Hellenistic to the 3rd century AD, as well as a new pavement and walls raised to a new height points to a fundamental reconstruction of this part of the habitation quarter in the Roman period.

Further alterations took place in room D20 in the 4th century AD. Another occupational level in the form of stone pavement C can be observed next to the mortar floor D. This in turn, after suffering partial damages, was sealed with another stone pavement (A), which is given a terminus post quem by pottery found in leveling layer B from the 3rd and 4th centuries AD. The presence of a painted ornament on a plaster ground on the bottom of one of the blocks used in pavement A also demonstrates that the material used in the making of this pavement was salvaged from ruined architecture, presumably in the close vicinity.

A relief marble slab with an image of Horus as a falcon [Fig. 12, see also below, Fig. 2 on page 457] was found in fill I, 1.44 m below ground surface. The slab measured 40 x 35 x 7 cm; the shallow bas relief was carved in a slab where the background was never cut. An irregular outline and chisel marks on the edges and back indicate that the relief was cut from a bigger fragment. Horus was shown in profile, turned to the right, no feathers marked. The carving style and the contextual dating place the relief in the Hellenistic period; parallels can be found among Ptolemaic limestone models now in the Egyptian Museum in Cairo (Grimm 1975: 61, Pl. 101; Edgar 1906: X, Nos 33456-33458; on Egyptian cults in Phoenicia, Aliquot 2004).

[MG]

TEST TRENCH IN ROOM 4
Rectangular room 4 (4.00 x 5.75 m) was chosen for the fourth test trench, which for reasons of limited time covered an area of only 2.20 m by 3.20 m in the northeastern corner. A well preserved mortar floor on a bedding of pebbles appeared directly under Byzantine fill, the latter being 0.25–0.30 m thick. The pottery material excavated directly under the floor suggests a Roman period date for the feature. A wall going north-south was discovered some 0.15 m under the floor. It was apparently well constructed, approximately 1.40 m wide. The western façade survived about

Fig. 12. Relief marble slab with an image of Horus (Photo M. Bogacki)
one meter higher than the central and eastern parts. The wall was associated with a brown-gray layer of soil containing mixed Early Roman–Hellenistic–Iron Age pottery material. The trench was stopped at a depth of approximately 1.60 m and will be continued.

TEST-TRENCH IN ROOM 72
Another limited test trench was opened in room 72 (4.25 x 4.00 m) situated in the northwestern part of the dwelling zone. A mortar floor level uncovered already by Roger Saidah’s team in 1975 was cleared in 2008, then a test pit was cut in the floor in the southwestern corner of the room in 2009. A wall going east-west was discovered directly under the floor, some 0.20 m below this level, which should be dated to the Roman period. The feature, approximately 0.70 m thick, was constructed of small stones and was associated with a layer of gray-brown soil containing mixed Early Roman–Hellenistic–Iron Age ceramics. The trench was stopped at approximately 1.50 m and will be continued.

A well preserved terracotta vessel sunk into the Roman-period floor was found in the southwestern corner of the trench, directly beside the steps leading to room 74. The pot is apparently one of a series of several similar installations located in different rooms in Jiyeh (see below, appendix 1).

FINDS DOCUMENTATION

In 2009 the team focused on documenting artifacts from Jiyeh stored at the National Museum in Beirut and the Museum of Beiteddine Palace.

The National Museum holds the only assemblage of finds kept after the DGA excavations at Jiyeh by Roger Saidah in May through September 1975. A provisional list of these objects was made in 2005 and a team of four specialists worked on the documentation of these finds in 2007 and in 2009. About 200 of the listed 600 objects: coins, pottery sherds, oil lamps and a prevalence of diverse metal objects, including iron and bronze nails, weights, vessels, candelabra etc., have been drawn, photographed and described. Plans exist for a separate publication of this material, which constitutes a unique document of the 1975 season of fieldwork at the site.

Another important assemblage of objects said to be associated with the...
site of Jiyeh is held by the Museum of Beiteddine Palace. Circumstances of discovery in this case are mostly obscure. A small team of documentalists spent five days (July 20–24) working in close cooperation with the Direction Général des Antiquités (DGA) to record some 65 objects, provisionally dated to the Roman and Byzantine periods. Among the most interesting objects one should mention the bases of two candelabra and a large bronze cross (similar crosses dated usually to the 6th–7th century AD are known from other regions of Eastern Mediterranean, e.g. Mundell Mango 1986: 90–91 Cat. Inv. No. 8, and 249 Cat. Inv. No. 76) [Fig. 13].

CONCLUSION

The exploration of the habitation quarter in Jiyeh is of twofold significance: it will allow the Lebanese excavations of 1975 to be published finally and it will permit a deeper understanding of the history of this part of the ancient town through continued research on the stratigraphy of underlying layers.

Once the late Roman and Byzantine dwellings were cleared again, it was possible to trace several separate dwelling units and to characterize on these grounds the domestic urban architecture common to Phoenician coastal towns. Local sandstone was the preferred building material and the houses were grouped together in a kind of insula, communicating via a network of narrow lanes. This architecture was significantly different in character from the limestone building present in the mountain villages of the Limestone Massif in Syria, Chhîm in Lebanon and Galîlée in the south. It merits note that Jiyeh has produced the only such architectural complex known to date from the Lebanese coast. Parallels are few, coming mainly from the Palestinian coast and southern Phoenicia; the site of Kfar Samir near modern Haifa remains the nearest example from late antiquity (see Finkielsztejn 2005).

At the same time, testing in a number of places inside the habitation quarter has produced data for analyzing the stratigraphic sequence of Jiyeh (Porphyreon) as such, but also reflecting the history of settlement on the Phoenician coast in the Iron Age, as well as the Roman-Byzantine period, as well as regarding the continuity or lack of continuity of occupation in the Hellenistic age. The issue had seldom been discussed before in Lebanese archaeology, mainly for lack of stratigraphic studies.

The five test trenches dug in Jiyeh in the course of the reported seasons have led to preliminary observations which will be verified in future research. Trenches in D20, D37 and D44 have produced clear evidence of three architectural phases at least in these parts of the quarter. The oldest phase, connected with relics of stone architecture founded on a sand and earth level directly on bedrock, can be dated to the 8th–7th century BC. The next phase is separated from the first by an accumulation of 1.00–1.50 m. The architecture of the second phase is characterized by bondwork referred to frequently in publication as the so-called ‘Phoenician’ bond. It comprised pillars
erected of well-dressed blocks at regular intervals, the gaps between them filled with smaller stones. Pottery from contexts adjoining structures of this phase invariably points to a Persian-Hellenistic date (primarily 5th–2nd century BC). The youngest phase, considered Roman–Byzantine on the grounds of the pottery evidence, stands on top of the walls of the preceding phase, but employing an entirely different bond. It comprises courses of medium-sized sandstone blocks, which was the typical building material for dwelling architecture of the period. The stratigraphic sequence recorded in trenched D4 and D72 fully confirmed these observations despite having yet to reach the 8th–7th century BC level.

Current views on site chronology at Jiyeh have had to be modified substantially as a result of this season’s work. The origins of the settlement can now be placed provisionally in the Iron Age. Analyses of the material from the trenches, including pottery, glass and coins, are underway and until they have been completed, the conclusions presented here need to be considered as provisional. It remains an open question why the site was abandoned, for the first time in the Iron Age II phase and then following the Persian-Hellenistic occupation. Neither can the passage to the late Roman–Byzantine phase be evaluated in detail as yet. Research planned for the coming season will address these questions in particular.

APPENDIX 1

SUNKEN VESSELS IN LATE ROMAN AND BYZANTINE HOUSES IN AREA D

Mariusz Gwiazda

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In fifteen rooms of the late Roman and Byzantine dwelling quarter (nos 1, 4, 10, 13, 14, 21, 25, 28, 30, 32, 38, 47, 52, 72, 76) there were ceramic pots with a diameter of the mouth from a dozen to a few dozen centimeters. They were sunk in the ground, their rims slightly below floor level [Fig. 14]. In ten cases the vessels were situated close to the entrances to the rooms, in two they were clearly removed from near the doors (in the remaining three instances the relation could not be established due to the poor condition of the walls).

The vessels have been interpreted in a number of hypothetical ways. They could have been for one, traps for scorpions and vipers. They could have held water as a form of air humidifier. They could have served as garbage cans, as spittoons, basins for washing feet, pots to hold potted plants, such as wormwood to frighten off reptiles.
None of these possibilities can be excluded in the case of the vessels from Jiyeh simply because they had been emptied off their contents during earlier excavations by Lebanese archaeologists.
In the course of explorations of the habitation district in Jiyeh (Porphyreon) 28 thresholds were documented *in situ*. All of them represent site occupation in the last, Romano-Byzantine phase. Most of the thresholds were made of single limestone or sandstone blocks. The top surface was carved on two levels: the narrower upper step and the wider but lower by a few centimeters lower step, which gives a lying L-shaped figure in cross-section. The dimensions are not standardized: the length ranges from 0.71 m to 1.63 m with a dominance of approximately 1.20 m; the width is usually about 0.50 m (+/- 0.10 m), and the height from 0.20 m to 0.30 m.

Five types of thresholds were distinguished in the presently documented set [Fig. 16] based on differences of shape and absence of openings on the steps. Type I [Fig. 17], has two rectangular openings at the ends of the higher step and no openings on the lower step for mounting the door pivots. The openings in the upper step are always long rectangles with the longer sides parallel to the long threshold axis. The exact localization varies in particular cases. Some openings adjoin the shorter edges of the threshold, while others are displaced a few centimeters toward the center of the threshold. A wooden embrasure cut appropriately to fit these openings was mounted in them and the door was hinged to this frame. One or more seldom two openings can be found approximately at one-third and two-thirds of the threshold length. The depth is from 2 mm to 4 mm. Single openings are located usually on the right side of the threshold. These openings can be associated with a system of bolts serving to block the wings of the door.

Type II had openings for the door pivots on the lower step. These were always hidden behind the stone jambs, which rested partly on the upper step of the threshold. The number of openings in a threshold was not constant. In most cases there is one opening on each of the shorter
edges. There are also examples of the pivot opening being located on just one side of the threshold, always to the right side when looking at the threshold from the side of the lower step. Similarly as in the first type, the bolt openings are on the lower step.

Type III had the pivot openings for the wings of the door on the lower step. The jambs that characterize type II are missing from this category. Instead of the jambs there was a wooden embrasure fitted into rectangular openings on the upper step.

Fig. 16. Types of thresholds and sections (Drawing M. Gwiazda)
Preliminary remarks on thresholds from private houses in Jiyeh (Porphyreon)

A wooden frame in this case ensured greater tightness of the door. Moreover, it was a relatively easy design to achieve requiring no special arrangement of dressing of stones for the jambs. Openings for bolting devices were observed on the lower step.

Type IV, similarly as types II and III, had openings for the door pivots but no jambs or fittings for a wooden embrasure.

The last type V had no openings at all. Its localization in the two known cases [Fig. 15], which placed them not siding the street, but inside complexes of rooms, suggests that there was no door in this passage.

The other threshold types occur by the street as well as inside complexes of rooms. In quantitative terms, types I and III were the most common, respectively eleven and eight examples. The other types were represented by six (type II), one (type IV) and two (type V) specimens. The number of openings for pivots and bolts on individual thresholds clearly points to a preference for double-wing doors. In all cases the doors opened to the inside. An analysis of the distribution of particular types of thresholds [see Fig. 15] demonstrates that two different kinds of thresholds could have been used in a single living complex, e.g., the complex of rooms 48–26–25 where types II and IV occurred.

Fig. 17. Threshold of type I between room 45 and street 73 (Photo M. Gwiazda)

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REFERENCES

Aliquot, J.
2004 Aegyptiaca et Isiaca de la Phénicie et du Liban aux époques hellénistique et romaine, Syria 81, 201–228

Bogacki, M.
2012 Ground and aerial photogrammetric documentation in Jiyeh (Porphyreon), PAM 21 (Research 2009), 454–458

Contenau, G.
1920 La mosaïque de Djiyé [in:] G. Contenau, Mission archéologique à Sidon (1914), Syria 1, 295–305

Domżalski, K., Wicenciak, U., El-Tayeb, M., Waliszewski, T.
2005 Late Hellenistic and Early Roman pottery production center at Jiyeh. Rescue excavations, 2004, PAM 16 (Reports 2004), 429–439

Edgar, C.C.
1906 Catalogue général des antiquités égyptiennes du Musée du Caire, nos 33301–33506. Sculptors' studies and unfinished works, Cairo: Institut français d’archéologie orientale

Elayi, J.
1996 Nouveaux éléments sur le mur à piliers phénicien, Transeuphratène 11, 77–94

Finkielsztejn, G.

Grimm, G.
1975 Kunst der Ptolemäer- und Römerzeit im Ägyptischen Museum Kairo, Mainz am Rhein: Philipp von Zabern

Henein, N.H., Wuttmann, M.
2000 Kellia II. L'ermitage copte QR 195, 1. Archéologie et architecture [=FIFAO 41], Cairo: Institut français d’archéologie orientale

1989 Beiteddine. Past and Present, Beirut

Mundell Mango, M.
1986 Silver from Early Byzantium. The Kaper Koraon and Related Treasures, Baltimore: The Walters Art Gallery

Renan, E.
1864 Mission de Phénicie, Paris: Imprimerie impériale

Saidah, R.
1975 Khan Khaldé, Dossiers de l’Archéologie 12, 50–59
1977 Porphyreoun du Liban: une Pompéi byzantine enfouie sous le sable, Archéologia 104, 38–43
Waliszewski, T.

Waliszewski, T. et alii

Waliszewski, T., Wicenciak, U.

Wicenciak, U.
2012 A local Hellenistic “Phoenician”type Amphora and other pottery vessels from excavations in Jiyeh (Porphyreon), (Seasons 2008–2009), PAM 21 (Research 2009), 446-453

Wicenciak, U., El-Tayeb, M., Domżalski, K., Waliszewski, T.
POLISH ARCHAEOLOGY IN THE MEDITERRANEAN

XXI

RESEARCH 2009
Acknowledgments ................................................................. 11

Obituaries
Aleksandra Krzyżanowska .................................................. 13

Abbreviations and standard references ................................. 15

PAM REPORTS

PCMA field missions and projects in 2009 (with map) ............... 19

EGYPT
ALEXANDRIA
Alexandria Kom el-Dikka: excavations and preservation work.
Preliminary report 2008/2009
Grzegorz Majcherek ......................................................... 27
Appendix: Auditorium E: exploration in season 2009
Karol Juchniewicz, Katarzyna Lach ................................. 43
Kom el-Dikka 2005–2009: selected anthropological research
Robert Mahler ................................................................. 49

MAREA
Marea. Report 2009
Hanna Szymańska, Krzysztof Babraj .................................. 59
Marea 2009: pottery from the excavations
Anna Drzymuchowska .................................................... 72

MARINA EL-ALAMEIN
Marina el-Alamein. Conservation work in the 2009 season
Stanisław Medeksza, Rafał Czerner, Grażyna Bąkowska with contributions by I. Fuks-Rembisz, W. Grzegorek, G. Majcherek, M. Mrozek-Wysocka, P. Zambrzycki ............ 79
CONTENTS

TELL EL-RETABA
Tell el-Retaba: season 2009
Slawomir Rzepka, Jozef Hudec ................................................................. 107

Appendix: Tell el-Retaba: Archaeobotanical Studies
Claire Malleson ......................................................................................... 118

Tell el-Retaba 2009: the pottery
Anna Wodzinska ....................................................................................... 124

TELL EL-FARKHA
Tell el-Farkha (Ghazala). Season 2009
Marek Chłodnicki, Krzysztof M. Ciałowicz ............................................ 135

SAQQARA
Saqqara 2008–2009
Karol Myśliwiec ....................................................................................... 157

Zbigniew Godziejewski .......................................................................... 167

Saqqara 2008–2009: the pottery
Teodózja I. Rzeuska ................................................................................ 175

NAQLUN
Naqlun (Nekloni) excavations in 2008–2009
Włodzimierz Godlewski ........................................................................... 193

Appendix: Naqlun 2008: archaeobotanical studies
Jarosław Zieleński .................................................................................. 210

Tomasz Derda, Dorota Dzierzbicka ......................................................... 212

Pottery from the refuse dump under unit B.26 in Naqlun
Katarzyna Danys-Lasek .......................................................................... 222

Two burials from cemetery A in Naqlun: archaeological and anthropological remarks
Dorota Dzierzbicka, Marzena Ożarek ....................................................... 233

On the collection of wooden finds from Naqlun again
Jarosław Zieleński, Iwona Zych ............................................................. 244

DEIR EL-BAHARI
Conservation work in the Hatshepsut Temple in Deir el-Bahari (2009)
Rajmund Gazda ....................................................................................... 251

Sandstone sphinxes of Queen Hatshepsut from Deir el-Bahari:
preliminary remarks
Agata Smilgin ......................................................................................... 255
CONTENTS

Temple of Tuthmosis III in Deir el-Bahari in 2008 and 2009: work in the stores and field
Monika Dolińska .......................... 261

The Temple of Tuthmosis I rediscovered
Jadwiga Iwaszczuk .......................... 269

DAKHLEH OASIS
Dakhleh Oasis Project. Petroglyph Unit: rock art research, 2009
Ewa Kuciewicz, Michał Kobusiewicz .......................... 279

SUDAN

OLD DONGOLA
Dongola 2008–2009
Włodzimierz Godlewski .......................... 289

Appendix: Conservation of wall paintings inside the former Throne Hall of the Makurian kings in Dongola (2009 season)
Cristóbal Calaforra-Rzepka .......................... 312

Dongola 2009: Pottery from Building I (Kom A)
Katarzyna Danys-Lasek .......................... 315

Wall inscriptions in a burial vault under the Northwest Annex of the Monastery on Kom H (Dongola 2009)
Adam Łajtar, Jacques van der Vliet .......................... 330

Crypts 1 and 2 in the Northwest Annex of the Monastery on Kom H in Dongola: report on the exploration in 2009
Włodzimierz Godlewski, Robert Mahler, Barbara Czaja-Szewczak .......................... 338

EL-ZUMA
The pottery from four tumuli graves in el-Zuma (2009)
Edyta Klimaszevska-Drabot, Ewa Czyżewska .......................... 361

FOURTH CATARACT
Research in the PCMA UW concession on the Fourth Cataract (Hamdab Dam Rescue project). Interim report 2009
Marek Chłodnicki .......................... 377

Rock art research in the Fourth Cataract region, season 2009
Ewa Kuciewicz, Andrzej Rozwadowski .......................... 387

Excavations in 2009 in the environs of El-Ar village (Fourth Cataract region, Sudan)
Anna Longa .......................... 393

El-Ar 31: excavations of Late/Post-Meroitic tumuli. Preliminary report
Artur Buszek, Michał Kurzyk .......................... 399
CONTENTS

CYPRUS

NEA PAPHOS

**Nea Paphos. Season 2009**
*Henryk Meyza in cooperation with Wiktor Andrzej Daszewski, Aleksandra Brzozowska, Joanna Michalska, Joanna K. Rądkowska, and Monika Więch* ................. 407

LEBANON

JIYEH

**Preliminary report on the 2008 and 2009 excavation seasons at Jiyeh (Porphyreon)**
*Tomasz Waliszewski, Karol Juchniewicz, Mariusz Gwiazda* ..................... 423

*Appendix 1. Sunken vessels in late Roman and Byzantine Houses in area D*
*Mariusz Gwiazda* .................................................................................. 439

*Appendix 2. Preliminary remarks on thresholds from private houses in Jiyeh (Porphyreon)*
*Mariusz Gwiazda* .................................................................................. 441

**Local Hellenistic ‘Phoenician’-type amphora and other pottery vessels from excavations in Jiyeh (Porphyreon) (seasons 2008–2009)**
*Urszula Wicenciak* .................................................................................. 446

**Ground and aerial photogrammetric documentation in Jiyeh (Porphyreon)**
*Miron Bogacki* ....................................................................................... 454

SYRIA

PALMYRA

**Polish Archaeological Mission to Palmyra. Seasons 2008 and 2009**
*Grzegorz Majcherek* ............................................................................... 459

HAWARTE

**Excavations in Hawarte 2008–2009**
*Michał Gawlikowski* ............................................................................... 481

**Glass finds from the mithraeum in Hawarte**
*Krystyna Gawlikowska* ........................................................................ 496

TELL ARBID

**Tell Arbid 2008–2009. Preliminary report on the results of the thirteenth and fourteenth seasons of Polish-Syrian excavations**
*Piotr Bieliński* ....................................................................................... 511
<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adam Mickiewicz University excavations in Sector P at Tell Arbid</td>
<td>Rafał Koliński</td>
<td>537</td>
</tr>
<tr>
<td>(spring 2009)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tell Qaramel</td>
<td></td>
<td>559</td>
</tr>
<tr>
<td>Tell Qaramel: excavations 2009</td>
<td>Ryszard F. Mazurowski</td>
<td></td>
</tr>
<tr>
<td>PAM Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult burials of Ninevite 5 date on Tell Arbid (2007–2008)</td>
<td>Dariusz Szeląg</td>
<td>585</td>
</tr>
<tr>
<td>Chariot terracotta models from Tell Arbid</td>
<td>Mattia Raccidi</td>
<td>605</td>
</tr>
<tr>
<td>New Protodynastic serekhs from the Nile Delta: the case of finds</td>
<td>Mariusz A. Jucha</td>
<td>625</td>
</tr>
<tr>
<td>from Tell el-Farkha</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pithos-type vessels from Chhîm: preliminary assessment of finds</td>
<td>Zofia Kowarska, Szymon Lenarczyk</td>
<td>643</td>
</tr>
<tr>
<td>from 1996–2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buildings on Site B at Naqlun (Nekloni)</td>
<td>Szymon Maślak</td>
<td>653</td>
</tr>
<tr>
<td>Zooarchaeological analysis of material from cisterns STR 1/96–97 and</td>
<td>Ewelina Tepe</td>
<td>677</td>
</tr>
<tr>
<td>and HA/NEH 2.16.3 in Nea Paphos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal bone remains from Sheikh Abd el-Gurna: issues and opportunities</td>
<td>Urszula Iwaszczuk</td>
<td>691</td>
</tr>
<tr>
<td>Animals in rock art: results of archaeozoological research at the</td>
<td>Marta Osypińska</td>
<td>703</td>
</tr>
<tr>
<td>site of El-Gamamiya 67 (Fourth Cataract, Sudan)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index of sites</td>
<td></td>
<td>715</td>
</tr>
<tr>
<td>Guidelines for authors</td>
<td></td>
<td>716</td>
</tr>
</tbody>
</table>

PAM 21, Research 2009