

مجموعة معمارية لمبنى بالقاسمية: نحو فهم وإعادة تفسير لمنشأته المميزة

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إن المباني ذات الأغراض الدنيوية والتي تعود للعصر البيزنطي في مصر لم تحظ بالقدر الكافي من الدراسة. ويرجع ذلك غالباً إلى الحالة السيئة التي تكون عليها عادةً أطلال غالبية هذه المباني بسبب تأثير عوامل الزمن من ناحية، أو بسبب أساليب البناء الرديئة و قلة الاهتمام المعماري من ناحية أخرى. وبينما ساعد التنقيب العلمى الجيد للعديد من هذه المواقع الأثرية مؤخرًا في التعرف بشكل تدريجي على الشكل و المظهر الأصليين لمثل هذه المنشآت، إلا أن تفسير هوية ووظيفة هذه الأطلال المعمارية بقى مثاراً للجدل.

من هذا المنطلق كان الاهتمام فى هذه الدراسة بمنطقة هضبة القاسمية، فى الموقع المعروف لدى أهالى المنطقة بـ "منامة الست بدرية" على الجانب الأيمن من طريق الكافوري/ برج العرب .. حيث كشفت بعثة المجلس الأعلى للآثار عام ٢٠٠١ جزئياً عن بقايا مجموعتين معماريتين تمثل الجنوبية منها أطلال لكنيسة صغيرة، عثر فى أحد حجراتها على حوض للتعديد بينما عثر تحت حجرة أخرى على مدفن. أما المجموعة الشمالية و التى اختصها بالدراسة فهى تمثل مجموعة معمارية متقنة التكوين أشيرَ إليها فى تقرير البعثة الموجز ك: "بيت ريفي يخصّ عزبة خاصّة".

تهدف الدراسة إلى توضيح المنشآت والعناصر المعمارية المختلفة المميزة لهذه المجمع من خلال فهم شامل و إعادة تفسير لوظائفهم المحتملة و التى ربما ستضيف خصائص جديدة إلى هوية المجمع من خلال إعادة تصور للممارسة اليومية و تسلسل الأنشطة مما قد يسلط ضوءاً جديداً على بعض المظاهر العامة للأنشطة الصناعيّة فى العالم القديم فى هذه الفترة وخاصة مصر.

A Building Complex at Qasimīya¹
'Towards a Perception & a Reinterpretation of Its Characterizing Structures'

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The manners and the different patterns of everyday life for man in Egypt in earlier times might preoccupy one's mind who wants to tackle upon the other side of the Egyptian society apart from the ruling class and nobility dominating the majority of the archaeological sites mostly related to temples, tombs and royal buildings. From this standpoint the study of the secular structures varying greatly in terms of quantity, quality and uses stands the most prominent as they illustrate different classes of ordinary people and provide rare glimpses of their lifestyle and evidences of their activities and habits.

The secular structures of ancient Alexandria and surroundings, namely those dated to the late Roman and early Byzantine periods have not gained the adequate amount of study; mostly due to the ravages of time as the subjects discovered were commonly consisted of mere fragments poorly built and of little architectural interest. On the other hand, while the original form and appearance of such structures are gradually being addressed and even rectified through proper excavation of new sites, their definition remains at issue.

¹ I am indebted to both Mr. Adly Rushdy Amin, General Director of the Alexandrian Antiquities Department, for his support and cooperation and to Mr. Peter Grossmann for handing me an offprint of the report. (now in press to be published in ASAE as follows: Grossmann, P., and Abdal Fattah, A., "Qasimīya; Report on the Survey Work from June 17 to June 19, 2001", pp. 1-4). The report comprises the two building complexes uncovered; the one of our concern and another complex to the south termed the church complex where the remains of its little church shows very simple layout. A small baptismal basin was clearly identified in one of its chambers while below the church a well preserved hypogeum is extant.

At El-Qasimīya plateau, the site known to the public "*Manamet El-Set Badriya*", some 50km. southwest of Alexandria, on the northern side of the modern highway El-Kafoury/Borg El Arab, the Supreme Council of Antiquities partly unearthed the remains of a remarkable building complex with peculiar and unique characterizing features [Fig.1] . Despite the significance of the subject, there has been little reference of it in the survey report. Discussion of this elaborate building complex is our main concern in this paper.

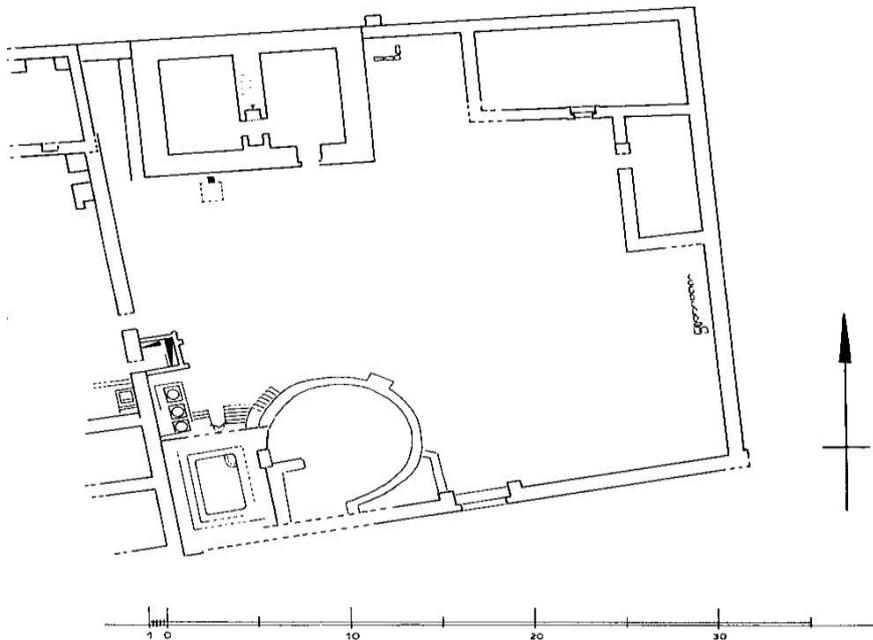


Fig.1: The Early Byzantine Tower House Complex
Surveyed and drawn by P. Grossman

This suburban complex covers a roughly rectangular plot ca. 1110m^2 . It is clearly demonstrated by the thickness of its double walls built of large dressed blocks of hard limestone quarried locally and bonded in clay mortar with occasional use of lime mortar. The main access to the complex is made by a wide entrance – about 2.45m – that lies approximately in the middle of the southern wall and leads directly to the central court. The doorway opens directly on to a street that is running east west direction adjacent to the southern wall of the complex. Very remarkable are

the signs of wear on the threshold of the entrance denoting its frequent use.

The interior space is arranged around the central courtyard in an organization distinctly divided into residential units to the north and east sides of the court and working space at its southwest corner. The layout of the thickened walls delineates two spacious rooms at the northeast corner directly accessed from the court [fig.2].



Fig.3
Northern room doorsill

Fig.2: Layout of the rooms' walls from the northern side

Stone remains of a probable podium may point to a third room adjacent to the eastern one. The doorway of the northern room has a square cavity in the right side of its doorsill as socket marking the existence of a hinged door [fig.3]. The rooms function is unclear as they lack any finds through which one would establish their use, albeit their simplicity preponderate being utilitarian.

Further to the west there is a solid construction, which is the focus of the residential wing. It consists of two parallel rooms, the eastern of which is directly entered from the court. Its entrance still preserves a bolt-hole cut onto the thickness of the western door jamb indicating that the recess had featured a door or shutter [fig.4].

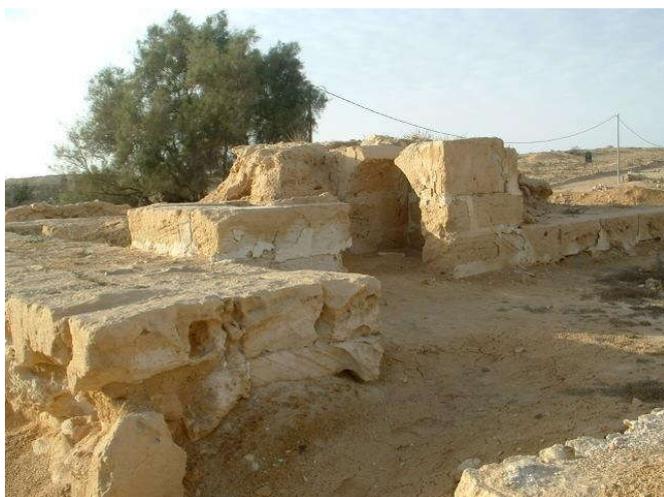


Fig.4 The tower's ground floor
A square bolt-hole in the door-jamb is remarkable



Fig.5 Remains of latrine installations at the foot of the tower

Access to the western room was via a narrow passage cut through the very thick partition wall between both rooms on its southern side. This entry is flanked by two barrel-vaulted niches. Walls and floors of these niches preserve remains of reddish plaster coating, known to be utilized as insulation against damp. ¹ A feature that cannot pass unnoticed especially with the presence of drain installations located on the courtyard side slightly to the west of the partition wall (fig.5), albeit unconnected to those niches. All ask for closer insight in order to explore the nature of this structure.

¹ The Roman architect Vitruvius, in his book “*De Architectura*”, presented to the 1st Roman Emperor Augustus, among other things he talks about walls covered with burnt clay to prevent seepage. See: Vitruvius, “*De Architectura*”, V 10, VI 6.7, VII 4,1,3.

The sturdy feature of this construction preponderates that it might have represented the ground floor of a tower-like structure,¹ which might recall the two lime stone models of tower houses, in the Egyptian museum [fig.6], dated to the Greco-Roman period. Both models have been designed so that the ground floor could become a basement.²

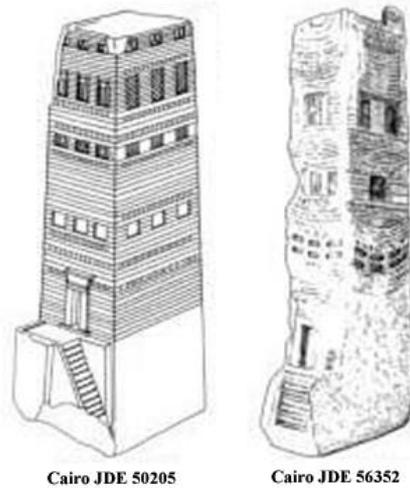


Fig.6 Models of tower houses after Engelbach, R., ASAE 31 (1931),129, fig.3, pl. III

Other closer examples are to be found in Upper Egypt, in the Coptic town of Djeme at western Thebes within the area of the temple complex of Medinet Habu. Although almost vanished, but we still have its description recorded in the field report.³ Among the remains of the unearthed Coptic dwellings Holscher described tower houses which might originally have two or more storeys with a narrow entry that was usually positioned so that it didn't afford a view directly into the interior of the house. The interior arrangements are organized vertically rather than horizontally, with

¹ Grossmann, P., and Abdal Fattah, A., *op.cit.* p. 4.

² Kemp, B., J., *Ancient Egypt: Anatomy of a Civilization*, Routledge, London and New York, 2006, p. 354, fig. 123 (Cairo Museum JE 50206, 56352, after Engelbach, R., ASAE 31, 1931, p. 129, fig.3; pl. III).

³ Holscher, U., *The Excavation of Medinet Habu*, Vol. V, *Post-Ramessid Remains*, University of Chicago Press, Chicago, 1954, pp. 45-51, pls. 41-3.

the living accommodation and cooking hearths on the upper floors. At the ground level there was often an installation to house water jars, frequently in a niche.^١

This might interpret the function of the two floor niches on either side of the communicating passage way between the two ground floor rooms and would in its turn explain the ambiguous use of the aforementioned hydraulic reddish plaster.

Further interesting parallels would be perceived at a variety of structures still stand to full height in the northern and central Syrian Countryside, mostly belong between the 4th and 6th centuries. At times free standing as separate residential buildings, towers were more often built integrally in association with residential farm-houses, adding a distinctive social as well as defensive accent to the household.^٢ Comparable to Syrian counterparts the residential upper stories frequently feature large windows and a small corbelled structure on the wall. The latter forms the house latrine equipped with holes in its stone floor slabs and a door that separated it from the room or corridor [fig. 7].



Fig.7
Tower house of Serdjibleh
Syrian Countryside
5th - 6th century AD

^١ *Ibid.*, p. 46, fig. 54, Pl. 43c; Kemp, B., J., *op.cit.*, pp. 351-355, fig. 122.

^٢ Krautheimer, R., "*Early Christian and Byzantine Architecture*", 4th ed., Penguin Group, England, 1986, pp. 137-156, fig. 95, 96. in footnote 135 of chapter 6, p. 475, Krautheimer cited numerous publications concerning Syria; see also: Butcher, K., *Roman Syria and the Near East*, Los Angeles, The J. Paul Getty Museum, 2003, pp. 145ff, 151f

It is, however, by no means clear that the presence of the aforementioned drainage facility at the foot of the tower would normally be for the latrine of the house placed somewhere in one of the upper floors above the western room. The Remains preserved consists of two vertical drains leading to the sewer; the first was square and embedded in the wall, the other was smaller circular and located a bit further to the south. It is assumed that the larger of these pipes are for sewage and the smaller ones for waste water. The sewer is an underground catchment chamber with a gabled roof and it is provided with steps in the sidewalls used when performing cleaning tasks.^١

In the light of what have been mentioned one would determine with certainty that the complex of our concern follow the pattern of '**suburban tower houses**' that were common aspects of domestic and agricultural architecture since antiquity^٢. By virtue of its form, it might express architectural responses to social needs and climatic factors, in which it was used by occupants to escape strangers, as well as being well adapted to cope with and mitigate the effects of climatic extremes also serve for storage purposes.^٣

Since the building type was settled, what would matter then is allocating the staircase, the absence of which remains a matter of inquiry. A suggestion that was introduced by the excavators put the staircase in the partition wall between both rooms, being accessible from only one of the two rooms starting at the northern end of the wall and with no flanking stringers. In this respect the partition wall was not intended to hold the ceiling beams of the rooms on its both

^١ For domestic sewage and upstairs latrines see Hodge, A., T., *Roman Aqueducts and Water Supply*, Gerald Duckworth & Co. Ltd., London, 1995, pp. 336f.

^٢ Nevett, L.,C., *House and Society in the Ancient Greek world*, Cambridge University Press, Cambridge,1999, pp. 17, 36 -37, 82.

^٣ Alston, R., " *The City In Roman and Byzantine Egypt*", Routledge, London & New York, 2002, pp. 303,408.

sides because otherwise there would not be sufficient space remaining for the stairs. In other words, the wooden beams would be arranged lengthways though the 6.40m length of the room is rather wide to be covered.¹

Regarding the aforementioned nature of this structure and if we consider excavators standpoint regarding the beams, there are some remarks of noteworthy:

- Normally the beam is meant to be the structural element that is capable of withstanding load primarily by resisting bending. Such bending force would be induced into the material of the beam as a result of the external loads and its own weight. Thus the longer of the beam span the weaker its capability to perform its purpose.²
- It would have been difficult, however, to raise the ceiling that was supposed to carry the weight of the above rooms if the beams supporting it are not strong to stand the load of such multi-storey structure.

Regarding the nature of the structure, it seems a mandatory then for the beams to be seated breadthways, 4m wide, for more consolidation of the block. In this respect the thickness of the partition wall was meant to support the ceiling beams on both sides. By refuting the prior suggestion the location of the staircase remains controversial.

Comparable with the previously mentioned models in the Egyptian museum and paralleled with those Coptic dwelling uncovered in Djeme where the best preserved were reported to have a staircase

¹ Grossmann, P., and Abdal Fattah, A., *op.cit.* p. 4.

² In view of architect consultants, the depth of an enforced concrete beam equal 0.1 of its span that would be in our case about 64cm, thence how big should be the depth of a beam made of wood?

in a corner,^١ an external corner staircase could be plausible.

Another piece of evidence would be approached through several Syrian houses mentioned above, where different stories are accessible via external stairs. Each step is made of a single piece of stone, embedded into the wall as a bracket [fig.8].

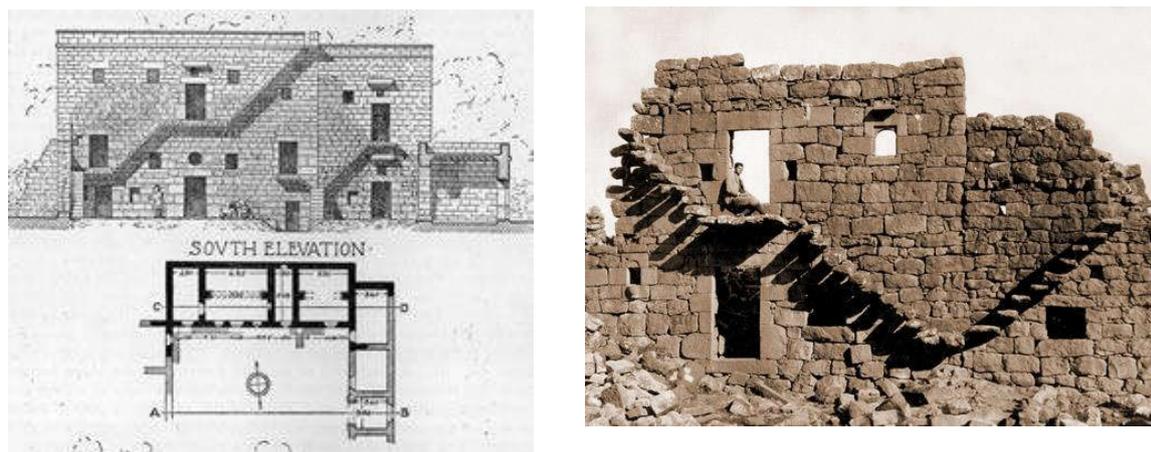


Fig.8: External stairs, Umm Igimal at Syrian country side
(left: house III) (right: house I)

There are stone remains at the northeast corner of the tower from outside most probably were intended as the base for a staircase. Therefore an external reconstruction of that staircase outweighs. Consequently the suggested probability would start externally at the northeast corner of the tower up to the first upper storey then either it continues externally as in Syrian examples, or internally along one side of the walls, most probably the northern.^٢

The last element in our investigation is the distinct working space that occupies the court's southwest corner and is the most distinguished part of the complex (fig.9).

^١ Kemp, B., J., *op.cit.*, p. 355.

^٢ With regard to the 4m width of the site 3 storeys tower recommended in the first case and more in the other.



Fig.9: The Fullery Workshop, 'Fullonica', as viewed from The northern side

One of the most noticeable features, unlike the whole context, is the well preserved floor pavement with regular shaped rectangular slabs of hard local limestone. In architectural parlance, this might indicate a wish to provide solid surface in a room. One reason for this is that the floor was in a space likely to be subject to wetting.¹

Another striking feature is the distinct draining canalization under the ground or cut through the pavement of the floor. Also the wide use of the aforementioned reddish waterproofing plaster² is quietly noticed. All these features denote a heavy use of water [fig.10]

¹ Nevett, L., C., *op.cit.*, pp. 176-177.

² Vitruvius, "De Architectura", V 10, VI 6.7, VII 4,1,3. According to Vitruvius, this was a Roman invention in constructions dealing with water and continued in use with some carelessness during the Byzantine Era.

Fig.10:
Distinct draining
canalization in the
paved floor



In terms of the significant characteristics of such an elaborate workshop, one would anticipate a more comprehensive perception of its structures so as to reconstruct the sequence of activities practiced and approach its functional identity. The key question is therefore: what would be the manufacturing activities associated with our structural remains?

- The major structure is a large rectangular trough built of stone rubble at a higher elevation and equipped with several external flights of stairs at its northern side. Remainder of other stairs is still observed in its inner northeast corner. It seems that the trough featured heavy duty which demands several repairs and resizing that considerably reduced its size by adding thick inner reinforcement walls [fig.11]. A water-tap was installed at the northern wall of the trough in a small conch niche, remains of its little half dome are hardly observed. It was supplied by a narrow 5cm lead pipe starting at the foot of the inner stairway of the trough. Signs of the running water below the tap would suggest the frequent filling and discharging of the trough that induced the presence of a draining channel remarkably cut through the

floor pavement and pours into a common underground catchment chamber.



Fig.11 (up)
Large Trough



Fig. 12 (right)
Set of circular Vats

- The second main structure of the workshop is a set of three circular vats embedded in a high podium built of masonry attached against the northwest corner of the trough and the western wall of the workshop [fig.12]. The whole set is coated by a thick layer of the hydraulic reddish mortar and furnished with a common water supply channel atop the western side of the podium and a drain channel beneath it. At the joint between the podium and the western wall lies a square ditch, 28cm wide, sloping down northwards, coated with reddish mortar, seemingly intended to draw away excess of water spattered from the vats proposing vital activity. All drains pour into another larger one cut in the pavement, which in turns leads to the same catchment chamber.

- It is worthy to note that there is another lead pipe immured in the wall beneath the ditch, the outlet of which is well recognized, emptied into the same ground canalization. Its presence might refer to a probable trough further to the south of the previous one.¹ Outside the southern side and adjacent to it some compartments are still unearthed and it is highly probable that they represent the suggested trough.
- Based on archaeological and literal records, the common use of lead pipes would demonstrate to the continuous provision of a piped water-supply, as the use of lead pipes were the standard thing in the city distribution network since the Roman period.²
- The third structure in connection with this workshop is a circular court attached to its eastern side. According to the field report, this court belongs to the whole complex not part of the workshop, and that its scope is not fully clear and probably was intended to keep sheep and that the washing installations was for cleaning the wool produced by the animals.³ By investigating the circular court, some aspects were recognized that demand to question such suggestion:
 - The presence of an external staircase attached to the western side of the circular court and turn in contiguity with its wall and adjacent to the left external staircase leading to the large trough [fig.13].

¹ The ditch and the lead pipe beneath as well as the stone base of the urine jar (below) were not recorded in the field report and were observed during my own investigation of the site.

² Hodge, A., T., *op.cit*, p. 110.

³ Grossmann, P., and Abdal Fattah, A., *op.cit.*, p.5.



Fig.13: staircases
in contiguity with
the court

- A prominent wide step towards the circular court cut in the partition wall between the trough and the court opposing another one, in ruins, towards the trough denoting prominent connection between workers in the trough and those at the circular court.
- Frequent use of the reddish waterproofing plaster as evidenced from the reminiscent of the plaster coating on the walls tends to show that the court was subject to damp.
- The circular court opens on its southern side to a small room with a podium, mostly intended as a seat, attached to the partition wall between the circular court and the large trough also coated with the same waterproofing mortar. Seemingly the entry to this room was from the same street to which opens the main entrance of the complex, but further to the west because the layout of the southern enclosure double walls of the complex stopped at the workshop location. It is highly probable that this small room being situated on the street could be the antechamber for business with customers.
- At the screen wall separating the circular court from this room evidence of a rail that was once fitted into the thickness of the wall is very remarkable.

A set of washing vats, large trough, evidences of water source, large work space, evidences of rails and what seems to be an antechamber for customer transactions ... All these features are assuming that we have found a site where fulling took place, a fullery workshop, or the so-called '*Fullonica*', in which the finishing of cloth as part of the textile-manufacturing process took place. Besides, the *fullonica* acted also as a commercial laundry. Craftsmen who were involved in fulling were often referred to as '*fullones*'.^١



(a) Fig. 14 (b)
Fresco depicting Fullones at work from Fullery of Hypsaesus at Pompeii

As a matter of fact, scholars' interpretation of structural remains as fulling establishments are based mainly on material evidences from Pompeii, Herculaneum and Ostia, where the layout of the *fullonicae* uncovered is often relatively well preserved and more likely to provide us with valuable archaeological criteria for comparison.^٢

^١ Flohr, M., "Fullones and Roman Society: a Reconsideration", *JRA* 16 (2003), p. 447; Bradley, M., "It All Comes Out in the Wash: Looking Harder at the Roman Fullonica", *JRA* 15 (2002), pp. 20-24.

^٢ Moeller, W., O., *The Wool Trade of Ancient Pompeii*, Leiden, 1976, p. 18.

In this respect, parallel diagnostic features would propose a reconstruction of the sequence of activities practiced in our *fullonica* as follows:

- **The set of circular vats:** Comparable with archaeological record it would certainly be interpreted as treading vats customary separated by low masonry or slab walls for the *fullones* to support themselves. In some cases wooden rails were used for support, which is more plausible in our *fullonica* as it lack any partition slabs.¹ A battery of closer vats is found in a series of frescoes on a pilaster in the fullery of Hypsaeus at Pompeii [Reg. VI.8.20] that depicts fullones at work [fig.14a].² Other Pompeian Parallels uncovered in the Fullery of Stephanus [Reg. I.6.7], the Fullery of Vesonius Primus [Reg. VI. 14.21-22] and they were identified as treading stalls.³
- Fullones trampled cloth, scrubbed them and wrung them out to loosen the dirt and allow the cleansing agent to penetrate the fabric. To dissolve the grease from the wool and remove the stains, they used various detergents, amongst which urine and a particular kind of lime called fuller's earth '*creta fullonica*'.⁴
- **The large trough:** With regard to its aforementioned characterizing features, and by taking into our consideration its adjacency to the treading vats, and the probable presence of another trough behind. Keeping in mind the confirmed

¹ Also in some northern Roman provinces the treading operations were often performed in wooden tubs or movable earthenware vessels. For more details see: Wilson., A., The Archaeology of the Roman Fullonica", *JRA* 16 (2003), p.443-446.

² Ibid., p. 443; Carratelli, G., P., *Pompeii. Pitture e mosaici, vol. IV: region VI, parte prima*, Rome, 1993, 604 - 609. This series is now in Naples archaeological museum.

³ Moeller, W., O., op.cit., pp. 41-51; Wilson., A., op.cit., p.443.

⁴ For more details on detergent used see: Bradley, M., op.cit., 24, footnote 28.

probability of a piped water supply source. It would be now confirmed that it functioned as the trough required for rinsing cloth as attested through at many of the Pompeian fulleries.¹

- After the treading the clothes had to be rinsed thoroughly. This was done in large troughs with fresh water. Some small *fullonicae* often lack visible remains of rinsing vats that has been attributed to the use of portable wooden stalls instead.² The number of rinsing vats depends on the size of the *fullonica*. Usually there are 3 or 4 troughs fed by a piped water supply from the urban aqueduct and overflowing in serious one into another.³ *Fullonicae* of more modest size sometimes features only one or two troughs, like the one of our concern.⁴
- **The circular court:** Finally, the cloth had to be finished. This finishing consisted of various activities and may have differed according to the place or period. It may also count on the customer's wishes. Customary the cloth was beaten to tighten the texture, then was hung up on wooden beams or rope and aired until it was dry. Then the cloth was hung on poles and teased with thistle head to raise the nap. After this cloth was spread over curved or square wicker fame, under which sulphur was burned to bleach the cloth. Finally pressing the cleaned cloth.⁵
- In this respect the circular court might be considered the working area that induced the aforementioned communication between *fullones* who were rinsing in the trough and those who

¹ Wilson., A., op.cit., pp.443 - 444.

² Flohr, M., op.cit., p. 448.

³ Wilson., A., op.cit., pp.443.

⁴ Examples given by Flohr are *fullonicae* [I.4.7], [V.1.2] at Pompeii and *fullonica* [I, XIII, 3] at Ostia. see Flohr, M., op.cit., pp. 447f, footnote 6.

⁵ Bradley in p. 24 summarized the whole fulling process based on *Daremborg-Saglio* (1980s)

were finishing in the court area. That would also interpret the evidences of rails recognized in the court, that might belongs to carding frames or drying racks as depicted in frescoes of Pompeian fulleries.

- **The small antechamber:** While larger *fullonicae* might have dealt with a professional clientele, archaeological records, however, proved the existence of modest workshop of small capacity and size focused on private customers. These having wide opening on the street and a space to deal with customers.¹ The previously mentioned fresco series depict a female client inspecting the quality of the work [fig.14b]. It is recognized that she is not far from the working area, which would highly preponderate the prior suggestion that this room was for business with customers. In the light of what had been mentioned, the suggestion of a **fullery workshop**, the so-called *fullonica* would be highly preponderated.

Still in the workshop parlance and combined with its arrangement, is the latrine and the bath unit, accessed through a doorway on the western wall of the main complex further to the north of the *fullonica*. It consist of a common latrine with space for several seats, probably provided for workers [fig.15], a room housing a bath with an inner seat attached to its southern side [fig.16], and distributing room communicating between them. The bath/latrine unite is built against the western wall of the workshop, while the rear of the latrine room is protruding in alignment with the treading vats of the *fullonica*. The used waste water from the bathroom is brought by a ground channel to the aforementioned catchment chamber of the workshop, through which the latrine sewer would be drained away.

¹ Flohr, M., op.cit., p. 448.



Fig.15: The Latrine Bathroom



Fig.16: The

It is worthy to remark that at the entrance of the latrine to the southwest corner of the communicating room there is a stone base mostly to support a jar in front of which the signs of wear in the floor denoting frequent use [fig.17].

- Evidently, urine was always the most exploited detergent used in the fulling process. Stronger, older urine was preferred and that of a camel was considered the most desirable.¹ In the baths of Mithras at Ostia a lead pipe from a public urinal carried fluids directly into a basement corridor leading to two small underground fullonicae.² Fullers used to leave large earthenware vessels in the streets to collect the urine of passers by. Example of such Urine receptacle was identified at Pompeii [fig.18].³ This might explain the provision of the stone base of a jar at the

¹ Bradley, M., op.cit., pp. 24, 30. He stated that in the 2nd c. A.D. Athenaeus' *Deipnosophistai* pointed out that excessive wine made urine acrid, useless to fullers as a washing agent. (*Athenaeus*, II, p. 484).

² Ibid., p. 21, fig. 1-4.

³ Moeller, W., O., op.cit., p. 33; Bradley, M., op.cit., p. 25, fig. 6.

entrance of the latrine and denote a plausible interpretation of the signs of wear in the floor.



Fig.18: (right)
A reservoir of urine. Pompeii, officina lanificaria 7.11.2-5. (Moeller 1976, 33)

Fig.17: (left)
A Base for a jar at the entrance of the latrine with remarkable signs of wear.



The Dating:

The Construction Techniques betray the traditional style of early Byzantine buildings where the general impression is of rough work, badly constructed in detail with inferior workmanship, which was the prevailing characteristic of the Byzantine architecture.¹ The Byzantine method is less solid and the limestone blocks are neither cut with right angles nor polished with accuracy, which demand the wide use of small limestone debris to be wedged to fill interstices of irregularly cut stones. The rubble and mortar construction dominates the southern wing and the thick layer of mortar used decomposed by the effect of time.

Elevation of the foundation blocks of the tower when appears among the ruins show ashlar masonry that is likely to antedate the

¹ Vitruvius, *De Architectura*, V.10; VI.6.7; VII.4.1.3.

southern wing of the complex by few decades, but remains however denoting the relatively haphazard nature of much Byzantine buildings.

Further proof for that would be in the remarkable re-use of materials from earlier constructions as a sign of continuous renew and restoration. This in turn preponderates that the house was gradually passing from owner to owner and finally the addition of the *fullonica* to the complex.

Besides, the distinct use of the aforementioned waterproofing reddish mortar where the burnt brick is not perfectly grounded to powder form as was during the Roman period. Such Roman invention according to Vitruvius continued in use with some carelessness during the Byzantine Era, therefore an early Byzantine dating outweighs^١.

In terms of spatial organization the complex follows the similar pattern of tower-houses that are paralleled at a variety of structures still stand to full height at the Syrian Countryside most of the surviving buildings belongs to the 4th, 5th and 6th centuries.

To be more certain of the building dating an assemblage of about 25 sherds were studied, mostly household, date to the early Byzantine period particularly from 5th to late 6th century AD (see annex below).

On the basis of what has been discussed above the complex would be highly interpreted as a “ *Rural Tower-House with a small Fullonica* ”^٢. In this respect the building is considered unique with no counterpart among all antiquities discovered, aiming to shed new light on some general aspects of industrial processes in the ancient late Roman and Byzantine Egypt.

^١ Ibid.

^٢ In respect of the discovered church complex nearby (see ft. note no. 1), this complex might belongs to a group of monks in the shadow of the spread of Christianity in the fourth century A.D

ANNEX

Pottery shards from a countryside house in Alexandria

During the 1st visit to a countryside Villa in Alexandria, about 25 shards were collected from the debris of the previous Excavation which carried out by the SCA, most of the collected shards are rims, and could be date to the late Roman period particularly from 5th to late 6th century AD.

The following statement is the types, its description and the suggested chronology:-

- Bag shaped Palestinian Amphora, 8 examples of this type were collected (No 1-8) , all made of Palestinian wear in pink, reddish yellow or gray fracture² mixed with abundant amount of well distributed sand and few of Quartz particles with exception of No 8 which made of hard fired Nile silt mixed with lots of fine straw and few of decomposed limestone particles which could be suggested as an Egyptian imitation of the Palestinian one, used for white wine³, date normally to 5th and 6th century AD⁴.
- Late Roman Amphora 1, only one example of this type was collected (No. 9), made of hard marl ware in pale yellow fracture mixed with abundant amount of well distributed dark

¹ I am indebted to Mr. Ashraf El-Sonussi, curator of Kom Ausheim museum, who joined me to the site and selected the samples and offered all help and effort in studying and preparing the report below.

² This type normally occurred in 2 fabric, orange which is dominated and gray which is rare. See, Peacock and William, *Amphora and the Roman economy, an introduction guide*, London and New York, 1999, P.191, the 2 fabric plus the Egyptian Nile silt occurred in the Villa.

³ *Ibid.*, P191.

⁴ Spencer, A. J. and Bailey, D. M., British Museum Expedition to Middle Egypt, Ashmunein, (1984) , Departments of Egyptian, and Greek and Roman Antiquities, British Museum Occasional Paper No. 61, British Museum Publications Ltd., London, 1985, fig 49 No. P.12.2; See for comparison Peacock and William, *op.cit*, class 46.

rocks – the form found in many countries of the Roman empire and used for oil trade¹ - date mainly from the end of 4th to late 6th century AD and not exceed after this period² .

- Ring based bowl with knobbed rim, tow examples of this type were collected one made of western ware (No. 10) while the other is Egyptian imitation or what descried by Hayes as "Egyptian Red Slipped ware"³ (No. 11) – date from 5th to early 7th AD⁴ .
- Bowl with out ledge rim, (No.13) – made of Egyptian marl ware – date according to Spencer and Baily to 550-600 AD⁵.
- Large size basin with out flaring rim (No. 15) – made of Nile silt and could be an imitation of Cypriot form date to the Byzantine period⁶.
- Ring based, carinated bowl with out extended rim, decorated with black dots on the upper rim, (NO. is type occur with black and white decoration on the outer body –

¹ Peacock and William, *op.cit.*, P189, class 44.

² For comparison see, Lecuyot, G., "La céramique provenant du secteur du mastaba d'Akhethetep à Saqqara. Observations préliminaires", Cahiers de la Céramique Égyptienne (CCE) 6, Le Caire, 2000, fig 3.4 No. C17; Quibell, *Excavation at Saqqarra. IV, The monastery of Aba Jermias*, Le Caire, 1912, p. 140 Pl. XLVIII; Egloff, M., "Kellia, La Poterie Copte, quatre siècles d'artisanat et d'échanges en Basse-Egypte, T.1", Recherches Suisses d'Archéologie Copte (RSAC), Vol. III, Geneve , 1977, type 164 (date from early 5th to mid 7th AD); Ballet, P. et Picon, M., "Recherches préliminaires sur les origines de la céramique des Kellia (Egypte). Importations et productions égyptiennes", Cahiers de la Céramique Égyptienne (CCE) 1, Le Caire, 1987, P. 21-24 ; Gempeler, R., *Die Keramik Romischer bis fruhaarabischer zeit Elephantine*, X, Mains und Rhein, 1992, 198 (date to 6-7 century AD).

³ . Hayes, J., W., *Late Roman Pottery*. London, 1972, type 105

⁴ See for comparison, Gempeler, R., *op.cit.*, 72 T22 6a (date from mid 5th to early 6th AD).

⁵ Spencer, A. J. and Bailey, D. M., *op.cit.*, fig. 33, no. 1:8.

⁶ Catling, H., W., "An early Byzantine pottery factory at Dhiorios in Cyprus" *Levant*, 1972, IV, 1-82

date to Coptic period from Saqqara¹; date to 400-500 from Ashmolein².

- Rounded bottomed cooking pot with 2 horizontal handles and beveled rim (No. 19, 20) originally from Cyprus³ and imitated in Nile silt or Egyptian Marl – date to 5-6 century AD⁴.
- Lid of cooking pot with beveled rim, (No. 21, 22) – used normally as lid of the pervious type – date to early 7th century AD from Tod⁵.
- Cooking pot with ribbed body with deferent rim shape⁶ (No. 23, 24).
- Cover of water jug⁷

-The Catalogue

No	Type	Fabric	Surface Treatment
1	Bag shaped Palestinian Amphora.	Palestinian marl ware in pink fracture mixed with abundant amount of sand and few of quartz particles.	Both surfaces are plain, the outer in very pale brown 10YR 7/3 and the inner in pink 5YR 7/4.
2	Bag shaped Palestinian	Palestinian marl ware in reddish yellow	Both surfaces are plain, the outer in

¹ Lecuyot, G., *op.cit.*, fig 3, P.244.

² Spencer, A. J. and Bailey, D. M., *op.cit.*, no. 14.2.

³ . Catling, H., W., *op.cit.*, fig 15 No. P483

⁴ Rodziewicz, M., *Alexandrie I. La ceramique romaine tardive d'Alexandrie*, Warsaw, 1976, pl. IV.

⁵ Pierrat, Essai de la Classification de la Ceramique de Tod, Cahiers de la Céramique Égyptienne (CCE) 2, Le Caire, 1991, fig 1 no. d.

It is not clear to identify the chronology of these types of cooking pots as it widely used⁷ during the Roman period and even earlier.

For my knowledge there is no comparison reference for this type but according the fabric⁸ which is similar to the bag shaped Amphora, it might be date to the 6-7 century AD.

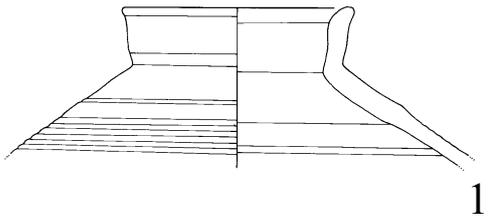
No	Type	Fabric	Surface Treatment
	Amphora.	fracture mixed with abundant amount of sand and few of quartz particles.	very pale brown 10YR 7/3 and the inner in pink 5YR 7/4.
3	Bag shaped Palestinian Amphora.	Palestinian marl ware in pink fracture mixed with abundant amount of sand and few of quartz particles.	Both surfaces are plain, the outer in very pale brown 10YR 7/3 and the inner in pink 5YR 7/4.
4	Bag shaped Palestinian Amphora.	Palestinian marl ware in pink fracture mixed with abundant amount of sand and few of quartz particles.	Both surfaces are plain, the outer in very pale brown 10YR 7/3 and the inner in light reddish brown 5YR7+6/4.
5	Bag shaped Palestinian Amphora.	Palestinian marl ware in pink fracture mixed with abundant amount of sand and few of quartz particles.	Both surfaces are plain, the outer in very pale brown 10YR 7/3 and the inner in pink 5YR 7/4.
6	Bag shaped Palestinian Amphora.	Palestinian marl ware in pink fracture mixed with abundant amount of sand and few of quartz particles.	Both surfaces are plain pink 7.5YR7/4.
7	Bag shaped Palestinian Amphora.	Palestinian marl ware in pink fracture mixed with abundant amount of sand and few of quartz particles.	The outer surface is slipped by reddish yellow 5YR7/8 and the inner is plain pale yellow 2.5Y7/4.

No	Type	Fabric	Surface Treatment
8	Bag shaped Amphora, Egyptian imitation.	Hard Nile silt mixed with lots of fine straw and few of decomposed limestone.	Both surfaces are plain reddish brown 2.5YR5/4.
9	Late Roman Amphora	Marl ware in pale yellow fracture mixed with abundant amount of dark rocks.	Both surfaces are plain reddish yellow 5YR7/6.
10	Western red slipped, ring based bowl with knobbed rim.	Hard, dens western ware in reddish yellow fracture.	Both surfaces are slipped by red 10R5/6.
11	Egyptian red slipped, ring based bowl.	Egyptian marl ware with lots of white particles and few of dark rocks.	Both surfaces are slipped by red 10R5/6.
12	Lid of cooking pot.	Nile silt with lots of sand	Both surfaces are plain light reddish brown 5YR6/4.
13	Bowl with out ledge rim probably with ring slightly round base.	Egyptian marl ware with lots of white plain particles and few of dark rocks.	Both surfaces are plain reddish yellow 5YR7/6.
14	Bowl with recurved rim.	Nile silt with lots of sand	Both surfaces are plain red 2.5YR5/6.
15	Large size basin with out flaring	Nile silt with lots of sand	Both surfaces are plain reddish

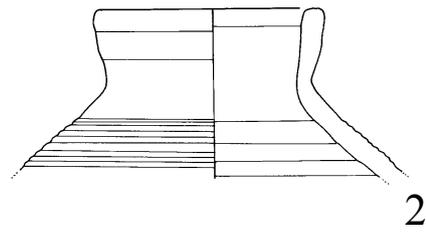
No	Type	Fabric	Surface Treatment
16	rim. Rim of cooking casserole.	Nile silt with lots of Mica.	brown 5YR5/4. Both surfaces are plain reddish brown 5YR5/4.
17	Ring based, carinated bowl with out extended rim, decorated with black dots on the upper rim.	Marl ware in gray fracture mixed with abundant amount of sand and few of quartz particles.	Both surfaces are plain pale yellow 5Y7/3.
No	Type	Fabric	Surface treatment
18	Rim shard of jar ¹ .	Egyptian marl ware with lots of white particles and few of dark rocks.	Both surfaces are plain, the outer in pale brown 2.5Y7/3 and the inner in light reddish brown 5YR7+6/4.
19	Rounded bottomed cooking pot with 2 horizontal handles and beveled rim. ⁵⁵	Nile silt with lots of sand	The outer surface is slipped by pale yellow 2.5Y7/3 and the inner is plain red 2.5YR5/6.
20	Rounded bottomed cooking pot with 2 horizontal handles and	Marl ware with lots of white particles and few of dark rocks. ⁵⁶	The outer surface is slipped by red 10R5/6 and the inner is plain brown 7.5YR5/4.

¹ . The type isn't well identified. ⁵⁵ Not illustrated. ⁵⁶ It might be Cypriot ware

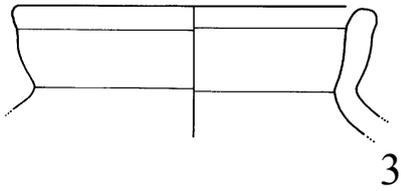
No	Type	Fabric	Surface treatment
21	Lid of cooking pot with beveled rim.	Egyptian marl ware with lots of white particles and few of dark rocks.	Both surfaces are plain red 2.5YR5/6.
22	Lid of cooking pot with beveled rim.	Nile silt with lots of sand	The upper part of the outer surface is slipped by pale yellow and the inner is plain light reddish brown 5YR6/4.
23	Round bottomed cooking pot with inner led seat and ribbed body.	Hard Nile silt with lots of decomposed limestone.	Both surfaces are plain red 10R5/6.
24	Round bottomed cooking pot with out ledge rim and ribbed body.	Nile silt with lots of sand	Both surfaces are plain light reddish brown 2.5YR6+5/4.
25	Cover of water jug with basket handle.	Egyptian marl ware with lots of white particles and few of dark rocks.	Both surfaces are plain, the outer in very pale brown 10YR 7/3 and the inner in pink 5YR 7/4.



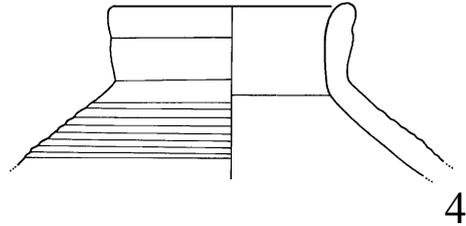
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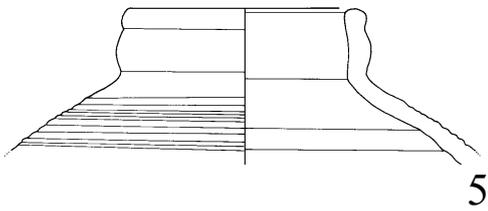
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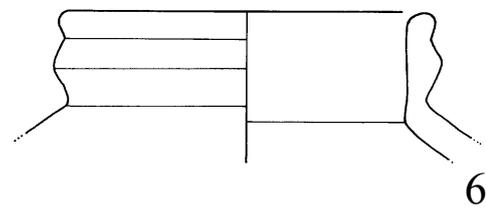
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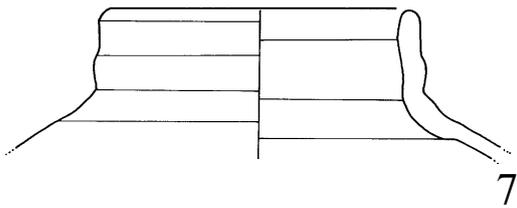
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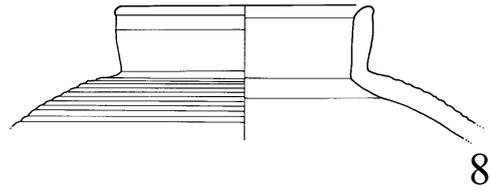
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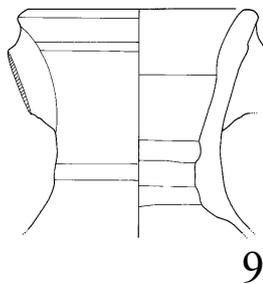
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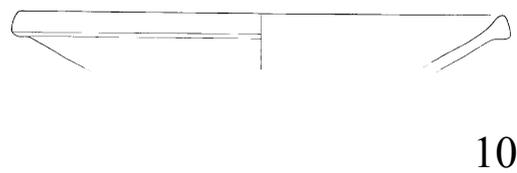
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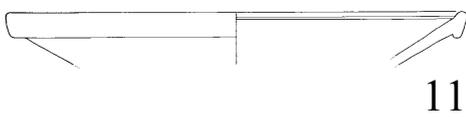
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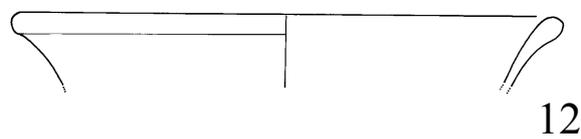
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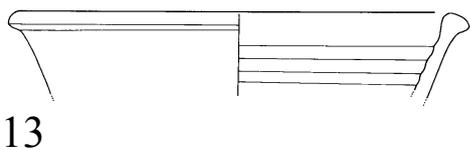
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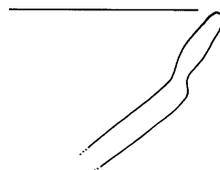
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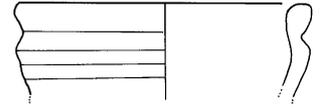
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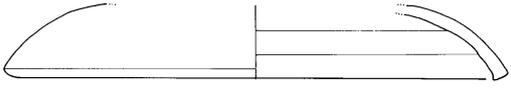
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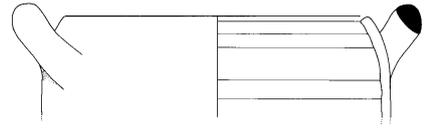
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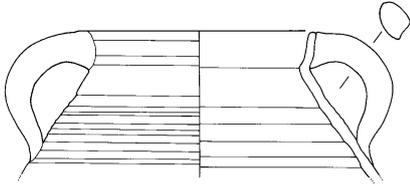
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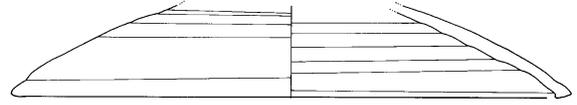
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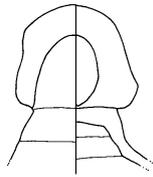
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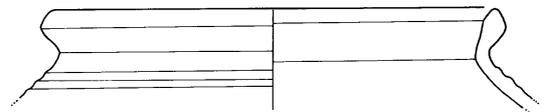
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