BARTŁOMIEJ LIS

THE ROLE OF COOKING POTTERY AND COOKED FOOD IN THE PALACE OF NESTOR AT PYLOS

ABSTRACT. The article discusses cooking pots that were found in the Mycenaean palace at Pylos as a main source of information about cooking and its role in the palatial setting. Each of the cooking pot types recovered from two main storage spaces – Rooms 67–68 (taken here as a single storage entity) and 60 – is described in detail and the possible ways of its use are suggested. The discussion of single types is followed by the analysis and interpretation of whole assemblages from the two storage spaces. For the first one (Rooms 67 and 68) two issues are raised and elaborated – the way the assemblage might have been used and its role in food preparation, especially in relation to possible feasting activities conducted by the palace. For Room 60 an alternative explanation of the function of its assemblage is brought forward. Previously, the room's content was interpreted in relation to feasting held outside of the palace or daily feeding of palace's personnel. Starting with a detailed analysis of one particular shape, the two-handled krater, the possible use of room's assemblage for industrial activities, possibly perfumed-oil manufacture, is suggested.

The Mycenaean palace at Pylos, named the Palace of Nestor by its discoverer and excavator Carl Blegen, is unique not only in comparison with other Mycenaean centres but also in a wider Aegean context. What makes it so special? The list is long and well known. It will suffice to mention the archive of clay tablets, the good state of preservation with an almost complete ground-plan and most of the original furnishings (at least in terms of pottery) found in situ, its late discovery (in comparison with, e.g., Tiryns or Mycenae), and excavation conducted by an experienced archaeologist. Given the extent of discovered remains, the final publication was prompt, fairly complete, kept high standards and gave an enormous impulse to scholars conducting research on issues of Mycenaean culture, economy and politics. Having said that, Blegen's publication has by no means ended the scholarly history of his excavation. One of the most attractive, and sometimes also most frustrating, aspects of humanities and social sciences is that everything is subjected to verification and reconsideration, which leads towards a better understanding of a given problem. Due to a major project, Hora Apotheke Reorganization Project (HARP), and works of individual scholars, some of Blegen's observations and interpretations have been enriched, changed, or even refuted. By no means does it discredit the value of his work – many of the new ideas are results of a careful and meticulous study of the artefacts, for which Blegen's team did not have enough time. Moreover, none of these new ideas would have been brough forward without Blegen's fundamental work.

Among the new works to be mentioned here is the restudy of the palace's architecture by Nelson,² the examination of the small finds by Hofstra³ and, among many other interesting issues that appear in her work, the study of the palace's stratigraphy and the role of pots from pantries 18–22 by Hruby.⁴ They all showed the staggering potential of re-examination of the material from old excavations. In this article I will try to re-investigate in detail one

¹ The first Linear B tablets were found during the very first day of excavation, already in 1939.

² M.C. NELSON, *The Architecture of Epano Englianos, Greece,* Toronto 2001. Some results of his research were summarized in J.B. RUTTER, *Southern Triangles Revisited: Laconia, Messenia, and Crete in the 14th–12th Centuries B.C,* in: A.L. D'AGATA and J. MOODY (eds), *Ariadne's Threads: Connections between Crete and the Greek Mainland in the Postpalatial Period (LM IIIA2 to LM IIIC),* Athens 2005, 17–50.

³ S. HOFSTRA, Small Things Considered: The Finds from Pylos in Context, Austin 2000.

⁴ J.A. HRUBY, Feasting and Ceramics: a View from the Palace of Nestor at Pylos, Cincinnati 2006.

of the artefact groups recovered by Blegen's team from the palace at Pylos – the cooking pots.⁵

The storage of vessels that were used in considerable quantities at events conducted/supported by the palace was highly organized. This is clearly shown by the pantries 18–22 (see the plan, Fig. 1), where almost 7 000 serving and tableware vessels, sorted by vessel-types, were stored in a space of ca. 50 square metres. Undoubtedly, not only the question of *where* a given type was stored (for example in Room 18 belonging to the pantries) is of importance, but also looking at *which other types* it was stored with may reveal certain patterns. For instance, one-

handled cups (Shape 12) were stored together with bowls (Shape 4) and not with kylikes, 2 854 of which were stacked unaccompanied in Room 19. Cooking pots, judging by their number, were apparently also in big demand from the palace and were stored in a similarly organized way, mainly in Rooms 67–68 and Room 60 (Tables 1 and 2). Therefore, it is sensible not to separate the description of a particular vesseltype from its location within the palace. As will be shown, vessel-types connected with cooking, with one important exception, were stored either in one room only or else in rooms belonging to the same pantry-set (i.e. Rooms 67–68).

Table 1. Vessel-types stored in Rooms 67 and 686.

Shape	Vessel type (Figure)	FS	Room 67		Room 68		Average capacity	
No	v esser type (1 igure)		Counted	Inventoried	Counted	Inventoried	(in litres)	
48a	One-handled jar (2:1a,1b)	65	8 or 9(+1)	8 (+1)	X (≤42)	11	2.54	
49b	Two-handled jar (2:2)	66	1 or 2	1	42 – X	11	2.72	
59	Krater (2:3a)	288			30	13	10.48 (59b2); 3.36 (59b1)	
67	Brazier (3:1)	312	51	23				
69	One-handled tripod (2:5)	320	(+1)	33 (+1)			0.69	
70	Two-handled tripod (2:4)	320	(+1)	17 (+1)			0.96	
74	Lid (3:4)	335		2				
78	Pan (3:5)				3	2		

Source: C.W. BLEGEN and M. RAWSON, The Palace of Nestor at Pylos in Western Messenia: I. The Buildings and Their Contents, Princeton 1966.

Table 2. Vessel-types stored in Room 60 discussed in text.

Shape No	Vessel type (Figure)	FS	Counted	Inventoried	Average capacity (in litres)	
2	Basin	293	76	3	5.40	
4	Shallow angular bowl	295	51	2	0.51	
10	Deep spouted bowl		33	6	11.23	
26	Miniature kylix		82	1	0.017	
59	Krater (2:3b)	288	31	3	10.5 (59a2) 1.6 (59a1)	
66	Ladle (3:2)	311	39	18	0.27	
71	Tripod incense burner	315	5	5		
72	Lid for Shape 71	315	6	6		

Source: BLEGEN and RAWSON, op. cit.

⁵ The cooking pots are understood here as ceramic objects that were in all probability used for food preparation with the use of heat.

⁶ FS stands for Furumark shape number. Vessels found in doorway 66 are, for convenience reasons, added to the

assemblage of Room 67 (numbers in brackets). 59b1 and 59b2 are subtypes of the Shape 59 listed in Table 4. Average capacities are calculated basing on data provided by Blegen for the inventoried and measurable shapes.

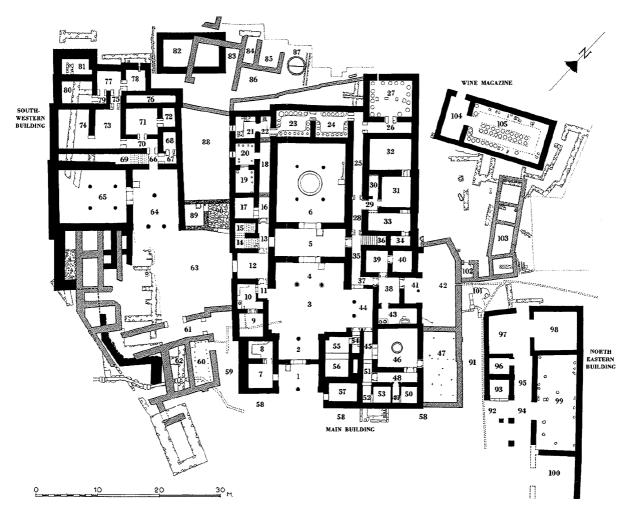


Fig. 1. Plan of the Palace of Nestor at Pylos. After Blegen and Rawson, *op.cit.*, Fig. 417. Courtesy of the University of Cincinnati, Department of Classics

ROOMS 67-68

Vessel-types found in Rooms 67 and 68 are discussed together, as both rooms, located next to each other and connected with a doorway, are to be treated as a single pantry-set, as are Rooms 18–22.

One-handled jar (Shape 48a, Fig. 2:1a, 1b)

This vessel-type has a thick-walled, ovoid body. The neck is low, wide, and splaying, sometimes sharply offset from the body, but usually the bodyneck transition is smooth. The bottom is simple and flat or has a form of a slightly raised base. A single, thick loop handle is attached just below the rim, at the transition from neck to shoulder. The average capacity amounts to 2.54 litres. Examples of this shape were found both in Rooms 67–68 and doorway 66.

A simple flat bottom suggests such vessels were placed on a flat, stable surface, probably an edge of a hearth, with the handle opposite the fire. Alternatively, it could have simply been heated with glowing coals spread around its base.

Two-handled jar (Shape 48b, Fig. 2:2)

This vessel-type is very similar to Shape 48a, the only important difference lying in its having two, instead of one, loop handles. The body tends to be slightly more globular. The average capacity is 2.72 litres, slightly more than in the case of 48a, but the difference is negligible. It also seems to be slightly more standardized, with a narrower range of dimentional variation.

As already stated, the only considerable difference between Shapes 48a and 48b is the number of handles. This feature reflects in all probability the difference in the way both variants were used. Two opposite-placed handles suggest the Shape 48b was set with the handles parallel to the edge of a hearth. One-handled jar (48a) was more suited to pour the content out of it – one person could easily handle it. The content of such a pot could therefore have been

⁷ BLEGEN and RAWSON, op. cit., Fig. 372, No. 1025.

liquid. The two handles of 48b suggest it was designed to be carried around. Pouring out of such a vessel may pose some difficulties, suggesting the content of more solid consistence. The difference between the number of handles would be easily explicable if the capacity of the two-handled variant was considerably larger. However, this cannot be proved for Pylos. The last possibility is that the two-handled cooking pot was hung on strings from a grate of some kind; the flat base would be useful only to put the pot aside after use.

Two-handled krater (Shape 59, Fig. 2:3a, 3b)

This particular vessel-type deserves a great deal of attention. Several observations point to the significance of this shape. As is clear from Tables 1 and 2, it is the only vessel-form that appears in both of the analysed storage entities – Room 68 (belonging to pantry-set 67–68) and Room 60. It has been already observed by Blegen⁸ that the two-handled (coarse) krater comes in three more or less standard sizes – a feature otherwise only attested for serving and tableware shapes, the ubiquitous kylikes in particular. Interestingly, the shape is quite rare on the Mainland.⁹

My suggestion concerning two-handled kraters from Pylos is that in Room 60 and Room 68 we are dealing with virtually two different vessel-types which plausibly have had different implementations. Each of these types features two size-variants. If

these conjectures correspond to the actual situation, there is no connection between Rooms 60 and 68 whatsoever, at least in terms of ceramic forms.

Let us now turn to the detailed analysis of the examples of Shape 59 found in the two relevant rooms. Although at first sight they look quite similar - they all are wide-mouthed globular vessels - it is clear from Fig. 2 (Nos. 3a and 3b) that we are indeed dealing with two different vessel-types. Pot No. 3a is a typical example of the medium size type found in Room 68; pot No. 3b is in turn a 'typical' 10 example of the small size type found in Room 60. On the basis of these drawings, photographs of single examples of type 59,11 group photos of Rooms' 60 and 68 content, 12 and metrical data kindly shared with me by Julie Hruby, I was able to compile a table showing the most distinct differences between examples of Shape 59 found in both rooms (Table 3).

In my opinion, the listed differences are substantial enough to speak of two different vessel-types or, at least, two variants of one type. Once again it is confirmed that the storage at Pylos was highly specialized.¹³ In addition, the general impression of examples from Room 60 is that of a better manufacture and, if one is to judge by two examples only, of a more standardized shape.¹⁴

In order to avoid further confusion, I would suggest calling examples of Shape 59 found in Room 60 - 59a, and those found in Room 68 - 59b. As

Table 3.	Differences	in morphology	/ between examp	oles of	Shape 59	found	in Room	68 and	l Room 60.
----------	-------------	---------------	-----------------	---------	----------	-------	---------	--------	------------

Feature	Room 68	Room 60		
Rim and neck	Splaying neck, lipless rounded rim	Neckless, thickened lip		
Handles	Thick in section	Thin in section		
Base	Simple flat base, slightly raised	Raised and splaying base		
Proportions	Large examples – rim diameter is comparable to medium-sized examples, while height is much bigger giving a more slender shape (height/rim diameter = ~1.4)	Large example – rim diameter increases with height resulting in a much different ratio of height/rim diameter = 1.11		
Additional features	None	Bosses/knobs between the handles, grooving of the larger example		

Source: Author's own compilation based on drawings and photographs from Blegen's publication and information kindly made available by J. Hruby.

⁸ Ibidem, 396, note 1.

⁹ Mycenae: K.A. WARDLE, A Group of Late Helladic IIIB1 Pottery from within the Citadel at Mycenae, BSA 64, 1969, 283, Fig. 8, No. 84; P.A. MOUNTJOY, Late Helladic IIIB1 Pottery Dating the Construction of the South House at Mycenae, BSA 71, 1976, 96, Fig. 10, No. 103; Zygouries: P.M. THOMAS, LH IIIB1 Pottery from Tsoungiza and Zygouries, Chapel Hill 1992, 328 ff.

¹⁰ Only three examples of Shape 59 were inventoried from Room 60, two of them belong to the small-sized type.

¹¹ BLEGEN and RAWSON, op. cit., Fig. 383.

¹² *Ibidem*, Figs. 340-342.

¹³ There are only five out of 66 examples of Shape 59 that were found in rooms other than 60 and 68 - Rooms 23, 97 and Exterior Propylon had one example each, Room 98 produced 2 examples of that shape.

¹⁴ It is all the more surprising since, for example, incense burners from the same Room 60 are of a very crude manufacture and differ much from each other.

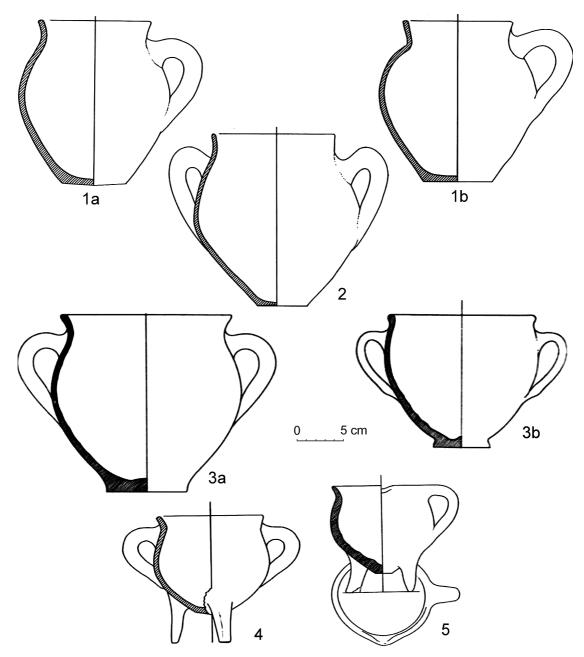


Fig. 2. Pylos cooking pots. 1a, b – Shape 48a; 2 – 48b; 3a – Shape 59 from Room 68, 3b – Shape 59 from Room 60; 4 – Shape 70; 5 – Shape 69

already mentioned, Shape 59 comes in three standard sizes. In Room 68 there are solely large- and medium-sized examples, whereas in Room 60 only large- and small-sized vessels. I propose a further subdivision of the two variants, 59a and 59b. This subdivision is shown in Table 4, together with the dimensions of the subtypes in the manner adopted in Blegen's publication to show that they are readily distinguishable from each other.

After having clarified the internal diversity of Shape 59, we can now turn to the discussion of subtypes 59b1 and 59b2 found in Room 68. Most of the type's description is to be found in the discussion above, particularly in Table 3. The average capacity of the medium-sized subtype (9 out of 10

medium-sized examples have been found in Room 68) is 3.35 litres, only half a litre more than the average capacity of Shape 48b. There are more general similarities between 59b1 and 48b, and the only considerable difference lies in the general proportions – 59b1 is more globular rather than slender and it is a wide-mouthed form. The latter feature makes access to its interior less restricted than in the case of Shape 48b and helps to reconstruct the possible use of 59b1. It seems to be quite suitable for cooking meals that requires a lot of stirring and/or thickening of the liquid constituent, like stews, sauces, or porridges. It is not possible to tell what kind of equipment was used for stirring the content. Since no appropriate ceramic object has been found

59a1 (Room 60) 59a2 59b1 (Room 68) 59b2 Subtype small-sized large-sized medium-sized large-sized Dimensions Max Min Max = MinMax Min Max Min 0.16 0.14 0.14 0.26 0.19 0.31 0.28 Height 0.16 0.24 0.20 0.17 0.21 0.19 Rim diameter 0.16 0.17 0.16 0.27 0.22 0.19 0.33 0.27 Max diameter Base diameter 0.06 0.06 0.10 0.09 0.07 0.12 0.10

Table 4. Dimensions of four singled-out subtypes of Shape 59.15

Source: Author's own compilation based on information kindly provided by J. Hruby.

at Pylos or any other Mycenaean palace (the ladle is much too large for it), this object must have been made in some organic material, possibly wood or even a large animal bone. Other practical issues concerning the use of 59b1 are similar to that of 48b.

The average capacity of the large-sized subtype (4 out of 6 were found in Room 68) is 10.48 litres, approximately four times as much as the average for 48b and more than three times as much as the average for 59b1. Since the capacity of 59b2 is considerably higher than that of the medium-sized subtype and the rim diameter is more or less unchanged (Table 4), the general proportions of the vessel are more slender and the mouth seems to be more restricted than in the case of other subtypes of Shape 59. Therefore, 59b2 is morphologically very close to Shape 48b.

As for possible use one should consult the section devoted to Shape 48b. However, it is the size that makes an important difference. Manoeuvring or carrying around such a big pot filled with warm or even boiling food must have caused serious difficulties. Nevertheless, slender proportions and a rather narrow base make tilting quite easy, enabling the content to be poured out into other vases. On the other hand, these pots must have been quite unstable, requiring much caution and stable, flat surface.

Brazier (Shape 67, Fig. 3:1)

This form consists of a shallow bowl with a rounded or flattened bottom and a thick handle that bends down slightly to support the vessel. At the handle attachment, the wall of the bowl is sharply bent inside, serving as a protection for the hand. There is a suspension-hole at the end of the handle and either two holes in the body on both sides of the handle or just one above the handle attachment.

It is generally accepted that this ceramic object was used for carrying glowing coals. ¹⁶ Other aspects

of its use, relating to the coals themselves, are more enigmatic.

The first question concerns the origin of the coals, i.e. the fireplaces. If the braziers were used within the palace, the closest fixed hearth is in the Great Megaron, Room 6, with highly restricted access, located quite far away from Room 67, where the braziers were stored. The hearth in Room 46 is even further away (see Fig. 1). Another possibility is that the coals originated not from a fixed structure but from an open fire made for a particular event. Alternatively, the braziers might have been used outside the palace building.

The most important issue concerning the coals is the purpose of their use. Their most obvious application is to warm up (or keep warm) a pot that was not intended to stand on a fixed hearth. Oneand two-handled tripods (Shapes 69 and 70), the vessels best suited for rough exterior surfaces (see discussion below), constitute an almost automatic association. In addition, the tripod cooking pots were stored in the same room as the braziers. Whether the coals were spread around and underneath individual vessels or a bigger heap of coals was formed and several vases were set on its border, may currently be only a matter of speculation. Careful observation of burning marks, if present, would help to answer this question. The closely matching number of braziers and both types of cooking tripods would suggest the first possibility, i.e. that coals were spread individually around single vessels. However, only the number of inventoried tripods is given.¹⁷ Thus even the rough estimates of the original number of tripods stored in Room 67 are not available.

The braziers are definitely too big in relation to the tripods to be placed between their legs. However, another possibility must be kept in mind – a small tripod could have been placed on the interior of a brazier. The usual two holes in the brazier bowl on each side of the handle support such an assumption – they would not make much sense if the coals were only carried from one place to another and they

 $^{^{15}}$ Number of examples used for calculations for each of the subtypes: 59a1 - 2; 59a2 - 1; 59b1 - 9; 59b2 - 3.

¹⁶ See, for example, final publication of Pylos, BLEGEN and RAWSON, *op. cit.*, 412.

¹⁷ HRUBY, op. cit., 147.

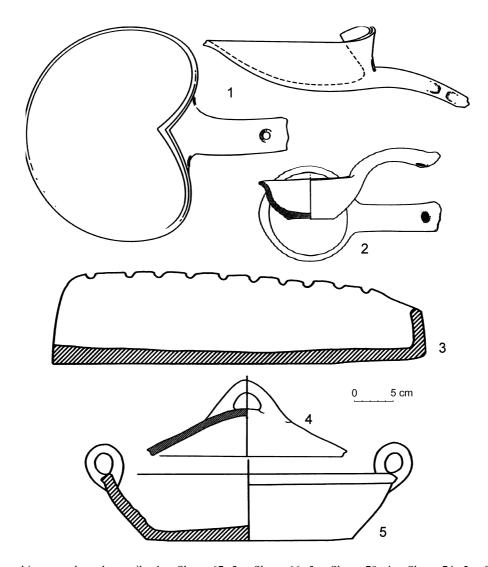


Fig. 3. Pylos coking vessels and utensils. 1 – Shape 67; 2 – Shape 66; 3 – Shape 79; 4 – Shape 74; 5 – Shape 78

increase the danger for the hand of carrying person. If the coals were to be burned on the brazier for a long time, the additional inflow of oxygen would come quite handy. The stability of such an arrangement represents a drawback of this possible cooking set.

Another use of the coals that could have been transported in the braziers is related to the pan, Shape 78, and will be discussed further below.

One- and two-handled cooking tripods (Shapes 69 and 70, Fig. 2:5 and 2:4)

Tripods 69 and 70 display many common features, hence it is sensible to discuss them together at first. They feature globular bodies, low splaying necks and very narrow flat bases. Given the general proportions (but not the dimensions) they are not dissimilar to 59b1, especially the two-handled tripod Shape 70. Relatively large and thick loop handle(s) are attached usually just below the rim, although some of the one-handled examples have their handle beginning at the rim. The legs are small, attached close to the base

at a 120° angle, with one leg underneath the handle (or one of the handles in the case of Shape 70). The legs raise the bottom of the pot by no more than 3 cm – this fact seems to have big consequences for the possible applications of these vessel-types.

Three feet attached to the lower body, especially spaced at equal distances, make a pot extremely stable, hence perfect for use in an open area, where the ground is not as flat as in interior spaces or at the edge of a hearth. Of course, tripod pots are universal cooking vessels that can be used both inside and outside, on hearths and over open fires. However, bases of Pylos Shapes 69 and 70 are set so close to the ground level that their use over open fire is quite improbable – the feet would not reach the ground through the material used as fuel, making the pot less stable. Even if it was placed on the edge of the fire, the lower body would touch coals not leaving any space for the fire to raise and operate, rendering cooking in such a way rather noneffective. Lack of appropriate lids, which would

accelerate boiling, further undermines their use as primary cooking utensils. If not proper cooking, what was done in these pots that were found in considerable quantities? The answer seems to be provided by two observations concerning: 1) the capacity of the Pylian tripods, and 2) the vessel-types stored together with them in Room 67.

The average capacity of neither one- nor two-handled version exceeds one litre, which is extremely little in comparison with other local cooking pots and especially given the fact that tripods usually tend to be of the same size or even larger than ordinary flat-based cooking pots.¹⁸ Moreover, it is reasonable to assume that pots were usually not filled up to the rim – the content of a single tripod cooking pot could therefore satisfy not more than one or two persons. Preparation of food in copious small tripods would be a curious time-, resource- and space-consuming activity, although not excluded if other than practical reasons were at play. What could be, however, quite a suitable function for such pots is warming/ keeping warm food that was already prepared in bigger vessels. Considerably larger pots are indeed present in Rooms 67–68 – four examples of subtype 59b2, visible in Blegen and Rawson on photo 342,19 feature capacity of approximately 10 litres each. Thus the content of one 59b2 is enough to fill-up between 10 and 15 tripod cooking pots, whereas the content of four inventoried examples is enough to fill all of the inventoried tripods from Room 67. For what happened later with the food distributed to small cooking tripods, I can see three possibilities. The food, which would be a ready meal, was eaten directly from the tripods. Alternatively, the food, possibly in a liquid form, would need some more heat processing (e.g. thickening of a sauce) in the small tripods and was then poured to eating vessels (like the shallow angular bowl, Shape 4, hereafter: SAB). The last possibility is that the content of the cooking tripods was only a part of the whole dish, like a dip that had to be kept warm, in which pieces of meat, prepared in another way (for example in a pan or on metal spits), were dipped by couple of persons gathered around the tripod.²⁰ This would be quite an interesting way of group food consumption, especially in terms of possible feasting activities taking place at or in the vicinity of the palace.

One-handled tripod (Shape 69). Apart from the characteristics mentioned so far, this vessel-type has

a spout located 90° clockwise from the handle. This particular feature (if it was indeed a pouring-spout) and its placement would imply that the vessel was designed to hold content in a liquid or half-liquid form, which was poured out towards a person using the pot. If this idea is true, the vessel was designed for self-service. However, a closer look at the relation of legs' arrangement to the placement of handle and spout causes some doubts to appear. It has already been said that the legs are set at equal distances and one of them is placed directly under the handle. This means that another leg is set at just 30° angle from the spout, a fact which clearly makes pouring out of such a vessel a tricky venture. The most practical solution in this case would be to place one leg underneath the handle (as in the case of Pylian tripods), another one at 180° angle, and the third one just opposite the spout (in a $90^{\circ}-90^{\circ}-180^{\circ}$ scheme). Such an arrangement would also make the tilting of such a pot much easier. The Cretan one-handled spouted cooking tripods have one of the legs below the handle, but the handle is set opposite the spout. The other two legs are set at an angle of about 100°.21 This could be treated as an optimal arrangement. What was the reason for this seemingly irrational arrangement in the case of Shape 69? Hruby's analysis²² of pots from pantries 18-22 has shown that the potter was probably both inexperienced and was working under time-pressure. This could be the case of, among others, one-handled tripods from Room 69 – the potter might have not been very concerned with or even not aware of the practicalities of the vessels' use, maybe because of the time-pressure set by palatial officials. Variations in size, proportions, form of lip or position of the handle of the tripods, noted already by Rawson,²³ also point towards a rather carelessly working potter. Another possibility one should consider is that the 'spout' had a purpose other than the standard one. First of all, spouts of these tripods are smaller and less functional for pouring than the spouts of the other five spouted vessel-types found at Pylos (Shapes 6-10). If the pot contained not only thin liquid but also some solid ingredients (pieces of meat, vegetables), the spout should have been bigger to be of any help. What could be the alternative function of the spout? It might have been placed there to facilitate the handling of the vessel. The pointed part of the rim would give extra support for the other hand when the pot

¹⁸ E. FRENCH, Mycenae: Agamemnon's Capital. The Site in its Setting, Gloucestershire 2002, 112, Fig. 54; I. MYLONAS-SHEAR, The Panagia Houses at Mycenae, Philadelphia 1987, Figs. 20, 21; Y. TZEDAKIS and H. MARTLEW (eds), Minoans and Mycenaeans. Flavours of Their Time, Athens 1999, 120–122.

¹⁹ BLEGEN and RAWSON, op. cit., Fig. 342.

²⁰ For this idea I am grateful to Justyna Ołtarzewska.

²¹ H. MARTLEW, Domestic Coarse Pottery in Bronze Age Crete, in: E.B. FRENCH and K.A. WARDLE (eds), Problems in Greek Prehistory. Papers Presented at the Centenary Conference of the British School of Archaeology at Athens, Manchester, April 1986, Bristol 1988, 424, Type E1.

²² HRUBY, op. cit., 192.

²³ BLEGEN and RAWSON, op. cit., 413.

was lifted. It would serve a similar function as a knob on vessel's surface. At first sight it would be more practical to have such a feature placed opposite the handle. However, if the tripod was occasionally set against open fire with the handle facing outside, the spout in such a location would get extremely hot, loosing its usefulness. A solution to this discussion might be provided by the average capacity of the measurable inventoried examples of Shape 69, which is only 0.69 litres. Even if filled up to the edge, such a pot would not be heavy and difficult to lift, in contrast to some other cooking pots with their capacity reaching 10 litres. Therefore the legs arrangement was plausibly determined only by the way the tripod was set against the fire, i.e. with its only handle facing out.

Two-handled tripod (Shape 70). There are three notable respects in which this tripod differs from the one-handled version (Shape 69). These are: 1) the number of handles (2 instead of 1), 2) lack of a spout, and 3) bigger capacity that on average amounts to 0.96 litres (ca. 40% more than the one-handled version, with nevertheless considerable variability). Although small in number, these differences point to an at least slightly different application. Two handles facilitate handling and, in particular, moving of such a pot. Maybe it held a content that constituted an addition to the 'main dish', distributed among many participants. One might assume that in such a case the main dish was kept warm in smaller onehandled tripods. The lack of a spout, the true application of which is not clear, can only suggest that liquid content was less probable than in the case of tripod 69.

Lid (Shape 74, Fig. 3:4)

This shape has a flattened conical profile with a single loop-handle placed on top. Only two examples have been inventoried – there is no information on whether fragments of any others were found in Room 67. In any case, the number of lids does not correspond to the number of any of the cooking pots found in Rooms 67–68,²⁴ nor does the lid's diameter²⁵ (it is too big even for the widest kraters 59b2), except for one single shape – the pan.

Pan (Shape 78, Fig. 3:5)

As far as the Pylian cooking pots are concerned, the pan represents a relatively large, yet quite shallow shape. The walls are thick and the bottom is slightly convex on the interior. Two vertical ring handles are attached opposite each other on top of sloping lip.

The morphology of the pan suggests that the underlying thought in its design and manufacture was to enable direct contact with the heated walls of the vessel for as much food as possible. In that case the pan would be a good device for frying meat or other foodstuffs, if the vessel was put into the fire. In such a case the handles would get extremely hot in contact with an open fire. However, with their narrow and round openings, the use of two sticks to take the pan out from the fire is not an improbable procedure.

If covered with a lid of appropriate dimensions, the pan would make a good baking device. It seems that the handles would be an obstacle for a tightly adhering cover. However, if the lid had a smaller diameter it could be put inside the pan, covering its bottom entirely (Fig. 3). In such a case it would be possible to remove the whole arrangement from the fire. In fact, a good candidate to serve as a cover has just been described – lid of Shape 74.26 The lid's handle is also placed accordingly - on its top and not on its sides, which would hinder the lifting of the lid. Moreover, there were almost matching numbers of both shapes found in Rooms 67–68. Lid of Shape 74 was also executed in similar coarse reddish fabric. All of these observations give a strong impression of a cooking set.

ROOM 60

Two-handled krater (Shape 59, Fig. 2:3b)

Two size-varieties of that shape were found in Room 60 – they were already described in detail above and termed 59a1 (small-sized) and 59a2 (large-sized). The only other difference between the two is the grooving below the rim and more elongated shape of the larger variety, 59a2. These two variants, however, differ significantly from examples of Shape 59 found in Room 68 (Table 3). Indeed, only small-sized kraters from Room 60 should be addressed as typical examples of FS 288.²⁷

²⁴ Thomas noted that in Zygouries the number of lids was considerably smaller than the number of corresponding cooking pots. His conclusion was that only a few cooking pots were used at the same time (THOMAS, *op. cit.*, 330).

²⁵ It cannot be excluded, however, that the diameter of the lids was so big as to fit all, even the biggest, cooking pots.

²⁶ The diameters of bottoms of two inventoried pans (26 and 28.2 cm) correspond very well to the diameters of two lids inventoried from Room 67 (26.6 and 28.9 cm). The only other shape that could have been covered with lid 74 is the pithoid jar Shape 54b (rim diameters between 21.7 and 30 cm). However, it features different distribution, is made of different fabric and sometimes bears decoration.

²⁷ As noted by Furumark, the diameter of FS 288 is greater than its height – this criterion is neither fulfilled by all (only 4 out of verifiable 8) of 59b1 examples, nor by any of the large size (59a2 and 59b2) pots. A. FURUMARK, *Mycenaean Pottery* III. *Plates*, P. ÅSTRÖM, R. HÄGG, and G. WALBERG (eds), Stockholm 1992, 159.

The average capacity of the smaller variant, 59a1, is only 1.58 litres. The way it was used should not be different from 59b1 (see the discussion above). The knob between the handles is of interest here, and it could be related to the handling of the vessel. However, it is neither clearly visible on the photos nor indicated on the drawing whether these knobs were solid or were rather kinds of pierced lugs through which a string could have been pulled. If so, it could be used to fasten a lid to transport the pot with full content (two handles would be indispensable). More hints on possible use of 59a1, which are, however, not form-related, are provided by Thomas's re-interpretation of the so called Zygouries Potter's Shop, where pots categorized as FS 288 were found in enormous quantities. This issue will be touched upon in the general discussion of Room 60 and its assemblage.

The larger version of FS 288 found in Room 60 has an average capacity of 10.5 litres, roughly six times more than the just discussed subtype 59a1. Its particular feature is the grooving between the handles that could have had a practical meaning – improving the grip for the hands. As for possible usage, nothing more as in the case of 59a1 can be said. Of course, the handling of such a big pot filled with content would have been troublesome and the pot itself must have been quite unstable.

Ladle (Shape 66, Fig. 3:2)

The ladle consists of a shallow bowl that is rounded or slightly angular. The bottom is flattened. The rim is said to be pinched out to form a pouring channel, 28 which is, however, neither clearly indicated in the provided profile drawing (Fig. 3:2), nor visible on photos. The handle is long, thick and bending up with a suspension-hole at the end. In contrast to the brazier, it is not clear how the handle is attached to the bowl. The handle is so heavy that it tips the vessel off its bottom. Nevertheless, if filled completely, the vessel could probably stand only on its bottom. It seems that such a possibility has been considered by the potter, otherwise a rounded bottom would be an alternative.

The average capacity of the ladle's bowl amounts to 0.27 litres²⁹ and seems to be quite standardized. It seems logical that such a shape could have been used to stir the content and to ladle it out. However, because of its diameter (12–13 cm) it could not be used together with e.g. Shape 59a1. It was suitable for 59a2 and other large shapes from Room 60, like the basins (Shape 2) or spouted bowls (Shape 10).

Interestingly, the latter were found in a similar quantity as the ladles. Given the capacity of Pylos Shapes 10 and 59a2, the ladle was used rather for stirring – ladling out even half of their content would require no less than 20 scoops.

Because of the coarser nature of the fabric of pots stored in Room 60,³⁰ many more vessel-types could have been described here in detail. However, I have decided to mention only two shapes, the ladle and two-handled krater, which can be more certainly connected with cooking.³¹

ROOMS 67-68 AND THEIR ASSEMBLAGE

In this section I would like to address two questions which are of primary importance to the issues dealt with in this article and which relate to the analysis of the whole assemblage of these two rooms (cf. Table 1). The first is related to the way different vessel-types were used – was it in combination with each other, forming a few sets or a large single cooking set? Or the vessels were used separately on different occasions? The second question is of a more general character – what can the assemblage of Rooms 67–68 tell us about cooking and its role in palatial activities?

Ad question 1.

It has already been stated that the vessel-storage at Pylos was highly organized, best exemplified in pantries 18–22. Also in the case of cooking utensils stored in Rooms 67-68 we are in all probability not dealing with a chance arrangement. The first good indications of such a 'conceptual storage' is the fact that virtually only cooking vessels were stored in these rooms and that no other room contained a considerable number of any of the vessel-types represented in the discussed entity. An important question is whether the storage was organized on a palace-scale only or whether also within the pantries (i.e. within Rooms 18-22 and 67-68) there was some kind of meaningful division of vessel-types. In the case of pantries 18-22 there are two different kinds of storage. On the one hand, there is a highly specialized storage in Room 19 (solely kylikes) and 21 (one-handled cups and shallow angular bowls). On the other hand, Rooms 18 and 20 contain wide

²⁸ BLEGEN and RAWSON, op. cit., 411.

²⁹ It is enough to fill most of the cups found at the palace of Pylos but it would not fill entirely the majority of bowl types.

³⁰ Regrettably, it is not clear from Blegen's publication whether there were certain variations in the coarse fabric 'typical of Room 60' that would allow to be more precise as to possible functions of the different vessel-types.

³¹ For the two-handled krater from Room 60, see L. BEN-DALL, Fit for a King? Hierarchy, Exclusion, Aspiration and Desire in the Social Structure of Mycenaean Banqueting, in: P. HALSTEAD and J.C. BARRETT (eds), Food, Cuisine and Society in Prehistoric Greece [Sheffield Studies in Aegean Archaeology 5], Sheffield 2004, 119ff.

selection of vessel-types appropriate for food and drink serving and consumption. Since Room 20 opens directly into the open-area, it has been interpreted as an 'emergency' storage to keep the whole assortment of vases at hand. 32

The situation in Rooms 67–68 is ambiguous in this respect. Several vessel-types were stored only in one of the two rooms. However, flat based cooking pots 48a and 48b were stored in both rooms, the majority in Room 68, where another type of flat-based cooking pot, Shape 59, was stored as well.

Such an organization of storage may reflect the way the cooking pots were used in the palace's operations. There are three, already enumerated, possibilities – 1) vessel-types were used separately on different occasions, 2) there were specialized 'sets' of cooking utensils used at particular occasions, 3) all of the vessels stored in Rooms 67–68 were used simultaneously to offer a variety of dishes to participants at especially big celebrations.

The first suggestion cannot be seriously discussed. It cannot be disproved that a single vessel-type was needed to prepare a particular kind of food on the daily basis. Much more interesting is the second suggestion. In order to discuss it, one has to identify possible cooking sets and analyse them in relation to the storage place of all their components. Possible cooking sets were already inferred in the discussion of single shapes. The most obvious set is the combination of tripod cooking pot(s) (either Shape 69, or 70, or both) with the brazier. These objects were also stored together in the same room. Another set - the pan with a lid (see the discussion of the pan, Shape 78) – is not as self-evident, yet there are many arguments in its favour. These objects, however, were stored in two different rooms. Undoubtedly, some of the flat-based cooking pots could also have been used together with coals distributed on braziers in order to warm up their contents in the open space. This might explain why some of the flat based jars (Shape 48) were stored in the same room as the braziers.

Some more sophisticated cooking sets could be reconstructed as well. In the discussion of the Pylian tripods I reached the conclusion that they were designed to keep the content warm, and not to serve as primary cooking vessels. Therefore the dish itself would be prepared in other vessel-type (s). As a good candidate, the large-sized two-handled krater 59b2 was selected. It holds more than 10 times as much content as the larger two-handled tripod 70. This, again (after the set pan + lid), would suggest a simultaneous use of vessels from both rooms.

The last suggestion put forward above was that all of the vessel-types were used simultaneously. Just as in the case of the first suggestion, it cannot be disproved. Moreover, there are some interesting observations in favour of such a possibility. These arguments already lean towards the second question posed at the beginning of that section (i.e. the role of cooking at Pylos):

- Hruby has convincingly argued that the Mycenaeans developed *haute cuisine*. One of its constituents is the variety of recipes for which specialized equipment was needed.³³ Several vessel-types found in Rooms 67–68 have served plausibly different functions constituting a truly specialized equipment it is hard to imagine that all the shapes were used to prepare ordinary porridge. If the variety of dishes was envisaged by the palace officials for a certain occasion, then all of the equipment stored in the pantries might have been in use. Such an occasion could have been a palace-sponsored feast.
- Some doubt has already been cast on an idea that vessels from different rooms were used separately. Moreover, in the discussion of Pylian tripods I suggested a kind of dish consumed by a few people gathered around a single tripod. For its preparation, several vessels would be required a large 59b2 to cook the sauce/dip, tripods and a brazier to keep it warm, and a pan with/without a lid to prepare the meat. Although highly speculative, this idea shows how several vases (in this case five or six out of eight types represented in Rooms 67–68) could be used in combination to prepare one dish.
- The enormous number of vases stored in pantries 18−22 (also the SABs, Shape 4, believed to be a primary eating vessel³⁴) suggests a large number of participants in events organized by the palace, plausibly feasts. If food was to be served, a large number of cooking utensils would be required maybe even more than what was stored in Rooms 67−68.

In short, I believe that the cooking equipment from Rooms 67–68 was used in all three suggested ways – single vessel-types on a daily basis, cooking sets to prepare some more sophisticated dishes for all kinds of occasions and, the most interesting situation, when all of the vases were in simultaneous use to prepare a large variety of dishes for a feast. As already hinted, there are doubts whether vessels stored in different rooms were indeed used separately. This would challenge an assumption that there was an organized storage within the pantry rooms (apart from keeping examples of one vessel-type together). However, I think there is a certain idea behind the storage of

³² BENDALL, op. cit., 117.

³³ HRUBY, op. cit., 135ff.

³⁴ I. TOURNAVITOU, Practical Use and Social Function: A Neglected Aspect of Mycenaean Pottery, BSA 87, 1992, 200.

vessels in Rooms 67 and 68. It seems that vessels from Room 67, in particular tripods and braziers, were designed to be used in an open space. Also some of the flat-based jars, Shape 48, could have been used outside. On the contrary, vessel-types from Room 68, mainly flat-based cooking pots, are more in place on a fixed hearth or internal fireplace, which provides a stable standing surface. Also the pans, due to their large dimensions, are more appropriate for hearths. Therefore, not the moment of use governed the division of Pylian cooking pots, but the setting of the food-preparation process.

Ad question 2.

In the previous section, three ways of using cooking pots from Rooms 67-68 were proposed. It remains to be settled which was the most probable primary way of use for the assemblage and in what kind of cultural context the pots were utilised. Given the fair amount of vases belonging to each represented vessel-type (except for pans and lids) and their variety, the way of use of the assemblage that would take full advantage of these assets would be a large gathering combined with food consumption. The obvious guess is a palace-sponsored feast, for which there is a plethora of evidence found in the palace of Pylos - Linear B records, ceramics, metal vessels and faunal remains (cf. discussion by Bendall, Halstead and Isaakidou, and Hruby³⁵). The use of that particular assemblage on a daily basis, for instance in order to feed the palace's staff, is possible but should be considered secondary to the just outlined possibility.

As far as feasting is concerned, combined use of vessels from both pantries has been suggested – 18–22 containing serving and tableware vessels and 67–68 containing cooking pots.³⁶ In light of the analysis presented above, I can only agree with such an assumption. The assemblage of Rooms 18–22 and the whole concept of feasting at Pylos has been carefully studied by Hruby. One of her conclusions was that the main feasting activities were conducted outside of the palace, in regional centres that were supplied both with foodstuffs and fine pottery, the latter stored in pantries 18–22.³⁷ What is the sig-

nificance of the assemblage from Rooms 67-68 in this respect? Interestingly, their ceramic assemblage suggests something to the contrary. None of the main vessel-types is easily stackable (as, for example, the SABs, Shape 4) allowing for easy transportation – tripods because of their legs, flat-based jars because of substantial vertical handles. They could possibly be tied together, yet the bundle would contain a small amount of vases and would be cumbersome to handle. Secondly, there is a considerable discrepancy between the capacity of the SABs (Shape 4) from pantries 18-22 (almost 700 litres) and that of all of the cooking pots from pantries 67–68 (some 350 litres 38). The difference is even greater if one takes into account that some of the cooking pots might have been used only in one of the preparation stages, after which the content was transferred to another cooking pot. Moreover, bowls of Shape 4 were probably not the only vessels designed for food consumption. Bendall suggests also one-handled cups, Shape 12, as good candidates.³⁹ Their total capacity exceeds 200 litres, which, together with SABs, gives ca. 900 litres. Closely corresponding number of examples of Shapes 4 and 12 stored together in Room 21 (1099 and 1024 respectively) suggests that feast participants might have used both of them together during the same occasion. If so, the average amount of food consumed per person could be very roughly estimated at 0.7 litres (0.51 and 0.19 of average capacity for Shape 4 and 12 respectively)

This incompatibility of capacities may be explained in two ways. The shallow angular bowls, as well as other pots stored in quantity in pantries 18-22, were intended to be used only once in their lifetime, while cooking pots would be used on several occasions as less personalized equipment. The tableware would be discarded or taken home by the participants after the feast. In such a case one would need many more vessels than if their multiple use was practised. How many more vessels were in demand for this reason (in contrast to their re-use) depended on the frequency of feasts and average number of participants. The cooking pots, on the contrary, would be replaced at their normal breakage rate - one would only have to store appropriately more vessels to compensate for this factor.

Another explanation acknowledges the results of Hruby's study, without rejecting the hypothesis that some feasting indeed took place in the palace itself.

the original number of tripods (Shapes 69 and 70) is unknown.

38 This is the minimum possible capacity – as already noted,

³⁵ BENDALL, op. cit.; P. HALSTEAD and V. ISAAKIDOU, Faunal Evidence for Feasting: Burnt Offerings from the Palace of Nestor at Pylos, in: HALSTEAD and BARRETT, op. cit.; HRUBY, op. cit.

³⁶ BENDALL, *op. cit.*, 119. Combination of Rooms 67–68 and Room 60, as suggested by Whitelaw, seems to be less probable. The capacity of SABs (primary eating vessels) from Room 60 amounts to a meagre 26 liters, more than 10 times less than the combined capacity of cooking pots stored in Rooms 67–68. T. WHITELAW, *Palatial Involvment in Ceramic Production and Consumption*, in: S. VOUTSAKI and J. KILLEN, *Economy and Politics in the Mycenaean Palace States*, Cambridge 2001, 57.

Even if there were three times (approximately the highest counted/inventoried ratio for Rooms 67-68) more than the inventoried examples, the overall capacity would increase by some 80 litres

³⁹ BENDALL, op. cit.

In short, this explanation assumes that part of the vessels stored in pantries 18-22 were sent by the palace into the province, possibly with the supply of foodstuffs, whereas the cooking pots were not – they were used only within the palace. Therefore only the cooking pots stored in the palace shed clear light on the dimensions of feasting that took place at Pylos. Dividing the overall capacity of cooking pots from Rooms 67-68 (350 litres) by the already estimated amount of food per person (0.7 litres) one arrives at ca. 500 food-consuming participants. More rationally⁴⁰ this number could be lowered to around 200-300 participants. If wine was consumed on the same occasion, the number of its consumers, based on the kylix/shallow angular bowl ratio, should be estimated at around 500-700 people.

It is interesting to see that the palace took an interest in providing plain serving and tableware vessels to the local centres. The pottery from pantries 18-22 was not of highest quality⁴¹ and the relative cost of pottery in the period of its mass-production could not have been high.⁴² Therefore, in purely economic terms, this gift from the palace could not have been considered a valuable one. What could have been the palace's intention then? It is possible that through the provision of hundreds of similar-looking plain vessels the palace put stress on values such as equality, sense of commonality and shared identity of participants. Definitely, provision of cooking pots would not be of considerable help in this respect. It could also be a way of avoiding manipulation from local elites - if they were to provide dining vessels, they could play with their quality, circulating elaborately painted examples among the more important members of society and thus stressing quite different values than it would be in the interest of the palace. If the vases were kept and taken home by the participants, the palace would archive one more goal - a physical keepsake of a feast organized and provisioned by the highest authority.

The hypothesis that food preparation and consumption on a large scale took place in the palace itself seems to be well grounded in the available evidence. We might assume that wine-drinking took place simultaneously. It is now worth speculating where such events (feasting) might have taken place. The location of both pantries quite clearly marks out the possible location – it would encompass open courts 88 and 63 plus pillared Rooms 64 and 65. Both

courts have a vast capacity to house a considerable amount of people.⁴³ Room 64 and especially Room 65 are smaller, with more restricted access, and are to be placed higher in architectural hierarchy. If the assumption that wine was consumed by more participants than the food proves correct, and if indeed food was valued higher, then the courts might be seen as primary wine-drinking areas and the mentioned rooms as places where also food was consumed by selected, more important participants. As to where the food was prepared, no satisfactory answer can be given. There are no fixed hearths reported by the excavator from the neighbouring rooms. The open area suitable for the use of tripods is, for instance, court 63 located at close distance both from pantries 67–68 and from Rooms 64 and 65. If the latter had an opening in the roof, tripods might have been used also there.

After having established that the assemblage of Rooms 67–68 could have been used to prepare food consumed at feasts and where these feasts might have taken place, it is the right moment to discuss the food itself and the role it possibly played in the feasting. This discussion will not take the form of a thorough analysis of Mycenaean cuisine – only observations that can be inferred from or are related to the cooking pots will be included here.⁴⁴

Considerable variety of cooking utensils stored in Rooms 67–68, both in terms of their form as well as of capacity, points to variety and also sophistication of dishes that were prepared.⁴⁵ Of course, very simple dishes might have been prepared in some vessel-types, yet such an impressive set of vessels was plausibly manufactured to allow for a greater choice of dishes. It is without doubt that such a variety was at demand by the palace administration, since it allows for a certain manipulation, much greater than wine does. Not only can different meals be prepared according to different recipes, but also similar dishes can be diversified by the use of rare spices, exclusive ingredients, different sorts of meat (e.g. red deer as opposed to cattle) or more valuable parts of a given animal or sea food, if it was held in high esteem. 46 Wine, in turn, can only be served either in diluted or undiluted form and with or without some extra ingredients (spices, honey, etc.). The fact that

⁴⁰ Some of the cooking pots were stored to compensate for the estimated breakage rate. In addition, it is conceivable that for the preparation of some of the dishes more than a single type of cooking pot was needed.

⁴¹ HRUBY, op. cit., 192-195.

⁴² P.M. THOMAS, A Deposit of Late Helladic IIIB1 Pottery from Tsoungiza, Hesperia 74, 2005, 539f.

 $^{^{43}}$ Whitelaw estimates the capacity of courts 63 and 88 to 500-800 individuals. WHITELAW, *op. cit.*, 58.

⁴⁴ A comprehensive discussion of Mycenaean cuisine, including literary sources, as well as botanical and faunal remains was presented by Julie Hruby in her dissertation.

⁴⁵ Compellingly, in the Linear B records there are no mentions of person(s) who could be equated with modern idea of cook or chef.

⁴⁶ In Homer, eating sea food is associated with poverty and starvation (F.R. RILEY, *The Role of the Traditional Mediterranean Diet in the Development of Minoan Crete: Archaeological, Nutritional, and Biochemical Evidence,* Oxford 1999, 62).

most of the primary cooking vessels found in Rooms 67–68 were of medium and not large capacity (the only exception are a few examples of the subtype 59b2) suggests that dishes were prepared in relatively small portions, suitable to satisfy only a couple of persons. Such conduct is in line with the idea that dishes have been frequently differentiated, even if the basic recipe was similar. If such a possibility was not expected and envisioned, the dishes would be prepared in huge cooking pots, especially if there was a need to feed tens or hundreds of participants.

A diversified menu definitely put more stress on the exclusive aspect of feasting, rather than the inclusive one. First of all, there was the difference between the participants that were allowed to consume food and these that were not. Then, within the 'consuming' participants, there could have been several divisions along the quality of food they were served. Nevertheless, this strongly exclusive aspect has been weakened by several factors. First, whatever food one consumed, there was a gathering of many people that created a sense of communality. Second, it seems that everybody consumed the meal from identical vessels – the SABs, Shape 4. Third, if the tripods were used in a way similar to what has been suggested above, i.e. shared by a small group of people, ties within such a group could have emerged (or be strengthened) during the act of consumption. There was therefore a constant interplay between in- and exclusion, with an emphasis on the latter (as far as the food is concerned).

At one point there is a considerable inconsistency between a part of the archaeological record and the assemblage of Rooms 67-68. Six deposits of burnt bones from the palace at Pylos have been recently studied.⁴⁷ The deposit found in Room 7 (the archive) comprised probably remains of a large animal sacrifice. It seems that the meat was filleted from the bones and meant to be consumed. The deposit included bones of at least 19 cattle and one red deer, 48 which would account for some two tons of meat (!), a truly impressive amount. One of the main questions is how this meat was prepared for consumption. It is peculiar that even if all of the vessels stored in Rooms 67–68 were used in such preparation, it would still be impossible to process these, or even considerably smaller, amounts of meat. Larger chunks of meat could have been baked/fried in pans, yet this vessel-type was found in small amounts. Socalled souvlaki trays, not found in Rooms 67-68, yet scattered in many places of the palace, 49 could

be of help. This form consists of a rectangular tray with three vertically rising sides and one of the shorter ends left open. Two long sides have 10 V-shaped notches on top, designed to hold spits in place above hot coals. The spits, judging from the width of the pan, would be ca. 35 cm long, and the amount of meat processed this way would not be very substantial. Moreover, it is not clear how many of these trays were found in the palace – the publication states only that fragments of several trays were found in various parts of the palace.⁵⁰ Similarly scattered distribution, with no complete example inventoried (fragments were reported from Rooms 71, 76, 77, 97, 102, 103 and 105), is attested for a kind of rounded grill with a punctuated interior of the plate. Although it was claimed to be appropriate for making waffles,⁵¹ it could very well have been suitable to grill meat, just as it is done on modern electric grills. This vessel-type is present at many contemporary settlements of different rank in the hierarchy - Mycenae, Midea, Tsoungiza.⁵² Flat-based cooking pots could also have been employed to cook the meat - it could be either simply boiled or, if chopped in cubes, added to stews. Still, it is quite obvious that the majority of meat from sacrifices must have been processed differently. It was either grilled directly over the fire on large, probably metal spits, or prepared in some other ways that are not easily detectable archaeologically. In such a case, meat would be distributed among the participants and, additionally, it would be dipped into or poured with a sauce kept warm in the tripods. Given the amount of meat available after the sacrifice evidenced by the deposit in Room 7, it is possible that all of the SABs would have been in use. However, so many participants could not fit even into the spacious courts of the Pylos palace. The problem of these large animal sacrifices and the feasting that followed is highly intriguing, but rather out of the scope of this article. Even if one forgets about these large deposits, it is still quite striking how little cooking equipment from Pylos seems to be designed for meat-preparation, especially in Rooms 67–68. The flat-based cooking pots and to some extent also the tripods match ordinary cooking pots found at lower-ranked settlements,⁵³ where one should not expect large amounts of meat in the daily diet.

⁴⁷ S.R. STOCKER and J.L. DAVIS, *Animal Sacrifice, Archives, and Feasting at the Palace of Nestor*, in: J. WRIGHT (ed.), *The Mycenaean Feast*, Hesperia 73, 2004, 181.

⁴⁸ HALSTEAD and ISAAKIDOU, op. cit., 147.

⁴⁹ BLEGEN and RAWSON, op. cit., 418.

⁵⁰ Ibidem, loc. cit.

⁵¹ *Ibidem*, 341.

<sup>Mycenae: FRENCH, op. cit., 112, Fig. 54; Midea: K. DE-MAKOPOULOU et al., Excavations in Midea 1995–1996, OpAth 22–23, 1997–1998, Fig. 44; Tsoungiza: THOMAS, A Deposit..., 567, Fig. 33, No. 1.
For example, see LH IIIB1 Tsoungiza (THOMAS, A Deposition of the company of the c</sup>

⁵³ For example, see LH IIIB1 Tsoungiza (THOMAS, A Deposit..., Figs 31f.) or Late Bronze Age Nichoria (W.A. MCDONALD and N.C. WILKIE (eds), Excavations at Nichoria in Southwest Greece. Volume II: The Bronze Age Occupation, Minneapolis 1992).

ROOM 60 AND ITS ASSEMBLAGE

It is possibly not a big exaggeration to call Room 60 the most intriguing one in the palace of Pylos, at least in terms of ceramic assemblage. No less than 11 vessel-types are unique to this room or show up elsewhere only in a very small number. The fabric, especially of the tableware vessels, does not correspond to the ordinary fine fabric of similar or even identical vessels found elsewhere – the fabric represented in Room 60 is coarser and of reddish colour. Unfortunately, no more details about the fabric are to be found in the publication (see note 30) and these could be enlightening for this kind of study.

So far two interpretations of the ceramic assemblage and its possible application have been proposed:

- Bendall, comparing the assemblages of the two pantries (18-22 and 67-68) with the vessels found in Room 60, reached a conclusion that the latter were also used in feasting activities. In contrast to the large pantries, Room 60 served feasts held in the vicinity of the palace, conducted either as an introduction to a much more prestigious event within the palace or attended by those that were not given the privilege of entering the palace.54
- Hruby, referring to the coarser fabric of the vessels and also their less time-consuming manufacture, presented a hypothesis that vessels stored in Room 60 were used to feed the palace's personnel on daily basis.55

Both interpretations successfully explain some peculiarities of the assemblage, yet fail to explain the room's equipment in its full complexity. Hruby only partially takes account of the presence of an astonishing number of diminutive kylikes and a few incense burners - indeed highly unusual in an ordinary context of daily nutrition. Very restricted access from Room 60 to the interior of the palace (two narrow doorways and a sharp turn) is a strong argument against her idea. Bendall convincingly explains these features, opting for a feasting assemblage (kylikes and incense burners) held outside of the palace (accessibility). But there are another three factors that cannot be explained with the use of her interpretation:

- Whereas the tableware (SABs, kylikes) from Room 60 finds exact counterparts in pantries 18-22, most of the other vessel-types are unique. It is difficult to believe that a lower-rank feasting event, conducted for people not allowed to enter or those who had not entered yet, would require such a diversified and indeed unique assembly of vases;
- While the serving/tableware vessels stored in Room 60 constitute ca. 9% of the quantities found

in pantries 18-22,56 the cooking pots constitute ca. 23% of the number of different cooking pots found in Rooms 67-68 and as much as 50% if the more meaningful capacity is to be considered.⁵⁷ It is rather doubtful that for the people feasting in front of the palace relatively more food prepared in cooking pots would be anticipated than for those banqueting in the palace's interior;

Bendall's discussion does not take into account the special character of krater Shape 59, found in a small number of Mycenaean settlements. 30 vessels found at Pylos are superseded only by a staggering number of 660 examples found in a local centre at Zygouries.

I would like to start the discussion of Room 60 with this particular vessel-type. It has been shown that Shape 59 found in that room differs substantially from other examples of that shape recovered from Room 68. Clearly, only small examples from Room 60 can be ascribed to FS 288, following Furumark's typology, and thus compared with the finds from Zygouries. An enormous number of that otherwise rare vessel form suggests that FS 288 from Zygouries must have fulfilled some special function. This impression was strengthened by the 'oddity' and peculiar combination of other vessels found in the so-called Potter's Shop, indicating a special function for the whole assemblage. It was convincingly argued by Thomas that the vases stored in Rooms 13 and 33 of the Potter's Shop complex were used for manufacture of perfumed oil.58

There are two important features of the pottery from Room 60 that constitute an important connection with the Potter's Shop:

- the presence of two-handled krater FS 288 in considerable quantity,
- an unusual ceramic assemblage containing many unique vessel-types, not only with respect to the palace at Pylos, but to the whole Mycenaean territory.

Therefore, it is worth considering the hypothesis that at least some of the vessel-types stored there could have been used in perfumed oil production.

The involvement of the palace at Pylos in perfumed oil industry has been already widely discussed in literature, mainly by Foster⁵⁹ and Shelmerdine,⁶⁰ who based their arguments on Linear B records and

⁵⁶ BENDALL, *op. cit.*, Pl. 6.4.

⁵⁷ The ratios of cooking pots would have been more in favour of Rooms 67-68 if the true number of tripods (Shapes 69 and 70) had been known. However, this would not change the capacity ratio in a substantial way, since their average capacity falls below

⁵⁸ THOMAS, *LH IIIB1 Pottery*..., 283–300.

⁵⁹ E.D.H. FOSTER, The Manufacture and Trade of Mycenaean Perfumed Oil, Ann Arbor 1975.

⁶⁰ C.W. SHELMERDINE, The Perfume Industry in Mycenaean Pylos, SIMA Pocket Book 34, Göteborg 1985.

⁵⁴ BENDALL, op. cit., 122.

⁵⁵ HRUBY, op. cit., 108.

some remains from the palace pointing to the storage of large amounts of oil. Shelmerdine has even suggested a possible location for the workshop in courts 42 and 47.61 Relatively little attention, however, has been devoted to the vessels that might have been involved in such a process. Both authors agreed that cooking tripods would be suitable for boiling oil. Moreover, in the face of the small capacities of Pylian tripods, Foster suggested that two-handled cooking pots (among them also two-handled krater Shape 59) could have been used for that purpose, too. Foster did note the parallel with Zygouries examples of FS 288 but did not go any further, 62 and Thomas's study and re-interpretation was still to be published.

As a starting point for his analysis, Thomas used the works of later Classical authors, Theophrastos and Dioscurides, who described the process of perfumed oil manufacture. For each of the three stages of manufacture Thomas tried to select the most appropriate vessels stored at the Zygouries Potter's Shop, carefully looking at their capacities. We shall now go through all three stages, look at the shapes from Zygouries and compare them with the vases stored in Room 60 in search for similar patterns.

1. Stypsis – boiling of stymmata (aromatics) in oil. Thomas selected two-handled kraters, FS 288, as a main vessel to be used in that stage. Examples of that shape were quite standardized, with an average capacity of 3 litres. Auxiliary vessels include lids (only four of which were found) that fit very well the local FS 288, and braziers for the distribution of coals.

At Pylos, Room 60, 31 examples of Shape 59 were counted (only three of them were inventoried). As already shown, they come in two size-varieties. The smaller one, 59a1, is morphologically the closest to examples of FS 288 from Zygouries. Unfortunately, it is not known how many of 31 counted pieces belonged to that particular subtype. Only two small-sized examples were inventoried (see note 10). The third and last one of the inventoried vessels belonging to the smallest version of form 59 was found in Room 23, just behind the Great Megaron. The find context provides another argument for association of subtype 59a1 with perfumed oil production – in Room 23 there were several pithoi, in which the final product was probably stored.⁶³

Even if most of the 31 examples from Room 60 belonged to the small-sized variety, their number would be much smaller than in the Potter's Shop. Smaller also is the capacity – 1.58 litres on average – exactly half of the capacity of Zygouries counter-

parts, which was in accordance with Classical recipes. One remark is indispensable at this stage and will remain valid throughout the whole discussion. One should not treat the Potter's Shop from Zygouries as a 'metre from Sevres' in terms of perfumed oil production. Divergences should be allowed, as they may be connected to a different local tradition of the industry and the peculiarity of the palatial setting.

Both braziers and appropriate lids are missing from the assemblage, yet if the stypsis took place at a fixed fireplace, they might not have been needed. A larger example of Shape 59 (59a2), almost seven times as capacious as the smaller subtype, could also have been used at this stage for preparation of bigger batches of oil with particular scent.

2. Steeping of aromatics in cold oil. For that stage a shallow basin called *louteridion* is needed. There were broad and shallow four-handled basins, FS 293, at Zygouries. Their capacity, 7–12 litres, was three to four times bigger than the capacity of the two-handled kraters. The constant increase of capacities of vessels used in subsequent stages of manufacture is very typical of the Potter's Shop, suggesting that several batches were combined when a certain step was finished.

Room 60 at Pylos contained 73 examples of the two-handled shallow basin, FS 293. Its average capacity amounts to 5.4 litres, which is three, four times more than the capacity of the krater 59a1. Therefore the evidence from Pylos is in line with the Potter's Shop. The only major inconsistency is that there were more examples of the shallow basin than those of the krater used in the previous stage.

3. Settling and separation of the organic material from the pure scented oil. Large four-handled kraters, FS 280, found at Zygouries were suggested as suitable for that purpose. Their respectful capacity (35-45 litres) is again three-four times bigger than the capacity of vessels used in the previous stage. Twohandled variants of FS 280, also of considerable size, were also found in the palace of Pylos, yet in small quantities and not in the discussed room. However, there are two vessel-types in Room 60 that seem to have been appropriate for that kind of task. Big, twohandled, bridge-spouted bowl (described as a 'milkbowl' - Shape 10), featuring 11.2 litres of average capacity (2.1 more than the basin No. 2), is the obvious candidate. The spout could prove very helpful in pouring out the contents, a crucial activity in that stage. 64 Another possibility is vessel-type 59a2 –

⁶¹ Ibidem, 58.

⁶² FOSTER, op. cit., 173f.

⁶³ SHELMERDINE, op. cit.

⁶⁴ Author's personal examination of vases displayed in the Chora museum revealed that the surface of these vases has been carefully burnished, which is unusual treatment for Pylian unpainted vases.

a larger version of the two-handled krater. Its capacity is comparable⁶⁵ with that of the bridge-spouted bowls. Although it lacks the spout, its diameter is big enough to enable the use of ladles and the shape is as slender and the base as narrow as it is needed to make the vessel tilt easy.

The result of these considerations is that appropriate vessel-types for all three stages of perfumed oil production are present in Room 60. Of course, it does not mean that they were used for that purpose. The comparison with Zygouries has been conducted mainly to show that the hypothesis of perfumed oil manufacture with the use of vessels from Room 60 cannot be disproved. To prove it beyond all doubt, a comprehensive programme of residue analysis would be needed.

At Zygouries, a few other shapes have been identified as possible auxiliary objects in the process (apart from already mentioned braziers and lids):

- ladles to stir and transfer the content,
- jugs and amphoras as containers for wine and honey (the latter was used to anoint the vessels and hands of the perfumer),
- 3-lugged jars for measuring or storing ingredients,
- 100 pierced and carinated saucers (classified as pierced lids, FS 334), made in groups of 5-10 vessels, possibly employed in stacks to squeeze oil out of flower petals.

At Pylos, Room 60, there are also vessel-types that can be interpreted that way. Ladles are obviously to be mentioned here; in the discussion above it was shown that they are more suitable for stirring than transferring the content. Interesting in this respect are 'cups with rod handle', Shape 16, which might have served also as a scooping device. However, only two examples of that type were recorded (all from Room 60). Jugs, Shape 41, could have been used as containers for honey. Intriguing are three types of spouted shallow bowls, all found in Room 60. They seem to be very appropriate when it comes to adding small amounts of liquid content - some precious ingredient for the perfumed oil might have been involved. They are executed in a coarser fabric, thus their content might have been warmed up as well. If stacked one in each other with handles placed opposite, they could have been even used to squeeze oil out of petals. The incense burners might have played a role in the production process, since scents were a central ingredient in it. If some of the flavouring ingredients were supposed to be heated or even partly burnt before being added, these objects would be indispensable.

After the presentation of the hypothesis, some of its weak points should be discussed as well:

- The first objection, that there is only a similarity of equipment between Pylos and Zygouries, has been already dismissed. One should not expect an exact correspondence between Pylian vessels and their functional counterparts. At Pylos, only two-handled kraters 59a1 and ladles 78 are more or less exactly paralleled at Zygouries.
- Some of the highly specialized vessels from the Potter's Shop are missing in Room 60, or their possible counterparts are not very convincing – lids (missing), pierced saucers (some of the spouted bowls might be used instead), yet again the same rule as in the previous point might be applied.
- There are other vessel-types like shallow angular bowls (Shape 4), shallow cups (Shape 5), miniature kylikes (Shape 26) and kylikes (Shape 30c) that are present in big quantities and cannot be explained in direct connection with industry. Especially the miniature kylikes, maybe to be associated with incense burners, point towards less pragmatic and more ritual interpretations.

It seems that the last point may be dismissed as well. At Zygouries, in adjacent Room 13, there were some ordinary shapes like kylikes, stored there possibly for the daily use of the workshop's personnel. The same use can be inferred for Pylian kylikes, bowls and cups. However, miniature kylikes and incense burners (if not used for perfumed-oil manufacture) cannot be explained in the same way. Nevertheless, quite often in prehistoric societies industrial activities have been considered to be ritually significant, connected with the interference of gods or the need of their support. The best, both geographically and chronologically close example is the copper industry on Cyprus. The associated god was depicted as standing on a copper ingot. If the same was true for the Mycenaean perfumed oil industry, then the presence of cult-related vessels is hardly

Although the objections can be dismissed within the hypothesis of perfumed-oil manufacture, there is still another possible explanation for the 'non-suitable' vessels. Ceramic objects stored in Room 60 could serve various activities that were conducted outside of the palace. One of such activities would be the manufacture of perfumed oil. The rest of the vases, including cups, kylikes, bowls, miniature kylikes and incense burners, would serve other purposes. If one is to name a single occasion during which all of these vessel-types could be used, feasting would be the first guess. Such an idea has been presented by Bendall, yet in relation to the whole assemblage of Room 60. There are some indications that allow us to narrow down the type of feasting these

⁶⁵ It falls between 8.3 and 12.8 litres, since we do not know which capacity listed by Blegen refers to the only inventoried example of subtype 59a2.

vessels might have served. The key vessel-type is the incense burner, which is found mainly in funerary contexts. Thus, apart from possible use in perfumedoil production, it is hard to imagine incense burners used in other context than in the funeral proceedings. The whole set of vases could therefore have been used for funeral feasts. It would explain the storage of these vases in Room 60 which had better communication with palace's exterior than its interior. Overrepresentation of miniature kylikes (Room 60 contained 82 out of a total of 163, two times more than pantries 18-22) should come as no surprise, if they were used to conduct libations at the grave. Moreover, it has been suggested that the context of use of scanted oil in Messenia was mainly mortuary to annoint the corpse or as an offering.⁶⁶ Storage in the same room of vases for two applications, conduct of funerary feasts and production of perfumedoil to be deposited with the dead, appears therefore even more justified and reasonable.

It is worth summarizing the discussion of Room 60 and its assemblage now, since their interpretation diverges from the main subject of this article, i.e. cooking and cooking pottery. There are, I believe, good grounds to accept that some of the vessels stored in Room 60 could have been used in primary activities of perfumed-oil manufacture. The rest of the vessels could have been employed in secondary activities – the feeding of the personnel working in the workshop or conducting some industry-related rituals. These vessels might have been also used in different, yet not unrelated, events that took place outside of the palace - funerary feast have been mentioned as a plausible occasion. The location of the workshop, where perfumed oil was produced with the help of the vases stored in Room 60, remains elusive. If it was not placed in some exterior room(s) of the palace, the workshop should not be located far away from the palace, its oil storerooms and Room 60 in particular.

Although the hypothesis seems to be acceptable, it cannot be proved correct without residue analysis. Nevertheless, because of the coarser fabric and the oddity of assemblage, some kind of industrial activity may be taken for granted. If not perfumed oil, perhaps some other kind of valuable liquid was manufactured.

CONCLUSIONS

Cooking pottery from the Greek Mainland has so far been a rather neglected part of ceramic assemblages. The analysis and interpretation of feasting evidence, recently quite a fashionable field of study, constitutes no exception to this rule. Out of six criteria for identification of ceramics involved in feasting activities put forward by Dabney, Halstead and Thomas, one, and still only partially, refers to the cooking pots stating that "cooking pots of various sorts should be prevalent, especially if meat was prepared in stews".⁶⁷

Contrary to what common sense would suggest, not the size of the cooking pots but their variety has been at value in the assemblages plausibly used in feasting activities.⁶⁸ This, in turn, implies that a wide array of dishes could have been prepared and served to the participants. Although so much has been written about wine-drinking and its role in feasting, it seems that consumption of food could have played a similar, if not more significant role. The enormous potential of the analysis of cooking pots lies in the fact that they offer almost the sole insight in this part of feasting activities. Moreover, it has been argued above that only cooking pots stored in Rooms 67-68 could shed some light on the actual dimension of feasting conducted at the very palace at Pylos, since at least part of the serving and tableware vessels were destined to supply events taking place in provincial centres. Careful analysis of cooking pots making up parts of ceramic assemblages connected to feasting from such settlements should set the Pylos cooking sets in a proper context. It is regrettable that no other Mycenaean palatial centre yielded a comparable assemblage, which could offer comparison on a similar palatial level.

It is still worth remembering that the study of cooking pots may prove enlightening not only in the case of feasting. It is very helpful in the interpretation of any kind of archaeological evidence. In the case of the palace at Pylos, this has been exemplified by the careful observation of the internal variety of the two-handled krater, Shape 59. The conclusions allowed the exclusion of Room 60 from the discussion of the role of cooking pottery and cooked food at Pylos and opened new perspectives for the interpretation of this room's extraordinary ceramic assemblage.

Instytut Archeologii i Etnologii PAN Al. Solidarności 105 PL – 00-140 Warszawa

SHELMERDINE, op. cit., 123-130; WHITELAW, op. cit., 60.
 M.K. DABNEY et al., Mycenaean Feasting on Tsoungiza at Ancient Nemea, in: WRIGHT (ed.), op. cit., 83.

⁶⁸ Larger cooking pots, made of bronze, could also have been used. However, together with other metal vases, they were involved plausibly in more exclusive events or, in the case of large-scale feasting, only to serve higher-ranked participants.