

MYCENAE AND TIRYNS: THE POTTERY OF THE SECOND HALF OF THE THIRTEENTH CENTURY BC – CONTEXTS AND DEFINITIONS¹

INTRODUCTION (BY E.B. FRENCH AND PH. STOCKHAMMER)

IN modern times, from the excavations by Schliemann to the present day, when Mycenae and Tiryns have been granted jointly the status of a World Heritage Site, the two sites have been linked. The relationship between them in the Bronze Age is, however, much less clear and has become more complex with subsequent research. Recent coordinated studies of the pottery at each site by those actually working on the material can offer a firm foundation for future work.

Schliemann was extremely interested in the pottery he found, compiling albums of the finds for each site (Hood 1960). After him, Furtwängler and Loeschcke (1879; 1886) published important stylistic accounts of the ceramic material known at that point. At the request of V. Stais, then Director of the National Museum in Athens, this was continued by Wace during the First World War (*BSA* 21, 1914–16, 187, Annual Report). Our work today, however, is based on the monumental study by A. Furumark (1941*a*; 1941*b*), undertaken to analyse the sherd material from Asine, which was transported in quantity back to Sweden for study. After 1955, French (E.B. French 1963) studied a series of deposits from Mycenae in order to date the figurines found in them. This work appeared to be supported by the copious and high quality material from the West Wall Deposit at Tiryns (known as the Ephichosis: Verdelsis, French, and French 1965). Unfortunately the final, more detailed publication (Voigtländer 2003) throws doubt on the depositional history of the deposit. Thus this material must be used with great caution until we know the results of a total reassessment of the deposit now in progress by E.B. French and W. Gauss.

To the groups used originally by French, three groups of material have been added from the Citadel House Area excavations (Mountjoy 1976; Wardle 1969; 1973). Since then, study of the site as a whole has continued but the complex stratigraphy and the many important finds have required many years of work. During this period provisional results have been

¹ Our thanks are due to Ken Wardle for making us write this justification of our terminology; to Joseph Maran for his support throughout; to Kim Shelton, Jacke Phillips, Sofia Spyropoulou, and Nikos Katsoulieris for last minute checking and drawing in the Mycenae Museum; and Martina Riedl for her most useful assistance in Tiryns and Athens. Stockhammer's research at the University of Heidelberg is funded under the initiative 'Cluster of Excellence – Asia and Europe in a global context'.

The publication series of the Helleno-British Excavations at Mycenae 1959–1969 '*Well Built Mycenae*', edited by W.D. Tylour, E.B. French, and K.A. Wardle, is listed under the abbreviation WBM. The fascicules relevant to this article are as follows:

WBM 1 = Tylour, W.D. 1981. *The Excavations*

(Warminster); WBM 9 = Tylour, W.D., French, E.B. and Wardle, K.A. in preparation. *The South House and Annex* (Oxford); WBM 10 = Moore, A.D. and Tylour, W.D. 1999. *The Temple Complex* (Oxford); WBM 11 = Moore, A.D. and Tylour, W.D. forthcoming. *The Room with the Fresco Complex* (Oxford); WBM 12 = Andrew, R.A. under study. *The Megaron Complex* (Oxford); WBM 13 = French, E.B. and Tylour, W.D. 2007. *The Service Areas of the Cult Centre* (Oxford); WBM 16/17 = French, E.B. forthcoming. *The Post-Palatial Levels* (Oxford); WBM 21 = Crowel, J.H. 1991. *The Mycenaean Pictorial Pottery* (Oxford); WBM 34.1 = French, E.B., Hoffmann, S.M.A., Jones, R.E., Robinson, V.J. and Tomlinson, J.E. forthcoming. '*Technical reports: the Results of Neutron Activation Analysis of Mycenaean Pottery* (Oxford).

made available to colleagues but these have on occasion been misunderstood (Iakovides 1986, 2003; E.B. French unpublished, 1987).

At Tiryns studies of the Mycenaean pottery, although of considerable interest to Müller and well summarized by E. Slenczka in Jantzen 1975, took second place to the architecture and to studies of other periods. The first systematic work on the Mycenaean painted wares was undertaken by Podzuweit in the context of Kilian's excavations on the site from 1976 to 1985. In several preliminary reports and his *Habilitationsschrift* (upon which Podzuweit 2007 is based) he based his argument on the sherd material from the stratified settlement layers in the Unterburg and the North-Western Lower Town.² The sudden deaths of both Kilian and Podzuweit, within a short period of time, brought to an end the intense period of research initiated by the former. Since 1994, however, work at Tiryns by the German Archaeological Institute has been resumed under the direction of Joseph Maran of Heidelberg University. He has supported the publication of work already started and new work on the Mycenaean pottery from the North-Eastern and North-Western Lower Town (Stockhammer 2008). In addition, he has encouraged work on an important pottery assemblage from a recent excavation of the Fourth Ephorate of the Greek Archaeological Service in the area of the Western Staircase (Kardamaki in progress), in cooperation with Alkistis Papadimitriou.

Archaeologists at Mycenae and Tiryns have been in close contact throughout recent excavation and study, although the two sites are by no means identical in their pottery fashions. With completion of the final study of all but one area of the Citadel House Area (WBM 1, 9, 10, 11, 13, 16/17; only WBM 12, the Megaron Complex, remains unfinished) and the pottery of the North-Eastern Lower Town in Tiryns (Stockhammer 2008) and the ongoing re-evaluation of the pottery from the North-Western Lower Town and the Unterburg, it became possible to attempt a stratigraphically based historical reconstruction for both sites: unfortunately this was pre-empted by a well thought-out but publication-based study (Vitale 2006), which has the potential to cause considerable confusion.

In this paper, after an outline of the methodological approach used, we describe the actual methods of excavation and recording used at each site and how these have affected post-excavation study and analysis. We then put forward in detail the evidence afforded by the pottery from Mycenae and Tiryns with a suggested definitive terminology for the second half of the thirteenth century BC, the later stages of the LH III B period in the Argolid. No suggestion is made that these specific characteristics have chronological relevance beyond the Argolid, although it may be interesting to note their presence/absence in other regions. The features are presented in tabular form in TABLE 1.

METHODOLOGICAL BACKGROUND (BY E.B. FRENCH AND PH. STOCKHAMMER)

The principles of the seriation of prehistoric pottery styles on the basis of the stratigraphic sequences at one or more sites have been understood in the Aegean, at least, since the work of Mackenzie at Phylakopi in the late nineteenth century (Momigliano 1999, 23–5) and the suggestion that the Aegean could be linked chronologically to other regions on the basis of

² The long catalogue contained in Podzuweit's *Habilitationsschrift* has not been included in Podzuweit 2007.

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TABLE 1. Features of LH III B2 pottery from Mycenae and Tiryns.

LH III B2 Early (FIGS. 21–2)

<i>Diagnostic features</i>		<i>Mycenae</i>	<i>Tiryns</i>
FS 64	Collar necked jar: small	FIG. 21. 1	FIG. 21. 2
FS 284	Deep bowl: Rosette DB (i.e. with dotted rim)	FIG. 21. 3	FIG. 21. 4
	Deep bowl: type B	FIG. 21. 5	FIG. 21. 6
FS 296	Shallow bowl/Plate: white on the interior bands		FIG. 21. 7
<i>Problematic features</i>		<i>Mycenae</i>	<i>Tiryns</i>
FS 215	Deep cup: linear in & out	FIG. 22. 1	
	Deep cup: dotted rim	FIG. 22. 3	
	Deep cup: mono in & unpainted out		FIG. 22. 2
FS 284	Deep bowl: type A/B		FIG. 22. 4
	Deep bowl: linear in & out		FIG. 22. 5

LH III B2 Late (FIGS. 23–4)

<i>Diagnostic features</i>		<i>Mycenae</i>	<i>Tiryns</i>
FS 69/	Large closed vessels:		
106/128	slightly hollowed lip, linear	FIG. 23. 1	FIG. 23. 2
FS 215	Deep cup: dotted rim	FIG. 23. 3	Voigtländer 2003, 80 pl. 55, 117 TA 6
	Deep cup: Mono in, medium rim band = medium band cup		FIG. 23. 5
	Deep cup: linear in & out	FIG. 23. 4	
FS 267	Carinated kylix: linear or partially monochrome	FIG. 23. 6	FIG. 23. 7
FS 274	Conical kylix: dotted rim	FIG. 24. 6	
FS 284	Deep bowl: mono in, medium rim band (0.5>2.4) & no pattern outside		FIG. 24. 2
	Deep bowl: type A/B		FIG. 24. 3
	Deep bowl: stemmed bowl banding out, mono or linear in	FIG. 2. 2	FIG. 24. 5
	Deep bowl: mono in with reserved circle at base		FIG. 24. 4
	Deep bowl: sinuous profile	FIG. 24. 1	FIG. 13. 2
	Deep bowl: linear Rosette DB (i.e. with linear banding)		FIG. 24. 7
FS 295B	Shallow bowl: rounded		FIG. 24. 8
<i>Problematic features</i>		<i>Mycenae</i>	<i>Tiryns</i>
FS 215	Deep cup: stemmed bowl banding outside		FIG. 19. 9

the pottery was put forward by Petrie in 1890 (Phillips 2006). However, the underlying difficulties of definition and interpretation have often been less well understood.

The main difficulty lies in ascertaining the deposition history of what are usually called ‘deposits’. A deposit can result from an event or from a process. An event such as an earthquake may leave pots and other artefacts more or less *in situ*, perhaps on a floor. These would have been ‘in use’ (of one kind or another) at a particular moment in time although that does not mean that they were all manufactured at the same time. Many items, for

example in palaces or shrines or even in general storage, may be 'antiques' and there may be nothing that is actually contemporary with the event causing the withdrawal from use. The problem with these groups is that the range of pottery of each is restricted by the functional context and is thus unlikely to be widely representative. Mountjoy (1993, 119–28) devotes a most useful chapter to this background of interpretation, although her site summaries are now largely out of date.

Deposits deriving from a process, what we might term cumulative deposits, will consist mainly of sherds; such pieces as may have been partially mended or restored on paper are not truly 'whole pots'. The material is likely to have originated in rubbish (discarded material) and will comprise a high proportion of such pots as break easily or are in constant use. The date range of such material may be wide with a high proportion from earlier periods of heavy occupation. Some fills may derive mainly from a single source, but others may well have been moved in a variety of processes: through human agency to make mudbrick or a roof, to serve as fill or ballast in a foundation terrace, or by chance, washed down a slope by rain, or falling with the collapse of a wall or other retaining feature (Renfrew 1985; Tzounou-Herbst 2002).

The problems of identifying the accumulation process of a cumulative deposit and thus assessing its potential as a resource have led some scholars (D.H. French forthcoming) to give up the use of such evidence wherever possible. Ethnoarchaeology, however, can offer considerable assistance. Particularly useful is the work of Blum (2003) and Dittmore (1983). The former analyses the reuse of sherd material in construction, sherd paving, drainage channels etc. by observing recent activity of using and abandoning houses in the Turkish village Işıklar. The latter excavated a ruined village house in the village of Zemzemiye in Turkey before investigating its known history. Such studies may also help in understanding the construction processes variously in use, particularly the use of terracing on steep slopes, involving both the removal of some levels and the construction of others.

SCIENTIFIC BACKGROUND (By E.B. FRENCH AND PH. STOCKHAMMER)

The fact that two sites are geographically close does not mean, *per se*, that their pottery was produced from the same clay sources or produced in the same workshops. Visually the material found at Mycenae and at Tiryns is very similar, as has been apparent to all from Schliemann onwards. French, however, was both surprised and dismayed to note that the material from the copious Epichosis deposit at Tiryns was tactilely superior to material with which she was familiar from Mycenae. The pottery from the area of the Ivory Houses at Mycenae (excavated and studied between 1950 and 1958) was of very good quality itself but did not have quite the excellent surface of much of the Tiryns group. As the Epichosis probably originates from the actual Palace area of the site, the difference may be the result of this factor but it may be a characteristic of a distinct workshop.

The application of physico-chemical analyses to the provenancing of pottery was started for the Aegean by Hector Catling and the Oxford Laboratory using Optical Emission Spectroscopy and was followed by Neutron Activation Analysis (NAA) of these sherds by G. Harbottle (summarized Jones 1984; 1986). More extensive testing of Mycenaean pottery by NAA was undertaken in 1970 by Asaro and Perlman under the aegis of the Swedish Institute in Athens (Asaro and Perlmann 1973). Samples from both Mycenae (84) and Tiryns (43), as well as other sites, were collected. The former were chosen by a student of the British School

(without supervision from anyone excavating on the site), the latter by Voigtländer from the Epichosis material on which he was working. The results were later entered on computer and statistically analysed at Manchester. More recently Hans Mommsen (Bonn University) has run these computerized data with those from his own programme of testing (see WBM 34 pl. 1 forthcoming for full references and discussion). Further work in Manchester brought the total sample from Mycenae to just over 300 in several projects, including a detailed comparative study of the fabrics found (E.B. French *et al.* 1984). As part of this fabric study, a series of samples for petrological examination were taken by John Riley in consultation with the Mycenae excavators for a project under David Peacock at Southampton University. Unfortunately funding for this project was withdrawn before its completion and publication.

In Tiryns, many more sherds were sampled for NAA in the context of the project 'Untersuchungen zur Keramikproduktion und -distribution bronzzeitlicher Siedlungen Griechenlands und der Ägäis mit Hilfe der Neutronenaktivierungsanalyse' under the direction of Joseph Maran and Hans Mommsen. The project was financed from 1993 to 1997 under the 'Neue Technologien in den Geisteswissenschaften' programme of the German Federal Ministry of Education and Research. Between 1995 and 1997, samples of 2500 vessels from different parts of Greece were taken, of which 1500 have been analysed so far (Maran, Hein, Ittameier and Mommsen 1997*a*; 1997*b*; Mommsen and Maran 2000/1; Maran and Mommsen 2008).

The important result of these projects, for the purposes of this paper, is that despite differences in statistical method between the Manchester and Bonn groups working in NAA, those samples for Mycenae and Tiryns, which are dated stylistically between LH III A2 and LH III C, are distinctly separate. The Tiryns group can be assigned geographically to that region thanks to kiln wasters found on the Unterburg, and may to a certain extent derive from the kiln found in horizon 19a (Kilian 1981, 165–6; Mommsen *et al.* 1989). Although this kiln was very short-lived, it probably indicates at least one clay source for the site. Unfortunately no Bronze Age kiln is known from Mycenae and attempts to link samples from the clay sources (at Longaki and Plesia) to samples that have been fired have, as yet, not been successful. Samples of earlier Mycenaean pottery (LH II–LH III A1) present a quite different picture but it is not relevant to this study.

A division of power in the Argolid, dividing Mycenae and the area towards Corinth from Argos and Tiryns to the south, is, of course, reflected in Homer (*Il.* ii. 559–77). This is reflected also in the Bronze Age road system as far as it has been preserved (E.B. French 2002, fig. 3). Whether this division is purely economic or reflects two separate administrative units within the Mycenaean kingdom of the Argolid must be considered in any historical hypothesis for the end of the Palatial period.

THE CITADEL HOUSE AREA AT MYCENAE 1953–69 (BY E.B. FRENCH)

The Citadel House Area was the last completely unexcavated area within the Citadel at Mycenae. Wace had long wished to work here, fascinated by the two doorways, leading to the south section of the South House, that were clearly visible in the southern baulk of the area (Wace 1949, pl. 85 *a*). The site measured some 23 m N–S and 31 m E–W with a depth of deposit from 3 m to over 7 m. It lay on a steep slope, the base of the Citadel wall to the west being some 13.5 m below the top of the Hellenistic Terrace Wall to the east. It is this steep

slope and the terracing used in building on it that have caused much of the difficulty with final planning and interpretation.

The history of the excavation with relevant plans has been given by Taylour (WBM 1). From the start each basket of pottery was given a unique number. This number has been retained in all excavation records and publications referring to what is termed a 'unit' of excavation. From 1962 the site was divided on a grid system but given the depth of deposit and the height of surviving walls, much work was done by rooms. The excavation team had a wide variety of archaeological training and the systems that were adopted, often in response to practical issues, were likewise varied. We knew from the start that we were seeking to clarify the history of the site as known from the work of the 1920s, and to find answers to questions arising from previous excavations.

TABLE 2 shows the available Mycenae Archive (all of which is numbered and recorded in a card index) and its interrelations. The contexts or phasing were determined by a process of correlating the various sources of evidence available. Some were self-evident; others required deduction, possibly subjective. If some were uncertain before restudy, this was noted and many have since been reassigned once detailed restudy has taken place (e.g. the revised list of the registered pictorial pottery of WBM 21 now issued on the CD).

The availability of computers about half way into the study seasons brought two new possibilities: the Small Finds indexes were entered onto computer through a Manpower Services Project at the University of Birmingham, and the contexts were assigned numerical designations so that lists of units could be set out as spreadsheets. These designations have been based, as far as possible, on the identification of the original source and subsequent depositional history of the material in each unit. In this way the chronological parameters of each unit can be assessed and the information accurately used in reconstructing the history of the site (TABLE 3). The details of this system and the designations are given in each fascicule of WBM.

THE LOWER CITADEL AND LOWER CITY OF TIRYNS 1876–2003 (BY PH. STOCKHAMMER)

THE EXCAVATION

While starting his excavation on the Oberburg (Upper Citadel), Heinrich Schliemann also excavated preliminary trenches on the Unterburg (Lower Citadel) in 1876. This was followed by further activities in the early twentieth century in the Unterburg and the Lower City (Unterstadt) under the direction of the German Archaeological Institute. However, it was the discovery of the 'syringes' (underground passages to a water supply) in 1962 by the Anastylis Service and their subsequent excavation by Nicolas Verdelis (Ephor of the Argolid) that resulted in the first large-scale excavation in the Lower Citadel. After the death of Verdelis, the excavation in the Lower Citadel was taken over in 1967 by the German Archaeological Institute under the direction of Ulf Jantzen.

It was the series of large-scale excavations in the North-Western Lower Town and in the Lower and Upper Citadel from 1976 to 1985 under the direction of Klaus Kilian that produced the richest evidence and finds of the Palatial and the Post-Palatial period in Tiryns. But after Kilian's sudden death in 1992, the investigation of Tiryns came to an abrupt end.

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TABLE 2. Mycenae: The Excavation Archive

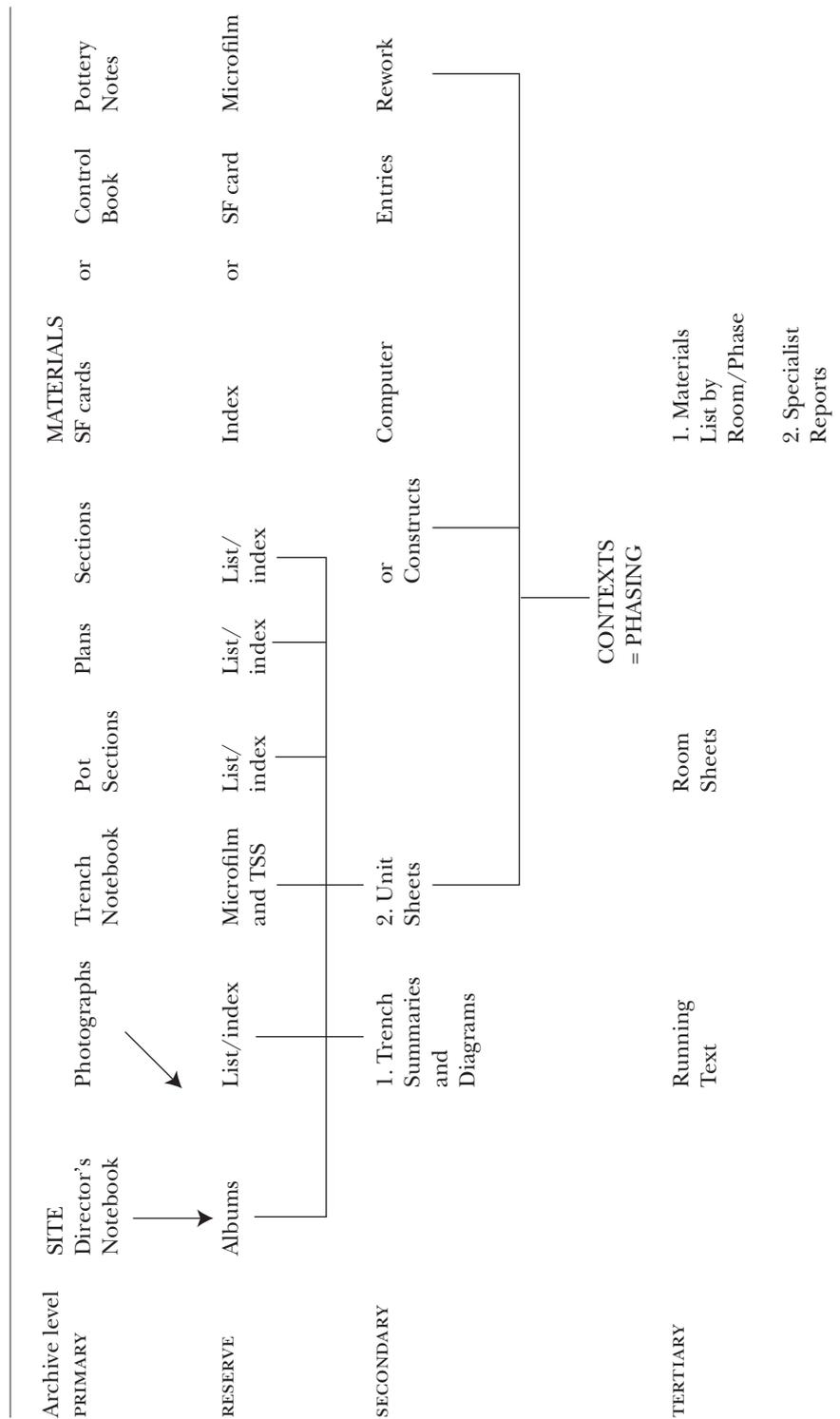


TABLE 3. Phases in Citadel House Area at Mycenae.

Pottery phase	Architectural phase	Phase designation	Event	Description
LH III B1	VI B	0660	Construction	South House followed by South House Annex Temple Complex, Room with the Fresco Complex, Service Areas
LH III B Mid = LH III B2 Early	VII	0720 0731	Alterations Earthquake	Rooms xxiv, 32, and 38 added Destruction level with pottery on floors
LHIII B2 Early LH III B2 Late	VIII	0805 0828 0831	Infill and repairs Refuse Earthquake	Deliberate infill over pottery etc Pisé repairs, new floors Causeway deposit Burnt destruction all over site, some pottery on floors
LH III C Early 1	IX	0918 0910 0931	Terracing Construction Earthquake	New terraces built over destroyed buildings using the destruction level pottery as sherdage in the fill West and South complexes built Destruction level with pottery on floors

Since 1997 fieldwork has resumed under the direction of Joseph Maran in several areas of the acropolis and Lower Town (1997–8 Upper Citadel, 2000–3 Lower Citadel, 2006–8 Western Lower Town) and in cooperation with Alkistis Papadimitriou in 1999–2000 in the North-Eastern Lower Town. A detailed history of the excavation of the Lower Citadel is given by Tobias Mühlénbruch (2005).

An excavation grid of 10 by 10 m squares was introduced in Tiryns in 1971, laid out over the whole settlement. These large squares ('Großquadrat') were numbered with arabic numerals from north to south and roman numerals from west to east, so that every large square is easily identified by the combination of a roman and an arabic numeral. Each large square was further divided into 100 small squares of 1 × 1 m, starting with no. 1 in the north-west corner of the large square and ending with square 100 in the south-east corner. The excavation took place by Abhübe or spits of approximately 10 cm unrelated to the stratigraphy, unless floors or other surfaces were met. These spits were numbered with roman numerals, from 'I' at the top downwards. Special features were excavated separately and all small finds measured three dimensionally in their exact position. Kilian also added the designation 'R' to all find contexts inside a room, not just the floor level. Using his interpretation of both the stratigraphic and architectural evidence Kilian was able to amalgamate the different Abhübe and Oberflächen (surfaces) into horizons (TABLE 4; cf. Kilian 1988a, 132 fig. 27 = Kilian 1988b, 120 fig. 2; Mühlénbruch 2005), i.e. Nutzungsphasen (phases of settlement activity) based mainly on Laufflächen (trodden surfaces). Where it was not possible to trace such surfaces, e.g. in courtyards, Kilian sometimes refrained from attributing Abhübe to certain horizons. The dating of the different horizons was done by Kilian on the basis of the pottery found *in situ*, i.e.

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TABLE 4. Architectural horizons at Tiryns.

Pottery phase	Architectural phase	Architectural horizon	Major activity	Description
LH III B2 Early	SH III B Mitte	16a0	Construction	Large building complex with corridor extending over two terraces: Rooms 190, 214, 215, 216, 211 (Corridor), 209, 210, 207, 208
		16a1–a6	Repair	Repair of the floors at least once, in places twice; Restoration on two occasions of the older Citadel Wall (built in SH III B Früh) constructed of rubble with a mudbrick superstructure.
LH III B2 Late	SH III B Entwicket	Event	Earthquake Destruction	Destruction of the older Citadel Wall and the building complex probably by an earthquake
		16a7	Destruction Layer	Destruction layer
		17a0	Levelling and Construction	Levelling of the remains of the older buildings; a short stretch of the lower structure of the Citadel Wall remains standing in LXI 42–4; Extensive building activity in the Lower Citadel: Erection of the Cyclopean wall with the casemates and the two Synges; Terracing of the Lower Citadel by building retaining walls; Layout of a path network oriented north-south; Erection of the best known buildings of LH III B2, e.g. building complexes I–VIII–VII, building VI together with the ‘Zwinger’ (a court or more technically a ‘bailey’), building X, building XIV in front of Kw (casemate) 14 with the well
		17a1–3	Repair	Partial renewal of floors (Hor. 17a3).
LH III C Early 1	SH III C Früh	Event	Earthquake Destruction	The buildings suffer slight damage, probably caused by a small earthquake
		17a4–5	Repair and Construction	Repair of the damaged buildings; most rooms are given a new floor. The well inside Kw 14 is filled. Major building activities on the Citadel Wall: blocking of most of the casemates (exceptions: Ko 4, Kw 9–11, Kw 14). First major building activity in the northern most part of the Lower Citadel: construction of the Northern gate and of buildings XI and XV
		Event	Earthquake Destruction	Destruction of the buildings of the Palatial period by a heavy earthquake; all buildings are affected
		18	Destruction Layer	Destruction layer
		19a0-a1	Repair and Construction	Provisional inhabitation of the ruins before systematic rebuilding; only small remains preserved: R 10a, R 119, potter’s kiln, Kw 14

largely restorable pots, following the chronological systems worked out by Christian Podzuweit and by Guntram Schönfeld. In order to differentiate clearly between Kilian's architectural horizons and our terminology based on the development of the pottery, we use Kilian's German terminology for the designation of the architectural horizons (SH III B Früh, Mitte, Entwickelt, Ende) and the English for the designation of the pottery phases (LH III B1, B2 Early, B2 Late, C Early 1, etc.).

Because of the terrace layout of the Unterburg, the correlation of the Laufflächen from different areas was difficult. Where possible, this difficulty was overcome by connecting adjacent areas with the help of the long stratigraphic sections across the whole Unterburg. In some cases Kilian achieved the correlation solely on the basis of the pottery evidence, but making this explicit in his documentation. The fact that during the Palatial period the Unterburg was hit by three major destruction events and another event that caused minor damage has provided a sufficiently secure framework for understanding the history of the site and the correlation of the stratigraphic layers (cf. Kilian 1988*b*, 121 fig. 3, and confirmed by Damm-Meinhardt's work). The first destruction marks the end of SH III B Früh (horizon 15a3). The second at the end of SH III B Mitte (horizon 16a7) led to the construction of the Cyclopean wall around the Unterburg and a completely new organization of the settlement. A third but minor event caused some damage in most of the houses belonging to SH III B Entwickelt, resulting in repairs (horizon 17a4) and new floors (horizon 17a5) at the end of SH III B. Shortly after this, the entire settlement and the Palace were completely destroyed. In the Unterburg the debris of this fatal catastrophe (horizon 18) marks the end of the Palatial period.

The availability of computers has allowed the excavators and those who work on the finds to establish databases in which the type and quantity of finds are recorded for each excavated square. However, such databases exist, at present, only for the pottery from the North-Eastern Lower Town (Stockhammer) and from Kilian's excavation in the Palace area (H. Stülpnagel 2000), the figurines (M. Veters), and the small finds (L. Rahmstorf) from Tiryns as a whole. In addition, all the finds from the latest excavations on the Unterburg and the Western Lower Town are recorded in this way.

RECORDING AND ARCHIVING

The documentation of Kilian's excavation of the Lower Citadel does not enable us to evaluate complete floor deposits, as the pottery was not stored by find context in the storerooms at Tiryns, but by the type of ware and parts of vessels. During the excavations pencil drawings of several tens of thousands of vessels and vessel fragments were made and afterwards stored in the Tiryns archive of the German Archaeological Institute at Athens. Only a systematic revision of this corpus—each drawing is stored by the date of its production and not by its context or stratification—would allow the reassembly of the floor contexts with restorable vessels from the Unterburg. Therefore, we are not at present able to reconstruct the total number and type of vessels found in a certain room in a certain phase of the settlement. In her re-evaluation of the Unterburg stratigraphy, Ursula Damm-Meinhardt lists only the vessels for every room published so far by Kilian and Podzuweit. However, the published material is just a small and subjective selection of the huge number of vessels found in each context. Especially for LH III B2 Late, only a very few vessels have been illustrated in the preliminary reports and in Podzuweit 2007.

THE CONTEXTS OF LH III B₂ LATE AT MYCENAE (FIG. 1) (BY E.B. FRENCH)

In contrast to the contexts of Phase VII (usually known as LH III B Mid), those of the great destruction at the end of Phase VIII produced far fewer restorable pots. All pottery from contexts not published in full is illustrated here; from those already published we illustrate some diagnostic pieces. All were found on or close to identifiable floors. The sherd evidence in the 'fill' material enclosing them was (almost without exception) of the typical Citadel House Area type comprising material ranging from at least MH to LH III B₁.

A. SOUTH HOUSE ANNEX AND THE SOUTH HOUSE

Room 1

Excavated in 1954; published Wace 1955, 177–81 (Plan fig. 2); Chadwick 1962, 37; WBM 1, 16–17, and described in detail in WBM 9.

Although originally described as 'cut out of the rock slope', the clearing of the outside of the entrance at the north end of this room in 1960 showed that it was in fact an independent storeroom of plastered mudbrick construction like the rest of this building. The first interpretation was that a stamped floor was the original one and the plaster floor some 20 cm above was a later alteration. Below the stamped floor was a fairly deep layer of small stones ('potatoes'), laid as elsewhere to facilitate drainage. The plaster floor is preserved only in the central part along the north–south axis of the room and at the north-west corner by the door. The west and east sides of it had been cut away to make room for emplacements sunk in the lower earthen floor to receive large storage vessels. Eight such emplacements could be recognized but there may have been two more along the east side.

After study however, it would seem that both floors were contemporary, the stamped earth floor being a working surface on which the vessels were positioned and then held in place by the plaster floor laid round them. In either case these vessels were broken and scattered before the room was burnt. This is clear both from the fragmentary nature of the examples like the large stirrup jar (54–578, FIG. 3. 3) and from markings on the vat (54–526, FIG. 3. 1). Such destruction would also account for the broken edges of the settings in the plaster floor. As well as the many fragments of large vessels, there were also found in this room a large amount of amorphous lead, a 'Canaanite' jar (FIG. 3. 2) and several pots with pierced bases (FIG. 2. 3, 5). These were probably purely functional (cf. Kommos: Koehl 1981, 181; 2006, 9–10), serving to fill the larger vessels. The wide diversity of types among the large vessels as well as among the fillers is of particular interest.

Pot 54–289 (FIG. 2. 2) was originally published as LH III C (corrected Chadwick 1962, 46). The outer rim decoration is of Stemmed Bowl type, a type that has been identified as a feature of LH III B₂ Late, but the fact that the pot also has the Stemmed Bowl band low on the inner body has caused confusion. The pot has been re-examined in the Mycenae Museum storeroom and the base exists, that of a Deep Bowl although it seems to have been deliberately cut off. An additional atypical feature of this pot is the poor quality of the decoration in the handle zone. However, given that four of the eight pots are possibly reused in a secondary context, their production date may be meaningless in terms of the final destruction of the room.

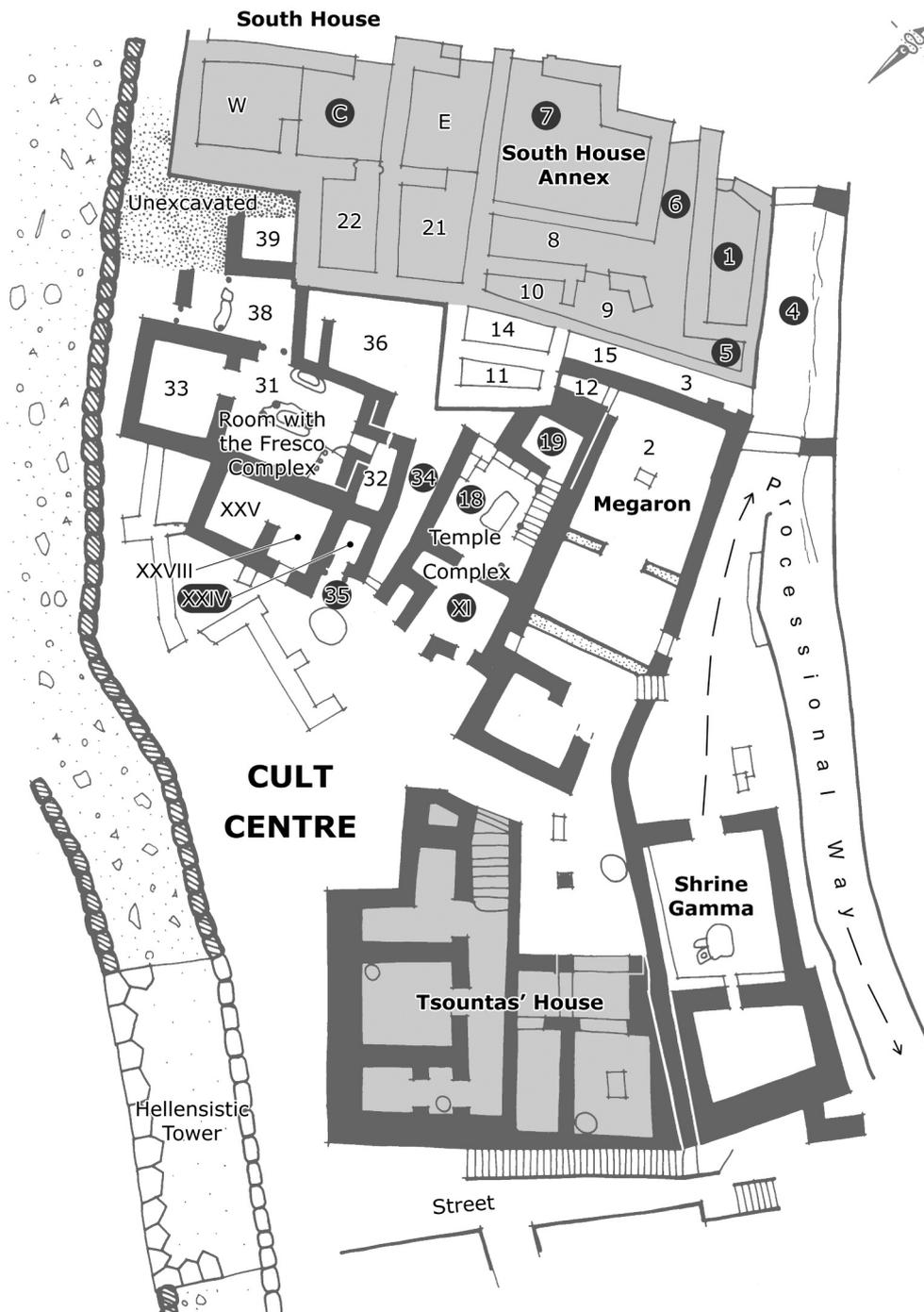


FIG. 1. Mycenae: Plan of the Citadel House Area at the end of LH III B2 Late.

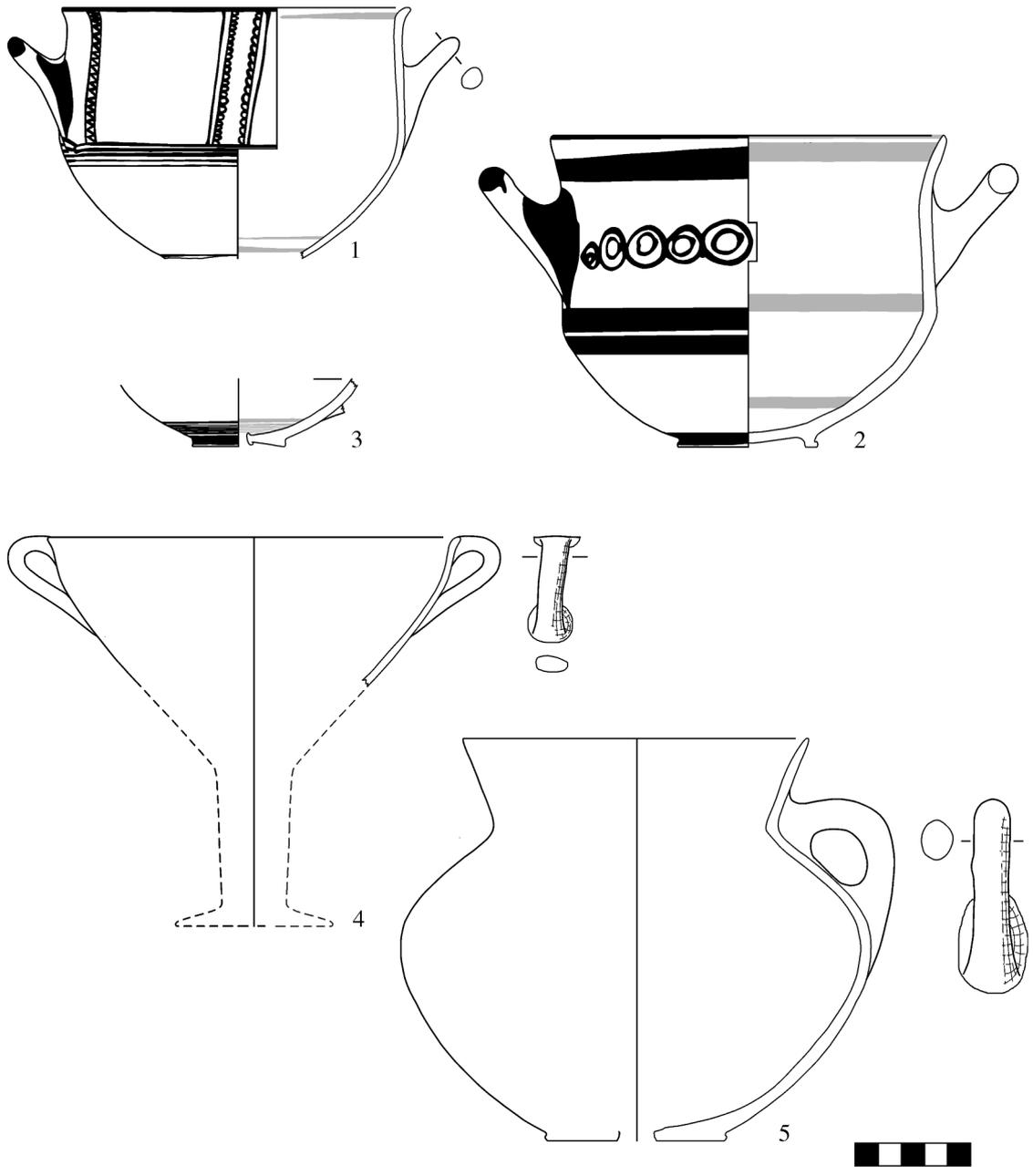


FIG. 2. Mycenae: South House Annex Room 1.

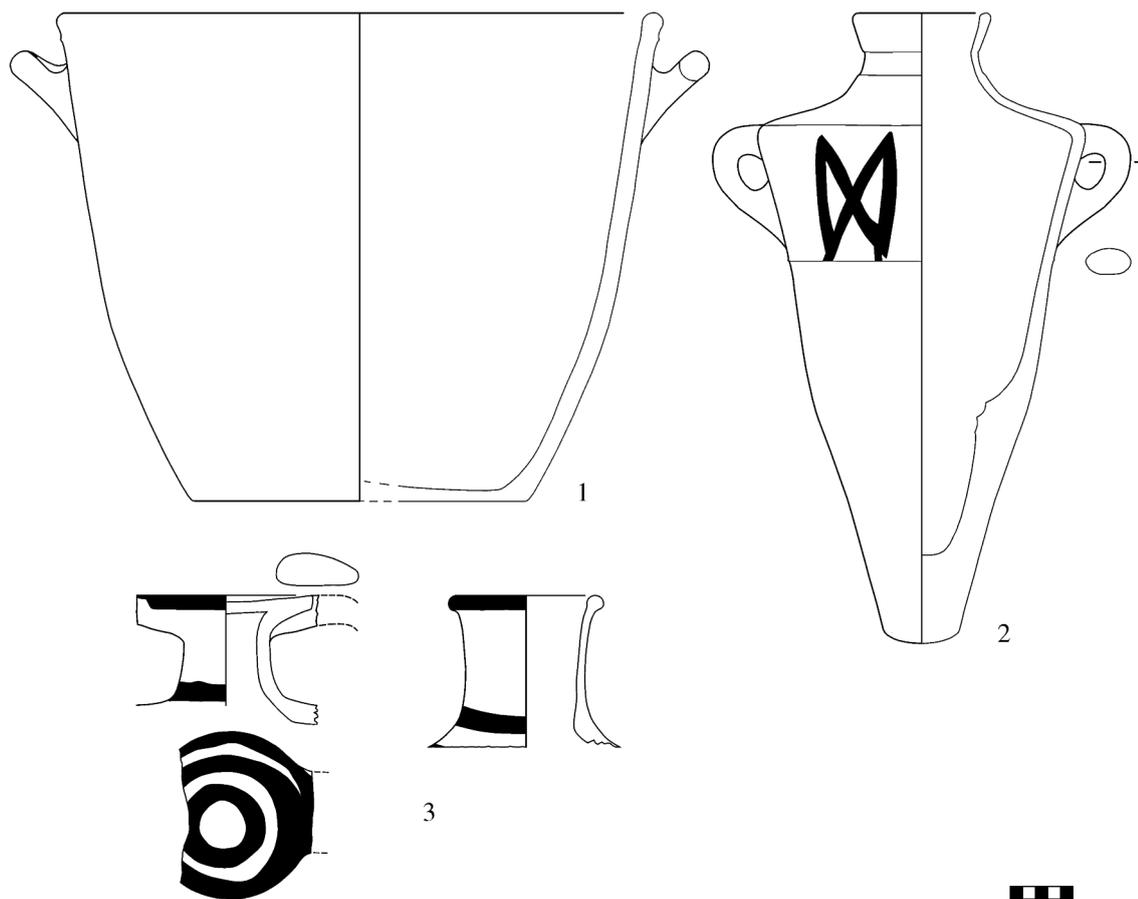


FIG. 3. Mycenae: South House Annex Room 1.

Room 4

Excavated in 1960; published in detail Chadwick 1962, 43-46 with plan and sections. Pottery FIG. 4. 1.

A well-appointed corridor room closed at each end linking the Causeway at the north to the ramp system of the Processional Way at the south.

Room 5

Excavated in 1960; described in detail in WBM 9 (from which the summarized accounts here of Rooms 5, 6, and 7 are taken). Pottery FIG. 4. 2-4.

This is a very small area, with no means of access except from above at the time of the destruction. The finds from it were few and exclusively from the fill, with nothing to suggest any function, but they do clearly indicate that, when it was destroyed, this was an empty space and not one filled as a foundation or containing rubble from the first disaster. Three building phases could be identified in this area. In the third period the area was closed off to the west

MYCENAE AND TIRYNS

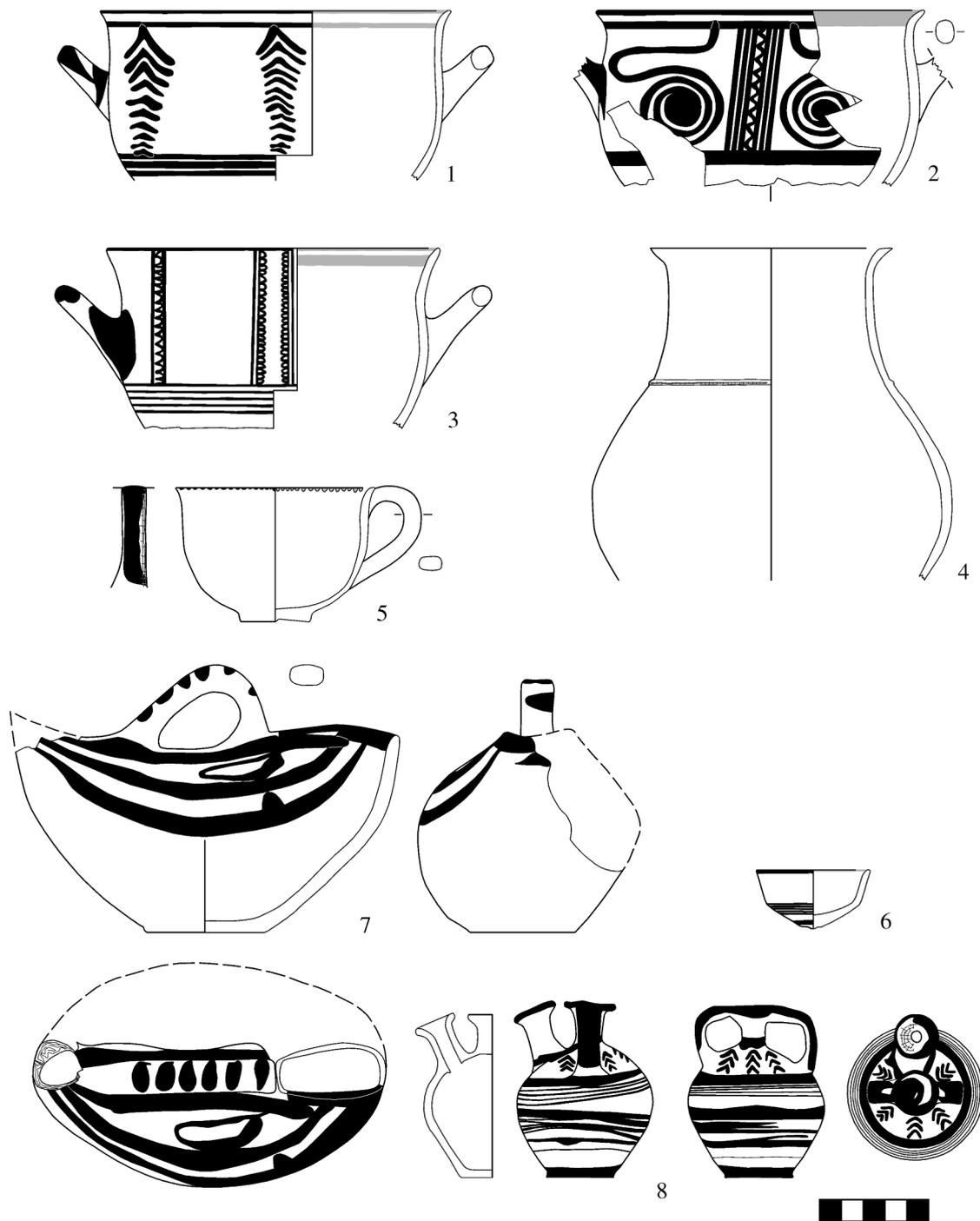


FIG. 4. Mycenae: South House Annex Room 4 (1); Room 5 (2-4); and Room 6 (5-8).

by a mud-brick wall. The building of this wall is to be attributed to Phase VIII and may have been necessitated by the collapse of the stair at the south end of Room 6 leaving a dangerous accumulation of rubble. This rubble became a hard calcined mass in the final burnt destruction and could not be fully excavated. The idea that there was a beaten earth floor belonging to Phase VIII at a much higher level seems to be disproved by joins in the pottery from the fill of the area. This fill is of a type comparable with the latest material found in the other rooms (60-325, FIG. 4. 2; 60-326, FIG. 4. 3). A figurine (60-224) confirms this date for the fill.

Room 6

Excavated in 1962; described in detail in WBM 9. Pottery FIG. 4. 5-8.

This is a corridor that seems originally intended to lead from the courtyard to the N, both via the passage Room 8, down to Room 7 and to the rooms above the South House and to the stair (9) leading to the roof and upper rooms of the Annex. The finds from Room 6, however, may indicate a function in Phase VIII more specific and elaborate than just a corridor, although it might have been merely a storage space for objects normally used in other areas, particularly the roof. Room 6 lies to the west of and parallel to Room 1. Like Room 1, its entrance was from the north but at a lower level down the slope. The corridor, as other areas, was filled with debris of heavily calcined mud-brick.

The cross wall was a later addition which must have been made not so long before the destruction of the area. Up against the south-west corner of it was found a miniature stirrup jar, (FIG. 4. 8) undamaged. Its significance in this position is unclear. A similar vessel was found higher up in the fill of Room 4 (Chadwick 1962, figs. 92-3).

Rooms 7, 7B

Excavated in 1962; described in detail in WBM 9. Pottery FIG. 5. 1-5.

Room 7 is the largest of the rooms in the South House Annex and the only one where the excavation showed clear traces of two storeys. The room could not be entirely cleared because it had been decided to preserve a LH III C terrace wall over the west part of the room as evidence of the history of the site. Particularly interesting was the evidence that was retrieved of varied building methods for both walls and floors/ceilings.

Many important finds came from excavating the main room, including some fairly complete pieces of pottery. It is not clear whether the objects from the upper fill came from the upper storey or possibly from shelves within the room itself. The similarity of the finds (including patterned wall plaster) which had fallen into Room 6 to those in 7 make it seem likely that the room above on floor 2 extended over the area of both 6 and 7. The shape of 7 is unusual and one is tempted to believe that it was not so designed originally. One possibility is that 7 was originally almost square and that damage occurred to the north-east corner at the end of VII.

South House

Partly excavated by Schliemann and further in 1920; Wace 1921/3, 86-96; reconsidered in WBM 9. Pottery FIG. 5. 6.

The entry to this large free-standing building lay at the north-east corner, leading into a long room from which three others opened to the south and beyond them two others. Almost

MYCENAE AND TIRYNS

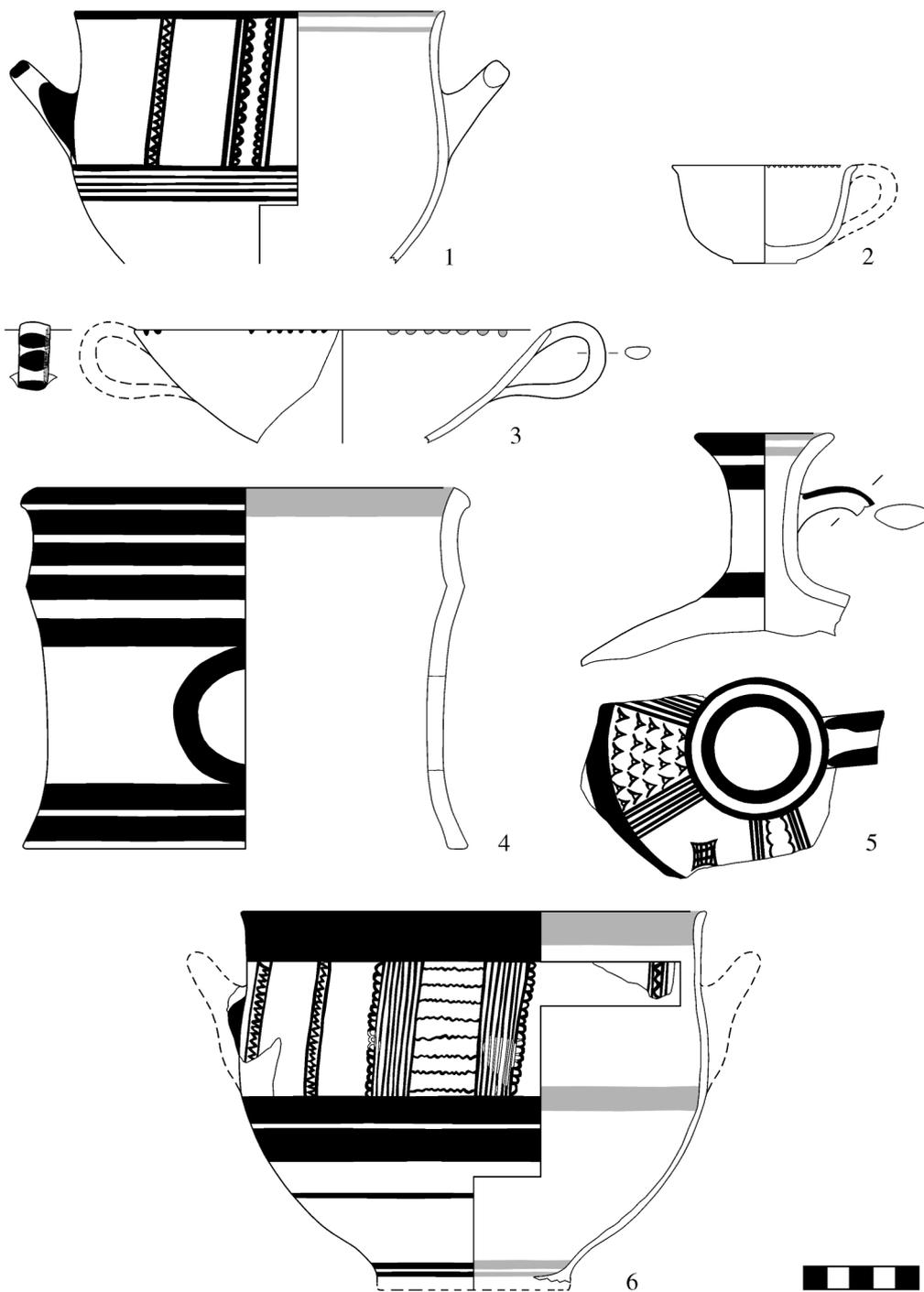


FIG. 5. Mycenae: South House Annex Room 7 (1-4), Room 7B (5), and South House Central Room (6).

no materials from the destruction levels were found. One pot (20-109) was registered from the Central (Pillar) Room. No further information about its find spot is given either in the notebooks or the publication. The pot seems from the photograph to be a classic example of type B but it is in fact a variant in several ways: inside there is a deep band below the rim and another band lower on the body as is normal in a stemmed bowl; the pattern is not symmetrical either side of the central triglyph but varies on both sides of the vase. Moreover, as the actual base is missing, it has, once at least, been drawn as a stemmed bowl although the reconstruction given here has been deemed more likely.

Thus as a whole the South House with the Annex has produced excellent evidence both for the date of construction of this complex and for its destruction, evidence that is both internally consistent and which agrees with that from adjacent areas. (This account of the date is taken directly from that to appear in WBM 9; it was written before 1989 and serves to document the history of the definitions presented here.)

The construction of the South House is dated by the pottery from the fill below the floor of Rooms 21 and 22, which has been published in detail by P.A. Mountjoy (1976). This pottery group is totally consistent with smaller groups from beneath the floors elsewhere in the building and can be assigned to mature LH III B1.

A *terminus post quem* for the destruction of the complex is given by the deposit of pottery published by K.A. Wardle (1973), which comes from rubbish fallen at the time of the destruction from the upper terrace onto the causeway leading into this building and corridor 4 at the north-east corner of the site. It therefore belongs to use in Phase VIII.

The actual pottery found in the final destruction debris of the South House and the Annex belongs to a pottery stage fractionally more advanced than that from the Causeway deposit, as is perfectly consistent with the contexts: destruction floor deposits contrasted with accumulated rubbish. The most noteworthy feature is the use on deep bowls of the system of linear decoration that is earlier associated solely with stemmed bowls. A few Group A bowls are also monochrome inside; others seem to show a stylistic divergence from a canonical example of Group B. This material belongs to the end of Phase VIII.

B. THE TEMPLE

Excavated in 1968 and 1969; fully published WBM 10 (esp. 2-3, 35).

Much of the pottery on the floors was of unpainted types that cannot be closely dated. The six Deep Bowls, however, are of considerable interest. Three are typical of Group B (a fragmentary example, 68-583, from the destruction level of Room 18, wrongly published as a Stemmed Bowl, and two from the destruction fill of Anteroom XI, 60-387, 69-506, WBM 10, fig. 4, phase 832). It should be noted that the inside of the base of 60-387 is so worn that no paint remains. This caused some considerable delay in finding the sherd during mending and the lack of base for 69-506 may result from a similar difficulty. The other three examples of Group A, one from each of Rooms 18, 19, and XI, show a distinctly flaring lip.

C. THE PASSAGE (34) AND SMALL COURTYARD (35)

Excavated in 1968 and 1969; fully published WBM 13 (esp. 31 and fig. 10, pl. 10). Pottery FIG. 8. 1-5.

The two deep bowls of the variant types with small rosette and with flaring rim, the linear deep cup and the decorated carinated kylix are typical of the end of Phase VIII.

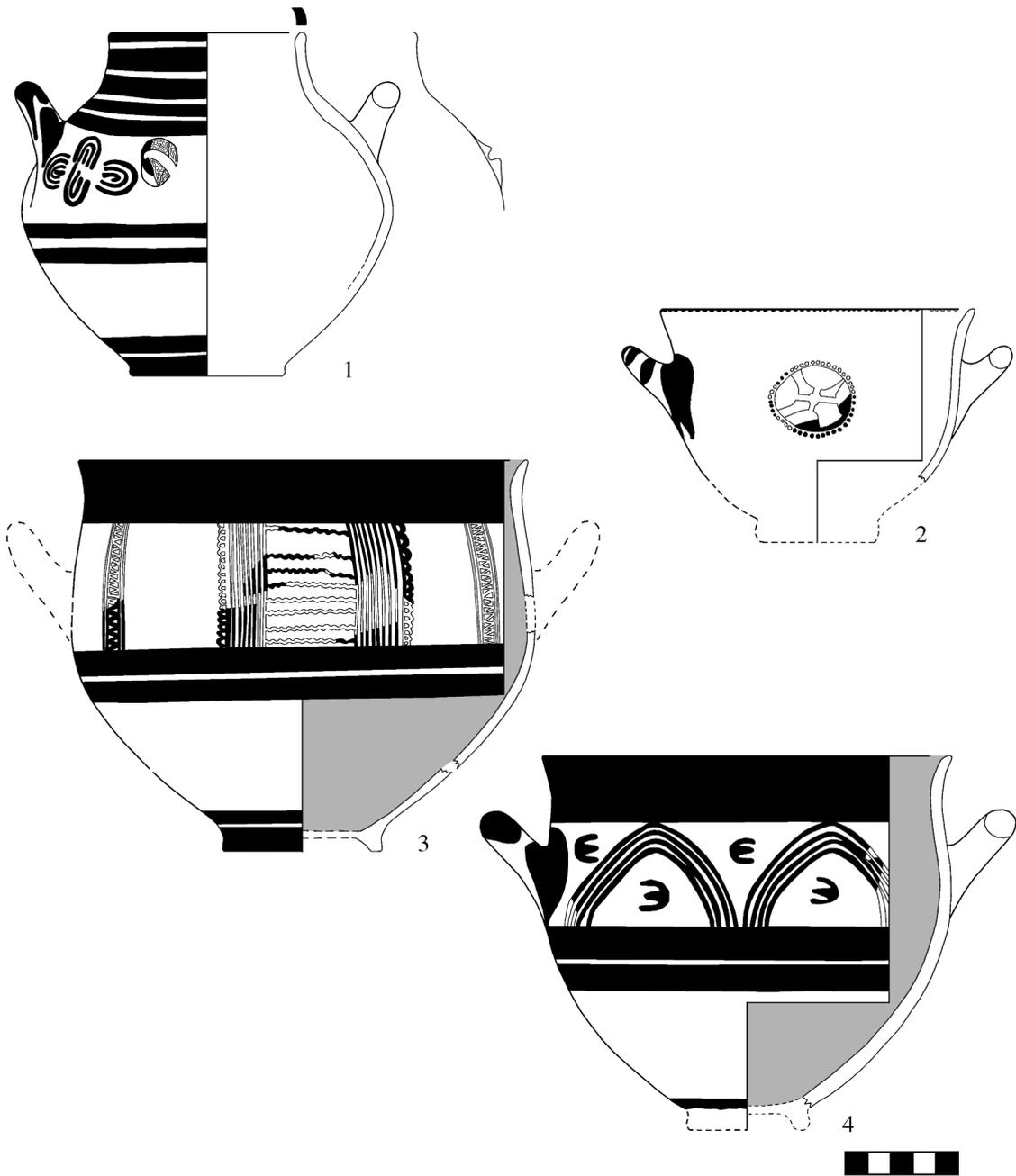


FIG. 6. Mycenae: LH III B2 Early examples from secure contexts West House (1), Causeway Deposit (2-4).

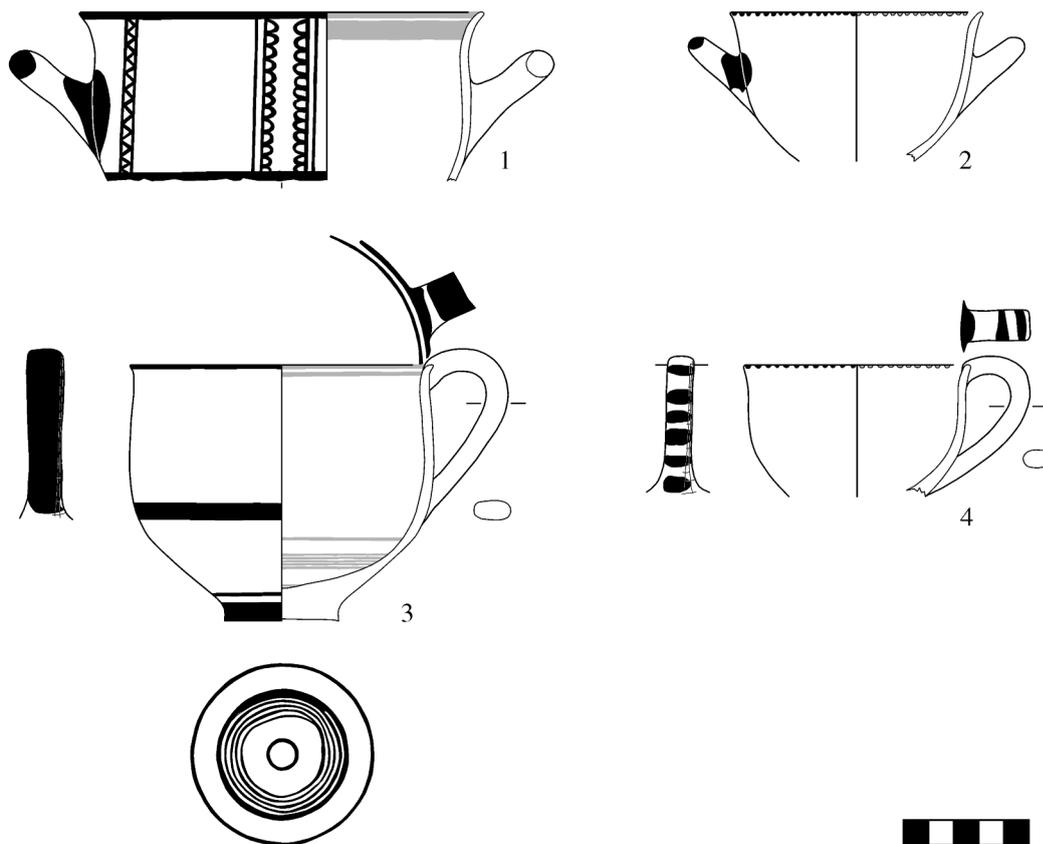


FIG. 7. Mycenae: Megaron Complex Room II.

D. ROOM XXIV

Excavated in 1966 and 1968; fully published WBM 13 (esp. 15 and fig. 10).

Notable here are the deep cup with dotted rim (FIG. 8. 6) and the large collar-necked jar.

E. THE NORTH-WEST QUARTER

This section of the work, under the direct supervision of the Archaeological Society, was published by Iakovides in 2006. The results are particularly relevant to our study. In the pottery summary (Iakovides 2006, 123–4 [in Greek], 176–7 [in English]) the presence of a variant deep bowl type A/B should be noted. Unfortunately the lack of pottery drawings makes further comparisons impossible.

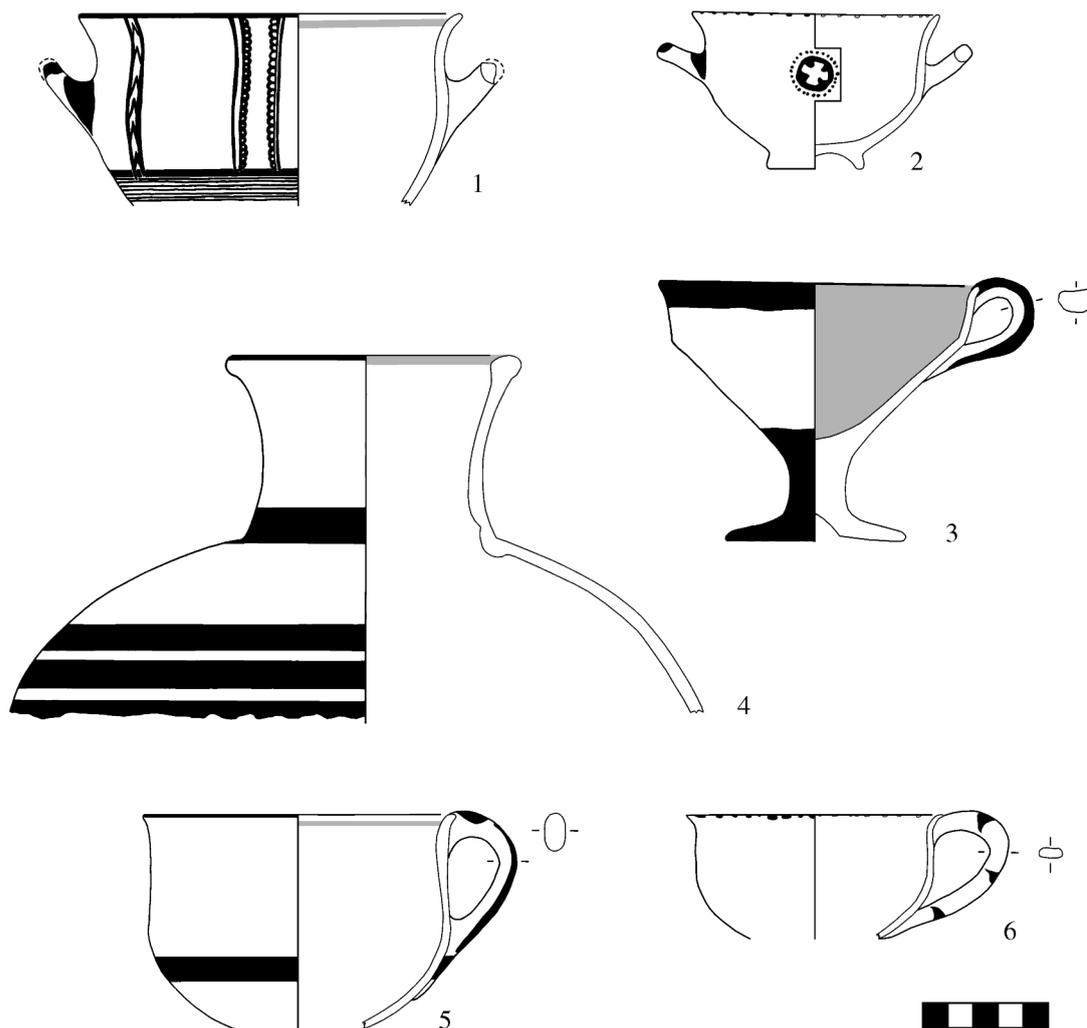


FIG. 8. Mycenae: LH III B₂ Late examples from secure contexts Passage 34 (1–4), Small Courtyard 35 (5), and Room xxiv (6).

LH III B₂ LATE AT TIRYNS (FIG. 9)

(BY PH. STOCKHAMMER WITH A CONTRIBUTION BY U. DAMM-MEINHARDT)

In contrast to Mycenae, we are not yet able to give a state analysis of the LH III B₂ Late contexts of the Unterburg at Tiryns, as these are still under study by Ursula Damm-Meinhardt, who took over the analysis of the Unterburg stratigraphy of the Palatial and Earliest Post-Palatial strata after the death of Klaus Kilian. She has continued working on the excavator's already completed stratigraphic tables (similar to Kilian 1988*a*, fig. 27 = Kilian 1988*b*, 120 fig. 2; Mühlénbruch 2005). This synopsis contains the last stage of Kilian's research on all

buildings and other units in the Unterburg in the various subphases of SH III B and it thus forms a most important source of information.

Kilian merged the huge number of artificial strata excavated on the Unterburg into several architectural horizons, which comprise the building, use, destruction, and levelling of the rooms (cf. Kilian 1988*a*, 132 fig. 27 = Kilian 1988*b*, 120 fig. 2; Mühlenbruch 2005). However, although he based his phases only on architectural evidence, he often chose terms from the ceramic terminology to label his horizons (e. g. horizon 19 = LH III C Early). Kilian's use of ceramic terms for the architectural horizons of the late Palatial period, however, differs from the terminology currently used by archaeologists working in the Argolid. The pottery phase LH III B2 Early, as it will be defined in this article, equates with Kilian's architectural phase SH III B Mitte (horizons 16a0–7), our LH III B2 Late comprises his SH III B Entwickelt (horizons 17a0–3) and SH III B Ende (horizons 17a4–18). The Post-Palatial period on the Unterburg starts with our ceramic phase LH III C Early 1 in horizon 19a0.

As examples of the nature of the Tiryns evidence and the problems we currently face, we present two significant LH III B2 Late contexts of special importance, the Bau (Building) XIV and the well in K_w (casemate) 14 (cf. FIG. 9).

A. BUILDING XIV (ROOMS 223, 225, 226) (BY PH. STOCKHAMMER WITH A CONTRIBUTION BY U. DAMM-MEINHARDT)

Excavated in 1982–3; published by Kilian 1982, 397; 1983, 279, 297 fig. 19; 1988*a*, 113–14, 117, 121 with figs. 10 *d*, 15, and 17; described in detail in Damm-Meinhardt forthcoming. Pottery FIGS. 10–12.

The designation of Rooms 225 and 226 as Building XIV was not given by Kilian in the preliminary report (Kilian 1988*a*), but for the first time in his general plan in 1990. It has to remain an open question whether Kilian also wanted to include Room 223, lying higher than Rooms 225 and 226 on the terrace adjacent to the east as part of the same building, but Damm-Meinhardt has decided to include it. As Room 223 and the remaining higher terrace were not completely excavated, the total extent of Building XIV remains unclear. Building XIV was erected at the beginning of the architectural horizon SH III B Entwickelt, but only the Rooms 225 and 226 were still in existence in the later part of SH III B Entwickelt and in SH III B Ende.

Room 223

This partially excavated room is situated in the squares LXII 35/63–6 and LXI 36/10–LXII 36/25. Because of heavy erosion, the southern wall is badly preserved, and the northern and eastern walls have not been excavated. A floor was encountered in Oberfläche VII in the south-western part of the room. In Kilian's view, the use of Room 223 was very short-lived, probably restricted to the horizon 17a1, i. e. the beginning of the architectural phase SH III B Entwickelt, and, after being levelled, it was replaced by an open space. Besides the actual stratigraphy, this interpretation is based on his dating of the large quantity of restorable vessels found on the floor of this room. By the west wall there was a hearth with a large crushed lead cauldron (LXII 35/81–92). To the south Kilian documented several complete vessels, which probably fell down from some kind of shelf. Kilian (1988*a*, 117) mentions amphorae, medium-sized stirrup-jars, a narrow-necked jug and several unpainted kylikes. In the centre of the southern part of the room a pithos (LXII 36/4) and several other storage



1



2



3

FIG. 10. Tiryns: Unterburg, Room 223.

vessels as well as drinking vessels were found: vats, linear and undecorated jugs, a deep bowl, a mug with spiral decoration and a cup.

As the pottery from the floor of Room 223 was not stored by context and there are no photos or inked drawings available, most of these vessels from the floor context of this room await identification and illustration. We can attribute to the floor context the following vessels, of which drawings are stored in the Tiryns archive in Heidelberg or Athens or which could be identified in the storeroom at Tiryns (FIGS. 10–11):

From the vessels mentioned by Kilian to have fallen from some kind of shelf along the eastern wall: a narrow-necked jug FS 120 with linear decoration (FIG. 11. 3) and a medium-sized stirrup jar (FIGS. 10. 2).

From the vessels discovered by Kilian in the vicinity of the pithos (FIG. 10. 3): a small deep bowl with unusual decoration (FIG. 10. 1), another deep bowl (FIG. 11. 2), and a deep cup FS 215 with monochrome interior and linear decoration on the exterior (FIG. 11. 1). The mug FS 226 with spiral decoration has already been published (Kilian 1988*a*, 117, 121 fig. 17) (FIG. 11. 4).

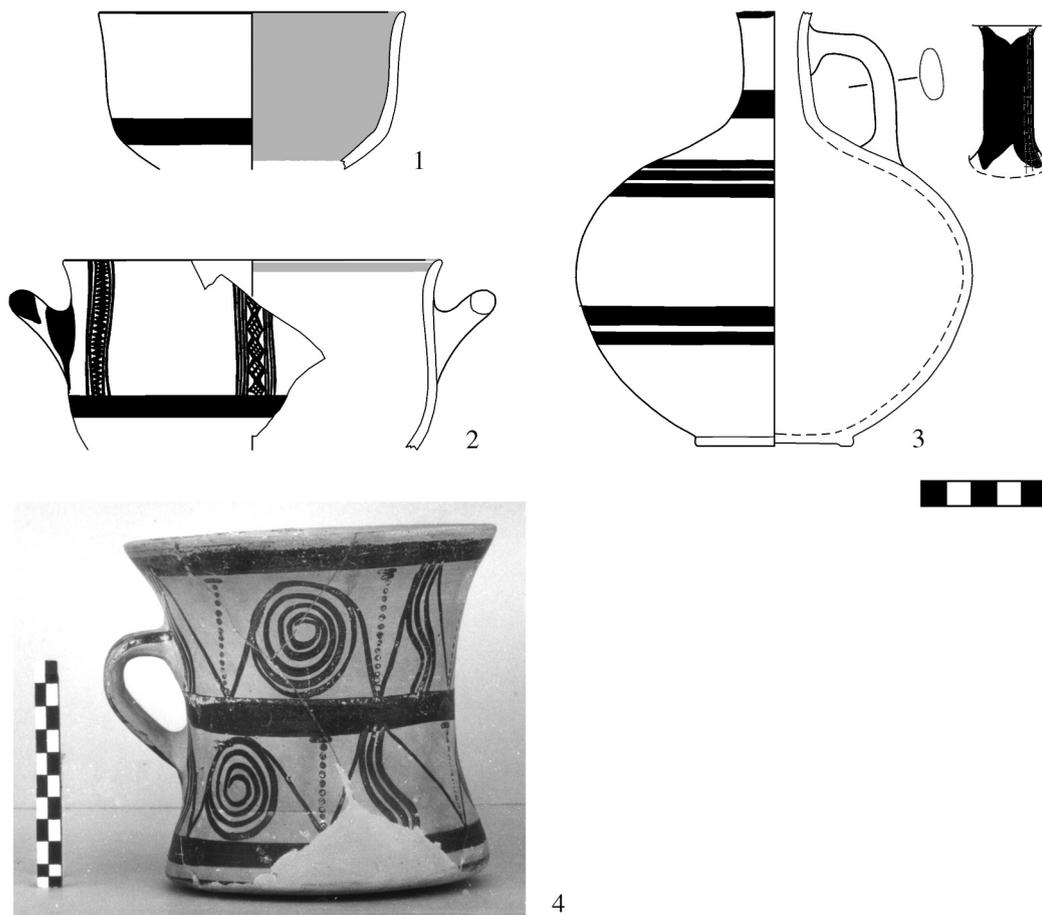


FIG. 11. Tiryns: Unterburg, Room 223.

Rooms 225, 226:

Because of later building activities, only the southern part of Room 225 in LXI 35/68–78 could be excavated. It stretched for at least 3.5 m along the Cyclopean wall. A Lauffläche was preserved only in a small part of the room (0.8 × 1.4 m). A doorway connected Room 225 with Room 226 to the south. Room 226 (LXI 35/77–90; LXI 35/96–LXI 36/09), with a north–south-extension of 2.25/3.0 × 2.90/3.30 m, was probably used as passage down to the casemate Kw 14. Two phases of use can be postulated for the building (see Kw 14).

B. KW (CASEMATE) 14 AND WELL (BY PH. STOCKHAMMER WITH A CONTRIBUTION BY U. DAMM-MEINHARDT)

Kw 14: excavated in 1980–1983; published Jantzen 1969, fig. 1; Grossmann 1980, 479 fig. 2; fig. 6; 485, 487 fig. 10; Kilian 1982, 397; 1988*a*, 111, 113–19 with figs. 10 *d*–15; 149; described in detail in Damm-Meinhardt forthcoming. Pottery FIGS. 13–17.

Situated in the squares LXI 35/43–67 and LXI 35/62–86, the northernmost casemate, Kw 14, is the the biggest and best preserved one in the Unterburg. It shows a rectangular layout

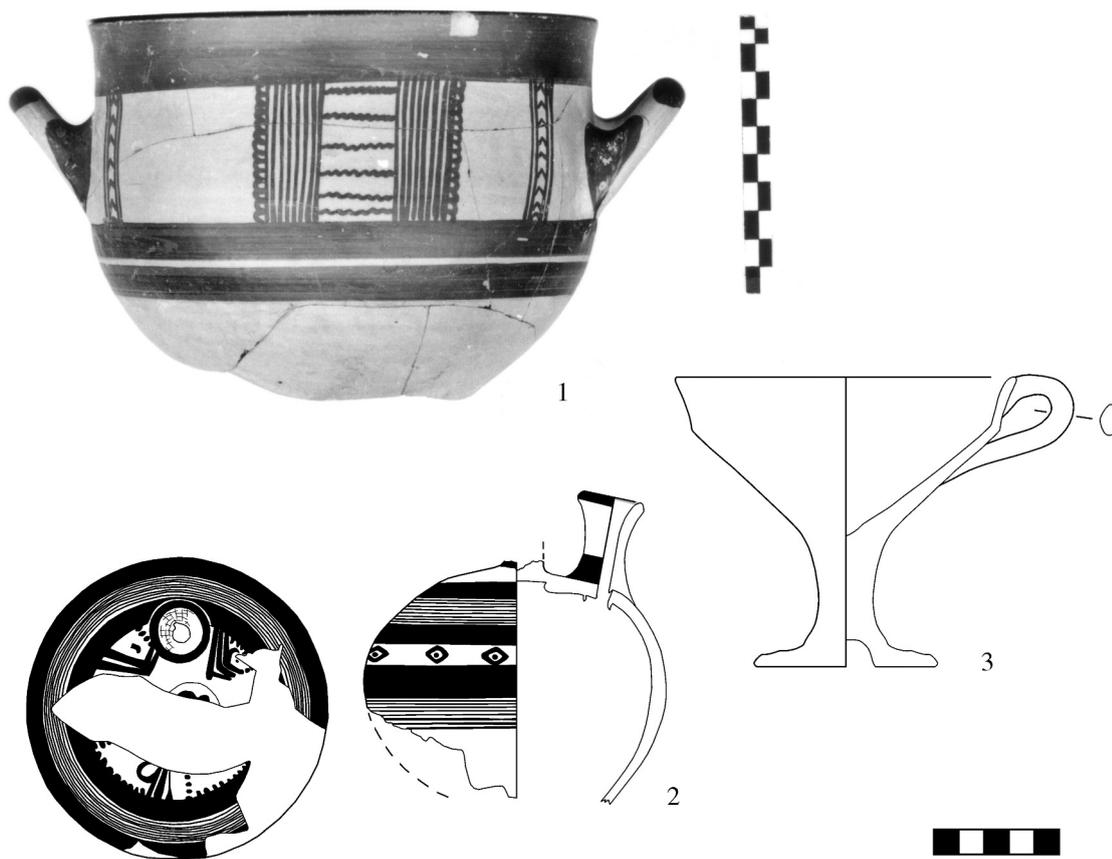


FIG. 12. Tiryns: Unterburg, Rooms 225, 226.

with a west–east-extension of 4.70 × 3.10–3.30 m and a height of 6.80 m. It was first documented by Jantzen in 1968. The Mycenaean strata were excavated together with the adjacent Rooms 225 and 226 by Kilian in 1980–3. In order to give a north–south section, Kilian divided the casemate into an eastern and a western part (borderline: LXI 35/56, 66, 75, 85), which were excavated separately down to Oberfläche XIVa. Within the casemate Kilian was able to identify an undisturbed sequence of eleven different floors ranging from SH III B Entwickelt until SH III C Spät. From the bedrock of the casemate a well with a diameter of 1.55–2.20 m was sunk 10 m into the rock down to the level of the groundwater. It is situated in the centre rear part of the casemate (LXI 35/53.54.63.64.74). During the use of Building XIV in the Palatial period the casemate Kw 14 remained open for a long time. Only after the well had been filled was a cross wall built blocking the entrance. For architectural reasons, but probably also on the basis of the pottery from the fill, Kilian (1988a, 114) dated the sinking of the well earlier than the construction of the Citadel wall in SH III B Entwickelt, which he thought was built around the well. He considered the filling to have occurred shortly after but still in SH III B Entwickelt, as he dated the pottery of the filling to SH III B Mitte (Kilian 1988a, 114). Jacob-Felsch (1998, 123) rejected Schönfeld's and Kilian's dating of the pottery from the well to SH III B Mitte. In her view the pottery can only be dated generally to LH III B. Like Kilian, she dated the construction of the Cyclopean wall after the filling of the well, which she placed at the end of LH III B without further elaboration. On the basis of this evidence, she saw the construction of the Cyclopean wall at the beginning of the Post-Palatial period (Jacob-Felsch 1998, 117, 123, 125; cf. Jacob-Felsch 2000, 67–8 for a slightly different view of the history of the citadel walls). However, recent re-evaluations of the architecture and stratigraphy of the casemate by Damm-Meinhardt, and especially of the pottery from the well by Stockhammer, have led to a redating of the filling of the well. The casemate was probably built as a well chamber in SH III B Entwickelt and the well sunk after the construction of the casemate and not filled before, as Kilian, Schönfeld, and Jacob-Felsch thought. Two phases of use could be differentiated in casemate Kw 14 and Rooms 225 and 226 connected to it. The older Lauffläche was encountered in Oberfläche XV within the casemate and seems to have been used for quite a long time (horizons 17a1–5; *contra* Kilian 1988a, 114). No restorable vessels connected with this Lauffläche were found. The later Lauffläche in Oberfläche XIV covered the well, which had already been infilled, and is itself covered by the debris of the destruction of the Unterburg at the end of the LH III B (horizon 18). Therefore, the well was in use in the architectural phases SH III B Entwickelt and SH III B Ende and filled shortly before the destruction of the Unterburg at the end of the Palatial period; consequently its fill (Abhübe XIVc–s) started and ended within the pottery phase LH III B2 Late.

The pottery from the fill comprises several complete or fairly complete vessels (FIGS. 13–17). In contrast to the fill of the well of the Acropolis fountain in Athens (Gauß 2003, 99 figs. 1–4), most of the vessels from the fill were open vessels, i.e. deliberate fill. Some of the closed vessels (jugs) may have been lost in the well during the time of its use (FIG. 17. 1–2). It must remain open to question whether we are confronted with the ceramic rubbish of a single or of several households dumping waste into the well after its abandonment. Fragments of a pictorial krater with a stag scene found at different depths (FIG. 16. 2) show the rapidity of filling. In his preliminary excavation report (Kilian 1988a, 114) and a report to the Deutsche Forschungsgemeinschaft (Kilian, TSS from 1983, stored in the Tiryns archive in Heidelberg),

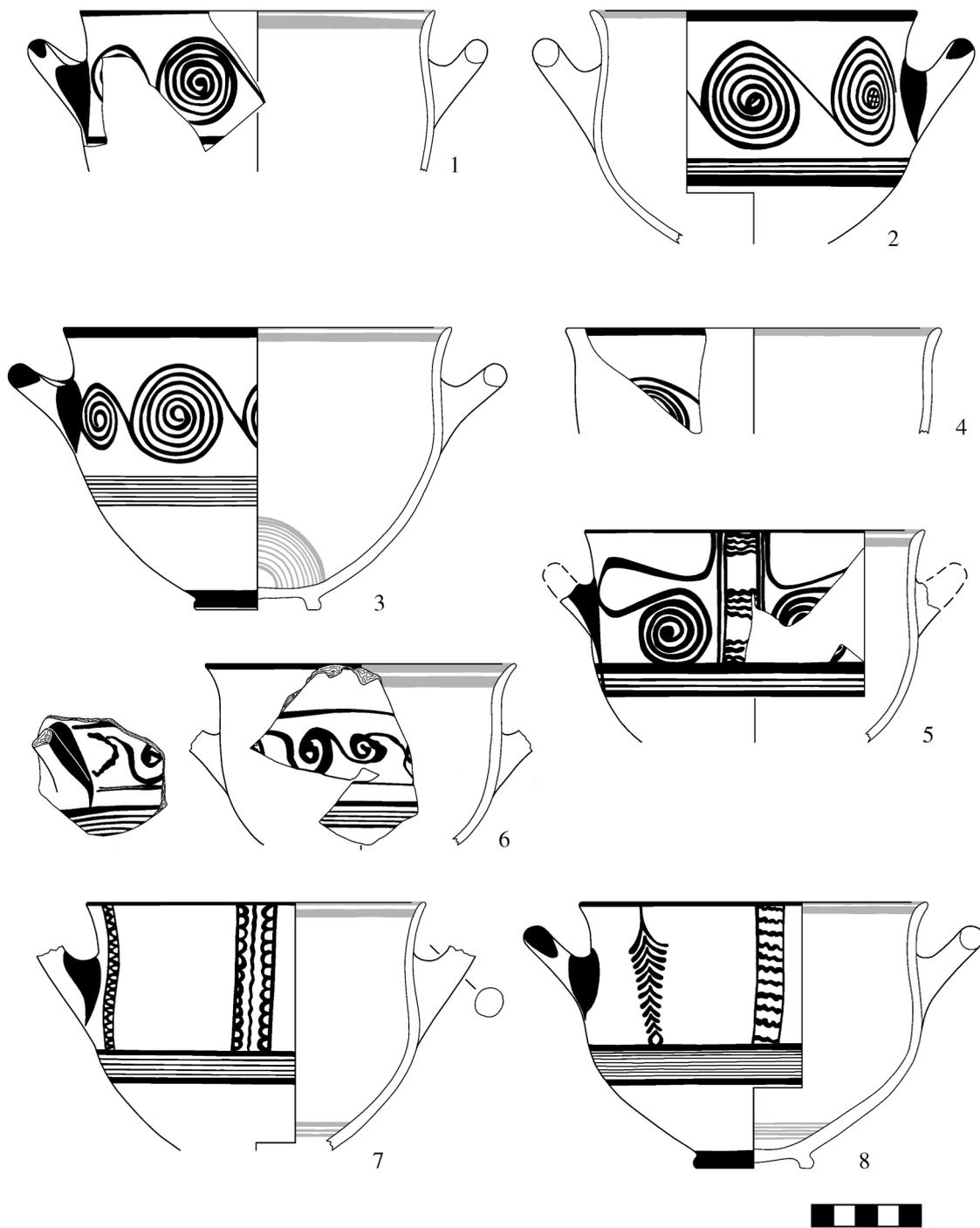


FIG. 13. Tiryns: Unterburg, Kw 14.

MYCENAE AND TIRYNS

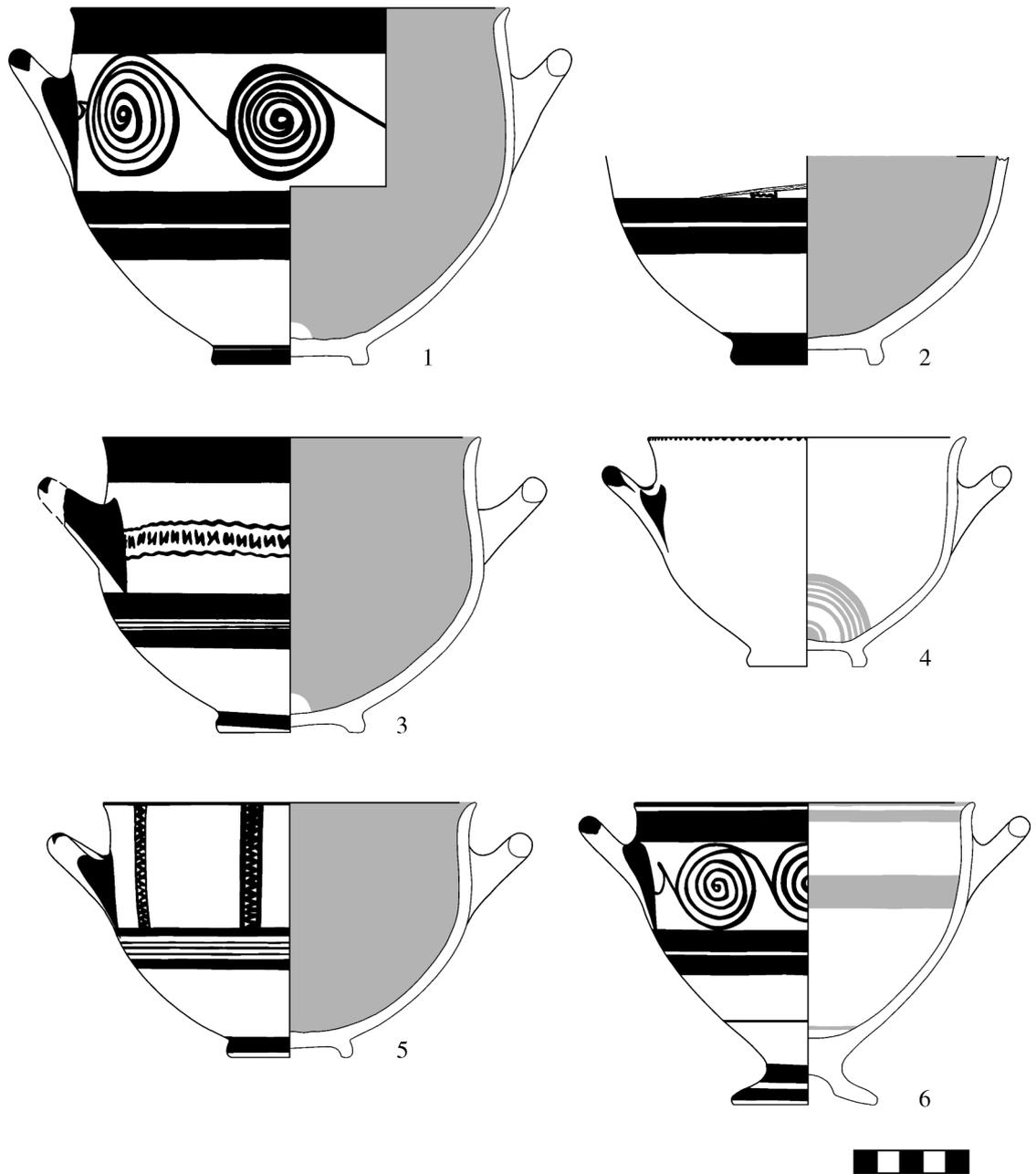


FIG. 14. Tiryns: Unterburg, Kw 14.

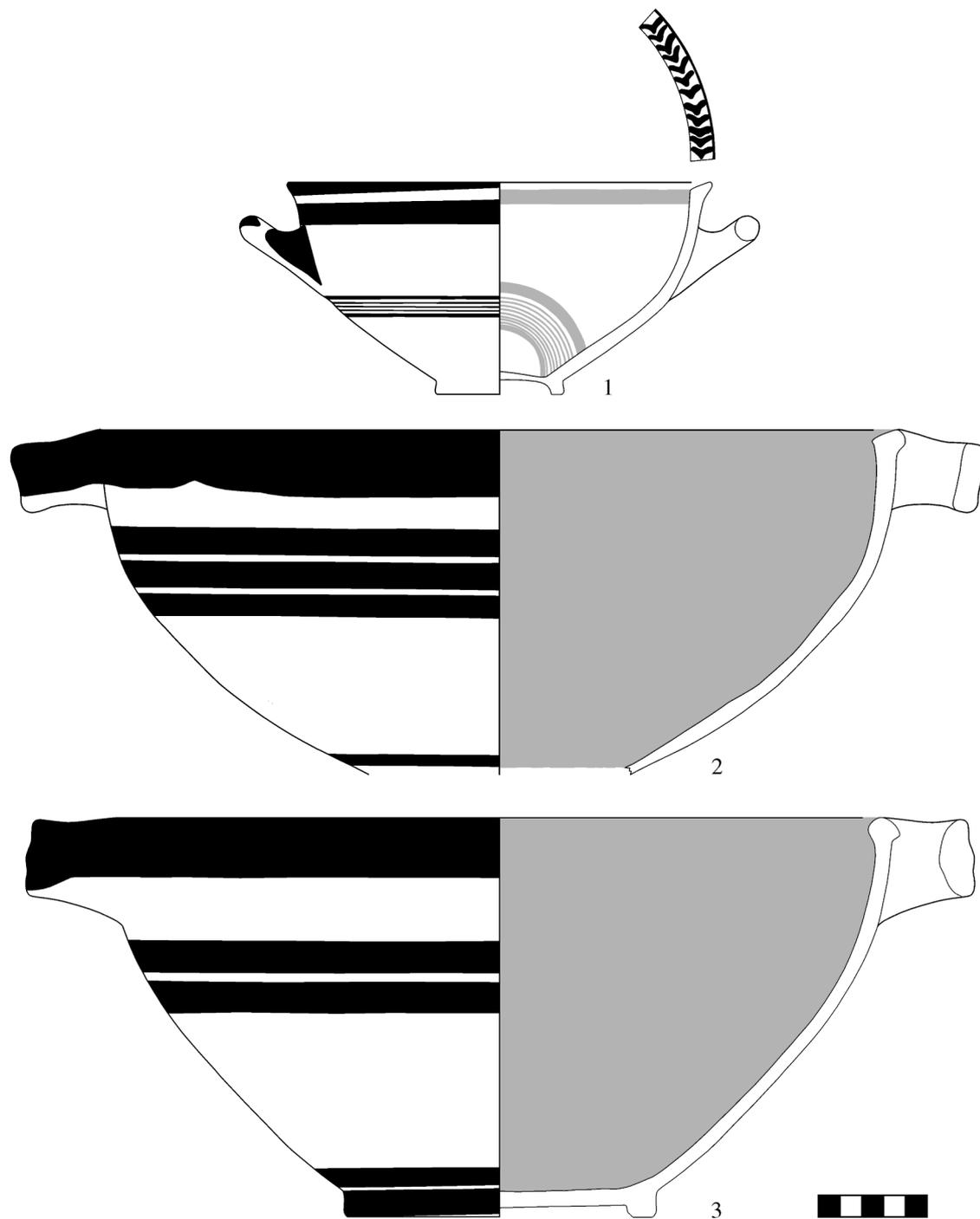


FIG. 15. Tiryns: Unterburg, Kw 14.

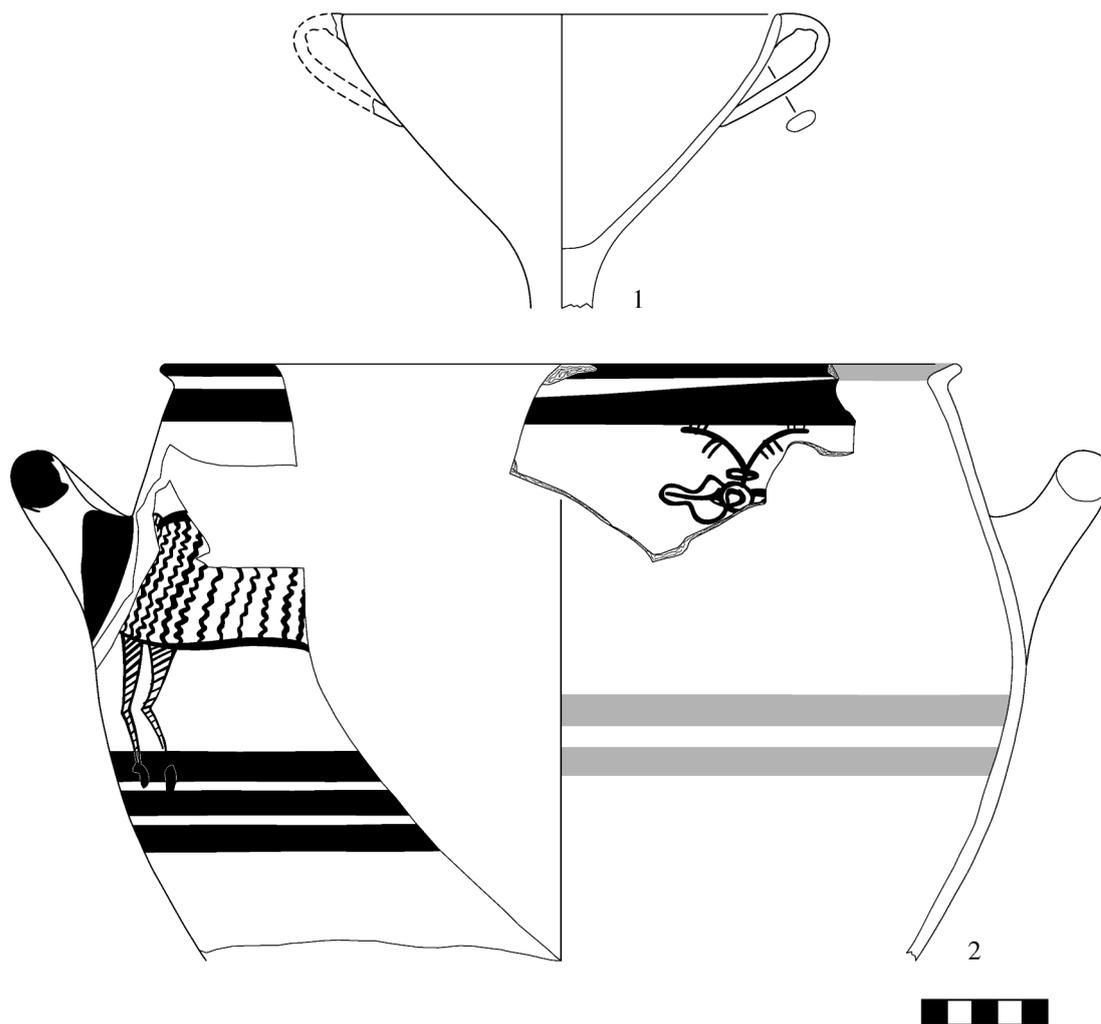


FIG. 16. Tiryns: Unterburg, Kw 14.

Kilian mentions ten restorable deep bowls, three large basins with monochrome interior, small jugs, a Handmade Burnished cup and a bowl in gray ware (Kilian 1988*a*, 116 fig. 12; 118 fig. 13; 119 fig. 14; 131 fig. 26, 21), but does not discuss the great quantity of sherd material from the fill. On the basis of his preliminary report and the drawings stored in the Tiryns archive in Heidelberg we are able to identify most of the restorable vessels (FIGS. 13–17). A small stirrup-jar (FIG. 17. 4) is illustrated by Kilian (1988*a*, 116 fig. 12. 2), but not mentioned in the reports. The great quantity of pottery from the fill is still waiting to be studied.

The most advanced features of the pottery from the well are the very slightly hollowed lip of a linear jug (FIG. 17. 2) and the reserved circle on the bases of two of the deep bowls with

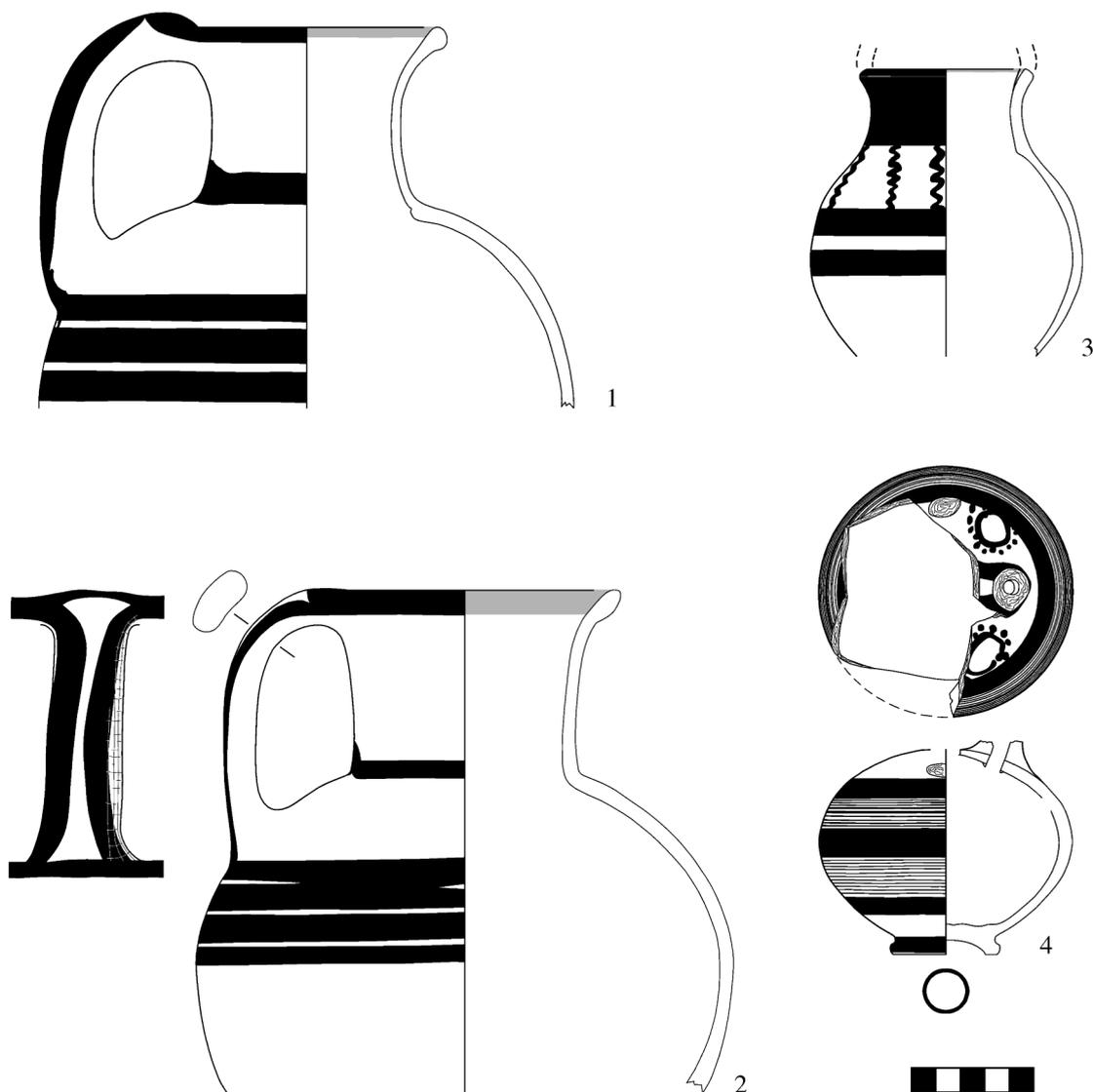


FIG. 17. Tiryns: Unterburg, Kw 14.

monochrome interior (FIG. 14. 1, 3). The linear shallow rounded bowl FS 295B (FIG. 15. 1) could be the first evidence of this type in Tiryns.

Although Kilian does not mention vessels found *in situ* on the later Lauffläche after the abandonment of the well on the floor of Kw 14 or Rooms 225 and 226, a photograph in the Tiryns archive clearly shows that at least two restorable vessels were found lying on the floor of Room 225 in Oberfläche XIVa (Photo 1983, film 13, no. 13). One of the two vessels can be identified as a classic type B deep bowl (FIG. 12. 1). Moreover, a restorable small globular stirrup jar with flower decoration on its shoulder (FIG. 12. 2) and a complete unpainted

carinated kylix (FIG. 12. 3) have been drawn from horizon 18 inside Room 226. Because of their state of preservation, they might be attributed to the floor of the room. An accumulation of sherds, probably the substructure of a sherd-hearth, was discovered at the north-eastern edge of the casemate Kw 14 (LXI 35/56.66 Nr. 9 Of. XIV), which again was covered by the debris of the destruction of the latest buildings of the Palatial period (horizon 18).

ALTERNATIVE METHOD OF STUDY (BY PH. STOCKHAMMER)

The state of documentation outlined above has made it necessary to proceed with an alternative methodology, which had already been applied to identify the 'type fossils' of LH III C Middle 2 and LH III C Late on the Unterburg (Stockhammer 2008; Stockhammer forthcoming).

The first stage was to undertake a critical assessment of the different systems of chronology for LH III B2 and then to characterize the features that might be used as diagnostic for LH III B2 Early and Late (Stockhammer 2008). Out of the huge corpus of drawings stored in Athens, several thousand were inked, photocopied and brought to Heidelberg to be stored in the Tiryns archive there, where they were re-sorted into contexts.

Making the assumption that all vessels preserved to a significant extent would have been drawn and with our list of features in hand, the many pottery drawings in the publications of Kilian (1979; 1981; 1982; 1983), Schönfeld (1988), and Podzuweit (1979a; 1981; 2007) as well as the drawings stored in the Tiryns archive in Heidelberg were searched. We tried to identify all vessels displaying one or more of the features considered relevant for our analysis.

The find contexts of these pots were checked afterwards on the basis of Damm-Meinhardt's stratigraphic analysis of the Unterburg. In this way, we aimed to determine the first appearance of certain features in its layers.

It must be realized that this approach will give a slightly different result from that of floor deposits such as those from Mycenae. In particular it must be remembered that some information is missing as only some of the vessels in question have been examined first hand. Moreover, it has not been possible to check all the drawings and information on the fabric does not exist in every case.

The following features have been identified in this way:

Unterburg horizon 16 (architectural phase SH III B Mitte)

(a) *Closed vessels.* Small collar-necked jars FS 64 were found in horizon 16 for the first time (FIG. 18. 1). Schönfeld (1988, 155 table 1 no. 83; 195 fig. 10, 4. 8; 1997) assigns the start of this feature to horizon 16a1.

(b) *Deep bowls.*

(1) Secure evidence: rosette deep bowls with dotted rim appear with horizon 16a1 on the Lower Citadel for the first time and become very common in the course of horizon 16 (FIG. 18. 2), i.e. the architectural horizon SH III B Mitte (Schönfeld 1988, 155 table 1 nos. 88–9; 155 table 2 no. 2 nos. 93–4; 177 fig. 6. 1, 3, 4, 8, 11; 182, 196, 203 fig. 12, 2).

There is no certain evidence for type B deep bowls in horizon 15, despite what Schönfeld (1988, 174) alleges. The only evidence presented and illustrated by him was found in strata under the Dörpfeld excavation in 1905 (Schönfeld 1988, 159 fig. 1. 1: LXI 43/80 XXc). According to Damm-Meinhardt (pers. comm.) this fragment has no good stratification. The

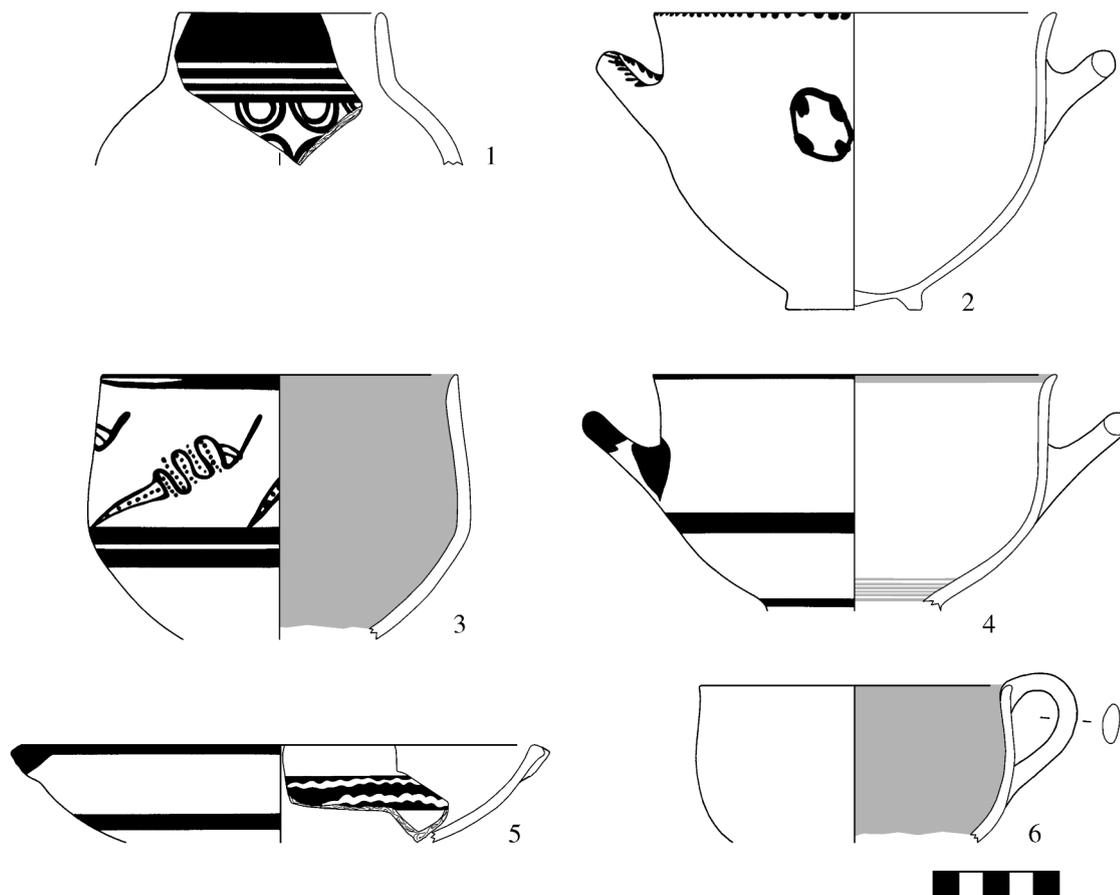


FIG. 18. Tiryns: Unterburg, LH III B2 Early examples from secure contexts.

depth of the fragment points to a stratum of possibly LH III A date. However, a disturbance from early excavations is very probable. From the same square but from a slightly deeper stratum (LXI 43/80 XXII) a stemmed bowl in heavy style is illustrated by Schönfeld (1988, 159 fig. 1. 18) and is taken by him as a further argument for the early start of features, commonly dated to LH III B2. However, one wonders about both these exceptional pieces, which give early evidence for these features and were found in the same square below the old excavation. In our view, there is no doubt that the stratum has been disturbed by the early excavation. Furthermore, the type B deep bowls with their characteristic broad triglyphs with half rosettes appear suddenly and frequently in horizon 16 (FIG. 21. 6; Schönfeld 1988, 155 table 1 no. 60; 155 table 2 no. 2 nos. 92, 97).

(2) Problematic evidence: in addition there is possible early evidence for deep bowls type A/B in this horizon. A deep bowl with monochrome interior and narrow rim band and two lower bands on the exterior (FIG. 18. 3), dated by Schönfeld to horizon 15, is not so clearly stratified as he claims (Schönfeld 1988, 174), but may derive from horizons 15a2–16a4 (Damm-Meinhardt, pers. comm.). There is also no information on fabric and a parallel might be

found in an example imported to Mycenae (Mountjoy 1976, 88 fig. 6. 45; 89 no. 45). In the following horizon 17, deep bowls A/B are very common. One example from the fill of the well in Kw 14 is illustrated (FIG. 14. 5), another one was found under the floor of Room 10, Building I, in horizon 17a2 and in the debris above the floor in horizon 17a4 has been published by Podzuweit (2007, pl. 7, 3) (FIG. 19. 2).

According to Schönfeld, we also have evidence for the linear deep bowl in horizon 16a3 with at least one reasonably preserved vessel (FIG. 18. 4). However, it remains unclear from Schönfeld's report whether this vessel is the only evidence of this feature, as Schönfeld does not differentiate between patterned and linear painted vessels in his chronological order of the types of linear decoration. As we have not handled this particular deep bowl from Tiryns, we are not able to decide whether the state of preservation of the vessel totally excludes the original presence of patterned decoration. A reworking of the Schönfeld material may answer these questions. Therefore, although this feature might start in horizon 16, the exact determination of its first appearance remains problematic. There is no doubt that such deep bowls are present in horizon 17, as a restorable linear deep bowl with monochrome interior and only linear decoration on the exterior (Podzuweit 2007, pl. 19. 6: LXI 41/78 XI) was found between the debris and the last floor (horizon 17a4) in Room 121, Building VI, in SH III B Ende.

(c) *Shallow bowls.* There is frequent evidence for shallow, linear bowls FS 296 with white paint applied on the interior bands in horizon 16 (FIG. 18. 5; Schönfeld 1988, 155 table 1 no. 59; 193 fig. 9, 11. 13. 16). The earliest evidence of this form quoted by Schönfeld (1988, 190) in horizon 15 shows no added white on the interior and cannot be taken as a representative of this type fossil. It is of interest, that bowls of very different rim and handle types show the added white on the interior bands as the only common element (cf. Podzuweit 2007, pl. 38. 1–10).

(d) *Cups.* Rather surprisingly deep cups FS 215 with monochrome interior and unpainted on the exterior may already be present in horizon 16. A cup of this kind is illustrated by Schönfeld and can be attributed to horizon 16a3 in Tiryns (FIG. 18. 6). In his schedule of forms, Schönfeld (1988, 155 table 1 no. 30) gives the start of this feature in horizon 15. However, as he does not illustrate these fragments and as the cup illustrated by him comes from horizon 16a3 (which, according to him, does not present this feature) the beginning may be assumed to lie in horizon 16 until the Schönfeld material can be restudied. However, an earlier start of this feature cannot be totally excluded.

It is possible that linear cups also began this early but there is no evidence at present available from Tiryns. However, Room II under Megaron 2 at Mycenae, where the fill is probably connected with the earthquake destruction in 'mid LH III B' (= end of Phase VII in the Citadel House Area), contained a nearly complete linear cup FS 215 (62–0460, FIG. 7. 3) and a cup with dotted rim and barred handle (62–543, FIG. 7. 4) among other vessels.

Unterbürg horizons 17–18 (architectural phases SH III B Entwickelt and Ende)

(a) *Closed vessels.* Linear painted, closed vessels with slightly hollowed lip have so far been considered to appear for the first time in LH III C Early. However, there is clear evidence from Tiryns that this feature starts in horizon 17, as the vessel illustrated by Podzuweit (2007, pl.

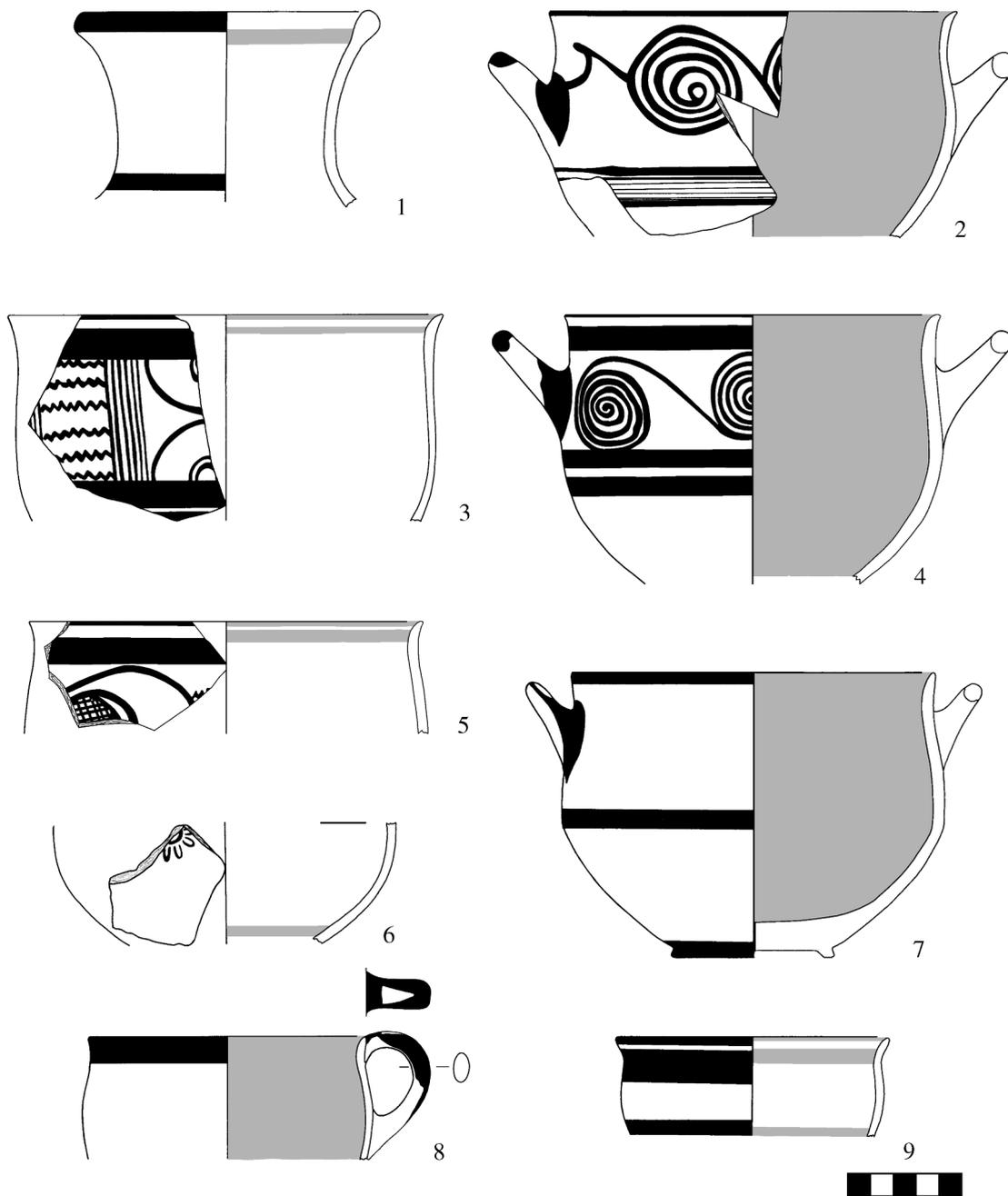


FIG. 19. Tiryns: Unterburg, LH III B2 Late examples from secure contexts.

103, 2) was found in Room 15, Building VIII, in a context (LXI 39/71 XV) assigned to 17a2–4 by Damm-Meinhardt (FIG. 19. 1). A linear jug from the fill of the well in Kw 14 also shows a very slightly hollowed lip (FIG. 17. 2).

(b) *Deep bowls.* The earliest evidence for deep bowls with monochrome interior with reserved circle in the base can be found in the fill of the well in Kw 14 described above in detail (FIG. 14. 1, 3). There is also evidence for this feature from the Epichosis (Voigtländer 2003, 97 pl. 69, Si 169–71).

Deep bowls showing an incipient stage of curving profiles are already common in horizon 17, as some of the restorable deep bowls from the fill of the well in Kw 14 clearly illustrate (FIG. 13. 2, 7–8).

Deep bowls with stemmed bowl banding also appear in horizon 17. This is shown by deep bowls from the fill between the two floors of Room 10, Building I, in horizon 17a2 (FIG. 19. 5), from the strata of horizon 17a3 in the Zwinger (FIG. 19. 3) and from the debris of the earthquake destruction at the end of the Palatial period in Room 123, Building VI (FIG. 19. 4).

The linear rosette deep bowl has long been considered to be a type fossil for the beginning of LH III C (Mountjoy 1986, 151). However, this form may now possibly be documented in the horizon 17a4 of the Unterburg in Tiryns (FIG. 19. 6), but later intrusions in this context cannot be absolutely excluded.

The first evidence of medium-band deep bowls, i.e. deep bowls with a monochrome interior and only a medium rim band (0.5>2.4 cm) on the exterior, can be dated to horizon 17. Fragments of a medium band deep bowl (FIG. 20. 3) were found together with a medium band cup (FIG. 20. 4) in the debris of the earthquake destruction of Room 122, Building VI, in horizon 17a4. Another one was found in horizon 18 at the end of the Palatial period (FIG. 20. 1). Moreover, the Epichosis provided several restorable medium band deep bowls (Voigtländer 2003, 95–6 pl. 69, Si 142–5).

The earliest appearance of the completely monochrome deep bowl is still unclear. In Tiryns this feature is first securely documented early in horizon 17 and possibly already in horizon 16 (Podzuweit 2007, 55, 60, 212). Podzuweit does not mention the quantity of monochrome deep bowls in horizons 17–18. They are also possibly documented in the Epichosis (Voigtländer 2003, 117 pl. 72; 134, Mo 10–14). However, in view of the state of preservation of these vessels an alternative identification as monochrome stemmed bowls FS 305 cannot be ruled out. At Mycenae the completely monochrome deep bowl FS 284 is documented throughout LH III B, a fact which can be interpreted as the continued popularity of monochrome vessels from LH III A2.

(c) *Shallow Bowls.* The first evidence of linear shallow-rounded bowl FS 295B with horizontal strap handles was found in the fill of the well in Kw 14 dating to horizon 17 (FIG. 15. 1). Of course, an earlier start of this feature cannot totally be excluded, as linear decorated shallow bowls of various different types appear in earlier horizons.

(d) *Deep cups.*

(1) Secure evidence: the first appearance of several types of deep cups with linear and monochrome decoration can be dated to horizon 17 in Tiryns. A medium band cup FS 215, i.e. monochrome interior and only a medium rim band on the exterior, was found

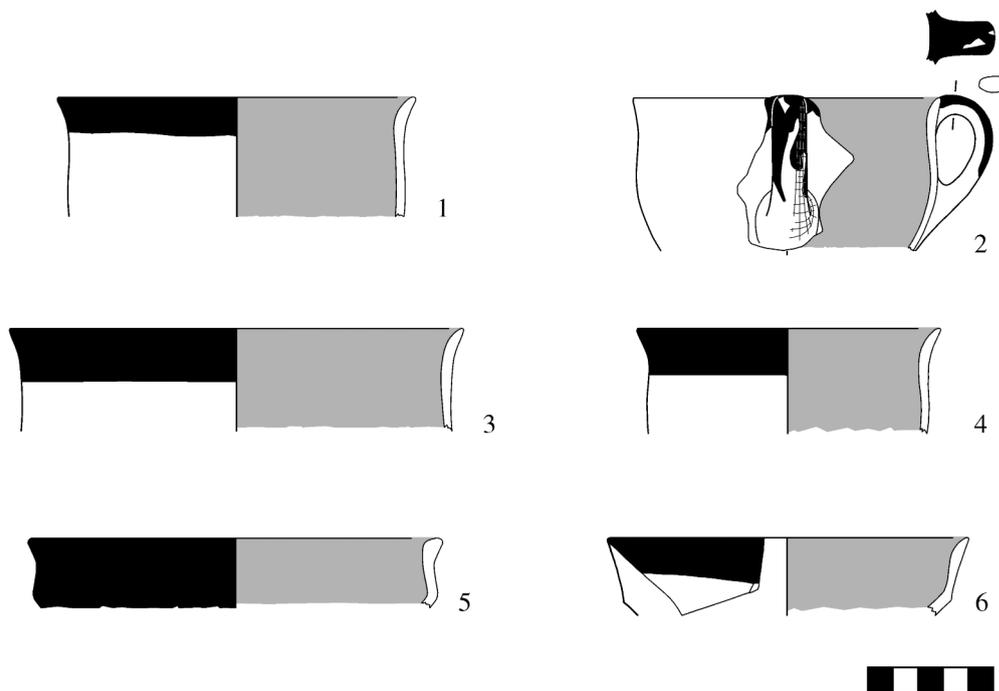


FIG. 20. Tiryns: Unterburg, LH III B2 Late examples from secure contexts.

sandwiched between the two floors of Room 10, Building I, and can safely be assigned to horizon 17a2 (FIG. 19. 8). Others were found in the slightly later destruction layer of the same room in horizon 17a4 (FIG. 20. 2) and in the debris of the earthquake destruction of Room 122, Building VI, in horizon 17a4 (FIG. 20. 4).

It is difficult to determine the first appearance of cups with dotted rim in Tiryns, as small rim sherds cannot be differentiated from those of the dipper. However, there is evidence for their presence in horizon 17–18. In addition a complete dotted rim cup was found in a probable burial in the Epichosis (Voigtländer 2003, 80 pl. 55, 117 Ta 6) with the feeding bottle G 43.

(2) Problematic evidence: linear deep cups with stemmed bowl banding may also appear in horizon 17. One quite well-preserved cup (FIG. 19. 9) was found in Abhub XIVb in the Zwinger. This layer is part of a fill that can be dated stratigraphically to SH III B Entwickelt at the latest. However, as the Zwinger area probably was an open courtyard and the strata of the Zwinger suffered from many intrusions in the Latest Palatial and the Post-Palatial period, one should be careful not to take this seemingly early evidence for this feature as a proof of its early appearance.

(e) *Carinated cup*. The beginning of the linear or monochrome carinated cup FS 240 in Tiryns has been the subject of controversy. The first appearance of this type fossil is dated by Podzuweit in the architectural phase SH III B Entwickelt (Podzuweit 2007, 117, 119, 201, 205, 212; *contra* Rutter 1977, 2, Deger-Jalkotzy 1982, 55–7, E.B. French 1985, 298, Mountjoy

1986, 134, Jung 2002, 152–3, who all see the start of this feature in LH III C Early). In this context, Podzuweit (2007, 78) also refers to a possible early instance from Tiryns-Stadt-West (Western Lower Town) in LH III A. Unfortunately, Podzuweit does not illustrate this very important find—not even in the context of his preliminary publication of the pottery from the Western Lower Town (Podzuweit and Salzmänn 1977)—which leaves doubt about the correct identification of the vessel and the quality of its context. In order to resolve the discussion about the beginning of this form (at least in Tiryns), a re-examination was undertaken of the stratification and context of all carinated cups from the published works of Kilian and Podzuweit; the catalogue in Podzuweit's *Habilitationsschrift* (1992), which was not published with the rest of his work (Podzuweit 2007); and all the carinated cups identified during the excavation in the Lower Citadel and kept separately in the storeroom. Altogether 232 of the sherds that were certainly, probably, or possibly identified as carinated cups derive from stratified Mycenaean levels of the Lower Citadel. Small monochrome rim fragments were excluded, as they could also be classified as deep bowls, as not enough of the profile is preserved. In contrast to Podzuweit's results, and in spite of intense effort, no evidence for monochrome or linear painted carinated cups FS 240 in palatial contexts in Tiryns was found (see Stockhammer 2008 for a more detailed discussion). This type of cup is also missing in the rich ceramic material of the Epichosis (Verdelis, French, and French 1965; Voigtländer 2003, esp. 99–100). The relevant rim fragments from Midea (Demakopoulou and Divarivalakou 1996, 19 fig. 18) are now classified by Demakopoulou (pers. comm.) as monochrome carinated kylikes, which are clearly documented in this horizon by a rim fragment with part of the handle.

(f) *Carinated kylikes*. Podzuweit has already noted the appearance of linear or monochrome carinated kylikes in the architectural horizon SH III B Entwickelt (Podzuweit 2007, 110, 117, 196, 205, 211–12, 222). A monochrome carinated kylix was stratified under the floor of Room 15, Building VIII, and can be attributed to horizon 17a0 (FIG. 20. 5). A rim sherd of a carinated kylix with monochrome interior and a medium band on the exterior was found in the debris of the earthquake destruction of horizon 17a4 in Room 122, Building VI (FIG. 20. 6).

RELATION TO TRANSITIONAL LH III B2–LH III C EARLY (BY E.B. FRENCH AND PH. STOCKHAMMER)

As defined by Mountjoy (1997) the 'Transitional' pottery phase lies between LH III B2 and LH III C Early and is characterized by an admixture of new features amid material otherwise similar to that of the preceding phase. She stated clearly (1997, 110) that in her view this phase 'postdates the pottery in the destruction levels in the citadels at Mycenae and Tiryns at the end of LH IIIB 2'. She did, however, consider pottery of this phase to be present in the destruction level at Midea.

In the summer of 1997 E.B. French finalized her analysis of the stratigraphy of the LH III B2 and LH III C levels of the Citadel House Area and circulated the result to those interested. (This was presented at the Mycenaean Seminar in London on 17 March 1999; E.B. French 1999). With this evidence in mind and having seen a prepublication draft of Mountjoy's Pylos article, in March 1998 she inserted into the final text of WBM 10 (p. 3) a statement calling

attention to the presence in the destruction levels at Mycenae of 'some features immediately antecedent to LH III C' and 'some sherds individually of LH III C type'. The presence of such material had been known since at least 1989 as it is noted in the draft of WBM 9 (see above) on the South House Annex. She misunderstood Mountjoy to accept this evidence as showing that at Mycenae, like Midea, her Transitional phase was already present in the Phase VIII destruction level. The definition of LH III B2 Late presented here attempts to correct this misunderstanding.

It may be noted that any identifications of LH III C Early material from the Citadel House Area at Mycenae made before 1997 were stylistic and not stratigraphic. Thus, one Deep Bowl of the type common in LH III C Early was chosen by Mountjoy for her book from our photographs of registered pottery arranged partly by stratigraphy and partly by style (Mountjoy 1986, 151 fig. 190. 2); after subsequent study, however, it proved to have been found on a Phase VIII destruction floor and belongs, in fact, to LH III B2 Late. It is a good example of the problems addressed here.

Mountjoy (1997) gave many examples from a wide range of sites of the four types of Deep Bowl which she identifies, and states (1997, 112) that the features she lists as Deep Bowl types 2–4 are 'the criteria of this phase'. These are not obviously present at either Mycenae or Tiryns, either in the destruction levels or in those immediately subsequent to the destruction (see below). Type 1 is present at both sites but of the others only 54–289 (FIG. 2. 2) from Mycenae and a LH III B2 Early Deep Bowl A/B from Tiryns (FIG. 18. 3 = Schönfeld 1988, 175 fig. 5. 9) need be mentioned, which have a somewhat angular profile (type 3); but this is not the only divergent feature for either example. Moreover at Mycenae, there are no examples of Wavy Band on Deep Bowls either before or after the destruction. In Tiryns there is no clear evidence for Wavy Band on the Deep Bowl in LH III B from the Unterburg (*contra* Podzuweit 2007, 38: SH III B Ende), as the relevant vessel (Podzuweit 2007, pl. 13. 2: LXI 40/18 XVIIa R 120) came from a post-palatial intrusion down into the stratum of horizon 17a4 inside Room 120 not recognized by Kilian or Podzuweit, but only recently in the context of the revaluation of the Unterburg stratigraphy. However, several bowls with Wavy Band were found in the Epichosis (Voigtländer 2003, 73–5 pls. 49–50, 109–110 SW 1–27); of the five (SW 21–5) which might be classified as Deep Bowls on the basis of the lip profile, SW 23 and 25 come from the deposit itself. Throughout all LH III C this motif is common on Deep Bowls in Tiryns (cf. Podzuweit 2007, pls. 12–14). The evidence of the Wavy Band on Deep Bowls clearly shows differing microregional preferences within the Argolid.

Several of the additional shapes listed by Mountjoy are known from the LH III C Early 1 floors at Mycenae and from horizon 19 from the Unterburg in Tiryns (e.g. Podzuweit 2007, pl. 19, 8: LXI 41/05.15 Xa G 32, i.e. horizon 19ba) while others are known earlier.

The Übergangshorizont (transition horizon) of the Unterburg was first mentioned by Kilian in his second preliminary report 1979 (Kilian 1979, 389, 404; Kilian 1980, 184 fig. 7; 185, 193). As an architectural phase he places this Übergangshorizont (or rather Ruinenbewohnung by squatters) directly after the destruction of the Unterburg at the end of LH III B2 and before the proper LH III C construction phase (Kilian 1979, 404). In his view, the pottery of this phase shows strong relations to the high quality wares of LH III B as well as to the features of LH III C (Kilian 1979, 404). When in 1979 Podzuweit first defined the pottery features of this Übergangshorizont, he characterized it as a typical late LH III B inventory in which type fossils of LH III C Early already appear, namely the monochrome

carinated cup FS 240, the linear carinated bowl FS 295, the conical bowl FS 242 and the linear kylix FS 274 (Podzuweit 1979*a*, 412; Podzuweit 1979*b*, 217). In contrast to Kilian, however, Podzuweit is not consistent in his placing of this Übergangshorizont. In his pottery reports from 1979 and 1981 he places it, as does Kilian, at the very beginning of the Post-Palatial period (e.g. Podzuweit 1979*a*, 412; 1981, 204); in his pottery report from 1982 he uses the term 'Übergangshorizont' synonymously with 'spätestes SH III B' (latest LH III B) and locates this phase explicitly before the destruction of the Unterburg (Podzuweit 1982, 68. 70). In his 1981 report only the monochrome carinated cup FS 240 remains as a type fossil of those mentioned in 1979 (Podzuweit 1981, 204–205). At the same time, he presents a seemingly closed context with pottery typical for the Übergangshorizont, Room 10a (Podzuweit 1981, 201 fig. 54; 204–5). However, the monochrome carinated cup FS 240, one of the most innovative features said to appear in this horizon, is not illustrated. In 1984 Podzuweit (1984, 12–13) also redated the first appearance of the monochrome carinated cup FS 240 to LH III B, depriving his former Übergangshorizont of the last remaining diagnostic feature. Therefore, it causes no surprise that the Übergangshorizont is no longer mentioned in his *Habilitationsschrift* finished in 1992 and published in 2007. While a critical reading of the pottery reports can show the deconstruction of this horizon by Podzuweit himself, the published sherds from Room 10a have long remained a complex of uncertain chronological position, as the stratigraphy of the Unterburg has not yet been finally published. A glance at the contexts of the illustrated sherds reveals that the pieces derive from two different Abhübe, the Abhub IX and IXb (Podzuweit 1981, 218). Already in the late 1980s it must have become clear that while the Abhübe IXc—a represent the earthquake destruction of Rooms 10 and 8, Building I, at the end of the Palatial period and can be attributed to horizon 18, Abhub IX has to be positioned after the earthquake destruction in horizon 19a (Podzuweit 2007, 324; Damm-Meinhardt, pers. comm.). Moreover, a comparison between the contexts given by Podzuweit for the illustrated pieces (Podzuweit 1981, 218) and the plan published by Kilian (1981, fig. 27) reveals that only four of these (Podzuweit 1981, 201 fig. 54. 3, 9, 13, 14) come from Room 10a and that the find spot of the other sherds except for two is located east of Room 10a (Podzuweit 1981, 201 fig. 54. 1, 7, 10–12; pieces 2 and 8 are included in error), in other words, in or above Room 8. Podzuweit may well be right that there was some form of successor to Room 8 in horizon 19a but it cannot be proven stratigraphically. The pottery illustrated in Podzuweit 1981, fig. 54 belongs to slightly different horizons. None of the sherds was in a primary position. It could have been included in the mudbricks of Rooms 8 and 10, or in filling or levelling processes after the destruction, etc. Consequently it has to be excluded from any chronological considerations in trying to define LH III B2 or LH III C Early in Tiryns.

Thus neither at Mycenae nor at Tiryns is it possible at present to isolate a distinct 'Transitional' pottery phase as defined by Mountjoy. Rather what seems to emerge is an increasing diversity among the few pottery workshops of the Argolid rather than the previously striking conformity (for a revaluation of palatial and post-palatial pottery production cf. Stockhammer 2008) over a period of historical disruption. This would not be unlikely if the earthquake destructions in the course of LH III B2 in Mycenae and Tiryns resulted in a lessening of bureaucratic dominance and restriction, maybe also because of the excessive demands with which the palaces were confronted in the last phases of the Palatial period.

LEVELS OVERLYING THE DESTRUCTION
(BY E.B. FRENCH AND PH. STOCKHAMMER)

At Mycenae, although the stratigraphy is clear, there is a difficulty in defining the pottery used in the phase immediately after the destruction, because so much use was made of the actual destruction debris in the subsequent rebuilding. Such walls as remained standing, including the West Citadel Wall itself, were used to support substantial terraces filled with the debris containing a mixture of sherd material dating from much earlier periods through to that of the destruction level. Although material exhibiting new features may well occur in these terraces, it cannot be isolated with any certainty as it forms a stylistic continuum with what went before.

It seems quite possible that the reconstruction period and the occupation period of these new complexes may have lasted for some time. They were well built and substantial. However, they were finally destroyed in what appears to have been another earthquake, which in one case caused the collapse of one of the reused walls over a floor covered in pottery. Throughout the Citadel House Area some 90 restorable pots were recovered from floors of this phase—referred to as LH III C Early 1 (E.B. French 2007, 528). Over half of these were decorated. The shapes represented have been listed and illustrated in E.B. French 2007, fig. 1, 4–7, and fully catalogued in WBM 16/17. They are not, however, as yet paralleled at Tiryns.

In Tiryns it is equally difficult to characterize LH III C Early 1. This phase comprises the horizons 19a0–a1 on the Unterburg and the older subhorizon of horizon 19 A in the North-Western Lower Town in which the monochrome carinated cups FS 240—the most prominent type fossil of LH III C Early 2—are still missing (Stockhammer 2006, 146; 2008). However, the system of storing and archiving used during Kilian's excavations prevents us from reconstructing floor deposits of LH III C Early 1 on the Unterburg and in the North-Western Lower Town. In the North-Eastern Lower Town the first settlement phase started in LH III C Early 1 and continued into III C Early 2, making it very difficult to determine which features might have appeared in III C Early 1 and which in III C Early 2 (Maran and Papadimitriou 2006, 104–5; Stockhammer 2006, 145–7, 156; 2008).

The only shape that seems, at present, to serve as a universal 'type fossil' for the LH III C Early 1 phase is the shallow angular bowl FS 295A, with a very soft carination (Mountjoy 1986, 153 fig. 197. 1); this also has a spiral on the inside of the base. This type derives from the rounded form FS 295B of LH III B2 Late and develops itself into the form FS 295C in LH III C Middle, a form which becomes overwhelmingly popular. The various types of this shape, its development, and its relation to FS 296 are shown in FIG. 25.

SUMMARY (FIGS. 21–4) (BY E.B. FRENCH AND PH. STOCKHAMMER)

At Tiryns a primary result of this study is the realization that LH III B2 Early starts with the architectural horizon SH III B Mitte (LH III B Middle) and not with SH III B Entwickelt (LH III B Developed), as once claimed by Kilian (1988*b*, 118) and more recently by Vitale (2006, 197).

The introduction of the term LH III B2 Late for the phase immediately preceding the destructions has considerable consequences for existing and competing chronological systems: Podzuweit's phases SH III B Entwickelt and SH III B Ende are both subsumed into it.

MYCENAE AND TIRYNS

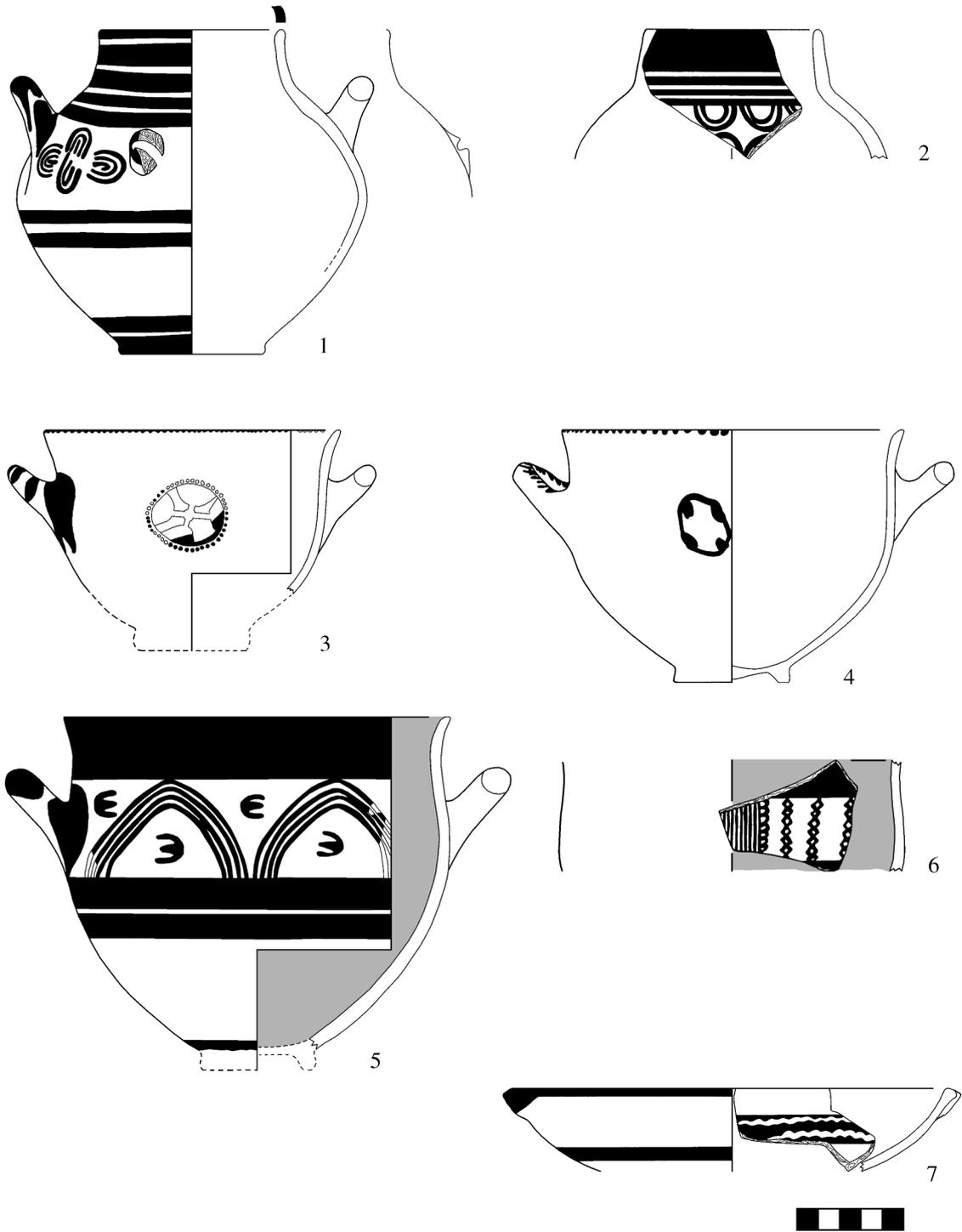


FIG. 21. LH III B2 Early: Diagnostic Features, examples from Mycenae (1, 3, 5) and Tiryns (2, 4, 6, 7).

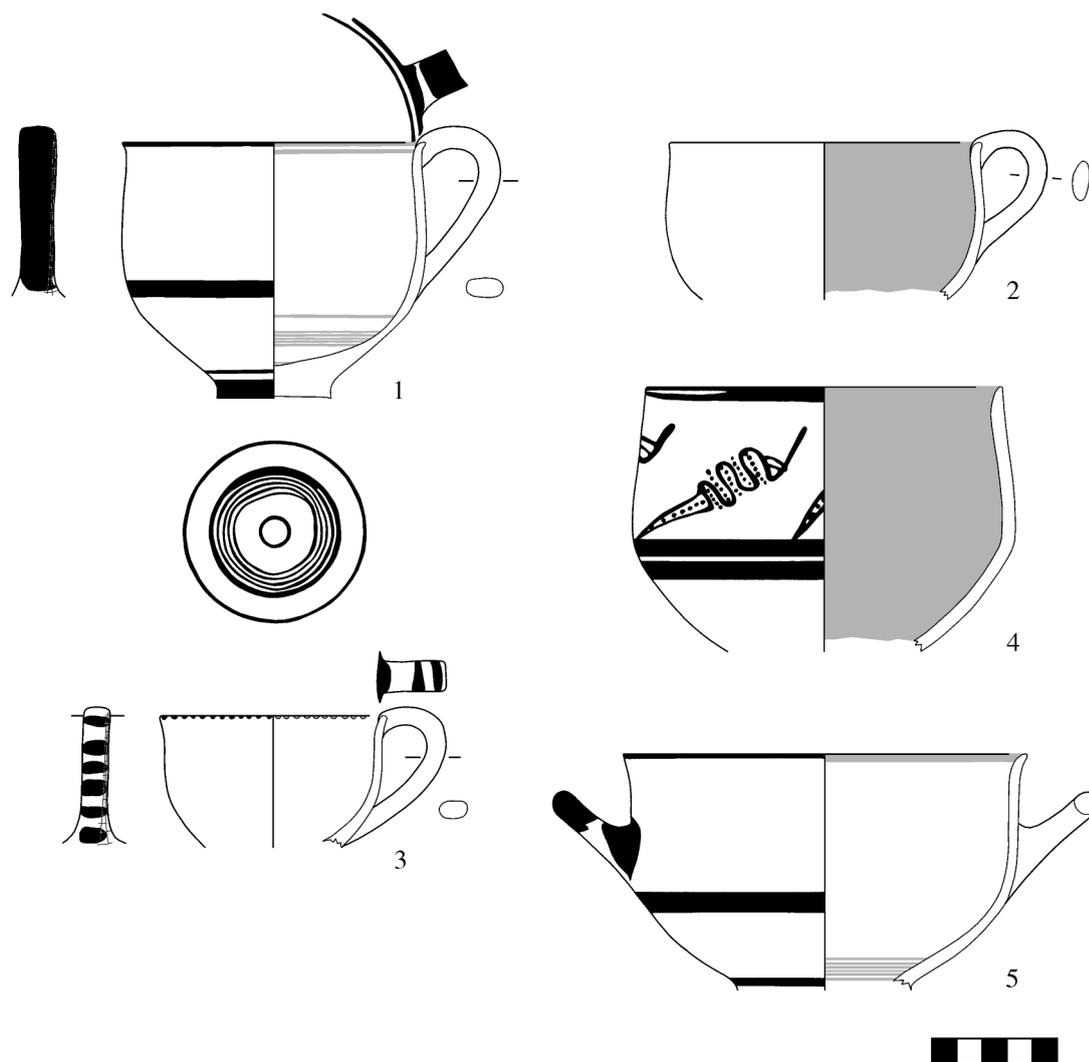


FIG. 22. LH III B2 Early: Problematic Features, examples from Mycenae (1, 3) and Tiryns (2, 4, 5).

The further subdivision of LH III B2 Late pottery between the two architectural horizons SH III B *Entwickelt* and SH III B *Ende* is not possible for Tiryns at the moment, as the closed floor contexts of the Kilian excavations were not kept together. However, the latest excavations in the Northern Lower Citadel in Tiryns (2000–3) have produced new and rich contexts (Maran forthcoming). At other sites, however, it cannot be demonstrated, perhaps because the relevant levels are not present or have not been identified. The horizons 17a0–18 in the Lower Citadel at Tiryns are assigned to the phase LH III B2 Late.

Therefore, future research in Tiryns, especially the complete evaluation of the floor contexts from the Northern Lower Citadel, might enable us to differentiate further the

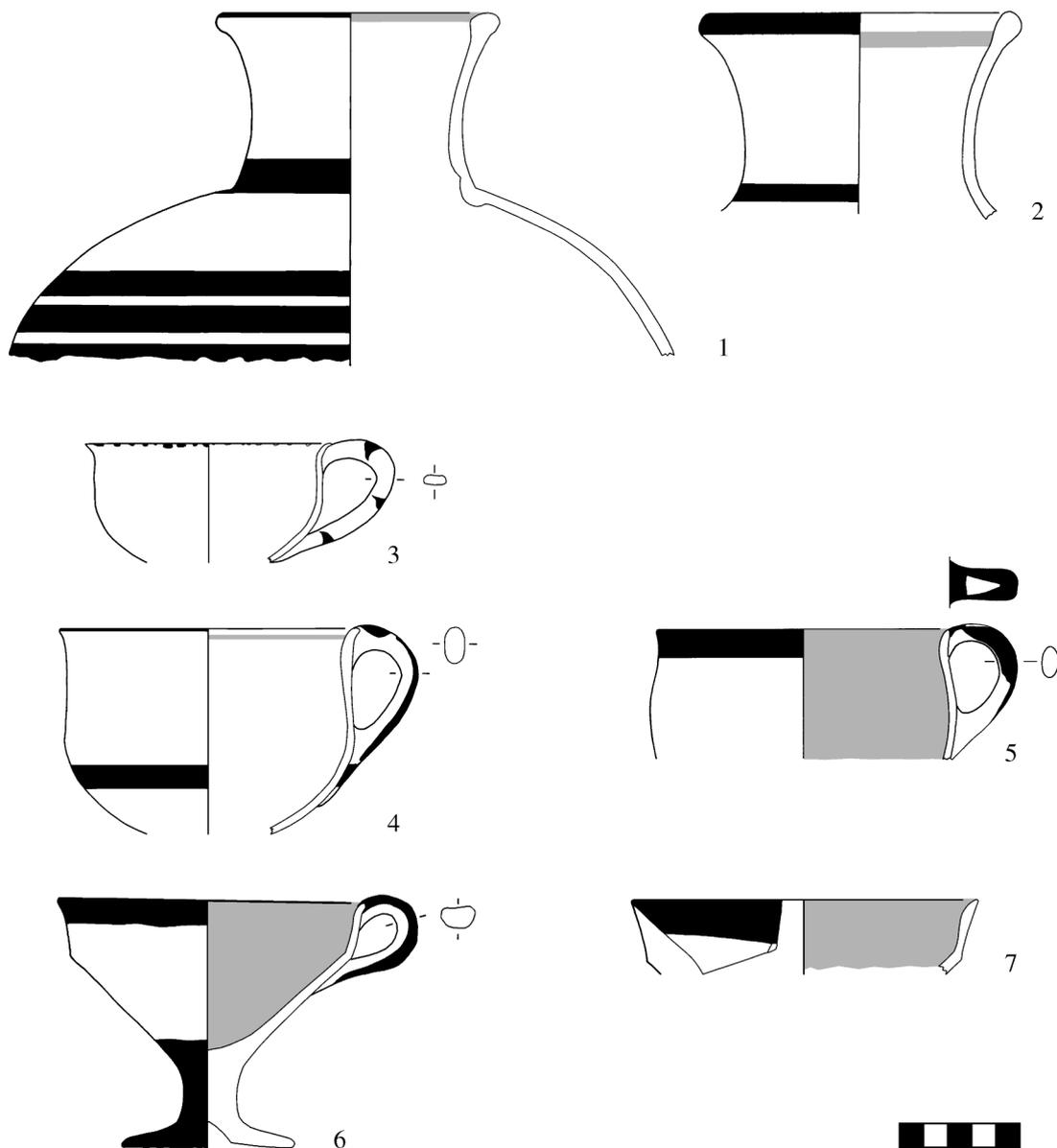


FIG. 23. LH III B2 Late: Diagnostic Features, examples from Mycenae (1, 3, 4, 6) and Tiryns (2, 5, 7).

pottery development within the phase LH III B2 Late. It might be possible to see whether Tiryns and Mycenae were destroyed at the same time.

It is obvious that the Epichosis deposit contains a small proportion of material of this phase as well as a very considerable quantity of LH III B1 and B2 Early. It seems to us likely, but not at present provable, that this is a cumulative deposit covering the whole Palatial period. A few

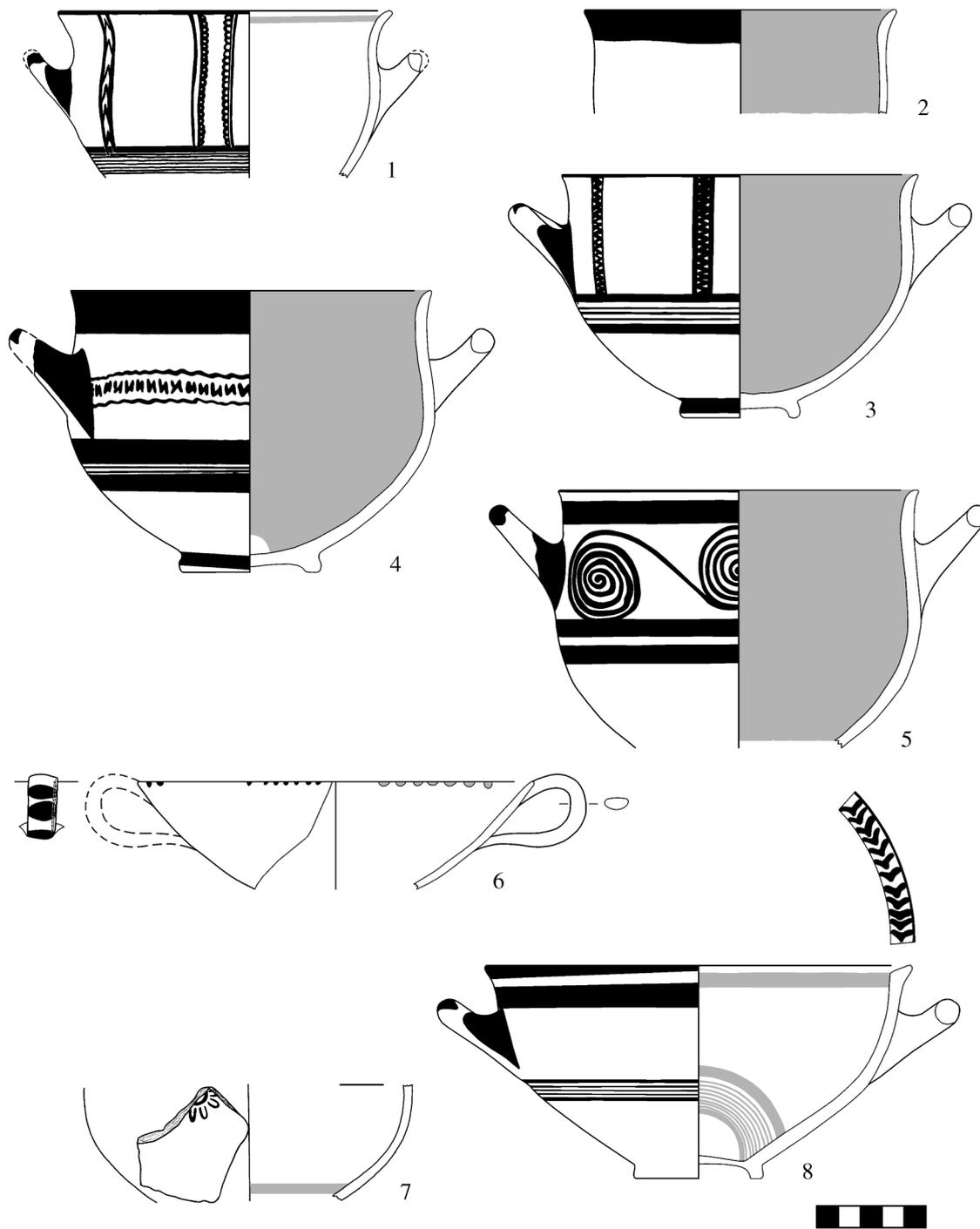


FIG. 24. LH III B2 Late: Diagnostic Features, examples from Mycenae (1, 6) and Tiryns (2-5, 7, 8).

rogue intrusions are clear (Voigtländer 2003, 85, 94 pl. 67, Si 127, 129; Jung 2006, 194) but whether there is any serious component of the first post-palatial phase is still uncertain.

At Mycenae the Citadel House Area with the South House has given some clear but scanty evidence. It may be hoped that, as the other areas of the Citadel at Mycenae excavated by the Archaeological Society are studied, more evidence may come to light. Already Iakovides has noted the presence of our variant types of Deep Bowl in the North-West Quarter (Iakovides 2006, 176).

There remains the other major Citadel of the main Argive plain: Midea. Here also there is evidence of a major destruction. Mountjoy has assigned this to her LH III B–LH III C Transition period. Demakopoulou (2003) prefers to call the period LH III B2 although she recognizes the presence of the material on which Mountjoy's assessment is made. Again, it seems likely, but not provable, that this site was destroyed in LH III B2 Late like Mycenae and Tiryns and that the material is largely comparable with ours. Judgement on this must await final study and analysis by the excavators of the very large bulk of material from the various parts of the site.

With this definition of a LH III B2 Late horizon we are trying to unify the latest phase of the Palatial period immediately before the destruction of the Mycenaean centres in the Argolid in both terminology and content. The plethora of possible diagnostic features should facilitate identification. However, one has to bear in mind that all the features identified also continue and become even more frequent in the Post-Palatial period. Therefore, it is essential to demonstrate the absence of type fossils of LH III C Early before attributing a find complex to LH III B2 Late at other sites.

In the destruction contexts marking LH III B2 Late so far isolated and which we have described in detail above, it is possible to note something of a disintegration of the tight standardization in pottery decoration of the previous phase. The salient features may be summarized as follows:

1. The variation of standard types of rim and body decoration on the 'type fossils' of Deep Bowl which have been identifying features in earlier phases.
2. After first appearing in LH III B2 Early, growing frequency in the use of a variety of 'linear' types of decoration (including the dotted rim) on Deep Cups, which have previously been unpainted.
3. Similar variation in the decoration of carinated and, very rarely, conical kylikes (and here dotted rims only, not linear decoration) which in the previous phase have been unpainted.
4. The start of the series of linear bowls of which the gradual development of shape forms a very important feature on the mainland, on Cyprus and in the Levant (Ussishkin 2004, 1447). These are initially linear versions of unpainted shapes. The first to appear is FS 295B; the others characterize various phases of LH III C. The development of shallow linear bowls in LH III B and III C at Mycenae and Tiryns is illustrated in FIG. 25.
5. The first appearance of slightly hollowed lips on large closed vessels with only linear decoration.

We can see here a wide range of vessel types used apparently for a similar purpose. Moreover a large number of cups and deep bowls with only linear decoration appears suddenly.

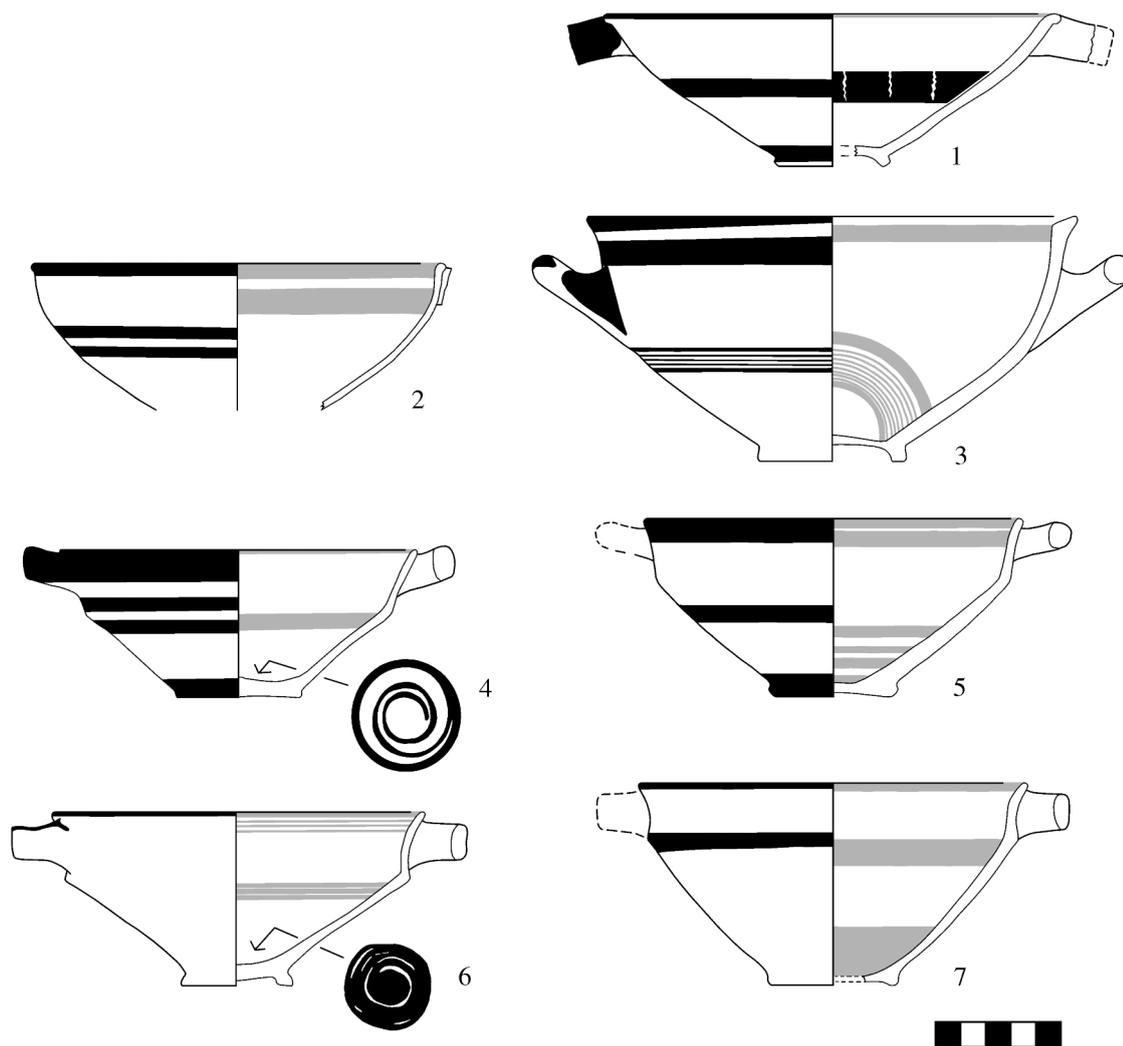


FIG. 25. Bowl Types FS 296 (1), FS 295B (2, 3), FS 295A (4, 5), FS 295C (6, 7)
from Mycenae (2, 4, 6) and Tiryns (1, 3, 5, 7).

Nevertheless, they show some standardization, for instance with regard to the combination of monochrome interior with some distinct types of rim banding. Thus in LH III B₂ Late a change in the usage of linear decoration seems to have taken place as well as wide experimentation in the decoration of each shape.

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SOURCES OF FIGURES

FIG.	Name	Context	Publication
<i>Mycenae (All illustrations are copyright Mycenae Archive)</i>			
1	plan of the Mycenae Citadel House Area		
2. 1	Deep Bowl FS 284. type A	SHs Ann, Room 1	Ex No 54-288; BE No 15907; G'54/052; Phase 0831
2. 2	Deep Bowl FS 284. type C	SHs Ann, Room 1	Ex No 54-289; BE No 15914; G'54/052; Phase 0831
2. 3	Deep Bowl FS 284. type A	SHs Ann, Room 1	Ex No 54-525; BE No 15909; G'54/108; Phase 0831
2. 4	Unpainted Kylix FS 274	SHs Ann, Room 1	Ex No 54-528; BE No 15911; G'54/108; Phase 0831
2. 5	Cooking Pot, Jug	SHs Ann, Room 1	Ex No 54-527; BE No 15913; G'54/108; Phase 0831
3. 1	Vat	SHs Ann, Room 1	Ex No 54-526; BE No 9507; G'54/104; Phase 0832
3. 2	Canaanite Jar	SHs Ann, Room 1	Ex No 54-601; BE No 16750; G'54/039; Phase 0832
3. 3	Transport Stirrup- Jar FS 164. false spout	SHs Ann, Room 1	Ex No 54-573; BE No 15906; G'54/108; Phase 0831
3. 3	Transport Stirrup- Jar FS 164. spout	SHs Ann, Room 1	Ex No 54-575; BE No 15915; G'54/052; Phase 0831
4. 1	Deep Bowl FS 284. type C	SHs Ann, Room 4	Ex No 60-322; BE No 17003; G6'60/35; Phase 0835
4. 2	Deep Bowl FS 284. type C	SHs Ann, Room 5	Ex No 60-325; BE No 17000; G6'60/46. 47; Phase 0832
4. 3	Deep Bowl FS 284. type A	SHs Ann, Room 5	Ex No 60-326; BE No 17002; G6'60/46. 47; Phase 0832
4. 4	Jar FS 112. unpainted	SHs Ann, Room 5	Ex No 60-328; BE No 17004; G6'60/48; Phase 0832
4. 5	Cup FS 215. dotted rim	SHs Ann, Room 6	Ex No 62-416; BE No 15990; G10'62/77; Phase 0831
4. 6	Miniature bowl	SHs Ann, Room 6	Ex No 62-403; BE No 16004; G10'62/22; Phase 0831
4. 7	Bird Askos	SHs Ann, Room 6	Ex No 62-415; BE No 15989; G10'62/74; Phase 0834
4. 8	Small Stirrup-Jar	SHs Ann, Room 6	Ex No 62-539; BE No 16000; G11'62/93; Phase 0812/833
5. 1	Deep Bowl FS 284. type A	SHs Ann, Room 7	Ex No 62-0406; BE No 15998; G10'62/40; Phase 0831
5. 2	Cup FS 215. dotted rim	SHs Ann, Room 7	Ex No 62-413; BE No 15997; G10'62/67; Phase 0831
5. 3	Kylix FS 274. dotted rim	SHs Ann, Room 7	Ex No 62-0412; BE No 15999; G10'62/62. 63; Phase 0832
5. 4	Pot Stand	SHs Ann, Room 7	Ex No 62-414; BE No 15986; G10'62/67; Phase 0831
5. 5	Jug	SHs Ann, Room 7B	Ex No 62-417; BE No 15993; G10'62/80; Phase 0831

5. 6	Deep Bowl FS 284. type B	South House, Central Rm	Ex No 20-109; BE No 5399; Area k, Pillar Room; Phase 0830	Wace 1921-3, pl. V c; WBM 9
6. 1	Small Collar- Necked Jar FS 64	West House	Ex No 43; BE No 2771; Phase 0731	French 1967, pl. 38 c
6. 2	Rosette Deep Bowl	Causeway Deposit	BE No 23488-23492; G1'60; Phase 0828	Wardle 1973, 315 fig. 10. 56
6. 3	Deep Bowl FS 284. type B	Causeway Deposit	BE No 23488-23494; G1'60; Phase 0828	Wardle 1973, 316 fig. 11. 64
6. 4	Deep Bowl FS 284. type B	Causeway Deposit	Ex No 60-310; BE No 15975; G1'60; Phase 0828	Wardle 1973, 316 fig. 11. 66
7. 1	Deep Bowl FS 284. type A	Megaron, Room II	Ex No 62-555; BE No 16133; G23'62/158; Phase ?0732	WBM 12
7. 2	Small Deep Bowl FS 284. dotted rim	Megaron, Room II	Ex No 62-554; BE No 16134; G23'62/158; Phase ?0732	WBM 12
7. 3	Cup FS 215. linear	Megaron, Room II	Ex No 62-460; BE No 16107; G23'62/158; Phase ?0732	WBM 12
7. 4	Cup FS 215. dotted rim	Megaron, Room II	Ex No 62-543; BE No 16109; G23'62/158; Phase ?0732	WBM 12
8. 1	Deep Bowl FS 284. type A, flaring lip	Passage 34	Ex No 69-411; BE No 16505; GMBW'69/ 27&; Phase 0834/805	WBM 13
8. 2	Small Deep Bowl FS 284. dotted rim	Passage 34	Ex No 69-404; BE No 16495; GMBW'69/ 34; Phase 0834/805	WBM 13
8. 3	Kylix FS 267. linear/monochrome	Passage 34	Ex No 68-445; BE No 16410; G23'68/18; Phase 0728/805	WBM 13
8. 4	Amphora, hollow lip	Passage 34	Ex No 69-407a; BE No 21771; GMBW'69/ 27. 40; Phase 0805	WBM 13
8. 5	Cup FS 216. linear	Small Court 35	Ex No 68-458; BE No 16480; G23'68/ 136&; Phase 0831	WBM 13
8. 6	Cup FS 215. dotted rim	Room xxiv	Ex No 68-541; BE No 16414; G23'68/57&; Phase 0827/832	WBM 13

Tiryns (All drawings are copyright Deutsches Archäologisches Institut)

9	plan of the Tiryns Unterburg			Damm-Meinhardt forthcoming
10. 1	Deep Bowl FS 284. type A	Building XIV, Room 223	LXII 36/13 VI; Horizon 17a1	Photo M. Riedl, Tiryns
10. 2	Globular Stirrup- Jar FS 173	Building XIV, Room 223	LXII 36/01 Ofl. VII; Horizon 17a1	Photo M. Riedl, Tiryns
10. 3	Vessels <i>in situ</i> on the floor of Room 223	Building XIV, Room 223	Horizon 17a1	Photo 1982, film 14, no. 62
11. 1	Deep Cup FS 215. linear	Building XIV, Room 223	LXII 35/93 VII + 36/3 VII; Horizon 17a1	Drawing Tiryns Archive no. 11/71 and 11/184
11. 2	Deep Bowl FS 284. type A	Building XIV, Room 223	LXII 36/32 VIb; LXII 36/04 VII; Horizon 17a1	Drawing Tiryns Archive no. 11/130
11. 3	Narrow-Necked Jug FS 120	Building XIV, Room 223	LXII 35/91 Ofl. VII; LXII 36/1 Ofl. VII a 12.56; Horizon 17a1	Drawing Tiryns Archive (without number)
11. 4	Mug FS 226	Building XIV, Room 223	LXII 36/3.4 Ofl. VII; Horizon 17a1	Kilian 1988a, 121 fig. 17

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12. 1	Deep Bowl FS 284. type B	Building XIV, LXI 35/78 OfI. XIVa; Horizon 17a4-18 Room 225.226	Photo 1983, film 19, no. 9
12. 2	Small Stirrup-Jar FS 173	Building XIV, LXI 35/98 XIII; Horizon 17a4-18 Room 225.226	Drawing Tiryns Archive no. 10/59
12. 3	Carinated Kylix FS 267. unpainted	Building XIV, LXI 35/87 XIII; Horizon 17a4-18 Room 225.226	Drawing Tiryns Archive no. 10/44
13. 1	Deep Bowl FS 284. type A	Casemate Kw LXI 35/63 XIVl.m; Horizon 17a1-17a5 14. Well	Kilian 1988a, 119 fig. 14. 2; Drawing Tiryns Archive no. 9/1093
13. 2	Deep Bowl FS 284. type A	Casemate Kw LXI 35/63 XIVg; Horizon 17a1-17a5 14. Well	Kilian 1988a, 119 fig. 14. 6; Drawing Tiryns Archive no. 9/1210
13. 3	Deep Bowl FS 284. type A	Casemate Kw LXI 35/63 XIVo.p; Horizon 17a1-17a5 14. Well	Kilian 1988a, 119 fig. 14. 4; Drawing Tiryns Archive no. 9/1115
13. 4	Deep Bowl FS 284. type A	Casemate Kw LXI 35/63 XIVp; Horizon 17a1-17a5 14. Well	Drawing Tiryns Archive no. 11/148
13. 5	Deep Bowl FS 284. type A	Casemate Kw LXI 35/63 XIVk.m; Horizon 17a1-17a5 14. Well	Kilian 1988a, 119 fig. 14. 1; Drawing Tiryns Archive no. 9/1137
13. 6	Deep Bowl FS 284. type A	Casemate Kw LXI 35/63 XIVc; Horizon 17a1-17a5 14. Well	Drawing Tiryns Archive (without number)
13. 7	Deep Bowl FS 284. type A	Casemate Kw LXI 35/63 XIVc.m.n.o; Horizon 14. Well 17a1-17a5	Kilian 1988a, 119 fig. 14. 3; Drawing Tiryns Archive no. 9/1155
13. 8	Deep Bowl FS 284. type A	Casemate Kw LXI 35/63 XIVo.p.t; Horizon 17a1-17a5 14. Well	Kilian 1988a, 119 fig. 14. 5; Drawing Tiryns Archive no. 9/1168
14. 1	Deep Bowl FS 284. type B	Casemate Kw LXI 35/63 XIVE.g; Horizon 17a1-17a5 14. Well	Kilian 1988a, 118 fig. 13. 3; Drawing Tiryns Archive no. 9/1182
14. 2	Deep Bowl FS 284. type B	Casemate Kw LXI 35/63 XIVg; Horizon 17a1-17a5 14. Well	Kilian 1988a, 118 fig. 13. 4; Drawing Tiryns Archive no. 9/1372
14. 3	Deep Bowl FS 284. type B	Casemate Kw LXI 35/63 XIVg; Horizon 17a1-17a5 14. Well	Kilian 1988a, 118 fig. 13. 1
14. 4	Deep Bowl FS 284. dotted rim	Casemate Kw LXI 35/63 XIVg; Horizon 17a1-17a5 14. Well	Drawing Tiryns Archive no. 9/1060
14. 5	Deep Bowl FS 284. type A/B	Casemate Kw LXI 35/63 XIVg; Horizon 17a1-17a5 14. Well	Kilian 1988a, 118 fig. 13. 2; Drawing Tiryns Archive no. 9/1124

14. 6	Stemmed Bowl FS 305	Casemate Kw 14. Well	LXI 35/63 XIVn.m.p.q; Horizon 17a1-17a5	Kilian 1988a, 119 fig. 14. 7; Drawing Tiryns Archive no. 9/1001
15. 1	Shallow rounded Bowl FS 295B	Casemate Kw 14. Well	LXI 35/63 XIVm; Horizon 17a1-17a5	Kilian 1988a, 119 fig. 14. 8; Drawing Tiryns Archive no. 9/1086
15. 2	Basin FS 294	Casemate Kw 14. Well	LXI 35/63 XIVg,h; Horizon 17a1-17a5	Drawing Tiryns Archive no. 9/810
15. 3	Basin FS 294	Casemate Kw 14. Well	LXI 35/63 XIVh; Horizon 17a1-17a5	Kilian 1988a, 116 fig. 12. 4; Drawing Tiryns Archive no. 9/1226
16. 1	Conical Kylix FS 274. unpainted	Casemate Kw 14. Well	LXI 35/63 XI; LXI 35/63 XIVg; Horizon 17a1-17a5	Drawing Tiryns Archive no. 10/29
16. 2	Krater FS 281. pictorial	Casemate Kw 14. Well	LXI 35/65 XIVg-h; LXI 37/78 IV; LXI 41/43 XI grau ; Horizon 17a1-17a5	Kilian 1988a, 116 fig. 12. 3; Avila, Grossmann, and Schäfer 1980, 25 pl. 7. 101; Güntner 2000, 64-5 pl. 29. 1 a-b; Drawing Tiryns Archive no. 9/1323
17. 1	Jug FS 110	Casemate Kw 14. Well	LXI 35/63 XIVn; Horizon 17a1-17a5	Drawing Tiryns Archive no. 9/1205
17. 2	Jug FS 110	Casemate Kw 14. Well	LXI 35/63 XIVn; Horizon 17a1-17a5	Kilian 1988a, 118 fig. 13. 5; Drawing Tiryns Archive no. 9/1195
17. 3	Feeding Bottle FS 159	Casemate Kw 14. Well	LXI 35/63 XIVk.p.q.v.; Horizon 17a1-17a5	Kilian 1988a, 116 fig. 12. 1; Drawing Tiryns Archive no. 9/1097
17. 4	Small Stirrup-Jar FS 173	Casemate Kw 14. Well	LXI 35/63 XIVn; Horizon 17a1-17a5	Kilian 1988a, 116 fig. 12. 2
18. 1	Small Collar Necked Jar FS 64	Courtyard	LXII 43/84 XVIII; Horizon 16a2	Schönfeld 1988, 195 fig. 10. 4
18. 2	Rosette Deep Bowl FS 284	Courtyard	LXI 42/68 XV; Horizon 16a7	Schönfeld 1988, 203 fig. 12. 2
18. 3	Deep Bowl FS 284. type A/B	Courtyard	LXI 42/80 XVIa; Horizon 15a2-16a4	Schönfeld 1988, 175 fig. 5. 9
18. 4	Deep Bowl FS 284. linear	Room 214	LXII 43/11 XVIIb; Horizon 16a3	Schönfeld 1988, 177 fig. 6. 13; Drawing Tiryns Archive no. 7/1432
18. 5	Shallow Bowl FS 296. added white	Room 215	LXII 43/42 XVIc; LXII 43/43 XVI; Horizon 16a1	Schönfeld 1988, 193 fig. 9. 13

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18. 6	Deep Cup FS 215	Room 215	LXII 43/42 XVIb gelb; Horizon 16a3	Schönfeld 1988, 193 fig. 9. 7
19. 1	Amphora/Jug/ Hydria, hollow lip	Building VIII, Room 15	LXI 39/71 XV; Horizon 17a2-17a4	Podzuweit 2007, fig. 103. 2
19. 2	Deep Bowl FS 284	Building I, Room 10	LX 38/90 IXf; LX 38/71 IXe; LX 38/89 IXf; Horizon 17a2 and 17a4	Podzuweit 2007, fig. 7. 3; Drawing Tiryns Archive no. 4/9550
19. 3	Deep Bowl FS 284. type SB	Zwinger	LXI 41/64 XIVd; Horizon 17a3	Podzuweit 2007, fig. 3. 5
19. 4	Deep Bowl FS 284. type SB	Building VI, Room 123	LXI 42/19 Xa G 41 a 1465; LXI 42/10 Xa; Horizon 18	Drawing Tiryns Archive no. 4/16381
19. 5	Deep Bowl FS 284. type SB	Building I, Room 10	LXI 38/71 IXf; Horizon 17a2	Drawing Tiryns Archive no. 4/9464
19. 6	Rosette Deep Bowl FS 284. linear	Building VII, Room 120	LXI 40/47.57 Of. XVIII; Horizon 17a4	Podzuweit 2007, fig. 16. 10
19. 7	Deep Bowl FS 284. linear	Building VI, Room 121	LXI 41/78 XI; Horizon 17a4	Podzuweit 2007, fig. 19. 6
19. 8	Deep Cup FS 215	Building I, Room 10	LXI 38/71 IXf; Horizon 17a2	Podzuweit 2007, fig. 57. 18; Drawing Tiryns Archive no. 7/21
19. 9	Deep Cup FS 215. type SB	Zwinger	LXI 41/43 XVIb; Horizon 17a0	Podzuweit 2007, fig. 57. 9
20. 1	Medium Band Deep Bowl FS 284	Building I, Room 9	LXI 39/11 IXf; Horizon 18	Drawing Tiryns Archive (without number)
20. 2	Deep Cup FS 215	Building I, Room 10	LXI 38/81 IXe; Horizon 17a4	Drawing Tiryns Archive no. 4/16645
20. 3	Medium Band Deep Bowl FS 284	Building VI, Room 122	LXI 41/59 XI; Horizon 17a4	Podzuweit 1979a, 415 fig. 36. 5
20. 4	Deep Cup FS 215	Building VI, Room 122	LXI 41/58.59 XI; LXI 41/06 Xd G 32; Horizon 17a4 and 19ba (G 32)	Podzuweit 1979a, 415 fig. 36. 3
20. 5	Carinated Kylix FS 267	Building VIII, Room 15	LX 39/80 XVI; Horizon 17a0	Drawing Tiryns Archive no. 11/224
20. 6	Carinated Kylix FS 267	Building VI, Room 122	LXI 41/69 XI; Horizon 17a4	Podzuweit 1979a, 415 fig. 36. 1; Drawing Tiryns Archive no. 3/-

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21. 1 = fig. 6. 1

21. 2 = fig. 18. 1

21. 3 = fig. 6. 2

21. 4 = fig. 18. 2
 21. 5 = fig. 6. 4
 21. 6 Deep Bowl Room 215 LXII 43/31 XVIb; Horizon 16a1 Schönfeld 1988,
 FS 284. type B 178 fig. 7. 6
 21. 7 = fig. 18. 5
 22. 1 = fig. 7. 3
 22. 2 = fig. 18. 6
 22. 3 = fig. 7. 4
 22. 4 = fig. 18. 3
 22. 5 = fig. 18. 4
 23. 1 = fig. 8. 4
 23. 2 = fig. 19. 1
 23. 3 = fig. 8. 6
 23. 4 = fig. 8. 5
 23. 5 = fig. 19. 8
 23. 6 = fig. 8. 3
 23. 7 = fig. 20. 6
 24. 1 = fig. 8. 1
 24. 2 = fig. 20. 1
 24. 3 = fig. 14. 5
 24. 4 = fig. 14. 3
 24. 5 = fig. 19. 4
 24. 6 = fig. 5. 3
 24. 7 = fig. 19. 6
 24. 8 = fig. 15. 1
 25. 1 Shallow Bowl FS Tiryns, Epichosis Z 70/176 Podzuweit 2007,
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 25. 2 Shallow rounded Mycenae, Trench L (W) 1953; BE No 6073, E.B. French 1969,
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 25. 3 Shallow rounded Tiryns, = fig. 15. 1
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 25. 4 Shallow Bowl with Mycenae, Ex No 66/462/1402; BE No 16353; Mountjoy 1986.
 slight carination West Complex, Phase 0932 153 fig. 197. 1;
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 25. 5 Shallow Bowl with Tiryns, LXVIII 30/98 IX; Phase 1 (with Post- Stockhammer
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 FS 295A Lower Town
 25. 6 Shallow Bowl with Mycenae, Ex No 62-422; BE No 16008, Mountjoy 1986.
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 25. 7 Shallow Bowl with Tiryns, LXIX 30/46 VIII; LXIX 30/57 VIII; Post- Stockhammer
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 FS 295C Lower Town

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