

# THE CHRONOLOGICAL USE OF IMPORTED MYCENAEAN POTTERY IN THE LEVANT: TOWARDS A METHODOLOGICAL COMMON GROUND

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## Abstract

Mycenaean pottery found in the Levant is heavily used for determining the absolute chronologies of both the Levant and the Aegean world in the 15<sup>th</sup>–12<sup>th</sup> centuries B.C. On one hand, archaeologists working in the Levant have almost complete trust in the chronology given by Mycenaean pottery. On the other hand, very high value is given in Aegean archaeology to Levantine find contexts as means to date Mycenaean pottery. How can we avoid the danger of circular arguments? Are all contexts equally reliable? Are all the chronological arguments resting on imported Mycenaean pottery methodologically sound?

In the absence of an existing methodological framework for the study of chronology, this article attempts to map some of the methodological problems related to the use of imported Mycenaean pottery in establishing absolute chronology.

## 1. INTRODUCTION

Mycenaean pottery is often used in the archaeology of the Levant as a potent chronological tool in the hand of archaeologists, second only to Egyptian inscribed finds. It seems that both Late Bronze Age Canaanite consumers and modern archaeologists have much in common in their perception of Mycenaean pottery: it is an imported luxury item, and with its lustrous appearance is not only easily defined from the local wares, but also preferred over them.

How reliable is this tool? A starting point may perhaps be recognition that both Levantine and Aegean archaeologists overestimate the value of each other's absolute chronology.

On one hand, few Near Eastern archaeologists had actually taken the pains to conduct a close scrutiny of the chronological aspects of Mycenaean pottery, and to discover that much of it rests on finds in Levantine strata. On the other hand, very few Aegean archaeologists are aware of the great fragility of the Levantine absolute chronology and the frequent changes in the

interpretation of the absolute chronology of strata and even periods.

Only few had tried to bridge this gap, the most successful among them are Peter Warren and the late Vronwy Hankey (WARREN and HANKEY 1989) in "Bronze Age Aegean chronology". However, this masterpiece is an exception which proves the rule, since very few serious challenges to it, by scholars as MANNING (1999) and WIENER (1998), had been raised so far by any Aegean or Near Eastern Archaeologist in last 14 years, although much more crucial data was published since.

It may not be enough to simply create an update by introducing the new data to the existing schemes. A corner stone in any archaeological study is the methodology used. Much advance was achieved in recent years in the methodology employed for the study of the social significance of Mycenaean pottery. Works by scholars as SHERRATT (1998, 1999) STEEL (1998, 2002), LEONARD and CLINE (1998), and VAN WIJNGAARDEN (2002) among others, provided new methodological perspectives which enabled to redefine patterns of trade, interaction, and consumption reflected in Mycenaean pottery. Furthermore, theoretic archaeological work in the last decade has called for a reevaluation of the place of time as well as chronology within the archaeological discipline culminating in the many contributions within the volumes edited by MURRAY (1999) and VAN DER LEEUW and MCGLADE (1997). In view of these advances, it seems that the methodology for the study of the *absolute chronology* of Mycenaean pottery, never explicitly presented, may have stayed a decade or more behind. This may have been the outcome of one of the oldest concepts of archaeology: seeing time and change in archaeology as a linear process, and thus creating chronological sequences of material culture: "The appeal of chronostratigraphic methods was such that they were viewed as 'neutral' – an elegant demonstration of the laws of progress" (MCGLADE 1999, 144). It may be impossible to create here a complete methodological framework with due atten-

tion given to all the non-linear qualities in Aegean and Levantine material culture sequences. However, a first step in this direction may be defining some of the methodological problems which occur while ascribing a chronological value to different Mycenaean imports in the Levant. These problems are typical of cases in which imported Mycenaean pottery is used for determining the chronology of the stratum in which it is found, or in cases in which well dated strata in the Near East are used to determine the absolute chronology of Aegean pottery phases. We should differentiate between two types of problems: The first are problems connected with the archeology of the Aegean world, inherited in the aspects of manufacture, as well as Aegean relative and absolute chronologies which may hinder or qualify the value of Mycenaean pottery to Levantine chronology. The second type of problems is factors of trade, consumption and deposition which may help to assess the chronological value of a *specific* Aegean import found in the Levant.

## 2. PROBLEMS CONNECTED WITH THE ARCHAEOLOGY OF THE AEGEAN WORLD

These problems are all the outcome of the fact that Late Bronze Age Aegean chronology was determined by stylistic changes in fineware. The use of a single material culture trait for creating periodization is highly problematic, since the use of a different trait, as, e.g., coarse ware, would probably have resulted differently (MCGLADE 1999: 143). Furthermore, the production, circulation, and deposition of Mycenaean fineware were not intended to be synchronous, linear processes by those who created this pottery and used it, but were made so by the archaeologists who formed the relative chronology of the Aegean.

### 2.1. Local styles

The typology of local styles is much more understood now, thanks to Mountjoy's groundbreaking work (MOUNTJOY 1999). Yet the ceramic evolution of all the regional styles is still far from being understood. It is certain that not all areas change styles contemporaneously, or that all styles exist everywhere in the Aegean world. For example the distinction between LHIIIB1 and LHIIIB2 is not

stratigraphically seen even in all the area of the Greek mainland (MOUNTJOY 1999, 32), and "transitional LHIIIB2–IIIC Early" (MOUNTJOY 1997; 1999, 36–38) is even more elusive. Will LHIIIC at the Dodecanese always evolve from LHIIIB2 pottery, and why does there seem to be no difference between LHIIIC early and middle on Rhodes (*ibid.*, 45)?

### 2.2. The overlap between ceramic styles in the Aegean

Related is the problem of the overlap between ceramic styles in the Aegean: In every absolute chronology, we must give a proper indication for a period of overlap, caused by the cycles of innovation, production, circulation and deposition (KRISTIANSEN 1985, 258 fig. 3). However, by giving a fixed date for a change of styles, there is an implicit assumption that all potters in all regions of the Aegean change styles immediately and together. WIENER's (1998, 314, 315) work on the absolute chronology of LHIIIA2 is an example of a due note given to a possibly considerable overlap between LHIIIA2 and LHIIIB. While we cannot ignore this problem, addressing it opens two new methodological difficulties:

- a. How can we find the length of this overlap, without other chronological indicators, if the mere assumption of an overlap will create havoc in the organization of the *relative* chronology based on stylistic change?
- b. In the very elaborate pottery and multi-phase relative chronology of the Aegean pottery, some phases may have a length of only one or two generations (say for example LHIIIB or LHIIIC/early). Adding 10–20 years of "transitional" or "overlap" before and after each of these periods severely hinders the absolute chronological value of pottery imports belonging to these phases<sup>1</sup>

### 2.3. The relative chronology and stratigraphic sequences in the Aegean

The study of Mycenaean pottery does not rely on sound stratigraphical sequence in every area of the Aegean. Well-excavated sequences exist for the Argolid, yet even for the key sites such as

<sup>1</sup> Cf. WIENER 2003, 246 suggesting a mere decade for LHIIIB–LHIIIC transitional, and IAKOVIDIS 2003: 249, allowing only 20 years for LHIIIC/early.

Mycenae and Tiryns are still in the process of meticulous publishing. Reevaluation of the sequences in these sites as well as other sites in the Peloponnes may still result in serious bearing on the relative chronology in the Aegean. Thus, for example, Mountjoy has fairly recently introduced the “transitional LHIIIB–LHIIIC” phase, which has to be put after LHIIIB (MOUNTJOY 1999, 36–37; see however DEMAKOPOULOU 2003 objecting to the use of this phase). Dr. E. B. French, in a lecture in the SCIEEM 2000 conference in June 2003 in Vienna, argued, based on stratification in Mycenae, for a longer, two-phased LHIIIC/early, which “pushes” LHIIIC/early significantly forward (see FRENCH 1998 for an earlier description of the LHIIIC sequence at Mycenae). The situation is much worse, in terms of published sequences, in some areas outside the mainland. For example in the Dodecanese, all LHIIIA2–IIIC pottery comes from tombs, and not from stratified settlements (MOUNTJOY 1999, 979–982). In Kos, the loss of the excavations notes of Seraglio, the only settlement excavated in the Island (*ibid.*, 1075). It is clear that these circumstances prevent any fine synchronization between the relative chronology of the Argolid and the Dodecanese which is not based solely on stylistic grounds.

#### 2.4. The so-called “local imitations”

What is the chronological value of high quality vessels of Aegean shapes and decoration made in Cyprus, Syria, Palestine and Cilicia? What can we make of the many examples of “pastoral style”, “simple style” (KILLEBREW 1998) or the notorious “Mycenaean IIIC:1b” (KLING 1989; 2000; SHERRATT 1992) made outside of the realms of the Aegean world proper? Can they be dated stylistically according to their resemblance to wares made in the Argolid, or do they reflect local stylistic preferences which are not always dependent on Aegean fashions?

### 3. THE CHRONOLOGICAL VALUE OF A SPECIFIC IMPORT

Once we have taken into account the thorny problems connected with the Aegean aspects, it is possible to turn to the problems which may hin-

der the assessment of the chronological value of a specific import. These are concerned with aspects of trade, deposition as well as identification and interpretation of the evidence.

#### 3.1. Patterns of trade

Economic and ideological factors, rather than mere chronology, have the greatest influence on the appearance of imported pottery in the Levant. As such, patterns of trade may create a bias in our chronological reconstruction. Two examples may be given for possible biases:

##### *a. The origin of the traded items*

Most Mycenaean pottery found in the Levant and Egypt and analyzed by NAA seems to be produced in the Argolid, or elsewhere in the Peloponnese (PERLMAN, ASARO and FRIERMAN 1971; GUNNEWEG et al. 1992; MOMMSEN et al. 1992; MOUNTJOY AND MOMMSEN 2001).<sup>2</sup> If this phenomenon is observed at other sites, then Mycenaean pottery, if found within well-dated Levantine contexts, may be used to give *direct* chronological anchors to pottery sequences within the Argolid alone, while its value to other regions in the Aegean will be indirect and significantly limited.

##### *b. The possible problem of trade in re-used vessels*

Cypro-Minoan marks on Mycenaean pottery in Cyprus, Ugarit and the Levant have led HIRSCHFELD (1993) to support Hankey’s hypothesis concerning the important role played by Cypriots in the trade in Mycenaean pottery. Furthermore, in the study of Cypro-Minoan marks on Mycenaean pottery in the Aegean, Hirschfeld (*ibid.*, 313) raised the idea that some vessels traveled more than once between Cyprus and the Aegean. Accordingly, given the role attributed to Cypriots in the import of Mycenaean pottery to the Levant (e.g. HANKEY 1967, 146; STEEL 1998, 287) it would be possible to suggest that at least some of the many Mycenaean vessels marked with Cypro-Minoan signs found in the Levant spent some time on Cyprus, and were then refilled and re-shipped to the Levant. A supporting evidence for such a “recycling” comes from a Canaanite amphora handle found in Aphek (YASUR-LANDAU and GOREN forthcoming). It is

<sup>2</sup> The results of the XPS analysis of the Mycenaean pottery from Megiddo (LAMBERT, MCLAUGHLIN and LEONARD 1978), arguing for several sources for the

Megiddo pottery may have to await more accurate NAA analysis of the same material (see LEONARD and CLINE 1998, 4–5).

incised after firing with a Cypro-Minoan sign no. 38. However, the amphora was made on the Levantine coastal plain somewhere between Tyre and Acco. It is therefore plausible that the amphora was exported first from Acco (or rather Tel Abu-Hawam?) to Cyprus, marked, and then refilled and shipped back to the Levant.

### 3.2. Patterns of deposition

#### *a. The time of deposition*

Was the vessel deposited very close to its arrival, or was it a used relic? As KRISTIANSEN (1985, 255) logically argues “The relationship of the deposition phase to the production phase is determined by the circulation phase”. A cautionary tale is that of the Amman Airport temple (HANKEY 1974). It was built during the time LHIIIB was in use, yet contained a very impressive array of Mycenaean imports from LHIIA to LHIIIB, meaning that some vessels were two hundred years old “antiques”. The reason for the extra care given to the LHIIA pithoid jar from Amman (*ibid.*, 144) is clear in view of the rarity of LHIIIB imports in the Levant (HANKEY and LEONARD 1998, 33; STEEL 2002, 30). Trade in Mycenaean pottery at the earlier parts of the Late Bronze Age may have aimed at the high elite (*ibid.* 35–36; SHERRATT and SHERRATT 1991), and thus each import had a much higher commercial as well as ideological value than vessels imported during the peak in trade, LHIIIA2 to LHIIIB. STEEL (2002, 38) suggested that curation of Mycenaean pottery resulted from treating them “...as an exotic, a valued prestige item, or an object invested with symbolic or ceremonial connotation”. Still, cases of LHIIIA2 “relics” known from Cyprus may indicate that the considerations for the curation of vessels for a long time may not always follow either the direct rules of supply and demand, or even be directly connected to elite behavior which, as suggested for Cyprus, was interested in fine tableware (SOUTH and RUSSEL 1993; STEEL 1998). Thus, a fairly common LHIIIA2 Globular Flask was found in Maa-Palaeokastro floor II, dated to the LCIIIC–LCIIIA (KARAGEORGHIS and DEMAS 1988, 231, pl. 79: 287; VAN WJINGAARDEN 2002, 192), and a more rare LHIIIA2 Conical Rhyton found in Myrtou-Pigadhes in a LCIIIC–LCIIIA context (VAN WJINGAARDEN 2002, 192).

#### *b. The find contexts*

Is the imported vessel found in a primary or a secondary deposit? How close and secured is the find context? What was the duration of time in which

the deposit was in use? The Uluburun ship gives an example of the perfect deposit: closed, deposited immediately, and not disturbed much by later human activities (PULAK 1997). Possibly the wealthiest LB tomb from Israel, Tomb 387, the so-called “Mycenaean tomb” from Dan (BEN-DOV 2002, 96–118), is the opposite and unfortunately a much more common example. Although yielding around thirty imported Mycenaean vessels, as well as Cypriot imports, rich jewelry and weapons, it gives a very limited chronological contribution. It was in use for continuous burials for ca. 150 years, and it was nearly impossible to match between the circa 40 burials found and their grave offerings.

#### *c. Complete vessels versus sherds*

How indicative are sherds of the chronology of the stratum they are found within? Can they only give a terminus post quem? Sherds may be subjected to a surprising number of post-depositional processes affecting their chronological value. Thus, for example, pictorial krater sherds found in a secondary deposit in a street in ‘Ajjul (STEEL 2002, 36–37) may give some information concerning consumption and deposition patterns at the site, yet their overall chronological value is limited. A somewhat exotic tale is that of a single “Simple style” LHIIIB stirrup jar sherd, found in Izbet Sarta stratum III (HANKEY 1986). Being the oldest find of the site, it was once used to ascribe the starting date of the entire phenomenon of the Israelite settlement in the hill country to the 13<sup>th</sup> century (FINKELSTEIN 1988, 319–320). HANKEY (*ibid.*) qualified this argument by allowing “simple style” into the 12<sup>th</sup> century. However, the humble settlement of stratum III yielded what is thought to be local, 12<sup>th</sup> century pottery. Since there is neither a LBII stratum at the site, nor any other imported luxury items, the only plausible explanation is that this small sherd may have been brought as a curiosity from the nearby Aphek.

### 3.3. Identification and interpretation

#### *a. Identification*

Since typology is not an exact science, and not every import is necessarily “fossil directeur” of the period of its manufacture, one should qualify the level of certainty in attributing a specific vessel to a phase. The assignment of many vessels to LHIIA–B or LHIIIA2–B1 etc. in LEONARD’S (1994) catalogue is an example of such important scien-

tific integrity. Obviously, it is just as critical to constantly re-examine pottery attribution made in the past, as well as to scrutinize its find context (e.g. LEONARD 1988).

*b. The value of negative evidence*

Sometimes negative evidence, i.e. the lack of some pottery type, is used as a *positive* chronological evidence. Apart from pointing to the logical fallacy in such arguments, it should always be remembered that an absence of a pottery type may result from various reasons, chronology being only one, others being ancient trade patterns as well as depositional processes, and the randomness of the archaeological find; An example of the use of negative evidence may be that of the lack of LHIIIC pottery from Tel Deir <sup>c</sup>Alla and Lachish stratum VI. A faience vessel with the name of Tawesert found in the shrine of Deir <sup>c</sup>Alla which also contained LHIIIB pottery had led WARREN and HANKEY, to conclude that LHIIIB pottery was used to the very end of the 19<sup>th</sup> dynasty (1989, 159–162). Taking aside the question whether the Deir <sup>c</sup>Alla vessels were heirlooms,<sup>3</sup> can a similar negative argument be used to date Mycenaean pottery from another final late Bronze Age assemblage, that of Lachish Stratum VI? The destruction of Stratum VI was assigned to the reign of Ramses III mainly on the base of a bronze plaque, possibly a part of a plating of a door, containing the cartouche of Ramses III (GIVEON 1983; USSISHKIN 1983, 123, 168–170; USSISHKIN 1985, 221–222). The chronological range for the destruction was further narrowed to a later part in Ramses III's reign, according to several bowls inscribed in hieratic script, two of which mention regnal years: one year 4 and the other between the years 10 and 19 (GOLDWASSER 1982; 1984, 85). However, a scarab of Ramses IV found in a settlement context containing Stratum VI pottery outside the tel (KRAUSS 1994) indicates that the destruction of

Lachish VI may be re-dated to the days of Ramses IV or even later. It is very significant therefore that no LHIIIC pottery was found even within this 20<sup>th</sup> dynasty context, or anywhere else in Lachish (LEONARD 1994, 207). This absence cannot be due to the late appearance of LHIIIC, because LHIIIC/middle pottery (or its Cypriot imitation) appears in contexts at Beit Shean datable to the days of Ramses III and IV, contemporary with Lachish Stratum VI (see YASUR-LANDAU 2003 for a reappraisal of the context of this pottery based on the new excavations).

*c. Direct versus indirect chronological evidence*

How secure is the date given to a Mycenaean import which is later used as a chronological indicator by itself? A direct evidence is provided when the vessel is found within a stratum in which well secured Egyptian or other inscribed finds enable a connection to one of the well founded historical sequences (as the Egyptian, Hittite, Ugaritic etc.). An example of such evidence are the vessels found within Stratum lower VI in Beit Shean, which yielded also a statue of Ramses III as well as other objects of the 20<sup>th</sup> dynasty (YASUR-LANDAU 2003). An indirect evidence is ascribing a date to strata according to an external historical source. Thus, for example, the date for the Late Bronze destruction level of Ashkelon found in PYTHIAN-ADAMS' (1921) excavation report may be indirectly assigned, as one of the options, to Merneptah's campaign, following the inscription on the "Israel Stele" (KITCHEN 1968, 19; DAVIES 1997, 186–187) and Karnak reliefs showing the conquest of Ashkelon by the same Pharaoh (WRESZINSKI 1935, pl. 58; STAGER 1985, 56–57; RAINEY 2001, 68–70).

#### 4. CONCLUSION

Although having many inherent problems, imported Mycenaean pottery, readily available in the Levant, will continue to be used in establishing

<sup>3</sup> The argument for the chronology according to the Tel Deir <sup>c</sup>Alla evidence is explicitly based on the assumption that it is contemporary with the faience vase with the cartouche of Tawesert, and that the vessels are not heirlooms. Two of the vessels, a flask (FS 192; HANKEY 1967, 131 fig. 5: b) and a stirrup jar (FS 180; HANKEY 1967, 131 fig. 5: a) are said to have "parallels at many sites at the Levant, often in sanctuaries or temples, not as treasured

heirlooms, but useful containers kept in sheltered circumstances..." (WARREN and HANKEY 1989, 161). However, the same vessels are described at first by HANKEY (1967, 132) as LHIIIA2, then by WARREN and HANKEY (1989, 161) as LHIIIB1, meaning that they were already in use for several decades, possibly more than half a century before the destruction of the temple.

both the absolute chronology of the Aegean world as well as that of some Levantine sites which lack direct links to the Egyptian and other Near Eastern chronologies. Even without providing conclusive answers to the problems presented above, I believe in the methodological value of explicitly presenting them. Acknowledging these problems

may not only pave the way to a renewed methodological framework to the study of chronology through the use of Mycenaean pottery, but also, in the meantime, may help in shaping a more balanced interpretation of the chronological evidence, or at least create lines of argument which can be better understood, accepted or refuted.

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