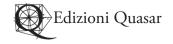
# STUDI MICENEI ED EGEO-ANATOLICI NUOVA SERIE

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# STUDI MICENEI ED EGEO-ANATOLICI

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# THE IRON AGE SEQUENCE IN THE AMUQ

#### Marina Pucci

#### Summary

This article provides an overview of the Iron Age levels at the site of Chatal Höyük in the Amuq (Hatay region) in Turkey, brought to light in the 1930s by the American team of the Oriental Institute of Chicago. The dataset is based on the reanalysis of the documentation and materials from the site that are housed at the Oriental Institute Museum in Chicago, as well as on the observations carried out on the Late Bronze and Iron Age assemblages at Alalah. The main aim of this contribution is to focus on the pottery assemblages, which are crucial for better understanding the archaeological sequence during the Iron Age, particularly at a site where there is continuity from LBI to IA III. Ceramic typology and morphological changes over time provide a reliable sequence for the Iron Age on a regional basis, which may help to establish a reference point for neighboring sites. This article focuses mainly on the chronological elements that may help in setting the relative regional sequence in a broader historical context, and investigates those aspects of the material culture that are useful for reconstructing the social, economic and political landscape of the Iron Age in the Hatay region. It starts with a brief introduction to the local regional sequence and presents the assemblages in each phase, their main features and their differences from previous materials. It then focuses specifically on the painted tradition during the Iron Age in the Amuq and provides a brief overview on the criteria employed to date each phase. The conclusions offer a general overview of the political development of the town of Chatal Höyük from the 13th to the 6th centuries BC.

## INTRODUCTION

The Iron Age sequence in the Amuq is mainly based on extensive work carried out in the 1930s by the Oriental Institute at the University of Chicago during the Amuq survey, as well as on the excavations of the sites of Chatal Höyük, Tell Judeidah and Tell Tayinat. In more recent times the Iron Age sequence has been investigated at the site of Tell Tayinat by the University of Toronto and to a smaller extent at Tell Atchana/Alalah by the Koç University. The exposed area belonging to this extensive period varies greatly from site to site and from period to period. At Tell Judeidah the Iron Age levels were exposed only in one square during the 1930s excavations; at Tell Atchana/Alalah, Iron Age levels were found and investigated mainly in two squares on the acropolis (42.10 and 32.53) covering an area of approximately 150m²; while at Tell Tayinat Iron Age structures and accumulation were exposed over a very large area, in which three building periods ranging from the 12th to 6th centuries BC were identified during the American excavations in the 1930s. Recent excavations have focused on a smaller area (approximately 15m²) adjacent to the one already exposed and dating to the 8th century BC, with several soundings (Field 1 and Field 2) showing features that can be dated to the 12th to 9th centuries BC. Chatal Höyük provided the largest (1ha) and the longest (12th-5th centuries BC) sequence of Iron Age structures and deposits have been exposed in four areas on the four edges of the mound during four excavations campaigns in the 1930s.

This article will focus on the Iron Age material culture at Chatal Höyük, emphasizing specific features of the archaeological material from these phases; this approach may help in understanding not only the sequence but also the contacts and the narrative of a large village in the Amuq. Since the chronology in the Amuq is based on a broad regional sequence identified by letters, the contexts will be presented according to the regional phasing adapted to

<sup>1</sup> The domestic nature of most of the structures identified on the mound prevented the construction of monumental architecture, which damages and destroys former structures. Moreover, American archaeologists intentionally focused on extensive archaeological investigation as they were looking for monumental architecture.

the stratigraphy of the site; this phasing system for the Iron Age will then be correlated with the general Iron Age sequence employed in northern Syria and south-eastern Anatolia.

## 1. THE AMUQ PHASES AND THE GENERAL CHRONOLOGY OF THE IRON AGE

Braidwood established the current² regional archaeological sequence for the Amuq based on his campaigns in the region in the 1930s³ specifically focusing on cultural phases, which are based on typological grounds and on the intermound stratigraphic sequence succession (Braidwood, Braidwood 1960, 4). According to Braidwood, each phase shows ten distinct assemblages (pottery, seals, metals) and represents the material manifestation of a "reasonably distinct culture" (Braidwood, Braidwood 1960, 4). However, even if the cultural materials from each phase differ from one phase to the next, this does not indicate separate assemblages or a succession of distinctive "cultures," nor is it related to ethnic, political or historical issues. The general stratigraphic sequence for all periods was based on the archaeological evidence found at Tell Judeidah and was enlarged and better defined by the phases brought to light at two other sites (Tell Tayinat and Chatal Höyük) and by the materials collected during the survey (Braidwood 1937). The Amuq phase, according to American archaeologists, is an artificial construct that defines the specific features typical only for one period. In theory, these features are related both to small finds and to pottery; in practice, however, the criteria defining the phases were only related to the pottery assemblages in their stratigraphic context (Swift 1958, 3).

Because the Amuq phases cover a range of periods of differing lengths, Braidwood broadly set the chronological limits of each phase to well-known events (*e.g.* the 1200 BC rupture for the beginning of Phase N) or to approximate dates on the basis of imports known from other excavations. In the most recent table published by the American team (Haines 1971, 1-2), the phases were named after their main cultural feature (Phase N, Levanto-Helladic IV; Phase O, Syro-Hittite) and since then they have been identified with Iron Age I (Phase N) and Iron Age II-III (Phase O), even though the chronological attributions have been shifting. The archaeological sequence of Chatal Höyük, *i.e.*, the Amuq sequence M, N, and O, is based on two main factors. The first is the main general division carried out on a regional scale, characterized by approximate features of the materials (see above). The second is the stratigraphic sequence at the site, allowing for a subsequent subdivision of each phase into "beginning, middle, and late" (Pucci 2019b, 10); the small changes in the pottery inventory, which may be considered local, help connect the areas. In the absence of any historical texts from the site, the absolute dates proposed are based on the dates of the periods to which the imported vessels belong and on the reasonable number of years assigned to each level.

Because the quantity of diagnostic sherds analyzed per phase depends on the extent excavated and on the number of architectural levels belonging to each sub-phase, some assemblages may result morphologically more extensive than others, or more reliable on the basis of the state of preservation. The following diagram (Fig. 1) shows in dark the number of whole vessels and of the diagnostic sherds that allow for a complete reconstruction of the vessel's shape; in grey colour are shown the number of the small finds identified in each sub-phase. It is evident that the number of sherds varies not only according to the extent of the excavated area, but also according to the state of preservation of the remains and the selection process of archaeologists in the field.

## 2. THE POTTERY ASSEMBLAGE AT CHATAL HÖYÜK DURING PHASE N (IRON AGE I)

The transition from Phase M to Phase N is characterized by a scattered occupation with domestic houses and mudbrick silos that probably lasted from approximately the mid-13th to mid-12th centuries BC (Pucci 2019a;

<sup>2</sup> The numbering of the phases changed from Roman Numerals – employed during the excavations and based on the phase sequence at Tell Judeidah – to letters, which were used first in the survey publication (Braidwood 1937) and later in the publication of the architecture (Haines 1971).

<sup>3</sup> For a complete history of research on this subject, cf. Pucci 2019b, 5-6.

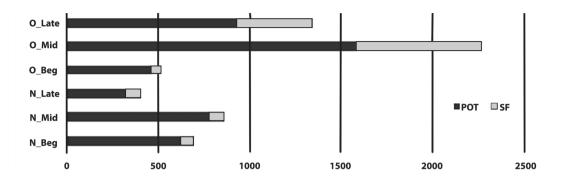


Fig. 1 Selected and processed pottery from the phase assemblages at Chatal Höyük.

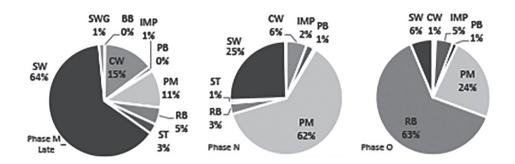


Fig. 2. Ware distribution in Chatal Höyük Phase M\_Late, Phase N and Phase O. BB = Black Burnished Ware; CW= Coooking Ware; GW= Grey Burnished Ware; IMP = Imported Pottery; PB = Painted Bichrome Ware; PM = Painted Monochrome; RB = Red Slip and Burnish Ware; ST = Storage Ware; SW = Simple Ware; SWG = Simple Ware Gray.

forthcoming) and presents an assemblage related entirely to the Late Bronze Age (Pucci 2019b, Phase M\_Late). Phase N begins with the first appearance of local imitation of Late Helladic IIIC (middle-developed) pottery and dates to the second half of the 12th century BC (see below for the dating elements).

The pottery assemblage from Phase N is generally characterized by an increase of painted decoration on open vessels, specifically on single serving containers such as carinated bowls, plates, bowls with flaring rim and fenestrated potstands. The percentage of painted pottery in Phase N\_Beginning at Chatal is very high in comparison to the same percentage in Phase M\_Late (cf. Fig. 2); this data, although based only on diagnostic sherds, has probably been influenced in part by the selection process carried out during the excavations. Nevertheless, it is evident that the number of diagnostic painted sherds grows considerably during Phase N. Grey burnished (GW) ware and Black Burnished Ware almost completely disappear by Phase N, and the already small number of imports identified in Phase M decreases during Phase N and almost completely disappears during Phase N\_Beginning. Continuity of ware is present in both phases in Red Slip and Burnish Ware (RB) as well as in bichrome painted ware, which are few in number in both phases.

When looking at the morphology, several elements in the table set appear continuous with the previous Phase M. Single serving conical plates preserve the same base shape with two main differences: during the Iron Age they become more rounded (Fig. 3A and B) and the well-known LBII large plates (from 30-50 cm in diameter) are no longer common during Phase N. The same continuity or slow progress in the morphology is visible in hemispherical single serving bowls (Fig. 4A): during Phase M\_Late simple hemispherical bowls are continuously employed and produced, although the examples found in Phase N contexts seem to be larger (20 cm diameter) than

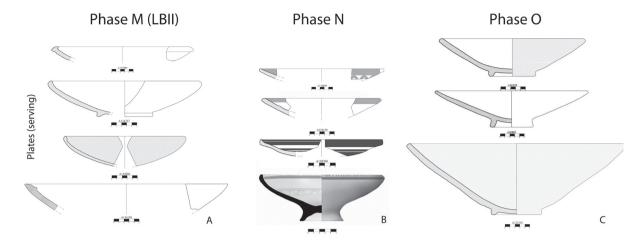


Fig. 3. Conical plates from Amuq phase M\_Late to Phase O\_Late.

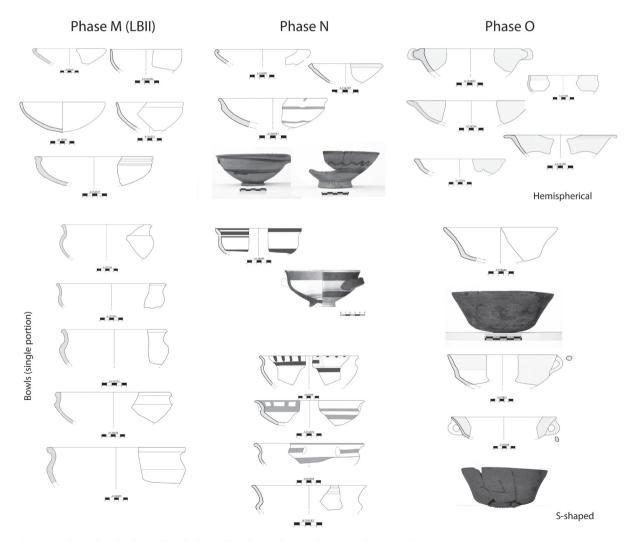


Fig. 4. Hemispherical and s-shaped bowls from Chatal Höyük according to each Amuq phase.

those from the LBII (12 cm). The general shape of the vessel remains stable, however the specimens from Phase N are frequently painted and provided with a ring base instead of a rounded one; in some examples they even have handles, in this case following a general Mediterranean trend. The so-called bell-shaped bowls (Pucci 2019b, pl. 47d, g) also belong to this group, again with variations in dimensions and painted decoration. In particular, the examples in Phase N\_Beginning from Chatal are characterized by a slightly globular shape and by a higher ring base, which may be identified with the Furumark "conical base" (FS285) that is typical of the Late Helladic IIIC Late period. The globular or biconical shapes seem to be common in the Argolid, Dodecanese, and Cycladic assemblages (Mountjoy 1999); the same rounded bell shape was also found at the nearby site of Tell Tayinat (Janeway 2017, pl. 5) and may point to a common origin.

Similar observations can be made for S-shaped (carinated) bowls (Fig. 4): the shape and size do not change from Phase M to N, whereas the flaring rim is slightly elongated and the general shape becomes squatter. This specific shape overlaps in some examples with the well-known Late Helladic "shallow angular bowls" (Furumark 1941, FS295) of Mycenaean origin. Their shape at Chatal is not angular but hemispherical, as is also the case for some angular bowls in the Argolid, Korinthos (Mountjoy 1999, figs. 41 no. 322, 78 no. 204) and Cyprus (Kling 1989, fig. 20 no. 1a-c); this clearly presents a hybrid by keeping a radial painted decoration, which is deeply rooted in the local Late Bronze Age tradition, on the rim.

The typical local Phase M open krater (Fig. 5A), frequently employed in the Late Bronze Age tradition, is rare in Phase N. Instead biconical kraters, well-known in the Syro-Cilician tradition (Fig. 5B) with characteristic oblique lines on the shoulder, continue in Phase N with a more definite carination (Fig. 5D) and different painted patterns. Amphoroid kraters appear at Chatal in the latest stages of Phase M (Fig. 5C) and become widespread during Phase N with geometric decoration and, in some preserved examples, with four handles (Fig. 5E). This shape may be a local imitation of Mycenaean Late Bronze Age amphoroid kraters, which were also largely imported to the northern Levant (Steel 2013), but only become as common as the biconical kraters in this period (Gilboa 2006-2007, 223-226).

Lentoid or asymmetrical pilgrim flasks (Fig. 6) are well known in the Late Bronze Age assemblage of the northern Levant and of Anatolia. The lentoid pilgrim flasks belong to a northern Levantine and Near Eastern tradition (Pucci 2019b, 225-227), making their first appearance during the Middle Bronze Age (Amiran 1970, 166; Einwag 2007, 204) and becoming extremely common during the Late Bronze Age (Gates 1988, 71; Venturi 1996). In Anatolia lentoid flasks (with three handles) were part of the Hittite repertoire (Müller-Karpe 1988, 29-30) and differ in shape and size from their northern Levantine counterparts. In the LBII Alalah, one example of an asymmetrical pilgrim flask (Fig. 6A) has been found in a LBII/IA context (Montesanto, Pucci 2019) and clearly belongs to the local north Levantine/middle Euphrates tradition. The only N\_Beginning example from Chatal (Fig. 6B) is much smaller and belongs to the monochrome painted group, while from Phase N\_mid onwards all local production will focus on barrel shaped flasks (Fig. 6B), which is a shape also well-known during the LBII at Tell Bazi (Otto 2006, fig. 43 no14).

Belonging to the same trend towards continuity are potstands (Pucci 2019b, cat. no 55, pl. 19d, 68l, 38g, 148). Although the shape of the large painted biconical fenestrated potstand A26946 (Pucci 2019b, fig. 44 no. 14, pl. 148) appears for the first time in Phase N, it is difficult to ascribe it to an Aegean tradition. According to Mountjoy (1999, 1145, fig. 470) this shape (FS336) is "an east Aegean and Dodecanese feature". It is possible, however, to identify it also as a local, or northern Mesopotamian, tradition. Fenestrated stands with simple rims were produced in Syria during the Late Bronze Age, such as at Tell Brak (Oates, Oates, McDonald 1997, pl. 64b), Tell Bazi (Otto 2006, fig. 46 nos. 1-3) and Tell al Rimah (Postgate, Oates, Oates 1997, pl. 95 no. 1135). In Tell Bazi, in particular, the potstands also have double or triple rims and an elongated hourglass-shaped form, just like the Chatal example. Moreover, the LBII assemblage from Alalah includes fenestrated potstands (Horowitz forthcoming, fig. 14)

<sup>4</sup> Although no potstands were found in Amuq Phase M levels from Chatal, this specific shape is well known at LBII Alalah, cf. Horowitz forthcoming, figs. 13 and 14.

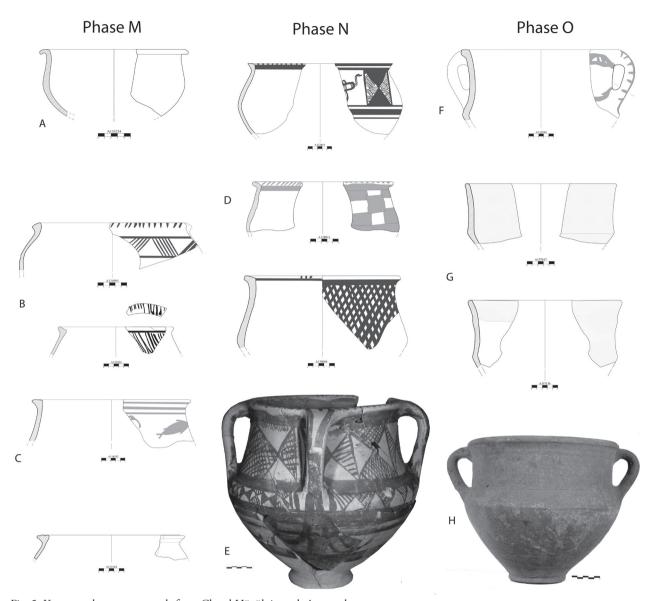


Fig. 5. Kraters or large open vessels from Chatal Höyük in each Amuq phase.



Fig. 6. Pilgrim Flasks from Chatal Höyük. A. Late Bronze Age II pilgrim flask from Alalaḫ. B. Pilgrim Flasks from Chatal Höyük, Amuq Phase N\_Beginning to O\_Mid contexts.

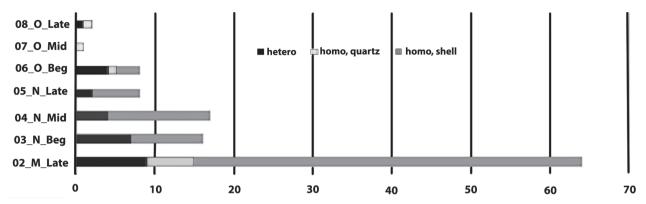


Fig. 7. Fabric temper distribution in cooking pots at Chatal Höyük.

in addition to the hourglass-shaped ones. This shape continues to be produced with similar light transformations during Phase N, such as the presence of geometric painted decoration or the presence of red slip during Phase O.

It is more complicated to define trends of morphological transformations in the closed shapes: the rim of necked jars are identical in Phase M and in Phase N while the low number of intact vessels prevents any clear conclusions from being formed on the changes to the general shape of the body (Pucci 2019b, fig. 84). One element of interest seems to emerge, however, in the Phase N assemblage: the extremely low number of globular jars or more generally of small/mid-sized jars, which are only available in the Phase M assemblage in low quantities.<sup>5</sup>

Continuity is also evident in cooking equipment, both in its shape and fabric (Fig. 7). The shape only changes slightly with the addition of handles (cf. Pucci 2019b, fig. 50), while the fabric in both Phases M and N is characterized by the presence of crushed shells in the majority of the examples. There are also two further fabrics – a fine heterogeneous grit and a fine temper with quartz – that are repeatedly employed in the cooking assemblage, especially for the hole-mouth cooking pots, a shape with strap handles that appears only in Phase N\_Late.

Besides the imitations of shallow angular bowls and bell-shaped bowls in the table set, two new shapes appear in Phase N. Even though they are less popular than the bowls mentioned above, they continue to be produced throughout the whole Iron Age (Phases N and O).

Feeding bottles (Pucci 2019b, 220-222, fig. 47 no. 25) are a shape that is present only from the N\_Mid period; they persist during Phases O\_Mid and O\_Late and are found in the Painted Monochrome (Fig. 8B-C), Bichrome (Fig. 8D), and Simple Ware (Fig. 8E) classes. In the two examples found in Phase N\_Mid (Fig. 8A) they have a basket handle and clearly reproduce a shape that is well known in the Aegean assemblage (Furumark 1941, FS261; Evely *et al.* 2006, pl. 29; Yasur-Landau 2010, 245). The subsequent local production always features a vertical loop handle at a right angle with the spout, an ovoid or slightly biconical body, and a standard height of about 13.5 cm. In the painted examples, the decoration is always linear and the handle is also decorated with bars, but the shoulders never have a paneled decoration. Quite often the vessels are not well made or decorated; they are always found in the usual domestic assemblage and may functionally belong to this set. Whatever function it may have fulfilled, this shape is completely new; not only is it absent from Phase M at Chatal, but also it never recurs in the LBII assemblage at Alalah.

Small or mid-sized vessels with built-in strainers (sometimes called "beer strainers") were probably used to separate solids from liquids and likely worked just as well as, or probably better than, the typical LBII strainer

<sup>5</sup> It should be noted that the progressive decrease in globular jars occurs in the Amuq during the Late Bronze Age, from large quantities in LBI levels to relatively few in LBII levels. For the LBII levels, cf. Horowitz 2019.

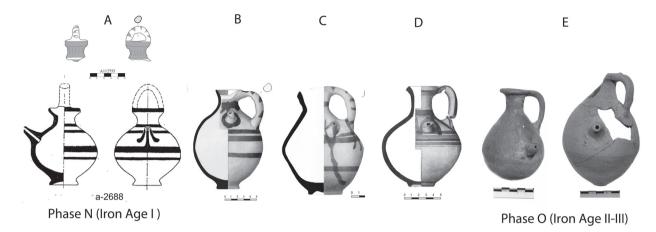


Fig. 8. Evolution of Chatal Höyük feeding bottles from Amuq Phase N\_Mid (mid-11th-10th century BC) to O\_Late (7th-6th centuries BC) contexts. A. Fragment of a feeding bottle with basked handle (import, A112755) and of a local made one (a-2688), both from contexts dated to Amuq phase N\_Mid. B. A26811 from an Amuq Phase N\_Late context (mid 10th to mid-9th centuries BC). C. A26929. Painted feeding bottle, Amuq Phase O\_Beginning (end of 9th-8th centuries BC). D. Bichrome, A26648 from an Amuq Phase O\_Mid context (8th-7th centuries BC). E. Red burnished (b-1379) and simple ware (b-0966) feeding bottles from Amuq Phase O\_Late contexts (7th-6th centuries BC).

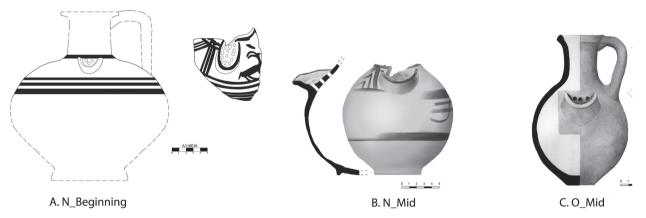


Fig. 9. Beer strainers from Chatal Höyük. A. Painted A116016 from an Amuq Phase N\_Beginning context. B. A26677 from an Amuq Phase N\_Mid context. C. A26822 in red slip and burnish from an Amuq Phase O\_Mid context.

bowls.<sup>6</sup> These jars with built-in strainers never occur in LB contexts in the Amuq and are considered to be a Mycenaean production (Furumark 1941, FS155), although they do not seem to be very common in the Late Helladic III horizon (Mountjoy 1986, table III). The earliest fragments appear in Phase N\_Beg (Fig. 9A): this fragment in particular may belong to a pyriform shape similar to the Perati examples (see Mountjoy 1986, fig. 214), although the pictorial figurative decoration on the shoulder, as well as the relatively short spout, both belong to a local tradition. This fragment, along with the other fragments of strainer jugs collected at Chatal in this early horizon, was made with a local clay and may represent a local imitation of a Late Helladic IIIC shape. Like the feeding bottle, this shape will continue to be produced until Phase O\_Late (Fig. 9C), with the usual modifications in surface treatment typical for each period.

<sup>6</sup> At Chatal Phase M (Pucci 2019b, 207-208, cat. no. 198), two similar fragments were found in M\_Mid and in M\_Late assemblages), cf. Tell Brak (Oates *et al.* 1997, nos. 57-60), Tell Rimah (Postgate *et al.* 1997, pl. 92) and Alalah (Horowitz forthcoming, fig. 7).

## 3. THE POTTERY ASSEMBLAGE AT CHATAL HÖYÜK DURING AMUQ PHASE O (IRON AGE II-III)

The town layout during this period presents a fortified settlement with a lower town (Pucci 2019b, pl. 191) and different neighborhoods: a more vernacular and domestic neighborhood on the NE side and a more representative one on the SW. The pottery assemblage from the beginning of Phase O includes the first significant appearance (and progressive increase) of red slip and burnished pottery, the progressive decrease of patterns in monochrome painted pottery, and a very slow increase in bichrome painted pottery, whose presence was very scant in the previous phase (Fig. 2). This treatment is usually applied to the whole surface of the vessel; while on closed forms the burnishing tends to be handmade and vertical, some variety is seen in conical plates (i.e., external wheel burnishing and internal hand burnishing). For this reason there does not seem to be any development from hand burnishing to wheel burnishing during Phase O (Swift 1958). In comparison to the previous level, RB pottery does not completely replace painted monochrome pottery (which is still very common), but rather it becomes



Fig. 10. Two wasters (feeding bottle, top, and bell shaped bowl, bottom) from the pottery kiln found at Chatal Höyük in an Amuq Phase O\_Beginning context.

the standard surface treatment for table ware, while painted decoration is more frequently employed on closed vessels. The discovery of a pottery kiln in Phase O\_Beginning (Pucci 2019b, 121-2) and the analysis of the wasters found near it (Fig. 10) clearly demonstrate that the kiln was employed to produce feeding bottles, bell-shaped bowls and amphoroid kraters in painted, simple and RB ware, confirming that the passage from Phase N to Phase O did not imply the abandonment of the painted pottery tradition; it instead continued at this site until the end of the Iron Age.

The first and most common shapes of the red burnished class, which become standardized forms during Phase O, are plates, biconical carinated bowls, and hemispherical bowls. As evidenced in Figs. 3 and 4 the morphology of both conical plates and hemispherical bowls does not change from Phase N to O. It is only their appearance that shifts from predominantly painted vessels to red slip and burnished ones. It should be emphasized, however, that in Phase O assemblages conical plates with a diameter of approximately 35 cm are more common, even reaching in some examples up to 40 cm in diameter, while in Phase N they tend to be mainly single serving. Only ring bases (with a diameter between 10 and 14 cm) were employed with this kind of shape. Hemispherical bowls (Fig. 4) begin to demonstrate a wider variety of handles (ledge, elongated ledge, knobs, butterfly) directly applied to the rim, which are not related to the size or the shape of the vessels. Only in the final stage of Phase O does the hemispherical bowl develop a pointed thickened inverted rim (Pucci 2019b, fig. 49, no. 44). It keeps a vestigial ledge handle but the rim changes, probably copying the well-known bowl with an incurving rim in the Neo-Assyrian assemblage (Anastasio 2010, pl. 6, no. 4). The shape of carinated bowls instead seems to change from curved outlines to more geometric ones (Fig. 4 bottom); while size and probably function remain unchanged, the walls are much thinner and the carination sharper. Those carinated bowls without handles usually have a rounded bottom, a feature that does not occur in Phase N and might eventually be related to a north Mesopotamian influence (rounded bottoms are typical in Neo-Assyrian pottery for carinated bowls, cf. Anastasio 2010, pl. 15). Biconical kraters with vertical loop handles and ring bases (Fig. 5E) seem to represent the larger version of the carinated bowls. Amphoroid kraters continue to be produced both in simple ware, red burnished (Fig. 5H) and painted ware (Fig. 5F).

For the first time in Phase O\_Middle, closed shapes make their appearance in the Red Burnished class, especially trefoil pitchers with elongated walls (Pucci 2019b, fig. 48, no. 39), ring bases, and vertical single-loop handles. The shape of these closed vessels derives directly from the Simple Ware and Painted Monochrome jugs of the previous periods. Footed or pedestal bases are still largely, but not uniquely, employed in connection with the conical plates. Ring bases tend to be slightly higher, developing into a trumpet shape, while the ring is squared in section.

All of these elements suggest a morphological development in the local production, and the real changes that occur in Phase O are related to appearance (uniform and red) and standardization of dimensions and shapes. The second feature is clearly visible in the homogeneous dimensions of the vessels per shape, in the decrease in the number of shapes in the table set, and in the reduction of painted patterns, tendencies that will continue despite contact with northern Mesopotamia, Cyprus and Greece.

### 4. PAINTED PATTERNS DURING PHASES N AND O

The number and variety of painted patterns (see Pucci 2019b, fig. 45) reaches its apex during Phase N. Decorative painted patterns range from simple horizontal lines and bands to concentric arcs, concentric circles, crosshatched or plain triangles, foliate bands and chevrons, as well as spirals or volutes on walls and on internal bases. Even though few figurative elements were painted on vessels from this phase (on fifteen fragments), the ones available are eclectic: fish, birds, and horned quadrupeds are the most common. Aside from the simple geometric bands and lines (appearing on 60 percent of the painted sherds), the most common patterns during the beginning of Phase N, are triangles and horizontal wavy lines. Triangles (which appear on 13 percent of the painted sherds from this period) are represented either in a row or opposed at their apices, creating an hourglass shape; they are mainly crosshatched, filled with concentric arcs, or solid fill. This pattern was already employed in local painted decoration; however, here it is used as an articulated pattern, on the same scale as it is employed at Chatal. Wavy lines (very frequently unframed) occur in different patterns. Large curvilinear lines can occupy most of the external surface of the vessel, usually within a large panel framed by horizontal lines, thus becoming the vessel's main subject, or they can be employed between lines to act as a frame for other shapes. This decorative pattern (which appears on 10 percent of the painted sherds) can be identified with the Furumark late type 53; it is frequently seen in the same arrangement on bowls from the Late Helladic IIIC early and middle from the Cyclades (Mountjoy 1999, fig. 391). Concentric arcs or panels filled with concentric arcs (in some cases the arcs are also foliated) are a common Mycenaean pattern (FP 44), especially in the Argolid during the Late Helladic IIIC middle (Mountjoy 1999, fig. 42). Moreover, the decoration in panelled friezes covering the external body of the vessels (frequently kraters or, in one case, a large pot stand) seems to again imitate the narrow decoration on Late Helladic IIIC middle/late amphorae or bowls (Mountjoy 1999, fig. 59), especially the hatched triangles. Handle hooks (Mountjoy 2007, 224; 2009, fig. 3 no. 9), on the other hand, are a common decorative pattern that occurs either hanging on the handles of vessels or, less often, under the rim. This pattern is employed in continental Mycenaean pottery (see Mountjoy 1999, fig. 386) as well as in the East Aegean Koine (Mountjoy 2009). The spiral pattern is directly connected with the one described above, but it is not frequently seen as a single pattern in the Chatal assemblage. It only appears on four body sherds, so its position and arrangement (antithetic or running) remains unclear, and also decorated three internal bases of open vessels in a combination of pattern and spot on the vessel, which is also often seen in the Late Helladic IIIC assemblage (Mountjoy 1999, 204, fig. 78).

The presence of figurative painted decoration is specific to the beginning of Phase N. In general it is possible to distinguish two groups: in the first, motifs clearly referring to an Aegean tradition with fish and quadrupeds, and in the second, motifs related to a local tradition representing human performances, such as musicians playing instruments or hunting scenes (only three examples, see Pucci 2019, fig. 45).

The Painted Monochrome group also comprises very few sherds, on which the decoration recalls the Phase M decorative tradition, with oblique lines on the shoulders of sharp, angular shapes, and probably refers to the so-

called Syro-Cilician tradition. These decorative patterns are completely absent from Phase N, having been gradually replaced by the new ones. These 'new' painted patterns were not only applied to 'newly introduced' shapes but also to local traditional shapes. These factors, when considered along with the modifications made to local shapes, show how complex a process the transition to Phase N was. This transition involved not only the acquisition of 'new shapes and patterns,' but also the embedding of those elements into local production; it was not triggered by the importation and imitation of imported objects (Pucci 2019a), but rather in all likelihood through the transfer of knowledge.

During Phase O, although a fair amount of experimentation in painted decoration and the rendering of monochrome patterns in two colors (bichrome) is evident, there is a trend towards the standardization of patterns. Bands and lines make up more than 70 percent of all painted patterns, followed by circles and arcs. The most common patterns of Phase N – hooks at the bases of handles, necklaces at the bases of necks, and wavy lines on a free field – continue to be used, whereas the more figurative and floral patterns tend to disappear, as does the narrow decoration on the surface of the vessel, which in these last phases tends to be even emptier than before.

## 5. CHRONOLOGICAL SETTING OF THE AMUQ PHASES AT CHATAL HÖYÜK

Because the sequence continues uninterrupted from the previous phase only in Areas II and V, these are the only areas where Phase N\_Beg could be marked. Area II, in particular, is the only one at the site that delivers a sequence from Phase M to N across a significant excavated area. The excavations in Area V provided archaeologists with a sequence from Phase M to N, but there are fewer clearly-defined structures, the excavated area is limited, and consequently there are fewer reliable loci.

The imitations and, to a smaller extent, the imports of Late Helladic IIIC pottery are relevant for the chronological definition of the beginning of Phase N. For example, two small cups with carinated bodies and high-swung handles (Pucci 2019b, pl. 44e, Ant\_4400, cat. no. 92) belong to the group of white slipped wares and their shape is more similar to the carinated cups with high-swung handles from the Argolid (Mountjoy 1999, fig. 48 no. 359) and from Corinth (Mountjoy 1999, fig. 74 nos. 182-84). A large fragment of a pyriform jar with triglyphs on the shoulder and a simple linear decoration (Pucci 2019b, a-2805, cat. no. 90) belongs to the same group of white slip vessels. Its pyriform shape and tassel-like decoration are similar to the Late Helladic IIIC middle assemblage (see Mountjoy 1999, fig. 43 no. 330) on the mainland. A large fragment of a bell-shaped bowl with reserved decoration (Pucci 2019b, pl. 67f) found in a N Beginning context, together with numerous local imitations of the same style, appears to point to a Late Helladic IIIC late period. In fact, the reserved decoration under the rim and the plain black paint on the body are typically considered to be a late style that is also assigned to the Sub-Mycenaean period (Mountjoy 1999, 77; Mountjoy 1986, 192, 200). Thus, based on the imported vessels and the decorative patterns on local imitations, it seems possible to point to a Late Helladic IIIC middle/late period for the beginning of Phase N.

Following these chronologies, Phase N should be dated to the mid- to late 12th century BC. The majority of the sherds show a regional development of decorations and shapes identical to the ones described for the East Aegean Koine from the Late Helladic IIIC middle to the late to Sub-Mycenaean period (i.e., from the second half of the 12th century to the 11th century BC). One large globular jar found on the floor dating to the Cypro-Geometric I period (Pucci 2019b, cat. no. 3, pl. 2a; see the discussion of loci V-13\_08 and V-13\_08\_Floor in Chapter 3), a black Painted Monochrome feeding bottle (Pucci 2019b, pl. 119, Late Helladic IIIC late), and a few sherds belonging to the White Painted I and II groups all support the dating of Phase N\_Mid to the 11th and 10th centuries BC. The belly-handled amphora found in a N\_Mid context (Pucci 2019b, 86, pl.78b) (Proto-White Painted/ White Painted group, CGI) also indicates an early 10th-century horizon (following the chronology in Fantalkin, Finkelstein, Piasetzky 2015). This horizon would seem to be further confirmed by a violin bow fibula (Pucci 2019, cat. no. 413) found in the N\_Beginning context, i.e., a type which is related to the Mycenaean cultural area and to a general Late Helladic IIIC area (Steel 2004, 196; Pucci 2019b, 245-246). The dating of the final periods of Phase N is predominately based on the sequence in Area IV, in which a large fragment of an imported shoulder-handled

amphora (Pucci 2019b, pl. 123a) can be dated to the end of the Late Protogeometric period. This suggests the beginning of the 9th century as a *terminus post quem* for the end of the last period of Phase N. This dating seems to be confirmed by the White Painted II sherds and the two large fragments of Black on Red found in the disrupted level II\_07, which also belong to Phase N\_Late. Moreover, a single sherd of an Euboean skyphos (Pucci 2019b, pl. 79b) was found in Phase N\_Mid (Kearsley 1989, type 5, cf. fig. 35). Considering that the earliest Euboean skyphoi at Lefkandi can be dated to the MPG period (*i.e.*, the first half of the 10th century BC), this may also fit with the general sequence at Chatal Höyük. Based on these findings, the beginning of Phase N at Chatal can be dated approximately to the mid-12th century BC, while its end can be dated to the mid-9th century BC at the very latest. The 'beginning, middle, and late' stages of Phase N are based on local changes in the pottery assemblage and on the stratigraphic sequence in each area.

The transition from Phase N to O, with the large production of Red Slip pottery can be dated according to very few elements; the imported pottery that appears at the same time as the Red Slip is in all areas and in almost all levels limited to imports of Black on Red I (III) juglets (Pucci 2019b, 192). According to the neutron activation analysis carried out on the Black on Red (BoR) ware (Matthers et al. 1983), all BoR juglets found at Chatal Höyük were imported from Cyprus. Due to their shape, these BoR imports can be assigned to the end of the 9th century BC (Schreiber 2003). This date is also supported by the Bichrome III imports, which, together with the BoR, all belong to the Cypro-Geometric IIIa-b period and fit with the data from the final stage of Phase N. These elements appear to date the beginning of Phase O in the Amuq during mid-9th century at the earliest. The small sherd A122833 (Pucci 2019b, pl. 38a), a figurative bichrome sherd belonging to the Bichrome IV horizon, provides a terminus post quem to date the O\_Mid context, where it was found, to the Cypro-Archaic period, i.e. to the end of the 8th-7th centuries BC (Karageorghis 2000, 98). While only small BoR juglets were imported in the earlier levels of Phase O, in the later levels we start to see BoR deep bowls (alongside the usual juglets with a bicurving neck), all belonging to the BoR II (IV) style. These Cypriot imports are common in all areas and are frequently well-preserved or sometimes even intact; it is therefore possible to interpret them not as sporadic finds, but rather as the remnants of a continuous exchange. For the latest occupation, one small fragment of a Proto-Corinthian aryballos, one small fragment of a black figure palmette cup, and one Archaic head of Herakles (Pucci 2019b, 282-283) indicate that levels O\_Middle and Late can be dated from the 8th to 6th centuries BC.

	Kinet H. (Lehmann 2017)	T. Tayinat F1 (Welton et al. 2019; Harrison 2013)	Chatal H.	Tell Afis (Venturi 2007)	Tille H. (Blaylock 2016; Summers 2013; 2010)	Tarsus (Ünlü 2005; Hanfmann 1963)
700-600		Building phase 3	O_Late		X	
850-700		Building Phase 2	O_Middle	Afis period VIII, Area D: 5-4. Period VII	VIII	
950-850			O_Beginning	Afis period VIII Area E-Icb	IV-V	EIB
950-850	11	FP4,3	N_Late	Period VII, Area E II	I-III	EIA
1100-950	12.3	FP6a FP6b	N_Mid	Period VII, Area E III	Prelevel 1 Gate phase 2	EIA
1150-1100	12.1-2 (LBIII)	FP6c	N_Beginning	Period VII, Area E IV	Gate phase 1	LBIIb Late
1250-1150	13.2	Atchana Area 4 phase 1	M_Late	Period VII, Area E Va Period VI, Area E VIb		LBIIb Middle

Table 1. Chronological correspondence of Chatal Höyük archaeological sequence with neighboring sites.

In order to correlate the Amuq phases at Chatal to those from sites both within and outside the region, Alalah and Tell Tayinat are key sites in the Amuq. Thanks to the project carried out in 2018 and 2019 focusing on the Area 4 Late Bronze Age sequence at Alalah, and thanks to the cooperation with the Tell Tayinat team (and Lynn Welton in particular), it has been possible to compare not only the morphology but also the wares and the surface treatments across the sites. There is no doubt that the assemblage from Alalah Area 4, Phase 1 and that of the acropolis, square 42.10 phase 3b (Montesanto, Pucci 2019) are identical to the Phase M\_Late in Chatal Höyük. The assemblages follow

a basic LBII morphology with a few elements indicating a later date, such as the presence of beer jug fragments in Alalah Area 4 lev. 1, of flat plates with rilling at the base, or the first and scattered appearances of Aegenizing painted ware in a fully LBII horizon. Moreover, large squat one-handled jars (in Alalah, Area 4 phase 1) are similar to Afis level Vb in Area E (Venturi 2007, fig. 54 no10), which is a further development of the M\_Mid jars found at Chatal (Pucci 2019b, fig. 76, b-2881/9). All these elements suggest that Phase M\_Late would belong to a period between the mid-13th and mid-12th centuries BC, a period almost completely corresponding to the Late Bronze Age horizon.

The dates provided by the few imports and by the enormous number of imitations of Late Helladic IIIC middle pottery indicate at least the second half of the 12th century for Phase N\_Beginning. Obviously this chronology is strictly related to the Late Helladic sequence, which is now based not only on stylistic criteria but also on more recent archaeological research and C-14 analyses (Fantalkin, Finkelstein, Piasetzky 2015). This same phenomenon has been observed across the whole Levant. Local imitations of Late Helladic IIIC pottery are present at Tell Tayinat (Janeway 2017; Welton et al. 2019, fig. 15), Tarsus (Mountjoy 2005), Kinet Höyük (Gates 2013), Kilise Tepe (Bouthillier *et al.* 2014), Ras el Bassit and Ras ibn Hani (Du Piêd 2006-2007), Sukas (Riis, Buhl, Otzen 1996), Tweini (Bretschneider, Vyve, Jans 2011), Tell Kazel (Badre 2006), Hama (Riis 1948), and in the whole southern Levant, where this pottery is called "Philistine" (see, in general, Bunimovitz, Yasur-Landau 1996; Yasur-Landau 2010). In order to limit this subject only to sites near Chatal Höyük, it seems that the local production of Late Helladic IIIC begins in the period 'early' in Afis (Venturi 2013) and Tarsus (Mountjoy 2005), whereas in the Amuq (for Tell Tayinat cf. Janeway 2017, for Alalaḥ cf. Koehl 2017) as well as Kinet Höyük (Gates 2010) the local production is clearly and homogeneously oriented towards the Late Helladic IIIC middle/advanced period.

The pottery assemblage from Phase N\_Beginning is very similar to the ceramic assemblage found in local phase FP6c at Tell Tayinat (Welton *et al.* 2019), whereas the connections in Inner Syria (Tell Afis) are less strong: biconical cooking pots identical to those found in Level IV in Area E at Tell Afis, as well as painted fenestrated stands and simple conical plates (Level III in Area E at Tell Afis, see Venturi 2007), indicate that Levels IV–III at Tell Afis are likely contemporaneous with, but regionally differentiated from, Phase N\_Beginning and N\_Mid at Chatal Höyük. According to the local production of Late Helladic IIIC pottery, it would not be possible to establish any end date for Phase N, since the parallel development of the Late Helladic IIIC pottery at Chatal and in the Aegean is limited to the Late Helladic IIIC late and Sub-Mycenaean periods. After this period, the local Chatal painted production continues without interruption, on the one hand becoming more and more standardized, but on the other following a different line of development than in mainland Greece.

The production of Red Slip and Burnished pottery also takes place at Tell Tayinat (Osborne 2011), Tell Afis (area D and G, from 850 BC, Mazzoni 1992, 163-201), Tell Qarqur (level IIa, from 915 BC, Dornemann 2003, 1978), Tell Rifa'at (level II, 900-600 BC; Seton-Williams 1961, pl. 38), and Porsuk (Dupré 1983), and that is only to name the sites closer to the Amuq. The same open simple shapes are the first to appear at all of these sites, and a similar dark red slip and burnish covers all the vessels (except at Tell Afis, where the slip seems to be only partial), a phenomenon that seems to be consistent throughout the whole northern Levant. According to the stratigraphy at these sites, the first appearance of Red Slip and Burnished ware is set at various dates, but all are in the range of the 9th century BC. The same Red Burnished treatment appears on pottery found in the southern Levant also with very different dates for its first appearance, ranging from the 11th century at Tell Miqne (Meehl, Dothan, Gitin 2006) to the mid-9th century at Gezer following the lower chronology (Holladay 1990, 63; Finkelstein 2005). Considering that it is difficult to follow a movement from south to north in the diffusion of this class and that the shapes of the vessels are not comparable, it seems likely, as Lehmann (1998, 13) states, that the Red Slip traditions developed independently, and that the local tradition of red slip and burnished in the Amuq experienced a new revival during Phase O. The morphological similarities of the Phase O assemblage are mainly related to the assemblage of Building phase 2 at Tell Tayinat (Osborne 2011) and, specifically for the few Greek imports, to the assemblage from Level VIII-VI from Al Mina (Vacek 2012).

## **CONCLUSIONS**

Although this article has mainly focused on the chronological sequence rather than on the economic and cultural elements of the settlement's evolution during the Iron Age, which have been discussed in other contributions (Pucci 2013; 2016; 2017; 2019b, chapter 16; 2019a), the pottery assemblage during the Iron Age mirrors several important steps and transitions that can be summed up as follows:

- a. The transition from Phase M to N (Late Bronze Age II to Iron Age Ia) is characterized by a period of economic decline, famine and scattered occupation, clearly visible at both Chatal and Alalah. The pottery assemblage is strongly related to the LB II tradition, and the quality of the pottery, firing techniques and fabric were at the same (low) level of standards as in the 14th 13th century BC. During this period the site of Alalah was progressively abandoned and the scattered occupation also appeared on the mound of Tell Tayinat.
- b. During Phase N (Iron Age Ib-c, 11th-mid 9th centuries BC) the community at Chatal undergoes a long process of re-urbanization and construction of a new identity based on the mixture of local and foreign elements, which led to a real fusion of features that changed the appearance of the table set. In a village settlement like Chatal Höyük, this re-urbanization is visible in a more dense urban occupation, the reconstruction of mound walls and of town gates (Pucci 2019b, 285), the eclectic production of pottery, and in the absence of an internal social hierarchy at the site. In terms of pottery production, the very eclectic nature of the decoration, fabric composition, and dimensions for the same shape all suggest the absence of centralization and surely the lack of standardization. During this period Tell Tayinat begins to fulfill its role as regional capital and to construct the first representative structures.
- c. The 9th century is a period of profound transformation in the economic system. Not only is the pottery production standardized and possibly centralized, but also the town of Chatal is divided into different neighborhoods, and both its architecture and its distribution of imported goods demonstrate the presence of a clear social hierarchy. The site becomes ever more dense; possibly during this period the lower town was occupied, while the site would organize and control other smaller settlements in the surrounding areas (Osborne 2013). At the same time in the capital Tell Tayinat, where the ruling dynasty had its seat during the 11th-10th centuries (and also possibly during this phase) a new building program is instated (Building phase 2) and the acropolis is rearranged, which implied dismantling the former structures and in some cases reusing them for building materials (Pucci 2008, 142 and table 81).
- d. The 8th-7th centuries (Phase O\_Mid, Iron Age II-III) affected Chatal Höyük and Tell Tayinat differently. While the Assyrian conquest of Tell Tayinat is clearly visible in the layout of the acropolis (Harrison 2016), it did not affect Chatal Höyük. The pottery assemblage does not show any signs of change, nor do the Neo-Assyrian shapes become part of the local production. A slight influence can be detected only on a few shapes and on the local production of cylinder seals in the Neo-Assyrian style. For this reason it is quite difficult to distinguish between the Iron II and Iron III periods, since most of the material does not change during this phase. A progressive reduction in size of the town is evident until its final abandonment takes place around the 6th century BC.

## References

- Amiran R. 1970, Ancient Pottery of the Holy Land. From its beginnings in the Neolithic period to the end of the Iron Age, Jerusalem. Anastasio S. 2010, Atlas of the Assyrian Pottery of the Iron Age (Subartu 24), Turnhout.
- Blaylock S.R. 2016, Tille Höyük 3.2. The Iron Age, Pottery Objects and Conclusions (British Institute at Ankara Monograph 50), London.
- Bouthillier C., Colantoni C., Debruyne S., Glatz C., Hald M.M., Heslop D., Kozal E., Miller B., Popkin P., Postgate N., Steele C.S., Stone A. 2014, Further Work at Kilise Tepe, 2007-2011: Refining the Bronze to Iron Age Transition, AnatSt 64, 95-161.
- Braidwood R. J. 1937, Mounds in the Plain of Antioch: An Archaeological Survey (OIP 48), Chicago.
- Braidwood R.J., Braidwood L.S. 1960, Excavations in the Plain of Antioch: 1. The Earlier Assemblages, Phases A-J (OIP 61), Chicago. Bunimovitz S., Yasur-Landau A. 1996, Philistine and Israelite Pottery. A Comparative Appproach to the Question of Pots and People, Tel Aviv 23, 88-101.
- Dornemann R.H. 2003, Seven Seasons of ASOR Excavations at Tell Qarqur, Syria, 1993-1999, in Lapp N.L. (ed.), Preliminary Excavation Reports and Other Archaeological Investigations: Tell Qarqur, Iron I Sites in the North-Central Highlands of Palestine (Annual of the American Schools of Oriental Research 56), Boston, 1-141.
- Du Piêd L. 2006-2007, The Early Iron Age in the Northern Levant: Continuity and Change in the Pottery Assemblages from Ras el-Bassit and Ras Ibn Hani, Scripta Mediterranea 27-28, 161-185.
- Dupré S. 1983, Porsuk 1: La céramique de l'âge du Bronze et de l'âge du Fer (Éditions Recherche sur les Civilisations, Mémoire 20), Paris.
- Einwag B. 2007, Early Second Millennium Pottery of the Euphrates Region, in Matthiae P., Pinnock F., Nigro L., Peyronel L. (eds), From Relative Chronology to Absolute Chronology: the Second Millennium BC in Syria-Palestine, Roma, 195-209.
- Evely D.G., Crouwel J.H., French E.B., Musgrave J., Popham M., Reese D.S., Sackett H., Schofield E., Sherratt S. 2006, Lefkandi IV: The Bronze Age: The Late Helladic IIIC Settlement at Xeropolis (BSA Suppl. 39), London.
- Fantalkin A., I. Finkelstein I., Piasetzky E. 2015, Late Helladic to Middle Geometric Aegean and Contemporary Cypriot Chronologies: A Radiocarbon View from the Levant, BASOR 373, 25-48.
- Finkelstein I. 2005, The Low Chronology Update: Archaeology, History and Bible, in Levy T.E., Higham T. (eds), The Bible and Radiocarbon Dating: Archaeology, Text and Science, London-Oakville, 31-42.
- Furumark A. 1941, Mycenaean Pottery: Part 1. Analysis and Classification. Part 2. Chronology (Acta Instituti Atheniensis Regni Sueciae in-4°, XX:1-2), Stockholm.
- Gates M.-H. 1988, Dialogues between Ancient Near Eastern Texts and the Archaeological Record: Test Cases from Bronze Age Syria, *BASOR* 270, 63-91.
- Gates M.-H. 2010, Potters and Consumers in Cilicia and the Amuq during the 'Age of Transformations' (13th-10th Centuries BC), in Venturi F., Societies in Transition: Evolutionary Processes in the Northern Levant between Late Bronze Age II and Early Iron Age: Papers Presented on the Occasion of the 20th Anniversary of the New Excavations in Tell Afis, Bologna, 15th November 2007, Bologna 2010, 65-81.
- Gates M.-H. 2013, Early Iron Age Newcomers at Kinet Höyük, Eastern Cilicia, in Killebrew A.E., Lehmann G. (eds), The Philistines and Other 'Sea Peoples' in Text and Archaeology (Society of Biblical Literature Archaeology and Biblical Studies 15), Atlanta, 485-508.
- Gilboa A. 2006-2007, Fragmenting the Sea Peoples, with an Emphasis on Cyprus, Syria and Egypt: A Tel Dor Perspective, Scripta Mediterranea 27-28, 209-244.
- Haines R.C. 1971, Excavations in the Plain of Antioch, Volume 2. The Structural Remains of the Later Phases: Chatal Hüyük, Tell al-Judaidah, and Tell Ta'yinat (OIP 95), Chicago.
- Hanfmann G.M.A. 1963, The Iron Age Pottery of Tarsus, in Goldman H., Excavations at Gözlü Kule, Tarsus III, The Iron Age, Princeton, NJ, 18-332.
- Harrison T.P. 2013, Tayinat in the Early Iron Age, in Yener 2013, 61-87.
- Harrison T.P. 2016, The Neo-Assyrian Provincial Administration at Tayinat (Ancient Kunalia), in MacGinnis J., Wicke D., Greenfield T. (eds), The Provincial Archaeology of the Assyrian Empire (McDonald Institute Monographs), Exeter, 253-264. Holladay J.S. 1990, Red Slip, Burnish, and the Solomonic Gateway at Gezer, BASOR 277/278, 23-70.
- Horowitz M.T. 2019, Local Ceramics in the Battleground of Empires: Alalakh in the 14th Century BC, in Mazzoni S., Pucci M., Venturi F. (eds), Ceramic Identities at the Frontiers of Empires: the Regional Dimension of Pottery Production in Late Bronze Age Northern Syria and Anatolia, Workshop held in Firenze 14th -16th January 2015, Pisa.

- Horowitz M.T. forthcoming, The Local Ceramics, in Yener K.A., Ingman T., Horowitz M.T. (eds), *Tell Atchana, Alalakh, The 2006-2010 Seasons. Volume 2: The Late Bronze Age II City*, Istanbul.
- Janeway B. 2017, Sea Peoples of the Northern Levant? Aegean-Style Pottery from Early Iron Age Tell Tayinat (Studies in the Archaeology and History of the Levant 7), Winona Lake, IN.
- Karageorghis V. 2000, Ancient Art from Cyprus. The Cesnola Collection in the Metropolitan Museum of Arts, New York.
- Kearsley R.A. 1989, The Pendent Semi-Circle Skyphos (BICS Suppl. 44), London.
- Kling B.B. 1989, Mycenaean IIIC:1b and Related Pottery in Cyprus (SIMA 87), Göteborg.
- Koehl R. 2017, Were There Sea Peoples at Alalakh (Tell Atchana)?, in Maner Ç., Horowitz M.T., Gilbert A. (eds), *Overturning Certainties in Near Eastern Archaeology. A Festschrift in Honor of K. Aslihan Yener* (Culture and History of the Ancient Near East), Leiden, 275-295.
- Lehmann G. 1998, Trends in the Local Pottery Development of the Late Iron Age and Persian Period in Syria and Lebanon, ca. 700 to 300 B.C., *BASOR* 311, 7-38.
- Lehmann G. 2017, The Late Bronze-Iron Age Transition and the Problem of the Sea Peoples Phenomenon in Cilicia, in Fischer P.M., Bürge T. (eds), 'Sea Peoples' up-to-date. New Research on Transformations in the Eastern Mediterranean in the 13th–11th Centuries BCE (Contributions to the Chronology of the Eastern Mediterranean 35), Vienna, 229-256.
- Matthers J.M., Liddy D.J., Newton G.W.A., Robinson V.J., Al-Tawel H. 1983, Black-on-Red Ware in the Levant: A Neutron Activation Analysis Study, *JAS* 20, 369-382.
- Mazzoni S. 1992, Tell Afis e il Ferro I in Siria, in Mazzoni S. (ed.), Tell Afis e l'età del Ferro, Pisa, 157-196.
- Meehl M.W., Dothan T., Gitin S. 2006, *Tel Mique-Ekron Excavations, 1995-1996: Field INE East Slope, Iron Age I (Early Philistine Period)* (Tel Mique-Ekron Final Field Report Series 8), Jerusalem.
- Montesanto M., Pucci M. 2019, The Iron Age at Alalakh revisited: a functional and morphological analysis of the pottery, in Haraf H., Welton L. (eds), *The Iron I in the Levant: the View from the North* (Archaeology and History of the Lebanon 50-51), Beirut, 93-135
- Mountjoy P.A. 1986, Mycenean Decorated Pottery: A Guide to Identification (SIMA 73), Göteborg.
- Mountjoy P.A. 1999, Regional Mycenaean Decorated Pottery, Rahden, Westfalen.
- Mountjoy P.A. 2005, The Mycenaean Pottery from the 1934-1939 Excavations at Tarsus, in Özyar A. (ed.), Field Seasons 2001-2003 of the Tarsus-Gözlükule Interdisciplinary Research Project, Istanbul, 69-134.
- Mountjoy P.A. 2007, A Definition of LH III C Middle, in Deger-Jalkotzy S., Zavadil M. (eds), LH III C Chronology and Synchronisms, Proceedings of the International Workshop Held at the Austrian Academy of Sciences at Vienna, May 7th and 8th, 2001, Vienna, 221-242.
- Mountjoy P.A. 2009, Cyprus and the East Aegean: LH IIIC Pottery Connections, in Karageorghis V., Kouka O. (eds), Cyprus and the East Aegean: Intercultural Contacts from 3000 to 500 BC. An International Archaeological Symposium held at Pythagoreion, Samos, October 17th-18th 2008, Nicosia, 59-71.
- Müller-Karpe A. 1988, Hethitische Töpferei der Oberstadt von Hattusa. Ein Beitrag zur Kenntnis spät-großreichszeitlicher Keramik und Töpferbetriebe unter Zugrundelegung der Grabungsergebnisse von 1978-82 in Bogazköy (Marburger Studien zur Vor- und Frühgeschichte 10), Marburg.
- Oates D., Oates J., McDonald H. 1997, Excavations at Tell Brak. Volume 1. The Mitanni and Old Babylonian Periods (McDonald Institute Monographs), Cambridge.
- Osborne J.F. 2011, Spatial Analysis and Political Authority in the Iron Age Kingdom of Patina, Turkey, Ph.D. diss., Harvard University.
- Osborne J.F. 2013, Sovereignty and Territoriality in the City-State: A Case Study from the Amuq Valley, Turkey, *Journal of Anthropological Archaeology* 32, 774-790.
- Otto A. 2006, Alltag und Gesellschaft zur Spätbronzezeit: Eine Fallstudie aus Tall Bazi (Syrien) (Subartu 19), Turnhout.
- Postgate C., Oates D., Oates J. 1997, The Excavations at Tell al Rimah: The Pottery (Iraq Archaeological Reports 3), Warminster.
- Pucci M. 2008, Functional Analysis of Space in Syro-Hittite Architecture (BAR-IS 1738), Oxford.
- Pucci M. 2013, Chatal Höyük in the Amuq: Material Culture and Architecture during the Passage from the Late Bronze Age to the Early Iron Age, in Yener 2013, 89-112.
- Pucci M. 2016, Material Identity in Northern Levant during the 8th Century BCE: the Example from Chatal Höyük, in Pedrazzi T., Garbati G. 2016, *Transformations and Crisis in the Mediterranean Identity and Interculturality in the Levant and the Phoenician West during the 8th 5th centuries BCE*, Roma, 25-43.

Pucci M. 2017, The Iron Age II 'Spoon Stoppers/Censers' Production in the Amuq: An Example from Chatal Höyük, in Maner C., Horowitz M.T., Allan G. (eds), Overturning Certainties in Near Eastern Archaeology. A Festschrift in Honor of K. Aslıhan Yener (Culture and History of the Ancient Near East 90), Leiden, 560-576.

Pucci M. 2019a, Cultural encounters during the LBII and IAI: Hittites and "Pelesets" in the Amuq (Hatay) Turkey, Asia Anteriore Antica 1, 159-183.

Pucci M. 2019b, Excavations in the Plain of Antioch, Vol. 3. Stratigraphy, Pottery, and Small Finds from Chatal Höyük in the Amuq Plain (OIP 143), Chicago.

Pucci M. forthcoming, The Amuq region during the Iron Age I-II: Formation, Organization and Development of a Community, in Van Exel V., Sollee A.E. (eds), Formation, Organization and Development of Iron Age Societies: A Comparative View (Österreichische Akademie der Wissenschaften), Vienna.

Riis P.J., Buhl M.-L., Otzen B. 1996, Sukas 10: The Bronze and Early Iron Age Remains at the Southern Harbor (Publications of the Carlsberg Expedition to Phoenicia 12), Copenhagen.

Seton-Williams M.V. 1961, Preliminary Report on the Excavations at Tell Rifa'at, Iraq 23, 68-87.

Steel L. 2004, Cyprus before History: From the Earliest Settlers to the End of the Bronze Age, London.

Steel L. 2013, Materiality and Consumption in the Bronze Age Mediterranean (Routledge Studies in Archaeology), New York-London.

Summers G.D. 2010, Revisiting the End of the Late Bronze Age and the Transition to the Early Iron Age at Tille Höyük, Iraq 72, 193-200.

Summers G.D. 2013, Some Implications of Revised C14 and Dendrochronological Dating for the 'Late Bronze Levels' at Tille Höyük on the Euphrates, in Yener 2013, 316-332.

Swift G.F. 1958, The Pottery of the Amuq Phases K to O, and its Historical Relationships, Ph.D. diss., University of Chicago.

Ünlü E. 2005, Locally Produced and Painted Late Bronze to Iron Age Transitional Period Pottery of Tarsus Gözlükule, in Özyar A. (ed.), Field Seasons 2001-2003 of the Tarsus-Gözlükule Interdisciplinary Research Project, Istanbul, 145-168.

Vacek A. 2012, Greek and Related Pottery from Al Mina: A Case Study of Production, Consumption and Distribution of Greek Pottery in the Eastern Mediterranean from the 9th to the End of the 7th Century BC, Ph.D. diss., University of Oxford.

Venturi F. 1996, Una 'fiasca del pellegrino' da Tell Afis: l'evoluzione dei 'Pilgrim Flasks' cananaici nel passaggio tra bronzo tardo e ferro I, Vicino Oriente 10, 147-161.

Venturi F. 2007, La Siria nell'età delle trasformazioni (13-10 sec. a.C.): Nuovi contributi dallo scavo di Tell Afis (Studi e Testi Orientali 8), Bologna.

Venturi F. 2013, The Transition from the Late Bronze Age to the Early Iron Age at Tell Afis, Syria (Phases VII-III), in Yener 2013, 227-259.

Welton L., Harrison T.P., Batiuk S., Ünlü E., Janeway B., Karakaya D., Lipovitch D., Lumb D., Roames J. (eds) 2019, Shifting Networks and Community Identity at Tell Tayinat in the Iron I (ca. 12th - mid 10th century B.C.E.), AJA 123/2, 291-333. Yasur-Landau A. 2010, The Philistines and Aegean Migration at the End of the Late Bronze Age, Cambridge.

Yener K.A. 2013 (ed.), Across the Border: Late Bronze-Iron Age Relations between Syria and Anatolia. Proceedings of the International Conference held at Koç University Research Center for Anatolian Civilizations in Istanbul, May 31-June 1, 2010 (Ancient Near Eastern Studies Supplement Series 42), Leuven.

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