

RED LUSTROUS WHEEL-MADE WARE FROM TATARLI HÖYÜK (EASTERN CILICIA): NEW EVIDENCE FROM A LATE BRONZE AGE KILN CONTEXT

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Abstract

Red Lustrous Wheel-Made (RLWM) ceramics represent a distinct ware group characterized by their distinctive fabric and typological features during the Late Bronze Age (LBA). Widely distributed across Anatolia, Cyprus, Egypt, and the Levant within the Eastern Mediterranean trade network, this ware group has been the subject of differing scholarly interpretations regarding its place of production. While archaeometric studies indicate a clear degree of compositional homogeneity, the question of whether production was carried out at a single center or within multiple workshops operating in the same production region continues to be debated in the literature. Recent studies and petrographic analyses suggest that the production area should be sought in the mountainous region of Cilicia. The high number and morphological diversity of RLWM examples recovered at the settlement of Kilise Tepe in particular further support this view. Previous excavations have shown that in the Plain Cilicia region, the number of sites yielding fragments of this ware group, as well as the quantity of the finds themselves, is rather limited. However, the excavations at Tatarlı Höyük, located in the Ceyhan district of Adana Province in eastern Plain Cilicia, have revealed new data concerning this issue.

This article presents RLWM ceramic fragments recovered from LBA deposits at Tatarlı Höyük, as well as from the debris of a kiln dating to the same period, and offers new assessments regarding their production system. The debris of the kiln, first uncovered in 2016 and dated to LBA II, yielded numerous period-specific forms such as plates, bowls, jugs, and pots, along with slagged ceramic fragments. During the 2023 and 2025 excavation seasons, investigations carried out within the kiln context identified waste areas thought to be associated with the earlier phase of the structure, from which partially slagged and vitrified RLWM fragments were recovered. Among these finds, arm-shaped vessels and spindle bottle forms were identified. The RLWM fragments from the kiln fills

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exhibit single-surface slagging, partial vitrification, and deformation resulting from exposure to high temperatures. While these characteristics demonstrate that the fragments were subjected to intense heat, the question of whether this thermal impact is related to a primary firing process or to a secondary burning event remains a methodological issue requiring careful evaluation. Nevertheless, the absence of a widespread burning layer around the kiln and the contextual characteristics of the finds suggest that the RLWM ceramics may be associated with local production.

Keywords: Cilicia, Kizzuwatna, Tatarlı Höyük, Late Bronze Age, Kiln, Red Lustrous Wheel Made Ware (RLWM), Arm-shaped vessel, Spindle bottles.

Introduction

Tatarlı Höyük, one of the largest multi-mounded settlements in Cilicia, is located to the east of the Ceyhan district of Adana Province, near the border with Osmaniye (fig. 1). Excavations carried out to date (fig. 2) have revealed a stratigraphic sequence extending from the Neolithic to the Early Roman Period¹. The mound lies along important military and commercial routes and occupies a well-watered and fertile area. This geopolitical location led the mound to maintain close ties with surrounding cultural regions throughout all periods of its occupation. From the beginning of the 2nd millennium BC onward, the dynamic structure of the Ancient Near East shaped interregional interactions and fostered long-distance political and commercial connections among urban centers. The finds uncovered at Tatarlı Höyük illuminate the site's participation in these networks, linking it to Central Anatolia, Syria, the Eastern Mediterranean, Cyprus, and the Aegean during the 2nd millennium BC². A fragment of a White Painted Pendant Line Style (WPPLS) jug³, together with sherds of Red-on-Black (RoB) vessels and bowls, indicates that the earliest connections with Cyprus began during the transition from the Middle Bronze Age (MBA) to the Late Bronze Age (LBA) I. Moreover, a fragment of White Slip (WS) II ware demonstrates the continuation of this relationship during the LBA II. A Mycenaean sherd dated to the Late Hellas (LH) IIIA2/B phase attests to contacts with the Aegean world⁴.

The RLWM fragments that form the focus of this study further shed light on Tatarlı Höyük's interactions with the Eastern Mediterranean and the Hittite world during this period. Considering that no kiln associated with the production of this ware⁵ has yet been identified, the discovery of most RLWM sherds at Tatarlı Höyük within the refuse fill of a LBA kiln represents a particu-

1 Girginer – Oyman Girginer 2020, 211ff; Novak et al. 2017, 173-176.

2 See Ünal – Girginer 2010, 275ff; Girginer – Collon 2014, 59ff; Doğan Alparslan – Girginer 2021, 31ff; Dardeniz et al. 2018, 117ff; Dardeniz 2020, 75ff; Cevher 2020, 63ff; Dündar 2020, 89ff; Oyman Girginer 2022a; Oyman Girginer 2022b, 84ff.

3 Oyman Girginer 2017, 229ff.

4 These ceramics associated with Cyprus and the Aegean world are currently being prepared for publication by the author.

5 Steele – Stern 2017, 641.

larly significant finding.

RLWM: Chronology, Distribution, and Provenance

During the LBA, RLWM vessels constituted a distinctive ware group widely distributed across Cyprus, the Eastern Mediterranean, Egypt, and Anatolia. The most characteristic features of this ware are its exceptionally well-leveled, fine red fabric—often exhibiting salmon-pink hues—and its firing in an oxidizing atmosphere. The outer surfaces are self-slipped and burnished, usually with long vertical strokes⁶. The origin of this ware has long been a subject of scholarly discussion. Two major views have been proposed in the literature. The first, advanced by K. Eriksson, attributes the production of RLWM to Cyprus. Eriksson's interpretation is based on the earliest appearance of this ware group on the island, as well as the greater typological diversity and numerical frequency observed there⁷. An alternative view has been proposed by E. Kozal, who emphasizes the typological diversity of RLWM vessels recovered from the LBA levels at Kilise Tepe, suggesting that the production center may have been located in the mountainous region of Cilicia (Rough Cilicia)⁸. Furthermore, she notes that certain RLWM forms may trace their developmental origins back to the Assyrian Trade Colony Period (Karum Age) in Anatolia, implying that some shapes may ultimately derive from local Anatolian prototypes. While the precise organization of RLWM production and the number of workshops involved continue to be discussed, recent scholarship has increasingly converged on Rough Cilicia as the most plausible region of origin for this ware group⁹.

RLWM first appeared in the Late Cypriot (LC) IA2 period¹⁰ and is known to have circulated widely across the Eastern Mediterranean between approximately the 15th and 13th centuries BC. In Cyprus, small quantities of RLWM were found in settlements and tombs toward the end of LC IA, but its presence became widespread during the LC IB phase¹¹. RLWM vessels have also been found in Egypt together with Late Minoan (LM) IA/B (?) and LH IIB ceramics, a context that corresponds chronologically to LC IB¹². In the Levant, the ware appears as early as the LBA I¹³, while the few other examples from the region date to LBA II and its final stages¹⁴. In Syria, the RLWM fragments discovered at Alalakh¹⁵ are associated with the LC IB:2–LC IIA:1 transition¹⁶. The earliest examples from Alalakh were recovered from Level V, which postdates the destruction of the settlement by Hattusili I¹⁷. According to Eriksson (1993), all

6 Knappett – Kilikoglou 2007, 3.

7 Eriksson 1991; Eriksson 1993.

8 Kozal 2014; Kozal 2015a; Kozal 2019a, 98.

9 Kozal, loc. cit; Kibaroglu et al. 2019, 2025.

10 Eriksson, op. cit. 1-3.

11 Eriksson 1991, 89.

12 *ibid* 83.

13 *ibid* 89; A spindle bottle dating to the MBA IIC - LBA I was found in a grave at Pella in Jordan. See Potts et al. 1985, 205-206.

14 Eriksson, op. cit. 90.

15 Woolley 1955, 358.

16 Eriksson, loc. cit.; See also McClellan 1989, 211.

17 Kozal 2015a, 55.

RLWM finds from Anatolia date from the reign of Tudhaliya I through to the collapse of the Hittite Empire, that is, to the LBA II period¹⁸. She further notes that parts of Cyprus were in contact with the Hittites at least from the reign of Suppiluliuma I onward¹⁹, and that RLWM appears with increasing frequency in Anatolia beginning in this period²⁰. D. Mielke's study of RLWM from Hittite contexts indicates that the ware first emerged in Anatolia around 1500 BC²¹. At Kayalıpınar, RLWM fragments derive from Levels 4 and especially 3, the latter destroyed during the Middle Hittite period or at the beginning of the Hittite Empire, corresponding to the 14th century BC²².

At Kinet Höyük, RLWM appears in Period 15, dated to the LC IA2–LC IB transition²³. At Kilise Tepe, located in Rough Cilicia, the earliest examples of this ware have been reported from Levels IVb–IIIa²⁴. At Gözlükule, RLWM is attested in the LBA II levels²⁵, while at Sirkeli Höyük it derives from the Middle Cilicia I (MCI) ²⁶ phase. The fragments recovered from Soli are dated to the 14th–13th centuries BC²⁷. Overall, the datable examples from Cilicia, like those from Kilise Tepe, fall within a time span extending from the 15th century to the second half of the 14th century BC²⁸.

In Anatolia, RLWM ceramics are generally attested in Central Anatolia and Cilicia, and are most commonly represented by arm-shaped vessels and spindle bottles. Large numbers of RLWM fragments have been recovered at both Kilise Tepe and Boğazköy; however, these two sites differ in terms of typological diversity²⁹. In particular, at Kilise Tepe, in addition to the seven main RLWM forms defined by K. Eriksson, E. Kozal has identified three additional krater types and one pedestal vessel³⁰. At Boğazköy, arm-shaped vessels, spindle bottles, lentoid flasks, and bowls are attested, whereas at Kinet Höyük and Alalakh the assemblages consist predominantly of arm-shaped vessels, spindle bottles, and bowls³¹ (fig. 3).

While archaeometric studies have demonstrated a remarkable degree of compositional homogeneity in RLWM ceramics, the organization of production—specifically whether manufacture was centralized in a single workshop or carried out across multiple workshops within the same production region—has been the subject of ongoing discussion. Chemical analyses of RLWM samples from different parts of the Eastern Mediterranean consistently indicate the do-

18 Eriksson 1993, 129-131.

19 Eriksson 2007, 160.

20 *ibid* 166.

21 Mielke 2007, 156; Schoop 2009.

22 Mühlenbruch 2014, 293-294. A seal impression of Kantuzzili was found in layer 3 of Kayalıpınar Building B, and the fact that he was recognized as Suppiluliuma I's uncle or brother is the basis for the dating.

23 Gates 2006, 300, 304; Kozal 2015a, 55.

24 Kozal, *loc. cit.*

25 Goldman 1956, 205.

26 Kozal – Kulemann Ossen 2019, 214.

27 Yağcı 2008, 1217; Yağcı 2021, 36.

28 Kibaroğlu et al. 2019, 415.

29 Kozal 2015a, 55-56. See also Seeher 2002; Mielke, *op. cit.* 158.

30 Kozal 2014, Bouthiller et al. 2014, 146, fig. 49; Kozal 2015b; Kozal 2019a, 98.

31 Kozal 2015a: 56.

minance of a single geological source or production region³². On this basis, C. Knappett proposed northern Cyprus as the most plausible geological match³³. However, Manuelli has argued that it is unlikely that all RLWM vessels were distributed exclusively from Cyprus or that Cypriot potters alone were responsible for their production³⁴. E. Kozal, by contrast, has proposed the mountainous region of Cilicia (Rough Cilicia) as the primary production area³⁵. Petrographic and geochemical analyses support this interpretation, demonstrating strong compositional compatibility between RLWM fabrics and clay sources from the Anamur and Ovacık areas of Rough Cilicia³⁶. More recent comprehensive archaeometric research has further identified the Göksu Valley as a likely production zone, thereby substantially challenging the Cypriot-origin model³⁷. Within this framework, production in Rough Cilicia can be understood as involving one or more workshops operating within the same region, with distribution extending northward into Central Anatolia and southward to the Mediterranean coast via both overland and maritime routes³⁸. For the wider Eastern Mediterranean distribution of this ware, the port of Ura—mentioned in Hittite texts and generally located near Silifke at the mouth of the Göksu River—has been proposed as a plausible outlet³⁹.

RLWM Vessel Forms and Contexts from Tatarlı Höyük

At Tatarlı Höyük, the LBA is represented by Level IV, which comprises two subphases. The earlier subphase, IVb (LBA I), dates roughly between 1650 and 1450 BC and corresponds to a period when Hittite connections began to appear, both in the philological record and in ceramic typology. The subsequent subphase, IVa (LBA II), dating approximately between 1450 and 1250 BC, reflects the continued and intensified influence of the Hittite world, evident in architecture, pottery, and seal impressions. On the eastern side of the mound⁴⁰, excavations in 2016 revealed a pottery kiln dated to this period⁴¹, providing one of the clearest indications of local ceramic production at the site (fig. 4). Within the heavily damaged kiln debris were numerous slag and vitrified fragments of varying sizes, as well as misfired pottery sherds. The vessel forms recovered from the kiln correspond closely to plate and bowl types known as ‘drab ware’ from the Hittite Empire period. In addition, fragments of plates and handles bearing potters’ marks—already attested elsewhere at the site⁴²—were also recovered from the same kiln debris.

In subsequent years, continued excavations in this area revealed evidence

32 Kozal 2015b, 698; See also Schubert 2005; Schubert - Kozal 2007; Knappett et al. 2005; Knappett - Kilikoglou 2007.

33 Knappett – Kilikoglou, op. cit. 133.

34 Manuelli 2009, 263.

35 Kozal 2014; Kozal 2015a; Kozal 2019a, 98.

36 Knappett et al. 2005, 48-49.

37 Kibaroğlu et al. 2025.

38 Fantoni 2021, 95

39 Kozal 2018, 223-224.

40 See supra Fig.2.

41 Dardeniz et al. 2018, 117ff.

42 Oyman Girginer 2022b.

belonging to an earlier phase of the same kiln, although this earlier level was not well preserved (fig. 5). The early use phase had been levelled during the rearrangements carried out in the later phase, during which the area underwent secondary use and was refunctioned with a compacted earthen floor. Excavations have identified two main parts of the kiln. The first is the kiln collapse zone (fig. 6.e), and the second is the internal waste zone (fig. 6.a) located immediately to its east. The kiln collapse zone is characterized by large mudbrick blocks (fig. 6.c), thick plaster remains, melted slag, and dense ceramic fragments deformed by exposure to high temperatures. Some slag fragments in the central area reached up to 40 cm in size, suggesting that repeated and continuous firings were carried out in this zone. In addition, basalt stones with diameters of 10–15 cm identified at the center mark the foundation level of the kiln. Collectively, these findings indicate that the central part of the kiln represents the primary area where production activities were concentrated.

The internal waste zone, located to the east of the kiln collapse, is characterized by smaller slag fragments, scattered traces of fine mudbrick debris, and residues related to the production process. Within this area, partially vitrified and secondarily fired fragments belonging to the RLWM group were recovered (fig. 6.b). The fill of this zone displays a softer and less compact texture, indicating that it represents a secondary deposit added after the main phase of use. Therefore, this area has been interpreted as the kiln's internal waste zone (fig. 5). Alongside the RLWM fragments, small slag pieces, production debris, and numerous ceramic sherds were also encountered. Unlike the kiln structure itself, large mudbrick blocks were not observed here; instead, smaller and more dispersed mudbrick fragments were documented. In addition, no large slag specimens were identified. Consequently, this zone can be defined as a secondary waste area where residues produced during the ceramic manufacturing process accumulated. Among the LBA ceramic assemblage recovered from this deposit, the most noteworthy finds are the RLWM fragments.

The RLWM fragments recovered from kiln-related waste areas, kiln fills, and other nearby contexts are presented in Fig. 7. The RLWM fragments from the kiln's waste area were identified for the first time in 2023. These consist of eight body sherds belonging to spindle bottles or similar vessel types. Some of the fragments exhibit heavy vitrification on their surfaces as a result of exposure to intense heat, while others display a gray core (2.5 YR 5/1 *reddish gray*) (fig. 8). The pieces are made of a clean, fine clay fabric and have a red paste (2.5 YR 5/6 *red*). Petrographic analyses of four of the 2023 fragments, carried out by M. Kibaroğlu and B. Semiz, revealed that the textural characteristics of the samples are consistent with those of the RLWM ware group. The samples correspond to the “*fine fabric*” group typical of spindle bottles and other thin-walled vessel types. Preliminary results indicate that the outer surfaces of the fragments were exposed to extremely high temperatures, causing vitrification of approximately half of the wall thickness, while the inner half remained within the normal firing range of RLWM. Furthermore, the analyses demonstrated that the clay matrix of the Tatarlı Höyük samples closely matches that of the Kilise Tepe specimens, suggesting that they were likely subjected to short-term, localized exposure to intense heat

on one side⁴³.

During the 2025 excavations, 13 additional RLWM fragments were recovered from the same area (fig. 9). Among these are an arm-shaped vessel preserving the hand-shaped bowl portion (fig. 10) and several fragments—though difficult to identify in form—that most likely belong to spindle bottles (fig. 11). Some of these fragments display vitrification and surface slagging, while in the arm-shaped vessel, swelling of the clay body during firing was observed. A common feature of all fragments recovered from the kiln area is that this vitrification occurs unidirectionally. Although the vitrified RLWM fragments from the internal waste zone of the kiln are most likely failed products of a local firing attempt, the possibility that they were secondarily exposed to high temperatures during later phases of kiln use—or due to a subsequent burning episode—cannot be ruled out. However, since no evidence for a large-scale burning event has been identified in the area surrounding the kiln, it seems more plausible that these fragments are related to the primary production system of the kiln. The arm-shaped vessel recovered from the kiln area is preserved to a length of approximately 10.4 cm. The surface is red (10R 4/6 *red*) and burnished. The wrist portion consists of three raised rings, while the hand-shaped bowl, though somewhat distorted, corresponds morphologically to Fantoni's type M3, in which the thumb is rendered in high relief and the fingers in low relief of equal height, with a carelessly incised fingernail on the thumb⁴⁴. Similar arm-shaped vessels have been found at Boğazköy—in both the Lower City, dated mainly to the 14th century BC, and the Upper City—as well as near Temple 15, dated to the 13th–12th centuries BC⁴⁵, and at Ortaköy⁴⁶. Fantoni has suggested that the four main morphological types of hand-shaped bowls may represent products of different workshops⁴⁷.

Fragments of arm-shaped vessels were also recovered from the LBA fills outside the kiln area at Tatarlı Höyük. One of these pieces belongs to the base of a vessel (fig. 12.a). The sherd, made of a reddish paste (2.5 YR 6/8 *light red*), exhibits a gray core formed during firing. It was discovered in 2012 within Trench AZ 187, west of Wall D-12 belonging to Building C. The base form of this vessel can be compared to an arm-shaped vessel with a simple convex base defined in Eriksson's typology⁴⁸. Bases of the same form are attested in Anatolia at Kayalıpınar⁴⁹ and Kilise Tepe⁵⁰. Another fragment from Trench AZ 186 (fig. 12.b) probably represents a body sherd of an arm-shaped vessel. The surface is red-slipped (2.5 YR 5/8 *red*) and burnished, and the paste is light red (2.5 YR 6/8 *red*) with a gray core (2.5 YR 5/1 *reddish gray*) resulting from firing. The last fragment of this form was found in the same area and at approximately the same

43 I would like to thank Dr. Mustafa Kibaroğlu and Assoc. Prof. Dr. Barış Semiz for their petrographic studies on the samples and for sharing their valuable insights. Research on the RLWM fragments from the kiln area is ongoing and will be published separately.

44 Fantoni 2021, 98, Fig. 21.

45 Fantoni, loc. cit. See for examples from Boğazköy: Fischer 1963, 149-150, Tafel 124; Parzinger – Sanz 1992, 116.

46 Kıymet – Süel 2010, 474-475

47 Fantoni, op. cit. 99-100.

48 Eriksson 1993, 28, fig.7: VIIIb:1021.

49 Mühlenbruch 2014, Taf. 30 n.3

50 Hansen – Postgate 2007, 340, Fig. 391 n.684.

depth as the previous one (fig. 12.c). This sherd also has a red-slipped (2.5 YR 5/8 *red*), burnished surface, but its paste appears completely gray (2.5 YR 6/1 *reddish gray*) due to over-firing, distinguishing it from the other examples.

Arm-shaped vessels, which have no clear predecessors in Anatolia or elsewhere⁵¹, depict a right hand rendered in a grasping position holding a small bowl at one end, while the other end is closed⁵². These vessels, known from Cyprus, Egypt, Syria, Palestine, and Anatolia, became a form particularly favored by the Hittites. The largest number of examples have been recovered from Boğazköy, where they are typically found in temple contexts⁵³. Their findspots have led scholars to interpret them as ritual implements used for libation offerings to deities⁵⁴. T. Pilavcı has proposed, however, that these vessels—believed to symbolize the outstretched arm of a god—were not used for pouring liquids during libation ceremonies, but rather for receiving them⁵⁵. The alternative suggestion that they served as incense burners⁵⁶ has been largely dismissed, since none of the examples examined show traces of soot or burning on their interior surfaces⁵⁷.

Several analyses have indicated that arm-shaped vessels were functionally related to liquids. One such analysis revealed traces of bitumen in several Cypriot examples, even though no local bitumen sources exist on the island. The bitumen was identified as originating from the Ugarit region. This finding has led to the suggestion that arm-shaped vessels were used for transporting or storing liquids⁵⁸. Residue analyses conducted on the interior surfaces of libation arms from Anatolia, Rough Cilicia, and Cyprus have also identified the presence of animal and vegetable oils, as well as traces of beeswax⁵⁹. However, it has also been proposed that both the bitumen and beeswax may have been used to seal these vessels rather than as part of their liquid contents⁶⁰.

Arm-shaped vessels have been recovered from Central Anatolia at Boğazköy⁶¹, Kayalıpınar⁶², Alacahöyük⁶³, Ortaköy⁶⁴, Eskiypar⁶⁵, Maşathöyük⁶⁶, and Kaman-Kalehöyük⁶⁷; from Eastern Anatolia at Korucutepe⁶⁸; from the Pamp-

51 Kozal 2015b, 61.

52 Knappett – Kilikoglou 2007, 3.

53 In Boğazköy, arm-shaped vessels were recovered from layers IVa and III of Büyükkale and layers 2-1 of Lower City. See Eriksson 1993, 27.

54 Eriksson 2007, 166.

55 Pilavcı 2017, 245.

56 Bittel 1937, 25-26.

57 Fantoni 2021, 102.

58 *ibid* 95; Knappett et al. 2005, 49.

59 Fantoni 2021, 95; Steel et al. 2007, 192-195.

60 Steele et al., *loc. cit.*; Kozal 2017, 28.

61 Fischer 1963, Taf. 122: 1102, 1124; Taf. 124; Seeher 2002.

62 Mühlenbruch 2014, Taf. 30 n.3-6, Taf. 31 n.1-3.

63 Koşay – Akok 1966, Lev. 17 g94, h153, j154; Yıldırım 2021, 38.

64 Kıymet – Süel 2010, 457-478.

65 Mellink 1970, 161.

66 Özgüç 1982, 102, Fig. 35.

67 Omura 2000, 219, Çizim 9.1.

68 Griffin 1980, 88-89; Ertem 1988, 18 Cat. No. 31-34.

hlyia region at Perge⁶⁹; and, further west in Anatolia, at Dede Mezarı⁷⁰ (Fig. 3).

In the Cilicia region, two arm-shaped vessel fragments are known from the Hittite Temple at Gözlükule, dated to the 13th century BC⁷¹. At Yumuktepe, an arm-shaped vessel fragment consisting of the right hand holding a bowl and part of the forearm has been recovered⁷². Another arm-shaped vessel was found in Levels VII during the 1938–1939 excavations at Yumuktepe. This vessel, described as a censer, has a buff-colored paste with an orange slip and a burnished surface⁷³. An additional arm-shaped vessel fragment is also known from Level V at Porsuk Höyük⁷⁴. At Alalakh, a few arm-shaped vessels were identified among the RLWM fragments recovered by Woolley from Level VII⁷⁵. At Kilise Tepe, such vessels have been reported from Levels IIIc–d⁷⁶ (fig. 3).

Among the RLWM forms uncovered outside the kiln area at Tatarlı Höyük are also fragments belonging to spindle bottles. These consist of bases and body sherds. The spindle bottle, the most common form within the RLWM group and one with antecedents dating back to the Old Hittite period⁷⁷, has been classified by K. Eriksson into five types⁷⁸. A base fragment belonging to a spindle bottle, found in Room 18 of the monumental Hittite Temple (Building A), is made of fine and well-levigated clay with a light red fabric (fig. 12.d) and corresponds to Eriksson's Type VIA1b. This type is characterized by a slender, elongated body and bases generally of the same diameter as the rim⁷⁹. Body fragments of the spindle bottle form (fig. 12.e) were also recovered from Room 6 of Building A. These fragments are made of light red clay (2.5YR 6/8 *light red*) and exhibit vertical burnishing marks. They possess a clean, well-levigated fabric, with a light red paste and a high-quality burnish.

In Central Anatolia, spindle bottle fragments have been reported from Kayalıpınar⁸⁰, while in Cilicia they occur in Level IIIId at Kilise Tepe⁸¹ and in Level V at Yumuktepe⁸². In addition, fragments of spindle bottles were also recovered from Level V at Porsuk Höyük, which is generally dated to the LBA II (ca. 1400–1200 BC)⁸³. At Alalakh, spindle bottles constitute the predominant form within the RLWM repertoire found in both the old and recent excavations⁸⁴. At

69 Recke 2006, 620-21, Abb. 4-5.

70 Üyümez et al. 2010a, 189, 194 Resim 4; Üyümez et al. 2010b, 949, fig. 2-3.

71 Goldman 1956, 205, 218, fig. 328 n.1229-1230.

72 Manuelli 2009, 259-260, fig. 2.

73 *ibid* 261; See also Jean 2006, 318, fig. 6.5.

74 Dupré 1983, 26, Pl. 41.

75 Kozal 2010, 69.

76 Symington 2001, 169-170, Fig. 6; Bouthillier et al. 2014, 100, 145-147; Hansen – Postgate 2007, 340, fig. 391 n. 684-692.

77 Özgüç 1988: 11, Pl. 26. Spindle-shaped bottles are associated with the bottles from Inandıktepe dating to the Old and Middle Hittite Periods. See Kozal 2015b, 60.

78 Eriksson 1993, 23.

79 *ibid* 22-23, Fig. 5a VIA1b.

80 Mühlenbruch 2014, 40, Taf. 2 n. 25-31.

81 Bouthillier et al. *op. cit.* 140-142, fig. 46b.

82 Eriksson, *op. cit.* 133; See also Fitzgerald 1940, 132; Garstang 1953, 243.

83 Dupre, *op. cit.* Pl. 41, 43.

84 Kozal 2010, 69.

Sirkeli Höyük, a rim fragment belonging to this form has also been identified⁸⁵.

Discussion and Conclusions

The RLWM fragments recovered during the ongoing investigations within the fill of a ceramic kiln, dated to LBA I-II and first identified during the 2016 excavations at Tatarlı Höyük, provide new evidence regarding production contexts. Petrographic analyses conducted on four fragments from this kiln indicate that the clay fabrics of these vessels are similar to those of RLWM samples from Kilise Tepe. The diversity of forms and the quantitative abundance of RLWM at Kilise Tepe strongly suggest that the mountainous region of Cilicia was one of the principal production areas of this ware. In this regard, the presence of RLWM fragments within the kiln debris at Tatarlı Höyük, located in eastern Plain Cilicia, represents an unexpected piece of evidence. This may suggest the possibility that clays specific to this ware were transported from the mountainous part of Cilicia as part of broader raw material exchange networks. It is well known that the exchange of raw materials took place across the Eastern Mediterranean during the LBA. Although there is a suggestion that RLWM vessels, which are distributed to the major centers of the Eastern Mediterranean and Anatolian geography, were produced and distributed to such a wide area from a single production center, the kilns in which these vessels were produced have not been uncovered to date.

The RLWM ceramic fragments recovered from the waste zone of the kiln debris at Tatarlı Höyük exhibit evidence of extreme thermal alteration. The sherds display partial vitrification, slagging confined to a single surface, and deformation caused by exposure to uncontrolled high temperatures. In some cases, the exterior surfaces are covered with a dark grey to black glassy layer, while the interior surfaces retain the characteristic reddish tone typical of RLWM vessels. This condition suggests a directional heat distribution and limited oxygen circulation within the kiln environment.

These characteristics suggest that the alterations observed on the fragments did not result from a fire or secondary burning event, but rather from excessive firing that occurred directly within the kiln structure. The absence of a clearly defined burning layer in the surrounding context further supports this interpretation. The context in question likely represents a collapsed firing phase in which spindle bottles or arm-shaped vessels were overfired, became vitrified, and subsequently mixed into the kiln fill. The morphological features and surface treatments of the Tatarlı RLWM fragments closely correspond to known RLWM forms; however, the irregularities in the clay texture, swelling, and vitrification traces indicate that these were misfired products.

Nevertheless, the observed traces of vitrification cannot be entirely excluded as resulting from the secondary insertion of pre-existing RLWM vessels into the kiln structure. However, when the stratigraphic context, material consistency, and directional distribution of thermal deformation are considered together, the possibility of in-situ production appears considerably stronger.

As E. Kozal has rightly emphasized, the diversity and abundance of RLWM examples, particularly those recovered from Kilise Tepe in the mounta-

85 Kozal – Kulemann Ossen 2019, 214; Kozal 2019b, 346.

inous region of Cilicia, indicate that the primary production center of this ware should be sought in this area. Recent archaeometric analyses further support this interpretation. However, the discovery of RLWM fragments in a kiln context at Tatarlı Höyük—where this ware is represented only by a few examples within the eastern part of the Plain Cilicia—is particularly noteworthy. The petrographic correspondence between the Tatarlı samples and the Kilise Tepe clays suggests the possibility that the raw material—namely, the clay—may have been transported by land or sea routes and that production, or at least experimental firing, may have taken place at Tatarlı.

Most of the RLWM fragments from Tatarlı Höyük were recovered from the fills associated with LBA contexts in and around the kiln area. The nearby finds and materials from comparable depths also provide valuable chronological indicators. In the same area and at the same depth as the fragments found in trench AZ–AY 186, a terracotta seal bearing Hittite hieroglyphs was discovered, dated to the 15th–14th centuries BC. Likewise, hemispherical votive bowls⁸⁶, known to be typical of the 15th century BC, were among the other finds from this area. Approximately 40 cm above this level, a false mouth fragment belonging to a Mycenaean stirrup jar, dated to the LH IIIA2/B phase (14th–13th centuries BC), was found. Taken together, these finds indicate that the RLWM fragments recovered at Tatarlı Höyük can be dated to the 15th–14th centuries BC. Once the radiocarbon date of a wooden sample taken from within the kiln area becomes available⁸⁷, it will further refine both the duration of the kiln's use and the stratigraphic context of the RLWM fragments.

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86 Oyman Girginer 2024, 47f.

87 A carbonized wood sample recovered from the same fill was submitted to the TÜBİTAK-MAM laboratory for radiocarbon analysis.

Öz

**Tatarlı Höyük'te (Doğu Kilikia) Kırmızı Parlak Çark Yapımı Kaplar:
Geç Tunç Çağı'na Ait Fırın Konteksinden Yeni Bulgular**

Kırmızı Parlak Çark Yapımı (RLWM) seramikler, Geç Tunç Çağı (GT-Ç)'nda kendine özgü mal yapısı ve tipolojik özellikleriyle karşımıza çıkan nitelikli bir grubu temsil etmektedir. Doğu Akdeniz ticaretindeki dolaşım ağı içerisinde Anadolu, Kıbrıs, Mısır ve Levant'ta dağılım gösteren bu mal grubunun üretim yeri konusunda araştırmacılar tarafından farklı görüşler ileri sürülmüştür. Arkeometrik çalışmalarda tespit edilen belirgin bir homojenliğe karşın, üretimin tek bir merkezde mi yoksa aynı üretim bölgesi içinde birden fazla atölyede mi gerçekleştirildiği konusu literatürde tartışılmaya devam etmektedir. Son yıllarda yapılan araştırmalar ve petrografik analizler ise üretim yerinin Dağlık Kilikia bölgesinde aranması gerektiğine işaret etmektedir. Bu bölgede özellikle Kilise Tepe yerleşiminde ele geçen RLWM sayısı ve form çeşitliliği de bu görüşü desteklemektedir. Şimdiye kadar yapılan kazılarda Ovalık Kilikia bölgesinde bu mal grubuna ait parçaların ele geçtiği yerleşim sayısının az, ele geçen parça sayısının da sınırlı olduğu bilinmektedir. Ancak Ovalık Kilikia'nın doğusunda Adana ilinin Ceyhan ilçesinde yer almakta olan Tatarlı Höyük'te yapılan kazılar konuyla ilgili yeni veriler ortaya çıkarmıştır.

Bu makalede Tatarlı Höyük GTÇ dolgularından ve aynı döneme ait bir fırın enkazı içerisinde ele geçen RLWM seramik parçaları tanıtılmakta ve bu buluntuların üretim sistemine ilişkin yeni değerlendirmeler sunulmaktadır. İlk kez 2016 yılında açığa çıkarılan ve GTÇ II'ye tarihlenen fırına ait enkaz içerisinde döneme özgü çok sayıda tabak, çanak, testi ve çömlek formu ile cürüflaşmış seramik parçalar ele geçmiştir. 2023 ve 2025 kazı sezonlarında fırın konteksi içerisinde gerçekleştirilen çalışmalarda, yapının erken evresiyle ilişkili olduğu düşünülen atık alanları tespit edilmiş ve bu alanlardan kısmen cürüflaşmış ve vitrifiye olmuş RLWM parçaları ele geçmiştir. Bu parçalar arasında kol biçimli kaplar ve iğ biçimli şişe formları tanımlanmıştır. Fırın dolgularındaki RLWM parçaları tek yüzeyde cürüflaşma, kısmi vitrifiye ve yüksek ısıya bağlı deformasyon izleri göstermektedir. Bu özellikler, söz konusu parçaların yüksek ısıya maruz kaldığını ortaya koymakla birlikte, bu ısıl etkinin birincil pişirim süreciyle mi yoksa ikincil bir yanma olayıyla mı ilişkili olduğu konusu yöntemsel olarak değerlendirilmesi gereken bir husus olarak ele alınmaktadır. Bununla birlikte, fırın çevresinde yaygın bir yangın tabakasının tespit edilmemiş olması ve buluntuların bağlamsal özellikleri, RLWM seramiklerinin yerinde üretimle ilişkili olabileceğine işaret etmektedir.

Anahtar Kelimeler: Kilikia, Kizzuwatna, Tatarlı Höyük, Geç Tunç Çağı, Seramik Fırını, Kırmızı Parlak Çark Yapımı Seramikler (RLWM), Kol biçimli kaplar, İğ biçimli şişeler.

Bibliography and Abbreviations

- Bittel 1937 Bittel, K., Die Kleinfunde der Grabungen 1906-1912. I. Funde hethitischer Zeit, Leipzig.
- Bouthillier et al. 2014 Bouthillier, C. – C. Colantoni – S. Debruyne- C. Glatz – M. M. Hald – D. Heslop – E. Kozal –B. Miller – P. Popkin – N. Postgate – S. Steele – A. Stone, “Further work at Kilise Tepe, 2007–2011: refining the Bronze to Iron Age Transition”, *AnatSt* 64, 95-161.
- Cevher 2020 Cevher, M., “Tatarlı Höyük Geç Tunç Çağı Savunma Sistemi ile İlgili Bir Değerlendirme”, *MORS IMMATURA Amanosların Gölgesinde, Hayriye Akıl Anı Kitabı / In the Shadow of Amanus, Memoriam Hayriye Akıl* (eds. K. S. Girginer – G. Dardeniz – A. Gerçek – F. Erhan – E. Genç – İ. Tuğcu – Ö. Oyman Girginer – M. C. Fırat- H. Gerçek- M. F. Tufan), İstanbul, 63-74.
- Dardeniz 2020 Dardeniz, G., “A Group of Late Bronze Age Faience Beads from Tatarlı Höyük (Adana/Turkey)”, *MORS IMMATURA Amanosların Gölgesinde, Hayriye Akıl Anı Kitabı / In the Shadow of Amanus, Memoriam Hayriye Akıl* (eds. K. S. Girginer – G. Dardeniz – A. Gerçek – F. Erhan – E. Genç – İ. Tuğcu – Ö. Oyman Girginer – M. C. Fırat- H. Gerçek – M. F. Tufan), İstanbul, 75-88.
- Dardeniz et al. 2018 Dardeniz, G. – K. S. Girginer – Ö. Oyman Girginer, “A Pottery Kiln from Tatarlı Höyük (Adana, Turkey) and its Implications for Late Bronze Age Pottery Production in Cilicia and Beyond”, *Adalya* 21, 117-134.
- Doğan Alparslan – Girginer 2021 Doğan Alparslan, M. – K. S. Girginer, “Hittite Seals and Bullae from Tatarlı Höyük”, *Adalya* 24, 31-42.
- Dupré 1983 Dupré, S., *Porsuk I. La céramique de l’âge du Bronze et de l’âge du fer* (Editions Recherche sur les Civilisations, Mémoire 20), Paris.
- Dündar 2020 Dündar, E., “Transport Jars from Tatarlı Höyük in Cilicia Pedias: First Observations”, *MORS IMMATURA Amanosların Gölgesinde, Hayriye Akıl Anı Kitabı / In the Shadow of Amanus, Memoriam Hayriye Akıl* (eds. K. S. Girginer – G. Dardeniz – A. Gerçek – F. Erhan – E. Genç – İ. Tuğcu – Ö. Oyman Girginer – M. C. Fırat- H. Gerçek- M. F. Tufan), İstanbul, 89-100.
- Eriksson 1991 Eriksson, K. O., “Red Lustrous Wheelmade Ware: A Product of Late Bronze Age Cyprus”, *Cypriot Ceramics: Reading the Prehistoric Record* (eds. J. A. Barlow – D. L. Bolger – B. Kling), Philadelphia University Monograph 74, Philadelphia, 81-96.
- Eriksson 1993 Eriksson, K. O., *Red Lustrous Wheel-made Ware, Studies in Mediterranean Archaeology* 103, Jonsered.

- Eriksson 2007 Eriksson, K. O., *The Creative Independence of Late Bronze Age Cyprus. An Account of the Archaeological Importance of White Slip Ware*, Vienne.
- Ertem 1988 Ertem, H., *Korucutepe I. (1973-1975 Kazı Yıllarında Ele Geçen Erken Hitit-İmparatorluk Çağı Arası Buluntuları)*, Ankara.
- Fantoni 2021 Fantoni, C., "The arm-shaped vessels in Anatolia and the Eastern Mediterranean during the Late Bronze Age: a morphological and contextual analysis", *Asia Anteriore. Antica Journal of Ancient Near Eastern Cultures* 3, 93-123.
- Fischer 1963 Fischer, F., *Die Hethitische Keramik von Boğazköy*, WVDOG 75, Berlin.
- Fitzgerald 1940 Fitzgerald, G. M., "Pottery of Levels V, VI and VII", *LAAA XXVI: 3-4*, 131-135.
- Garstang 1953 J. Garstang, *Prehistoric Mersin-Yümüktepe in Southern Turkey*, Oxford.
- Gates 2006 Gates, M.-H., "Dating the Hittite Levels at Kinet Höyük: A Revised Chronology Strukturierung und Datierung in der hethitischen Archäologie. Voraussetzungen, Probleme, Neue Ansätze". *Structuring and Dating in Hittite Archaeology. Requirements, Problems, New Approaches* (eds. D. P. Mielke – U.-D. Schoop – J. Seeher), *Byzas* 4, İstanbul, 293-309.
- Girginer – Collon 2014 Girginer, K. S. – D. Collon, "Cylinder and Stamp seals from Tatarlı Höyük", *AnatSt* 64, 59-72.
- Girginer – Oyman Girginer 2020 Girginer, K. S. – Ö. Oyman Girginer, "Tatarlı Höyüğün Stratigrafisi Üzerine Ön Sonuçlar", *MORS IMMATURA Amanosların Gölgesinde, Hayriye Akıl Anı Kitabı / In the Shadow of Amanus, Memoriam Hayriye Akıl* (eds. K. S. Girginer – G. Dardeniz – A. Gerçek – F. Erhan – E. Genç – İ. Tuğcu – Ö. Oyman Girginer – M. C. Fırat - H. Gerçek - M. F. Tufan), İstanbul, 211-250.
- Goldman 1956 Goldman, H., *Excavations at Gözlü Kule, Tarsus II. From the Neolithic through the Bronze Age*, Princeton.
- Griffin 1980 Griffin, E. E., "The Middle and Late Bronze Age Pottery", *Final Reports on the Excavations of the University of Chicago, California (Los Angeles) and Amsterdam in the Keban Reservoir, Eastern Anatolia 1968-1970: Korucutepe 3* (ed. M. Van Loon), Amsterdam-New York- Oxford, 3-110.
- Hansen – Postgate 2007 Hansen, C. – N. Postgate, "Pottery from Level II", *Excavations at Kilise Tepe, 1994-98, From Bronze Age to Byzantine in western Cilicia, Vol.1-2* (eds. N. Postgate – D. Thomas), Ankara, 329-341.
- Jean 2006 Jean, É., "The Hittite at Mersin – Yumuktepe: Old Problems and New Directions", *Strukturierung und Datierung in der hethitischen Archäologie. Voraussetzungen, Probleme, Neue Ansätze. Structuring and Dating in Hittite Archaeology.*

- Requirements, Problems, New Approaches (eds. D. P. Mielke – U.-D. Schoop – J. Seeher), *Byzas* 4, İstanbul, 311–332.
- Kıymet – Süel 2010
Kıymet, K. – M. Süel, “Ortaköy-Şapınuva Kazısı’nda Ele Geçen Kol Biçimli Kaplar”, *Acts of the VIIth International Congress of Hittitology* (ed. A. Süel), Çorum, August 25-31, 2008, Ankara, 457-78.
- Kıbaroğlu et al. 2019
Kıbaroğlu, M. G. – E. Kozal – A. Klugel – G. Hartmann – P. Monien, “New evidence on the provenance of Red Lustrous Wheel-made Ware (RLW): Petrographic, elemental and Sr-Nd isotope analysis”, *Journal of Archaeological Science Reports* 24, 412-433.
- Kıbaroğlu et al. 2025
Kıbaroğlu, M. G. – E. Kozal – P. Monien, “Long-distance trade relations in the Eastern Mediterranean during the Late Bronze Age: An archaeometric study of Red Lustrous Wheel-made Ware (RLW) using petrographic, elemental and Sr-Nd isotope analysis”, *Journal of Archaeological Science Reports* 61, 1-18.
- Knappett – Kilikoglou 2007
Knappett, C. – V. Kilikoglou, “Provenancing Red Lustrous Wheelmade Ware: Scales of Analysis and Floating Fabrics”, *The Lustrous Wares of Late Bronze Age Cyprus and the Eastern Mediterranean. Papers of a Conference, Vienna 5th–6th November 2004*, edited by I. Hein, *Contributions to the Chronology of the Eastern Mediterranean XIII*, Vienna, 115-140.
- Knappett et al. 2005
Knappett, C. – V. Kilikoglou – V. Steele – B. Stern, “The Circulation and Consumption of Red Lustrous Wheelmade Ware: Petrographic and Residue Analysis”, *AnatSt* 55, 25-59.
- Koşay – Akok 1966
Koşay, H. Z. – M. Akok, *Alaca Höyük Kazısı 1940-1948’deki Çalışmalara ve Keşiflere Ait İlk Rapor*, Ankara.
- Kozal 2010
Kozal, E., “Cypriot Pottery”, *Tell Atchana, Ancient Alalakh Vol. 1. The 2003-2004 Excavations Seasons* (ed. K. A. Yener), İstanbul, 67-80.
- Kozal 2014
Kozal, E., “New evidence on Lustrous Wheel-made Ware from Level IIIc–d” in C. Bouthillier, C. Colantoni, S. Debryne, C. Glatz, M. M. Hald, D. Heslop, E. Kozal, B. Miller, P. Popkin, N. Postgate, C. S. Steele, A. Stone, “Further work at Kilise Tepe, 2007–2011: Refining the Bronze to Iron Age Transition”, *AnatSt* 64, 145–147.
- Kozal 2015a
Kozal, E., “A discussion of the origin and the distribution patterns of Red Lustrous Wheel-made Ware”, *Anatolia: Cultural Connections Across the Taurus and Amanus Mountains: La Cappadoce Méridionale de la préhistoire à la période byzantine* (eds. D. Beyer – O. Henry – A. Tibet), İstanbul, 8–9 Novembre 2012, 53-64.
- Kozal 2015b
Kozal, E., “Study of Imports in the Late Bronze Age Anatolia: Identification, Definition, Chronological and Spatial

- Analysis”, *NOSTOI* Indigenous culture, Migration and Integration in the Aegean Islands and Western Anatolia During the Late Bronze and Early Iron Age, İstanbul, 693-708.
- Kozal 2017 Kozal, E., *Fremdes in Anatolien. Importgüter aus dem Ostmittelmeerraum und Mesopotamien als Indikator für spätbronzezeitliche Handels- und Kulturkontakte*, Schriften Zur Vorderasiatischen Archäologie 11, Wiesbaden.
- Kozal 2018 Kozal, E., “South, Central and North Central Anatolia in Eastern Mediterranean Networks. An Archaeological Perspective on Maritime and Land Routes in the Late Bronze Age”, *Anatolian Metal* 8 (ed. Ü. Yalçın), Bochum, 219-232.
- Kozal 2019a Kozal, E., “The dualistic nature of a Red Lustrous Wheel-made bowl from Boğazköy with a depiction of a victorious armed warrior”, *AnatSt* 69: 95-108.
- Kozal 2019b Kozal, E., “Kulturstufen OCI und MCI”, *Sirkeli Höyük: Ein urbanes Zentrum am Puruna- Pyramos im Ebenen Kilikien Vorbericht der schweizerisch-türkischen Ausgrabungen 2006–2015* (eds. M. Novák – E. Kozal – D. Yaşın), Wiesbaden, 345-349.
- Kozal – Kulemann Ossen 2019 Kozal, E. – S. Kulemann Ossen, “Der Hangschnitt in Sector A”, *Sirkeli Höyük: Ein urbanes Zentrum am Puruna-Pyramos im Ebenen Kilikien Vorbericht der schweizerisch-türkischen Ausgrabungen 2006–2015* (eds. M. Novák – E. Kozal – D. Yaşın), Wiesbaden, 210-234.
- Manuelli 2009 Manuelli, F., “Local Imitations and Foreign Imported Goods. Some problems and new questions on Red Lustrous Wheel-made Ware in the light of the new excavations of the Southern Step Trench at Yumuktepe/Mersin”, *AoF* 36/2, 251-267.
- McClellan 1989 McClellan, T. L., “The Chronology and Ceramic Assemblages of Alalakh”, *Essays in Ancient Civilization Presented to Helene Kantor* (eds. Jr. A. Leonard – D. Beyer Williams), *SAOC* 47, Chicago, 181-212.
- Mellink 1970 Mellink, M. J., “Archaeology in Asia Minor”, *AJA* 74/2, 157-178.
- Mielke 2007 Mielke, D. P., “Red Lustrous Wheelmade Ware from Hittite contexts”, *The Lustrous Wares of Late Bronze Age Cyprus and the Eastern Mediterranean. Papers of a Conference, Vienna 5th–6th November 2004* (ed. I. Hein), *Contributions to the Chronology of the Eastern Mediterranean XIII*. Vienna, 155-68.
- Muhlenbruch 2014 Muhlenbruch, T., *Hethitische Keramik im Kontext. Das Gebäude B von Kayalpaḫnar und die Nutzung institutioneller Gebäude des 2.Jt.s v. Chr. im ostmediterranen Raum*, Leidorf.
- Novak et al. 2017 Novak, M. – A. L. D’Agata – I. Caneva – C. Eslick – C.

- Gates – M.-H. Gates – K. S. Girginer – Ö. Oyman Girginer – E. Jean – G. Köroğlu – E. Kozal – S. Kulemann Ossen – G. Lehmann – A. Özyar – T. Özaydın – N. Postgate – F. Şahin – E. Ünlü – R. Yağcı – D. Yaşın Meier, “Cilician Chronology Group A Comparative Stratigraphy of Cilicia Results of the first three Cilician Chronology Workshops”, *AoF* 44/2, 150-186.
- Omura 2000 Omura, S., “1998 Yılı Kaman-Kalehöyük Kazıları”, *KST* 21/1, 217-228.
- Oyman Girginer 2017 Oyman Girginer, Ö., “A White Painted Pendant Line Style Jug Fragment from Tatarlı Höyük”, *Period, Questions, Approaches and Dialogues in Eastern Mediterranean Archaeology, Studies in Honor of Marie-Henriette and Charles Gates* (eds. E. Kozal – M. Akar – Y. Heffron – Ç. Çilingiroğlu – T. E. Şerifoğlu – C. Çakırlar – S. Ünlüsoy – E. Jean), *Alter Orient und Altes Testament* 445, Munster, 229-242.
- Oyman Girginer 2022a Oyman Girginer, Ö., *Tatarlı Höyük 2007-2016 Yılları Kazılarında Açığa Çıkarılan Hitit İmparatorluk Dönemi Seramikleri*, Ankara HBVÜ Yayınlanmamış Doktora Tezi, Ankara.
- Oyman Girginer 2022b Oyman Girginer, Ö., “Tatarlı Höyük Hitit İmparatorluk Dönemi Seramiklerinde Çömlekçi İşaretleri”, *Amisos* 7/12, 84-98.
- Oyman Girginer 2024 Oyman Girginer, Ö., “Tatarlı Höyük’den Hitit İmparatorluk Dönemi’ne ait Bir Grup Adak Kabı”, *HÖYÜK* 13, 47-64.
- Özgüç 1982 Özgüç, T., *Maşat Höyük II. Boğazköy’ün Kuzeydoğusunda Bir Hitit Merkezi*, Ankara.
- Özgüç 1988 Özgüç, T., *İnandıktepe. An Important Cult Center in the Old Hittite Period*, Ankara.
- Parzinger – Sanz 1992 Parzinger, H. – R. Sanz, *Die Oberstadt von Hattuša. Hethitische Keramik aus dem zentralen Tempelviertel. Funde aus den Grabungen 1982-1987, (Boğazköy-Hattuša 15)*, Berlin.
- Pilavcı 2017 Pilavcı, T., *Drinking a God and Sacrificing a Drink: Agency of the Hittite Libation Vessels*, Ph. D. Diss, New York, Columbia University.
- Potts et al. 1985 Potts, T. F. – S. M. Colledge – P. Edwards, “Preliminary Report on a Sixth Season of Excavation by the University of Sydney at Pella in Jordan 1983/84”, *ADAJ* 29, 181-210.
- Recke 2006 Recke, M., “Eine Trickvase von der Akropolis in Perge und andere Zeugnisse für kultische Aktivitäten während der Mittel- und Spätbronzezeit: Zur Rolle Pamphyliens im 2. Jahrtausend v. Chr.”, *Studies in Honor of Hayat Erkanal. Cultural Reflections* (eds. A. Erkanal-Öktü et al.), İstanbul, 618-625.
- Schoop 2009 Schoop, U. D., “Indications of Structural Change in the Hittite Pottery Inventory at Boğazköy- Hattuša”, *Central-North Anatolia in the Hittite Period. New Perspectives in Light of Recent Research* (eds. F. Pecchioli Daddi – G. Torri – C.

- Corti), Acts of the International Conference held at the University of Florence, 7-9 February 2007, , *Studia Asiana* 5, Roma, 145-167.
- Schubert 2005 Schubert, C., *Untersuchungen zur Herkunft der Spätbronzezeitlichen "Red Lustrous Wheelmade Ware" in der Südtürkei: Petrographie und Neutronenaktivierung*, Unpublished MSc thesis, TU Bergakademie Freiberg.
- Schubert – Kozal 2007 Schubert, C. – E. Kozal, "Preliminary Results of Scientific and Petrographic Analysis on Red Lustrous Wheel-made Ware and other LBA Pottery from Central Anatolia and Cyprus", *The Lustrous Wares of Late Bronze Age Cyprus and the Eastern Mediterranean. Papers of a Conference* (ed. I. Hein), Vienna 5th-6th November 2004, *Contributions to the Chronology of the Eastern Mediterranean XIII*. Vienna, 169-177.
- Seeher 2002 Seeher, J., "Die Ausgrabungen in Boğazköy-Hattusa 2001", *AA* 2002, 59-78.
- Steele – Stern 2017 Steele, V. J. – B. Stern, "Red Lustrous Wheelmade ware: Analysis of organic residues in Late Bronze Age trade and storage vessels from the eastern Mediterranean", *Journal of Archaeological Science Reports* 16, 641-657.
- Steele et al. 2007 Steele, V. J. – B. Stern – C. Knappett, "Organic Residue Analysis of Red Lustrous Wheelmade Ware from Five Sites in the Eastern Mediterranean", *The Lustrous Wares of Late Bronze Age Cyprus and the Eastern Mediterranean* (ed. I. Hein), Wien, 191-196.
- Symington 2001 Symington, D., "Hittites at Kilise Tepe", *La Cilicie: espaces et pouvoirs locaux (IIe millenaire av. J.-C. – IV siecle ap. J.-C.)*, Actes de la Table Ronde d'Istanbul (eds. E. Jean – M. A. Dinçol – S. Durugönül), 2-5 novembre 1999, İstanbul, 167-184.
- Ünal – Girginer 2010 Ünal, A. – K. S. Girginer, "Tatarlı Höyük Kazılarında Bulunan 'Anadolu Hiyeroglifli' Damga Mühür Baskısı", *Veysel Donbaz'a YAZILAR DUB.SAR E.DUB.BA.A / Studies Presented in Honour of Veysel Donbaz* (ed. Ş. Dönmez), İstanbul, 275-281.
- Üyümez et al. 2010a Üyümez, M. – Ö. Koçak – A. İlaslı, "Dede Mezarı Nekropolü Kazıları 2008 Yılı Çalışmaları", *KST* 31/2, 183-194.
- Üyümez et al. 2010b Üyümez, M. – Ö. Koçak – A. İlaslı, "Afyonkarahisar-Bayır'da Bir Orta Tunç Çağ Nekropolü: Dede Mezarı", *Acts of the VIIth International Congress of Hittitology* (ed. A. Süel), Çorum, August 25-31, 2008, Ankara, 939-950.
- Yağcı 2008 Yağcı, R., "A Grave at Soli Höyük from the Hittite Imperial Period", *EUERGETES*; Prof. Dr. Haluk Abbasoğlu'na 65. Yaş Armağanı (eds. İ. Delemen – S. Çokay-Kepçe – A. Özdizbay – O. Turak), Antalya, 1217-1226.
- Yağcı 2021 Yağcı, R., "Soli Kilikia RLWM Kapları", *XI. Uluslararası Hi-*

- Woolley 1955 titoloji Kongresi/ XIth International Congress of Hittitology, Bildiri Özetleri, 13-19 December 2021, 36.
Woolley, S. L., *Alalakh. An Account of the Excavations at Tell Atchana in the Hatay, 1937-1949*, London.
- Yıldırım 2021 Yıldırım, T., “Hitit Dönemi’nde Alaca Höyük’ün Çevre Kültürlerle İlişkileri”, XI. Uluslararası Hititoloji Kongresi/ XIth International Congress of Hittitology, Bildiri Özetleri, 13-19 December 2021, 38.

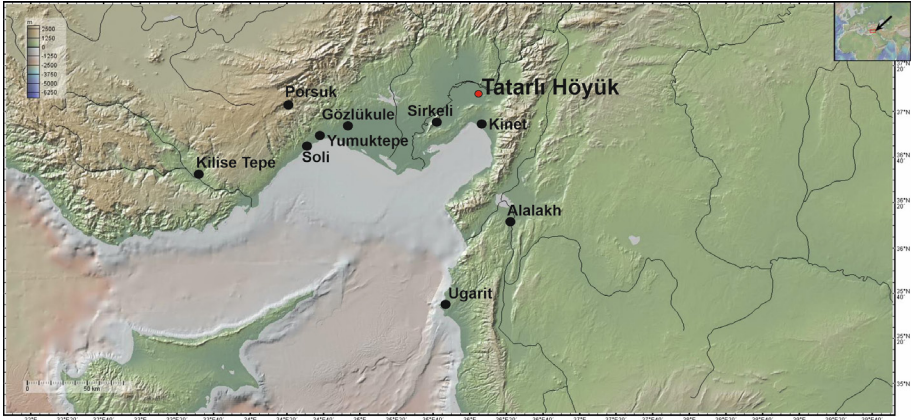


Fig. 1. Major Second Millennium BC settlements in Cilicia and the location of Tatarlı Höyük. (The map was created and modified using GeoMapApp)

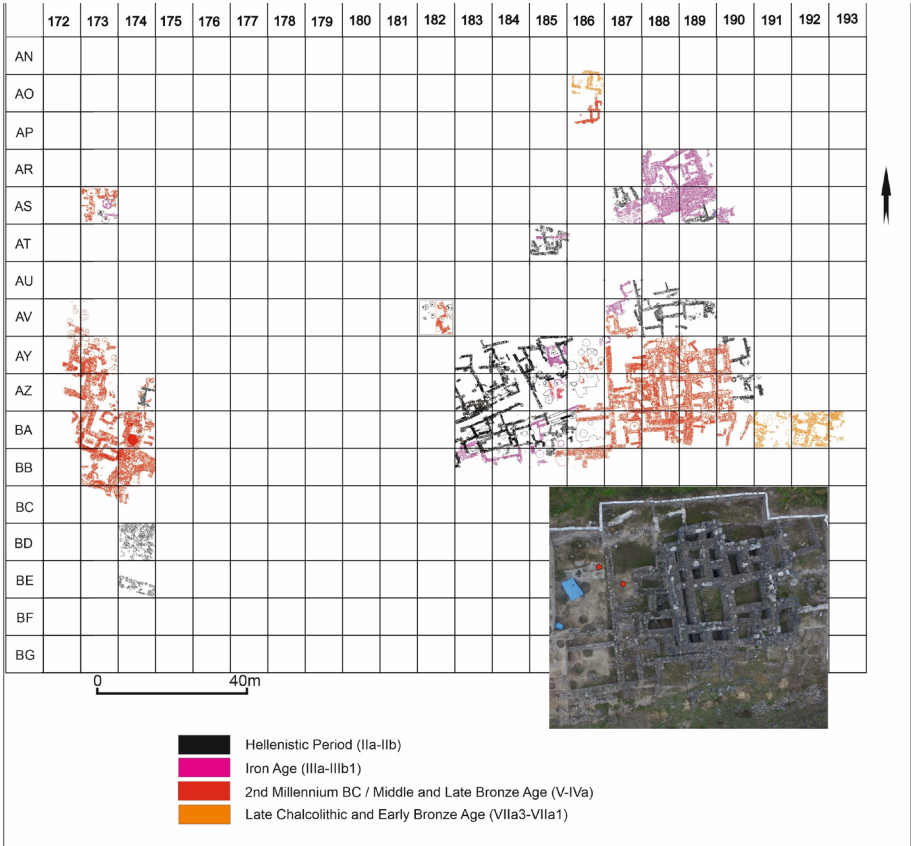


Fig. 2. Tatarlı Höyük site plan and architectural areas where RLWM fragments were found

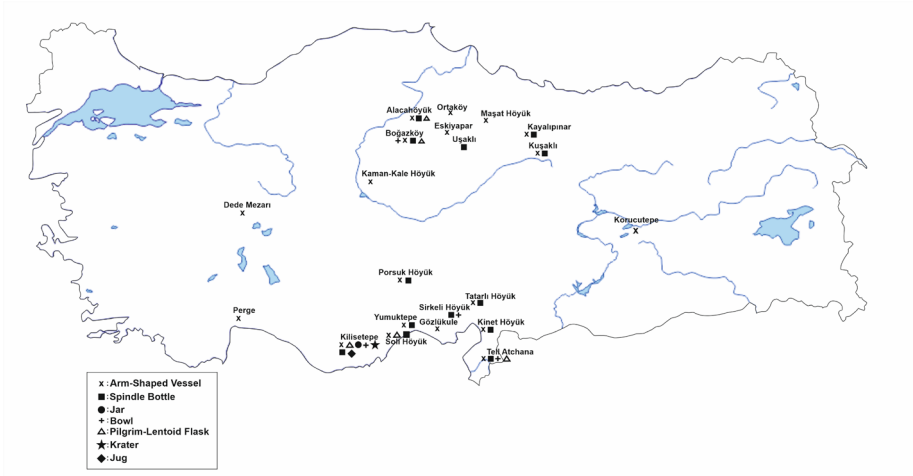


Fig. 3. RLWM founded from sites in Anatolia and their form distribution

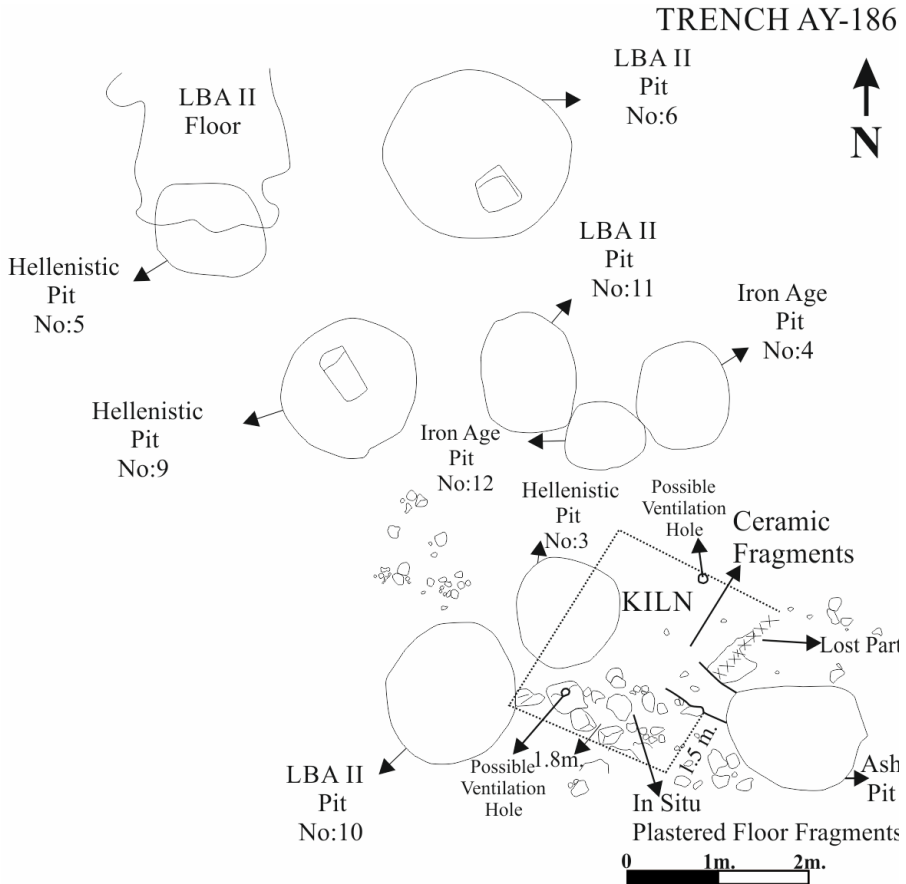


Fig. 4. Kiln structure from the LBA II levels, uncovered in 2016 (Dardeniz et al. 2018, Fig. 5)

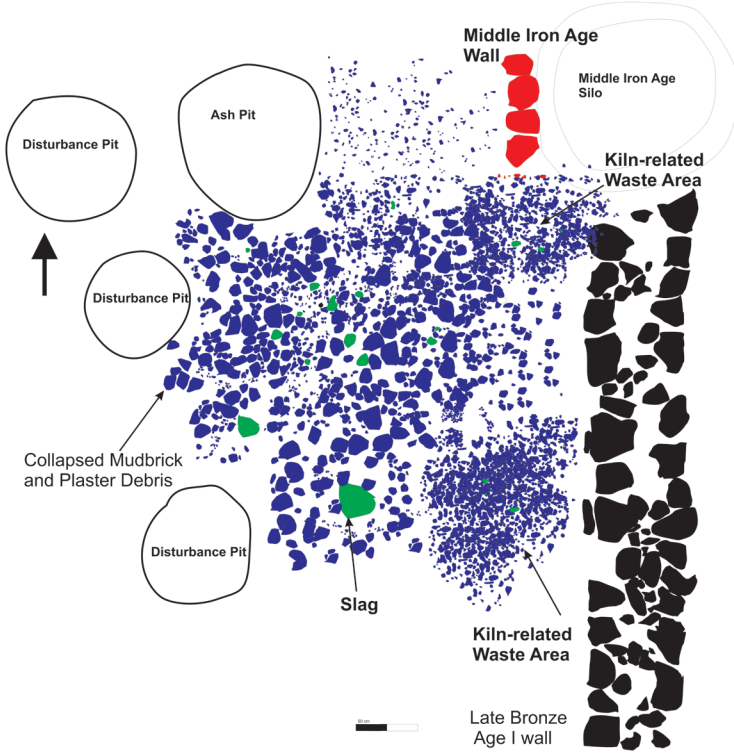


Fig. 5. Plan of the LBA kiln area and the kiln-related waste areas at Tatarlı Höyük

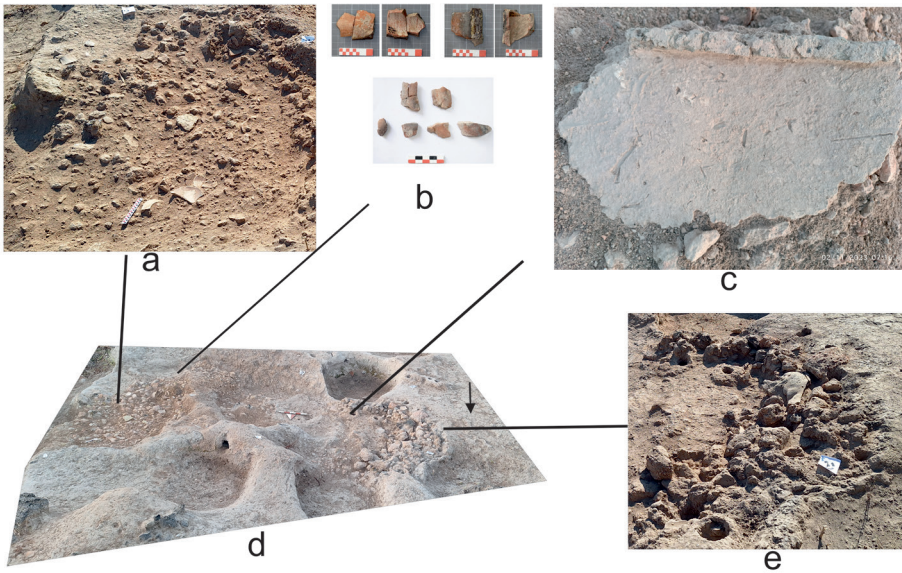


Fig. 6. Kiln collapse zone, waste area, and locations where RLWM fragments were uncovered in 2023

Excavation Year	Number of Fragments	Vessel Form	Context	Trench / Locus	Surface	Paste
2023	8	Spindle bottle (body sherds)	Kiln-related waste area	Kiln debris AY 186	2.5YR 5/6 (Red)	2.5YR 4/4 (Reddish brown)
2025	1	Arm-shaped vessel	Kiln-related waste area	Kiln debris	10R 4/6 (Red)	
2025	12	Spindle bottle (body sherds)	Kiln-related waste area	Kiln debris		
2012	1	Arm-shaped vessel (base)	Near the kiln waste area	AZ 187 7150/2	2.5YR 6/8 (Light red)	5YR 6/6 (Reddish yellow)
2015	1	Arm-shaped vessel (body)	Kiln-related context	AZ 186 118/14	2.5YR 5/8 (Red)	2.5YR 6/8 (Light red)
2015	1	Arm-shaped vessel (body)	Kiln-related context	AZ 186 117/101	2.5YR 5/8 (Red)	2.5YR 6/1 (Reddish gray)
2014	1	Spindle bottle (base)	Building A	Room 18	2.5YR 5/8 (Red)	2.5YR 6/8 (Light red)
2010	1	Spindle bottle (body sherds)	Building A	Room 6	2.5YR 6/8 (Light red)	2.5YR 6/8 (Light red)

Fig. 7. RLWM fragments recovered from LBA contexts at Tatarlı Höyük



Fig. 8. RLWM fragments recovered from the kiln area in 2023



Fig. 9. Kiln collapse zone, waste area, and locations where RLWM fragments were uncovered in 2025



Fig. 10. RLWM arm-shaped vessel fragment from the kiln area

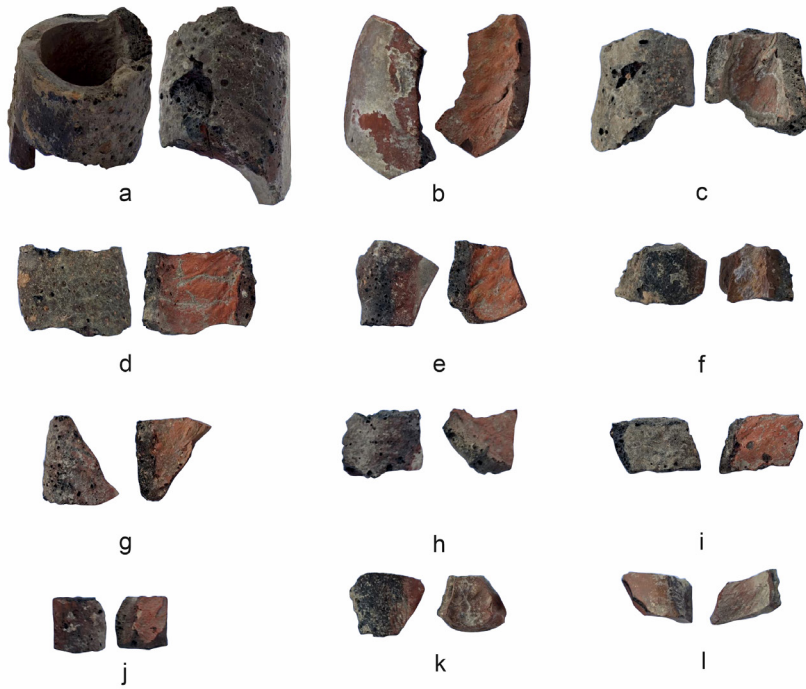


Fig. 11. RLWM fragments recovered from the kiln area in 2025

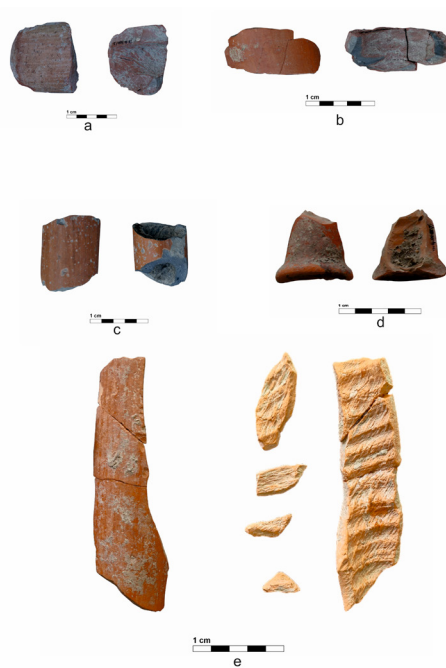


Fig. 12. RLWM fragments recovered from other areas of Tatarlı Höyük outside the kiln context