

# A New Perspective on Chronological and Cultural Dynamics from the Early to the Middle Bronze Age Transition in Central Anatolia: A Two-Phase Model of Cultural Development

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[This study argues that the transition from the late Early Bronze Age (EBA) to the Middle Bronze Age (MBA) in Central Anatolia followed a two-phase model of development rather than a linear progression. Based on archaeological evidence and radiocarbon ( $^{14}\text{C}$ ) data, it is proposed that the transition period, traditionally regarded as beginning with the early MBA in the Central Anatolian chronology, actually commenced around 2200/2150 BCE (contemporary with EBA IIIB or late EBA III). The second phase encompasses ca. 2050–1950 BCE (early MBA) and corresponds to the emergence of new cultural dynamics that characterized the “*kārum* period” culture, contemporary with the first quarter of the 2nd millennium BCE in Central Anatolia. Accordingly, this study suggests that this phase should be defined not as a “transition” but as the “proto-*kārum*” in both chronological and cultural terms. Furthermore, this terminological revision—supported by current archaeological, archaeobotanical, and paleoclimatic evidence—provides a renewed framework for re-evaluating the mechanisms underlying cultural continuity and disruption in the region. By integrating interdisciplinary data, the study aims to offer a more refined and comprehensive perspective on the chronological development of Central Anatolia during this cultural reorganization.]

**Keywords:** EBA-MBA Transition, Proto-*kārum*, Re-configuration, Paleoclimatic Evidences, Central Anatolia.

## 1. Introduction: Archaeological and Chronological Framework

The EBA is marked by significant changes in societal structures and developments. Particularly in its second half (ca. 2500 BCE, EBA III), the metal industry gained considerable momentum, which in turn facilitated the establishment of a systematic trade network between distant regions to meet the growing demand for raw materials.<sup>1</sup> The sites of Central Anatolia, whose economies were based on agriculture and animal husbandry, flourished and experienced significant growth on various scales, thanks to the advantages of the trade network. As a result, a social structure emerged, characterized by fortified settlements consisting of upper and lower cities,

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1. Şahoğlu 2005; Efe 2007.

where social hierarchy was prominent and there was a rapid increase in social complexity.<sup>2</sup> This system, emphasizing power and prestige, also highlighted the efforts of the ruling authorities (elites) to exert control not only over precious metal resources but also over exotic goods.<sup>3</sup>

The reflections of the power and prestige achieved during this period of significant cultural and economic developments are also evident in the character of various material culture remains, particularly in architecture and pottery. As a result of this process, sites in northern parts of the Central Anatolia plateau saw local elites controlling the production and distribution of metal objects on an Anatolian scale, supported by the high level of professional skill in the mining industry (e.g., Alaca Höyük, Eskiyaar, Mahmatlar, Horoztepe, and Resuloğlu).<sup>4</sup> Meanwhile, the primary commercial hubs, forming the heart of trade, were established as major urban sites in the southern part of the Kızılırmak basin, such as Kültepe (ancient Kaneš), Acemhöyük (Aksaray plain), and Konya-Karahöyük (Konya plain). During this period, the establishment of a trade network between Anatolia, Mesopotamia, Syria, and the Aegean brought immense wealth to sites governed by independent rulers. These sites, as the most prominent manifestation of their significant gains, were equipped with monumental public structures and specialized defensive systems.<sup>5</sup> The architectural remains serve as primary evidence of both a developed and organized urban structure, as well as the increasing political complexity and social hierarchy in many regions of Central Anatolia. Furthermore, these public buildings, in terms of their plan and construction techniques, indicate that, in the third quarter of the 3rd millennium BCE, the influence of Mesopotamia and Syria was more defining than Anatolian elements in the region.<sup>6</sup> These data should be considered as concrete evidence that interregional interactions played a crucial role in the dissemination of ideas regarding social organization.

Excavations in Central Anatolia have revealed that fire destructions occurred at nearly all large, medium, and small mounds throughout the EBA III period. <sup>14</sup>C (calibrated) results indicate that these fire destructions concentrated in two distinct phases, between 2450-2350 BCE and 2250-1950 BCE (Table 1). In addition to these findings, the presence of various assault weapons and the increase in the frequency of weapon-related injuries on the skeletons are further clear indicators of escalating conflict and tensions between communities.<sup>7</sup> It is particularly important to emphasize that, following the fire destruction event around 2200/2150 BCE, there was no cultural disruption in the settlements of the region. On the contrary, the incorporation of new dynamics into the cultural framework marked the beginning of a re-configuration during this period.

This period represents a cultural trajectory in which continuity in settlement patterns and cultural dynamics coexisted with the emergence of new dynamics. For example, evidence showing the simultaneous appearance of late variations of characteristic EBA III pottery traditions (*intermediate* ware, red-crossed bowls, etc.) alongside early variants that would become classics in the early MBA (such as Alişar III ware, conical-bodied cups) can be seen as the first signs of a break in culture. On the other hand, the new dynamics observed in the local culture of Central

2. Massa 2014: 106; Bachhuber 2015.

3. Çevik 2007: 137; Zimmermann 2005; Bachhuber 2015; Massa-Palmisano 2018.

4. Alaca Höyük: Çınaroğlu 2018; Yıldırım 2023a; Yakar 2023; Eskiyaar: Özgüç-Temizer 1993; Mahmatlar: Koşay-Akok 1957; Horoztepe: Özgüç-Akok 1957; Resuloğlu: Yıldırım 2006; Yıldırım 2023b.

5. Kulakoğlu 2017; Omura 2025; Yıldırım 2023a, 95; Kamyş-Şener 2022, 353-360.

6. Omura 2013: 316.

7. Massa 2014; Kamyş 2024: Figs. 11-13.

Anatolian settlements are generally addressed within the cultural context defined as EBA IIIB or late EBA III. However, this study suggests that, under the influence of various triggering dynamics in the region, a “transition period” began, marking a significant change and transformation in cultural structures. This cultural trajectory, in which these new dynamics emerged alongside previous traditions for the first time, continued in a two-stage development model until the beginning of the *kārum* period (1950-1710 BCE).<sup>8</sup>

The cultural layers following the EBA IIIB or late EBA III period in settlements are characterized by the emergence of a wheel-made pottery group, the so-called “Hittite pottery”.<sup>9</sup> The architectural and other material culture remains uncovered in the contemporary layers of this new ceramic group reflect the proto-types of *kārum* period dynamics, both in terms of technique and form. On the other hand, scholars, based on the continuity of certain dynamics referenced in the EBA III period and the absence of key elements that characterize the *kārum* period, accept that the historical boundary marking the transition (EBA-MBA) period in Central Anatolian settlements corresponds to the period ca. 2050/2020–1950 BCE. However, the maturation of various dynamics associated with the *kārum* period and their dominance in the culture call into question the validity of the term “transition”.

In light of all these findings, the aim of this study is to examine the chronological context and dynamics of the transition period in the region, based on archaeological findings from wealth cultural deposits of the mounds in Central Anatolia, as well as <sup>14</sup>C data from several sites and various contexts. In particular, this research hypothesizes that the transition period, characterized by the dynamics of cultural restructuring, began around 2200 BCE and followed a two-stage developmental process extending into the early 2nd millennium BCE. In this context, it argues that the date of the transition period in Central Anatolian chronology should be pushed back to an earlier date, i.e. 2200 BCE, and that settlements contemporary with the early MBA (2050/2020-1975 BC) should be redefined as “proto-*kārum*”, a cultural context traditionally referred to as “transition period” in the literature. Furthermore, the results of paleoclimatic studies conducted in the region will be discussed in order to understand the role of environmental influences as one of the main triggering factors for the fundamental changes in the social structures, economic activities and cultural practices of societies during this period. In this way, it is aimed to contribute to a broader understanding of the processes of continuity, stagnation and change in cultural dynamics in the region.

8. At the first quarter of the 2nd millennium BCE, foreign traders, arrived in Anatolia mostly from Assyria in northern Mesopotamia and to a lesser extent from Syria. They established a network of nearly forty commercial settlements, which started a new period known as the Assyrian Trade Colony period or *kārum* period. Balkan 1955; Özgüç 1959; Larsen 1976; Larsen 2015; Öztürk 2023.

9. The term “Hittite pottery” does not refer to the same type of pottery that emerged during the Old Hittite Kingdom period and continued into the Empire period. What is meant here is that certain defining characteristics of the ‘classic’ Hittite pottery, which would emerge in the later stages of the *kārum* period, first began to appear during this period.

## 2. Dynamics of Continuity and Change After the Fire Destruction of EBA III Buildings

### 2.1. Architecture

The transition to the MBA stands out as a critical threshold in the historical and cultural evolution of Central Anatolia. This period is characterized by significant cultural transformations and changes under the influence of various factors, such as wars and destructions, socio-political restructuring, changes in settlement patterns, and climatic change. New evidence indicates that, following the final destruction caused by a fire at the end of EBA III on the Central Anatolian plateau, changes occurred in settlement patterns, construction techniques, and land use. Kültepe serves as a prime example of this phenomenon. Current research at the mound has yielded new data showing notable breaks in the settlement pattern and other cultural traditions after the final fire destruction of the EBA III period (level 11b, ca. 2350–2150 BCE).<sup>10</sup> The level 11a of Kültepe dates to 2200-2020 BC and is culturally marked as the beginning of the transition period.<sup>11</sup> When the architectural remains and the settlement pattern of this phase are examined, it is characterized by a modest group of structures which were built on top of the monumental structures of level 11b, and expanded towards the south of the mound. In this period, monumental buildings built in the Mesopotamian architectural fashion (levels 13-11b)<sup>12</sup> are replaced by modest structures built in a simple architectural order reflecting the local traditions of Central Anatolia. These structures, consisting of four construction phases built on top of each other, is characterized by workshops and kiln indicates industrial functions (see Fig. 1). This change indicates that urban culture ended with the period of monumental buildings at Kültepe and that international connections with neighboring regions suffered a period of stagnation that lasted until the *kārum* period that followed this period.<sup>13</sup>

At Yassihöyük, located to the west of the Kızılırmak River, two “Monumental Building” were uncovered in level III, which is dated to the EBA III period.<sup>14</sup> The later “Monumental Building” (level III-1) is compared in terms of its construction plan and function with the so-called Pilastered Building (level 11b) at Kültepe.<sup>15</sup> The pottery recovered from the building’s fill, together with the <sup>14</sup>C dates (2260–2135 BC) obtained from wooden beams, provide consistent results. These findings indicate that the building can be dated to the EBA III-MBA transition.<sup>16</sup> Furthermore, these results suggest that, despite changes in settlement patterns and architectural traditions during the EBA-MBA transition at Kültepe, Yassihöyük continued to preserve the traditions of the previous phase.

A similar situation is observed at Acemhöyük, located to the south of Lake Tuz and one of the largest mounds in Anatolia. Current excavations at the site have revealed that the settlement continued to maintain the advanced form of the EBA III culture in the X-VIII levels. In these levels, local architectural traditions persisted, and particularly in level X, the “Anatolian Settlement Pattern” is clearly visible, this time implemented in a configuration where the fortifications were removed. This arrangement continued uninterruptedly until level VIII, as demonstrated by the

10. Rıdvanoğulları et al. 2024.

11. See Powel et al. 2024: Tab. 2.

12. Özgüç 1986; Kulakoğlu 2017.

13. Rıdvanoğulları et al. 2024.

14. Omura 2024; Omura 2025.

15. Omura 2013: 316.

16. Omura 2013: 315-316, fig. 11; Omura 2015, 305-306; Omura 2024: 470-472; Şener 2021, 139-142.

recently published plan based on the latest research.<sup>17</sup> The comparative <sup>14</sup>C results prove that level VIII of Acemhöyük,<sup>18</sup> ending in 2150 BCE, is almost contemporary with Kültepe level 11b, Yassıhöyük III-1 (2260-2135 BC), and the level IV of Kaman-Kalehöyük (see Table 2).

With its strategic location in the Konya Plain and an area of approximately 100 ha, Konya-Karahöyük occupies a significant crossroads between Syro-Mesopotamia and the Aegean, making it a key site for the archaeology of the 3rd and 2nd millennia BCE.<sup>19</sup> Despite limited published data on 3rd millennium excavations, the V and IV levels, representing the end of EBA III and the transition period, suggest no cultural hiatus in the settlement. The large building in level VII, interpreted as an “official building” based on its architectural features, and the remains of a thick fortification wall in level V,<sup>20</sup> indicate Konya-Karahöyük’s “central” role in the region during EBA III and the immediate post-EBA III phase. Furthermore, these findings demonstrate that during the EBA III, Konya-Karahöyük moved away from building structures based on the Anatolian settlement model and instead adopted a new settlement organization with centralization tendencies, a trend that continued into the subsequent period.

Evidence for the transition period in other sites of North-Central Anatolia, including Alaca Höyük, which exhibited a strong local principality character in the second half of the 3rd millennium BCE, is currently limited.<sup>21</sup> Alaca Höyük represents a society under the rule of an aristocratic group (elites) that controlled the metal industry, played an active role in trade networks, and consequently achieved great wealth. Like other Central Anatolian sites, the settlement reached its cultural peak in the levels 6 and 5, which represent the third quarter of the 3rd millennium BCE. However, the catastrophic fire that brought an end to level 5, the final phase of EBA III, constituted a significant cultural rupture in the settlement.<sup>22</sup> The level 4, built upon the debris of this destruction layer, corresponds to the period during which the dynamics of the MBA began to emerge within the settlement. On the other hand, although this level has been interpreted as the earliest “Hittite” level recent publications on Alacahöyük suggest that the EBA did not end with the destruction of level 5 but continued for a certain period.<sup>23</sup> However, we must not forget that this hypothesis can only be confirmed through the expansion of excavations and research focusing on the comprehensive investigation of this level and the material culture associated with the MBA, supported by concrete archaeological evidence. In contrast, at Boğazköy, within the same cultural region as Alaca Höyük, data from the end of EBA III are extremely limited, with the exception of a two-phase settlement at Büyükkaya, dated to the late 3rd millennium BCE, which includes residential structures.<sup>24</sup>

17. Kamyş-Şener 2022: 352, Fig. 5.

18. Kamyş-Şener 2022: 370-371.

19. Alp 1994; Dardeniz 2023: 471.

20. Alp 1994.

21. See Arık 1937; Koşay 1938; Koşay 1951; Yıldırım 2023a: 101-106.

22. Yıldırım 2023a: 95, 99.

23. Although some evaluations suggest that this layer corresponds to the old “Hittite” level, recent studies on Alaca Höyük continue to support the notion that the EBA did not conclude with the fire in level 5 but rather persisted for a limited period thereafter. See Yıldırım 2023a: 87.

24. Schachner 2019: 43, Fig. 15; Schachner 2024: 18, Fig. 3.

## 2.2. Pottery and other objects

The pottery finds from settlements in Anatolia during the transition from the EBA III period to the Middle Bronze Age play a critical role in understanding the cultural dynamics of the region. The formal characteristics, decorative features, and production techniques of the pottery produced during this period not only demonstrate the continuity of local traditions but also the adaptation of new ones, shedding light on Anatolia's multilayered and dynamic cultural structure. This period is characterized by the first phase of cultural restructuring that began following the major fire at the end of the 3rd millennium BCE, marking a significant moment in societal transformation.

The evidence of cultural continuity in the Central Kızılırmak region is demonstrated by the continued use of *intermediate* ware and monochrome pottery traditions, along with handmade, red-slipped, and burnished ware, from the early phase of EBA III onward, up to the end of the period (early phase of level 11a of Kültepe). This tradition reaches its peak in both quantity and variation in the level 12 (mid-EBA III) at Kültepe.<sup>25</sup> On the other hand, chronologically, the use of *intermediate* painted ware continues into the late EBA III period, albeit at a decreasing frequency (Figs. 2-3). At the Alişar levels 6M and 13T (late phase), as well as the late phase of level 11a at Kültepe, the late examples of *intermediate* ware, along with the first examples of Alişar III pottery—one of the most characteristic elements of the new cultural dynamics that began to emerge in the region by the end of EBA III—can be found together,<sup>26</sup> albeit in limited numbers within the same context. These findings can be considered primary evidence of the transition period in the region (Fig. 4).

Apart from Alişar and Kültepe, the final fire destruction that occurred around 2200/2150 BCE and the subsequent dynamics of change are characterized by the occurrence of at least three severe fires in level IV at Kaman-Kalehöyük,<sup>27</sup> the second “Monumental Building” at Yassıhöyük (level III-1),<sup>28</sup> and similarly, in the IIa level at Çadır Höyük.<sup>29</sup> These levels contain late examples of *intermediate* pottery alongside the first examples of Alişar III painted pottery, found together in the same context, albeit in limited quantities. Furthermore, excavations at settlements on the Central Anatolian Plateau highlight that the use of *intermediate* painted pottery ceased by the end of EBA III. However, in the cultural layers following this period, the developed variations of Alişar III painted pottery continued to be used on various vessel forms, extending into the early 2nd millennium BCE (*kārum* period). All of this evidence is crucial for demonstrating that the transition from EBA III to MBA in Central Anatolia involved a simultaneous and gradual process of cultural continuity and change.

The Alişar III ware has been suggested by some researchers to be the product of a new group or ethnicity that arrived from outside the region. However, Özgüç has convincingly rejected this hypothesis, arguing that the tradition evolved from the *intermediate* painted ware and reflects the customs of the local communities. On the other hand, it should be noted that the vessel forms, production techniques, and decorative features of the so-called Alişar III painted group clearly differ from those of *intermediate* painted ware. Based on archaeological data, Alişar III painted

25. Kulakoğlu 2015, Fig. 8.

26. von der Osten 1937: 236; Gorny 1990: 159; Rıdvanoğulları et al. 2024: Figs. 14:16-17.

27. S. Omura 2011: 1108.

28. Omura 2024: 471-472; Omura 2025, 344, Fig. 12.

29. Gorny et al. 2002: 126

pottery is generally accepted in the literature as representing the characteristic local culture of the Kayseri and Yozgat plains.<sup>30</sup>

The typological and technical characteristics of the pottery found in levels VII-IV at Acemhöyük, located south of Lake Tuz near Aksaray, demonstrate that these pottery assemblages should be evaluated under two main categories: as new dynamics that strongly continue the EBA III traditions, and as pioneering examples of forms that would characterize the MBA period.<sup>31</sup> Levels VII-V at Acemhöyük are attributed to the cultural context of EBAlIIIB or late EBA III.<sup>32</sup> However, the nature of the archaeological data uncovered in these levels clearly shows that new cultural dynamics marking the transition period began to be felt from level VII onwards. According to Kamış, the various types of pottery found in level VII, such as bowls, conical cups, teapots, and spouted jugs, as well as traditions of incised, dot-pattern, and relief decoration, serve as evidence of these new dynamics.<sup>33</sup> All of these data strongly support the argument that the transition period in the region, contemporary with late EBA III in many other Central Anatolian sites, should be considered to have occurred earlier than traditionally accepted, with the transition period overlapping with the early MBA period (ca. 2050 BCE). In the chronological context, both considering the existence of an uninterrupted settlement, and as indicated by the radiocarbon result marking the end of level VIII, it is reasonable to assume that the settlement of level VII began around 2150/2100 BCE.<sup>34</sup>

The pottery uncovered in levels VI and V at Acemhöyük, along with the characteristic elements of new cultural dynamics identified in the settlements around the Kızılırmak bend (such as Alişar III painted pottery), as well as pottery that carries decorative traditions with regional characteristics, provide crucial insights into understanding the broader dynamics of the transition period in settlements around the Aksaray and Konya plains. Among the ceramic groups that clearly demonstrate the continuity of the local culture, the “Konya Plain Painted Ware” is particularly notable (Fig. 2).<sup>35</sup> This painted pottery group first appears at Acemhöyük in level IX and continues to be used until the end of level IV, which is dated to the early MBA period. Similar examples of the “Konya Plain Painted Ware”, both in terms of technique and decoration, are known from other settlements in the region, such as Konya-Karahöyük,<sup>36</sup> Ovaören-Topakhöyük,<sup>37</sup> and Eminler Höyük (Figs. 2-3).<sup>38</sup> Another decorative tradition that represents the wheel-made pottery tradition in the region is the banded painted pottery. This decorative technique, which began in the early EBA III period, continued into the early 2nd millennium BCE, though with a decreasing frequency.<sup>39</sup>

30. Özgüç 1963: 24; Omura 1991; Emre 1989: 117.

31. Kamış-Şener 2022: 372.

32. Kamış-Şener 2022: 371, Fig. 21.

33. Kamış 2017: 169-170.

34. Kamış-Şener 2022, 371.

35. This painted pottery group, while exhibiting similar characteristics in terms of shape and decoration types to the *intermediate* pottery tradition, is emphasized to represent a distinct tradition in comparison to examples from other regions of the plateau, based on the fact that nearly half of the “Konya Plain Painted Ware” was produced using wheel. Kamış 2018: 68; Kamış-Şener 2022: 372.

36. Mellink 1962: 75; Alp 1994: 16, Fig. 9; 17. Scholars have grouped these painted ceramics found during the excavations of the first period with the *intermediate* ceramics characteristic of the mid-Kızılırmak basin. See Alp 1961: 8; Alp 1964: 116; Mellink 1962; Orthmann 1963a.

37. Şenyurt et al. 2014: 68.

38. Kamış-Şener 2024.

39. Kamış 2018: 66, Fig. 6:5.

An important point to emphasize here is that, based on several reasons such as the low proportion of Alişar III painted pottery in Acemhöyük's pottery repertoire, which is first represented by a small number of examples in level VI, its consistent low frequency up until level IV, and its distinct differences from the local painted pottery tradition of the region, Kamış and Şener argue that these pottery were imported to the settlement.<sup>40</sup> However, the limited presence of Alişar III painted pottery during this period even in the settlements around the Kızılırmak, which is considered the origin region of this type, emphasizes the weakness of the hypothesis that they were imported. In my opinion, the relatively low preference for Alişar III painted pottery in the Konya Plain region, despite its widespread use in the early 2nd millennium levels of the Kızılırmak settlements, can primarily be attributed to the dominance of the local "Konya Plain painted pottery" (Figs. 2- 3). This view contrasts with the interpretation, which tends to emphasize other factors in explaining the distribution patterns of these ceramics. This local tradition, with more advanced forms, paste, and surface treatments, was consistently favored by the regional population over an extended period, without significant decline. Based on this evidence, I argue that the relatively limited use of Alişar III painted pottery, characterized by coarser and lower-quality craftsmanship in production and technique, is a natural result of its development and presence in the region. Rather than being imported, its distribution and evolution appear to have been influenced by the cultural and economic dynamics of the area.

In order to determine the chronological context of the stratigraphic sequence at the site, <sup>14</sup>C dates (95.4%) obtained from the wooden beams used in the foundation of the mudbrick wall of level IV proved that this level covers the years 2139-1960 BCE.<sup>41</sup> Thus, the stratigraphic analysis of the site provides crucial data on the dynamics of interaction and the diffusion of ceramic traditions. Furthermore, these data strongly support the argument that the onset of the Transition period, based on the two-phase developmental model proposed in this study, should be placed earlier (to level VII). It also strongly supports the argument that the phase in which these dynamics are observed can be culturally defined as a "transition period" rather than EBA IIIB. These dynamics also shed light on the possibility that levels VI-V of the settlement may have begun historically after 2150 BCE (around 2100).

Another characteristic form that first appears in the transition period, signaling a new dynamics in cultural, is the becher. This form represents a group made from well-sifted clay with yellowish-brown color, left unglazed and unburnished, with no surface treatment. Technically, these cups are wheel-made and well-fired, featuring wide, simple rim edges, conical bodies, and small, flat bottoms. This type of becher has a wide distribution across various sites, including Kültepe (levels 11-10),<sup>42</sup> Acemhöyük (VII-V), Boğazköy, Kaman Kalehöyük, Yassıhöyük, as well as Gordion, Polatlı, further north at İkiztepe, and in the west at Beycesultan and Küllüoba. This broad spread suggests that, as a result of new cultural dynamics emerging in Anatolia during the end of the 3rd millennium BCE, societies developed common production techniques and pottery forms within a shared cultural context. Detailed studies on the historical development of this form indicate that its use continued, though in diminishing numbers, until the early phases of the *kārum* period in Central Anatolia.<sup>43</sup>

40. Kamış-Şener 2022: 372.

41. Kamış-Şener 2022: 372.

42. Öktü 1973, Fig. 59: I-1/1-3.

43. Emre 1989: 114; Türker 2008.



Apart from these new pottery forms that mark the beginning of the “transition period” on the Central Anatolian plateau, the region is characterized by a series of developments indicating that the trade network that reached its peak during the 2500-2250 BCE (Şahoğlu 2005; Efe 2007) experienced a significant break in the connections between the surrounding cultural regions and neighboring geographies as trade was interrupted during the “transition period”. Thus, in addition to the “imported” pottery (tankards, depas and Troy A2 type plates) that entered circulation as a result of the interaction of Central Anatolia with the settlements in the western region, imported alabastron-shaped Syrian bottles of Northern Syria and Mesopotamia, “simple ware goblets” and precious metals (such as gold, silver, electrum) jewelry, cylinder seals and balance weights made of various types of stones, and the complete disappearance of imported products of various qualities constitute the primary evidence of a significant break in cultural and economic networks.

In addition to these findings, it is noteworthy that the primary evidence of stamp seals and sealing systems (*bullae*), which shed light on the mechanisms of the socio-economic and administrative systems of Anatolia’s communities in the 3rd millennium, is conspicuous by its absence in the transition period deposits of key sites of Central and Western Anatolia, particularly Kültepe.<sup>44</sup> Undoubtedly, all these data are important as they point to a transformation of the economic organization or administrative structures of the communities of the period, as well as a temporary decline in the urban culture of the settlements. The direction in which these changes took place and the findings that allow us to make in-depth inferences about new socio-economic structures and forms of administration become clear with the emergence of the Kaneš-Assyrian centered trade system in the first quarter of the 2nd millennium BC. The imported cylinder seals and prints representing Post-Akkadian and Ur III glyptic art uncovered in the contemporary levels 11a, 10 of Kültepe prove that despite the dynamics of environmental, economic and political (?) change in the region, trade continued, albeit to a limited extent, despite a radical break in the international connections of Kültepe.<sup>45</sup>

The EBA-MBA transition in Central Anatolia was shaped by developments that signaled a radical change not only in the cultural dynamics of societies but also in their religious belief practices. In this context, the most remarkable finds of the period are the alabaster idols and anthropomorphic figurines, known in the literature as “Kültepe-type Idols” because of their identification with the south of Central Anatolia and especially with Kültepe.<sup>46</sup> These artifacts were found in the sacred rooms and graves of monumental buildings dated to the second half of the 3rd millennium BCE, together with burial gifts.<sup>47</sup> However, similar idols are also found at sites outside Kültepe. The examples from sites such as Zencidere, Hacıbektaş/Suluca-Karahöyük, Acemhöyük

44. Cf. Ezer 2014; Kulakoğlu 2015; Kulakoğlu and Öztürk 2015. In the study published by Ezer (2014), the seals and bullae recovered from the “great pit” at the Kültepe mound were dated to the EBA III period. Additionally, a preliminary report by Kulakoğlu and Öztürk (2015) indicated that thousands of bullae were discovered in this great pit, which had destroyed some of the monumental buildings at Kültepe dating to the EBA III period. However, Öztürk’s (2019a) PhD dissertation, which analysed the motifs and scenes on seals and seal impressions, provided valuable data that defined more precisely the chronology of Kültepe and clarified the cultural phases represented by these finds. In this context, one of the most significant results of the study is that it challenges the earlier view that the large refuse pit was used exclusively during a single period. The dissertation also revealed that most of the bullae recovered from this area date to the Assyrian Trade Colony period (Öztürk 2019a: 202).

45. Öztürk 2019a: 199-200; Öztürk 2019b: 58-60.

46. Özgüç 1943; Özgüç 1957; Öztürk 2013; Öztürk 2015.

47. Öztürk 2013; Öztürk 2015; Öztürk-Kulakoğlu 2019; Kulakoğlu et al. 2023.

and Tyana (Niğde) show the spread of “Kültepe-type Idols” and figurines. These finds, which exhibit similarities in terms of material, technique and form, prove that the religious beliefs of the societies in the southern Kızılırmak Basin had a similar and homogeneous structure in the second half of the 3rd millennium BCE.<sup>48</sup> However, the use of these objects disappeared in the transition period following the fire in the region at the end of EBA III, along with the special offering vessels used for ritual purposes, and were replaced by lead figurines, which differ from the previous period not only in terms of material but also in terms of iconography, style and composition.<sup>49</sup> Systematic excavations have revealed that lead figurines and stone molds continued to be used from Anatolia to Syria (Chagar Bazar, Tell Cüdeyde, Tell Brak, Tell Mozan, Ebla) during the *kārum* period.

### 3. New Dynamics in Culture in the Proto-*kārum* Period

This period (2050/2020-1950 BCE), contemporary with the early 2nd millennium in Central Anatolian chronology, is referred to in the literature with various terms such as “*Übergangsperiode*”,<sup>50</sup> the transition to the MBA, or the proto-Hittite period.<sup>51</sup> However, in recent years, some researchers have preferred to define the cultural context of this period as the proto-*kārum* period.<sup>52</sup> The pottery, architectural, and various other material culture remains from Central Anatolian sites dating to this period provide clear evidence that they represent the proto-types of the dynamics of the *kārum* period (ca.1975/1950-1710/1700). Evidence for these dynamics can be observed in major sites on the Central Anatolian plateau dating to the early 2nd millennium BCE, such as Kültepe, Alişar, Boğazköy, Acemhöyük and Yassıhöyük (see Tab. 2).

#### 3.1. Architecture

Due to the limited excavations conducted at major sites on the Central Anatolian plateau, our knowledge of the architecture of the proto-*kārum* period remains extremely limited. For this reason, the techno-typological characteristics of the pottery stand out as the primary source of reference for outlining the new cultural dynamics of almost all settlements in Central Anatolia during the transition to MBA.

On the other hand, the recent expansion of the excavations at levels 10 and 9 of Kültepe mound, which are contemporary with this period, has contributed new data to our knowledge of the period. According to the results of the excavations at Kültepe, the so-called “large grain silo”, which destroyed some part of the monumental structures on the mound, and the early layers of the fill from the so-called “great pit”, excavated in a later phase, are dated to this period.<sup>53</sup> The outer boundaries of the silo have been identified during the excavations to date, but the entire fill inside has yet to be excavated. It is reported that analysis samples were taken from the silo during the excavations.<sup>54</sup> However, there are no published results to date that provide information about the function of the silo. The multiple so-called garbage pits dug into the silo, along with the artifacts of

48. Özgüç 1943; Öztürk 2013; Öztürk 2015.

49. Emre 1971.

50. Orthmann 1963a.

51. Arık 1939.

52. Öztürk 2023: 3, Tab. 1; Powell et al. 2024, Tab. 2.

53. Kulakoğlu-Öztürk 2015, Fig. 2; Öztürk 2019b, Fig. 9; Powell et al. 2024, Tab. 2.

54. Öztürk 2019a.

various qualities recovered from them, suggest that this area was used by the community at distinct timeframes for various functions according to their needs. The archaeological data recovered from these pits consist of artifact assemblages, the majority of which date to the *kārum* period.<sup>55</sup>

The evidence from levels IV and III of the lower town of Kültepe<sup>56</sup> is the most extensive architectural remains from this period. This period is characterized by rectangular buildings consisting of two or four rooms, built with small and shapeless stones and weak foundations. These simple houses have thick mudbrick walls plastered with thick mud from the inside and outside, starting from the floor of the buildings.<sup>57</sup> Acemhöyük levels VI- IV, which are contemporary with the levels of the lower city of Kültepe (levels IV-III), were found in the fills on the southern slope of Sarıkaya Palace. The architectural remains of levels VI and V are represented by mudbrick walls without a coherent plan, while level IV is represented by a building(s) with three rooms and a kitchen built with the same architectural materials.<sup>58</sup> Despite the limited data, the architectural remains of the *kārum* period are an important source of reference for the plan and function of these scattered architectural remains at Acemhöyük. Taken together, it is not unreasonable to think that this house structure with three rooms and a kitchen, which is attributed to the transition period at Acemhöyük and whose connections cannot be determined, represents an early model of *kārum* period buildings.

In Alişar, after the destruction of level 6M (transition period) by fire, a second large city wall with a two-towered gateway surrounding the mound was constructed on top of the earlier fortification in the 5M and Terrace 12T levels (proto-*kārum*). The pottery found in the base of the gateway, which includes monochrome, wheel-made pottery, reflects cultural features parallel with other sites.<sup>59</sup>

It is frequently emphasized in the literature that many archaeological finds from the contemporary levels of Central Anatolian sites dating to this period, such as ovens, tombs or grave goods, metal weapons, lead figurines, and ceramics with various functions, are stylistically and technically similar to examples found in the levels of the *kārum* period. On the other hand, the continuation of certain traditions associated with the EBA III period, together with the absence of primary evidence—such as cuneiform clay tablets or foreign glyptic styles in Anatolia (e.g., Assyrian, Babylonian, or Syrian)—that would indicate international trade relations centered on Assur–Kaneš, has led to the use of the term “transition period” in the cultural context.

However, the evidence outlined above indicates that these materials share stronger affinities with the local culture of the *kārum* period rather than with the so-called “transition period”. This observation highlights the importance of defining the chronological and cultural framework of these dynamics as the “proto-*kārum* period”, as proposed in this study.

Moreover, dendrochronological analyses of the earliest construction phases of the Old Palace (2027/2024 BCE) and the South Terrace Palace (levels 10, 9 ca. 2050 BCE) at the Kültepe mound, alongside stratigraphic analyses based on archaic pottery assemblages, suggest that both palaces

55. See Öztürk 2019a.

56. Level IV of the lower town of Kültepe dates to the reign of Ibbi-Sin, the last king of the Ur III Dynasty, while level III dates to the period between Ibbi-Sin and Erišum I. Özgüç-Özgüç: 1953: 8.

57. Özgüç-Özgüç 1953: 40-41.

58. Özgüç 1978: 541; Kamış-Şener 2022: 371.

59. von der Osten 1937: 210, 214, Figs. 209, 212.

were first used in the mid-21st century BCE.<sup>60</sup> The archaic pottery recovered from these buildings shows technical and formal parallels with pottery groups from the proto-*kārum* period (see pottery chapter). These findings not only confirm that the transition period was essentially complete and that the local cultural dynamics of the *kārum* period had matured, but also help to fill an important gap in Anatolian archaeology by establishing the chronological lower boundary of this period. This evidence contributes to our understanding of the evolution of the cultural, social, and economic structures of the societies in the Central Anatolian plateau during the transition from the EBA to the MBA.

### 3.2. Pottery Evidence

The main feature of this period is characterized by the emergence of a new group of monochrome, wheel-made pottery (so-called “Hittite”), together with late variations of the painted ceramic tradition known from the previous period (Alişar III, Konya painted and red-cross painted pottery). This new pottery tradition replaces the monochrome pottery tradition of the EBA III period, and in this context constitutes the major pillars of the cultural break. This pottery tradition is important in that it represents the proto-types of the forms that were in intensive use in the *kārum* period contemporary with the first quarter of the 2nd millennium BCE. The pottery of this group is red-slipped and burnished. The paste is grit-tempered and well-fired.<sup>61</sup>

This new pottery group, which is well known from large/small-sized sites in the same cultural region, such as Kültepe, Alişar, Acemhöyük, Boğazköy, as well as Kaman-Kalehöyük, Büklükale, Yassihöyük and Ovaören-Topakhöyük, shows that the societies adopted common cultural practices. The ceramics in this group are characterized by forms such as cups with various surface features and subgroups; bead-rim and flattened bead-rim bowls (with handles and no handles), teapots with pitchers and basket handles, bechers, goblets, rhytons, double-handled jars (with lids), and beak spouted jugs (*Schnabelkannen*) (Fig. 6).<sup>62</sup>

Although there are regional variations in paste color and surface treatment, common forms representing these new dynamics in culture can be seen in the vessel repertoire of MBA transition period levels at sites like Polatlı,<sup>63</sup> Gordion<sup>64</sup> in the North of Central Anatolia, and İkiztepe,<sup>65</sup> as well as Beycesultan,<sup>66</sup> Küllüoba,<sup>67</sup> and Troy in the west. In fact, based on these findings, which clearly reveal the interaction of the material culture from levels IV and V, considered to be from the MBA transition period at Troy, with the Central Anatolian traditions of the time, Korfmann defines these cultural levels of Troy as “Troy Culture with Anatolian Characteristics”.<sup>68</sup> These forms are known from levels VII-VIa at Beycesultan, dated to the EBA IIIb period and historically contemporary with the first century of the 2nd millennium BCE, and are considered to be early examples of pottery in the region that continued to see extensive use in the MBA.<sup>69</sup>

60. Barjamovic et al. 2012: 31, Fig. 11; Özgüç 1999, 67; Kulaoğlu et al. 2024: 221.

61. Emre 1989: 112.

62. For details, see Emre 1989; Emre 1968; Orthmann 1963a.

63. Lloyd-Gökçe 1951.

64. Gunter 1991.

65. Alkım et al. 1988.

66. Lloyd-Mellart 1962.

67. Efe-Türkteki 2005.

68. Korfmann 1997: 215.

69. Lloyd-Mellaart 1962: 63, 258

All of this data prove that the societies of Western and Central Anatolia had strong cultural interactions in the early 2nd millennium. The relations between different cultural regions, which were developing through the transfer of craftsmanship, knowledge, and technology, were revived during this period, leading to the standardization of the production of certain vessel forms. When these vessel forms are compared with material from both coastal and inland sites of Western Anatolia, they show close parallels to the pottery from Troy V, Beycesultan VII-VIa, Küllüoba IIB-IIA, Kültepe mound 10-9, and lower town IV-III; Northwest Slope Boğazköy 9-8, lower town 5, and Büyükkale V.

It is accepted that the monochrome “Hittite” pottery group that emerged during this period developed by originated from the local pottery prevalent in the region during the EBA III period.<sup>70</sup> On the other hand, these assemblages, which dominated the culture at the beginning of the 2nd millennium BCE, differ from earlier examples in that they represent more advanced forms with distinct surface treatments and techniques compared to the handmade pottery culture that prevailed in the plateau during the second half of the 3rd millennium BCE. For example, beak-spouted jugs, which are characteristic vessel forms of the *kārum* period, are known from the levels 12 and 11 dating to the EBA III period on the Mound of Kültepe.<sup>71</sup> The closest parallel to the Kültepe level 11 find is found in the level 5, which corresponds to proto-*kārum* period of Boğazköy lower town.<sup>72</sup> However, these earlier examples differ from the proto-*kārum* or *kārum* period jugs in the shape of the beak, handle, and body.

A similar comparison can be made for teapots. Among the teapots, which were widely used during the proto-*kārum* period and represented by various subtypes, the basket-handled forms were inherited from the EBA period. The plain or dark red-slipped, glossy burnished versions of this type continued to be used intensively in the *kārum* period as well.<sup>73</sup> However, details such as animal head-shaped spouts of the *kārum* period teapots highlight the differences in this vessel form between the periods. Another example can be seen in the painted pottery tradition. According to Mielke (2022, 7), the decoration tradition so-called “wavy line”, which is extensively used in the lower town level II of Kültepe and whose parallels are known from Boğazköy and Alişar, represents an advanced version of the decoration tradition and style known from the Alişar III ware of the transition period.

This evidence can be multiplied, but the main point to be emphasized here is that the indigenous Anatolian style of EBA III and its predecessors essentially had a multi-stage development line in the cultural context until the end of the *kārum* period. In this context, just as the art of EBA III originated and developed from previous periods, it is not unreasonable to think that the local culture of the *kārum* period is in the memory of the local communities in the region and that it was developed and integrated into the culture by rooting from the EBA III culture.

#### 4. The Impact of the 4.2 ka BP Event in Central Anatolia

In studies focusing on understanding the dynamics behind the cultural changes experienced by societies in Central Anatolia during the transition from the 3rd to the 2nd millennium BCE (2200-

70. Özgüç-Özgüç 1953; Özgüç 1963: 33; Emre 1963.

71. Öktü 1973: 46, Pl.55, Id/1-3; Pl.56, Id/04.

72. Fischer 1963, Pl.11:139.

73. Özgüç 1947; Özgüç-Özgüç 1953; Özgüç 1959; Emre 1963; Emre 1989.

1950 BC), the literature frequently cites the following main triggers: a) centralization, b) disruption of long-distance trade networks, c) human mobility, and d) climate change (the 4.2 ka BP event).

In this context, it has been argued on the basis of archaeological and paleoclimatic data (Massa and Şahoğlu 2015; Massa and Palmisano 2018; Bal and Pişkin 2024) that the sudden drought during the 4.2 K BP climate crisis had a more severe impact on the coastal and inland regions of Western Anatolia than in Central Anatolia. This sudden climate change is discussed through archaeological and paleoclimatic data, which suggest that it thrust the inhabitants of Western Anatolia into a period of stress, leading to conflicts driven by water scarcity, the contraction or abandonment of settlements, and even the collapse of long-distance trade networks connecting various regions.<sup>74</sup>

Paleoclimatic studies conducted in various parts of Central Anatolia provide evidence that this global environmental event manifested differently across regions, exhibiting historical and regional variations. Some areas were either unaffected or less affected by drought conditions, owing to their geographical advantages, thus avoiding dramatic consequences such as major collapse, abandonment, or migration (see Tab. 3). For example, research in the Delice Valley, located in North-Central Anatolia, indicates that the 4.2 ka BP drought event did not impact this area, and there was no abrupt decline in the number of settlements.<sup>75</sup> In contrast, studies on the Çarsamba fan in the Konya Basin suggest that changes in the alluvial regime during the late 3rd millennium (2200-2000 BCE) were linked to drought conditions.<sup>76</sup> It has been proposed that these changes led to a significant decrease in the number of settlements in the region and had a detrimental effect on agricultural production. Additionally, surveys conducted by Mellaart in the Konya Plain identified a large number of EB II settlements, but the relatively low number of EB III settlements aligns with the environmental data.<sup>77</sup>

In the Cappadocia region, studies involving pollen analysis and sedimentary stratigraphy at Eski Acıgöl in Nevşehir province have recorded a significant drop in the lake's water level around 4.2 ka BP, which is linked to a period of drought in the area.<sup>78</sup> However, recent research at sites such as Topakhöyük and Çakıltepe Höyük suggests that both were continuously inhabited during the 3rd and 2nd millennia BCE, and that no severe drought event of a magnitude that would trigger the abandonment of settlements occurred in the vicinity of Nevşehir (see Fig. 7).

Pollen data from Tecer Lake, located 35 km south of Sivas, suggest that a severe drought lasting approximately 450 years occurred between ca. 2350-1900 BCE.<sup>79</sup> This event may be linked to the dramatic abandonment of settlements observed in the Sivas region during the transition from the EB to the MBA. Moreover, these findings underscore the possibility of a centralization process in the region, indicating the need for further excavations focused on the 3rd millennium BCE to gain a more comprehensive understanding of these developments.<sup>80</sup>

The paleoecological studies conducted by Şenkul in Sultansazlığı, Tuzla Lake, and Engir Lake have provided crucial data on the historical development of climatic changes and human impact on

74. Şahoğlu 2005; Efe 2007.

75. Arıkan-Yıldırım 2018: 578-579.

76. Boyer et al. 2006.

77. Mellaart 1963.

78. Kuzucuoglu 2007; Roberts et al. 2001: 732-733.

79. Kuzucuoglu et al. 2011: 181, 184.

80. Ökse 2005: 67-69.

the natural environment in and around Kayseri (see Fig. 7).<sup>81</sup> Paleoclimatic data obtained from the Sultansazlığı marsh, located in the Develi Plain (1,050 km<sup>2</sup>), showed that the humid climatic conditions observed during the mid-Holocene persisted until around 2.8 ka BP, indicating that no significant drought event occurred in this region.<sup>82</sup> Surveys conducted around large mound settlements, such as Eğriköy and İkitpe, as well as around the marsh, which demonstrate continuous occupation during the EBA III-MBA periods, further support these findings.<sup>83</sup>

On the other hand, pollen data from Lake Tuzla, located approximately 23 km northeast of Kültepe, indicate that Kültepe was highly agriculturally productive in 2423 BCE (early EBA III) based on high AP (Arboreal pollen) rates (36.9%), but that the vegetation turned into steppe between 2150-1450 BCE.<sup>84</sup> However, the data from Lake Engir, located in the fertile Sarımsaklı Plain where Kültepe is situated, indicate that a humid climate prevailed in the period from 2330-2220 BC (EBA III, Mound levels 12, 11b of Kültepe stratigraphy).<sup>85</sup> It is highly probable that Kültepe, located in the immediate vicinity of Lake Engir during this time, capitalized on this fertile period and utilized its extensive hinterland to achieve high agricultural yields. In fact, archaeobotanical research at Kültepe highlights the abundance of wheat species during both the EBA III and MBA periods, showing the presence of similar crops and crop components, including barley, glume, and naked wheat chaff. Both emmer and einkorn were clearly used, with glume wheat species, particularly abundant in the EBA III samples, being dominant, which supports paleoenvironmental results.<sup>86</sup>

On the other hand, indicators of fruit, grain, and animal husbandry activities were identified during the period 2220-2145 BCE, (late EBA III/transition period, Kültepe level 11a), which has been defined as the “agricultural period”.<sup>87</sup> However, a decline in the proportion of woody pollen during this period was noted, which has been interpreted as a sign of deforestation or possibly the presence of a drought. This has also been interpreted as an indicator of a trend towards deforestation potentially caused by human intervention, such as the expansion of agricultural areas or the demand for fuel, possibly as a result of an increased food supply.<sup>88</sup> In Kültepe, this date range coincides with the end of the urban culture characterized by the destruction of monumental buildings due to intense burning (level 11b) and some contexts of domestic structure dated to level 11a of the mound.<sup>89</sup> Additionally, the “large grain silo” (levels 11a, 10), which caused the destruction of some monumental buildings (levels 13-11b), is also dated to this period.<sup>90</sup> All these archaeological and paleoclimatic data provide reliable evidence that Kültepe experienced the 4.2 ka BP climate event during levels 11a and 9. However, it appears that the inhabitants of the region took precautions against the drought to prevent the abandonment of the sites. At the same time, the architectural and other material culture remains uncovered indicate that the site entered a period of cultural and economic stagnation during this phase.

81. Şenkul 2018; Şenkul et al. 2018a; Şenkul et al. 2018b.

82. Şenkul et al. 2022: 33.

83. Kontani et al. 2014: 101-104.

84. Şenkul et al. 2018b: 5-6, Tab. 2.

85. Şenkul 2018: 101.

86. Fairbairn 2014: 186, Fig. 4.

87. Şenkul 2018: 102.

88. Şenkul et al. 2018: 102.

89. Rıdvanoğulları et al. 2024.

90. Öztürk 2019a: 26.

## 5. Discussion and Conclusion

In this study, it is emphasized that the development of the new cultural dynamics that characterize the “transition period” in Central Anatolia and the rate at which they dominated the culture did not proceed in a linear fashion, but had a two-phase development model. Based on archaeological and radiocarbon evidence, the first phase, defined as the “transition”, covers approximately between 2200/2150 and 2050 BCE. The subsequent phase, which is proposed here to be defined as the “proto-*kārum*”, begins around 2050 BCE and continues until the early years of the reign of *Erišum* I (ca. 1975/1950 BCE), when long-distance overland trade centered on Assur–Kaneš became systematically organized, as attested by contemporary cuneiform documents.<sup>91</sup> These distinctions not only clarify the connections between chronological and cultural phases but also provide a critical framework for interpreting the dynamics of change and continuity in Central Anatolia on a regional scale.

This period marks a phase of significant cultural transformation driven by warfare, destruction, socio-political reorganization, changes in settlement patterns, and climatic fluctuations. Archaeological evidence from major Central Anatolian sites such as Kültepe, Acemhöyük, Alishar, and Yassihöyük demonstrates that, despite the widespread destruction around 2200–2150 BCE, cultural continuity persisted, incorporating the earliest signs of emerging new dynamics into the existing framework.

The phase redefined as the proto-*kārum* is characterized by a series of developments that reflect the transformation of Central Anatolia following the decline of the 3rd millennium BCE hegemony. Rooted in the local cultural traditions of the EBA III, this phase marks the emergence of proto-types of the cultural dynamics that later dominated the *kārum* period. It is further distinguished by the strong revitalization of cultural interactions between Central Anatolia and both inland and coastal Western Anatolia. When the hypothesis of cultural continuity is considered alongside the innovative dynamics emerging during the proto-*kārum*, this process appears not as a mere transition but as a complex mechanism of transformation and adaptation. Moreover, the presence of newly dominant ceramic groups represented by shared forms across Central and Western Anatolian settlements is particularly noteworthy.

The evidence demonstrates that at the beginning of the 2nd millennium BCE, networks of cultural and technological knowledge exchange were highly active, highlighting their crucial role in shaping subsequent cultural structures. However, during the *kārum*-period, the diversity, craftsmanship, and creativity evident in the ceramic repertoire of the Kaneš community surpassed that of its western Anatolian counterparts. This situation clearly indicates that the Central Anatolian communities forming the *kārum*-period culture had already initiated this cultural development in the Early MBA. With the onset of international trade in the *kārum*-period, ceramic production evolved into an industry driven by supply and demand dynamics, producing striking vessel forms tailored to the fashions and consumer preferences of the time. Undoubtedly, another significant factor underlying this process was the widespread adoption of the fast-wheel technology by Central Anatolian potters, who had learned to use it since the second half of the third millennium BCE. The integration of this technology into the regional culture during the proto-*kārum* and *kārum*-periods resulted in a high quality of serial ceramic production.

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91. Balkan 1955; Larsen 1976; Veenhof 2003; Günbattı 2008, Barjamovic et al. 2012.



Moreover, this study supports the view that the main triggering factors underlying the dynamics of change in the cultural structure and settlement pattern of Central Anatolia during the transition period from the EBA to the MBA should be sought in the new social organization that emerged as a result of the effects of the 4.2-3.9 ka BP event that occurred in the Near East towards the end of the 3rd millennium BCE and the economic and politically based competition or conflicts between powers.<sup>92</sup> In this context, the widespread and nearly contemporaneous destruction layers identified across much of Central Anatolia in the last quarter of the third millennium BCE may plausibly be interpreted as the outcome of these competitive interactions, which escalated into conflicts among regional political entities. Furthermore, Akkadian texts referring to Kaneš, Puruṣhanda, and Boğazköy (Hattuša) raise the possibility that the destructions recorded at major centers such as Kültepe, Acemhöyük, and Yassıhöyük could be associated with the campaigns of Sargon and Naram-Sin, during the period when the Akkadian Empire achieved full political consolidation.

The table is fundamentally clear and straightforward to interpret. In the second half of the 3rd millennium BCE, regional kingdoms that had maintained strong political and economic positions within the Akkad-centered global trade network lost their commercial connections following the climatic changes known as the 4.2 ka BP event. The collapse of this system generated widespread instability across the Near East, triggering crises that eventually led to destructive wars and population movements as communities migrated away from arid regions. The consequences of these conflicts spread to Anatolia in a domino-like effect.<sup>93</sup>

Thus, this process, following ca. 2200–2150 BCE, disrupted the urbanization progress on the Anatolian Plateau and, as exemplified at Kültepe, brought an end to the era of monumental buildings that had symbolized power and prosperity within settlements. After this period (Kültepe level 11a and later), the construction of non-monumental structures—primarily small private workshops designed to meet only basic needs—became characteristic.<sup>94</sup> These buildings, which reveal multiple construction phases and show no evidence of destruction by fire, stand as primary evidence of the profound socio-economic transformation reflected in the architectural record. Moreover, the nature and quantity of the archaeological materials recovered from these contexts demonstrate that the substantial strides once made toward urbanization were reversed, and that a process of “ruralization” occurred within the mound settlements that had previously exhibited the complex dynamics of centralized city-states during the EBA III period. The presence of small stone wells and large storage units with cell-plans, unearthed in the mound area of Kültepe, dating to the same period, should be regarded as primary evidence of the economic measures and agricultural adaptation strategies developed in response to this global climatic crisis.<sup>95</sup> In this scenario of limited access to resources and the resulting increase in social tensions, it is logical to assume that human communities would have turned to a smaller-scale and more restricted way of life. The dramatic decline in agricultural yields and possible disruptions in trade routes would have reduced the resources available to the communities in the region for daily life, leading to a decline in the quality of crafts and the use of more modest goods.

92. Weiss et al.1993; Weiss 2015; Walker et al.2012; Wiener 2014.

93. Weiss et al.1993.

94. Rıdvanoğulları et al. 2024.

95. Massa-Şahoğlu 2015: 72.

In the subsequent *kārum* period (ca.1975/1950-1710/1700), socio-political and environmental conditions appear to have stabilized, while interregional caravan trade — which once again connected communities across vast distances — resumed in a more organized and intensive manner. As a result, local societies experienced a rapid socio-economic and cultural revival. The reconstruction of monumental public buildings at Kaneš, such as the so-called “Old Palace” and the “Southern Terrace Palace”, in the early 21st century BCE stands as one of the most tangible indicators of this resurgence.

Undoubtedly, as intensive research at major multi-layered sites in Central Anatolia—such as Kültepe, Acemhöyük, Yassıhöyük, and Konya Karahöyük—continues to expand in the coming years, new evidence will shed further light on the multifaceted nature of cultural continuity and change, allowing for the formulation of more comprehensive hypotheses on this subject.

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## 7. Tables and Figures

Province	Sites	Highlighted Details								References	
		Period			Major Fire Destruction				Site Size (approx.)		
		EBA III	Transition	kārum	Level	Context	Contextual ca. Date (BCE)	C14 Date (BCE)	Mound		Lower town
Kayseri	Kültepe	✓	✓	✓	11b	Idol room		2352-2201 (83.7%)	300 ha		Kulakoğlu 2017 Rıdvanogulları et al. 2024
				12	monumental building	2350-2150					
				13	palatial complex		2460-2279 (86.8%)				
	Numerous small-scale sites	✓	————		Survey Sites				less than 5 ha		Kulakoğlu et al. 2011 Kontani et al. 2014
	Eğriköy	✓	✓	✓					15 ha +		
	İkitepe	EBA materials reported as very rare							10 ha +		
	Kadılar Höyük	EBA and MBA ceramic sherds reported							10 ha +		
	Various small scale sites	✓	abandoned						less than 5 ha		
Kurttepesi	EBA and MBA ceramic sherds reported			10 ha							
Yozgat	Alışar	✓	✓	✓	6M	fortified structure	2200-2000	N/A	21 ha	Osten 1937a-b	
	Mercimektepe	✓	✓	?	N/A				2.1 ha	Bertram-İlgezdi Bertram 2021, 259-264	
	Çengeltepe	✓	✓	✓							Ünal 1966
Kırşehir	Yasshöyük	✓	✓	✓	III-1	monumental building		2260-2135	31 ha	Omura 2024	
				III-4	2350-2250						
	Kaman-Kalehöyük	✓	✓	✓	IV	thick fire layer		2150-2100	7 ha	Omura 2019	
Nevşehir	Topakhöyük/Ovaören	✓	✓	✓	N/A				27 ha	Şenyurt et al. 2016	
	Suluca-Karahöyük	✓	✓	✓							Türker-Çizikçi 2017
	Çalaltepe Höyük	✓	✓	✓					10.5 ha	Kamış 2021	
Konya	Konya-Karahöyük	✓	✓	✓					100 ha	Dardeniz 2023	
Aksaray	Acemhöyük	✓	✓	✓	XI	pit (grave?)		2465-2284 (91.9 %)	42 ha	Kamış-Şener 2022	
				unspecified deposits			2487-2346 (95.4%)				
Karaman	Eminler Höyük	✓	✓	✓	Unexcavated				40 ha (is composed of five hills)	Kamış-Şener 2024.	
Çorum	Boğazköy	insufficient data	✓	✓	Vc		2050-1950				
	Alacahöyük	insufficient data	✓	✓	5	monumental building	2350-2150			Yıldırım 2023a	
	Resuloğlu	✓	abandoned			None				Southeast Mound 0.78 ha	Yıldırım 2023b
	Eskişehir	✓	✓	✓	Indeterminate	burnt dwelling	2100-2000		8 ha	Özgüç-Temizir 1993	
Tokat	Maşathöyük	✓	✓	✓							
Ankara	Polatlı	✓	✓	✓	XV	destruction of the whole settlement by fire	2050-1950		6 ha	Lloyd-Gökcü 1951	
	Karaoğlan	✓	✓	✓	V	multi-unit building destroyed by fire	2350-2150		4.5 ha	Ank 1939	

Tab. 1. Highlights of the second half of the 3rd millennium BCE in Central Anatolia (table produced by Y. Rıdvanogulları and G. Öztürk)

DATES (BCE)	PERİOD	KÜLTEPE/KANEŞ		ALİŞAR		BOĞAZKÖY/HATTUŞA			ACEMHÖYÜK	YASSIHÖYÜK	KAMAN KALEHÖYÜK
		Mound	Lower Town	Mound	Terrace	Büyükale	Lower Town	Northwest Slope	Mound		
2200/2150-2050/2020	EBA-MBA Transitional	11a	no occupation	6M	13T (late phase)	V	—		VII VI	III-1	IVa
2050/2020-1950	Proto-kārum	10	IV	5bM	12T	↓	5	9	V		
		9	III	5aM		↓		8d-c	IV	II	↓
1950-1835	kārum Period (early phase)	8	II	5aM	11cT	—	4	8b	↓	II	III c

Tab. 2. Comparative stratigraphy and chronology of the major sites frequently mentioned in the text

Region	Site	Climatic Events (drought periods) end of the 3rd millennium BCE (rainfall and humidity drop)	References
Central Anatolia Plateaus	Eski Acıgöl	2150-2100	Kuzucuoğlu 2007; Roberts et al. 2001, 732-733.
	Lake Engir	2220-2145 (decrease of arboreal pollen ratios)	Şenkul 2018, 102.
	Lake Tuzla	During 4.2 ka BP, the number of woody taxa decreased, an indicator of drought.	Şenkul et al. 2018b, 9.
	Sultansazlığı Marsh	Humid climatic conditions observed during the Mid-Holocene persist up to 2.8 ka	Şenkul et al. 2022, 33.
	Lake Tecer	2350-1900	Kuzucuoğlu et al. 2011, 181, 184.
	Çarşamba Alluvial Fan (Konya Basin)	Changes in the alluvial regime at the end of the third millennium, indicating drought.	Boyer et al. 2006.
	Delice Valley	Annual rainfall has maintained itself at an average of 420 mm. (Humid)	Arkan -Yıldırım 2018, 578-579.

Tab. 3. Pollen and sedimental records in the plateau.  
Table is based on Kuzucuoğlu 2007 and has been updated with new data afterwards

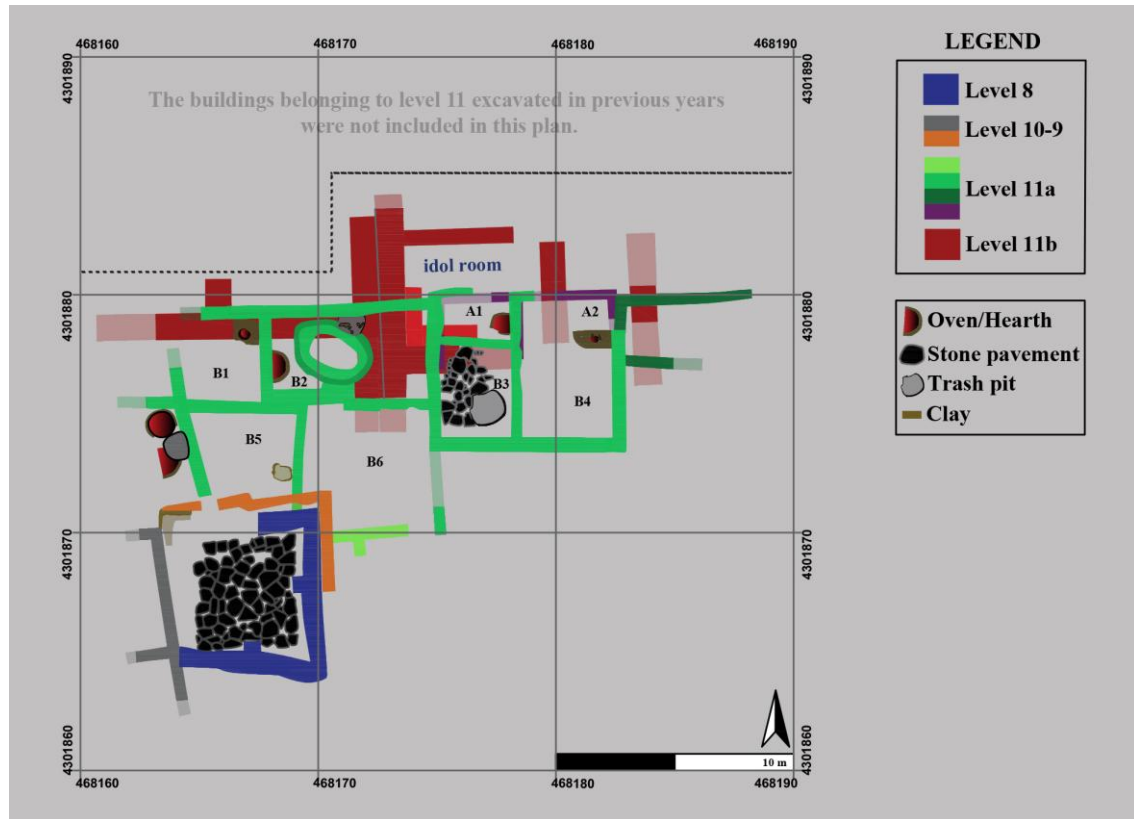


Fig. 1. Schematic plan of Late EBA III/ transition period (level 11a) workshops and later periods buildings on the mound of Kültepe (Rıdvanoğulları et al. 2024, Fig. 14:23)

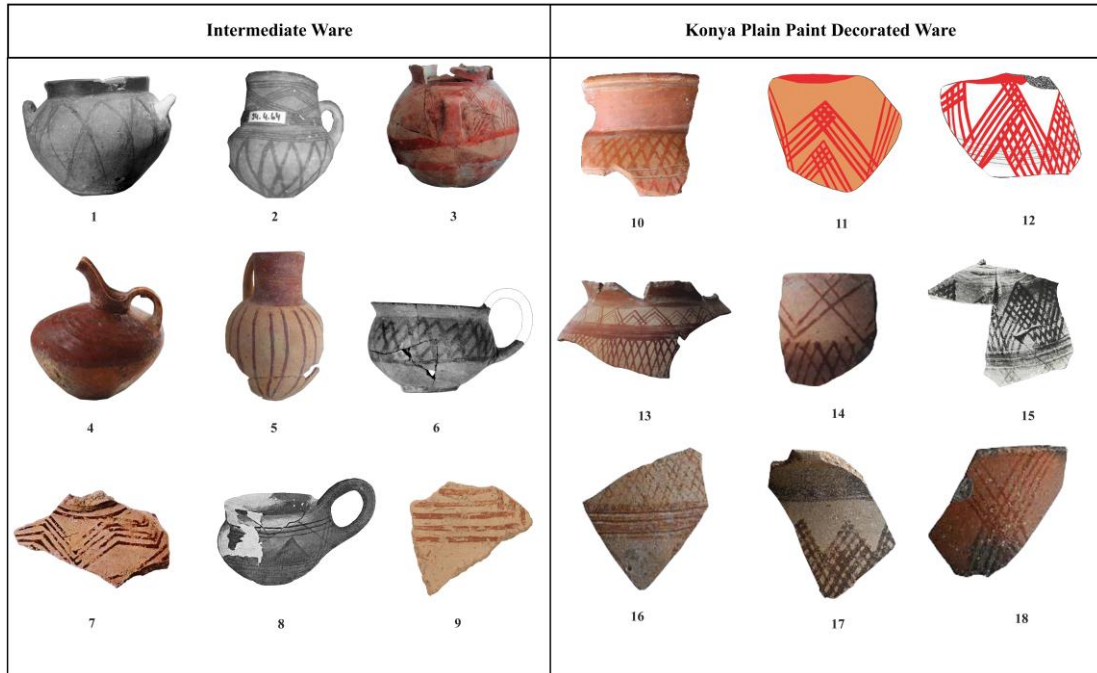


Fig. 2. *Intermediate Ware* and “Konya Plain Painted Ware” (not scaled)

1-3: Kültepe (Ezer 2014, Fig. 12; Rıdvanoğulları et al. 2024, Fig. 14:19); 4-5: İnler Dağı Cemetery (Öztürk-Kulakoğlu 2019, Figs. 9-10); 6-7: Alişar (von der Osten 1937, Fig. 235: 6/c 366; Pl. IV: 9); 8: Alaca Höyük (Koşay-Akok 1966, Pl. 48: e 230); 9: Yassıhöyük (Omura 2024, Fig. 15); 10-14: Acemhöyük (Kamış 2018, Figs. 8:7-8, 9: 2; Şener 2022, Fig. 7); 15: Konya-Karahöyük (Alp 1994, Pl. 9: 17); 16-18: Eminler Höyük (Kamış-Şener 2024, Pl. 9: 1)

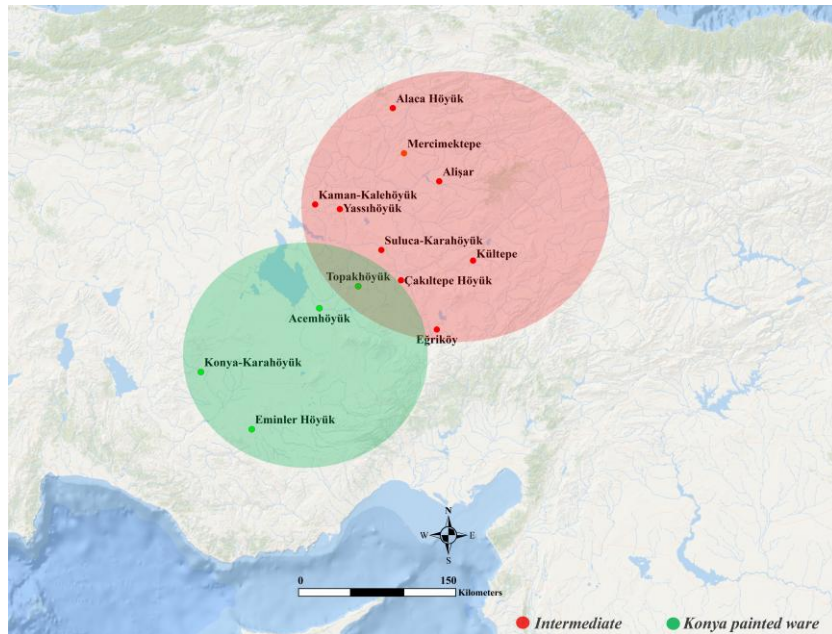


Fig. 3. Map represent the average spread of both painted ceramic traditions





Fig. 4. Alişar III painted ware (1-13 ) and wavy line pottery (14-20) (not scaled).  
 1-2: Kültepe (Rıdvanoğulları et al. 2024, Fig. 14:16); 3: Alişar (Schmidt 1932, Pl. V.b 181); 4-5: Acemhöyük (Şener 2022, Fig. 9); 6: Büklükale (Matsumura 2014, Fig. 7); 7: Yassihöyük (Omura 2025, Fig. 12); 8-10: Kültepe (Emre 1989, Pl. 28: 3, 6; Pl. 29: 1); 11-12: Boğazköy (Orthmann 1963b, Pl. 41 b); 13-14: Alişar (von der Osten 1937, Fig. 239: d 2493; Schmidt 1932, Fig. 257:a 1072); 15-20: Kültepe (Özgüç 2005, Figs. 122, 124, 150, 142, 144, 107)

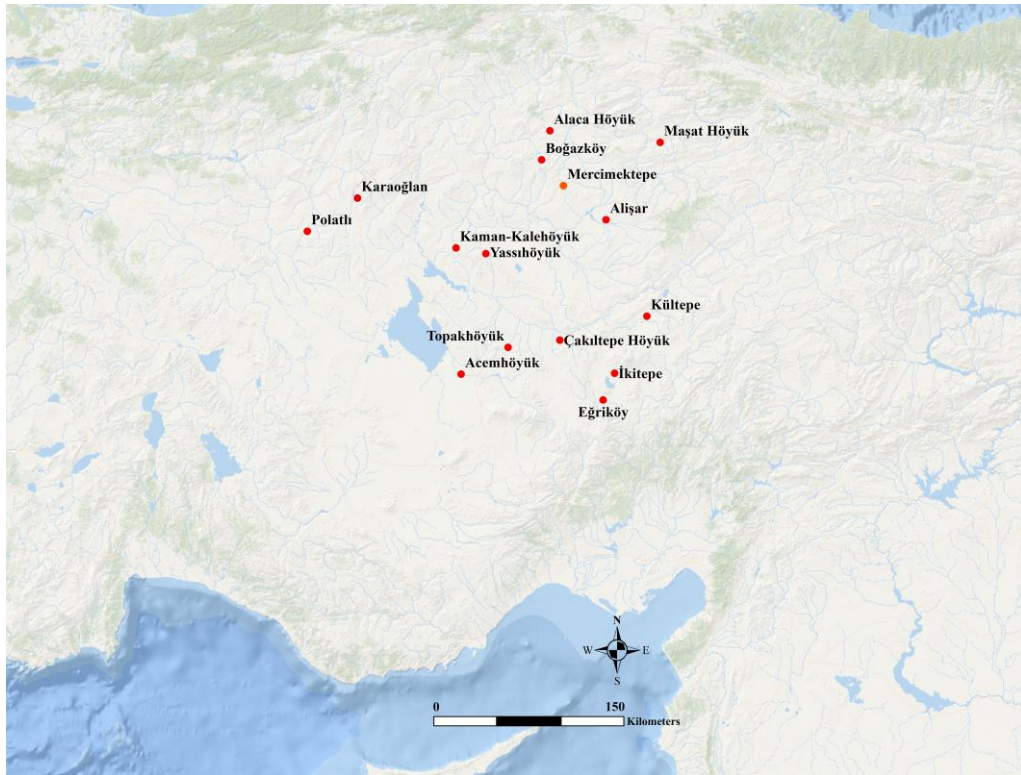


Fig. 5. Map represents the average spread of Alişar III painted ware

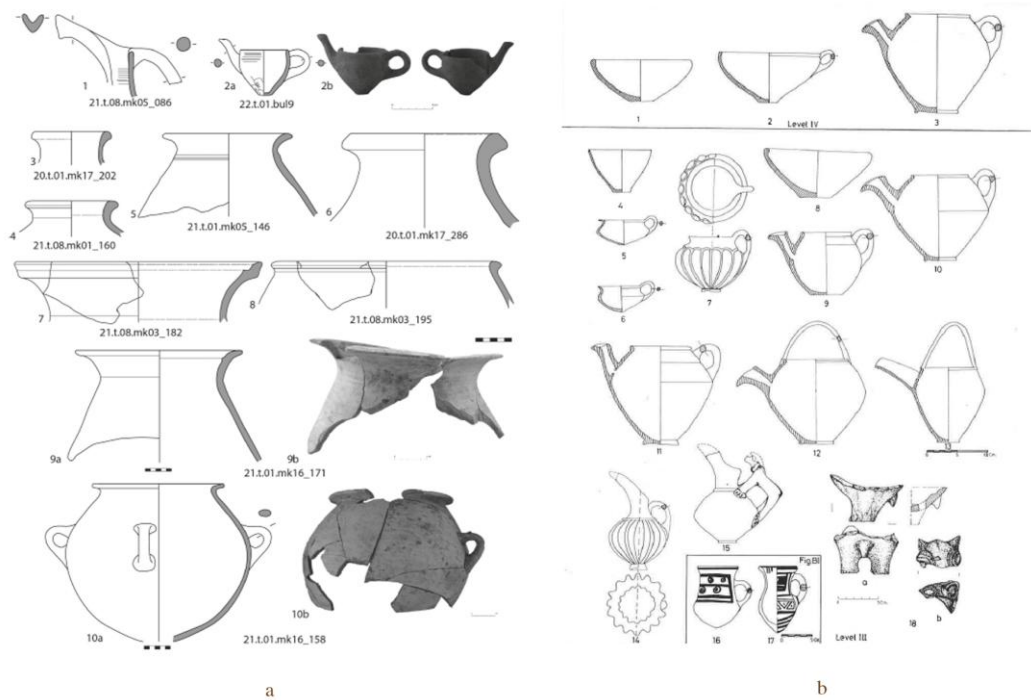


Fig. 6. Wheel-made monochrome (so-called “Hittite”) pottery assemblages from mound (a) and lower town (b) of Kültepe (a. Kulakoğlu et al. 2024; b. Emre 1989)

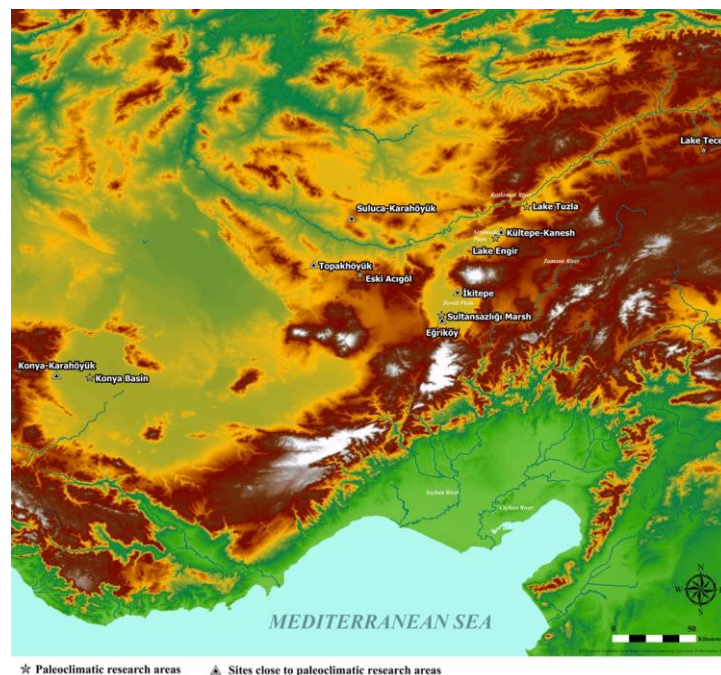


Fig. 7. Digital Elevation Model (DEM) map showing the paleoclimatic research areas and nearby archaeological sites in Central Anatolia (produced by Y. Rıdvanoğulları)