

THE 2002–2005 EXCAVATION SEASONS AT ÇADIR HÖYÜK The Second Millennium Settlements

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I. GENERAL INTRODUCTION

The 2002 through 2005 seasons at Çadır Höyük were related in purpose as they continued to explore the historical and cultural development of this large mound near the village of Peyniryemez in Central Turkey (Fig. 1). Our efforts were aimed at resolving outstanding chronological problems, examining significant historical issues, and illuminating the relationship of the environment to settlement in the various periods under investigation. This paper will address these issues and serve to update the reader on current discoveries, as well as changes in our thinking that have taken place in recent years. Funding for the project during the 2003-2005 seasons came as a result of generous donations from both public and private donors to whom we are extremely grateful.¹

Excavation took place in all six areas of Çadır Höyük during that three year span with second millennium remains coming from every area (Fig. 2). Sites of excavation include Area 1 (the east slope), Area 2 (the terrace), Area 3 (the southern exposure), Area 4 (the citadel), Area 5 (the upper south slope), and in Area 6 (on the northern slope). The excavation team once again enjoyed hospitable surrounding at our excavation house in the village of Peyniryemez, and the project was sustained during this period by workers from Peyniryemez who made up an excellent field team.² The project also profited greatly from the expertise and tireless efforts of our Turkish government representatives during this three year span. The representatives included Mr. Mehmet Demir (2003), Mr. Dursun Çalar (2004), and Mr. İsmail Sarıpınar (2005).

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¹ Funding included grants from the American Turkish Society, Inc.; Anatolian Archaeological Research Foundation; Chancellor of the State University of New York, Overseas Program Award; Dumbarton Oaks; Cortland State University, SUNY; Hood College; Loeb Foundation of Harvard University; National Science Foundation; Oriental Institute of the University of Chicago, Ramerica International, Inc.; ULU, Inc.; University at Buffalo Foundation; and University College London Institute of Archaeology. Private donors included Mr. Erden Arkan, Mr. George Blumenthal, Mr. Arnold Flegenheimer, Mr. I. Michael Kasser, Mrs. Barbara Koz Paley, Mrs. Edmée Reit, Mr. Rick Schneider, Mr. Frank Spring, and Mrs. Louise A. Valdes-Fauli.

² Members of the excavation team from 2002 through 2005 included the Senior Staff, Ronald Gorny (Director), Gregory McMahon (Associate Director), Sharon Steadman (Field Director), Samuel Paley (Assistant Director), Carol Schneider (Byzantinist and House Manager), and Bruce Verhaaren (Regional Survey Director). Excavators and specialists included Chad Bouffard, James Carlson (Lithics), Marica Cassis (Byzantinist), Amy Chang, Rob Cochrane, Tim Fortin, Claudia Glatz (Hittite Ceramics), Peter Graves (Iron Age Ceramic Project), Sarah Jones, Lisa Kealhofer (Iron Age Ceramic Project), Mary Jean Hughes, Amy Lloyd, Juliana McKittrick, Megan McMahon, Janet Meiss, Emilee Novak, Holly Oyster, Jenni Ross, Katie Ross, Aaron Smith, Alexia Smith (Paleobotanist), Gail Thompson, and Yukiko Tonoike.

In previous seasons, a great deal of effort was focused on Çadır's Chalcolithic settlement which took the history of the site back to roughly 5200 B.C. During the 2002-2005 campaigns, however, our attention also turned to the Byzantine areas and we made excellent progress in exposing the Late Classical settlement that once covered the top of the mound and the lower terrace. The Chalcolithic work is published in earlier volumes of *Anatolica*, while the Byzantine efforts are briefly reported on in several Oriental Institute publications (Gorny *et al.* 2002; Gorny 2004, 2005). A fuller description of the Byzantine investigations is in preparation.

The primary emphasis of this article is to briefly describe discoveries related to the second millennium at Çadır Höyük and to discuss their significance for understanding the rise and expansion of Hittite culture on the central plateau of Anatolia. As a byproduct of these investigations, we have reached a point where we believe that it is possible to hypothesize the identity of the second millennium settlement. In that vein, we would now like to propose the equation of Çadır Höyük with the Hittite cult site of Zippalanda, the center for the worship of the Stormgod of Zippalanda. In addition, I believe that there is evidence the settlement was connected by way of its cult to the nearby mountain of Çaltepe, referred to by the Hittites as Mount Daha, the "beloved mountain of the Stormgod of Zippalanda" (Fig. 3).

According to the bronze tablet found at Boğazköy in 1986, Zippalanda was one of the three most important Hittite cult centers (along with Hattuša and Arinna). Daha is known from texts to have played an integral part in the town's cult activities.³ Both city and mountain were central to important cultic functions performed by the Hittite king at specific times of the Hittite cult calendar. Of utmost importance in this cycle of seasonal worship were festivals that took place in Zippalanda. Among these were events such as the AN.TAH.ŠUM and *nuntariyashas* festivals, celebrations performed in the spring and autumn respectively. I believe that we can now look to the combined sites of Çadır Höyük and Çaltepe to better understand those events.

Previous preferences, my own included (Zippalanda and Ankuwa: The Geography of Central Anatolia in the Second Millennium B.C. *Journal of the American Oriental Society* (1997): 117: 549-557), placed Zippalanda at Kuşaklı Höyük near Kerkenes Dağ. Although I initially proposed this equation in 1990 (Alişar Höyük in the Second Millennium B.C., Ph.D. dissertation, University of Chicago, pp. 433-434), recent discoveries have caused me to reconsider central Anatolia's geography in the second millennium and to now identify Kuşaklı with the important Hittite town of Hurranassa, allowing Çadır Höyük to be identified with Zippalanda. This has had the spin-off effect of maintaining the identification of Alisar Höyük with Ankuwa and identifying the nearby site of Salur Höyük with ancient Katapa (below).

The cult that evolved around the Stormgod of Zippalanda was one of the most important religious institutions in Hittite Anatolia and it certainly predated the Hittite

³ H. Otten, Die Bronzetafel aus Boğazköy. Wiesbaden, (STBoT Beiheft 1), 1988. See Col III, p. 61-64 with commentary on p. 52.

state. Most of what we know about Zippalanda and its cult are from primary sources collected in M. Popko's book on Zippalanda.⁴ The primary sources are principally cuneiform tablets uncovered in the ruins of the Hittite capitol of Hattuša (above) and published either as KBo or KUB volumes⁵. From these texts we know a great deal about the town's topography, as well as its cultic activities. They tell us that the festivities surrounding the cult were not limited to one time of the year but required diligent service throughout the entire year and were highly orchestrated. These activities also required the direct participation of the Hittite king several times throughout the course of the year. By arriving at the belief this past year that Zippalanda and Çadır are one in the same place, we are also led to believe that we will soon be able to establish a productive linkage between the texts and Çadır's physical remains.⁶ With that word of introduction we can now turn our attention to the various areas of Çadır Höyük that have produced second millennium materials.

II. THE EASTERN TRENCH (AREA 1)

The Eastern Trench is the most complicated of the areas producing evidence from the second millennium. Efforts in this area go back to the initial excavation season of 1994 and have clearly demonstrated that Çadır is basically a massive Hittite settlement with a classical crown and a prehistoric foundation. The Eastern Trench is now 40 meters long and provides us with an excellent opportunity to explore Çadır's chronological sequence in an area that displays evidence of settlement from, at least, the Chalcolithic through the Late Bronze Age periods.⁷ The major period of occupation, however, is the second millennium and the majority of our work in the Eastern Trench has, therefore, focused on the Hittite periods.

The initial investigations in 1994 produced architectural evidence in the form of walls 6 and 7 in the lower portion of trench 800.930 (Gorny *et al.* 1995c). Wall 7 turned out to be the oldest of the second millennium walls and is built directly over EB III wall F 42. The wall F 7 foundation was composed of large field stones and the orientation of the wall originally seemed odd in that it ran southwest to northeast, an orientation that led directly into the mound instead of around it or parallel to it. Because of this fact, we came

⁴ M. Popko, *Zippalanda: Ein Kultzentrum in hethitischen Kleinasien* (Texte der Hethiter 21. Heidelberg: Universitätsverlag C. Winter, 1994 (reviewed by R. L. Gorny, *Zippalanda and Ankuwa: The Geography of Central Anatolia in the Second Millennium B.C.* JAOS 117 (1997): 549-557).

⁵ KBo is an abbreviation for Keilschrifttexte aus Boghazköi and KUB is the abbreviation for Keilschrift-Urkunden aus Boğazköy.

⁶ This should also aid us in tracing the roots of the Stormgod's cult much further back into the earliest periods of the mound's history and connecting that evidence with the areas of the mound where we are uncovering evidence of the cult's earliest existence.

⁷ I would remind readers of this article that excavation began in the Eastern Trench primarily as a salvage operation in 1994 when there was fear that water from the lake growing behind the newly built Gellingüllü Dam might engulf much of the site itself (Gorny 1994, Gorny *et al.* 1995). Excavation, therefore, began on the lower half of the mound instead of the top as is traditional. Since that time we have worked our way up the mound instead of down and this may account for some confusion on the part of a reader who is trying to figure out our excavation strategy.

to believe that this might be part of a construction that included a gate and processional way leading into the upper city⁸. This was reinforced in 2002 by the discovery of structure F 32 further inside the mound that may be connected with wall F 7 (below).

Wall F 20 was first uncovered slightly up the slope from F 6 and F 7 in 2001 and although this structure is built of much larger stones than either F 6 or F 7, it is apparently a much narrower wall, unless it too turns out to be a casemate-style wall like its predecessor (Gorny *et al.* 2002). Wall F 20 enclosed a Middle Bronze/Old Hittite transitional settlement that was apparently consumed in a conflagration characterized by reddish burned mudbrick that was strewn down the slope beneath the wall. While we have only excavated wall F 20 along the east side of the mound, a small defile observable along the slope traces the path of the wall as it skirts much of the northern slope with the characteristic red burned mudbrick littering the slopes below.

Wall F 5 lies about 1 m above wall F 20 and, while dating was uncertain at the time of its discovery (Gorny *et al.* 1995c), we now know that the structure is part of the early Old Hittite complex. The wall enclosed half of a room that seemed to stand alone on the edge of the mound when first uncovered in 1994 (Gorny *et al.* 1995c). It now seems that the room we found was actually inside the citadel wall (wall F 20) and dated to approximately the same period as that wall since it would have been below and outside of newly discovered wall F 68 which seems to date to the 15th century (below). There are two theories regarding the situation of this structure. On the one hand, one could imagine that wall F 5 was once connected to the superstructure of wall F 20 when both were in use, but that the connection was lost when wall F 20 collapsed (or was deliberately destroyed). On the other hand, since wall F 5 displays no evidence of the massive fire that clearly destroyed wall F 20, it seems more likely that the room delineated by F 5 was somewhat later in date, perhaps being part of a rebuild that took place soon after wall F 20 was destroyed.

In 2002 we recommenced work in square 800.930 that was designed to further articulate the area around walls F 6 and F 7. We had not worked there since 1994 and the reclamation of the walls excavated in the initial season allowed for a new appraisal of the relationship between those walls and wall F 20 (above). Soon after excavation began, we discovered that there was a beneficial result from the erosion occurring along the square's southern balk. While we were unable to see any connection between walls F 6 and F 7 in 1994, the erosion of the trench's southern balk gave us an extra meter of area to study, and within that area we could see that the walls either met or crossed (Fig. 4). After investigating the two walls, we determined that wall 6 was built over wall 7. A wall corresponding to wall 7 was expected on the north side of the passageway, but though we

⁸ When wall 7 was first uncovered in 1994, we found a large stone monolith resting on it and near the area we believed to be the entryway. This is reminiscent of Alişar where another monolith was found in a similar situation (von der Osten 1937: 8). Time did not allow us to articulate the wall or to investigate the monolith at that time, but we thought that this large stone could be part of the gate, or even a Hittite "huwaši" stone. This feature was among the factors that drew us back to re-explore the area in 2001 and 2002. As the wall was cleared again, we found the large monolith still resting precariously over its eastern edge. A small circular area in the stones of the addition may represent its original resting place.

were able to determine that the surface associated with wall F 7 had once been heavily plastered, we did not find the northern counterpart of that wall in either 2002 or 2003.⁹ The plaster is presumed to be part of the roadway into the town that had been laid directly over EB III wall F 42-F 43 and which lipped directly up to wall F 7 (Fig. 5). The corresponding north side of the gate must still be buried in the bulk further north of the trench.

Initially we thought that Wall F 6 was a simple stone wall about 1 meter in width that had been built to close off the gateway in the succeeding period. Investigations during the following seasons, however, indicated that this wall was, in reality, the front (exterior) face of a large 6 m wide casemate-style wall. The back (interior) side of the wall can be seen built into the slope of the mound, about 1.50 m higher than the exterior face. The overall project seems to have been done in various stages of construction beginning with an initial phase in which the lower part of the casemate was filled with ash, presumably from the wall F 7 destruction. The final product clearly covered the remains of Wall F 7 which we now date to the Old Assyrian Colony Kārum II period. Wall F 42-43 is apparently dated by the ceramic sequence to the EB III period, though it could conceivably correspond to the Kārum Kaniš III-IV period.

Important work was undertaken in a sounding behind wall F 20 during both the 2002 and 2003 seasons (Fig. 6). In 2002 we decided to work behind wall F 20 as a means of retrieving a vertical picture of the area. A small 2 x 2 m sounding was established directly behind the wall and in this exposure was discovered a thick Middle Bronze Age occupation that existed prior to the construction of the large circuit wall F 6. Excavations in this sounding revealed the corner of a significant building, perhaps a tower. The structure is designated as wall F 32 and is characterized by door F 39 which is blocked up but which would have once given the inhabitants entry to the structure from inside the city. The construction is situated on the slope beneath the level of the F 6 casemate wall and is on the same orientation as wall 7, suggesting it may have been part of the early Karum II period gate system we have proposed for wall F 7. The whole structure was covered with soil prior to the construction of the large circuit wall of which F 6 is but one segment. Below F 32, and sitting on a lower manifestation of the slope, we also uncovered wall F 40. This structure was associated solely with EB III pottery and is probably contemporary with EB III fortification wall F 42 situated beyond the perimeter of casemate wall F 6.

Several carbon samples were retrieved during the course of this project which provided us with radiocarbon dates for the area behind wall F 20. These samples came from the matrix into which wall F 20 was dug (i.e. the top of wall F 6) and indicate a date of ca. 1750, so based on that date, Wall F 20 (and wall F 5) must, therefore, represent a later (possibly Kārum Ia period) settlement with wall F 6 dating to the Kārum Ib period and wall F 7 (along with F 32) representing an even earlier (Kārum II) manifestation. Wall F 42-43, along with structure F 40, are most likely dated to the EB III which fits extremely well with the pottery sequence found in the sounding behind wall F 20.

⁹We did expose a small portion of an apparently unrelated wall in the northwest corner of the trench.

Excavations in 2004 and 2005 took place somewhat higher in trench 800.920 (Fig. 7). This project has produced several rooms that are apparently inside the city, as well as pit F 41 which yielded interesting materials including an interesting 8-knobbed pot (Fig. 8), an inscribed bone inlay (Fig. 9), and part of a bone flute. An Old Hittite stamp seal was also found in the trench (Fig. 10), along with a small stone bull figurine which is almost identical to ones found at Alişar (Fig. 11).¹⁰ Just outside the structure's exterior wall was a step or bench on which pottery had once been set. Numerous vessels were found strewn in front of the bench and with parallels from Alişar, Maşat, and Ferzant (Glatz, forthcoming), the pottery can confidently be placed in the early Old Hittite period (Figs. 12-13).¹¹

Taking into account the c14 date of 1750 (above) for the sample taken from the level directly below this building (the matrix into which wall F 20 was set), it would not be unreasonable to understand this pottery as dating to approximately the same period, and maybe just slightly later, ca 1700–1650 BC. This fits rather well with the suggested date of ca. 1700–1650 BC for the stamp seal which is similar in style to others that predate the emergence of the Hittite Old Kingdom across central Anatolia and also seems to fit into the framework of dates from the latest Dendrochronological studies for central Anatolia.¹²

A few meters above these rooms in trench 800.910 we uncovered the remains of an Old Hittite period wall F 68 that may date to the 15th century and which may also be contemporary with wall F 26 in Area 3 (below). F 68 appeared during the last few days of the 2005 excavation season and is still in the preliminary stages of excavation. At present, the wall is at least 4 m. thick. Its composition seems to be mostly rubble fill inside a mudbrick casemate, though a casemate design is only speculative at this point because of incomplete excavation. The fill is composed of materials that seemingly date to the 15th century, but with the uncertainty of dating in the Hittite ceramic repertoire, its possible that there may be later materials in the mix and that the wall could date to the earliest part of the Hittite Empire period.

Not surprisingly then, Hittite Empire period materials have come in some abundance from areas higher up the slope and because there is still a thick layer of Hittite material above this wall, I suspect that wall F 68 is early and will be followed by a later Hittite Empire period wall that should prove to be contemporary with and connected to the Monumental gate on the mound's north slope (below). Although the Hittite materials

¹⁰ I believe that a bull figurine found in lower portions of the Old Hittite temple confines is significant. Since the Stormgod of Zippalanda is probably worshipped in the form of a bull, the bull figurine most likely represents the Stormgod of Zippalanda. The fact that an almost exact parallel was found at nearby Alişar physically suggests that the same cult is represented in both sites and since we know from the texts that the Stormgod of Zippalanda was also worshipped at Ankuwa (Alişar), it provides tangible evidence for what the texts already attest to, the worship of the Stormgod of Zippalanda in both Zippalanda and Ankuwa.

¹¹ In fact, the entire material culture is very similar to what von der Osten found at Alişar for this period, so what we find at Çadır Höyük may well tell something about what happened at Alişar in the subsequent Hittite Empire period which is poorly represented in that site's excavated materials (cf. Gorny 1990, 1996b).

¹² Maryanne W. Newton and Peter Kuniholm, A Dendrochronological Framework for the Assyrian Colony Period in Asia Minor, *TÜBA-AR* VII 2004: 165-176

are covered by Byzantine, Hellenistic, and Iron Age materials, the heavy admixture of Hittite pottery in those remains may indicate that Hittite levels are not far below.

III. THE TERRACE (AREA 2)

Work on the terrace was confined to the sounding first established in 2001. Work here was intended to document the chronology of the terrace and to explore the possible existence of a Kārum-style settlement in the area adjacent to the main mound. Initial results yielded only classical materials, but after digging through a sterile layer of soil, the project produced a fill layer composed of pottery from both the Old Hittite and Middle Bronze Age periods. A small round installation lined with Old Hittite pottery was found 3.5 m below the surface and this renewed expectations that we may eventually find the remains of an Assyrian commercial establishment there. Further work will be needed, however, to determine the extent and significance of second millennium settlement on the terrace.

IV. THE LOWER SOUTHERN EXPOSURE (AREA 3)

Limited work was done in the Lower South Trench after the 2001 season. It remains clear, however, that Phrygian builders cut into the earlier Hittite remains in this area, destroying much of the second millennium architecture. This area was also the site of the so-called “Hittite House” which was uncovered in 770.880 (Gorny 2002:116) and the place where we discovered what is presumed to be a silo in 770.890 (Gorny 2002:112). With the discovery of a cylinder seal dating to approximately 1400 BC in this same area (Gorny 2002: 116), we have come to believe that this was a storage/administrative area and that the “Hittite House” with a large bottle found leaning against the wall *in situ* is only part of a larger magazine or storage complex that we know from Hittite texts existed at Zippalanda.

V. THE CITADEL (AREA 4)

The citadel itself, up to this point, has yielded little in the way of Hittite remains, ostensibly because of the thick layer of Byzantine and classical period remains overlying them. Nevertheless, there are hints of what is to come. It appears from the section at the top of the Eastern Trench, for instance, that the Byzantines filled the area with at least a meter of soil in order to level the crest of the mound and then built their own buildings into that matrix. Somewhere below this fill level lies what we believe to be the citadel of the Hittite Empire period settlement. Hittite ceramics are common in the soil excavated from the upper level of the Eastern Trench, and, although a Hellenistic and/or Iron Age level may also intervene, we expect the last Hittite Empire period level to appear before much longer. Knowing as we do from Popko’s analysis of Zippalanda’s topography in the Hittite texts, we believe that a temple dedicated to the Stormgod of Zippalanda lies not far below, on the highest part of the citadel, and we fully expect to find remains of that

structure somewhere beneath the Byzantine and classical remains.¹³ Continued Excavation at the top of the Eastern Trench in 2006 should tell us exactly how far down that will be.

VI. THE UPPER SOUTH SLOPE (AREA 5)

Squares 790.890 and 780.890 were originally opened in 2001. They initially produced a great deal of Byzantine, Classical, and Late Iron Age materials. In 2003, the area yielded a cache of Late Iron Age pottery, perhaps best exemplified by a beautiful uniquely painted vessel (Gorny 2004). The following 2004 season produced what appeared to be part of the Middle Iron Age wall and one pier of a gate system. The 2005 excavations reached the Early Iron Age and perhaps the enigmatic “Dark Age” level that followed right on the heels of the Hittite Empire period. Materials consist of pottery with a second millennium feel and look but with a variety of designs that are closer to the Iron Age than anything else. The pottery was found in association with a fascinating structure of unknown function (Fig. 14). Besides the unique pottery are at least three round plaster surfaces purposely built in association with the building while a fourth plaster surface was found directly above the structure. Also of note is that the area produced a large quantity of spindle whorls, so one has to wonder if there is some connection to the weaving industry. Various pieces of evidence suggested that the plaster may have served as a work surface or part of a working area for textiles and/or wool processing as there was a very large number of perforated disks and broken perforated disks, which were almost certainly spindle weights/whorls, as well as a couple of loom weights. A little metal hook also came from that area, perhaps for the hanging of wool. It may be that this was an area for washing or laying out washed wool. Alternatively, it could have been an area for dyeing. Any one of those explanations would explain the “waterproofed” nature of the plastered circles. It also seems to have been burned intentionally before plastering, to harden the earth¹⁴

¹³ The placement of the Temple of the Stormgod of Zippalanda is of some interest. We are looking for the Temple of the Stormgod of Zippalanda to be located on the eastern height of the mound as it is not only appropriate as the highest point on the site, but because the Hittite text describe the situation of the temple as above (šer) while the palace is said to be below (kattan). While we have interpreted this to indicate the temple was located on the citadel and the palace on the terrace or at the base of the mound, it is entirely possible that the palace could be on the lowest part of the citadel. Because the surface of Çadır's citadel is somewhat higher on its eastern side than on the western side, the mound's topography might well fit the description in the texts with the temple approached on the higher eastern side through a series of terraces from the palace situated on the lower western side of the citadel. We can envision a situation where the citadel is enclosed with a temenos wall but which also has interior courts with the upper level of the citadel separated from the lower level by at least two courtyards. This arrangement is not unlike the situation found on the citadel of Büyükkale in Hattuša where the upper part of the fortress is divided into three sections by intervening courtyards (Neve 1982). In fact, the Zippalanda texts seem to indicate just such an arrangement where in the Fall and Spring festival the texts indicate that there is an inner court of some sort where the palwatalla man stands which is separated by steps from another, presumably higher court into which the Priest steps (Popko 167). If this is the case, we may expect to find several courtyard levels on top of Çadır's Hittite citadel.

¹⁴ If we keep in mind the fact that the Hittites granted special status in laws 50 and 51 to the priests and weavers of both Arinna and Zippalanda that made them exempt from the luzzi requirement, we may find that we have a relic of that

The section of the Upper South Trench shows that the Hittite level lies immediately below this Early Iron Age structure in square 780.890. The Hittite remains are characterized by a layer of mixed debris scattered above the large mudbrick construction F 26 that was first revealed in 1998. Much of the debris is distributed as alternating levels of ash and bone in some of the more well-defined areas. Other extensive areas of mixed debris can be observed in the section littering the entire extent of F 26. That structure, which seems to be a mudbrick circuit wall, is *at least* 2 m thick (with the interior portion still buried beneath the balk) and is preserved to a height of about 1.7 m. Curiously, the circuit wall displayed no stone foundations of its own in this area and appears to be constructed on the remains of an earlier Chalcolithic/Early Bronze period mudbrick wall.

Wall F 26 had two later walls, F 24 and F 25, cut into it and running perpendicularly across it. Wall F 25 was cut into the western side of the trench, along with pit F 27. Wall F 25 also cut into pit F10, so in order to excavate pit F10, we had to remove wall F 25. This was not a clean removal as the wall ran diagonally into the trench's western balk where some of it still remains to be removed. Nevertheless, the procedure to remove wall F 25 showed that the wall, which was dated by pottery to the Hittite Empire period, was actually built over another wall (F 28) that was constructed of much larger stones and apparently cut into the mudbrick of wall F 26 even before wall F 25 was laid above it. This suggests that there are several phases of the Hittite Empire Period represented here, which is what one would expect for a site such as Zippalanda.

The above scenario seems to be confirmed by other facts. Wall F 24, on the eastern side of the trench, separated later fire installation F 5 from the rest of the area. The fire installation was dated by radiocarbon samples to ca. 1360 BC, which means that city wall F 26, just beneath it, must be earlier, *at least* 1400 BC., and based on the fact that a lower wall (F 28) underlies wall F 25, we can assume that wall F 26 is probably even earlier, perhaps in the 15th century, as we suggested above. Neither Wall F 24 nor F 25 (nor the larger wall beneath F 24) appears to be connected to an exterior crosswall. This wall presumably crashed down the slope as a result of erosional activity over the centuries and many of the Hittite artifacts found in the wash of the slope may have come from the collapse of that structure (for example, see Gorny *et al.* 2002, pp 118-120).¹⁵

In addition to the walls noted above, various pits had been cut into the mudbrick matrix of F 26 and these provided further evidence of the wall's date (Gorny *et al.* 2002: 118-19). The largest of these pits, pit F 10, contained numerous soil lenses and yielded a great deal of Hittite Empire period pottery in 2000, including several miniature Hittite votive plates (Gorny *et al.* 2002:119, Fig. 10). Pit F 10 was also stratigraphically below

situation still being manifested in the remains of the "Dark Age" settlement where the weaver's craft was still being practiced in keeping with the tradition of those laws.

¹⁵ Catherine Kuzucuoğlu has speculated that one or more discharges of the Eğri Su may have hit the mound at various times in its existence and washed away portions of the mound, creating a small delta on the opposite side of the watercourse (personal communication). Perhaps this explains how the exterior crosswalls connecting walls F24 and F25 disappeared.

Wall F 28 (above) which adds yet another phase of activity to the Empire period history of the mound. Similarly, pit F 27, just north of pit F 10, also held only Hittite Empire period pottery. As with the walls (above), the pits also suggest that wall F 26 was built prior to the main stage of the Empire period, and probably in the Old Hittite period. Judging from what we have now observed in our investigations across the mound, wall F 26 seems to be contemporary with wall F 68 in square 800.910 of the Eastern Trench. This wall is almost certainly Old Hittite, probably datable to the 15th century, though its precise date will have to be substantiated by further excavation. A similar mudbrick construction, which may be contemporary with both F 26 (Upper South Trench) and F 66 (Eastern Trench), seems to be appearing under the monumental gate that dominated Çadır's northern slope (below).

VII. THE NORTH SLOPE (AREA 6)

The decision to open preliminary excavations on the north slope in 2002 was due, in part, to robber trenches that had previously exposed two piles of large stones that apparently had been used as the foundations of a wall located three-quarters of the way up the north face of the mound and situated roughly in the middle of the north slope (Gorny 2004). The rock "construction" in square 850.800 appeared to be restricted to one area of the slope and did not continue around the mound. The stones seemed to be organized into two stacks of large rocks that were stepped up the slope on either side of an open space. With the discovery of second millennium pottery in the robber's spoil heap, we postulated that this might be two sides of a monumental gateway from the second millennium, so in order to investigate this structure, we opened a small east-west trench running between the two robber trenches and found that, as we had surmised, the wall did not continue across the span, but seemed to have a small, rather than large, entry way situated between the two stone constructions (F1 and F2). Pottery from above the gateway was a combination of Phrygian and Late Iron Age wares, including several pieces of what we take to be white painted Achaemenid pottery, along with an admixture of Hittite wares.

Initial excavations in 2002 confirmed that the stone construction on Çadır Höyük's northern slope was, indeed, an anomaly for the site. The opening in the gateway has not been completely excavated, but is postulated to be approximately 5 m wide. At the base of the stones is an abundance of yellow mudbrick, so we may have a parallel to the situation on the south slope where the Hittite city wall is built on an earlier mudbrick predecessor. If the mudbrick is datable to the 15th century as we theorized above, the gate would probably have been built in the fourteenth century or later. The style of construction recalls the platform built for Temple I at Boğazköy and suggested a Hittite origin for the construction. Excavation later confirmed this initial intuition as Hittite pottery attests to its second millennium construction.¹⁶ The structure's orientation is

¹⁶Unfortunately, vandals pushed many of the rocks from the gate foundation down the hill during the last several years. Others have probably been taken over the centuries and used in the construction of other building in the region's various

aligned with the terrace and faces the height known as either Yazılıtaş Keh or Maltepe which also links the gate with the second millennium settlement now known to have existed on the terrace (above).

By 2005 we could tell that the gate continued to exist in some form for several centuries after the fall of the Hittites. During the (Early?) Iron Age, a small stone retaining wall was built on the east side of the gate entry to serve as the interior facing of a narrowed entry. The gateway was further narrowed on the west side by a wall of mud bricks and its interior passage was paved with several rows of small stones that created a 1 m wide path which can still be observed leading into the mound (Fig. 15).

An abbreviated 2 x 6 m sounding was undertaken in 2004 in order to further test the date of the structure. Two rooms were identified directly below the large rocks that had tumbled from the larger structure. These may have been guard rooms protecting the exterior part of the gate. Inside the higher of the two rooms were found materials from the late Hittite Empire period. Small stones just west of it may be part of a cobbled *glacis*. The excavated rooms are clearly Hittite in date, but how they were actually connected to the rest of the gate structure (which sits just slightly above them) remained unclear. Hittite pottery found near the base of the large stone structure suggests that the Hittites were involved with the structure's overall construction, which correlates with the materials found in the rooms.

Time, however, precluded a major effort in this area until 2005 when we were able to mount a larger investigation of the gate. Those excavations proved to be very interesting. As we opened more of the gate area it became clear that the original entryway was approximately 5 m in width. Above the Early Iron narrowing we uncovered a later (Late?) Iron wall that blocked off the entire span of the original gate entrance (Fig. 15). The western pier of the original gate is still unexcavated but where the eastern portion is cleared, one can see how the end of the (Late?) Iron Age wall met the interior portion of the gate. The sides of the gate have tumbled down, perhaps in an earthquake or by hostile activity, but the foundations of the later wall that closed off the gate remains intact. Ceramic evidence suggests that this closure dates to the Late Iron Age while the earlier narrowing noted above must be of the Middle or Early Iron Age. The three levels of the gate passage are clearly seen in photos of the gate. Pottery from the gate and surrounding area, such as this neck from a large flask (Fig. 16), indicate that the original gate itself is second millennium in date. Things should get even more interesting. Since the structure is high on the slope, it must have been approached by steps or a ramp of some sort. A wide earthen ramp on the north side of the mound may have something to do with such an approach though it may be a *glacis* of the sort known from Boğazköy. It remains to more fully articulate its construction and function, both of which are goals for the 2006 season.

villages. In spite of this we continued on with the work in square 850.880 by opening up a 10 X 2 meter trench in 2004 that was intended to study the gate's history.

VII. ÇALTEPE (AREA 7)

During the summer of 2005 we undertook an informal investigation of the mountain called Çaltepe which lies across the valley from Çadır. No excavations have taken place on Çaltepe, but various observations made during those visits have led to the theory that Çaltepe could be Mt. Daha, the site of important festivities for the Stormgod of Zippalanda's cult. We know quite a bit about Zippalanda and Daha by virtue of the numerous texts found in Hattuša which describe the town and its cult. What we found on Çaltepe perfectly fits the requirements for what we know about the Hittite holy mountain and is a crucial link in our tentative identification of the mound and mountain with Zippalanda and Daha.

To begin with, we knew that Mt. Daha was very close to Zippalanda and Çaltepe is situated less than a kilometer away from Çadır Höyük. One can clearly see Çadır Höyük from Çaltepe and the height of Çaltepe is plainly visible from Çadır Höyük. This is significant in that the texts make it clear that the Hittite king is able to look down on Zippalanda from the spot of his activity as he bows to the city. It is also clear that the people in Zippalanda were able to see the activities on the mountain. In this respect, the proximity of Çaltepe to Çadır Höyük makes perfect sense and nicely fits the requirements of the texts. Taken together, these facts make Çaltepe an obvious candidate for Mt. Daha.

Secondly, KUB XLI 29 indicates that there is a building on Mt. Daha which served as a temple or center of worship for the Stormgod of Zippalanda. Texts also mention a gated-courtyard or what the Hittites called a *hílammar* building existing very close to the temple. Not coincidentally, the two most striking architectural features to be found on Çaltepe (in fact the only ones that I know of) are a large 40 x 80 m walled-in space just below the summit and a gated-courtyard compound (Hitt. *hílammar*) just east of the large building. The first of the constructions is located slightly below the summit of the mountain and is oriented roughly east-west (Fig. 17).¹⁷ The construction is characterized by a large open area within its walls and a series of what appear to be storerooms that line the area's western extremity. The lower western portion of the enclosure rises steeply after about 20 meters and settles into a rather level area for the last 60 meters. I think that the former area must be a forecourt while the raised eastern area covers the remains of a temple to the Stormgod of Zippalanda. No matter how the area is arranged, however, there is plenty of room for a temple here. Temple 7 in Boğazköy's Upper City, for instance, is about 30 x 40 meters and would fit nicely within these temenos walls (see Parzinger and Sanz 1992, Plate 79). The temple would have been located very near the peak of the mountain and from this vantage point the cult personnel

¹⁷ Once the king reached the main temple area, there is a nicely carved set of steps east of the temple that are oriented towards the summit where I presume the original altar to the Stormgod of Zippalanda once stood. The area is now covered by a later Iron Age tumulus. In the texts, the "the hamina man" apparently goes up to the top of the mountain, probably with the king. Then, the "Man of the Stormgod" makes a pronouncement for Stormgod to awaken and take note of the king who is noted as being "below", presumably at the temple, and subsequently opens the gate of the temple (Popko 217). Some time later the king emerges from the temple with the other dignitaries.

could certainly see the city, and the people in Zippalanda could easily see the festivities on the mountain (Fig. 18, also cf. Popko p. 217).

The actual plan of the Çaltepe building awaits excavation but seems to resemble a slightly elongated version of Temple 2 in Hattuşa's Upper City (Parzinger and Sanz 1992, Plate 79) where the temple is placed in a *temenos* area enclosed by a privacy wall. The area of Temple 2 is approximately 50 X 40 m so that building could fit into the Çaltepe area with room to spare. According to the plan for temple 2 (and the Çaltepe building), the cult participants would enter the door of the building and find a series of storerooms on the right, just as on Çaltepe. The storerooms would continue across the back portion of the structure, thereby enclosing a court (as proposed above) and leading to a cella situated on the eastern side of the cult area. A portico may have fronted the storerooms as in the case of Temple 2, and perhaps, even the antechambers leading to the cella.

The possible *hīlammār* is located on the eastern side of Çaltepe-Daha.¹⁸ It consists of a multi-roomed area having a large walled courtyard with two gates. The rocky space between the gates was once a surfaced courtyard where the king stepped out of his coach and into a chariot he would use to depart from the mountain. A separate room along the side of the courtyard may have been a stable or a place to temporarily keep the king's horses and travel accouterments. It is probably not a coincidence that the two gates of the courtyard are oriented towards Alişar and direct traffic south from the mountain towards Alişar (Ankuwa) and the main road south. A road descends the gentle slope behind the mountain that leads through the present day village of Karahacılı. From there the road would have split with one fork continuing towards Alişar while the other splits off to Salur Höyük (Katapa) on the north slope of Çomak Dağ. Both settlements would have been reached in a relatively short period of time by the king's chariot as described in the Hittite texts. The Stormgod of Zippalanda's image was sent back to its primary temple in Zippalanda after the king's departure and a herald is sent to either Ankuwa or Katapa to inform the king of its safe return home. The king returns to the Capitol after completing his functions in those two towns via a more northerly route.

VIII. ANALYSES, FINAL OBSERVATIONS, AND CONCLUSIONS

Excavations at Çadır Höyük since 1994 suggest that the site was the center of important religious activities over the entire span of its existence. Evidence has been uncovered indicating that from the Chalcolithic through the Byzantine periods, religion played a key role in the settlement's historical development. The same was especially true during the second millennium when we believe the site functioned as a major exponent of the Hittite cult, maintaining a continuity of function that existed there for seven millennia.

¹⁸ The *hīlammār* was originally noted in our 1998 survey as site 98-6 (Gorny *et al.* 1999: 11). It was not, however, associated with Çadır Höyük at time because the connection with Zippalanda had not yet been proposed. Further exploration revealed the *temenos* structure on Çaltepe's northern slope and allowed the previously discovered structure to make sense as the *hīlammār*.

The full extent of the second millennium settlement is only beginning to become apparent. Ample attestation of the period comes from remains found in multiple areas. It would be fair to say that Hittite materials are the most abundant materials found on the site and those remains demonstrate that the Hittite settlement was much more extensive than we suspected on our arrival at the site in 1994. In the east trench (Area 1), for instance, we now have a sequence of occupation spanning the EB III (ca. 2500 BC) period all the way through the final days of the Hittite Empire period (ca. 1175 BC). This second millennium sequence is substantial and spans most of the 40 m step-trench we cut into the mound's eastern slope. In addition, there is a monumental gate from the late second millennium situated on the northern slope, while impressive Hittite structures are found on the lower south slope and additional second millennium remains are known from the terrace. The prominence of the settlement is underscored by the presence of the presumed Hittite temple and *hilammar* on nearby Çaltepe

Second millennium pottery is abundant and greatly informs us about the history of the mound throughout the Hittite era. Included in the Hittite Empire ceramic repertoire are pieces of thin porcelain ware vessels, Hittite painted wares, and the ubiquitous mass produced plain wares. In addition, we have observed the notable red burnished ware specific to cultic vessels found in Empire period deposits at Boğazköy-Hattuša. From the style and abundance of the Empire period ceramics, it has become clear that Hittite Empire period occupation existed much higher up on the mound than earlier guessed and was of a greater significance than first assumed.

Significant Old Hittite levels have also been identified below the Empire period remains with pottery characterized by plain wares, goldglimmer ware, red striped or banded ware, and the beautiful red polished wares associated with the earliest Old Hittite period at places such as Alişar, Ferzant, and Kültepe. Overall, the second millennium pottery speaks to the long history of Hittite occupation at Çadır and demonstrates continuity with both the preceding Old Assyrian Colony Age and the subsequent Early Iron Age period.

Çadır was clearly a significant Hittite settlement throughout the entire second millennium, a situation that we are utilizing to better understand settlement at nearby Alişar and one that could ultimately transform our understanding of that site, along with the entire geography of central Anatolia in the second millennium. Of particular note for the Hittite period is the cultic character of Çadır. Not only have we found the small votive bowls so common in Boğazköy cultic contexts, but we've also discovered sherds from red burnished ware cult vessels, along with small idols and figurines. Of added interest is the presence of several clay wheels, presumably from wagon models intended to carry images of the gods, in this case perhaps the Stormgod, thus carrying on a tradition that must have begun centuries before.¹⁹

¹⁹ R.L. Gorny, An Unpublished Relief Sherd from Alishar Höyük. Pp. 175-188 in *Studies in the Archaeology of Israel and Neighboring Lands in Memory of Douglas L. Esse*. Chicago: Oriental Institute of the University of Chicago (SAOC 59).

The emergence of Çadır Höyük as an important Hittite site calls for a reexamination of the current ideas concerning history and geography in the Kanak Su Basin. Several lines of thought have been advanced in support of the idea that Çadır Höyük is the site of ancient Zippalanda and a variety of additional arguments that could be brought to bear in support of the proposed identification. In short, while the location, pottery, and topography all seem to fit what is known about Zippalanda, the most important element in the equation may be the architectural remains found across the valley on the height of Çaltepe which we assume to be the Hittite holy Mount Daha. These topics will be the subject of future articles.

In the meantime, of course, we continue to investigate Çadır as a whole, hopeful of bringing more overall meaning to the mound's constituent parts. While events related to the rise and fall of the Hittite state are vitally important, I believe they are even more significant as part of a historical process that extended from the Chalcolithic period through the Byzantine period, and which also brought the second millennium Hittite settlement to a prominence that extended beyond the local Kanak Su valley. The association of Çadır Höyük with Zippalanda has the potential to provide a new and useful paradigm for understanding the problematic history and geography of central Anatolia. In this light, no matter how correct or how interesting such an identification may be, we are reminded that it only represents one piece in the more complex puzzle of how cultural entities arose in central Anatolia, how they maintained themselves, and ultimately, how and why they changed. Understanding the high degree of interconnectedness between the evidence from all these levels is critical in coming to a fuller understanding of, not only Çadır Höyük-Zippalanda's role in Hittite Anatolia, but the place Çadır Höyük occupied in the entirety of central Anatolian history.

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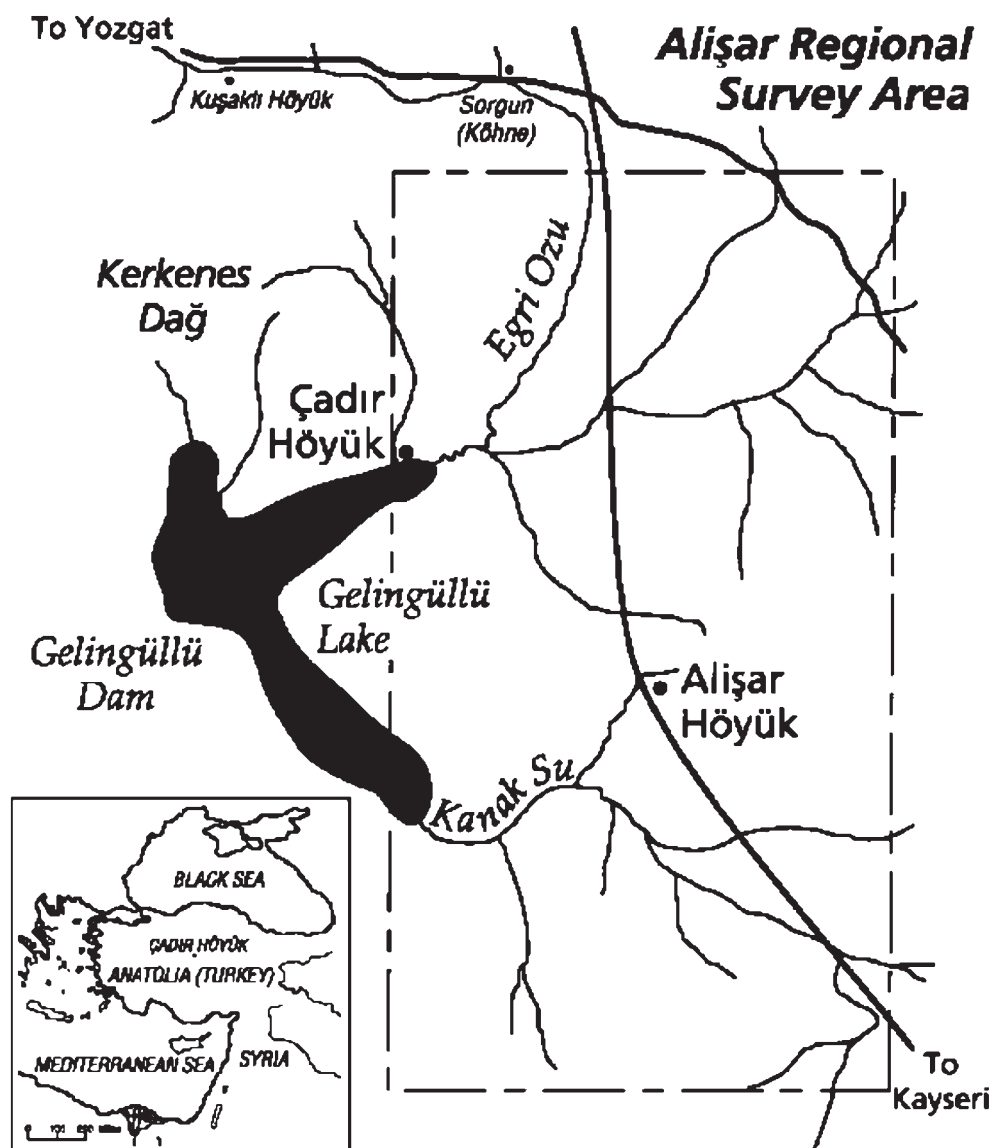


Fig. 1. The Kanak Su Basin showing Alishar and Çadır Höyüks.

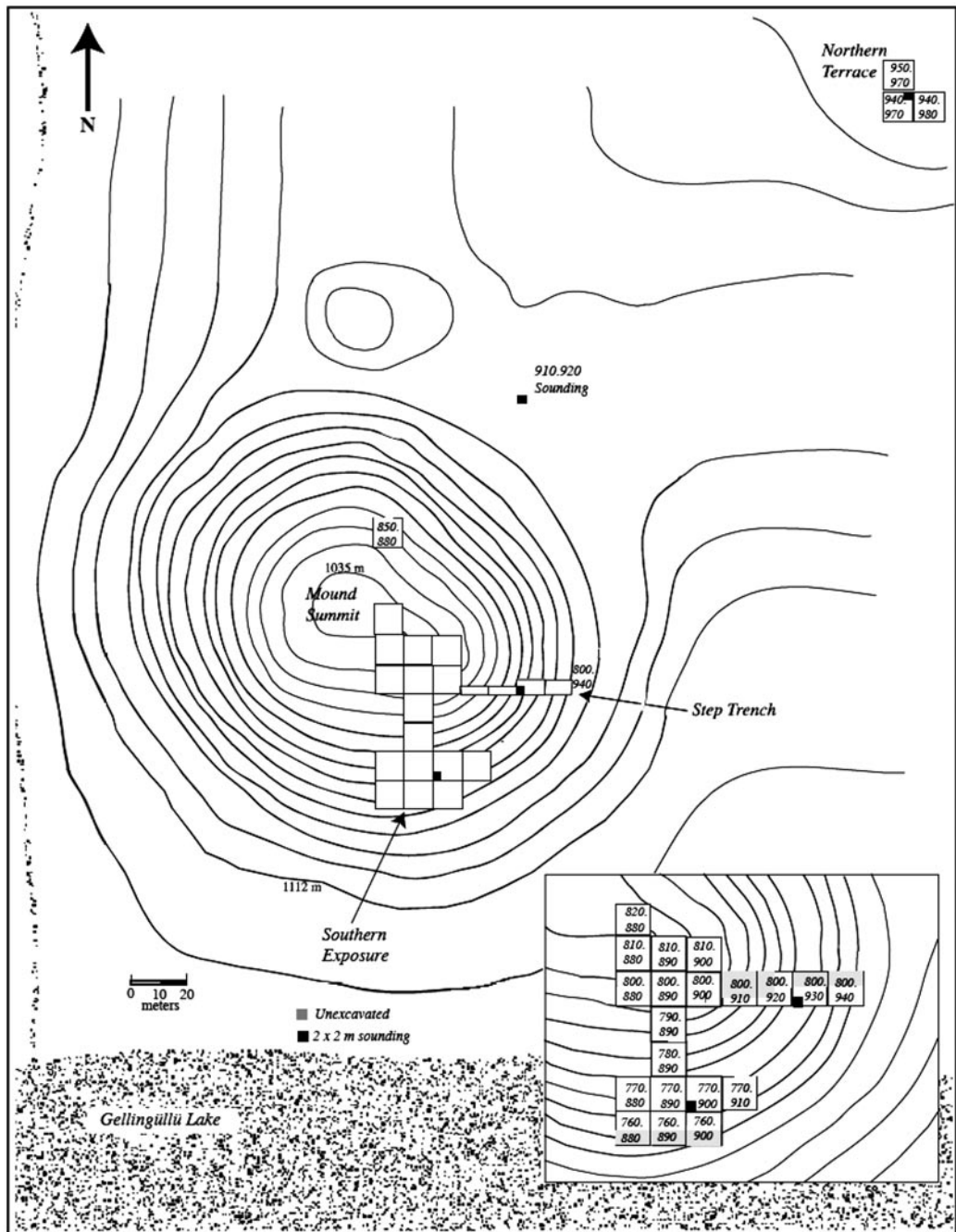


Fig. 2. Excavation areas on Çadır Höyük.



Fig. 3. Çadır Höyük (Zippalanda?) on the right with Çaltepe (Mt. Daha?) to the left.



Fig. 4. Front face (F 6) of (Karum Ib) period casemate wall with ash-filled interior.



Fig. 5. Walls F 7 (top) and wall F 6 (right) showing plaster surface and EB III Wall F 43 (left).



Fig. 6. Sounding behind wall F 20 in Trench 800.930 showing Karum II structure.

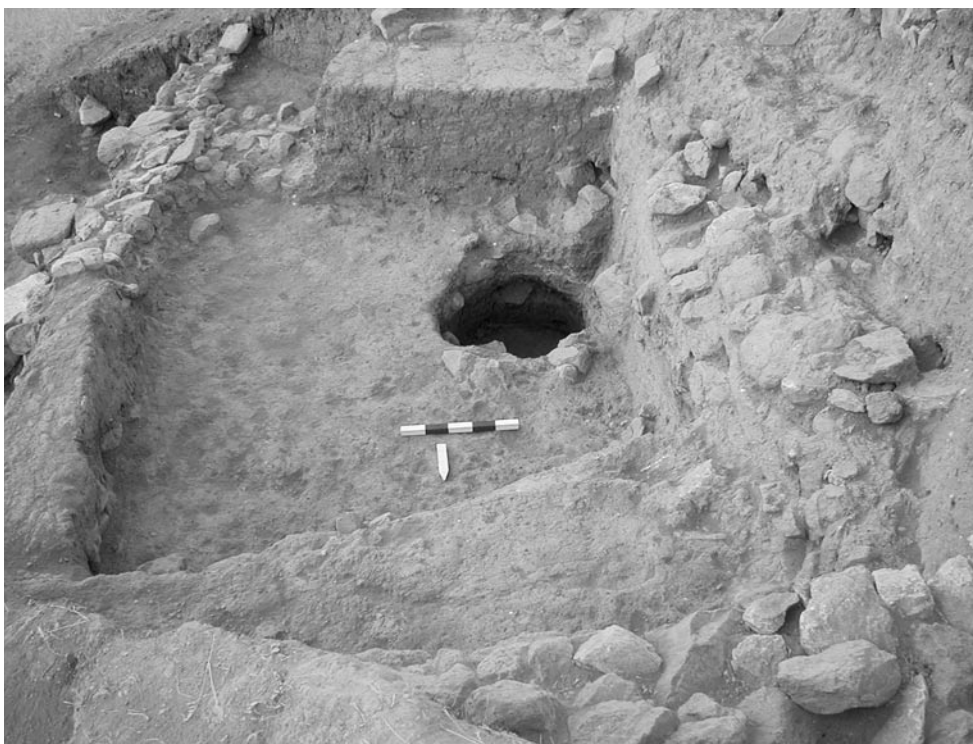


Fig 7. Interior rooms and pit F 41 from Early Old Hittite Period in trench 800.920

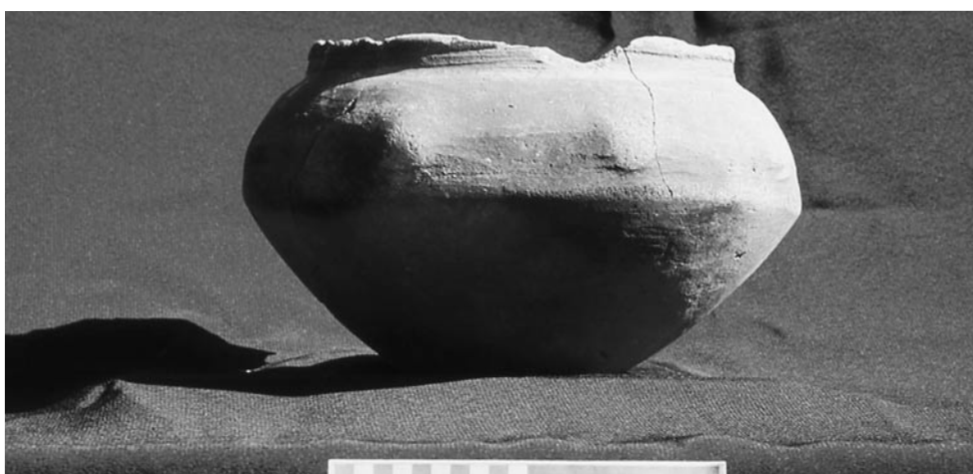


Fig. 8. Knobbed pot from Pit F 41 (Early Old Hittite) in trench 800.920

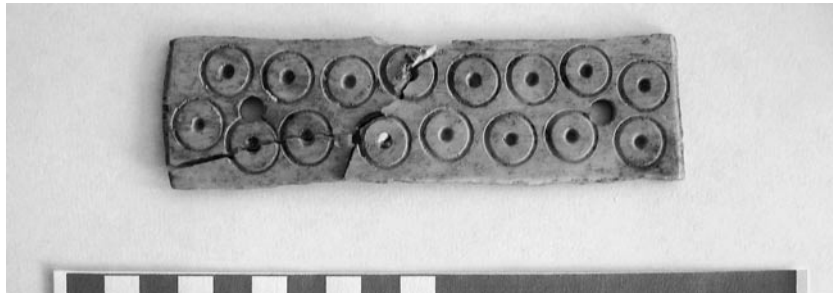


Fig. 9. Decorated bone inlay from pit F 41 in trench 800.920.



Fig. 10. Early Old Hittite Period seal from trench 800.920.



Fig. 11. Bull (?) Figurine from floor of building in Trench 800.920

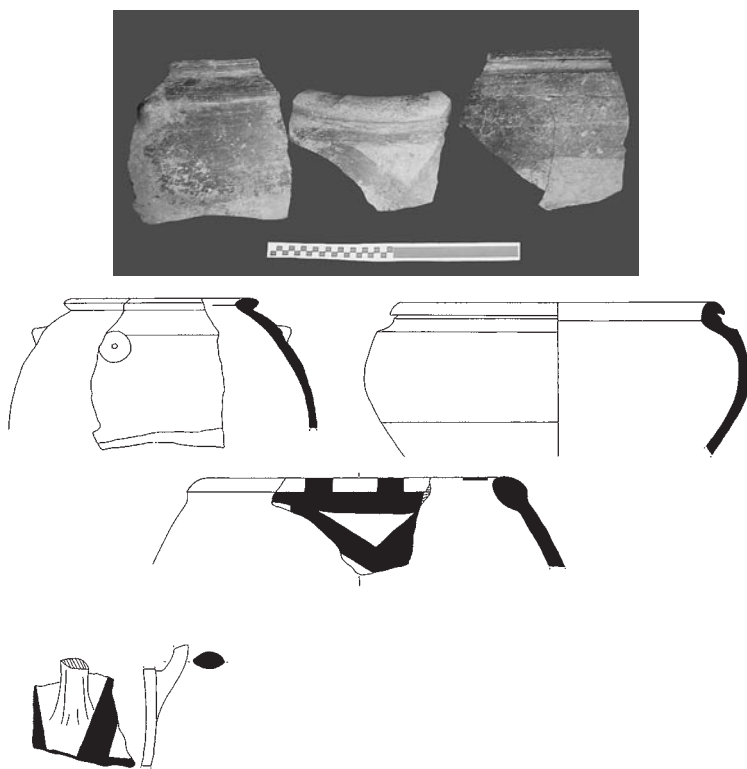


Fig. 12. Early Old Hittite Period Pottery from step/bench in Trench 800.920.



Fig. 13. Early Old Hittite Red Polished Pitcher from Trench 800.920



Fig. 14. Early Iron Age or “Dark Age” installation in trench 790.890.



Fig. 15. Late Iron Age casemate wall closing the second millennium gate (upper right).



Fig. 16. Neck of large Hittite period flask from second millennium gate area.

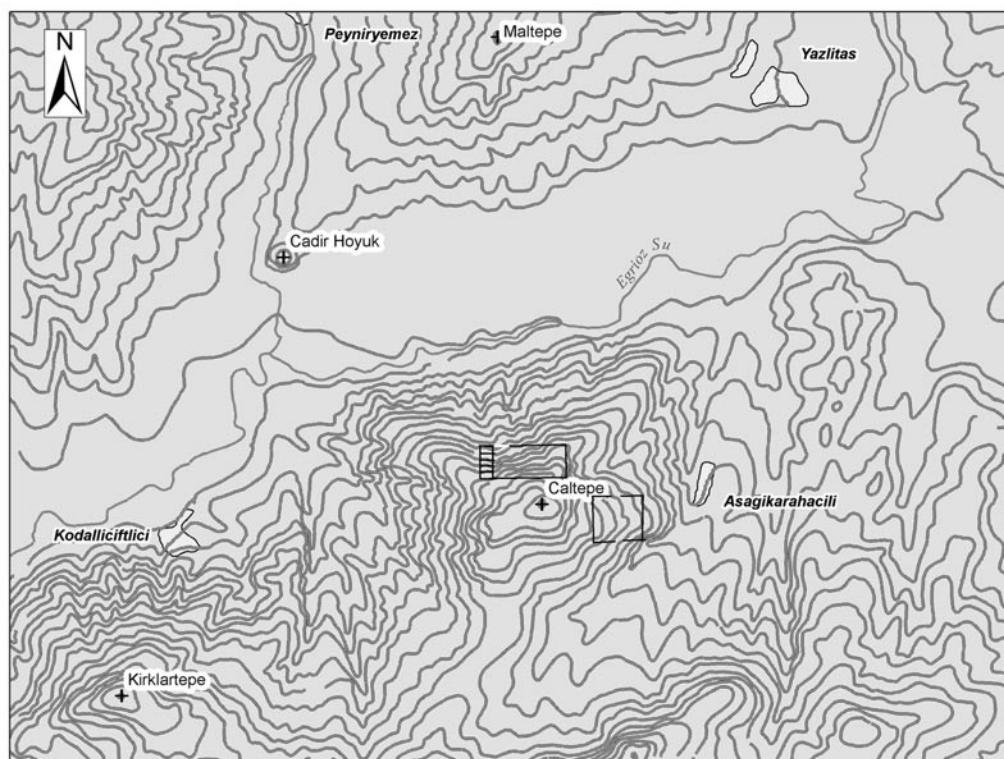


Fig. 17. Topographic map of Çaltepe showing approximate location of “temple and hlammar” (Note: buildings not drawn to scale).



Fig. 18. Storerooms (front) and wall line of the “Temple Area” on Çaltepe – Mt. Dahi (?).