# ADALYA



SUNA-İNAN KIRAÇ AKDENİZ MEDENİYETLERİ ARAŞTIRMA ENSTİTÜSÜ SUNA & İNAN KIRAÇ RESEARCH INSTITUTE ON MEDITERRANEAN CIVILIZATIONS

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#### SUNA-İNAN KIRAÇ AKDENİZ MEDENİYETLERİ ARAŞTIRMA ENSTİTÜSÜ YILLIĞI THE ANNUAL OF THE SUNA & İNAN KIRAÇ RESEARCH INSTITUTE ON MEDITERRANEAN CIVILIZATIONS

#### **ADALYA**

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# Silos in Neolithic Settlements of Burdur-Antalya Region

Gülsün UMURTAK\*

Agricultural production is generally considered a leading feature of Neolithisation, which forms an important milestone in the civilizational process. This big development of utmost importance leading to shifting from nomadic way of life to the sedentary way of life certainly brought with it numerous problems and innovations. One of these problems must be the storage of agricultural produce (mainly grains and legumes). Our article deals with the 'silos', the storage structures, uncovered at Bademağacı, Höyücek and Hacılar in the course of excavations which we have partaken – except at Hacılar – in Burdur-Antalya region during the last 50 years.

It is widely known that the prehistoric research in Burdur-Antalya region and thus use of the term 'Neolithic' for the Anatolian plateau started with James Mellaart's excavations at Hacılar¹ in the latter half of 1950s. A new period of excavations and research in the region was initiated by Refik Duru in 1978 and has covered the excavations at Kuruçay² and Höyücek³ as well as the excavations at Bademağacı⁴ as of 1993 (see Map). In the earliest settlements of Bademağacı, Höyücek and Kuruçay, which are dated to the beginning of Early Neolithic Period (EN), no traces of possible settlement architecture were found; however, following the floor of the layers and identification of pottery and other finds of these periods *in situ* allowed us to identify the settlement periods. It is possible to claim that common evidence has been attained at Bademağacı EN I/9-5, Early Settlements Period (ESP) of Höyücek and Kuruçay 13 regarding the wattle-and-daub architecture plastered with mud at these sites and simple sheds built using light and non-durable materials. The 'Aceramic (?)' settlements of Hacılar⁵ had a different line of development. In architecture,

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<sup>&</sup>lt;sup>1</sup> J. Mellaart, Excavations at Hacılar I-II (1970).

R. Duru, Kuruçay I. 1978-1988 Kazılarının Sonuçları. Neolitik ve Erken Kalkolitik Çağ Yerleşmeleri / Results of the Excavations 1978-1988. The Neolithic and Early Chalcolithic Periods (1994); idem, Kuruçay II. 1978-1988 Kazılarının Sonuçları. Geç Kalkolitik ve İlk Tunç Çağı Yerleşmeleri / Results of the Excavations 1978-1988. The Late Chalcolithic and Early Bronze Settlements (1996).

<sup>&</sup>lt;sup>3</sup> R. Duru - G. Umurtak, Höyücek. 1989–1992 Yılları Arasında Yapılan Kazıların Sonuçları / Results of the Excavations 1989-1992 (2005).

For a list of preliminary reports on Bademağacı excavations see R. Duru, "Bademağacı 2002 ve 2003 Yılları Çalışma Raporu", Belleten LXVIII, 2005, 519-560.

<sup>5</sup> In 1985 and 1986, an archaeological mission led by Prof. Dr. Refik Duru conducted excavations in search of the Necropolis and in the trenches opened extensions of the so-called Aceramic levels were found. On the red-painted

applications including stone foundations and mud brick walls appeared in mature phases of Early Neolithic (EN), contemporaneous with Bademağacı EN II/4 and Höyücek Shrine Phase (ShP); therefore, the first finds related with the mud silos forming the subject matter of the present study also appeared in this period.

The Neolithic settlements in Burdur-Antalya region do not have any large size jars suitable for food storage; yet, it is understood that the food was stored in bin-like immoveable elements. These bins were formed by bringing together individual plaques regardless of the settlement they are found in and dimensions they have. This group of immoveable elements had different dimensions probably based on the food type stored in them; the plaques of the small ones are generally 20x25 cm, medium size ones are 30x45 cm and large ones vary from 80x75 cm to 65x55 cm. The thicknesses of these plaques also varied from 3-4 cm to 8-10 cm based on their sizes; they were possibly manufactured from massive clay by use of moulds and then fired. These ready-for-use plaques were probably brought together somewhere inside the house and the bins or silos were formed. Most of the plaques do have holes in their corners opened during manufacturing (Fig. 6), thus it is inferred that they were tied together to form the bin. After tying together, the joining lines were plastered with mud from inside and outside to prevent it from falling apart. Thus we can say that sort of a prefabrication method was employed for the installation of these bins. It has also been observed that some silos were damaged during use, side plaques cracked or broke, and that they were repaired by fitting a second plaque from outside<sup>6</sup>. It is plausible to suggest that these bins were closed on top, possibly with a wooden lid.

The present study is about the silos of Bademağacı EN II/4, 3 and 2 settlements, Höyücek Shrine Phase (ShP) and the Neolithic levels of Hacılar, whose bins or chest-like constructions are large enough, i.e. their heights and side lengths are 40 cm and over, to hold grains. In spite of the lack of decent evidence regarding the contents of these immoveables it is plausible to think that they contained grains and other food.

## Bademağacı<sup>7</sup>

The earliest examples from Bademağacı<sup>8</sup> are the bins in the narrow passageway between the houses no. 1 and 2 in the EN II/4B level; their dimensions could not be determined due to heavy damage they suffered from fire and other factors.

At Bademağacı, the settlement pattern of level EN II/3 comprises nine houses, a narrow alley in between providing access and small squares (Fig. 1) and there is a storage system established in the narrow area between houses no. 1 and 3. The silo is a unit of six boxes forming a rectangular prism (Fig 2/a-b). Each box was constructed by putting together four clay plaques at right angles to each other. When two boxes came side by side then

floors exposed were potsherds attached to these floors; thus, it became necessary to reevaluate the subject: R. Duru, "Were the earliest Cultures at Hacılar Really Aceramic?", K. Emre – B. Hrouda et al. (eds), Anatolia and the Ancient Near East. Studies in Honor of Tahsin Özgüç (Tahsin Özgüç'e Armağan) (1989) 99-105.

<sup>&</sup>lt;sup>6</sup> R. Duru - G. Umurtak, Höyücek, 1989-1992 Yılları Arasında Yapılan Kazıların Sonuçları / Results of the Excavations 1989-1992 (2005) 15.

This project was supported by the Istanbul University Research Fund (Project nos. 1450/05052000, 1616/30042001, 5/27082002, 383/03062005, 531/05052006).

<sup>8</sup> I would like to extend once again my thanks to Prof. Dr. Refik Duru for supporting me in the publication of the silos and related other finds uncovered recently in Bademağacı.

they shared a common plaque. The square shaped plaques measured 65-70 cm and were fired before the construction of the bins; thus, they were able to stand firmly. The holes opened on the sides of some plaques are probably for tying them together. As the joining edges of the plaques were well plastered with mud, they seem to be rounded<sup>9</sup>.

No botanical residue has been attested in the bins but two small bowls and two medium sized jars, one of which is intact, (Fig. 13) were found in three bins. It is possible to think that the stores were empty when the big fire that terminated the settlement took place. In case they had been able to save the grains before the fire reached the bins, then they would not have left the pots behind. Besides, it does not sound plausible that the bins had been swept clean of any grain particles.

In the same settlement, there is another storage unit of three boxes, whose sides are damaged, adjoining the house no. 7 on the west. In one box a bone spatula was found while a necklace of stone beads was found in another box (Fig. 14). Again in the same level, there are some bins adjoining the house no. 9 on the east and house no. 4 on the southeast (Fig. 1); however, these were empty and their sides were damaged.

In Bademağacı EN II/2 settlement, a storeroom adjoining house no. 3 on the south and connecting to it via a doorway with a single step was uncovered. This storeroom has a silo with 12 boxes; besides, there is another silo with six smaller boxes adjoining the east wall of the building (Fig. 1; 3/a-b). The door of the storeroom opens to the work-area on the south. Here, the sides of the bins of various sizes were constructed with fired clay plaques and plastered over many times, conforming to the conventional method of the period. Due to thickness of the plaster it could not be seen whether or not there were holes in the corners to tie them together. At this point, it is worth noting that it is very difficult to reach the bins at the back without stepping inside those in front in order to fill them with grains or to take some out. All these bins were empty; thus, we can conjecture that the catastrophe that led to the destruction of the house took place at a time when these bins were empty in the village as was the case with the level 3. One small size jar was found in two boxes (Fig. 15). On the first large bin to the east of house no. 3 is a large schematised horn model (?) of clay (Fig. 8). It is thought that this horn was appliquéd on the wall which the bins adjoin and that it fell down when the house was damaged.

Among botanical remains recovered at Bademağacı are wild fruit such as apple, pear, plum and cherry, acorns, hackberries, wild pistachio; cultivated grains such as 'Einkorn' as well as 'Emmer', free threshing wheat, barley, and legumes, possibly cultivated, such as lentil, chickpeas, peas and vetch<sup>10</sup>. Kilos of burnt but well-preserved wild apple and pear have been collected from the Bademağacı EN II/4B, 4A, 4 and 3 settlements. In the 3-4 meter-long open area outside the houses of EN II/4B settlement, a heap of carbonised fruit spread out was found. Although no fruit residue has been attested in the storage bins of Bademağacı, it should be thought that such fruits were consumed fresh or dried.

<sup>&</sup>lt;sup>9</sup> R. Duru, "Bademağacı Kazıları, 1995 ve 1996 Yılları Çalışma Raporu", Belleten LXI, 1998, 716.

These data are taken from the short report by archaeobotanist Dr. Danièle Martinoli of Basel University. I would like to thank her.

#### Höyücek

In the Shrine Phase, numerous quadrangular or rectangular prismatic storage bins of various sizes have been found inside the structures, work-areas and courtyards. However, it was seen that the functions of these bins whose four sides and bottom were made from clay plaques were different. The bins understood to have been used as grain silos were found in front of the eastern wall of the building no. 2, inside building no. 4 and in the courtyard to the south of the building no. 3 (Fig. 4; 5/a-b).

Building no. 4, which is understood to have been the most sacred space of the Shrine, was a single room in the beginning and was later divided in two by building a platform and silos in the middle. However, the separating wall, bench and silos did not rise up to the ceiling. Thus, this immoveable construction did not actually divide the space in two independent rooms but rather blocked the access between the two halves. One bin was placed in the northern half and five were placed in the southern half. The bin in front of the eastern wall of the northern half was found full of burnt wheat (Fig. 7). Two bins adjoined the eastern wall while the remaining three adjoined the separating mudbrick bench in the southern half. In one of the bins adjoining the eastern wall a miniature table, on whose legs an animal head relief was appliquéd, was found (Fig. 10; 16). Besides, in the courtyard to the south of the building no. 3 was a fireplace and a group of silos; two bins were full of grains<sup>11</sup>. The plant remains gathered from the buildings no. 3 and 4 as well as the workarea of the Shrine Phase are grouped as 'Einkorn', naked wheat and legumes<sup>12</sup>. Among legumes are bitter vetch, chickpeas, lentil and peas. It was understood that in the bins placed in the courtyard to the south of building no. 3 and inside building no. 4 were put naked wheat and bitter vetch - very well sorted - and very little lentil has been found in them. On the floor of building no. 4 scattered 'Einkorn' samples beside naked wheat and bitter vetch were collected. They may have been dispersed or got mixed up on the floor when the catastrophe that brought the settlement to its end damaged their bins or they may even have been scattered on the floor of this most sacred place knowingly. All the cultivated plants that have been identified here were not grown by a group of priests and servants of this Shrine but rather were among the offerings including grains and legumes presented here.

#### Hacılar

The earliest settlement of Hacılar, called Aceramic (?) by Mellaart, has been studied in very small areas. On the level V, by some short stretches of walls and on the north of the oval oven and rectangular hearths were found two empty storage bins. The white ash level next to them is claimed to have come from food plants or weeds<sup>13</sup>. In the Aceramic (?) settlements of Hacılar, wild 'Einkorn', 'Emmer', naked barley, hulled barley, lentil as well as some weed species were recovered<sup>14</sup> and these results were considered as evidence for agricultural practices of that time<sup>15</sup>.

R. Duru - G. Umurtak, Höyücek, 1989-1992 Yılları Arasında Yapılan Kazıların Sonuçları / Results of the Excavations 1989-1992 (2005) 12.

M. Nesbitt - D. Martinoli, "Höyücek Plant Remains", in R. Duru - G. Umurtak, Höyücek, 1989-1992 Yılları Arasında Yapılan Kazıların Sonuçları / Results of the Excavations 1989-1992 (2005) 221-225.

<sup>&</sup>lt;sup>13</sup> J. Mellaart, Excavations at Hacılar I-II (1970) 5 Fig. 4.

H. Halbaek, "The Plant Husbandry of Hacılar", in J. Mellaart, Excavations at Hacılar I-II (1970) 198.

<sup>&</sup>lt;sup>15</sup> I. Mellaart, Excavations at Hacılar I-II (1970) 5.

In the level VI of Hacılar, which is known better, grains and legumes are reported to have been stored in plastered square bins standing a metre or more in height (Fig. 11a/b). These silos were placed adjoining the walls of, for example, houses no. 3, 4, 6 and 7 while they are found in kitchens (?) in some other houses. J. Mellaart reports that grains were recovered scattered on the floor as the silos disappeared <sup>16</sup>. In level VI, the plant types recovered, though mostly damaged by fire, include wheat types, barley, peas, lentil and bitter vetch. In house Q2, lots of peas were discovered in a storage bin while poorly preserved barley was found in another; in house Q4, the silo contained little lentil <sup>17</sup>.

### Kuruçay

Houses with stone foundations were uncovered in level 12 of Kuruçay and a very advanced defence system reinforced with towers - unique for this period - was brought to light in level 11<sup>18</sup>. It is thought that the northern parts of both settlements slid down the sheer slope due to floods coming down from the mountains on the east. About 40 grinding stones were found *in situ* on the floor of house no. 1 of level 12<sup>19</sup> and this suggests that grains were produced here or grains brought from elsewhere were ground at Kuruçay for local use. In this case, storing of these grains should have been also done at the settlement. As the northern part of the settlement in level 11 has disappeared as mentioned above, very poor traces of the fortified settlement have survived; thus, nothing regarding storage has been attested unfortunately.

#### **Evaluation and Conclusion**

In the archaeological methodical evaluation of architectural immoveables including the storage bins, it is open to discussion whether or not comparisons with near or far neighbouring regions make any sense or may lead us to correct results. The tradition of storing is thought to have emerged from environmental conditions of the settlement or the region or to have been inherited by the locals from the living practices of the preceding generations. On the condition that there is parallelism between two regions regarding, for example, pottery production, seal cutting or chipped stone industry, then it must be considered that there may exist parallelism between immoveables of both centres.

At Suberde to the east of Burdur-Antalya region, in a period earlier than the abovementioned settlements, cylindrical immoveables of 70-80 cm in diameter, supported with earth were found. Their sides were constructed with clay of 2-4 cm in thickness and they were buried in the ground. No plant remains, bone, ash or coal were found in them; however, J. Bordaz thought they were meant for storage purposes<sup>20</sup>. At Aşıklı, on the other hand, boxes of mud were identified in a structure in level 2; however, it is not possible to say that there is evidence for their use for storing food. At Aşıklı, where agriculture was in its

ibid, 15, Pl XVIa-b, XXa-b.

<sup>17</sup> H. Halbaek, "The Plant Husbandry of Hacılar", in J. Mellaart, Excavations at Hacılar I-II (1970) 196 List 200/B.

<sup>18</sup> R. Duru, Kuruçay I. 1978-1988 Kazılarının Sonuçları. Neolitik ve Erken Kalkolitik Çağ Yerleşmeleri / Results of the Excavations 1978-1988. The Neolithic and Early Chalcolithic Periods (1994) Pl. 10-18.

<sup>&</sup>lt;sup>19</sup> ibid, 9-10

J. Bordaz, "The Suberde Excavations, Southwestern Turkey, An Interim Report", TürkArkDerg XVII-2, 1968, 46-47 Fig. 6.

early phases but food gathering was going through its heyday, it is not known how the food gathered, such as hackberries which were abundant, was stored<sup>21</sup>.

It was mentioned above that some seals, box-like vessels, belt buckles of bone, previously known from Çatal Höyük, were found in the EN settlements of Bademağacı<sup>22</sup>. Yet, it is not possible to talk about a parallelism between the architectural traditions -except for the wall painting in Bademağacı- and pottery traditions of Çatal Höyük and Burdur-Antalya region. J. Mellaart compares the rectangular storage bins of Hacılar with the oval storage bins of Çatal Höyük and states that these were emptied via a hole opened in the level over the ground and stresses the differences he observed between the storage methods of both centres<sup>23</sup>. There is no parallelism between the series of oval silos in the depot of the Shrine 14 of Çatal Höyük level VI<sup>24</sup> and the silos which form the subject matter of this article but there are rectangular bins, closely resembling ours, together with oval ones in level III of the same site (Fig. 12a/b)<sup>25</sup>. In our opinion, the greatest difference in this topic arises from the dissimilarities between the architectural practices of the two concerned regions. It is seen that the silos of Çatal Höyük are found in the 'Depot Room', so called by J. Mellaart, in conformity with the planning of the buildings and settlement pattern<sup>26</sup>. However, in Burdur-Antalya region, food is stored, as mentioned above, inside the single-room houses, in the common area where the houses open to, in the 'Shrine Depot' or in a room specially spared for silos.

We are not able to gather much information regarding the storing of plants, seemingly quite a wide range, in Erbaba; however, J. Bordaz states that much burnt grains residue was collected from a pit, which cannot be certainly ascribed to level III<sup>27</sup>. It is also reported that storage systems and important amounts of grains residue were found in Can Hasan's levels 7 and 5. In level 5 of Can Hasan, a great part of a room was reserved for a series of rectangular storage bins placed side by side<sup>28</sup>. On the other hand, A. Öztan states that at Köşk Höyük, rectangular mud bins in the rooms or by the walls were used as silos during the Neolithic Period. In addition, there were some small boxes and tiny boxes of approximately 100-120x60-80 cm where stone tools such as the grinding stones and pestles were kept in. We also learn that animal horns were found stored in silos in the corner by the doorways of every house, at a later period, in level I of Köşk Höyük<sup>29</sup>.

In the regions to the north of Burdur-Antalya region, the burnt grains, grinding stone and wood remains found in building no. 13 of Ulucak Late Neolithic settlement all suggest

<sup>1</sup> I would like to thank my colleague Doç. Dr. Mihriban Özbaşaran who provided me with information regarding food storage in Aşıklı Höyük.

R. Duru, "Bademağacı Kazıları 2000 ve 2001 Yılları Çalışma Raporu", Belleten LXVI, 2003, 569 ff; "Bademağacı Kazıları 2002 ve 2003 Yılları Çalışma Raporu", Belleten LXVIII, 2005, 536.

<sup>&</sup>lt;sup>23</sup> J. Mellaart, Excavations at Hacılar I-II (1970) 15.

<sup>&</sup>lt;sup>24</sup> J. Mellaart, Çatal Hüyük, A Neolithic City in Anatolia (Albert Reckitt Archaeological Lecture British Academy) (1965) Pl. LXIVb.

<sup>25</sup> ibid, Pl. LXVb.

<sup>&</sup>lt;sup>26</sup> J. Mellaart, "Excavations at Çatal Hüyük, 1962. Second Preliminary Report", AnatSt XIII, 1963, 45-46, 59.

<sup>&</sup>lt;sup>27</sup> J. Bordaz, "A Preliminary Report of the 1969 Excavations at Erbaba, A Neolithic Site near Beyşehir, Turkey", TürkArkDerg XVIII-2, 1969, 60.

<sup>&</sup>lt;sup>28</sup> D. French, Canhasan I: Stratigraphy and Structures (1998) 21-23 Fig. 8.

<sup>&</sup>lt;sup>29</sup> I would like to thank Prof. Dr. Aliye Öztan for providing with information regarding the storage practices identified at Köşk Höyük.

the presence of a storage unit there<sup>30</sup>. A similar situation is also found in a structure in level X of Ilipinar; carbonised grains scattered on the floor, a grinding stone and silos of coarse clay were found in the north corner of the building providing with information regarding the structure which was damaged by a great fire<sup>31</sup>. There were also quadrangular clay bins with rounded corners inside the buildings in each level of Aşağıpınar. At the same site, there were also silos outside the structures in levels 5, 4, 3 and 2; these too were quadrangular clay bins and plastered and some had a capacity of 1 m<sup>3</sup> <sup>32</sup>.

As observed in Bademağacı and Höyücek, the silos are found in open areas and court-yards; and protection of them together with the food stored in them from insects and rodents as well as from unfavourable weather conditions. Although it is possible that these bins had wooden lids that have not survived, it is still difficult to explain how the botanical products stored in them were preserved. It is necessary to think of extra measures taken such as plastering with mud of the mouths closed with lids during long winter months in order to prevent mildew or germination. However, no evidence has been found regarding any insulation on their bottoms, sides or rims. Besides, no evidence has been recovered regarding use of posts to support a protective roofing or use of protective screens of light materials at both sites. It is understood that the problem of food storage has retained its importance in Anatolia through millennia and that various solutions and methods were sought after and experimented with<sup>33</sup>.

Due to the fact that the silos of Bademağacı EN II/3 are found in the open areas between the houses, it may be conjectured that they were meant for common use. It is not possible to reach a concrete result regarding the total number of silos and their holding capacity in any of the centres. However, wheat and lentil were the main produce stored in the silos of Bademağacı and Höyücek and we can propose the following capacities<sup>34</sup>:

## Bademağacı

	EN II/3 Silo with 6 boxes	EN II/2 Silo with 12 boxes	EN II/2 Silo with 6 boxes
Wheat	1770 kg	5239 kg	3073 kg
Lentil	1812 kg	5367 kg	3146 kg

## Höyücek

	ShP	ShP	
	Inside the Shrine – silo with 3 boxes	Outside the Shrine – silo with 3 boxes	
Wheat	1035 kg	615 kg	
Lentil	1059 kg	630 kg	

A. Çilingiroğlu et al., Ulucak Höyük. Excavations Conducted Between 1995 and 2002 (2004) 34.

<sup>&</sup>lt;sup>31</sup> J. Roodenberg, "Ilipinar X to VI: Links and Chronology", Anatolica XIX, 1993, 253 Fig. 3.

<sup>32</sup> N. Karul et al., Aşağı Pınar I. Einführung Forschungsgeschichte, Stratigraphie und Architektur (2003) 101-102.

J. Seeher, "Getreidelagerung in unterirdischen Großspeichern: Zur Methode und ihrer Anwendung im 2. Jahrtausend V. Chr. am Beispiel der Befunde in Hattusa", SMEA 42/2, 2000, 261-301.

<sup>34</sup> I would like to thank my friend Dr. Margaret Payne for calculating the capacities of the silos.

We have learned that, today, annual wheat consumption of a villager family of 4-5 people is approximately 750 kg. Thus, we can conclude that the silos with 12-13 boxes uncovered in various points in Bademağacı cannot be sufficient for the nine houses uncovered so far.

It is seen that the Neolithic silos were not only places for storing dry food but also special units related with bounty and abundance, continuity of life as well as very important evidence for plant remains and agricultural production. We do not consider that these storage bins were used as cupboards or chests for holding other objects or vessels. The houses at Bademağacı, Höyücek and Hacılar do have niches in the walls, places for simple cupboards and small bins for holding such items. In our opinion, the two small bowls and a pot found in the silo with six boxes, and the bead necklace and a spatula found in the silo with three boxes in Bademağacı EN II/3; two small jars and the horn-shaped object found in the silo with 12 boxes in Bademağacı EN II/2; and, the miniature table found in the silo in the building 4 of the Shrine at Höyücek were not left there by mere chance. A crowded assemblage of figurines was found amongst the grains in house Q5 of Hacılar level VI35. Also J. Mellaart reported that an alabaster statuette was found in the grain silo in house no. 5 in level VI of Çatalhöyük; that a small painted figurine was found amongst peas stored in level IV36. These also remind us of the Çatalhöyük's Mother Goddess giving birth in her throne carried by a pair of panthers found in the grain silo of the Shrine in level II<sup>37</sup> as well as the recent find of a woman figurine with a wild corn seed placed on her back<sup>38</sup> again in Çatalhöyük. The silo room with 12 boxes in Bademağacı EN II/2 opens into a work-area. It must be thought that the clay shoe model of size 36 (Fig. 9) found in situ next to a grinding stone in this work-area was not left there by accident but must have had a spiritual meaning within the Neolithic way of life.

<sup>&</sup>lt;sup>35</sup> J. Mellaart, Excavations at Hacılar I-II (1970) 167 Fig. 191.

<sup>36</sup> J. Mellaart, "Excavations at Catal Höyük, 1962. Second Preliminary Report", AnatSt XIII, 1963, 95.

<sup>&</sup>lt;sup>37</sup> ibid, 93, 95 Figs. 31-32.

<sup>38</sup> I. Hodder, "The Lady and the Seed: Some Thoughts on the Role of Agriculture in the 'Neolithic Revolution'", Köyden Kente, Yakındoğu'da İlk Yerleşimler. Ufuk Esin'e Armağan, M. Özdoğan et al., (eds.) (2003) 130.

# Özet

# Burdur-Antalya Bölgesi Neolitik Yerleşmelerinde Ambarlar

Uygarlık sürecinin önemli dönemeçlerinden olan Neolitikleşmeyi oluşturan temel ögelerden başlıcasının tarımsal üretim olduğu genelde kabul edilmektedir. Göçebe hayattan yerleşik düzene, yepyeni bir yaşam şekline geçişe neden olan bu büyük gelişmenin pek çok sorunu ve yeniliği de beraberinde getirdiğinde kuşku yoktur. Bu sorunlardan biri de, tarım ürünlerinin (ağırlıklı olarak tahıl ve baklagiller) saklanması olmalıdır.

Burdur-Antalya Bölgesi tarihöncesi araştırmalarının ve bu bağlamda Anadolu Yaylası için "Neolitik" kavramının kullanımının 1950'li yılların ikinci yarısında James Mellaart tarafından gerçekleştirilen Hacılar Kazıları ile başladığı genelde bilinmektedir. Refik Duru tarafından 1978 yılında bölgede başlatılan yeni bir kazı ve araştırma süreci ise Kuruçay, Höyücek ve 1993 yılından bu yana sürdürülmekte olan Bademağacı Kazıları ile devam etmektedir.

Mimaride, günümüze ulaşan taş temel ve kerpiç duvar gibi uygulamaların Erken Neolitik'in daha gelişkin aşamalarında, Bademağacı EN (Erken Neolitik) II/4 ve Höyücek TD (Tapınak Dönemi) ile çağdaş bir zamanda başladığı, dolayısıyla bu yazının konusunu oluşturan kerpiç harcından yapılmış ambarlara ilişkin ilk bulguların da aynı dönemde ortaya çıktığı anlaşılmaktadır.

Burdur-Antalya Bölgesi Neolitik Çağ yerleşmelerinde besin depolamaya uygun büyük boy çömlek bulunmamakta, buna karşın besin depolamanın kutu şeklindeki taşınmazlara yapıldığı anlaşılmaktadır. Kutular, genellikle bölgedeki farklı yerleşmelerde ve hangi boyda olurlarsa olsunlar, yöntem bakımından birbirine benzer şekilde, bağımsız, tek tek levhaların biraraya getirilmesi ile yapılıyordu. İşlevlerine ve herhalde içinde sakladıkları maddelerin türüne göre farklı boylarda olan bu grup taşınmaz eşyanın, kenar levhalarının büyüklükleri de değişken olmakla birlikte, ölçüler küçük boylarda genellikle 20x25 cm, orta boylarda 30x45 cm ve büyük boylarda 80x75 ve 65x55 cm arasında değişmektedir. Kalınlıkları da büyüklüklerine göre 3-4 cm ile 8-l0 cm arasında olan levhalar çoğu kez massif kilden, olasılıkla kalıplar içine dökülmek suretiyle yapılıyor, sonra fırınlanıyorlardı. Kullanıma hazır olan söz konusu parçalar, büyük olasılıkla evler içinde istenen yerde bir araya getirilerek, kutu veya ambarlar kurulmaktaydı. Kutu kenarlarından çoğunun köşelerinde, yapım sırasında açılmış delikler vardır ve ambar kurulurken levhaların bu deliklerden birbirine bağlandığı anlaşılmaktadır. Bağlama işleminden sonra yanyana gelen kenarlar, içten ve dıştan ıslak kil ile sıvanıp birleştirilmekte ve kutuların dağılmasının önüne geçilmekteydi. Ambarların üstlerinin kapalı tutulduğu ve kapaklarının da tahtadan olduğu düşünülebilir.

Mimarlığa bağlı taşınmazların ve bu kapsamda ambarların, arkeolojik yöntem olarak değerlendirilmesinde, uzak komşu bölgelerarası karşılaştırmaların ne ölçüde anlamlı olduğu ve bizi doğru sonuçlara ulaştıracağı tartışılabilir. Depolama geleneğinin, bir bölgede ya

da yerleşmede çevresel koşullardan ve o yerleşmede yaşayan insanların belki nesiller öncesinden gelen yaşam pratiğinden kaynaklandığı akla gelmektedir. İki yerleşme arasında örneğin çömlekçilik, mühürcülük ya da taş işçiliği gibi konularda ortak uygulamalar varsa, bu durumda, her iki merkezdeki taşınmazlar arasındaki benzerliklerin de anlamlı olabileceği düşünülmelidir.

Bademağacı ve Höyücek'de görüldüğü gibi, açık alan ve avlularda karşımıza çıkan ambarların ve içindeki besinlerin korunması kuşkusuz çok önemli olmalıydı. Kutuların günümüze kadar ulaşamayan ahşap birer kapağı olduğu düşünülebilirse de, yağışlı ve nemli mevsimlerde, depolanan eğer bitkisel ürünler ise, bunların nasıl korunduğunu açıklamak gerçekten zordur. Küf ve çimlenmeye engel olmak üzere, uzun kış ayları süresince kutuların sadece tahta kapaklarla örtülmesi ile yetinilmeyip, belki de ağzının çamurla sıvanması gibi yöntemlere başvurulduğunu düşünmek gerekir. Ambarların çevresinde, üstünün bir çatı ile kapatıldığına kanıt olabilecek, örneğin dikme olarak kullanılan direklere ait delikler ya da hafif malzemeden paravana gibi bir koruyucu olduğuna ilişkin izlere her iki yerleşmede de rastlamadık.

Bademağacı'nda EN II/3 tabaka yerleşmesindeki ambarların, evler arasında açık alanlarda yer almaları nedeniyle, ortak kullanıldıkları izlenimi oluşmaktadır. Merkezlerin tümünde, ambarların gerçek sayısı ve besin saklama kapasitesi konusunda çok doğru bilgilere ulaşmak olası değildir. Günümüzde, köyde yaşayan 4-5 kişilik bir ailenin yıllık buğday tüketiminin yaklaşık 750 kg olduğunu öğrendik. Bu bağlamda, örneğin Bademağacı EN II/3 tabakasında, bugüne kadar ortaya çıkartılan 9 yapı için, yerleşmenin farklı yerlerindeki toplam 12-13 gözlü ambarların kapasitesinin yetersiz kalacağı sonucu çıkabilir.

Neolitik Çağ'da ambarların sadece kuru gıda maddelerinin saklandığı taşınmazlar değil, bitki kalıntılarının yanısıra tarımsal üretimin çok önemli kanıtları ve aynı zamanda yaşamın sürekliliği, bolluk ve bereket ile ilgili çok özel birimler olduğu anlaşılmaktadır. Depolama kutuları olarak tanımladığımız taşınmazların, bazı nesnelerin, kapların saklanması için dolap ya da sandık seklinde kullanıldığını sanmıyoruz. Bunlar için Bademağacı, Höyücek ve Hacılar konutlarında duvar içi nişleri, basit dolap yerleri ve küçük kutular olduğu görülmektedir. Bademağacı EN II/3 yerleşmesindeki altı gözlü depoda karşımıza çıkan iki küçük çanak ve bir çömlek, aynı tabakada üç gözlü depoda bulunan boncuk kolye ve spatula; EN II/2'nin 12 gözlü deposunun bölmelerinden çıkan bir çift küçük çömlek ve boynuz biçimli nesne ile Höyücek Tapınağı'nın 4 no'lu odasındaki ambar içinde ele geçen minyatür masanın buralara rastlantı sonucu bırakılmadığını sanıyoruz. Hacılar VI. tabakasında kalabalık bir figürin grubu, Q5 evinde, tahıl tanelerinin içinde bulunmuştur. J. Mellaart, Çatal Höyük'te VI. tabakanın 5 no'lu evinde bir alabaster heykelciğin tahıl ambarından; küçük, boyalı bir figürinin ise IV. tabakada depolanmış bezelyeler arasında bulunduğunu bildirmektedir. Bu durum bize, bir çift panter tarafından taşınan tahtında "doğum yapan" Çatal Höyük Ana Tanrıçası'na da II. tabakadaki Tapınak'ın tahıl deposunda rastlandığını, ayrıca aynı merkezde son yıllarda, vücudunun arka kısmına yabani bir tahıl tanesi yerleştirilmiş bir kadın figürininin ele geçtiğini hatırlatmaktadır. Bademağacı EN II/2 yerleşmesinde 12 gözlü ambar odasının kapısı bir İşlik'e açılmaktadır. Burada bir öğütme taşının yanıbaşında in situ bulunan, 36 numara bir ayak ölçüsüne uyan kilden pabuç modelinin, bu alana gelişigüzel bırakılmadığı ve Neolitik yaşam içinde tinsel bir anlamı olduğu düşünülmelidir.



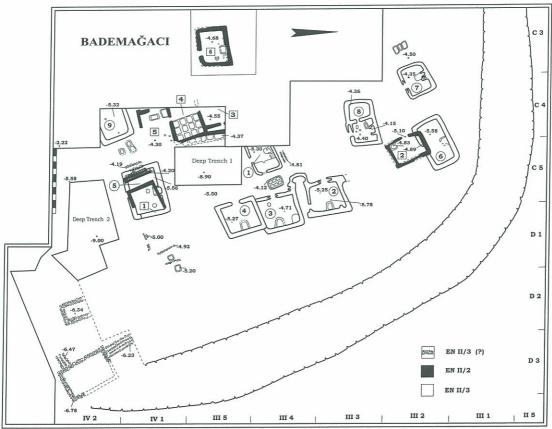


Fig. 1 Bademağacı. EN II/3 – EN II/2 Plan.

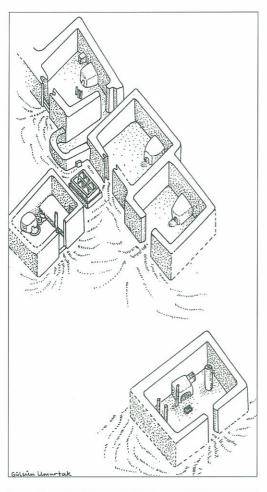


Fig. 2/a Bademağacı. EN II/3 – Isometric drawing.

Fig 2/b Bademağacı. EN II/3 – Silo.



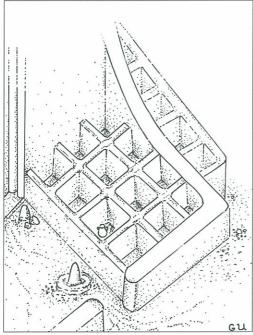




Fig. 3/b Bademağacı. EN II/2 – Silo.

Fig. 3/a Bademağacı. EN II/2 – Isometric drawing.

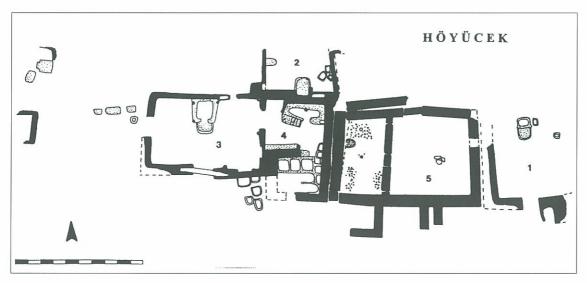


Fig. 4 Höyücek. The Shrine Phase plan.

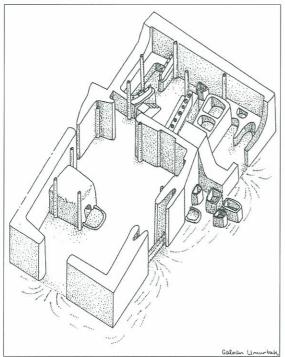


Fig. 5/a Höyücek. ShP – Isometric drawing.

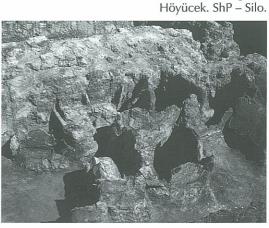


Fig. 5/b Höyücek. ShP – Silo.



Fig. 6 Höyücek. ShP – side of a bin.



Fig. 7 Höyücek. Burnt grain remains from building no. 4.



Fig. 8 Bademağacı. EN II/2 – Baked clay horn shaped (?) object.



Fig. 9 Bademağacı. EN II/2 – Baked clay model of a shoe.



Fig. 10 Höyücek. ShP – Baked clay miniature table.

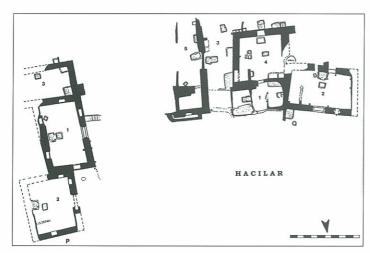


Fig. 11/a Hacılar. Plan of building level VI (simplified from J. Mellaart, Excavations at Hacılar I-II [1970] Fig. 7).

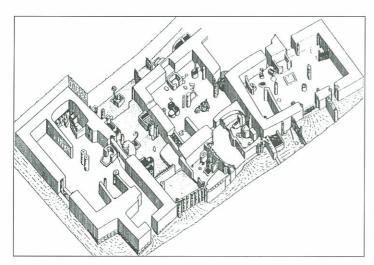


Fig. 11/b Hacılar. Building level VI – Isometric drawing (J. Mellaart, Excavations at Hacılar I-II [1970]).

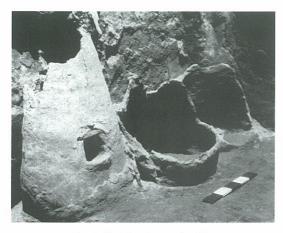
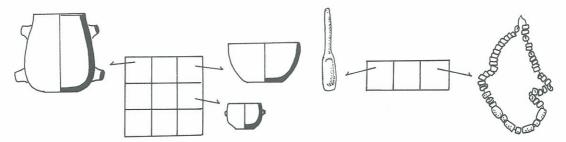


Fig. 12/a Çatal Höyük. Silo. (J. Mellaart, Çatal Hüyük, A Neolithic City in Anatolia, Albert Reckitt Archaeological Lecture British Academy [1965] Pl. LXIVb).

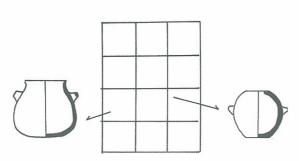


Fig. 12/b Çatal Höyük. Silo. (J. Mellaart, Çatal Hüyük, A Neolithic City in Anatolia, Albert Reckitt Archaeological Lecture British Academy [1965] Pl. LXVb).



 $\label{eq:Fig. 13} Fig.~13 \quad \text{Bademagaci.}$  EN II/3 – silo with 6 boxes and pottery found in it.

Fig. 14 Bademağacı. EN II/3 – silo with 3 boxes and small finds from it.



 $\begin{array}{ccc} & \text{Fig. 15} & \text{Badema\~gacı.} \\ \text{EN II/2} - \text{silo with 12 boxes and jars found in it.} \end{array}$ 

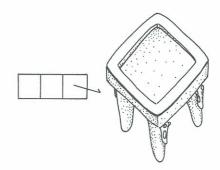


Fig. 16 Höyücek. ShP – silo with 3 boxes and the miniature table.