NİMET ÖZGÜÇ'E ARMAĞAN

ASPECTS OF ART AND ICONOGRAPHY: ANATOLIA AND ITS NEIGHBORS

Studies in Honor of Nimet Özgüç

COPPER BEADS OF AŞIKLI

UFUK ESİN — İstanbul

Professor Dr. NIMET ÖZGÜÇ who is one of the most distinguished archeologists of Turkey, is not only known because of her valuable studies about the ancient glyptic art of the famous Karum-Kanes and with her excavations such as Acem Höyük, Samsat a.o., but also with her broad view and interests in other fields of archaeology and even in the technological aspects of ancient cultures. This paper is dedicated to her in the hope of making a contribution in one of her fields of interest, namely in prehistoric metallurgy in view of the recent finds at Aşıklı Höyük in Central Anatolia which is one of the most important pre-pottery site of the Near-East belonging to the 8-th/7-th Millenium B.C. according to the radioactive carbon (14-C) assesments (Esin 1991; Esin et al. 1991, 26).

Aşıklı mound is situated 25 kilometeres South-East of the province of Aksaray at the shore of Melendiz river at the Kızılkaya village in the vicinity of the famous Ihlara Valley where a tectonic cappodocian landscape full with tufa cones and cave-churches presents a splendid view.

Salvage excavations at Aşıklı have been undertaken since 1989 because it will be partly inundated in the coming few years by the waters of the reservoire of the Mamasın dam in Aksaray when the level of the barrage-lake reaches the height of 1909.22 m (Esin 1991,4; Esin et al. 1991, 124). From top to bottom the layer 2 of Aşıklı has been more extensively dug in the course of three campaigns (Fig. 1; Pl. 34, 1-3; Esin et al. 1991). It presents a unique aceramic culture with its highly developed mud-brick architecture, well planned settlement pattern in radial form, apparently surrounded by two walls, the external one made of stone, the internal one of mud-brick with space in between for rectangular, empty rooms, forming altogether the earliest casemated wall-system (Pl.3), with its obsidian, bone/horn, ground and polished stone industries, its subsistence economy based on hunting and also with its burial customs (Fig. 2; Pl. 35, 1-2; cf. Op.cit.).

The deads of Aşıklı are buried under the floors of the rooms in earthen, shallow pits in *hocker* position without burial gifts except necklaces or arm rings usually made of semi-precious or none-precious stone beads found generally in women's graves (Op.cit.131-132, 167, Fig. 9/1, p. 168, pl. 10 AH. 89-120; Esin 1991, 23, fig.22, pp.33-34, figs.33-34).

During the excavations at Aşıklı in 1991 copper beads with stone or rockcrystal beads are revealed in two human graves in layer 2 which is recently dated with two radioactive carbon (14-C)

¹ Aşıklı Höyük salvage excavations are carried out by a team of the Prehistory Department of the Faculty of Letters of the University of İstanbul under the auspices of the same University, of the General Directorate of the Monuments and Museums of the Ministry of Culture, TEKDAM of the Middle East Technical University at Ankara, AKSAY (the Archaeometry Group) of the Scientific and Technical Research Counsil of Turkey (TÜBİTAK). Also a special project is undertaken by the Biological-Archaeological Institute of the State University at Groningen to study the archaeobotanical and archaeozoological remains of the pre-pottery settlements of Aşıklı.

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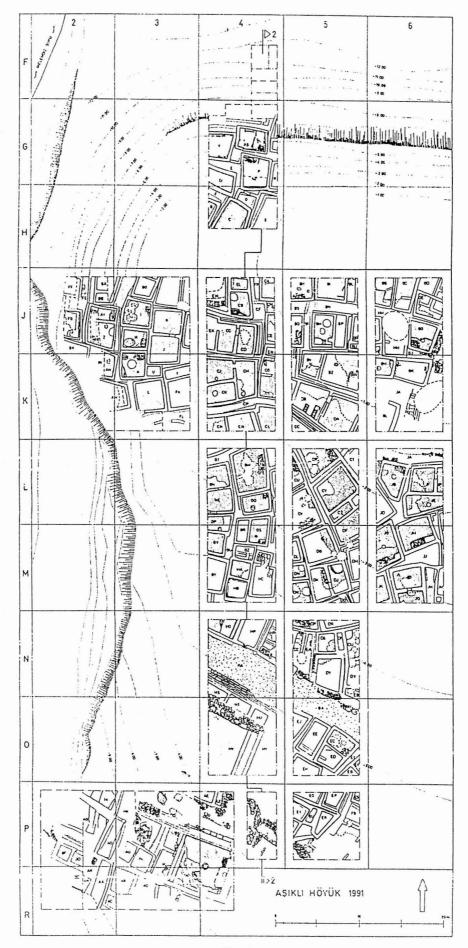


Fig. 1

measurments to the first quarter of the 7-th Millenium B.C.². Under the floor of a room called "GM" in trench 4-L in a pit a human grave was discovered which was highly damaged (Fig. 1; Pl. 34,4; 35,2). Around the ripple bones of the chest, near the neck of the individual, copper and stone beads were distributed which belonged to a necklace (Pl. 35,1, No. AH.91-194). The flat, round beads were made of chalk-stone measuring 3-5 milimeters in diameter and 1-2 milimeters in thickness (Pl. 35,1; Fig. 2, 3 rd row of the beads). The other beads were made of a hammered copper sheet of ca 1 milimeter in thickness. The sheet was rolled up into a hollow cylinder which was then cut into small pieces in order to make copper beads measuring between 8-3 milimeters in length and 5-6 milimeters in diameter (Fig.2, rows: 4-10).

Under the floor of room "HB" in trench 4-M (Pl. 34) three burials were discovered which were also highly disturbed. Near the wrist of one skeleton (No.AH.91-17) three copper beads were found with another bead made of rockcrystal (Pl. 35,1, ah.91-355). Two of the copper beads were shaped using the technique described above by rolling the thin metal sheet (Pl. 35,1, AH.91-352 and AH.91-353). One of them was larger than the other measuring 1.3 cm in length and 5 milimeters in diameter. The third bead was made of a massive, small clumb of native copper and shaped by hammering it into biconical form (Pl. 35,1, AH.91-343). It was the largest in size and measured 1.5 cm in length and ca 1.2 cm in diameter. It had been pierced at both ends and it seemed that the holes had been opened by annealing the bead.

The use of small objects made of native or native - arsenical copper during the aceramic Neo-lithic period is known from the "Plaza Phase" of Çayönü in South-Eastern Anatolia (Çambel, Braidwood 1970,5l, fig;3; Çambel 1974, 375-376; Esin 1976,210-213; personal comminications with Dr. Mehmet and Aslı Özdoğan in 1991). Also one copper bead has been found at Nevali Çori where Çayönü culture is also represented (Hauptmann 1988; personal comminication with Prof. H.Hauptmann)³.

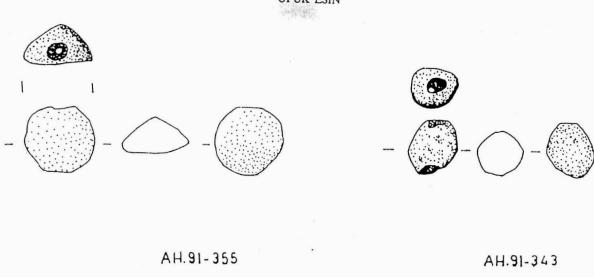
Although the isotope and metallographic analyzes of the copper beads of Aşıklı have not been made yet, they indicate that the use of pyrometallurgy must been largely distributed in Anatolia even during the 8-th/7-th Millenium B.C., especially the great distances between aceramic Çayönü, Nevali Çori and pre-pottery Aşıklı are taken into consideration.

When the isotope analysis of the copper objects of Çayönü, Nevali Çori and Aşıklı are completed, it will be clear whether the same or different copper sources were used by the settlers of these aceramic sites. It will also be beneficial for a better understanding of the parameters of the early exchange of ideas, or of the routes and rules of trade and moreover of the interrelationships between the two different cultures of Anatolia during the pre-pottery stage of human history.

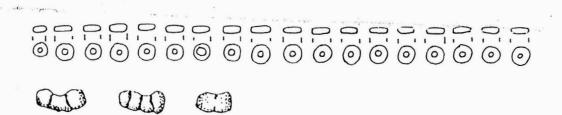
² The 14-C measurments of 2 samples from layer 2 of Aşıklı are recently completed at the 14-C laboratory of the Groningen State University. Therefore I'm very much indebted to the same laboratory and to Dr. H.Buitenhuis. The radioactive carbon (14-C) assessments given below are with Libby's standard half-life and uncalibrated in B.P. years:

No.of.Lab.	No.of.Sample	Location	Date in B.P.
GrN. 18618	Aşıklı-13	3-J, Room I	8725 ± 50
GrN. 18620	Aşıklı-24	3-J,Corridor AM	8720 ± 55

³ For the informations about new copper finds at Çayönü and at Nevali Çori I'm very thankfull to Dr. Mehmet and Aslı Özdoğan and also to Professor Harald Hauptmann.







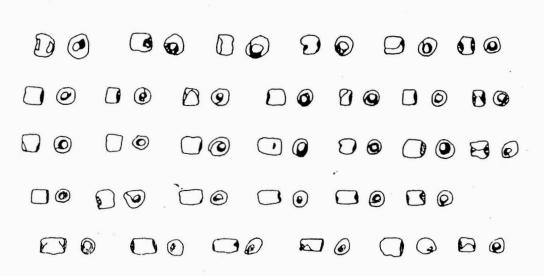


Fig. 2

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Captions

- Pl. 34,1 Aşıklı. Mud-brick architecture in Layer 2. View from the North-East.
- Pl. 34,2 Part of the casemated surrounding wall in layer 2. View from the South.
- Pl. 34,3 Room "GL" in trench 4-L and room "HB" in trench 4-M.. View from the South.
- Pl. 35,2 Damaged burial No.32 in room "GL" in trench 4-L.
- Pl. 35,1 Beads made of rolled copper sheet and stone found with grave No. 32 in room "GL".
- Fig. 1. Superposed plan of Aşıklı. Layer 2 in trenches 3-6 J-K, 4-6 L-M and 4-5 N-O.
- Fig. 2 Beads of Aşıklı: Rows: 1-2: One rockcrystal and three copper beads of grave No.17 in room "HB"; Row 3: stone beads of burial No.32 in room "GL"; Rows 4-10: Copper beads of the same burial in room "GL".