

# Dorota Ławecka

---

## Heating Places and Ovens of the 3rd Millennium BC in Sector SD on Tell Arbid

---

Polish Archaeology in the Mediterranean 18, 562-569

---

2008

Artykuł został opracowany do udostępnienia w internecie przez Muzeum Historii Polski w ramach prac podejmowanych na rzecz zapewnienia otwartego, powszechnego i trwałego dostępu do polskiego dorobku naukowego i kulturalnego. Artykuł jest umieszczony w kolekcji cyfrowej [bazhum.muzhp.pl](http://bazhum.muzhp.pl), gromadzącej zawartość polskich czasopism humanistycznych i społecznych.

Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.

# HEATING PLACES AND OVENS OF THE 3RD MILLENNIUM BC IN SECTOR SD ON TELL ARBID

Dorota Ławecka

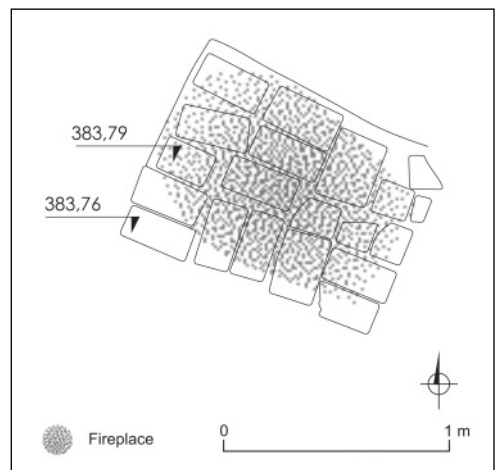
Sector SD covers a stretch of flat ground on the eastern slope of the main tell at Tell Arbid. In the course of six seasons of exploration between 1998 and 2006, 12 squares were investigated, uncovering an area of almost 700 m<sup>2</sup> (for preliminary reports concerning this sector of the excavations, cf. Bieliński 1999: 213-216; 2000: 281-284; 2004: 338-345; 2005: 477-485; 2007: 460-470; and above, in this volume; also Ławecka 2006: 71-73). With the

exception of some burials from the Khabour Ware period, the remains can be dated to the 3rd millennium BC. The density of uncovered urban architecture is a measure of the presumed affluence of inhabitants in the eastern district of the town. One category of domestic heating and cooking installations found in abundance in this sector are hearths and ovens of the round and oval kind. Most of these installations can be dated to the Late Ninevite 5 period.<sup>1</sup>

## HEARTHES

The simplest hearths are usually round, 0.60-0.80 m in diameter, and flat with no encasing structure. They are set on a bedding of fine gravel mixed with mud. In one instance, the bedding consisted of a single layer of mud bricks and the hearth was more or less oval in shape with one short side sectioned off [*Fig. 1*]. In all cases the surface of the hearth was black, smooth and hard.

Hearths of this kind are found inside rooms, as well as in the house courtyards. Cooking on these installations was facilitated by andirons, fragments of which have been found in the archaeological record, although not immediately around the structures. Pottery representing cooking ware is surprisingly rare in the relevant assemblages.



*Fig. 1. Flat hearth on a brick bedding. Square 36/65, Loc. 40 (courtyard). Late Ninevite 5 (Drawing M. Makowski, digitizing M. Momot)*

<sup>1</sup> Apart from the hearths and ovens discussed in this article, there was also a much destroyed furnace believed to be a pottery kiln, dating from the end of the 3rd millennium BC or the Khabour Ware period.

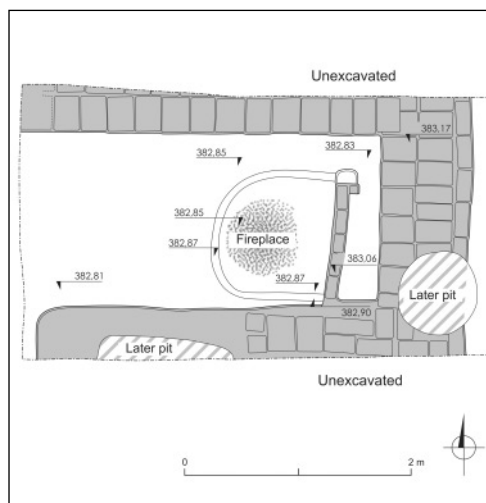
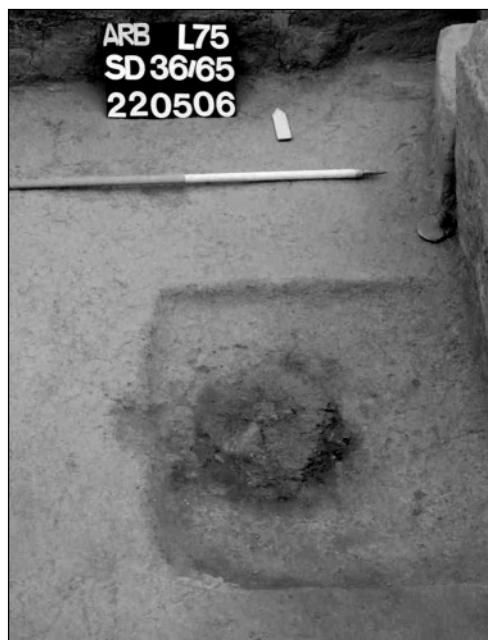


Fig. 3. Hearth with a low mud wall around it. Square 37/66, Locus 3B. Late Ninevite 5 period (Drawing and digitizing M. Momot with D. Ławecka)



Fig. 2. Rectangular hearths from square 36/65: Locus 41 (bottom), Locus 75 (top left). Late Ninevite 5 period (Photo A. Reiche)

Three more elaborate hearths were discovered in Late Ninevite contexts. The bedding was in all three cases fine gravel set in mud. Two of these hearths were rectangular in plan, 1.40 x 1.10 m in the case of Locus 41 [Fig. 2, left] and c. 1.10 x 0.70 m in the case of Locus 75 [Fig. 2, right]. They were cut into the floor a few [2-3 cm] centimeters deep, one long side adjacent to a wall or dais, the opposite long side having additionally a small semi-circular projection in front. The third case is a semicircular hearth inside a low mud wall, the straight long wall adjacent to a small

bin [Fig. 3]. The actual fireplace was in all three cases set away from the back wall, presumably to protect the wall from the effects of strong heat.

These three hearths were found in chambers with white-plastered walls and floors, which rather could not have had anything like a kitchen function. The rooms were either dwellings or served some public function, hence the hearths should be interpreted as heating installations rather than facilities for preparing meals or any other sort of domestic activities.

## ROUND OVENS

There are three kinds of round ovens and the first to be discussed here are the typical tannurs for breadbaking, presumably used for the same purpose already in Antiquity. They resemble modern *tannurs* in diameter (usually 0.60-0.70 m at the base) and they have the characteristic form narrowing toward the top and a hole at the base for raking out the ashes. Unlike the modern examples, which can be seen still in operation in the nearby village on Tell Arbid [Fig. 5]), the ancient ones were not set into mud benches, but were freestanding on the floor. The walls were lined on the outside with a several-centimeter thick layer of sherds set in mud to achieve the required thickness as in this example from the south trench wall of square 37/65 [Fig. 4].

*Tannurs* are set up in courtyards and in small units of domestic function. In or around them, small bowls can sometimes be found.

The slightly larger ovens dug into the floor are a variant of the typical *tannur*. Their walls are lined on the outside with sherds or fragments of walls from destroyed

ovens. One example is an oven about one meter in diameter, dug into the floor of a house courtyard from the end of the ED III period; the house must have already been abandoned at the time [Fig. 6]. A partly preserved pavement of small stones and sherds was uncovered on the bottom, the base of the oven being 0.65 m



Fig. 4. *Tannur with external coating of clay and sherds taken from the wall of a disassembled oven. Square 37/65, (Photo A. Reiche)*

below the relevant ground level. The outline of the pit is clearly distinguishable. Isolated potsherds were used to line the oven walls on the outside.

This category is represented by two other ovens, one uncertain, the other very well preserved. The former has a bottom lined with small stones and the outlines of a pit dug in the floor to accommodate it, which are discernible despite the eroded

context hindering the interpretation [Fig. 10]. A clay tray was found inside it. The other well-preserved installation comes from Locus 5, Square 35/66 [cf. Figs. 7, 9] and it leaves no doubt that it had been dug intentionally into the ground, leaving the top part projecting well above the surface. This finding (discovered in 2006 and not fully explored as yet), as well as the category of ovens dug into the ground in

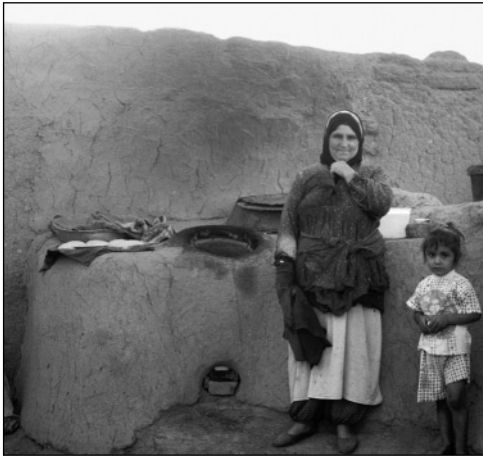


Fig. 5. Two examples of tannurs in use in the village on Tell Arbid, AD 1999 (Photos D. Ławecka)

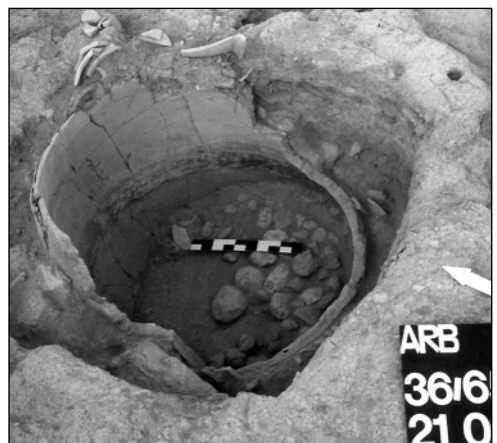
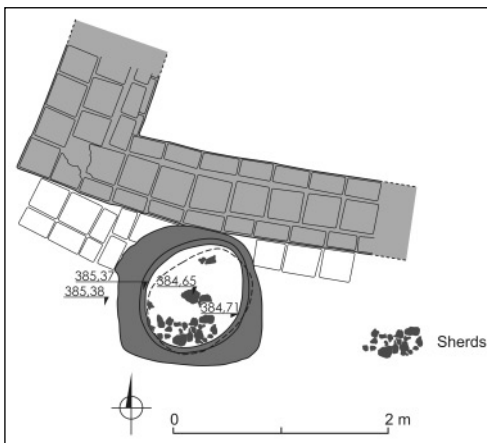


Fig. 6. Round oven of Akkadian date, dug into the courtyard of an earlier house. Square 36/65, Locus 23 (Drawing C. Sauter, digitizing M. Momot; photo J. Wierzbicki)

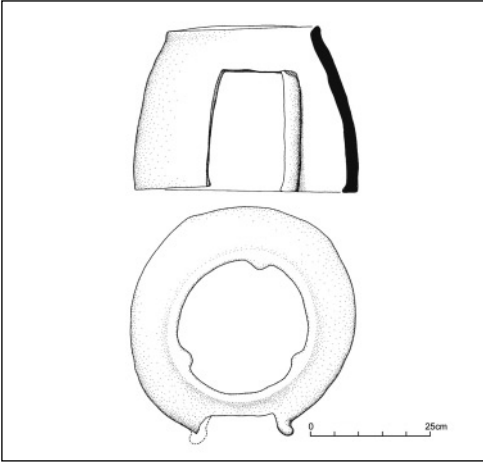


Fig. 7. Small round oven from Locus 5, square 35/66. Late Ninevite 5 or ED III (Drawing Ł. Rutkowski, inking D. Ławicka, M. Momot)



Fig. 8. Tannur and small round oven (in the background). Square 36/64, Locus 58. Late Ninevite 5 (Photo A. Reiche)

general, does not have any parallels that the author is aware of in the archaeological record from the region or in modern practice. From the practical point of view, these ovens must have been cleaned from the top, as they obviously could not have had a hole at the base for raking out the ashes.

The third category comprises small round ovens presumably intended for



Fig. 9. Big (foreground) and small round oven and half of an oval one (right) in Locus 5 (square 35/66). Late Ninevite 5 or ED III (Photo A. Reiche)

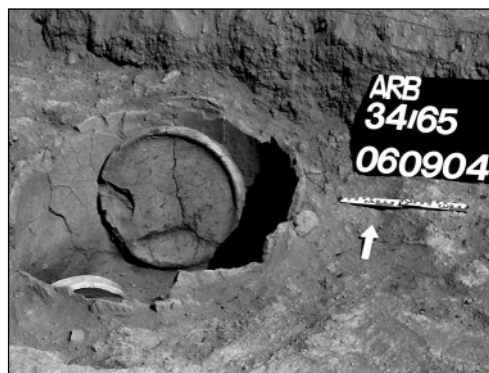


Fig. 10. Round oven with clay tray found inside it. Square 34/65, northeastern quarter. ED III or later (Photo A. Reiche)

cooking. Two well preserved objects of this type have been discovered. They have a diameter of c. 0.45 m and c. 0.30 m at the base and top respectively, and a height of 0.35 m. The opening at the bottom is fairly big. They feature walls of clay several centimeters thick. One was found next to a *tannur* in a domestic unit [Fig. 8], the other stood next to two other ovens, a round one (discussed above) and an oval one [Figs. 9, 11]. The opening in the side of the latter small oven was framed with a roll of clay and there were three flat projections around the top hole as a grid for supporting a cooking pot [Fig. 7].

## OVAL OVENS

Oval or more or less circular ovens of considerable size were found in three areas within the boundaries of the sector. The biggest (in Locus 5, squares 35-36/65) exceeded 2 m along the long axis [Fig. 12; cf. also Fig. 11].<sup>2</sup> The floors of these ovens are made of compacted mud and gravel, and are up to several centimeters thick. Like the walls made of mud brick, they are strongly burned. The casing walls were in all cases heavily destroyed (no more than three courses have been preserved), but there can be no doubt that the bricks in each successive course projected inward and the lean of the walls suggests a domed structure [Fig. 11].

Each oval oven is accompanied by at least one round one, and it is difficult to tell whether this repeated combination was because of a specific purpose that the two kinds of ovens were intended to serve

or because the room itself had a specific function. The small room in which these



Fig. 11. Partly explored Locus 18 with oval ovens. Square 36/66. Late Ninevite 5 period (Photo A. Reiche)

<sup>2</sup> Three oval ovens with *tannurs* next to them were discovered also in the southern part of square 36/66 (Loci 10-12), but it is not clear whether they were inside a room or by a wall in the corner of a courtyard. Two other features – round one in Locus 11, square 35/64, and semicircular one in Locus 64, square 36/64 – have been recorded, but it cannot be determined in these cases whether they were ovens or hearths lined with low walls.

ovens are found could have served no other function than that connected specifically with them, as there is practically no space around them for other activities.

The concentration of these ovens in the northern part of the sector is interesting.

A sequence of six such installations was found in neighboring rooms on different levels, starting from the Late Ninevite and going on through the ED III period. In two of these units, two oval ovens each are connected with the same occupation

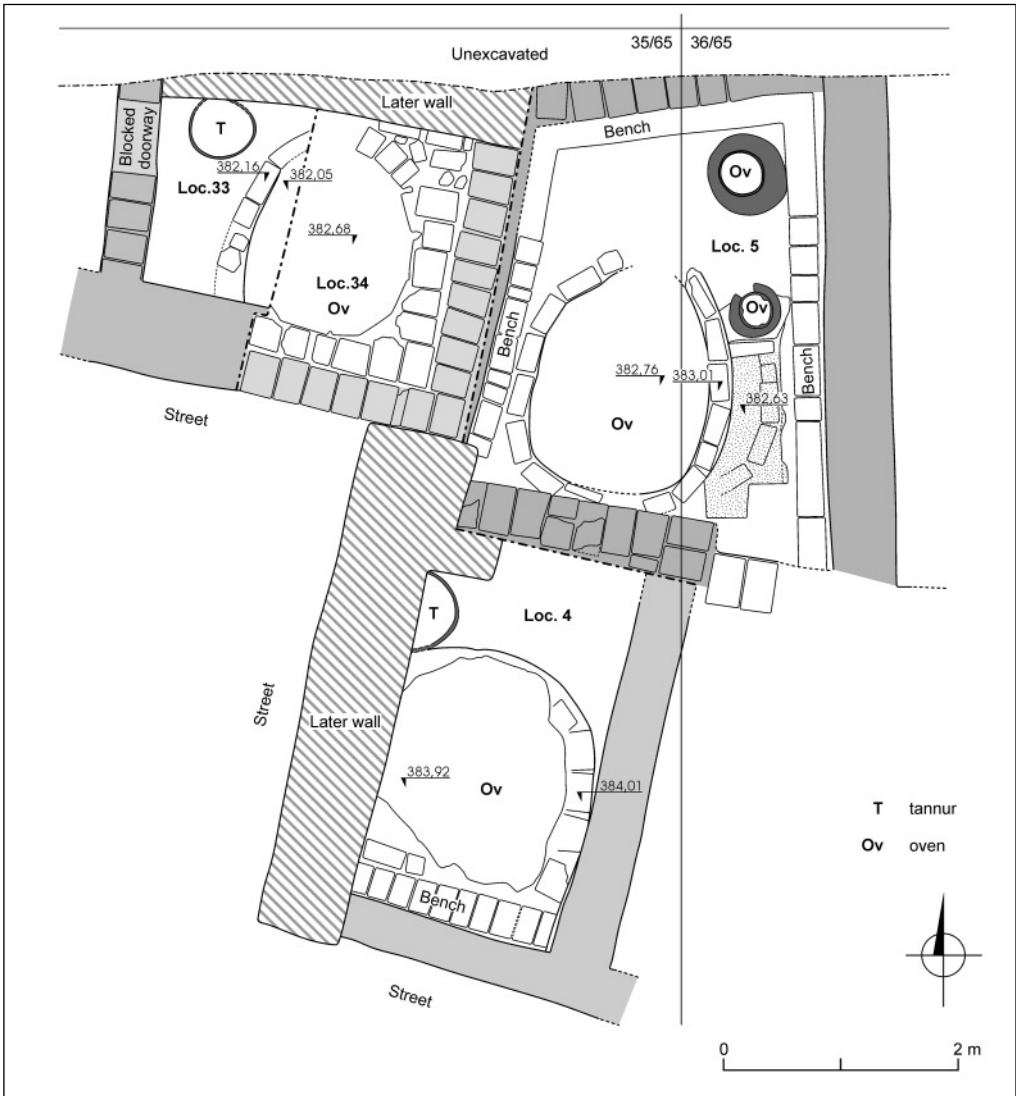


Fig. 12. Plan of rooms with oval furnaces on different levels in the northern part of the sector (squares 35-36/65). Late Ninevite 5 – ED III (Drawing and digitizing M. Momot with D. Ławecka )



phase: after the destruction of one (walls having been burnt through?) another one was constructed on the same spot.

The function of these particular structures remains to be determined clearly. The absence of finds anywhere in

the neighborhood and absolutely no slag or post-production waste does not help in explaining what these ovens were used for. The most likely theory is that these large ovens were intended for roasting or drying grain.

## REFERENCES

Bieliński, P.

1999 Tell Arbid. Preliminary report, 1998, *PAM X* [=Reports 1998], 205-216

2000 Tell Arbid. The fourth season, *PAM XI* [=Reports 1999], 273-284

2004 Tell Arbid. The fourth season, *PAM XV* [=Reports 2003], 335-353

2005 Tell Arbid. The ninth season of Syrian-Polish excavations. Preliminary report, *PAM XVI* [=Reports 2004], 475-489

2007 Tell Arbid. Report on the Syrian-Polish explorations in 2005. The tenth season, *PAM XVII* [=Reports 2005], 451-471

Ławecka, D.

2006 Late Ninevite 5 structures in the eastern district at Tell Arbid, N-E Syria, *OE 3*, 71-73