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FIRESIDE – ROOMS WITH HEARTHES IN EARLY HELLADIC NON-MONUMENTAL DOMESTIC ARCHITECTURE*

Introduction

The Early Helladic (EH) period in Mainland Greece lasted from 3100/3000 to 2050/2000 BC (chronology references after: MANNING 1993). Very scanty architectural remains have been dated to the EH I period ("Eutresis culture", ca. 3100/3000-2650 BC), i.e. Houses I from Eutresis (GOLDMAN 1931: 12-15) and a fragmentary building preserved at Lithares (TZAVELLA-EVJEN 1985: 8-9). In the EH II (EH II A – "Korakou culture", ca. 2650-2450/2350 BC and EH II B – "Lefkandi I culture", ca. 2450/2350-2200 BC) dynamic development of settlements and architecture occurred (HEARTH WIENCKE 1989: 495-509). Many examples of domestic and defensive buildings have been uncovered, along with graves, high quality pottery, seals and sealings, and terracotta figurines. Extended fragments of settlements with streets (KONSOLA 1984: 197-210) and residential districts have also been excavated. At the end of EH II most of these settlements had been destroyed. In the following phase (EH III – "Tiryns culture", ca. 2200/2150-2050/2000 BC) corridor houses are not found, but ordinary houses of small size and simple design still existed, i.e. at Aghios Kosmas (MYLONAS 1959) or Kolonna on Aegina (WALTER et al. 1981).

In EH II period most houses were rectangular in design, but structures with L-shaped or irregular plans have also been found. In EH II B and EH III houses with one apsidal wall appear. Ordinary houses consisted of a courtyard or portico and 1-3 interior rooms laid out axially, with a usable floor area of 25-45 sq. m. More complex houses were 60-100 sq. m. – like at Zygouries House of Pithoi (BLEGEN 1928: 9-14), House S/W (BLEGEN 1926: 16-20). Small dwellings with only one room were ca. 20 sq. m – like at Aghios Kosmas House I (MYLONAS 1959: 38-41), House E at Tsoungiza (PULLEN 1986: 75; PULLEN 1990: 344-346). In most cases houses were built with the same technique on all EH sites. Buildings were made of stone, mud brick, clay, earth, and perhaps wood. Foundations were constructed of stones of various sizes, usually laid in two parallel rows

filled out with clay, rubble or smaller stones. The superstructure was made of mud brick, a feature discovered at many sites – *in situ* at Berbati in House N-P (SÄFLUND 1965: 118). In wall construction wooden elements might also have been used (PRESS 1986: 88). The width of walls was usually ca. 0.6 m and it is not clear if they were massive enough to sustain upper storeys. Upper storeys are assumed only in cases where the foundations could have supported walls 1 m or more in width, such as Tsoungiza House A (PULLEN 1986: 73-75; PULLEN 1990: 339-340); also in monumental buildings. Roofs in most cases were probably flat, made of wooden beams, reed and clay (pieces of clay from a roof were found in the House of Pithoi at Zygouries; BLEGEN 1928: 13). Wooden posts or columns may have been used in some interiors to support ceiling; stone bases from such constructions have been found in rooms at Aghios Kosmas – House H (MYLONAS 1959: 35-38) and at Eutresis – House H (GOLDMAN 1931: 24-25) or in porticoes – House A in Tsoungiza (PULLEN 1990: 339-340), Lerna – Building BG (WIENCKE HEATH 1986: 41). Floors were either paved with stone slabs, or covered with packed earth, clay or small stones mixed with sherds. Stone was also used in doorways – stone thresholds, jambs and door pivots have been uncovered (often *in situ*). Doors were probably made of wood, although leather, woolen fabrics and straw may also have been used (TZAVELLA-EVJEN et al. 1990: 119). The walls may have contained windows, but if so these have not been preserved in EH houses.

Instances of monumental architecture (i.e. houses of tiles and corridor houses. THEMELIS 1984: 335-351; SHAW 1987: 59-79; SHAW 1990: 183-194) have also been found at EH II sites. The examples come from Lerna, Kolonna, Akovitika and Thebes. These structures were large (ca. 90-420 sq. m at the basement level) and complex. Most had rectangular plans with a series of rooms laid out axially, flanked by narrow corridors, sometimes with stairs to an upper storey. Their roofs were sloping, covered with fired clay or schist tiles. The function of monumental architecture is still debated. They are interpreted variously as public buildings,

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administrative or redistribution centres, houses for big families or palaces (THEMELIS 1984: 340, 351; REN-FREW 1972: 364, 390; CASKEY 1955: 119; FELTEN 1986: 26).

Ordinary houses are rarely the subject of research on the EH period, probably because of the poor state of their preservation and a lack of equipment. But it seems nevertheless that domestic architecture gives a better picture of the every-day life of its inhabitants than does monumental architecture. Houses of the EH period were quite small, probably used by one family, equipped with basic constructions, and almost certainly undecorated. Common objects, mostly coarse and fine ware and tools are found inside. People probably led very simple and ordinary lives, concentrated on agriculture, husbandry and handicraft. Houses of tiles and corridor houses, obviously more spectacular and elaborate in form, seem to have served as more complex structures than simple dwellings.

In ordinary houses we can distinguish such different types of interior space as courtyards (or porticoes), rooms with hearths, rooms with other structures (pits, *bothroi*, *pithoi*, benches) and rooms without any fixed structures. It is possible to reconstruct the functions of the interiors based on a very detailed analysis of material found inside the rooms, such as pot-sherds, cooking pots and other ceramics, tools, and animal bones and other organic waste products. Rooms with hearths are of special interest, because in most cases they seem to be the main areas of their buildings, where the lives of the inhabitants were concentrated. Since other fixed structures have been uncovered in these interiors, rooms with hearths are supposed to serve many functions, reconstructed on the basis of the sorts of objects found there.

Food preparation and meals

Rooms with hearths probably served as kitchens, where food was prepared and cooked. Hearths were round, oval or semicircular in shape; no rectangular or square examples have been uncovered in EH dwellings. In most cases they measured 1-1.2 m in diameter, but smaller instances are also found (0.6-0.75 m). There were two main types of hearth construction made of stone and clay. The first type was more common in non-monumental EH houses. Stone platforms or loose pebbles showing signs of fire have been found. The terracotta platforms were oval and had clay rims, sometimes decorated, with oblong cavities in the centre. Examples come from Megaron A at Berbati (SÄFLUND 1965: 99-100), Building BG at Lerna (CASKEY 1958: 130; CASKEY 1959: 203; WIENCKE HEATH 1986: 43), *Weisses Haus* at Kolonna (WALTER et al. 1981: 20) and House L at Eutresis, room III (GOLDMAN 1931: 16). Wood was laid directly on the stones or in the cavities of terracotta platforms; ash and charcoal are also often found directly

on the floor, frequently baked by fire. An interesting construction, reminiscent of a fireplace, has been uncovered in House B at Tsoungiza (PULLEN 1990: 343). The hearth was built into the wall and wood firing was laid on the floor. In House L at Aghios Kosmas a hearth was found by the low stone wall where signs of fire could be seen (MYLONAS 1959: 43).

For cooking and frying undecorated coarse vases and frying pans were used, which were found either directly in hearths or nearby. Food could have been warmed in fine ware. In a depression of a hearth, cut into the bedrock in Megaron A at Berbati, numerous potsherds have been found – obviously vases which had been thrown in when broken and were subsequently burned (SÄFLUND 1965: 100).

Fine ware has been found in considerable quantity on the floor of rooms with hearths. Saucers, sauceboats, plates, bowls, cups, jugs, *skyphoi*, *askoi*, fruitstands, spoons and ladles would have been used for serving meals. Animal bones (of sheep/goat, pig, ox) as well as snail shells, sea shells and boar tusks, uncovered in hearths or on the surrounding floor, are probably the remains of the meals themselves. Sometimes plant remains are found (i.e. peas and acorns at Tsoungiza. PULLEN 1990: 343-344). The tools found here may have been used for preparing meals. In most cases tools were of stone or obsidian. Grain and spices were milled with stone grinders, millstones and querns. Flint and obsidian blades and knives were used for cutting and chopping.

Storing

Food and liquid (grain, water, wine and olive) were stored in rooms with hearths. Large storing jars (*pithoi*) were usually placed directly on the floor or sunk into the bedrock. In House E at Tsoungiza eight *pithoi* were discovered recessed into the clay floor, 20 cm below the floor level (PULLEN 1990: 344). In room 4 of the House of the Pithoi at Zygouries four large storing jars (two of them almost complete and two in pieces) have been preserved, and there may originally have been more (BLEGEN 1928: 11). At Asine (House R, room III. PULLEN 1987: 537) a shallow depression may also have held vases (as in houses N-P and F-G at Berbati, where shallow pits and depressions served this purpose. SÄFLUND 1965: 118-119). Inside a hearth in House B at Tsoungiza a small storage jar was found, turned upside down with about 700 acorns scattered around (PULLEN 1990: 343).

Food and objects used for preparing it might also have been stored in other fixed constructions. A small annex (3.5x1m) was situated by the east wall of House B at Tsoungiza (PULLEN 1990: 343). There was no material inside, but it seems quite possible that it was a cupboard or pantry. A small niche (1m wide and 0.6m deep) in the West House at Prosymna may have served a similar

purpose, although it was found empty (BLEGEN 1937: 14). The function of a semicircular construction in room L1 of House L at Aghios Kosmas remains unclear. It was a low wall, situated east of the hearth, built of clay, small stones and potsherds, enclosing a space 1.45 x 0.8 m. According to the excavator it was a storage space (MYLONAS 1959: 44).

Storage jars and other pottery have been put on shelves or benches in rooms with hearths. In building 196-200 at Tiryns a shelf was discovered with two jugs, a Cycladic frying pan, a big sauceboat, three bowls, a handled amphora and few small *pitthoi* standing on it (KILIAN 1982: 420). A platform cut into the bedrock in building 145-148 at Tiryns may have served the same purpose (KILIAN 1981: 189). Wooden shelves may have hung on the walls. In House A at Aghios Dhimitrios fragments of pottery (*pitthoi*, coarse ware, pans, jugs and fine ware) were uncovered on the floor, turned upside down (ZACHOS 1986: 32). Pots could fall down from upper shelves during a fire or other catastrophe.

It seems probable that food was kept in storage-pits (*bothroi*) recessed into the floor. In most cases however, excavated pits were either empty or filled with potsherds. In Megaron A at Berbati a *bothros* (diameter 0.62 m, depth 0.9 m) was excavated containing plant remains mixed with rubble and potsherds (SÄFLUND 1965: 95). Pits might often have served as waste or ash-pits. In all likelihood other products were also kept in these locations, utensils and objects directly on the floor or in wooden boxes or baskets, which are not preserved.

Cult functions

Apart from the basic purposes of hearths, which were cooking food and warming and lighting interior spaces, these structures probably had other applications as well. According to some scholars, terracotta platforms were particularly associated with cult. In House L at Eutresis three hearths were found in two rooms (GOLDMAN 1931: 16). The two semicircular stone platforms in rooms II and III were probably used mainly for cooking (pottery was found nearby). The third terracotta hearth was situated in the centre of room III. Its construction together with the animal bones found in it and the other material recovered nearby may point to a cult function for this structure (GOLDMAN 1931: 20). Next to the platform there was a pit filled with broken pottery and a rectangular bench or an offering table, made of stone and clay, where ritual objects or sacrifices could be put. A zoomorphic rhyton was found on the floor some distance away.

The excavators of Building BG at Lerna and Megaron A at Berbati deemed the decorated terracotta hearths they found there to be ritual or cult structures, because of the nature of their construction and the impressed zigzag decorations around the rims (CASKEY

1958: 130; SÄFLUND 1965: 99). Terracotta platforms from other sites were also decorated with linear and stamped patterns, like at Aghios Dhimitrios – House A (ZACHOS 1986: 32), House B (ZACHOS 1986: 31), Kolonna – *Weisses Haus* (WALTER et al. 1981: 20). According to Miriam Caskey, decoration, a central cavity reminiscent of a double axe shape, the position of the structure in the centre of a room and a nearby ash pit or *bothros* suggest a ceremonial or sacrificial character both for terracotta hearths and for interiors showing such features (CASKEY 1990: 13-18). With the exception of House L at Eutresis with its remarkable combination of decorated hearth, offering table and *bothros*, it is difficult to indicate a cult function for whole rooms containing terracotta hearths. Additionally, material found in hearths could be connected with sacrifice – animal bones in House A at Aghios Dhimitrios (ZACHOS 1986: 32) and in House L at Eutresis (GOLDMAN 1931: 16) or consumption. Moreover, pottery could have been shattered during religious rituals or thrown in when it was broken and subsequently burnt. We should however consider other possible uses of elaborate structures. Terracotta hearths may have been a feature of dwellings owned by wealthy families or people of higher social status. As Klaus Kilian has noticed, the larger and more elaborated architectural units in Tiryns had a hearth with a stamped rim, it is difficult to accept an exclusively religious explanation for these hearths (Kilian in “Discussion” in: CASKEY 1990: 21)

Zoomorphic terracotta figurines and conical clay objects, interpreted as idols (KILIAN 1982: 421; BLEGEN 1928: 9), are often found in rooms with hearths. Only a single figurine is found per room, except in House Z at Lithares, where 16 terracotta figurines of animals were recovered in „Sanctuary”. Excavators suggest a cult character for these objects because of the large number found and their situation next to a hearth (TZAVELLA-EVJEN 1985: 20)

We might also imagine however that this room served as a storeroom or a workshop. It is difficult to indicate a direct connection between terracotta figurines, hearths and ritual practices, because idols have also been found in interiors without hearths and their purpose seems to depend on the context of their discovery (MARANGOU 1992: 231-256).

Other functions

Movable material discovered in rooms with hearths indicates that various household activities took place there. Terracotta spindle whorls, weights and bronze or bone needles were used in weaving and sewing. Stone, obsidian and bone tools and blades could have been used for a wide variety of purposes, such as joinery, bone and wood carving, tool production and so on. In addition to grinding grain millstones, grinders and

querns may have been used for crushing dyes and spices (RUNNELS 1988: 269-270). No doubt many tasks were performed with wooden, reed, clay or bone objects and tools which have not been preserved. Sealings have also been found in rooms with hearths – at Aghios Dhimitrios in House A and House B (ZACHOS 1986: 31-32). Sealings and seals are thought to be connected with administration, commerce, redistribution or storage (RENARD 1995: 288-295). It seems possible that rooms with hearths, which were the largest interior rooms in most buildings, served as administrative rooms in addition to their other functions, although these features are more often associated with monumental architecture.

Rooms with hearths and other interiors of EH houses

In most cases hearths are found in only one interior room, most often in the biggest room of the building. However, there are a few examples of dwellings with more than one hearth – Building 142-144 at Tiryns (KILIAN 1981: 189), House Θ at Lithares (TZAVELLA-EVJEN 1984: 208) and at Eutresis in House I (GOLDMAN 1931: 12-15) and L (GOLDMAN 1931: 15-16). In some buildings the hearth was not set in the largest room, but in a smaller one.

In a few cases hearths have been uncovered outside residential interiors. In Building BG at Lerna the hearth was set in a northern part of a western corridor (CASKEY 1958: 130; CASKEY 1959: 202-204; HEARTH WIENCKE 1986: 41). This space was very narrow (1.2 m) and the western wall of the corridor had to be partly rebuilt to accommodate a large platform. The hearth was damaged and overheated, and some marks of repairing are noticeable. This indicates that the hearth was in use for a long time. Martha Heath Wiencke has suggested that this construction was originally located in one of the centre rooms of the building and that the inhabitants decided to move it to the corridor and to build a new hearth in the main interior room (HEATH WIENCKE 1986: 41, 43). In House U at Zygouries a hearth was built in a courtyard (BLEGEN 1928: 25-27) and in House Θ at Lithares in a vestibule (TZAVELLA-EVJEN 1984: 208).

Josette Renard has noted that in large rooms, such as those in the House of the Pithoi at Zygouries, Megaron A at Berbati or *Weisses Haus* at Kolonna, hearths were placed in the middle of the room so that their heat would diffuse more readily. Smaller rooms had hearths set by the walls or in the corners, perhaps to provide more space for other activities (RENARD 1995: 214). The heat of the fire no doubt made it necessary to keep one's distance. In Lithares some of the hearths were equipped with a low wall or flagstones to shelter the fire from drafts (TZAVELLA-EVJEN 1984: 17, 208). In some cases hearths were set just on a line of a room and

possibly surrounded by an outer wall. According to Carl Blegen there was a wall behind a hearth in House S/W at Zygouries which has not been preserved (BLEGEN 1928: 20). House A at Eutresis furnishes a similar example (GOLDMAN 1931: 30-31). In House B at Tsoungiza a hearth was built into the wall of the room (PULLEN 1990: 343). This feature of its construction probably allowed the fire to draw better. A wall of stone or mud brick, exposed to high temperatures, would have been damaged more easily than other walls (as at Zygouries and Eutresis).

In many EH dwellings no hearth has been uncovered. Because the state of preservation of these buildings is frequently poor, it is possible that in many cases the presence of a hearth went undetected. Additionally, portable hearths, lamps, and other sources of light and warmth may have been used (PRESS 1986: 110-111). There may also have been outdoor hearths and ovens which either have not survived or have not been discovered.

Conclusions

Analysis proves that rooms with hearths served as kitchens, dining rooms and workshops, and even as administrative rooms at one time. It seems that interior rooms with hearths, where inhabitants cooked, ate and worked, formally do not differ from other rooms. The fixed constructions and movable equipment found in rooms with hearth are very similar to those from other interior rooms, the presence of the hearth itself being the only distinctive feature.

A hearth would have been the primary source of light, besides the exterior doorway, together with any skylights or windows (RENARD 1995: 156). It was naturally a source of heat as well, especially during the autumn and winter. These features, in my opinion, indicate a special character for rooms with hearths, since it was here that people would have spent their time, sitting with their families around the fire, eating, working, talking, singing, playing with children, and sleeping. It makes these rooms the focus of domestic life, since the inhabitants would naturally have tended to gather around hearths.

Moreover, it seems very probable that terracotta platforms were connected with domestic cult or ritual, although in dwellings with only one fixed hearth the main purpose of these elaborated constructions probably was utilitarian. The zigzag decorations and wavy lines on the rims are reminiscent of a flame pattern and it may have been designed to emphasize the importance of fire in the house and in cult. According to John Caskey, the sacred fire may have been kept alive in a double axe shaped cavity (CASKEY 1958: 130). Sacrifices and other rites however, could have been conducted in other rooms, perhaps with portable hearths or other equipment. It seems reasonable to me to accept Miriam

Caskey's suggestion that the purpose and meaning of a hearth can be discerned by its form and decoration, as well as by its position in the building (CASKEY 1990:

20-21). The same conclusion could be applied to rooms with hearths in EH houses. They were places of every-day household activity and sometimes of domestic cult as well.

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