Chapter 2 Housing in New Halos

2.1 Location and early travellers

New Halos is located in the southern part of the plain of Almiros on an eastern spur of Mount Othris. The city is not directly located at the sea, but borders a salty marsh on its eastern side, which, as has been established by geologists, must have already existed in Antiquity.\(^1\) North of the city boundary one can find a large spring, Kephalosis, from which the river Amphrysos flows eastward in the direction of the sea.

Identification of Halos by travellers in the 19th century was based on references made by Strabo, in his Geography. Strabo's description of the location of Halos can be summarized as follows. He situates Phthiotic Halos 'below the end of Othris, a mountain situated to the north of Phthiotis, bordering on mount Typhrestus and the country of the Dolopians, and extending from there to the region of the Maliac gulf. Halus [...] is about sixty stadia distant from Itonus.' [...] 'Halus is called both Phthiotic and Achaean Halus, and it borders on the country of the Malians, as do also the spur of Othris Mountain. [...] it is about one hundred stadia from Thebes, and is midway between Pharsalus and the Phthiotae. [...] and Artemidoros places Halus on the seaboard, as situated outside the Maliac gulf, indeed, but as belonging to Phthiotis, for proceeding thence in the direction of the Peneius, he places Pteleum after Antron, and then Halus at a distance of one hundred and ten stadia from Pteleum.\(^2\) [...] and then one comes to Pteleum and Halus; and then to the temple of Demeter; and to Pyrasos, which has been razed to the ground; and above it to Thebes; and then to Cape Pyrrha, and two isles near it, one which is called Pyrrha and the other Deucalion. And it is somewhere here that Phthiotis ends.\(^3\)

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1 Reinders 1988, 44ff.
3 Strabo, 9, 5, 14.
From these quotations it becomes clear that the description of the location of the town does not pose major problems. Based on these descriptions and the visit of ancient ruins of the Hellenistic town, Gazi’s identification of Halos on his map dating to 1814 is correct.4 Various 19th century travelers visited the site, among them Gell, Leake, Ussing and Stählin.5 They gave descriptions of the site in varying detail and suggested the idea that the upper city on the western spur of the Othris was of greater antiquity than the rectangular eastern part which lay in the lower plain. Research by the University of Groningen has made it clear that the upper and lower city were built simultaneously in the early Hellenistic period and that the Classical city of Halos was situated elsewhere.6 The early travelers also gave useful information on land use and on site formation processes, which will be used in later chapters of this book.

2.2 Halos in Historical and Literary sources

Several historical and literary sources refer to Halos and its territory. The earliest is Homer, who mentions Halos as taking part in the Greek campaign against Troy.7 Homer, however, is not clear on its location and also later authors, such as Strabo8 were puzzled whether Halos in Phthiotis was meant, an area which belonged to the territory of Protesilaos rather than Achilles, or perhaps another Halos, in Locris. Hope Simpson and

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Fig. 2.2. Location of Classical and Hellenistic Halos.

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4 Reinders 1988, 30.
7 Homer, Iliad 2, 680.
8 Strabo 9.433.
Lazenby \(^9\) presume that 'homerian Halos' should have been located in the area under the rule of Achilles and Peleus, thus near the Malian gulf. It should be noted that thus far, the archaeological evidence in the area of Phthiotic Halos does not support the presence of a large Mycenaean settlement in this area. Remains dating to the Neolithic and the middle Bronze Age were found at site HS1990/35, just north of the river Amphrysus and the extensive Proto-Geometric, Geometric and Archaic cemeteries and the Geometric settlement in the Voulokaliva area are well known and point to intensive human activity in the early Iron Age. \(^10\) Herodotus mentions Halos as a place for the disembarkation of 10,000 men in 480 BCE, indicating that the Classical town of Halos must have had a location near the sea and was able to offer the possibility of landing safely with that many ships. \(^11\) This passage and Demosthenes’ speeches (see below) were of help in identifying the town of Classical Halos with Magoula Plataniotiki.

Demosthenes is an important source regarding the history of the Classical town of Halos. In his speeches we find a description of how the peace treaty between the Athenians and the Macedonians in 346 BCE, the treaty of Philocrates, came into being. \(^12\) During the period that Philip II of Macedon's influence in central Greece increased, Athens developed several feuds with other city states, such as Thebes, and actively supported their own allies in several conflicts. At the same time, Halos was in conflict with Pharsalus, which was pro-Macedon, and Halos relied on friendly relations with Athens. In support of Pharsalus and in an effort to increase influence over southern Thessaly Philip's general Parmenion besieged Halos. Demosthenes describes a situation in which an Athenian embassy was able to disembark at Halos, pass by the siege of Parmenion, move on to Pegasae and later to Larisa in which he accuses one of the leaders of the embassy, Aeschines, of having made a secret deal with Philip II. Philip II made use of the internal and external conflicts of the Athenians and offered them a peace treaty under the condition that some of Athens’ allies were to be excluded from this treaty. Pressure grew on the Athenians to accept the peace treaty which took effect in 346 BCE. Indeed some of the Athenian allies such as Phocis, the Thracian king Kersobleptes and Halos were excluded from the treaty. Thereupon Parmenion took the city, expelled the

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\(^10\) The area surrounding the Hellenistic city was systematically surveyed over the past twenty years. The prehistoric remains have been published in Reinders, H.R., (ed.). *Prehistoric Sites at the Almiros and Sourpi Plains (Thessaly, Greece)*, (Assen: van Gorcum, 2004). The publication of the historic remains is in preparation and progress reports have appeared in *Pharos*. In addition, the south-east gate of the city was excavated over the past twelve years which yielded new information on subsequent habitation of the Hellenistic city (Reinders et al. 1996). The ceramics of the survey and the new excavations are currently being studied in more detail as part of a large scale project of the University of Amsterdam, entitled *New Perspectives on Ancient Pottery*. In addition, excavations by the 14th Ephorate of Prehistoric and Classical Antiquities in part connected to the works on highway no. 1, have yielded important new evidence on the occupation and use of this area in prehistoric and historic times: Malakasioti, Z., “Almiros,” *Archaiologikon Delition, Chronika* 40 (1) (1985): 184-185. Malakasioti, Z. and V. Rondiri, “Platanos Almirov,” *Archaiolikon Delition, Chronika* 45 (1), (1990): 203-204.


\(^11\) Herodotus VII, 173.

\(^12\) Demosthenes, *On the False Embassy*, 163.
inhabitants from their houses and imprisoned part of the population.\textsuperscript{13} The territory of Halos was handed over to Pharsalus.

There are no direct historical references to the period that follows the destruction of the classical town. This makes it difficult to establish a construction date and describe the circumstances under which the Hellenistic town of Halos was built. Stählin already suggested that New Halos was probably constructed in conjunction with the activities of Demetrius Poliorcetes in this region.\textsuperscript{14} He based his assumption on the relationship between Demetrius' activities and the presumed establishment of an Achaean League, known only from the coins of the cities of Peuma, Halos, Phthiotic Thebes, and Larisa Cremaste which all bear the monogram AX. Demetrius longed to establish a secure influence in the territories conquered by the Macedonians in the fourth century BCE. Like many of the descendants of Philip II and Alexander the Great. Demetrius himself was interested in the Aegean area and he assisted his father, Antigonus the One Eyed, in his struggle for power in the Near East. Demetrius' policy towards the occupied Greek cities consisted of declaring them 'free', though he often left a garrison behind. In the successive chapter we will further discuss the policies of the Antigonids and their relationships with Greek cities.

Reinders has made an extensive assessment of the various sources referring to historical events which can be related to the reestablishment of the polis of Halos and the construction of the new town at the end of the 4\textsuperscript{th} and the beginning of the 3\textsuperscript{rd} century BCE.\textsuperscript{15} There are no direct references to the refoundation and the building of the town of Halos, though Diodorus Siculus mentions the liberation of two towns in the vicinity of Halos around 302 BCE: Larisa Cremaste and Pherae.\textsuperscript{16} The author also tells us that Cassander had garrisons in Pherae and in Phthiotic Thebes and that upon the approach of Demetrius’ army he reinforced those garrisons.

The most probable occasion for building the Hellenistic town of Halos would have been in 302 BCE when the two armies of Cassander and Demetrius Poliorcetes met in the Crocian plain and encamped opposite each other. This situation did not lead to an actual fight. The developments in Asia forced Demetrius' father Antigonus the One Eyed to ask his son for assistance and Demetrius had to leave with his army. Both parties reached an agreement whereby all cities in Achaia Phthiotis were declared free.

Thus, the heavily fortified town of Halos would have been built by Demetrius Poliorcetes who probably stationed his army there until he was forced to leave. Another argument which supports Demetrius’ involvement in establishing the Hellenistic city of Halos comes from the excavation of the south-east city gate in 1995. Here a silver coin hoard was found which can be associated with the foundation of the city, as it was found at a low level very near to the city wall. The coins of this hoard derive from cities which, as is known from sources such as Diodorus Siculus, Demetrius had visited on his way to his encounter with Cassander in the Crocian plain.\textsuperscript{17}

Historical sources give us no information on the final abandonment of the Hellenistic town of Halos. The archaeological indications point to a date of around 265 BCE, which is largely based on coins. There are indications that the town may have suffered extensive damage from an earthquake around that time. The Almiros plain is subject to earthquakes and throughout history several seismic events have been recorded in this

\textsuperscript{14} Stählin 1924, 179.
\textsuperscript{15} Reinders 1988, 166-170.
\textsuperscript{16} Diodorus Siculus 20.110.2 and 20.110.6.
\textsuperscript{17} Reinders et al. 1996, 132.
region. In the next chapter, the evidence will be summarized. The area of the south-east city gate was inhabited somewhat longer. It was converted into a farmstead and presumably abandoned near the end of the 3rd century BCE.

2.3 *City Plan and fortifications*

The city of Halos, its fortifications, civic structures and city plan have been studied extensively by Dutch archaeologists and published in two volumes. When research commenced in 1976, it quickly became clear that the idea that the upper (western) part of the town was older than the rectangular area in the plain and could be identified as the Classical city of Halos, should be dismissed. Both sections were planned as a whole and built as a single process. The lower town consisted of a built up area of about 40 hectares enclosed by an enceinte measuring ca. 700 x 700 m which was fortified with 68 towers. An enceinte also enclosed the upper city and locked into the north-western and south-western corners of the lower enceinte. Two major gates provided access to the lower town, one in the north-western corner of the lower city, the other in the south wall. Both gates have been excavated and the latter gate, the south-east gate, provided evidence of later habitation. The upper enceinte was triangular in shape ending in an acropolis with probably a battery at the apex, now lying under a 12th century CE Byzantine fortress. It was fortified with at least 50 towers.

Fig. 2.3. Plan of the Hellenistic City. From Reinders 1988, 35.

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19 The latest coins date from the time of Antigonus Doson (Reinders, pers. comm.) Also the ceramics point in the direction of an abandonment at the end of the 3rd century BCE. Colette Beestman-Kruyshaar pers. comm.
The surface of the upper city shows various buildings scattered about without any clear sense of planning. One of these structures has been excavated, while others have been mapped. The lower city shows the opposite and displays a regular plan with a multitude of walls all with the same orientation. The rectangular space is divided up by fourteen streets running east-west and three streets running north-south. A central broad avenue ran east-west. This division created sixty-four housing blocks, each measuring the same width (30 meters = 100 Doric feet), but with four different lengths; ca. 80m, 180 m and 210 m (250, 600 and 700 feet). Initially it was assumed that the houses making up the housing blocks were mostly the same size, such as at Olynthus, but it appeared that rows of the most common house size, 15 x 15 m did not ‘fit in’ the housing blocks and it turned out that houses had all similar depths (15 m) but varying widths. There were three basic sizes, with a width of either 12.50, 13.75 or 15.00 m and a uniform length of 15.00 - 15.75 m.

It is striking that no clear remnants of large scale public buildings are or were visible in the city. The only area where a difference could be detected in the layout and which suggested the remains of public buildings was along the Main Avenue running east-west, in between housing blocks 3.8 and 7.1. Here the researchers found external foundation walls made of larger, ashlar blocks. The avenue also seems to widen over a stretch of more than 40 m to a width of 10.47 m. Several thresholds, other construction material and column drums were found on spoil heaps nearby, having just been taken out of the soil. Reinders interprets this area as a possible location of the city’s agora and it may be that the column drums represent remnants of a stoa, lining both avenue and agora. An ancient olive press was found in this area, the only artefact testifying to olive cultivation during the city’s existence.

2.4 The Houses
Six houses were excavated within the enceinte of the lower town of New Halos in the years 1978, 1980, 1984, 1987, 1989, 1991 and 1993. The excavation of each of the houses lasted one season, except that of the House of the Coroplast, which was excavated in two seasons (1978 and 1980). Most of the excavations lasted five to eight weeks. The size of the teams varied from ten to twenty members. The teams consisted of archaeologists and students.

In the following section I will give a general description of the architecture and principles of construction of the houses in Halos, followed by a detailed description of each excavated house. In the successive chapters I will discuss the houses of Halos and their contents in the broader context of early Hellenistic Greek housing. The following houses, each named after a characteristic artefact or artefacts found during the excavations, will be discussed in extenso:

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21 This structure, excavated in the upper city was the so-called sepulchral building (Reinders 1988, 137ff) which now has been identified as a sanctuary dedicated to Demeter. Beestman-Kruyshaar, C., “The cult of Demeter Thesmophoros at Hellenistic Halos,” (Paper presented at the 3rd Archaeological Meeting of Thessaly and Central Greece, Volos, Greece, March 12-15 2009). A larger building (building 6) which was identified contained a pebble floor and a cistern.


23 The thresholds measured 0.9 x 0.47 x 0.17 m and 1.57 x 0.47 x 0.23 m. The building stones measured 0.35 x 0.5 m (depth could not be measured) on average. The two column drums were of identical size and measured 0.46 m H and 0.33 m W on the lower side and 0.3 m W on the upper side.

24 For the composition of the teams, see the preface to Reinders and Prummel 2003.. Two workmen were hired in the 1989 and 1991 seasons.
1. House of the Coroplast (housing block 2.7, plot 11; 13.75 x 15 m). This house was excavated in 1978 and 1980; the results of the excavations were published by Reinders in 1988. Since then, studies of the artefacts and architecture have provided new insight into the history of the occupation of this house and the activities that took place in it. This new information will be included in the discussion of this house below.

2. House of the Geometric Krater (housing block 2.8, plot 17; 12.70 x 8.80 (15.00) m). The foundation stones of the south-western part of this house were found to have disappeared, obviously because the Almiros-Sourpi road once ran across this part of the house. The preserved north-eastern part was excavated in 1984.

3. House of the Snakes (housing block 6.4, plot 9; 15.10 x 15.45 m). This house was selected for excavation, in 1993, because until then mainly houses in the southern parts of housing blocks had been studied. Considering the house’s position, we expected its plan to differ from the plans of the House of Agathon and the House of the Ptolemaic Coins bordering this house on its southern side.

4. House of the Amphorae (housing block 6.4, plot 18; 15.50 x 14.30 m). This house was excavated in 1991 in order to gain insight into the plan of a house measuring...
15 x 15 m. Unfortunately we found the house remains had been severely disturbed.

5. House of the Ptolemaic Coins (housing block 6.4, plot 21; 12.70 x 14.80 m), excavated in 1989. This house bordered the House of Agathon, but was less well preserved as the south-eastern part had been partially disturbed.

6. House of Agathon (housing block 6.4, plot 22; 12.50 x 15.20 m), excavated in 1987.

At times I will also refer to one other house, ‘House A’, in housing block 6.2. The foundations of this house were cleaned in 1978 in order to gain insight into the house’s structure and plan. The house was however not excavated, and virtually no artefacts were collected during the fieldwork. As the results of the investigation of this house have been published elsewhere, this house has been left out of the description of the individual houses, but it is included in the architectural analysis in chapter 3.

In 2007, the University of Groningen excavated an additional house, the so-called House of the Tub. The excavation of this house was only finished in 2009. I have only included some of the architectural evidence regarding the House of the Tub throughout this book.

2.4.1 Excavation methods and find processing
The members of the excavation teams shared responsibility for every aspect of the fieldwork. Specific supervisory tasks were divided among the senior members of the team. For didactic purposes, the students were usually involved in the digging, recording, measuring, drawing and processing of the finds and were obliged to keep daily records of their results.

The actual excavation work was performed with the help of pickaxes, mattocks and trowels. Layers with thicknesses of about 0.05 – 0.10 m were removed until the virgin soil was reached. After each layer had been removed, the exposed surface of each unit was drawn. Units usually coincided with the rooms of the individual houses. Finds were recorded per room and per layer. The precise positions of all diagnostic finds, pottery, metal objects, organic matter and coins, were recorded and were indicated in the drawing of each unit.

The sherds recovered in the first three excavation seasons (the House of the Coroplast, the House of the Geometric Krater and the House of Agathon) were partially sorted in the field. The roof-tiles were discarded but most of the other pottery was kept, as were all other finds (organic remains, loom weights, metal objects). All of the ceramic objects encountered in the last three seasons (House of the Ptolemaic Coins, House of the Amphorae, House of the Snakes) were recovered and processed. All finds were recorded per layer on previously prepared forms, on which the type of ware, number and weight were specified. After this they were taken to the *apothiki* in Almiros to be washed. Finds of particular significance were taken to the Volos museum for consolidation and restoration. All finds were laid out according to the room where they were found in order to look for fits. In separate study seasons the pottery were sorted into different categories based on their shape and their type of ware, and all finds were individually described. The diagnostic pottery was drawn by members of the team and, where possible, restored either by us or by the Volos museum. A significant proportion of the metal finds was also drawn, and the most important metal objects were consolidated by members of the Volos museum. For descriptions and

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the results of the analyses of the artefacts and faunal remains the reader is referred to chapters 3 and 4 of Reinders and Prummel 2003. In 1998 a small selection of the finds was included among the archaeological remains displayed at the newly restored museum of Almiros.

This detailed registration and analysis of the finds of Halos was deemed worthwhile in view of the nature of the deposits and the site-formation processes. As a result of the seemingly sudden destruction of Halos and its subsequent abandonment without any rebuilding attempts, a significant percentage of the household inventory, essentially objects which were broken, of little intrinsic value or beyond recovery, was left behind. The straightforward stratigraphy associated with the houses moreover implies that the site was not occupied for very long. The numismatic evidence yielded a very accurate date for the destruction; the site was found to be abandoned around 265 BCE. This meant that the city had only been inhabited for two generations at the most. This, and the find conditions definitely called for a detailed system of registration and description.

2.4.2 Stratigraphy

The occupation layer containing the remains of the Hellenistic town of Halos was found to be extremely shallow (see fig. 2.5). Until recently, many foundations of the houses that once stood in the area enclosed by the enceinte could be identified in the field without much difficulty. In the cropping system employed by the local farmers, the plots were left fallow for one or two years after a crop of wheat had been grown. In those years the land was used for pasturing flocks of sheep and goats. These activities caused virtually no damage to the stratigraphy. Thirty years ago, however, intensive agriculture was introduced in the Almiros area and this had major consequences for the preservation of the site. The change in land use led to widespread damage not only to the archaeological stratigraphy, but also to the architectural remains. The owners of the plots of land within the enceinte of Halos used heavy machinery to remove the foundation stones of most of the houses and to plough the stony, but fertile soil. At present (2010), about 99% of the land within the city walls is in use for the cultivation of olives, wheat, cotton, lucerne and tomatoes. In recent years, most of the house remains have consequently been destroyed, except those in the plots of land that were expropriated for this research.

![Fig. 2.5. Stratigraphy of Room 4 of the House of the Amphorae from south.](image)

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26 Reinders in Reinders and Prummel 2003, 231 ff.
During our excavations we reached the virgin soil at an average depth of 0.40 m. The stratigraphy of each individual house or area within a house will be discussed in detail below. Generally speaking, the following layers were encountered:

- 0-0.15 m: topsoil; disturbed; mixed with worn sherds and other artefacts dating from the Hellenistic period and recent times;
- 0.15-0.35 m: layer containing destroyed remains; sherds (not worn) and other artefacts and structural remains dating from the Hellenistic period;
- 0.35-0.40 m: floor level(s); soil mixed with a few small, worn sherds dating from the early Hellenistic period and a few artefacts dating from the Geometric period;
- 0.40-…: virgin soil, consisting of Pleistocene hardpan. The foundation stones had been dug into the virgin soil.

2.4.3. Techniques and principles of construction
In this section I will discuss the basic principles of construction used for the houses at New Halos. These principles have been deduced primarily from the archaeological record, with supplementary information derived both from analogous sites and from the study of sub-recent houses constructed with a similar technology and building tradition.

a. Foundations and walls
The foundations of both the internal and external walls of the houses at New Halos consisted of large, roughly hewn blocks of limestone, usually laid out in foundation trenches dug into the Pleistocene soil. Most of the blocks were quarried on the hill of the upper town. Although the outer faces of some of the blocks of the foundations of external walls show signs of having been worked and smoothed to some extent, most blocks were unworked. Conglomerate stone was used sparsely. Poros stone, a soft

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27 Reinders, 1988, 60.
coarse limestone possibly deriving from the area, was used for some architectural elements, primarily thresholds (see below).

The majority of the foundations of the supporting walls consists of two rows of blocks with an overall width of 0.45-0.50 m. Non-supporting walls were somewhat less carefully constructed, the majority consisting of two rows of blocks and some of a single row of larger blocks. The width of these foundations is 0.30 - 0.35 m. The gaps between the elongated foundation stones and between the foundations and the courses of the walls proper were filled with soil mixed with small pieces of limestone.

In most cases only one course of foundation blocks had survived. Some foundation blocks were found to rest on flat limestone slabs (fig. 2.7). The upper walls were most likely built from perishable materials such as mudbrick, wood and/or wattle and daub. No remains of these walls were found in the excavated houses, so we have no direct evidence as to which of these materials was used at New Halos. The gaps between the foundation stones were wide enough to have contained the vertical timber beams that would have been required for wattle-and-daub walls. Indirect evidence and evidence obtained at similar sites however suggests that the walls were of mudbrick. Foundations such as those found at New Halos were quite suitable for supporting mudbrick walls, and in recent excavations of the remains of a small building adjacent to the south-east gate of New Halos the outlines of burnt intact mudbricks were observed.28

Recent excavations of the House of the Tub yielded a single burnt terracotta square which may represent a mudbrick.29 The measurements, however, suggest another usage; perhaps it was a window sill. Evidence obtained elsewhere in Greece suggests that mudbrick was used more commonly than wattle and daub in the construction of houses at this time.30

The foundations of the front and rear walls of houses at New Halos have a few characteristics in common. The stones of the external rows are generally broader and longer than those of the internal rows. The outer parts of a building’s external walls had to bear more pressure from the upper part of the wall and the roof than the inner parts (fig. 2.8). The row of larger stones thus prevented the risk of the external wall collapsing outwards. This implies that the rear walls of the south-facing houses bordered an open area. This we were able to check in one case only: the rear walls of the House of the Ptolemaic Coins and the House of Agathon indeed bordered the courtyard of the House of the Snakes.

Where only one course of foundations had survived, the average height of the stones was 0.30 m. Only in the House of the Coroplast and parts of the rear wall of the House of Agathon had two courses of the foundations been preserved. As the foundation stones had been dug into the hardpan, the height of the preserved foundations measured from floor level was 0.15 m on average. In my opinion this cannot have been their original height. Observations made during a study of present-day mudbrick housing in the Almiros area (see appendix C) show that the height of most foundations nowadays is between 0.40 and 1.00 m, measured from floor level. Such a height is necessary to prevent water seeping up or spattering the lowest row of mudbricks, which would affect the stability of the upper wall. This prevention is seen at Halos too.

28 Reinders et al., 1996, 129.
29 Reinders pers. comm. The square measured 0.45 x 0.45 x 0.08 m.
Fig. 2.7. House of Agathon, Halos: two rows of foundation stones. The lower row consists of flattened limestone blocks.

Fig. 2.8. House of the Coroplast. Exterior stones of the wall foundations are larger.

Fig. 2.9. Various ways of laying mudbrick.
It is suggested by the two courses of foundation stones preserved in the House of the Coroplast and the House of Agathon, but also by various stones found during our excavations which are assumed to derive from collapsed upper courses of foundation stones (e.g. House of the Snakes, room 2). In some houses (notably the House of the Ptolemaic Coins) in which parts of collapsed upper walls were discovered, these parts were moreover found to comprise the fill of part of the wall foundations. Besides, it is known that the site was quarried in the 19th century. Not only the stones of the eastern city walls may have been removed, but perhaps part of the smaller stones of the upper foundation as well. For these reasons I believe that the foundations of the houses at Halos originally comprised at least one course more than is preserved in the archaeological record, and that their height above floor level was at least 0.40 m.

Modern mudbricks, which were still being made in the Almiros area in recent times, usually measure 0.12 x 0.15 x 0.30 m.31 These measurements coincide with those known from the south-east Gate of New Halos. The bricks known from Olynthus were a little flatter, longer and wider, measuring 0.08-0.10 x 0.17-0.19 x 0.39-0.49 m.32 We may assume that the method used to produce mudbricks in antiquity was similar to that employed in recent times. The soil used for the mudbricks was usually obtained from an area very close to the site where the new building was to be erected. It was mixed with organic temper such as hay to improve its mouldability and was then placed in rectangular kaloupia, wooden moulds. When the soil had dried sufficiently, the mudbricks were removed from the moulds and were left to dry in the sun. Mortar was made from purified soil, free of stones and grit.33

As mentioned above, the widths of the wall foundations in New Halos varied. Several bricklaying techniques are consistent with the varying widths. These techniques, which are illustrated in fig. 2.9, all resulted in stable, flexible upper structures. Most of the techniques have been inferred from the above-mentioned sub-recent houses in Almiros and its surrounding area and from other archaeological evidence.34 From ethnoarchaeological research we know that roof-tile fragments are sometimes inserted between mudbricks to strengthen the walls (fig. 2.10a). Tile fragments are sometimes found on top of foundation stones, too (fig. 2.10b). Whether this custom was practised at New Halos we do not know, as we assume that the upper course of foundation stones has not survived. Large quantities of tile fragments were found in the excavations, but it is impossible to say with certainty whether any of those fragments derive from walls rather than from roofs.

A technique which was frequently used to increase the flexibility of walls in areas susceptible to earthquakes in sub-recent times involved incorporating cross-ties at regular distances in the walls (fig. 2.11), held in place by iron nails. This technique was used in all sub-recent houses in Almiros and surrounding areas, whether they were built from mudbrick or consisted partially or entirely of stone. It is likely that a similar technique was also used in the houses of New Halos. Although we found no evidence for the use of cross-ties in the walls, we do have some evidence in the form of postholes for vertical beams, which may have formed part of a framework ensuring

32 Robinson and Graham 1946, 185.
34 Skafida, 1994; Haagsma, Appendix D.
the required strength and flexibility, for instance in the south-western foundation wall of room 3 of the ‘House of Agathon’.

The finished walls were presumably plastered on both sides. Plaster prevented the risk of insects and other animals housing in the bricks and mortar. At Halos, most probably, the plaster will have consisted of a mixture of powdered limestone and water or simply of purified mud with water. Such plaster is still used in Greece and other countries today. In antiquity, it could easily have been obtained from the upper town of Halos or, in the case of soil, from nearby fields. The only case in which we found traces of lime plaster in Halos was in room 5 of the House of the Tub and we cannot entirely rule out the possibility that the houses were left mostly unplastered. It is unlikely that they were plastered with the kind of pre-concrete plaster found in the houses of Olynthus, Kassope and elsewhere, because traces of such plaster would almost certainly have been preserved in the archaeological record.

b. Floors

As already mentioned above, the soil in the area of Hellenistic Halos is very hard and dry during the excavation season. The shallow depth of the occupation layer and the great uniformity in the colour and texture of the soil made it difficult for us to

Fig. 2.10. Mudbrick wall in recent houses in Almiros. a. Sherds within mudbrick, b. Tile-fragments separate the foundation stones and the bricks, c. Straw used as temper in the mudbrick.


36 Cf. Hoepfner and Schwandner (1994, 155) on the fact that Kalkpfutz plastering leaves no traces in the archaeological record.
distinguish archaeological strata. Features were difficult to recognise in the exposed horizontal surfaces, even after we sprayed the baulks and surfaces with water. In most of the rooms we excavated we left baulks at the centre of the room in the hope that they would help us analyse the stratigraphy. After careful study, we were able to distinguish only one floor level in the sections of most rooms and houses. In room 2 of the House of the Ptolemaic Coins we encountered two floor levels. Here a small part of the floor was found to consist of a layer of larger pebbles, beneath which was the usual floor of trodden earth encountered elsewhere.

Most of the floors consisted of a very thin layer (0.005 m) of trodden earth containing the odd sherd, animal bone and mollusc shell overlying the Pleistocene hardpan. The hardpan, in fact, constituted a perfect floor foundation. In some houses and rooms, however, a thin layer of limestone grit had been incorporated in the trodden earth to consolidate the floor. In some cases earth had also been used to level the floor. This was most clearly observable in the House of the Ptolemaic Coins, whose room 5, especially the south-western part, contained a layer of earth with a thickness of 0.05 m that was virtually devoid of finds and had evidently been deposited to level the floor in this part of the room.

Floor layers found at other archaeological sites were less thin. The floors of House A at Eleutherna, which also consisted of trodden earth, were 0.03-0.20 m thick. The

Fig. 2.11. Mudbrick wall of House 10 in Almiros (now destroyed), partially constructed in stone, partially in mudbrick. Note the horizontal beams protecting the wall from collapsing during an earthquake.

Kalpaxis, T., A. Furtwängler and A. Schnapp (eds), Eleutherna, tomeas II, 2. Ena ellenistiko spiti ("Spiti A"0 sti thesi nisi (Contributions in Greek, German and French), (Rethymno: Ekdoseis Penepisthmio Kritis, 1994), 55.
latter thickness was measured in areas where the irregular floor had been levelled. But in other areas the floor layer was at least 0.03 m thick. At Olynthus, the majority of the floor layers were 0.05 m thick.

In our research into sub-recent Greek housing, we observed how earthen floors are treated in present-day Almiros (Appendix D). Every year, shortly before Easter, the inhabitants of the mudbrick houses we studied cover their earthen floors with a fine red slip of clay obtained from a riverbed near the town. This *kokkino choma* is purified with water before being spread over the floors and then left to dry. We found no evidence of a similar custom in the houses of New Halos, but it should be borne in mind that such a layer of purified clay is usually only a few millimetres thick, and by the time a new layer is applied the previous layer will have been worn away completely. It may have been that the trodden floors in houses were covered with mats or tapestries, especially during winter.38

c. Doorways

Whenever doorways were found in external walls at Halos, they were all of the same type. Doorways that provided access to a courtyard were designed as a so-called prothyron, a

Fig. 2.12. Prothyra in Halos. a. House of the Coroplast; b. House of Agathon.

38 Ault 2005, 10.
roofed entrance. This prothyron consisted of a limestone threshold with two pivots and usually a double door which opened inwards. The door was protected by a small tiled roof (figs. 2.12, 2.13 and 2.14). Only one doorway with a threshold was found in an external wall during the excavations, in the House of the Coroplas. In most of the other houses evidence of a prothyron was found in the form of a concentration of roof-tiles near a doorway in an external wall and the foundations of the doorjambs of such a structure. The majority of these doorways were between 1.20 and 1.60 m wide. An exception is the doorway in an external wall of the House of the Snakes, which was much narrower and provided access to the roofed area of the house. The smaller width of this doorway indicates that it contained a single door. The doorway in an external wall of the House of the Amphorae also seems to have been too narrow to have contained a double door, but this house most probably did have a prothyron.

It is generally assumed that carts could enter through the prothyron to be parked in the courtyard. This was the case with several houses in Olynthus, and some even had double doors; one for pedestrians and others for carts. However, the doorways in the external walls of the houses at Halos, with the probable exception of that of the House of the Coroplas, seem to have been too narrow for this.

There is a lot of information on what outside doors from the Classical and Hellenistic periods looked like. Representations of doors in Attic vase painting (fig. 2.13) and marble doors preserved in Macedonian tombs (fig. 2.14) show us doors made of vertically arranged wooden planks held together by cross-latches and large clenched nails which were sometimes decorated with bronze bosses or had large, boss-like iron heads. At Halos there is evidence from the House of the Coroplas and the House of the Snakes that outside doors were of this design. In both houses concentrations of large numbers of clenched nails with large heads were found near the doorways in the external walls. In the case of the House of the Snakes the nails were even found together with a lock, a key and a bolt.

Doorways in internal walls were of a simpler design. The doors were mostly single, made of wood and had an average width of 1.0 m. Some incorporated clenched nails and turned in a pivot hole hacked into a stone threshold. A few thresholds have survived. They were about 0.15 m high, measured from the original floor level, and were made from various materials. Some, such as those in the House of the Snakes, were made from poros stone, while those in the House of the Coroplas were of limestone. One of the latter thresholds had supported a double door (between rooms 4 and 5). Some of the doorways in the House of Agathon and the House of the Ptolemaic Coins contained a neat row of limestone pebbles. Whether these pebbles served as a foundation for a large threshold block is not clear. There is some evidence that internal doors could also be locked: in the House of Agathon and the House of the Amphorae keys and keyholes were found in the vicinity of internal doorways.

d. Windows
No direct evidence for the existence of windows was found during the excavation. Many iron fragments, including nails, came to light which may have been parts of the

40 Evidence for windows in houses has been obtained at for example Olynthus in the form of the capitals of pillars which were so small that they can only have been part of windows (Hoepfner and Schwandner, 1994, 106). On windows in Olynthus, see Cahill 2002, 76, 178. See also Löhr, C., “Griechische Häuser: Hof, Fenster, Türen nach 348 v.Chr.” in Licht und Architektur, ed. Heilmeyer, W.-D. and W. Hoepfner, Schriften des Seminars für klassische Archäologie der freien Universität Berlin. (Tübingen: Wasmuth, 1990), 10-19. Barbara
mountings of windows or shutters, but they may also derive from ceilings, furniture or other wooden items. As the houses excavated at New Halos so far shared most of their external walls, they can have had windows only in walls bordering the courtyards. For reasons of privacy, windows in Greek houses rarely opened directly onto the street. This means that on average, direct daylight will have been admitted to only three rooms in a house. Apparently two or more rooms had no daylight whatsoever. No evidence of so-called opaia, or other openings for letting daylight enter a house and smoke escape, were found.41

e. Ceilings
It is not clear whether the houses at New Halos had ceilings. Usually single-floor houses from Classical and Hellenistic times are reconstructed without ceilings, with the wooden structure of the roof exposed.42

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Tsakirgis gave an informative paper on light and lighting in domestic context on a conference in Vienna on Urban Living in the Eastern Mediterranean in October 2007. The proceedings were not yet published at the time this chapter was written.


42 e.g. Hoepfner and Schwandner, 1994, 107-108.
There are, however, no reasons why (single-floor) Classical and Hellenistic houses should not have had ceilings. From ethnoarchaeological evidence (Appendix D) we know that ceilings are common in sub-recent single-floor mudbrick houses. They insulate the house, which is necessary in the harsh winters as well as in the hot summers in Greece. Ceilings, moreover, prevent draughts and dust from entering the house.

Ceilings of traditional mudbrick and stone houses in Almiros and surrounding areas were usually constructed by arranging reeds longitudinally across the rooms in the house. The reeds were held in place by iron mountings attached to the horizontal beams of the timber framework of the roof. They were covered with purified earth or mortar and then plastered. Whether the same principle was applied in the houses at Halos is far from certain. A small number of fragments of iron mountings have been found, but it is not clear from what objects they derive. Besides, reeds may very well have been held in place by means which have left no trace in the archaeological record, such as lashing, pegging, etc.

Ceilings may also have been created by placing wooden boards longitudinally on top of the horizontal beams of the timber framework, but such a design would have been more costly.
f. Roofs
In view of the large numbers of roof-tiles found at New Halos, the houses most likely had gently sloping roofs consisting of a timber framework covered with large roof-tiles. Since most of the houses shared their external walls, we may assume that they also shared their roofs. Nicholas Cahill observed this in Olynthus as well and emphasized the constraint this must have put on the design of the houses and the common efforts that were likely involved in house construction. This aspect will be discussed in chapter 3. The principles used to construct such timber roof frameworks in Classical and Hellenistic buildings are not well attested in the archaeological record. The framework may well have resembled that used in sub-recent houses in Almiros and surrounding areas (see Appendix D) and also in traditional housing in a wider Thessalian context. These frameworks consisted of a horizontal beam with a vertical beam attached to it in the middle. Two smaller beams were added to form a diamond shape which were attached to the lower beam by two small crossbars. Several such triangles were arranged on top of the walls, on average at intervals of one metre.

The roofs were covered with large, slightly concave rectangular roof-tiles whose upturned edges were covered with elongated convex tiles. The concave tiles of this 'monk and nun' roofing system measured 0.40 x 0.80 m; the convex tiles measured 0.20 x 0.80 m. Although very large numbers of roof-tile fragments were found at New Halos, only one reasonably complete tile of each type had been preserved in an archaeological context. No other types of roof-tiles, such as antefixes, spouts or tiles with gutters, were found.

g. Upper floors
Examination of the ethnoarchaeological evidence shows that mudbrick houses are sturdy enough to support an upper floor. Ancient sources frequently refer to upper floors in Classical and Hellenistic houses as the gynaikonitis, the woman's quarter. However, upper floors are difficult to infer from archaeological remains. Usually, the only indications are bases of wooden stairs such as those found at Olynthus, or parts of stairs made of stone like those found at Thorikos, but in neither of these cases is it clear whether the stairs led to a flat roof or roof terrace or to an upper floor. Other indications of upper floors are holes for beams supporting the first floor in the preserved rear walls of a house like those found at for instance Priene. On the other hand, it is however difficult to prove the former existence of upper floors on the basis of stratigraphic evidence alone, except in cases involving certain architectural features such as mosaics.

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43 Cahill 2002, 199-200.
44 In the Villa of the Bronzes at Olynthus the remains of a wooden beam (1 m x 0.26 x 0.10 m) were found. They are thought to derive from a roof beam (Hoeprhner and Schwandner 1994, 107).
46 In processing the roof-tiles, we attempted to separate the concave from the round ones in order to better reconstruct the roof system. This turned out to be a laborious task; because fragments were, in many cases, relatively small, it was difficult to distinguish half round from curved tiles. It was our impression, however, that the number of curved tiles was much larger than the number of truly half round tiles. It would therefore also be possible that the roof consisted mostly of curved tiles laid out in a ‘monk and nun system’ with only a limited number of half round tiles resting on the peak of the roof.
47 Cahill 2002, 67.
49 Other houses which probably had an upper floor are the House of the Many Colours at Olynthus, whose upper floor was in all probability paved with mosaics (Robinson and Graham, 1946, 204; Cahill 2002, 95), and a Classical House at Kallipolis (Themelis, P., “Ausgrabungen in Kallipolis (Ost-Aetolia), 1977-1978,”
When a house with an upper floor collapses, household items from the upper and the ground floor usually become mixed along with architectural debris from the upper structure. In ancient times, such architectural debris will usually have consisted of organic, and hence perishable, material such as wood and reed, which leaves no trace in the archaeological record.

The stratigraphic evidence obtained at New Halos and the lack of other features, such as stair bases, suggest that the houses had no upper floors. No indisputable evidence of collapsed upper floors was found. Certain stones found in some of the houses, such as the House of Agathon, room 3, may have been bases of wooden stairways, but this is far from certain. No other finds or evidence suggest the former existence of an upper floor in any of the houses we excavated.

### h. Water supply, storage and drainage

During our excavations we found no remains of devices or structures for supplying or draining water. This is very unusual for a town from the Hellenistic period. A section dug across the street between housing blocks 6.4 and 6.5 in 1993 revealed no traces of gutters, drainage pipes or other drainage systems, nor did we find any remains of water-supply systems, with exception of the cistern found in building 6 on the acropolis. This lack of evidence may be due in part to the limited scope of our excavations. It is likely that all traces of waterworks, public cisterns and drainage systems such as gutters along the main streets of Halos, were destroyed in ploughing. Most houses were similarly devoid of drainage pipes, wells and the like. In 1978, when we cleaned part of a foundation wall of a house in the lower town of Halos, we found some evidence of a drainage system in the form of a roof-tile inserted between two large foundation stones which probably represent the remains of a gutter for draining excess water from the house to the street (fig. 2.15). In the courtyard of the

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*Athens Annals of Archaeology* 12 (1979): 245 ff.).
House of the Snakes we found a feature which proved to represent a well that was secondarily used as a rubbish pit.\textsuperscript{50} Drinking water was probably drawn from public cisterns, which were presumably widely distributed across the town, and subsequently stored in pithoi inside the houses.\textsuperscript{51} Some houses may have had wells. The most likely sources of water were the Kephalosis spring and rainwater.

2.5. Description of the Houses
In this section I shall discuss the evidence obtained in the excavation of each house separately. In each paragraph I shall provide general information on the excavation, descriptions of the foundations, individual rooms, areas and units, the finds recovered in them and the associated find conditions, traces of rebuilding/renovation, etc. I will add general conclusions concerning the nature of the house, its ground plan, any changes it underwent, etc. A ‘room’ will here be understood to be an area enclosed by four walls. An ‘area’ is part of a house that was enclosed by fewer than four walls, i.e. usually a courtyard or a corridor. For practical reasons some areas were subdivided into ‘units’ during the excavations.

2.5.1. The House of the Coroplast (Housing block 2.7, plot 11)
The House of the Coroplast was excavated in 1978 and 1979. Although the results of these excavations have already been published \textsuperscript{52} I have decided to include this house in the present publication because closer examination of its foundations has yielded new information on the house’s building phases.

The dimensions of the House of the Coroplast were 13.75 by approx. 15.00 m. The house lay in the northern part of housing block 2.7, along street No 6. It was entered through a prothyron with a double door with a width of 2.25 m. This door provided access to the courtyard which comprised two separate areas: areas 1 and 2. To the left of the entrance was a small room (No 9) measuring 2.70 x 4.40 m, which was not connected to any of the other rooms (fig. 2.16).

From the courtyard, the covered part of the house could be entered via what we have called room 3. In this room, which measured 5.20 x 5.20 m, a number of moulds and figurines were found. This room provided access to room 4, measuring 2.15 x 7.65 m. A double door in room 4 provided access to room 5 (3.60 x 3.60 m), which in turn opened into to room 6 (3.60 x 3.60 m). The latter room was void of finds. From room 6 one entered the largest room of the house, room 7 (4.55 x 7.60 m), which has been identified as the main living room. In its centre a rectangular feature was found consisting of pebble stones resembling a formal fire place, but without the hearthstones. Room 8, a small room (2.65 x 2.75 m) which yielded very few finds, could only be entered via this main living area.


\textsuperscript{51} A pithos was found in the courtyard of the house of Agathon, which was likely used for the collection of rainwater.

\textsuperscript{52} Reinders 1988, 117-134.
Fig. 2.16. House of the Coroplast Foundations.

The most remarkable feature of the House of the Coroplast is the single route running through the house. There seems to have been no circular route. Neither did any one of the rooms provide access to several other rooms as in the House of Agathon or the House of the Ptolemaic Coins. To get to, say, room 8, one had to walk through almost all the rooms in the house. Whether this feature formed part of the original design of the house or perhaps evolved as a result of the use of the house we do not know.\(^{53}\)

Closer examination of the foundations of the west wall of room 7 revealed a stretch with a length of 1.20 m consisting of smaller stones breaking the pattern of the rest of the wall foundations. The other wall foundations comprise two rows, the outer (western) row consisting of large limestone blocks and the inner (eastern) one of significantly smaller stones. The different pattern of the stretch just mentioned, suggests that there was a doorway here originally, which was later walled up. Photographs of this stretch support the assumption that it was built at a later stage. If

\(^{53}\) I would like to thank Todd Whitelaw and Lisa Nevett, with whom I first discussed this feature, for their helpful comments and suggestions, which led me to re-examine the architecture of this house.
Fig. 2.17. House of the Coroplast. View from the north.

Fig. 2.18 a and b. House of the Coroplast, two consecutive building phases
this is correct, this access from the courtyard would make room 7 the central room of the house, via which various other rooms could be entered, making it comparable with all the other main living areas encountered in the houses we excavated: room 3 in the House of Agathon, room 3 in the House of the Ptolemaic Coins, room 3 in the House of the Geometric Krater and room 8/11 in the House of the Snakes.

In this context it is worth noting that the foundations of the two east-west walls in the area at the western end of the house identified as the courtyard also differ significantly in character from the other wall foundations in that they consist of significantly smaller stones. The stones of these walls were moreover laid against the north-south walls of the courtyard, instead of being incorporated in them. This, and the walled-up doorway of room 7, suggests that the house underwent changes at least once.

We may conclude that in phase 1 (fig. 2.18a) the house had an open courtyard at its western end and that the roofed part of the house could be entered through rooms 7 and 4. In phase 2 (fig. 2.18b) the courtyard comprised three areas, one of which, the coroplast’s workshop, was roofed (room 3). Walling up the doorway between the courtyard and room 7 will have ensured the privacy of the living quarters, closing them off from the more public area of the workshop. The function of the wall between areas 1 and 2 remains unclear as there is no evidence of either of these areas having been roofed.

2.5.2. The House of the Geometric Krater (Housing block 2.8, plot 17)

Alongside the old road running from Almiros to Sourpi clear remains of wall foundations were visible in situ at the surface. Although this area had been used for arable farming, its situation near the elevated road had evidently saved it from extensive ploughing. The team decided to excavate this undisturbed area in order to obtain insight into the structure and layout of the architectural remains. The excavation was carried out in the autumn of 1984 by a team of eleven people who worked for four weeks using pickaxes, mattocks and trowels. They dug right down to the virgin soil. Diagnostic finds were plotted and kept for further investigation. The majority of the undiagnostic sherds were described and then discarded.

In the course of the excavation the observed concentration of wall foundations proved to be part of a house (fig. 2.19). This house, which we called the House of the Geometric Krater, lay in the southern part of housing block 2.8, bordering the Main Avenue. The wall foundations are the same as most of the others at Halos, consisting of double rows of differently sized limestone blocks. Stretches of 12.70 m and 8.80 m of the north-eastern and north-western wall, respectively, had survived. The average width of the north-eastern wall was 0.50 m, that of the north-western wall 0.55 m. The inner walls were built from smaller stones with widths of approximately 0.45 m. The widths of the north-eastern and rear walls and the absence of any doorways in them suggest that these walls separated the House of the Geometric Krater from the adjacent buildings. As the remains were uncovered, it was found that the north-eastern wall had suffered the consequences of recent agricultural activities. The stones at the southern end had been disturbed and parts of the wall were missing. Inspection of the assumed courses of the outer walls of the southern part of the house showed that the foundation stones in this part had disappeared in ploughing. This means we were unable to determine the house’s plan with 100% certainty (but see below).

Three rooms were distinguished in the excavated area. Gaps with widths of between approximately 1.00 and 1.15 m in the foundations indicate doorways. No threshold stones were found. A double row of small limestone blocks found just above floor
level in the southern entrance to room 3 represents a threshold or the foundations of a threshold stone.
Inside the rooms were dissolved mudbrick, small stones, roof-tile fragments, pottery and other finds. The stratigraphy and dates of the finds are the same as described in section 2.1, with the exception of a few finds encountered at a greater depth which date from the Geometric period. Differences in the structure of the walls suggest that the house underwent renovation work at least once. The south-western walls of room 2 and 3 both contain a doorway which was evidently walled up at a later stage. The presence of the internal wall in room 3, creating what we have called room 5 (see fig. 2.22 a and b), the level at which it was founded and the way it was linked to the other walls also indicate renovation activities. Starting in the north-east, I shall now describe the main features of the various rooms and the finds discovered in them.

*Room 1.* This room was situated in the north-eastern part of the house. Its inside measurements were 4.65 x 2.85 m. The room was bordered on two sides by the house’s external walls. In the north-western wall was a 1.00 m-wide doorway. The room’s floor consisted of trodden earth.

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It was covered with a thin layer of grit of which the density increased towards the entrance. This layer may have served to consolidate the floor. The many small roof-tile fragments indicate that the room was roofed, and also suggest that it was not immediately buried beneath debris after the final earthquake.

The bulk of the pottery was found in the south-eastern corner of the room. This location and the distribution of the sherds suggest that the pottery fell from a higher level, probably a shelf on the wall. Few metal and organic finds were recovered here. Most of the other artefact categories, especially pottery and coins, were found in the southern part of the room; the central part of the room was devoid of finds.

Room 2. Situated directly south of room 1, room 2 had more or less the same dimensions: 4.60 x 2.85 m, measured inside the walls. The room’s north-eastern wall was found to have been severely damaged by recent ploughing. The other walls were reasonably intact. The shapes and arrangement of the foundation stones suggest that there were originally two doorways in the south-western wall: a northern one, with a width of 0.85 m, providing access to room 3 and a southern one, with a width of 0.90 m, which probably provided access to the courtyard. The stones at both ends of the middle wall stretch were clearly worked. They both had straight corners. Small limestone blocks found in the southern doorway suggest that it was walled up during later rebuilding work. A thin layer of grit, probably deposited to consolidate the floor, was found at the same depth as in room 1 (-0.12 m at the centre of the room measured from surface level). The large number of roof-tile fragments supports the assumption that room 2 was roofed.

Rooms 3 and 3a. Room 3 was the largest of the three excavated rooms. Its dimensions were 6.85 x 4.35 m (including room 3a). Its situation at the centre of the living quarters and its shape and size bring to mind the main living rooms identified in houses at Olynthus, Kassope and elsewhere. Two partition walls in the north-western corner of the room designate room 3a as a separate area within room 3.
Evidence of rebuilding activities was observed in the structure of the wall foundations. The south-western foundation wall consisted of the usual double row of limestone blocks, except at its southern end. As in room 2, two stones, with neatly carved corners, marked a doorway which was walled up at a later stage (see fig. 2.22). From its northern end onwards the wall was disturbed, but the remains suggest that it originally extended to the rear wall.

The walls partitioning the area designated as room 3a did not form part of the original layout of the house. The way in which they were connected to the north-western and south-western walls and the level at which they were founded show that they were added at a later stage. The north-western foundation wall of room 3a originally contained a doorway with a width of approx. 0.85 m, evident from the arrangement of the stones near its connection to the south-western wall. This doorway provided access to a room, now lost, similar to room 2. The foundations of the south-eastern wall of room 3 were completely undisturbed. A fairly wide doorway with a width of 1.17 m provided access to room 3, with small limestone cobbles serving as a threshold or its foundation (fig. 2.21).

The floor level in room 3 was covered with large fragments of roof-tiles, indicating that this part of the house was roofed. The soil was mixed with small bits of charcoal. The floor of this room consisted of trodden earth mixed with large cobbles. Room 3a was defined by the foundations of a wall with a length of 2.50 m extending from the north-western external wall and the foundations of a wall with a length of 1.80 m extending from the south-western wall of room 3. As already mentioned above, these walls must have been built in a later occupation phase. Room 3a was most probably entered through a room lying to the west of it, as no doorway providing access to room 3 was observed. The south-western wall of room 3a had not survived. In view of the situation and size of this room and the evidence for food-processing activities found in room 3, room 3a resembles a partition in the kitchen area (the
kitchen flue) encountered in the houses at Olynthus. However, the absence of evidence such as ashes, charcoal or a cooking platform in addition to the character of the finds make it difficult to substantiate such an interpretation. 

**Reconstruction.** Although only part of the House of the Geometric Krater has been preserved, the four excavated rooms provide enough information for us to attempt to reconstruct the plan of the house. We know that the depths of the houses at Halos varied only little. The average width of a housing block was ca. 31.5 m, so the average length of the houses was 15.75 m. About 13.00 m of the length of the House of the Geometric Krater had survived, so it must have been about 2.75 m longer originally. As far as we can observe the houses at Halos had three standard widths: 12.50, 13.75 and 15.00 m. As will be discussed at the end of this chapter, the basic living quarters in the houses of New Halos consisted of a large living room bordered by two smaller rooms on either side. When we apply this principle to the House of the Geometric Krater we arrive at a width of approx. 12.50 m.

The reconstruction illustrated in figures 2.22 a and b show the various spatial components of the house. The house compares well with two other south-facing houses with widths of 12.50 m excavated at Halos: the House of Agathon and the House of the Ptolemaic Coins (see below). Rooms 5 and 6 may have been comparable with those in the latter two houses, and what we have reconstructed as area 4 can be interpreted as the courtyard, with northernmost area probably having been either a prostas or a pastas. These components and their consequences for the house typology of Halos and for house typology in early Hellenistic town-planning in general will be discussed at the end of this chapter.

**Geometric Finds.** The stratigraphy of the House of the Geometric Krater was more complex than that of the other houses. In room 3, a layer beneath the Hellenistic floor level yielded some finds dating from the Geometric period. These finds consisted of

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three coarse pithos bases, one fragment of an unknown terracotta object, a two- handled cup and a decorated krater. The pithos bases, the terracotta fragment and the krater were found in three separate pits which had been dug into the virgin soil with depths of approximately 0.25 m, measured from the Hellenistic floor level. The two- handled cup was found at the Hellenistic floor level. It is interesting to compare these finds with the results of the excavations of the Hellenistic cemetery of New Halos conducted by the 13th Ephoria of Prehistoric and Classical Antiquities in the area south-east of the town, outside the city walls. These excavations yielded remains of a re-used Iron Age tholos and some pithos burials, which date to the Early Iron Age. The finds discovered in room 3, the pithos burials and the tholos most likely represent the remains of one or more Geometric cemeteries situated south of the river Amphrysos, which were partially destroyed during the construction of the Hellenistic town. Of a somewhat similar date but different in nature is the well-known early Iron Age cemetery north of the Amphrysos which consisted of burial mounds containing both inhumation and cremation remains.

2.5.3. The House of the Snakes (Housing block 6.4, plot 9)

The House of the Snakes formed part of the same housing block as the House of the Amphorae, the House of Agathon and the House of the Ptolemaic Coins. It lay to the north-west of the latter two houses and was hence situated at the north-western end of the housing block. The house was excavated by a team of 15 excavators in eight weeks in the summer of 1993. The excavation of a well in the house’s courtyard was not completed that year, but was finalised in the summer of 1997.

Parts of the house’s wall foundations were visible at the surface. The foundations of this house were damaged in some places, especially near the external north-western wall, where all the foundation stones of a stretch of approx. 0.7 m of the internal walls were found to have been removed (fig. 2.23). The foundation stones consisted of large, irregular blocks of limestone, usually arranged in two rows with smaller stones used to fill the gap between them. One course of the foundations (with a height of approx. 0.45 m) had survived. As elsewhere, the external walls were a little wider (0.5 m) than the internal walls (0.4 m). The house measured 15.10 x 15.45 m.

As usual, the topsoil (0.08-0.1 m) had been harrowed and contained worn pottery and some present-day artefacts. The layer beneath (approx. 0.25 m thick) was more compact and seemed to have been disturbed in a few places only. The virgin, Pleistocene soil, which contained many cobbles and pebbles, constituted the floor level in both the roofed and the open parts of the house.

Room 1. Room 1 lay in the eastern part of the house and bordered room 2, area 4, area 9 and the external eastern wall. The room was almost square and measured 2.50 x 2.80 m. It could be entered from area 7 through a doorway whose exact width could no longer be determined as the wall foundations had been disturbed at this point. No threshold stone was found. A few large limestone blocks were found in the destruction layer, especially in the northern area of the room. Some may have come from a gap that was found in the wall between rooms 1 and 2 (which was not a

doorway but the result of disturbance), while others may derive from a second course of foundation stones. A number of stones were found arranged in a rectangle next to the eastern external wall. They rested on the floor and had surrounded a pit measuring 0.7 x 0.6 m with a depth of 0.07 m. The pit’s fill consisted of dark soil mixed with a few small sherds and organic matter. No ashes were found and the finds were not burnt. The pit may have been an old cooking pit or hearth, but was not in use as such at the time when the house was destroyed.

*Room 2.* This room lay immediately north-east of room 1 and was of the same size and shape. It was likewise entered from area 7. The doorway to room 2 was found to be intact and had a width of 0.8 m. It had a threshold made of volcanic stone which measured 0.75 x 0.45 m. The stone was worn at the centre due to use. No pivot holes were observed.

A trial pit was dug in this room in order to examine the relationship between the floor level and the foundation trenches of the north-eastern external wall. This pit showed that the room contained only one thin floor layer, consisting of compacted soil mixed with fine grit, at the same level as the top of the foundation trench. The trench was filled with somewhat softer, mostly virgin soil mixed with cobbles but no finds. The absence of a later floor layer on top of the foundation trench confirmed our assumption that most of the houses at Halos were occupied in a single continuous phase, with some re-walling, done over time.

No specific features were found in this room.

*Room 3.* Room 3 lay north-east of room 2 and appears to have been rectangular. The surviving part of the room measured 4.70 x 2.80 m. The foundations of the north-eastern wall and those of the entire south-western wall had been destroyed by harrowing in recent times; all the foundation stones in these parts had disappeared. The trench that had contained the foundation stones of the south-western wall was however still visible over what we took to be its entire length.58 We found a few other physical remains of this wall in the form of a foundation stone in the north-western corner of room 2 and two stones lying approximately 2 m further northwest in the presumed course of the wall. It is not clear whether room 3 was subdivided or not.

Significant differences are observable in the nature and distribution of the finds recovered in the north-eastern and south-western parts of the room. The south-western part contained a clear destruction layer with many roof-tile fragments, pottery and other finds, whereas only few finds, mixed with many small, worn roof-tile fragments came to light in the north-eastern part. As a similar difference was observed in areas 7 and 8, we assume that it is attributable to recent agricultural activities affecting part of the north-western area of the house rather than to different uses of the areas concerned or to some sort of internal subdivision of the room.

The south-western part of the room contained a compact layer of pottery fragments mixed with roof-tile fragments. Among the finds were also the remains of a door, consisting of a large number of clenched nails similar to those found in the House of the Coroplast. A bolt, lock and key which most probably belonged to the same door were found opposite room 3, near the doorway of room 8.

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58 This is remarkable because usually the foundations of the internal walls of houses at New Halos were laid directly on top of the Pleistocene cobble soil.
Fig. 2.23. House of the Snakes: foundations.

Area 4. This area lay south-west of room 1. It was open on the courtyard side of the house (area 9) and could probably be reached from the street through the corridor (area 7) and the courtyard (area 10-16). The area was rectangular and measured 4.35 x 6.90 m. The area’s situation and the fact that it yielded only small, worn roof-tile fragments suggest that it did indeed form part of the courtyard. So this part of the courtyard did not appear to be covered, or at least not with roof-tiles. Interestingly, the floor layer contained cobbles of a larger size than those found in the covered parts of the house. Also, the floor level was at least 0.1-0.2 m higher in area 4 and the rest of the courtyard than in the other parts of the house. The floor sloped gently upwards towards the west. The foundation trenches of the north-eastern and south-western external walls were less clearly visible in this area, probably as a result of disturbance by the roots of a tree that had grown at the south-eastern corner of the house.
Room 5. This room lay in the western part of the house and was accessible from room 8. The room, which provided access to room 6, was rectangular and measured 3.30 x 2.70 m. Its wall foundations were reasonably intact, although parts of the south-eastern and south-western walls had been disturbed. The doorways in the north-eastern and north-western walls were 1.0 m and 1.1 m wide, respectively, and each had a threshold made of limestone. The threshold in the doorway to room 8 contained two small pivot holes and was neatly finished. The surface of the western part of the threshold was lower than that of the eastern part, indicating that the door swung open towards the west.

The destruction layer yielded an abundance of pottery mixed with large roof-tile fragments. In addition, the features of two pithos holes were found along the north-western wall. They were approximately 0.4 m deep (measured from the original floor level) and had a diameter of 0.8 m. Both were filled with soil mixed with pottery from the destruction level. The floor consisted of a compact layer of small pebbles mixed with a few small, worn sherds and many metal objects. Traces of a walking route were observed by examining the colour of the soil of the floor: near the two doorways the soil was darker than elsewhere in the room.
Room 6. Room 6 could be entered from room 5. The doorway between the two rooms was 1.10 m wide and contained a threshold made of limestone without any traces of pivot holes. The room was slightly larger than room 5, measuring 2.50 x 3.95 m. The wall foundations were partially disturbed, especially in the northern part of the room, where foundation stones appeared to have been removed in harrowing across the entire length of the house. The rest of the room was reasonably intact. Room 6 contained three features interpreted as pithos holes along its south-western wall. They lay at equal distances from one another and were 0.7-0.8 m wide and about 0.3 m deep. The holes were filled with loose yellowish earth mixed with pebbles and a few finds. Large pithos remains were found scattered across the room’s floor.

Area 7. This area was a corridor running from the entrance of the house to the courtyard, which provided access to rooms 1, 2, 3 and 8 and to the courtyard itself (area 9). The remains of the original entrance of the house consisted of a 1.55-m-wide doorway in the external wall with a threshold made of a large block of limestone measuring 1.30 x 0.45 m, which contained no pivot holes. The northern part of area 7 lies in the zone affected by ploughing. Consequently, only one layer, containing mostly small worn roof-tile fragments, was observable in the disturbed stratigraphy. The stratigraphy of the southern part of this area was intact. Large roof-tile fragments indicated that the area was roofed.

Room 8/11. Room 8/11 was situated at the centre of the house, between rooms 5 and 6 and area 7. It was the largest room of the house, measuring 7.50 x 4.70 m. The room could be entered from area 7 and provided access to room 5. No clear indications of any internal subdivisions were observed in the room, apart from two foundation stones south of the entrance to room 5 and some foundation stones at the centre of the northern half of the room. The latter may perhaps be interpreted as the remains of a base for a wooden roof support; the former may have formed part of a short stretch of a wall shielding the southern corner of room 8.

Except for the north-eastern part of the room (fig. 2.23; see above), the stratigraphy was reasonably intact. A layer of roof-tile fragments mixed with pottery was found in most parts of the room. A few parts of the room had however been disturbed in recent harrowing. This was most clearly observable near the hearth that was found at the centre of the southern half of the room. A few of the blocks of volcanic stone of this hearth, which had been dug into the floor, had been removed in the harrowing; the damaged remaining blocks were found in the vicinity of the hearth. The furrow made by the harrow could still be followed across the room.

The hearth was originally rectangular and measured 1.15 x 0.7 m. Its blocks protruded slightly (about 0.07 m) above the level of the floor. The hearth contained ashes and burnt pottery fragments. Many remains of cooking vessels were found in the vicinity of the hearth, as well as remains of an iron chain and hook, which undoubtedly formed part of an implement for hanging a pot and/or food above the fire.

An exceptional find came to light next to the hearth, near its north-western corner (fig. 2.25). It consisted of a vessel with a lid, both made of local volcanic stone, which had been dug into the virgin soil. The hole into which the vessel had been placed was dug some time after the blocks for the hearth had been laid. The soil around the vessel was mixed with small pieces of charcoal. The vessel contained reddish soil, a bone fragment, a shell, a sherd, and two small serpent-shaped pieces of metal, one of iron and one of silver (fig. 2.26). This assemblage,
Fig. 2.25. House of the Snakes: hearth in room 8/11 from north with pot and part of lid to the west. Photograph Ydo Dijkstra.

Fig. 2.26. House of the Snakes: stone pot with contents. Photograph Ydo Dijkstra.
which is to be interpreted in the context of a house cult, perhaps a sacrifice to Zeus Ktesios, will be discussed in greater detail in chapter 6.

Immediately to the south-east of the doorway to room 5 a rectangular limestone block was found inscribed with the text EPIDOSIS. This inscription and three others which have since been found in the House of the Tub will also be discussed in chapter 6.

*Area 9.* Area 9 can be interpreted as the house’s courtyard. It could be reached from the entrance of the house through area 7. The courtyard consisted of a large rectangular area, measuring 7.50 x 8.10 m, which was open, and a narrower area (area 4), measuring 4.35 x 6.90 m in the north-east, which was most likely covered, perhaps not with roof-tiles, but with reed or some other perishable material, thus forming a kind of *apothiki.* The courtyard contained two features. The first, feature a, came to light a short distance to the south-east of the entrance to the courtyard and consisted of a heap of large cobbles mixed with fragments of pottery, roof-tiles, bone and charcoal as well as some 40 oyster shells. This feature, which was 0.8 m wide, was found at the courtyard’s floor level. It was interpreted as a rubbish heap. Feature b came to light a short distance to the south-east of feature a. It consisted of a deep pit which became slightly narrower towards the bottom (see fig. 2.28 for a section). The upper
Fig. 2.28. House of the Snakes: courtyard. Section of feature B (the pit).

Fig. 2.29. House of the Snakes, courtyard. Feature B (the pit). Terracotta pendant of a Baubo figure.
part of the pit was lined with roof-tile fragments and on the whole it was filled with soil which appeared to have many organic elements in it. Pottery fragments were mostly found in the upper layers, among which the upper part of a pithos-like vessel, which we interpret as a well head.

Five layers were distinguished in the pit’s fill. Layer 1 (0.15 m) represents the tops soil and the fill, as well as the abandonment layer, containing roof-tile fragments and pottery. Layer 2 (ca. 0.27 m thick) consisted of brown crumbly soil, containing a few limestone pebbles. Layer 3 (0.27 – 0.78 m thick) consisted of a greenish black clay-like soil mixed with many small limestone fragments. Some larger pieces of limestone seemed to mark the boundary between layers 4 and 5 (0.78 – 1.04 m thick), which consisted of a greyish loose soil with a distinctive smell. At a depth of 1.89 m from the surface a horizontal layer of roof-tile fragments appeared (0.15 m), overlying a soft brownish soil (layer 5). The bottom of the pit consisted of bedrock. The pit must have been full by the time the houses of New Halos were abandoned. In our opinion it probably served initially as cistern, but was later used to discard household waste. Soil analysis concentrated on the study of mites and was carried out by Jaap Schelvis. He concluded that the soil did not contain mites associated with human or animal waste, but that some kind of organic plant matter was deposited here. The few pottery finds mixed in with layer 5 consisted of domestic ware and a terracotta pendant representing a Baubo figure (see fig. 2.28).

The rest of the courtyard floor was covered with a scattering of small fragments of pottery and roof-tiles, evenly distributed across the area. The floor consisted of a compact layer of large cobbles.

History of occupation and reconstruction. The remains of the House of the Snakes seem to represent a single building phase, as only one floor level was found and there was no evidence of any changes in the house’s layout during its occupation. The roofed part of the house bordered the street, in contrast to the roofed parts of the 'south-facing houses', which gave access to an open area. The roofed part of the only other ‘north-facing’ houses, the House of the Coroplast, was entered through a prothyron and an elongated courtyard. The House of the Snakes of course lacked a prothyron, having instead a large door in its façade, consisting of wooden beams held together by cross-beams and clenched nails resembling the nails found in the House of the Coroplast.

As with most of the other houses, one room (room 1) protruded into the courtyard, thus providing a space for a pastas across the remaining width of the house (fig. 2.27). But, as with the other houses, no indisputable evidence of any pastas was found, such as column bases or a distribution of large fragments of roof-tiles distinctly differing from the distribution pattern in the rest of the courtyard. No remains of staircases indicating an upper floor were found. The number and weight of the roof-tile fragments, moreover, indicate that the entire roof was tiled and that no parts of the building had a flat roof (see the following chapters). Although this is a ‘north-facing house’, the same canon of a large room flanked by four side rooms encountered in all the other houses excavated so far (see below) was observed here, be it in a somewhat different configuration. The corridor (area 7) leading from the entrance of the house to the courtyard separated the living quarters into two parts, one consisting of two or three rooms (rooms 1 and 2 and perhaps 3), and the other of the main living room flanked by two smaller rooms (rooms 5, 6 and 8). There was a hearth in the main living room (room 8) and probably also in room 1 and in the courtyard. Holes for.

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large storage jars such as pithoi were found in rooms 5 and 6. A well that was secondarily used as a rubbish pit was found in the courtyard.

2.3.4. The House of the Amphorae (Housing block 6.4, plot 8)
The House of the Amphorae, which formed part of the southern row of houses in housing block 6.4 (figs. 2.30 and 2.31), was excavated in its entirety between May and July of 1991. A team of seventeen people used pickaxes, mattocks and trowels to clear away the soil and debris to an average depth of 0.40 m, at which the virgin soil was reached.

We decided to excavate this house because its foundations seemed to be in a reasonable condition at first sight. A second argument was the house’s width of 15.00 m. By this time, houses with all three of the widths encountered at Halos (12.50, 13.75 and 15.00 m) had been excavated or studied (House of the Coroplast – 13.75, House A – 15.00\textsuperscript{60} and two houses with widths of 12.50 m during the 1987 and 1989 seasons). We were interested in finding out whether the differences in width correlated with differences in layouts. If this were the case, the next question would

\textsuperscript{60} Reinders 1988, 117.
be to what extent the differences in house plan reflected differences in the use of space.

After the topsoil had been removed the house’s external wall foundations became more clearly visible, showing that the remains had been disturbed, and that large parts of the foundations were missing. The layer of debris that had to be removed turned out to be only 0.20-0.25 m deep on average. Below this debris no clear destruction layer was observable. The north-western part of the house in particular had been badly damaged by agricultural activities. Large parts of the north-western and south-western walls were missing as well as parts of the internal walls. As a result, only part of the plan of the house could be reconstructed. Nevertheless, it was clear that the plan as a whole differed in several important aspects from the plans of the other houses hitherto excavated.

The structure of the intact stretches of wall foundations did not differ from that of the foundations found elsewhere at New Halos. But differences were observed between the eastern and western parts of the house, reflecting different building stages (see below). The house’s dimensions were 15.50 x 14.30 m. (see fig. 2.30)

**Room 1.** This room was the most easily recognisable when the excavation was started. It measured 2.45 x 4.40 m. As the surface of the land on which housing block 6.4 was built slopes downwards slightly to the north-east, the surface was highest at the north-western wall.

The same holds for the floor level, which decreased approximately 0.04 m from the north-west to the south-east.

For practical reasons, the room was divided into two units, with a baulk left at the centre of the room to enable us to study the stratification. The room’s soil fill was found to vary. Part of the fill, especially that in the north-western corner of the room, consisted of clayey soil, for which there is no clear explanation. Other parts consisted of soil of a yellowish sandy texture. The latter most probably represents the remains
of the house’s original mudbrick walls. The greater part of the fill however consisted of dark red soil mixed with small particles of charcoal and tiny bits of limestone. The stratification observable in the baulk left at the centre of the room yielded no new information. It comprised the usual 0.10 m-thick top layer of worn remains followed by the destruction layer and a layer containing diagnostic finds. The floor consisted of the usual large cobbles of the Pleistocene hardpan intermingled with finds, some deriving from the destruction layer, others, such as small worn sherds, embedded in the original floor. A few modern objects were encountered among the finds of the destruction layer, such as a button and a bullet cartridge. These finds indicate that the greater part of the area of this house was severely disturbed. The lower layers of room 1, however, seemed to be more or less intact.

Room 2. This room was situated north-west of room 1 and measured 4.50 x 2.90 m. It could be entered from area 8. Its south-eastern wall probably contained an entrance to room 1. The doorways could not be located due to severe disturbance. As in room 1, a number of sub-recent artefacts were found in the upper layers. The lower layer of room 2 again seemed to be reasonably intact. And as in room 1, the destruction layer and the original floor came to light at a deeper level as the surface of the land sloped slightly downwards (approx. 0.03 m) towards the centre of the room. Fewer finds were recovered at the centre of the room than at the sides. The majority of the finds came to light in the southern part of the room. Many lumps of burnt soil were found all over the room, especially in the western corner, together with small pieces of charcoal, indicating that a small fire had burned here after the site was abandoned. Roof-tile fragments indicate that the room was originally roofed.

Area 3, units A, B and C. Area 3 was situated north-west of room 2. To the north and west it was bordered by the house’s external walls. To the east, a wall comprising two courses of foundation stones extending westwards over a length of 6 m constituted the third boundary. Further to the east, the land had been severely disturbed and no traces of any wall foundations had survived.

For practical reasons we divided the area spanning the entire width of the house into three equal units, which we called A, B and C, from the west to the east. This means that the western part of the southern boundary of area 3 is artificial. Each of the units thus distinguished measured 5 x 4.22 m. Due to the disturbance it is not certain how area 3 was originally entered, but the area was probably open to the courtyard. Area 3 had clearly been disturbed. Many worn sherds and small stones were encountered in the top layer of 0.2 m and in some places it was even difficult to identify the original floor level. In units B and C, which seemed to be the most severely disturbed, the original floor levels were totally absent. Instead of an even surface of small pebbles and cobbles, we found large boulders mixed with worn pieces of pottery and roof-tiles. During the excavation of area 3 we found a second sign of disturbance in unit A in the form of a pit with a depth of approx. 0.4 m containing large pieces of charcoal near the southern wall. This pit had once held the root system of a medium-sized bush or a small tree. Only one more or less complete piece of pottery was found here. The roof-tile fragments were all rather small and worn. Due to the disturbance it is difficult to say whether or not this area was originally roofed.

Room 4. Room 4 was situated in the southern corner of the house and was therefore bordered by the south-western and south-eastern external wall foundations. An internal wall running in a north-western direction from the south-eastern wall formed the third boundary. To the east, room 4 was bordered by another internal wall. The room was entered from area 6 in the north-eastern corner. During the excavations the
remains of a previously unobserved internal wall were discovered, running parallel to and between the south-western external wall and the north-eastern internal one. Room 4 originally comprised two parts, which we called room 4 units 1 and 2 (fig. 2.30). These units do not coincide exactly with the original unit division of the room into two different parts during excavation due to the later discovery of the internal wall, part of which was concealed from sight under the baulk. This wall was found to contain a doorway allowing passage from one part of the room to the other. The foundation stones of the internal walls differ remarkably in size and regularity from those of the other walls of this house and those of the other houses at Halos studied so far. This separation wall may therefore have been built at a later stage (see below).

A remarkable feature was found in unit 4b in the form of a 0.40 m-wide strip of soil alongside the south-western wall whose surface appeared to lie about 0.15 m higher than that of the floor (see fig. 2.32), suggesting that it was a small platform or bench. It did not seem to have a support in the form of a row of stones separating it from the floor beneath (see room 4 of the House of the Ptolemaic Coins.) The fill did not contain any diagnostic finds. We do not know for certain what purpose this platform served, but it may well have been used to support storage vessels. Many traces of burning were observed in both units a and b in the form of small and large charcoal particles and seven pieces of lead which seemed to have melted on the spot. However, neither the pottery nor the other finds recovered from the room were severely burnt. The many tile fragments found indicate that this area was roofed. One tile fragment bore part of an inscription: **KALLI...**

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Fig. 2.32. House of the Amphorae: room 4 unit 1 from north-east. Platform along western wall.

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Room 5. The north-western part of the house is rather poorly defined due to recent agricultural activities. Room 5 is defined by the house’s external south-western wall foundations, which had partially collapsed inwards, onto the destruction layer, the north-western wall foundations of room 4 and the remnants of the foundations of an internal wall in the south-east. The room formed by these walls, taken together, was almost square.

The south-eastern wall foundations had been recently disturbed. It is likely that room 5 was entered through area 8. There may have been a doorway in the eastern corner of the room, but if so, the width of the gap observed in the excavation of the foundations probably exceeds the doorway’s original width. Despite these disturbances the stratigraphy in this room was straightforward: the first 0.10 m of soil contained mostly worn sherds, the majority of which were roof-tile fragments. The lower layer contained a large number of artefacts that were fragmented but reasonably complete, and included a consistent layer of roof-tile fragments indicating that the room was roofed. The bulk of the finds was buried under the rubble of the mudbricks from the north-western external wall. The floor level was easily distinguishable and did not seem to have been disturbed. The floor itself consisted of a layer of very small pieces of limestone measuring about 0.05 m directly on top of the virgin soil, and contained only few finds, mostly metal objects and small worn sherds. No features were observed in this room, nor were there any signs of the burning evident in the adjacent room 4.

Room 6. This room was situated between room 4 and area 7 in the southern part of the house and was defined by the house’s external southern wall foundations, the eastern foundations of room 4 and the foundations of the partially destroyed eastern wall of room 6, separating it from area 7. No remains of a north-western wall separating room 6 from area 8 were found. We cannot be certain whether there ever was such a wall or whether room 6 was completely open to area 8, as this part of the room was severely disturbed. The north-western boundary of room 6, postulated as an extension to the extant, albeit damaged, foundations of the wall separating rooms 4 and 5, is therefore artificial. It is most likely that room 6 could be entered from area 8, either directly, with the latter serving as an extension to the room, or through a doorway in a wall now lost, defining it as a separate room.

Despite the widespread disturbance in the wall foundations, the south-eastern and south-western parts of the room did have a fairly clear, undisturbed stratigraphy. After the first 0.1 m of soil had been removed a layer of pebbles came to light. They probably derived from an upper course of the wall foundations. The next layer consisted primarily of roof-tile fragments. Among and beneath the roof-tiles were pottery and other finds. In the north-western part of the room the entire deposit was mixed with large pebbles, pieces of charcoal and large quantities of bone fragments and sherds which were all misfirings. Apart from an abundance of pottery fragments, a large number of bone fragments was found in this area, a fairly large proportion of which was burnt.

Area 7. This area was situated immediately behind the entrance to the house. The entrance itself was not designed as a prothyrion, as in the case of the House of Agathon, but consisted merely of a 1.1-m-wide doorway in the wall. No threshold had survived. The north-western part of the area seemed to have been severely disturbed. Owing to the absence of wall foundations or a foundation trench, the boundary between areas 7 and 8 could not be located with any precision. Roof-tile fragments

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61 The deposit was also significantly shallower (0.25 m) than elsewhere.
and other pottery sherds were found only in the upper layer and were all badly worn. The layer of soil overlying the floor yielded only few finds and very few roof-tile fragments, suggesting that the area was open. The floor itself consisted of medium-sized cobbles and pebbles. One feature was found in the south-western corner of this area, next to the wall foundations separating area 7 from room 6. It seemed to be a shallow, oval, north-south oriented pit. It was 1.45 m long, 0.80 m wide and 0.10 m deep. Its fill consisted of pottery and roof-tile fragments. The feature is too shallow to represent a rubbish pit. It could represent the trench of a wall whose stones have disappeared, though the proximity of the wall of room 6 makes this fairly unlikely.

Area 8. This large rectangular area lay at the centre of the House of the Amphorae. It was bordered by rooms/areas 2, 3, 4, 6 and 7. No meaningful measurements can be given due to the fact that some of the boundaries of this area are artificial, notably those in the west. Neither is it certain whether the area had boundaries in the form of walls separating it from areas 6 and 7. We have therefore defined area 8 as a separate unit for practical purposes only. The discovery of sub-recent artefacts in the upper layer and part of layer 2 suggests that this area was disturbed. The layer just above the original floor level was intact, but yielded few finds, mostly small roof-tile fragments and worn sherds. The floor itself consisted of a compact layer of large cobbles and pebbles and did not resemble the floors of for example rooms 5, 1 and 2, but seemed similar to those in the courtyards of the House of the Ptolemaic Coins and the House of Agathon (area 6 in both houses). No specific features were found in area 8. The absence of large, unworn roof-tile fragments indicates that the area was open.

History of occupation and reconstruction. From the descriptions of the different parts of the house it will be clear that the remains of the House of the Amphorae were too badly damaged to allow a reliable reconstruction. It is even difficult to say whether the architecture of the house represented a single building phase or perhaps several phases. The foundation stones of the south-western part of the house (rooms 4 and 5) seem to have been arranged less regularly than those of the south-eastern part (rooms 1 and 2) and room 6/7 and were bonded to the external wall foundations, like the foundations of the walls of room 1 and area 7. The sections created during the excavation however revealed no evidence to suggest that this may be due to different phases of occupation or rebuilding activities.

We originally interpreted this house as a building with a central courtyard surrounded by rooms.62 This interpretation was however not satisfactory as it was based entirely on negative evidence and was formed at a time when no comparable houses had yet been studied. Two years later, the excavation of the House of the Snakes, which also measured approx. 15 x 15 m, showed that the House of the Amphorae could also be reconstructed with a courtyard at the back, away from the street. This would mean that the covered part of the house bordered the street directly, which would explain why there was no prothyron at the entrance to the house. To conclude, the scanty evidence available for the House of the Amphorae does not permit a reliable reconstruction.

2.5.5. The House of the Ptolemaic Coins (Housing block 6.4, plot 21)
The House of the Ptolemaic Coins formed part of the southern row of houses of housing block 6.4 (fig. 2.33). It was excavated in 1989 by a team of eighteen people. The method of excavation was the same as in the other seasons: small teams

excavated the individual rooms of the house with pickaxes, mattocks and trowels down to the virgin soil.
It was clear from the start that the house’s external dimensions were the same as those of the adjacent House of Agathon, the greater part of which had been excavated two years earlier. The house measured 12.70 x 14.80 m on the outside.
The wall foundations of the House of the Ptolemaic Coins did not differ from those found elsewhere in the town. They consisted of blocks of local limestone and conglomerate which were usually arranged in two rows. The gap between these rows was filled with small cobbles and pebbles. The outer faces of some of the foundation stones had been worked and smoothed. In most cases only one course of the wall foundations had survived. The top of this course lay approx. 0.35 m from the Hellenistic floor surface. The stones had been laid in a shallow (approx. 0.05 m) foundation trench.
In the course of the excavation it became clear that large parts of the western and southern walls had been destroyed by agricultural activities. Stretches of the internal wall foundations were also damaged, as was a large part of the courtyard (area 6). It was therefore decided to excavate only part of the courtyard.

Area 6. Despite the disturbance, the dimensions of this area could be measured: 8.15 x 7.15 m, inside the wall foundations. Area 6 was the courtyard of the house. This was evident i.a. from the lower percentage of tile fragments found here. On account of the damage, the entrance from the street could only be inferred by comparing the layout of the house with that of house 22. The courtyard must have been of the same shape as that of the adjacent House of Agathon. The northern part of the courtyard may have been roofed, thus constituting a pastas, but no column bases were found to prove this. Finds consisted mainly of worn sherds and roof-tile fragments. No specific architectural remains or features were found in area 6.

Room 7. This room was situated in the south-eastern part of the house. The large roof-tile fragments found here indicate that this area was roofed. The room measured 3.55 x 7.15 m. It could be entered from the courtyard through a 2 m wide doorway. No specific architectural remains or features were found in room 7.

Room 3. During the excavation room 3 was divided into four equal units enabling one person to work in each. This room was the central, largest part of the roofed area of the house. Its measurements were 6.60 x 4.75 m. The room’s northern wall was partly damaged, as was the south-eastern corner. The room could be entered from the courtyard via a doorway with a width of 1.07 m. The room also gave access to the four side rooms. The doorway to room 5 had a threshold; the same probably holds for the doorway to room 2. The soil was loose and mixed with sherds and tiny bits of limestone. Along the southern wall of room 3 parts of the soil seemed to be more compact and of a brighter colour. These parts could represent the remains of partially dissolved mudbricks.
Roof-tiles were found scattered across the floor, covering pots and other finds. Some of the roof-tiles were more or less complete (fig. 2.35). Finds consisted of a wide range of domestic pottery and other items. In addition, a small bronze pyxis came to light, together with a conspicuous number of metal finds and organic remains, plus two grinding stones and one rubbing stone.
Fig. 2.33. House of the Ptolemaic Coins and House of Agathon: foundations.

Fig. 2.34. House of the Ptolemaic Coins and House of Agathon after excavation as seen from north-west.
Room 4. This room was situated in the north-western part of the house and could be entered from room 3 through a doorway with a width of 1.10 m. The room’s measurements were 3.00 x 3.80 m. The remains of some remarkable architectural structures were found in room 4. These structures originally comprised three compartments formed by courses of pebbles along the north-western external wall, which were filled with earth, thus forming some kind of platforms. The texture of the soil of these platforms consisted of a soft sandy texture, especially lower down, indicating that it was a fill. The platform was a little (0.1 m) higher than the level of the floor at the centre of the room. The partition separating compartments 1 and 2 seemed to have been disturbed. There were some indications that the platform extended along the south-western and south-eastern walls of the room, too (figs. 2.36 and 2.37). The compartments were on average 0.75 m wide and 1.60 m long. These compartments could be interpreted as the remains of platforms for either klinai or storage vessels. If we assume that the klinai were 1.60 m long, exactly five klinai would have fitted on the platforms.\(^{63}\) Evidence of platforms with indications of klinai along the walls of a room in a domestic context usually implies that the room was used as the men's dining room, the andron. However, andrones are usually square and have an entrance off-centre due to the positioning of the klinai, and this is not the case in room 4. An analysis of finds found in this room could shed light on activities associated with this room. This room is further assessed in chapters 5 and 6.

Room 5. This room was situated directly south of room 4 and measured 3.15 x 3.75 m. It could be entered from room 3 through a doorway with a width of 1.05 m which had a threshold consisting of loosely arranged pebbles with no signs of any pivot holes. A few more stones, seemingly arranged in a row, were found in front of the doorway. They may have formed part of platforms like those in room 4. The floor of room 5 lay

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\(^{63}\) Measurements of klinai found at other sites range from 1.60 m (Kassope) to 2.00 m (Priene).
at a slightly lower level than that in room 3 and the soil was of a sandy texture. The small number of finds and (platform) stones found here does not constitute sufficient evidence to conclude that the room was an andron. The stones came to light at a comparatively high level, overlying other finds, which makes it unlikely that they actually formed part of any structure. Their presence here is probably attributable to recent agricultural activities. The finds recovered from room 5 consisted of many worn fragments of roof-tiles, small iron artefacts, an amphora and some organic remains like shells and bones.

Room 1. Room 1 could be entered from room 3 via a narrow doorway with a width of only 0.55 m. The room could also be entered from room 2 originally, as indicated by a gap in the foundations of the south-western wall of room 1. This gap was originally 0.50 m wide and was later walled up with blocks of a greyish limestone differing from the white limestone and conglomerate used for the foundations of the south-western wall of room 1. The room was small, measuring only 2.80 x 2.30 m. Apart from an abundance of roof-tiles, few finds were recovered from this room. The upper layer of soil in this room was somewhat disturbed and contained some present-day artefacts.

Room 2. This room was situated south-east of room 1 and was slightly larger than the latter, measuring: 2.75 x 3.80 m. The doorway in the south-west was severely disturbed. A few threshold stones were still visible and part of the rubble of the core of the foundations of the original south-western wall was still in situ, indicating that the doorway was originally 1.05 m wide. In an earlier stage of occupation room 2 could also be entered from room 1 (see above). An abundance of roof-tiles was found in this room, all fragmented but the fragments were quite large. The room’s floor lay immediately beneath these remains. The north-eastern part of the room was paved with fairly large white limestone pebbles (see fig. 2.38). The roof-tiles were found all over the room, both on top of this pebble floor and in the part of the room which was not paved. This implies that the pebbles were deposited to consolidate part of the floor and are not to be seen as the remains of an originally completely paved floor which was damaged some time after the town was abandoned. Both the colour and texture of the soil and the discovery of pottery beneath the pebble floor indicated the presence of an earlier floor at a lower level, 0.05-0.10 m. beneath the pebble floor.

History of occupation and reconstruction. The House of the Ptolemaic Coins yielded indisputable evidence for at least two building phases: the doorway between rooms 1 and 2 was later walled up and the floor in room 2 was partially paved (figs. 2.39). The internal division of the House of the Ptolemaic Coins is largely the same as that of the House of Agathon and also closely resembles that of the House of the Geometric Krater. The house comprised an, originally roofed, northern part and a partially open area in the south. The northern part consisted of five rooms arranged in the usual layout observed in the houses at Halos, with one large room (room 3) at the centre flanked by two smaller rooms on either side (rooms 1 and 2; 4 and 5). A doorway in the southern wall of room 3 provided access to this part of the house from the courtyard. The southern part of the house was apparently partially roofed. Room 7 resembles room 7 of the House of Agathon in both its position and its shape. This spatial arrangement suggests that part of the courtyard was covered, as in the House of Agathon, forming a pastas. An entrance in the southern wall originally provided access to the house from the street, but no traces of this entrance (probably a prothyron) were found due to the disturbance in this area.
Fig. 2.36. House of the Ptolemaic Coins, room 4. Platforms.

Fig. 2.37. House of the Ptolemaic Coins, room 4. Possible reconstruction platforms.
Fig. 2.38. House of the Ptolemaic Coins, room 2 with remains of pebble floor.

Fig. 2.39 a and b. House of the Ptolemaic Coins: two building phases.
2.5.6. The House of Agathon (Housing block 6.4, plot 22)

In 1987, after inspecting the surface remains of the lower city as a whole, it was decided to concentrate the excavation efforts on the central part of housing block 6.4, which appeared to have suffered less from the harrowing than other areas inside the city walls. Some of the foundation stones in this area were visible at the surface and they seemed to be undisturbed. The land was expropriated and excavations started with the House of Agathon, which formed part of housing block 6.4. It was excavated down to the level of the Pleistocene soil in the summers of 1987 and 1989 by teams of thirteen and eighteen people using mattocks, pickaxes and trowels.

The foundation stones of the house’s external walls were clearly visible before the excavation was started, indicating that the house had had a width of approx. 12.50 m. A house of this type had not yet been excavated at Halos at that time. The house’s outside dimensions were 13.50 x 15.20 m. The House of Agathon was located in the southern half of the housing block. It lay adjacent to the House of the Ptolemaic Coins and south of the House of the Snakes (see fig. 2.33). The wall foundations were the identical to those of the other houses excavated at New Halos, consisting of two rows of irregular blocks with the space between the two filled with cobbles and pebbles. One course of the foundation stones (with a height of 0.30 - 0.40 m) had survived, but it is assumed that the foundations were originally higher. Only the wide foundation wall separating the northern and southern rows of houses and the foundations of the housing block’s external walls consisted of a single row of large limestone blocks. These walls were wider than the internal walls, measuring approximately 0.60 m.

The excavation revealed that the building had been only slightly disturbed. Some of the foundation stones of the north-eastern part of the south-eastern wall had disappeared in

Fig. 2.40. House of Agathon after excavation in 1987. Photograph H.R. Reinders.
harrowing and the remains of the prothyron in the middle of the south-eastern wall had been disturbed.

Area 6. This large area was excavated in 1989 (see fig. 2.41). For analytical purposes and for the sake of efficiency it was decided to divide this area into six equally sized units. When the excavation was started, the internal foundation walls defining the area that was later designated room 7 were not yet visible. Area 6 was entered from the street through a prothyron, indicated by architectural remains and an abundance of large roof-tile fragments. The prothyron had a width of 2.20 m. The doorway itself only measured ca. 1.25 m. No threshold stone was found. Perhaps there never was one or possibly the threshold consisted of several flat slabs of limestone. The soil in the area of the entrance was soft and humid, indicating that it had been disturbed by agricultural activities. The pieces of limestone that were still in situ showed no signs of any pivot or bolt cavities. They may therefore have been the foundations of a large threshold block which was removed after the site was abandoned.

Area 6, which extended over the entire width of the house, sloped downwards slightly towards the south-east. More earth consequently had to be removed in the south-east than in the south-west. This suggests that the latter part was affected by post-depositional processes, like harrowing, to a greater extent than the former. Very few artefacts were found in units C and F. In unit F a large bronze Geometric fibula was found among the cobbles of the Pleistocene subsoil. This find, together with the Geometric finds recovered from the House of the Geometric Krater and the Geometric finds found in the Hellenistic cemetery south of the city support the hypothesis that there was a cemetery, or cemeteries, in this area in the Geometric period, before the city was built.64

North-east of the house’s entrance, a concentration of several loosely arranged cobbles and pebbles was found. It is not clear what it represents. Remains of a pithos were found outside the western corner of room 7. Its position possibly indicates that it served to collect rainwater, running from either the roof of the pastas or the roof of room 7 itself. A layer of ashes came to light 1.70 m west of this pithos, representing the remains of a hearth or perhaps a place of domestic cult.65 A knife was found in the vicinity. The northernmost area of the courtyard, which probably represents a pastas, yielded more finds. Several pots were found among the pebbles of the floor, such as a kantharos and a bowl, as well as roof-tile fragments, indicating that this part of the area was roofed.

The area's position and size and the small number of roof-tile fragments found in most parts indicate that area 6 constituted the house’s courtyard; it probably contained a roofed pastas. The courtyard provided access to rooms 7 and 3.

Room 7. This room was situated in the eastern part of the house. It was a square room, measuring 4.45 x 4.40 m. Part of the north-eastern wall of the room was damaged, a stretch of about 1.30 m of the middle part of the wall having disappeared. That this gap did not represent a former doorway was evident from the softness of the soil in the area where the foundation stones originally lay. The room could be entered from the courtyard (area 6) through a doorway in the south-western wall indicated by an 0.8-m-wide gap. Room 7 contained two interesting features. One was discovered in the south-western corner of the room and consisted of a square patch of burnt soil

64 Dyer and Haagsma, 1993, Malakasioti et al., 1993.
65 Altars dedicated to Zeus Herkeios, the protector of the house, have regularly been found in courtyards, notably at Olynthus (Robinson and Graham 1938, 159, 321 ff., Hoepfner and Schwandner 1994, 97).
mixed with ashes measuring 1.0 x 0.9 m. The feature was on one side bordered by the
external south-eastern wall of the house and on another by one of the walls of the
prothyron. A few roof-tile fragments had been placed vertically against the foundation
stones of these walls, probably in order to protect them from the heat. Although no
boundaries in the form of e.g. stones along the north-eastern and north-western sides
were observable, this feature may be interpreted as a fireplace.

Another feature came to light a little to the west of the centre of the room. It consisted
of two rows of pebbles which probably originally formed a rectangle of about 0.6 x
0.8 m. Its position and shape suggest that here, again there was a hearth, but no ashes
or burnt material were found. Instead, the fill of the feature consisted of earth with a
high concentration of organic matter, evident from its colour and smell. A large pithos
rim was found at the centre of the feature. The feature is difficult to interpret as it was
severely disturbed. It may represent a hearth, but, if so, it was certainly not in use as
such at the time New Halos was abandoned. Perhaps there was a fireplace originally
here and the remains of this feature were later used to support a pithos containing e.g.
olive oil or other foodstuffs. The absence of further pithos fragments (removed in
harrowing?) in fact, makes this interpretation highly conjectural.

Other finds recovered from room 7 comprise a wide range of domestic earthenware
vessels. The abundance of roof-tiles found in room 7 indicates that the room was
roofed.

Room 3. Room 3 lay at the centre of the roofed part of the house. It was the largest of
all the rooms, with dimensions of 4.80 x 6.30 m. Parts of the foundations of the
room’s walls were disturbed. Some of the foundation stones of the eastern end of the
south-eastern wall were missing, as were some of those of parts of the north-eastern
wall. Most of the foundations consisted of the usual two rows of limestone blocks.
The greater part of the north-western wall, which was also the boundary between the
southern and northern houses of the housing block, consisted of a single row of large
limestone blocks with smooth outer faces, the gaps between the blocks having been
filled with smaller stones. Room 3 could be entered from the courtyard via a doorway
whose north-eastern side was disturbed. Hence, its width could not be measured. The
room provided access to three side rooms. An 0.80 m-wide threshold was found in
situ in the doorway providing access to room 4. The width of the doorway providing
access to room 5 could not be determined due to the severe disturbance of the wall
foundations at this point. The south-western corner of room 1 was also disturbed. A
1.25 m-wide doorway in the south-western wall of room 3 provided access to room 2.
In the doorway was a neat row of small cobbles whose top sides were worn. They
may have served as the threshold themselves or they may have supported a threshold
stone. A number of clenched nails with large heads indicated that there was once a
wooden door in this doorway.

Room 3 contained some remarkable structural remains: an almost semi-oval
arrangement of foundation stones extending from the northern part of the north-
western wall, a short distance to the east of room 1 and then to the centre of the room.
It was 1.35 m long and 0.60 m wide. The stones had been deposited on top of the
Pleistocene soil instead of embedded in it like the foundations of the house itself. The
function of this arrangement of stones must be inferred from the finds discovered in
its vicinity: two large grinding stones, both of volcanic rock. The upper stone had a
concave top side and a slot in its bottom side, the lower stone was flat. Both had
incised grooves. They represent two millstones of the hopper rubber type, which was
in common use in the Classical and Hellenistic periods. The structural remains are therefore most probably the foundations of a platform on which the grinding equipment rested. Another possibility is that the feature represents the foundation of a staircase, but no convincing parallels are known to support this interpretation. All known foundations of staircases consist of a single large elongated flat slab, not of several small cobbles.

At the centre of room 3, 3.30 m from the south-western wall and 2.50 m from the north-western wall, was a small, more or less round elevation built from pebbles, with a diameter of 0.75 and a height of about 0.10 m, measured from the Hellenistic floor level. It may be that this feature represents the remains of a hearth, but no traces of fire were found.

Room 1. Room 1 lay in the eastern corner of the house. It could only be entered through room 2, to the south of this room. The room’s dimensions were 3.60 x 2.75 m. The south-eastern side of the 0.90 m-wide gap representing the door was slightly disturbed. The wall foundations defining this room consisted of the usual double row of stones, partly embedded in the Pleistocene soil. The majority were of the local limestone, but some of the stones of the north-eastern wall consisted of conglomerate. During the excavation, remains of mudbrick were found in the form of irregularly fired amorphous lumps of terracotta. No other indications of fire were found in the room.

This room contained no specific architectural remains or features. It was observed that the pebbles marking the floor level were not, in fact, encountered in all parts of the room. A small circular area in the south-eastern corner with a diameter of about 0.60 m was clear of pebbles. Considering the character of the other finds recovered from this room (see below), among which are many fragments belonging to a pithos, we now believe that the absence of pebbles in this particular area may well imply that a hole was dug here into the Pleistocene soil for a large container such as a pithos. During the excavation, however, this feature was not identified as a hole. This rather small room yielded a large amount of pottery and other finds: a large part of a pithos with a lid bearing the inscription AGATHONOS (hence the house’s name) and other household items.

Room 2. Room 2 lay south-west of room 1. It had two doorways: one with a width of 0.90 m in the north-western wall providing access to room 1, and one with a width of 0.80 m in the north-eastern wall providing access to room 3. The latter doorway had a threshold that has already been described under room 3 above. The room’s dimensions were 3.65 x 3.35 m. Its walls were founded on a double row of limestone blocks. A number of blocks found in the southern corner of the room probably derives from a second course of wall foundations.

67 cf Robinson and Graham 1938, 326-336.
69 Roughly, the blocks in question seemed to form a quarter of a circle, extending from the south-eastern to the south-western wall. Although not all of the stones adjoined one another, it was first thought that they represented the remains of a structure with sides of approx. 0.85 m, possibly an aborted wall or a well, but no evidence was found to support either of these interpretations. Besides a single sherd, some charcoal and a loom weight, no specific finds were discovered in association with the stones. The colour and texture of the soil surrounding (and beneath) the blocks were moreover much the same as elsewhere. Furthermore, the Hellenistic floor lay at the same level here as in other parts of the house, implying that the stones lay about 0.05 m above the Hellenistic floor level at the time of their discovery. The most likely conclusion is
A thick layer of rooftiles was found in this room, under which a small number of domestic pottery and other household items were found.

Room 4. This room lay in the northern corner of the house and was accessible from room 3 through a 0.90 m-wide doorway. In the doorway there was a threshold consisting of two rectangular stones set at different heights longitudinally in the gap in the wall. The stones were of a grey, harder kind of limestone than that quarried in the direct vicinity of the town. The higher stone contained a pivot hole at its southern end.

that they derive from a collapsed upper course of wall foundations.
The room measured 2.75 x 2.40 m. As already mentioned above, the foundations of the north-eastern wall and the southern corner of room 4 were disturbed. The other wall foundations were of the usual kind. The foundations were all of the white local limestone. The floor of this room lay at a slightly higher level than the floors of the neighbouring rooms: 0.1 m higher than the floor of room 3 and 0.2 m higher than that of room 5.

No architectural remains or features and remarkably few artefacts were found in this room. A semi-circular patch of ash with a width of 0.50 m and a maximum depth of 0.01 m came to light a short distance to the south-east of the entrance, against the south-western wall. There was no evidence to suggest that the ash derived from a formal fireplace.

Room 5. Room 5 lay to the east of room 3 and south-east of room 1. Its dimensions were 2.60 x 3.70 m. The room was entered from room 3. The foundation walls in the vicinity of the gap representing the doorway were severely damaged, so no reliable width can be given. The blocks of the foundations of room 5 were all of local limestone and were laid in the usual double row with the gap between filled with smaller stones and pebbles.

Room 5 contained no architectural remains or features. In some parts of the room the soil was darker in colour and harder, indicating that a fire had burned here. The occurrence of fire in this part of the house during or after the abandonment of the town was further confirmed by the remains of an iron spade comprising large chunks of charcoal – what was left of the wooden handle. Pieces of melted lead objects were found here, too. Most of these pieces were beyond recognition, but two of the lead artefacts had indisputably melted on the spot. One is a roughly oval plaque which still bears the impression of woven reed, probably from a basket or a mat, and the other is a partially melted lead weight.

Room 5 contained the largest number of artefacts per room and the largest density of artefacts per m² encountered at New Halos to date. The finds came to light along the walls of the room, where they had originally stood on the floor or a shelf or hung from the wall.

History of occupation and reconstruction. Housing block 6.4 slopes downwards in a easterly direction. Nevertheless, the floors in the House of Agathon, and also those of the House of the Ptolemaic Coins, were only slightly levelled. Only one floor level was observed in all the house's rooms. No evidence for renovation activities, such as the walling up of former doorways or the addition of new foundations, was found. We may assume that the remains of the House of Agathon represent a single building phase and that the house's plan at the time of its destruction and abandonment was the same as that at the time of its construction, about 40 years earlier (fig. 2.41).

The house's dimensions and plan are very similar to those of the House of the Ptolemaic Coins and the House of the Geometric Krater. The plan included a courtyard in the south-east, with an entrance from the street through a prothyron. Only the northernmost part of this area yielded large quantities of roof-tile fragments. Hardly any roof-tiles were found in the other units, where an elongated pastas could be postulated. It is therefore likely that the area between rooms 7 and 5, had a tiled roof, representing a structure that could be described as a short version of a pastas. The area may have been roofed across its entire length with some perishable material such as reed, but there is no proof for this in the form of the bases of columns that may have supported such a roof. The courtyard contained a place for fire which could be interpreted as a hearth or an altar. The rest of the house was roofed with tiles as can be inferred from the abundance of tile fragments that were found scattered across all the
rooms. There was a fireplace in room 7, a possible hearth in room 3 and a hole in the floor of room 1 which may have held a pithos.

2.5.7 The House of the Tub (Housing block 6.3, plot 3)
This house was excavated in the years 2007-2009. As this house is currently being studied by Marloes Bergmans as part of her MA program at the University of Groningen, it is not included in this book. However, for reasons of comparison with the previously excavated houses I have included its plan (fig. 2.42) in this chapter. The next chapter deals with the analysis of the layouts of the houses and as the plan of the House of the Tub is available, I have added the measurements and accessibility of this house to this analysis in order to better research and assess potential spatial patterns in the houses overall.

2.6. Concluding remarks
The houses of New Halos provide important new information regarding the planning and nature of housing in newly planned cities in the early Hellenistic period. Despite the regularity of the city’s layout, we can observe distinct differences in the way the houses are designed and how housing blocks are laid out. In addition, houses occupy varying surface areas. At first sight it has become clear that the houses at Halos are not ‘type houses’ in the sense Hoepfner and Schwandner defined them. But on other levels there maybe similarities too and further analysis is necessary in order to be able to distinguish possible patterns in design and usage. How did the inhabitants of Halos build their houses? Can we distinguish patterns of cultural convention in the configuration of domestic space? How do the houses fit in the city plan overall? These are questions that we will discuss in the next chapter.
Fig. 2.42. House of the Tub: foundations. Drawing H.R. Reinders.