

The Greek *polis* and city: its origins, conceptual definition and development

Franziska Lang*

Abstract

After the destruction of the political system, which was based on palaces at the end of the 2nd millennium, Greece can be characterised as a society with small local communities without a major political centres. Small nucleated settlements were then the main features of the settlement patterns. From that time on a new political formation, the *polis*, can be observed. *Polis* is a term, which defines a complex community system including political and socio-economical as well as residential aspects. The *polis* did not develop in the same linear evolution in all areas, because in some regions of Greece it rose quicker than in other parts. In Archaic times as the latest the *polis* was well established and at the same time the first real cities appeared. The development of a city can follow two different principles: a naturally growing and a planned town. The lay-out of a naturally growing town is a haphazard agglomeration of small units connected by narrow and irregular alleys. A planned city has been created on the "drawing board". The development of the Greek city reflected through time also the changes in the differentiation of the community and the existing political, socio-economic and religious conditions. The house forms from the Geometric epoch, which typically comprised of one or two room houses, either apsidial or oval, were altered or replaced by new types in the Archaic period. We can demonstrate a clear development from these simpler forms to new house-types with several rooms and a courtyard. This evolution in plan reflected a change in family organisation, settlement structure, and society as a whole. From the 5th century BC the city-wall became a typical feature of a town and all new planned cities were based on a more sophisticated grid plan. Now all elements of the city were embedded in the grid plan with equal-sized plots. Not only the town-plan was standardised but also the house-plan. Each house followed the same ground-plan with the same division of rooms. But the

* Institut für Altertums Wissenschaften, Universität Rostock Universitätsplatz D - 18051, Rostock.

houses were usually remodelled in the following generation and the original design of the city plan was altered.

Resumo

Depois da destruição do regime político, que se baseava em palácios no final do 2.º milénio, a Grécia era uma sociedade constituída por pequenas comunidades locais sem grandes centros políticos. Os padrões de povoamento baseavam-se então em pequenos aglomerados nucleares. Desse período, uma nova formação política, a polis, emerge. Polis é um termo que define um sistema comunitário complexo, que inclui aspectos políticos, socio-económicos e residenciais. Esta não se desenvolveu da mesma forma linear em todas as áreas; nalgumas regiões da Grécia, o processo foi mais rápido que noutras. Nos períodos arcaicos, tal como nos recentes, a polis encontrava-se bem estabelecida, tendo surgido, ao mesmo tempo, as primeiras verdadeiras cidades. Estas desenvolveram-se a partir de duas situações diferentes: a do crescimento natural e a de uma cidade planeada. A planta de uma cidade sem planeamento urbanístico é uma aglomeração caótica de pequenas unidades ligadas por ruelas estreitas e sinuosas. Uma cidade planeada foi criada na “prancheta de desenho”. O desenvolvimento da cidade grega reflecte, igualmente, as mudanças operadas na comunidade e as condições políticas, socio-económicas e religiosas aí existentes ao longo dos tempos. O tipo de casas da Época Geométrica, que inclui uma ou duas divisões, sejam elas de configuração em ábside ou oval, foi alterado ou substituído por novos tipos no período Arcaico. É bem visível este processo de desenvolvimento das formas simples para novas casas-tipo, com várias salas e um pátio. Este desenvolvimento planificado reflectiu uma mudança na organização familiar, na estrutura de povoamento e na sociedade como um todo. A partir do século V BC a muralha tornou-se uma característica típica da cidade e todas as novas cidades planeadas basearam-se em projectos mais sofisticados. Agora, todos os elementos passam a estar incluídos numa malha uniforme. Não só o plano da cidade se estandardizou, mas também o próprio projecto da casa. Cada casa seguia o mesmo plano de base com a mesma divisão de compartimentos. No entanto, estas eram frequentemente remodeladas ao longo de gerações, o que conduziu, naturalmente, a alterações no plano original da cidade.

1. Introduction

In the first half of the first millennium BC in Greece one can recognise two important developments in political-social concepts: the emergence of the *polis* and the city.

With the destruction of the Mycenaean cities in Greece, which took place at the end of the second millennium BC, the centralised and ranked society began to decline. From clay tablets, which have been found in Pylos in the Peloponnesos, we know that the state was ruled by a powerful king-like man, called *wanax*. The economy was based on a tributary system. Sophisticated buildings, the palaces, which were often surrounded by megalithic fortification walls more than 5 meters in width, were built in the state centres. The palace was at the heart of the walled city surrounded by many other buildings. Outside the fortification walls further houses were situated, which were of the same type as the buildings within the walls. A good example is Mycenae in the Argolid (fig. 1). Presumably, this pattern reflected differing ranks in society: the *wanax*, the king, and the administration authority lived within the fortification walls while the aristocracy, without direct political tasks, lived outside. A large variety of house types could be identified, especially granaries and houses with several rooms along a corridor.

The destruction of this centralised system indicates a deep break in Greek history. It constitutes the end of the prehistoric and simultaneously the beginning of the historical period in Greece and also the change from the Bronze to the Iron Age.

2. The *polis*

2.1. *The concept of the polis*

The period after the decline of the Mycenaean era was for a long time called the “Dark Ages”, as the palaces, the monumental architecture and wall paintings disappeared together with the splendour of that period. The following

period, from the 10th century on, called the Geometric era, is characterised by a different political system. Centralised authorities were abandoned in favour of small local communities. The economy was now based on subsistence production. The social unit was formed by the *oikos*, the Greek word for house. The term *oikos* did not only mean the actual house but also the whole family unit. The social and political organisation of the communities in most parts of Greece during this time was different: probably acephalous in character, they apparently possessed no major political centre of their own. But there were communities with a local leader, which we infer from the existence of huge tombs beside small simple burials. Small nucleated settlements were now the main feature in settlement patterns.

The obvious break with the former Mycenaean culture and the different way of organising society were the preconditions for the birth of a new political formation: the *polis*.

With the phenomenon *polis* several points of discussion are connected:

- we do not know when and where exactly the *polis* developed;
- there is still a debate as to what *polis* means precisely;
- Greece was divided in more than several hundred different communities, which means we have to expect many different manifestations of political and social organisation.

For this reason one can not outline the rise of the *polis* in Greece as a single development. There was not the same linear evolution in each community; in some regions of Greece more complex political organisation rose quicker than in other parts. Furthermore, it is unlikely that there was always a linear development from the more kinship based community to the *polis* as a state-like-organisation. Above all, our picture of the rise of the *polis* is greatly influenced by the situation in Athens from where we possess the most ancient sources and therefore the most knowledge.

We should not confuse the term *polis* as a form of state-organisation with our modern view of a highly-populated state. If the term “state” is used in the text that follows it will be referring to a special political and social formation in ancient times which one cannot compare with the modern term “state”.

The *polis* consists of three elements: a territory, a people and a government. But there is no standardised concept, organisation or size for the individual *polis*. Apart from this general characterisation the basis for the affiliation to a *polis* is neither territory, nor the type of government but the people. So, in treaties, coins, seals and stamps the name of the location is not mentioned, but the citizen body is. Thus the ancient sources when describing the conflicts named the people, not the territory, in contrast to today where the state is defined by its territory.

Aristotle says that: “a *polis* is a community (*koinonia*) of citizens (*politai*) with regard to the constitution (*politeia*)” (Politeia, 1276, b 1) and further the *politeia* is the “organisation of political institutions, in particular the highest political institutions” (Politeia, 1278, b 8-10). Even to him the citizen are more important than the territory in defining the *polis*.

2.2. *The political organisation of the polis through time*

As mentioned above, we have no exact dates when and where the *polis* arose. The epics of Homer, the *Iliad* and the *Odyssey*, are the earliest ancient sources which refer quite often to the term *polis* as well as *asty*, the Greek word for city. The discussion about the rise of the *polis* is strongly linked with the discussion of how one dates Homer's epics and the question of exactly which society Homer described. The stories dealt with the Trojan war, which took place at the end of the second millennium BC, namely the Mycenaean period, and the following "adventures" of Odysseus. But from archaeological evidence we know that the Homeric descriptions also include elements which appeared only in the first millennium BC.

We recognise in the Homeric work cities with broad streets, city walls, sanctuaries and big houses with marvellous furnishings. Settlements and houses, similar to these descriptions, existed in Mycenaean times, such as the throne-room in the excavated palace of Tiryns (Argolid) from the 13th century BC, but not from the time when Homer supposedly lived, which was the eighth century BC. On the other hand weapons and other equipment are mentioned in the poems which do not appear before the Iron Age. Therefore, more than one epoch are outlined in the Homeric epics.

Because it still remains difficult to judge correctly which elements in Homer's epics date to which time period, Homer is therefore a problematic source for our question about the date of the rise of the *polis*. However, there is agreement that the *Iliad* and the *Odyssey* dealt mainly with the upper classes. Furthermore, Homer did not distinguish between the terms *polis* and *asty* when he described settlements in his epics; so the term *polis* was used for the community as well as for the settlement.

One of the remaining historical sources from the early seventh century BC, when the Archaic period in Greece began, is: *Works and Days* by Hesiod. The terms *polis* and *asty* also exist in Hesiod's descriptions. And, as in Homer, one cannot find differences in the use of the terms *polis* and *asty*. But Hesiod's poem gives a completely different view of a society. Hesiod lived in a village in Boeotia in mainland Greece and the focal point of his description is the hard, rural life of farmers. He especially concentrated on the *oikos*, that is the household, which is constantly threatened by crop failure. He has reservations about the dealings in the town and the *agora*, the Greek name for market place.

Nevertheless, Hesiod is also concerned with the fate of the community, the *polis*, which depends on its leadership. The leader, especially the *basileus*, the Greek word for king, is responsible for the well-being of the people and proper functioning of the society. The structure of the society is an aristocratic one as in Homer.

The epics of Homer and Hesiod show that *polis* as a term describing the society – and it was also used for settlement – was already established in their days. The *polis* existed but in an early stage it was based on a hierarchical system of the community and was not yet formalised. Not all individuals participate actively in political decisions.

After power struggles and tyranny political institutions in a community such as Athens are established in a more or less democratic manner in the sixth century BC at the latest. The aristocratic power declined. New institutions were created such as the assembly of the people or the council. Each citizen had the same rights and a vote. Membership in the political institutions were no longer tied to the aristocratic lineage, but to residence in the community. The individual citizen participated now in the municipal government. But there were still some institutions which admitted only aristocrats. Even these communities were called *poleis*.

The democracy reached its peak in the fifth century BC when all citizens gained admission to all institutions. The *polis* represented the whole society and concluded treaties with other *poleis*.

In the fourth century BC theories about the best *politeia* arose with the most famous ideas being put forward by Plato and Aristotle. The point of discussion in their work was not whether a community should be organised in a *polis* system, which was an accepted fact at this point in time. Their theoretical debate dealt with conditions for the creation of the best *polis*, that is what the best political and economical conditions should be. In modern terms we would say they formulated considerations of a constitution.

This brief overview had shown that the term *polis* is connected with community, independently from the political system.

In the end it should be pointed out that these Greek democracies were not a democracy in our sense of the word in which each person was automatically a full citizen of the state where he or she was born. In the ancient democracies the principle of residency was a necessary but not sufficient condition for citizenship. Not every person could become a full citizen. The citizenship in a *polis* was strictly defined. The best evidence is provided again in Athens. There a citizen had to be: a man, born in Attica and older than 20 years; that is, not a woman, not a slave, not a metic, (foreigner with trade or skill) and not a child. The population of a *polis* consisted not only of citizens but also of women, metics, slaves and children, but they had no representation in any governmental institution. In this respect the Athenian democracy cannot be compared with our modern understanding of a democratic society.

The evolution of a *polis* system as described above reflects the situation in Athens. Other *poleis* had an different political constitutions such as oligarchy, the power of the few. Nevertheless, they were *poleis* too.

2.3. *The polis and the city*

So far the *polis* has been described in its more political – constitutional aspects. But a different meaning of *polis* lies in its character as a residential unit. As mentioned above, Homer and Hesiod described a community and a settlement using equally the terms *polis* and *asty* (city). In later written sources *polis* was more often used in a constitutional sense. Nonetheless a residential connotation remained. The most famous ancient commentary was written by Pausanias, who lived in the second century AD.

“From Chaeroneia it is twenty stades to Panopeus, a city (*polis*) of the Phocians, if one can give the name of city (*polis*) to those who possess no government offices, no gymnasium, no theatre, no market place, no water descending to a fountain, but live in bare shelters just like mountain cabins, ... Nevertheless, they have boundaries with their neighbours, and even send delegates to the Phocian assembly” (10, 4, 1ff.).

This description has been quoted many times to prove that a *polis* means city. But I think this quote shows very well both aspects of what *polis* could mean: the constitutional and the physical aspect. Pausanias is reluctant to give the name *polis* to Panopeus and mentions the absence of urban and political features, although he names the boundaries and delegates for an assembly, which is obviously a characteristic of a political organisation. Therefore Panopeus was a *polis*, but without any urban structures. A *polis* could have an urban centre, but it was not essential.

Accordingly, *polis* is a complex term which defines a social system including political and socio-economical as well as residential aspects.

People often use the term *polis* as synonym for city as a settlement type.

We have to distinguish between city and town on one side and *polis* on the other, because while city and town are just types of settlement, *polis* is a state-like-system (“citizen-state”) with references to the political and economical organisation. Therefore in order to avoid any confusion in the discussions we do not use *polis* as a type of settlement such as city or village but only as a time-bound description of a community system. This would also explain the fact that there were *poleis* without an urban centre and, conversely, that many urban centres were not the political, religious and economic centre of a *polis*. For instance, the town Athens in Attica was the urban centre of the *polis*, but there were other towns in the same *polis*, like Sounion or Rhamnous. And on the other hand the *poleis* of Aitolia in Western Greece had no urban centres until the fifth century BC.

However, the people in the *polis* lived in different settlement types: city, village, farmstead. But each citizen had the same rights in the political institutions of the *polis*. The abode of the citizen within the *polis* had no influence on his political rights.

Therefore, it is obvious that *polis* has a political and residential meaning which the term city does not.

3. The city

3.1. *The concept of the city*

We have in old Greek as well as in modern Greek, two words for city: *polis* and *asty*. We have already discussed *polis* and its definition; there are some words to say about *asty*. *Asty* means city as a type of a settlement unlike *kome* or *chora* which can mean village. With the term “city” a further debate is started. This phenomenon appears in such different forms through history that no satisfactory uniform definition can be given. Furthermore it is difficult to

describe the development of a city. Normally, we know the city as a distinct feature. How can one recognise a city and what exactly does the term city mean?

If you analyse how an archaeologist decides that a settlement qualifies as a city, you will see that the common criterion, direct or indirect, is the size of the settlement. A large conglomerate is usually described as a city. But this is not a sufficient definition because the average size of a Greek city was not very large and compared with an ancient city in the Near East it would have been a village. And what nowadays is a village with a few thousand inhabitants would have often been a town in Antiquity. This means there have to be more elements in defining a city.

One possible explanation for the development of a city could be as follows (fig. 2): the population of one hamlet increases (1); in another a specific religious function is emerging (2) and a third is established as a market place with a wider catchment area (3). Each of these could be named a proto-urban centre. In a further step in the development of the settlements two of the above mentioned functions could be combined and urban centres would appear. If all three functions are established in one settlement, a city would be constituted.

Urbanisation marks the diversification of a society. The formation of a city is connected with a more specialised society. It has to be seen in connection with its hinterland, because a city is not able to exist on its own. Urban economy is not based on subsistence, therefore it depends on the supply from the hinterland. That is, to finance public works like a council hall or a city-wall, the citizens have to produce a surplus.

Therefore the following elements characterise a city:

- the place is permanently inhabited;
- the population-density is higher than in the surrounding areas;
- the (agricultural) economy is dependent on the hinterland;
- goods (e.g. pots, tools) and service offered in the city exceed the internal city demand;
- the society is more stratified than in the surrounding settlements;
- a city fulfils religious, ritual and cognitive functions (meaning central functions) for a larger area;
- furthermore one finds in a city particularly sophisticated types of architecture like theatres or administrative buildings and also specific technological facilities like fountain halls, a sewage and water system etc.
- finally, a larger variety of functional buildings (like council or a town hall) can be found in a city than in a village.

Some of these elements could be found in a village, but all elements combined would be met only in the city.

It is obvious that no ancient city is completely definable. No city is excavated to its full extent and very often only the latest stage is known at all. Our knowledge is based on a few examples. Nevertheless, we have gained a good picture of the ancient city and in the following a short overview about the development and structure of the Greek cities (fig. 3) will be given.

3.2. *The features of Greek cities*

There are different reasons for the formation of a city: the increase of a previous rural settlement; a concentration of people grows into a big settlement; a synoecism (this means here, that several settlements in a given area were abandoned in order to build a new settlement); an organised colonisation of a territory. With each kind of formation-process a different feature of the city-structure can be connected. Generally, the development of towns can be explained by two different principles: an evolved and a planned town.

An evolved town normally developed from a village which became a focus for further settlers. Because such a town developed from smaller units without any organised city-planning, the lay-out is usually a haphazard agglomeration of small units combined by narrow and irregular alleys. In evolved towns one can identify the historical process by the city-plan, unlike the planned town which has been created on the "drawing board". There a fixed plan was laid down, as we will see later. In the fourth century BC, the philosophers Plato and Aristotle gave some ideas about city-plans in their political philosophy. Both had different ideas about the best type of arrangement for the lay-out of a city-plan. Plato preferred a rigidly planned city with a regular road-network, while Aristotle stressed the advantages of natural growth. But both concepts were integrated in the discussion about the ideas of the organisation of a community and they were not thought as a manual for realising architectural concepts.

A Greek town is divided in several quarters distinguished by public, private and sacral areas. One area left vacant is the market-place, in Greek the *agora*, usually surrounded by halls (in Greek, *stoa*). The *agora* is created for public use, that is for political, social, economic life and also for celebrating the official cult. In accordance with their prevailing functions specific building-types were erected in the towns. There are facilities for the administration such as the *bouleuterion* (= assembly-hall), *prytaneion* (council), *beliaia* (court), for the economy (warehouses), for the water-supply (fountain-houses, water-channels, waste water channels etc.), and from late Classical period: libraries, and for entertainment theatres. These types of buildings are essential in Greek cities, being the political and cultural centre of the surrounding settlements. Finally, a network of roads and from the fifth century BC on a city-wall are among the common features of the city.

3.3. *The Greek city through time*

3.3.1. Geometric and Archaic times

3.3.1.1. *The settlement pattern*

It is known that the settlement plan reflects the differentiation of the community and the existing political, socio-economic and religious conditions. If we consider the settlement plans in Greece through time, we can make out the following development.

Geometric times (about 1000 – 700 BC)

As mentioned above, in the Geometric period the powerful Mycenaean centres with dependent settlements were replaced by smaller independent communities.

The Geometric settlements can be divided into two types: settlements with detached houses and settlements with agglomerated houses. Both arrangements were haphazard without any regular network of streets. For instance, at Emporio on Chios (fig. 4) the settlement is situated on a steep terraced hill so that the houses had to be free-standing. The top of the hill is enclosed by a wall. Within the wall one big house and a cult place, which was transformed into a temple in the sixth century BC, can be found. The street follows the natural contours of the hill. Along this street rectangular houses were erected. Other examples of settlements with isolated houses are known from Corinth, Aigina, Lefkandi etc. Houses with an apsidal ground plan like at Vitsa in Epiros, Miletos or Smyrna are always free-standing. The houses normally consist of one or two rooms. The settlements with detached houses continued into the Archaic period.

The other type of organisation is by means of agglomerating rectangular buildings (fig. 5). The streets and dwelling units in the agglomeration developed without any planning. Examples of this can be found, e.g. at Ag. Andreas on Siphnos, Prinias in Crete, Thorikos in Attica or at Kastanas in Macedonia.

This settlement type is only connected with rectangular houses with one or more rooms and disappeared gradually in Archaic times.

Archaic times (about 700 – 500 BC)

The first cities with an orderly network of streets were found in the Greek colonies. From the end of the eighth century BC the Greeks began to move from Greece to different regions in the Mediterranean, for instance to South Italy and Sicily, and to the region of the Black Sea, where they founded colonies. Why they left their home-country is still a point of discussion. A lack of sufficient resources caused by overpopulation or internal conflicts could be the reason.

In Sicily and Southern Italy the colonists built in newly founded cities a network of streets in the city. Afterwards they parcelled out the land in long strips along the streets. The streets were not always parallel and a triangular-shaped space could form the middle of the settlement, like in Megara Hyblaia (fig. 6). The streets were also of different widths. The strips of land were subdivided in plots. In the first stage each plot had built on it a small detached one-room house. At least from the seventh century BC on, the plots were of equal size.

In another colony city in South Italy, Metapontion (fig. 7), the colonist also divided the land in strips and created a network of regular streets. This city is interesting because, as recent research has revealed, not only the settlement but also the surrounding country were divided into regular strips which were oriented along the grid system of the town. That means town and countryside were divided in the same manner into equal lots.

In the seventh century BC regularly planned cities can also be found in Greece. The houses are erected in a row, one house beside the other.

A good example is offered in the case of Vroulia (fig. 8) on the island of Rhodes which is located on a promontory. Two rows of houses divided by a street form the settlement. The defensive wall is simultaneously the rear wall of the northern house-row. At the western end there is an enclosed space. Further known examples from the seventh century BC in Greece are Onythe in Crete or Xobourgo on Tenos.

At Halieis in the Argolid it seems that the houses of the seventh century BC had the same orientation as the houses of the Classical period which were erected along an orthogonal network of streets. One can also notice regular houses along a road network in Limenas in Thasos and in Miletos.

In all these settlements the ground plan of the houses shows the same pattern. That means the settlements reveal a standardisation of house forms and could be regarded as a proto-hippodamic system.

There are notable alterations from the Archaic to the Classical period in the settlement schemes. At the transition from the eighth to the seventh century the apsidal houses were directly overbuilt by rectangular houses. This phenomenon can be seen in settlements like Smyrna, Eretria or Miletos. That means the settlement, consisting of detached houses, was replaced by a system of either agglomerative or regular lay-out. But this development is only one that occurs in Southern Greece. It does not concern Northern Greece. In Kastanas (figs. 14, 15) and Assiros in Macedonia agglomerated houses are replaced by isolated ones; in Assiros even by apsidal buildings. It is obvious that this process is not accidental but a deliberate reorganisation of the settlement structure and house plans.

In the same phase a steady increase of regularly laid out settlements can be found while the detached house-type declines in Southern Greece. An opposite process can again be noticed in Northern Greece.

Beside the growth of a new settlement type and the alterations of settlement patterns, public and private space start to be differential and newly arranged. Along with the development of a more complex political system a public architecture arises. Its purpose is to meet the needs of the current political institutions. The affluence in which the community lives allows the construction of buildings with a limited functional purpose and restricted access. The symbolic character of these buildings is emphasised by the exceptional style of architecture embedding elements of temple architecture. In addition the public space becomes the focal point of settlement life. Where public buildings are erected, assemblies as well as feasts take place.

Since the end of the eighth century at the latest, one can distinguish the temple as a separate building for religious practices. But its ground plan is no more than a monumentalised type of domestic architecture. Only in the Archaic period does it become possible to make out a particular temple ground-plan which will be dominant for the next centuries. Temple architecture is combined with a new style of architectural decoration and is the beginning of a process of development in the following epochs.

3.3.1.2. *The house organisation*

Similar tendencies can be shown in domestic house plans. Generally, the houses are classified in accordance with the ground plan. The most visible

differences are between apsidal or oval and rectangular ground plans which can be subdivided into further types. But differences exist also in the internal structure of the houses, e.g. one or several rooms, a hallway etc.

A rectangular building with a convex wall opposite the entrance is called an apsidal house (fig. 9). If both sides are convex then it is called an oval house. If a building is only partially excavated it is impossible to distinguish between those types. Examples of this apsidal type are known from the tenth century BC onwards. They can be found all over Greece – at Assiros, Athens, Eretria or Smyrna or Oropos – except for Crete. Because of the ground plan the apsidal house appears only in “detached house” settlements. It can be divided in one or two rooms. From the seventh century onwards we notice a remarkable decline of this kind of house. This reflects, as mentioned above, an intentional process which we can recognise for instance at Eretria where the apsidal houses are replaced by rectangular ones.

The more common house type has a rectangular ground plan (fig. 10). It can have one room or be divided into two rooms. There are houses with more than two rooms. The distribution and functional division of rooms and the choice of distributing areas like courtyard or corridor determine the concept of these multiple-room houses (fig. 14).

In the courtyard-house or the corridor-house the rooms are situated around the courtyard or the corridor. In these houses the rooms do not all open onto each other, but they are entered independently. They are known e.g. from Miletos (Kalabaktepe) or Zagora (fig. 13) where in each house several rooms are grouped around a courtyard.

The other type of the multiple room house has a corridor instead of a courtyard. The rooms all open onto the corridor. Examples have been found at Tsikalario on Naxos, Dreros in Crete or in Athens (fig. 11).

The courtyard and the corridor mainly functioned as a distribution area within the house from where people could reach all other parts of the building. In addition to that the courtyard could also be used for domestic purposes like cooking, storing etc.

From the late Geometric period onwards more differentiation in the houses can be found. The one-room house disappears in favour of the multiple room house. The size of the house varies accordingly. The sizes differ from settlement to settlement, but within one settlement the houses can be said to have roughly the same size.

This evolution obviously reflects the new requirements of the communities, which can best be shown at Zagora and at Kastanas.

Zagora (fig. 5), founded on the island of Andros in the ninth century BC, first consisted of big one-room houses and some two-room house-agglomerates (fig. 12 A-G). The houses were surrounded by open space. Benches were found within the houses which were used for sitting, sleeping or storage. After the middle of the eighth century a remodelling of the houses took place (fig. 13 A-G). Either rooms and courtyards were attached to each former one-room house, or one-room-houses were subdivided by walls. In this phase each house consisted of three rooms and a courtyard.

This alteration might be explained by changes in the internal structure of the community.

The lay-out of the settlement provides data as to how the community was organised. For instance, the construction of a fortification wall was a joint task of the community and one big storehouse means that each family not only produced for the community but also stored the grain together in one storehouse.

The division of the houses provides information about the family structure. At Zagora all work of daily life was done in the one room of the house before the remodelling. It was multifunctional. There was no division between the *oikos* as a living room and storage room. One-room houses could be subdivided into different areas by convention: for instance, into a separate area for men and for women, for older people or younger people etc. Privacy inside the house in the present day sense did not exist. If need arose, hanging cloths, wooden partitions or similar items made of perishable material could have been used as blinds. When the weather was good, the work could be done outside the house. Thus family life took place more in public. There was not much difference between the private and public spheres. The entire settlement was the habitat or Lebensraum. The remodelling of the houses (fig. 13) at Zagora in the latest period indicates a change in social organisation.

First, each house got a small, a middle-sized and a large room, which was the former one-room house, and a courtyard. The largest room of each unit was now used probably for storage indicated by benches with storage vessels in situ. In one room, perhaps the *oikos*, a hearth was found. The remodelling led to a standardisation of the architecture of the settlement. This could imply that the social stratification was not very pronounced. But no final conclusion on this matter can be drawn as other methods of differentiation of social status, e.g. different types of clothes, tattoos etc., must also be taken into consideration.

Secondly, the new house plan shows a changed family organisation too. The functions of the household were divided into the three rooms. The multifunctional one-room of the former phase was replaced by three functionally different rooms. Now there was a separate storeroom, an *oikos* and a further domestic room. The addition of a courtyard suggests that the division between the private and the public spheres increased. Sometimes two houses shared one larger courtyard. That possibly means that the courtyard combined the houses of one family unit or an extended family, each smaller family living in their own unit. But generally the families now worked and lived in more seclusion. From one generation to the next we can recognise a complete change in the settlement as well as the family organisation. At the end of the eighth century BC the settlement at Zagora was abandoned.

An example of a standardised settlement plan which was enforced right from the beginning is Vroulia (fig. 8), which was founded in the seventh century BC. Here multiple roomed houses of the *prostas* house type (see below Priene) were erected. The finds show hardly any differences in the single rooms so that an interpretation about the original function of the rooms is difficult. But it is likely that the community which lived there showed little social stratification.

An example of a presumably more stratified community is given in Emporio (fig. 4) on the island of Chios. This settlement, erected in the eighth century BC, revealed different house types with varying sizes: one-room or two-

room houses. The information given by the finds is again scanty, but the distinct ground plan of the houses suggests a higher differentiation of the social groups. Whether the largest house within the acropolis was the residence of the local chief or the meeting place of the community cannot be verified by the material culture.

A completely different picture emerges at Kastanas in Macedonia (Northern Greece). A large house complex (fig. 14) of the late eighth century BC with at least twelve rooms along the street was completely excavated on a hill. Further houses, the north and the south house, were partially excavated. Four rooms (fig. 14: 7, 8, 11, 12) seem to have created one family unit in the large house complex. The room with a hearth (fig. 14: 8) was perhaps the *oikos*, the others also had domestic purposes. Some of the rooms in the complex were not connected with other rooms but opened to the street (fig. 14: 4, 5, 6). In some of these single rooms hearths were found. Thus these rooms were possibly individual house units. It could therefore be inferred that the whole complex held one extended family living in separate units of the house. In the later sixth century BC the housing complex was replaced by isolated two-room houses (fig. 15) with rooms of more multifunctional purposes. Thus at Kastanas the evolution of the settlement plan is contrary to that in Southern Greece, where an increase of the settlement density, a standardisation of the house types and even a change from the multifunctional one-room house to the multiple room house with a functional differentiation of the rooms is obvious. While at Kastanas the settlement structure was modified from a more complex to a simpler lay-out, the multifunctional house type increased.

3.3.2. Classical and Hellenistic times (about 500 – 100 BC)

A new stage in the development of town-planning was reached in the fifth century BC. A more sophisticated grid plan (fig. 16) is associated with the name Hippodamos of Miletos and usually we use the expression "Hippodamic system" for cities built using this plan. He drew his ideas of a uniform settlement with equal-sized houses from the Archaic developments. Now all elements of the city were embedded in a grid plan with equal-sized plots. Streets divided the separate plots which held the market-place as well as the sanctuaries, public buildings and private houses.

Not only the town-plan was standardised but also the house-plan. In the town each house followed the same ground-plan with the same division of rooms. And now all houses had a second storey.

In the following text some examples of cities built in the Hippodamic style will be given.

According to ancient written sources around the middle of the fifth century BC Piraeus (fig. 16) was laid out by Hippodamos. The new town covered an area of two hundred and fifty hectares and was enclosed by an eleven kilometre long city wall.

The town was divided in equal sized plots. The city plan was created using a grid-system of streets – in contrast to the haphazard and unplanned city of Athens – which can be sorted according to their different width: the streets

between the houses were 5 metres wide, the main street was 8 metres and the widest streets, so called *plateiai*, were 15 metres wide. The streets enclosed blocks of houses, which are today called *insulae* (a latin term). Almost each residential area had 16 *insulae* and each *insula* had eight houses.

Corresponding to the regular concept of the city plan the houses were uniform. Each house plot had a size of about two hundred and forty square metres. In each house (fig. 17) one recognises the same building elements: *oikos* with a vestibule, *andron*, courtyard, shops. The courtyard functioned as a distribution area in the house from which people could reach all other parts of the building, including the upper storey. It also divided the house in a northern and a southern part. It was an open space, and the floor was covered with stone slabs. Sometimes there was also a cistern in the courtyard. In the northern part of the building was situated the living area, with *oikos* and *andron*. The *oikos*, derived from the social unit of former times (family body), means at this point only a room, but it was the focal point of the house. It included the hearth and most activities of the family took place here. Sometimes two smaller rooms used as storage space were in the rear. In front of the *oikos* was an open vestibule with two columns. Some vestibules hold cisterns.

The *andron* was another important room in the building. The *andron* was isolated from the remaining house and could be reached through a foreroom. It had a square ground plan. In this room seven couches stood. The design of the *andron* showed sophisticated architectural features like a stone framed window or floor-mosaics, as found in a few houses. These adornments point to the significance of the room.

As mentioned above, the citizen of a Greek state was by definition a man. This was also reflected in the *andron*. Here he met his friends and colleagues, and here they debated and enjoyed themselves (in Greek, symposium). For women access was not permitted except for waitresses and the *hetairai*, highly educated women who entertained the men at the symposium with songs and dance, but who were also clever enough to participate in the political debates. The *andron* reflected well the organisation of the society on a small scale.

The division of a town plan by a regular grid, the partition into *insulae* and the uniform house types are intended to be an expression of the equality of the inhabitants of the town. The use of such features in Piraeus is particularly connected with the idea of democracy, as Piraeus was remodelled at the same times as Athens was at the apex of its power and of the development of democracy.

Looking at another town, Olynthos (fig. 22), we have an example of a city erected in the Hippodamic system, which was probably based on an oligarchy, that means a specific political organisation where the power is held by a few people.

Olynthos is situated in Northern Greece on the Chalkidike peninsula. In 479 BC the old town was destroyed by the Persians. As written sources record the new town was built in 432 BC as a result of a synoecism.

The new town was laid out on a grid plan. The *insulae*, the house blocks, were placed accordingly. The streets had different widths. The main road bordered with shops passed the *agora*. In the western part there was another large square with halls and perhaps a temple.

The *insulae* were subdivided in eight or ten houses. Between the houses was a sewage channel. The houses (fig. 18) have a square ground plan. As in Piraeus one finds the same individual elements in all the houses. From a courtyard one had access to all parts of the house: to the *oikos* with two small rooms to the side, the *andron* and other rooms. The houses have about four hundred square metres and are therefore much larger than the houses in Piraeus, and have more rooms of which some were used as workshops or shops. The features of the houses are comparable with the dwellings in Piraeus, but in some details one can detect differences too. In one side room of the *oikos* there are bath tube fragments indicating a bathroom. The other small room beside the bathroom had a chimney.

An important feature of the houses in Olynthos is the *pastas*. A *pastas* is a hall with columns facing the courtyard. It was normally a transversal room connected with some of the rear rooms. Its main function was to separate the courtyard and the entrance area as a more public space from the private living rooms. This is the defining and eponymous element of this type of house: the *pastas* house.

During the fourth century BC many houses were rebuilt. Some houses became larger in taking over the neighbouring plots. Some houses had only *andrones* and a courtyard with enclosing columns, called a peristyle. In this case it is assumed that the upper class possessed villas outside of Olynthos and lived permanently there, while they just came back to the town to deal with political, financial and social affairs and to meet people in their *andrones*. Some houses were subdivided into several flats of about sixty square metres. Each of these flats had its own courtyard. Presumably, these houses were for rent.

In Olynthos we can understand well the evolution of the settlement. Starting with equal house plots, a few generations later there had been many changes. It is most interesting that this town, which was presumably ruled in an "undemocratic" way by an oligarchy, was built according to the "democratic" Hippodamic system with uniform plot sizes and house types. This means a "democratic" city plan is not necessarily combined with a democratic constitution.

With Priene (fig. 23) a further example of a Greek city in the Hippodamic style can be presented. Priene is situated above the river Maiandros on the West coast of Turkey. The old town, known from written sources, has not yet been found. The new town was founded in 352 BC. Under the influence of Athens Priene had a democratic constitution. The city was built on very steep terrain in the hippodamic manner with *insulae* embedded in a road-network.

The *insula* in this city held eight houses of about two hundred square metres. The houses (fig. 19) had a rectangular ground plan.

Again one can recognise the same well known elements in these houses: *oikos*, store-room, *andron*, divided by a courtyard. But these houses are distinguished from the houses in Olynthos by one element: the forehall in front of the *oikos*, which has the same width as the *oikos*. The Greek name for this forehall is *prostas*. Hence this house type is known as a *prostas* house. It has a different house plan from the *pastas* house known from Olynthos. In the southern part were workshops and storerooms. Along the streets the houses had shops with doors opening onto the street. In Priene the houses were

remodelled in the following generations and the original design of the city plan was altered.

That the idea of a Hippodamic city was not only a phenomenon of the more central regions but also used in the more remote regions, is shown by the example of Kassope, located high in the mountains in North-Western Greece.

In the middle of the fourth century BC, Kassope (fig. 24) was settled by a synoecism, that is here several settlements voluntarily gathered in one new city.

Again a grid-system was the backbone of the city. In Kassope there were differences in the width of the streets as in the street-system of Olynthos and Piraeus. The length of the *insulae* and therefore the number of houses per *insula* varied according to the topography. For instance, in the north there were *insulae* with two to ten houses, but the row of *insulae* immediately north of the *agora*, the market place, had sixteen houses per *insula*.

A waste water channel divided the *insula* in two parts. The channel was particularly necessary in this rainy region. The house plan (fig. 20) was square with about two hundred and twenty square metres. The division inside the house differed from the aforementioned examples. The courtyard is smaller and had only a minimal distributional function. This function reverted to the *oikos*. The *oikos* was the largest room in the house and the excavation showed that it was a room, two stories high with a stair case by which you could reach the upper floor above the other rooms. It had two side rooms used as a bathroom and loom chamber. The *andron* was entered immediately from the courtyard; there was no corridor or hall in front of it. Separate rooms in the south part of the house were used as shops or workrooms.

The smaller courtyards and the larger enclosed *oikos* of the houses in Kassope were probably due to the climate. The rainier and colder weather of North-Western Greece prevented the more open architecture of large courtyards and open halls and made a more protective architecture necessary. Most of the year life had to take place inside the rooms of the houses.

This city-planning concept was well established in Hellenistic times (from the end of the fourth century BC onwards) and most of the new planned towns followed this concept. With Alexander the Great's conquests in the East, this idea became also common in the Near East.

An example of this is Dura Europos (fig. 25). It is located beside the Euphrates on a plateau forty metres above the river and was founded in the third century BC by Greek veterans.

Again it was laid-out on a grid-system. The streets enclosed regular blocks and had the same width. An exception was the main street from the main entrance in the west to the east with 12 metres width. Each *insula* had eight plots.

The houses (fig. 21) had a square ground plan and a courtyard in the middle which could not be entered from the street. The rooms opened to the courtyard. The houses were subdivided into two parts and the *andron* was always situated in the southern part. Beside it were smaller rooms. This unit dominated the house and might show influence of the oriental building features. This might also explain why one cannot find the *oikos* which was such a typical element in a Greek house. That means in Dura Europos Greek and Oriental elements were combined. Greek influence can be recognised in the

principal features of a standardised city-plan with grid-system and *insula* and Greek architectural elements, while Oriental traditions can be seen in internal house organisation: the greater importance of the *andron*, the missing *oikos* and no direct access to the courtyard from the street.

4. Conclusion

After the decline of the Mycenaean culture which had palaces and larger houses with many rooms the settlements were small with simple groundplan houses. From the late eighth century BC onwards, the former settlement types, like the detached house (fig. 4) and the conglomerate houses (fig. 5), declined in favour of the planned and regular type which also indicates an alteration in organisation of the community. The first examples are known from the Greek colonies. From Archaic times onwards there were strict divisions between the different spheres in the community: a greater division of private and public life can be seen in the appearance of other house-types and public buildings. The religious sphere was manifested in temples and the sphere of the dead in the cemeteries.

Corresponding with these developments a change in the house types is obvious. The multiple room house, which follows the same ground plan within one settlement emerged and showed a desire for more standardisation. One can recognise changes in the internal family structure, shown by the modification from the house with one or two multifunctional rooms (fig. 12) to the multiple room house (fig. 13) in which each room had its own particular function. Now, the settlements left an area vacant for use as a public space. The fact that the places were permanently inhabited and had signs of communal activity, like temples or fortification walls, are indications of proto-urban communities (fig. 8).

The rise of public building also reflected the change in the political structure. And, because of the growth of the population, new installations for the water-supply, like fountain houses, plumbing and canalisation, became necessary. All these alterations were the preconditions for the rise of the city which can be dated at the latest to the sixth century BC.

That this evolution in Southern Greece was not universal in Greece, but subject to regional conditions, is shown by the contrary developments in Northern Greece.

So all elements of the later Classical city are already in existence in the Archaic period: the regular settlement lay-out, similar house types and the division into private and public areas.

Then, from the fifth century BC on, the regular grid of streets and standardised house-blocks, called *insulae*, dominated city planning (e.g. Piraeus). In this grid, based on equal-sized plots, all elements of the city were embedded: the private houses, the public buildings, (like sanctuaries and administration buildings), and the *agora*. This plan was not restricted to the central Greek homeland such as at Piraeus (fig. 16) but was also used in the remote regions, like in Kassope (fig. 24). This feature became standard for all newly founded cities in the Greek World. In Hellenistic times when Alexander

the Great expanded his realm it appeared wherever Greeks settled, even as far as the Near East, like in Dura Europos (fig. 25).

The houses had the same size and followed the same ground-plan with the same arrangement. At the latest from the fifth century BC onwards we can recognise that the houses had two-stories. Within the different regions one can find several differences in the arrangement of the houses, but only in minor elements, like the exact lay-out of the hall (pastas in Olynthos (fig. 18), prostas in Priene [Fig. 19]) or the size of the courtyard (Kassope, fig. 20).

One can recognise in the *insula* and house plans topographical and internal social organisation. But there were always certain features which formed a typical Greek house: the courtyard which mediates between the world outside and inside the house, the *oikos* as the focus of the family life, and the *andron* as a special element of the male dominated society in Greek culture.

It is important to point out that the standardised city plans and houses do not automatically reflect a democratic constitution. Nor do they mark an economic equality. As we know from written sources, there were citizens with huge property living outside the cities in large farmsteads (*villas*).

Finally, it is obvious that this idea of equal sized divisions within the city and uniform sized houses did not endure for a long period. Almost everywhere, a few generations after the founding of the city, house plans were modified and the standardised plot-division was abandoned.



References

- DICKINSON, O. – *The Aegean bronze Age*. Cambridge: Cambridge University Press, 1994. (Cambridge World Archaeology).
- DRERUP, H. (1969) - *Griechische Baukunst in geometrischer Zeit*. Göttingen.
- FAGERSTRÖM, K. (1988) - *Greek Iron Age architecture. Developments through changing times*. Stockholm.
- HANSEN, M. H. (1997) - *The polis as an urban centre and as a political community*. In *Acts of the Copenhagen Polis Symposium*. August 29-31, 1996. Vol. 4.
- HANSEN, M. H. (1998) - *Polis and city-state. An ancient concept and its modern equivalent*. In *Acts of the Copenhagen Polis Symposium*. January 9, 1998. Vol. 5.
- HOEPFNER, W.; SCHWANDNER, E.-L. (1994) - *Haus und Stadt im klassischen Griechenland*. 2.^a ed. München.
- LANG, F. (1996) - *Archaische Siedlungen. Struktur und Entwicklung*. Berlin.
- MARTIN, R. (1974) - *L'urbanisme dans la Grèce antique*. 2.^a ed. Paris.
- MURRAY, O. PRICE, S., eds. (1990) - *The Greek city. From Homer to Alexander*. Oxford.
- RICH, J.; WALLACE-HADRILL A., eds. (1990) - *City and country in the ancient world*.
- SAKELLARIOU, M. (1989) - *The polis -state: definition and origin*. Athens.
- TORELLI, M. and GRECO, E. (1983) - *Storia dell'urbanistica. Il mondo greco*. Bari.

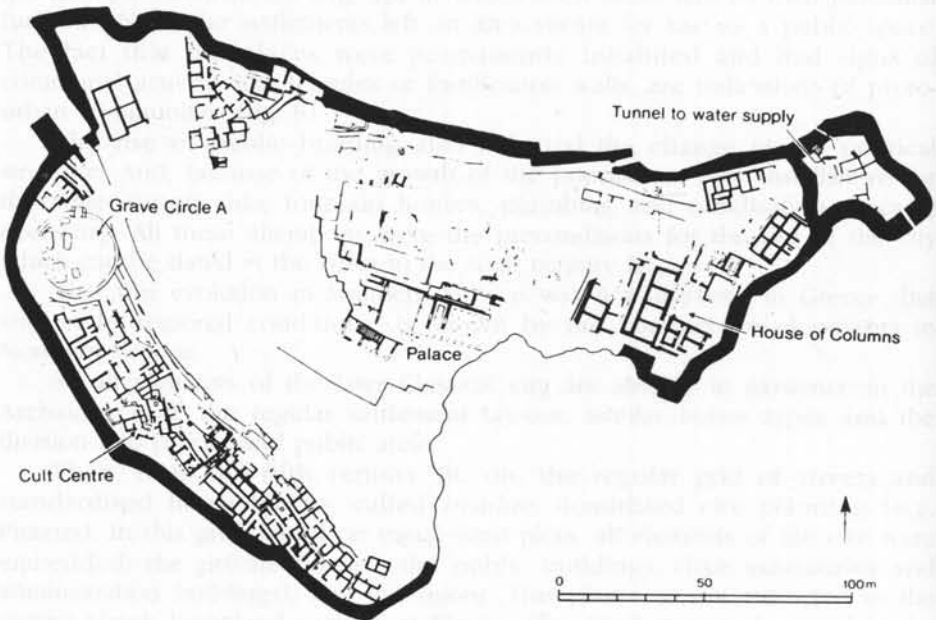


Fig. 1 – Mycenae (after Dickinson, O. - *The Aegean Bronze Age*. 1994, 154 fig. 5, 29).

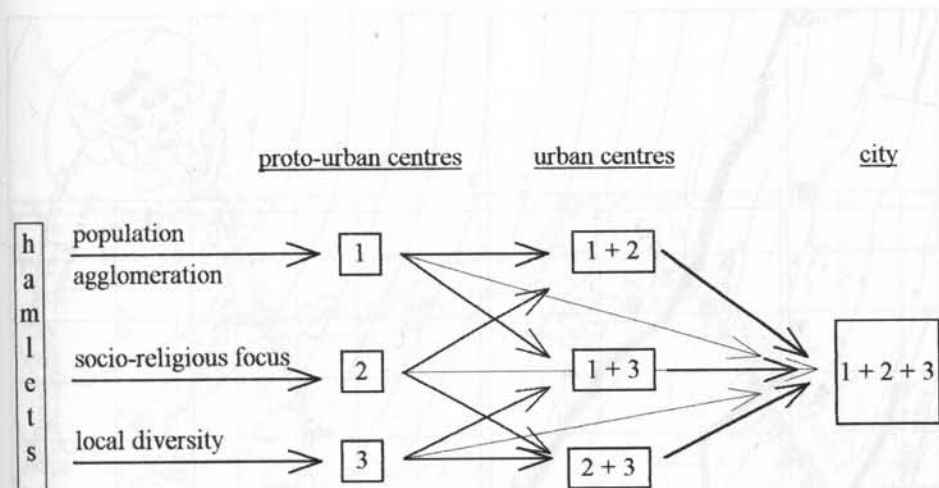


Fig. 2 – Scheme of functions (after Renfrew, C. - *Approaches to social archaeology*. Cambridge. Mass 1984, 110 fig. 8).

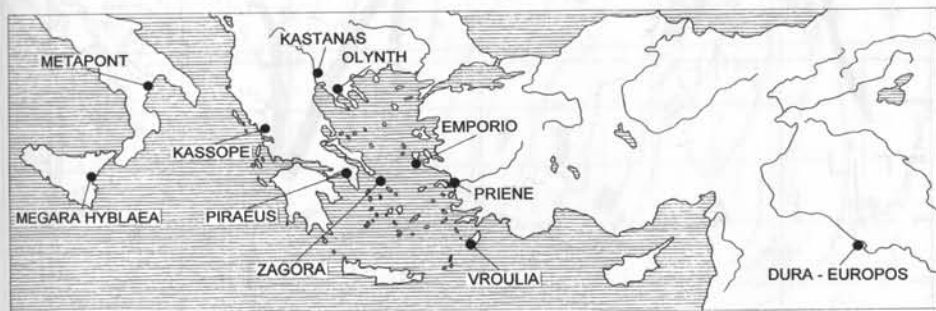


Fig. 3 – Map of sites mentioned in the text.

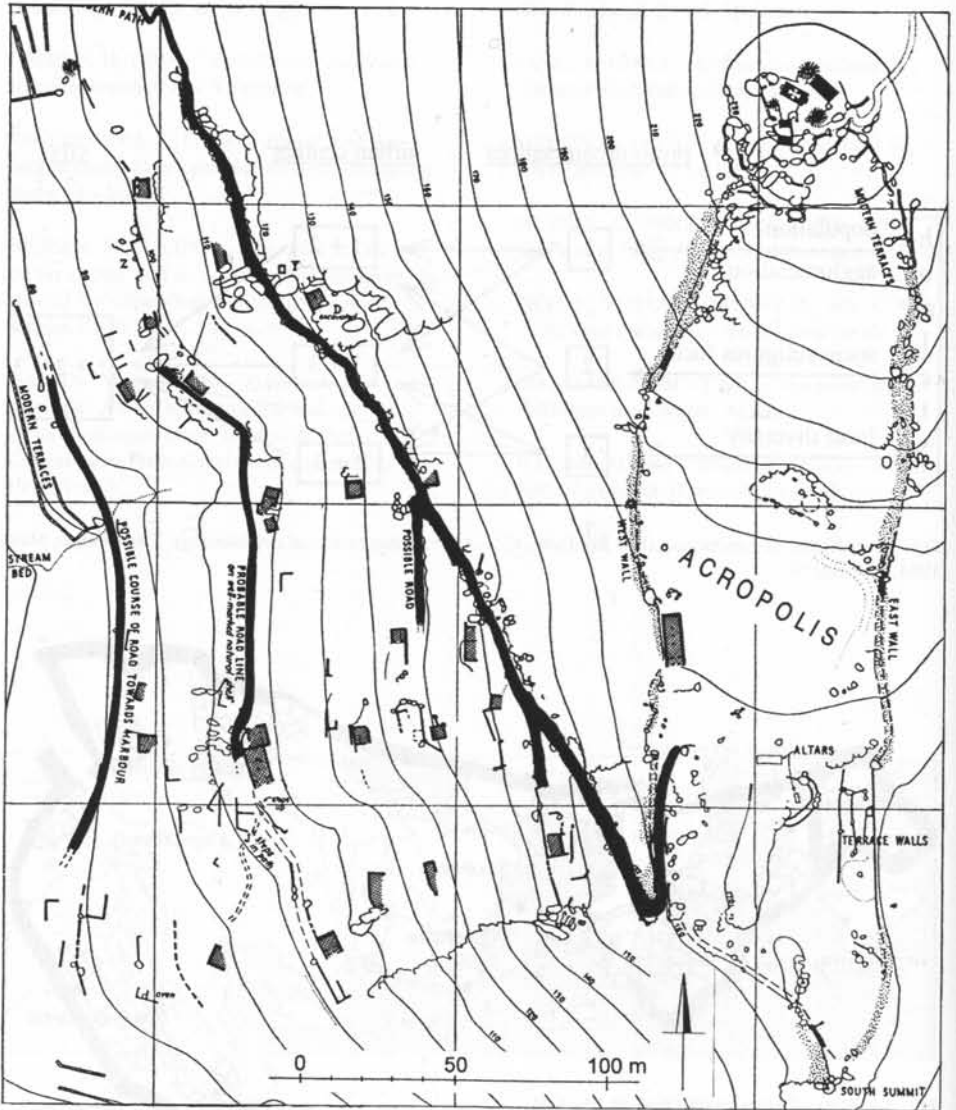


Fig. 4 – Emporio (after Boardman, J. - Excavations in Chios 1952-1955. *Greek Emporio*, 6. Suppl. BSA, 1967, Abb. 2).

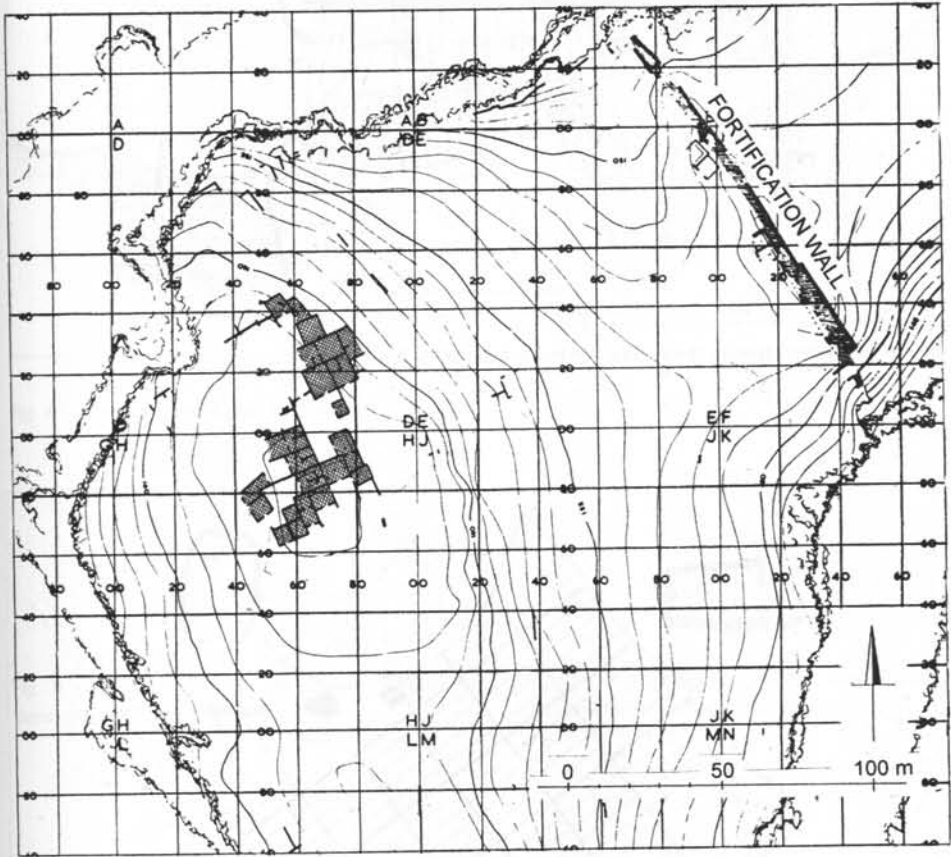


Fig. 5 – Zagora (after Cambitoglou, A. *et al.*, Zagora, 1988, pl. 1).

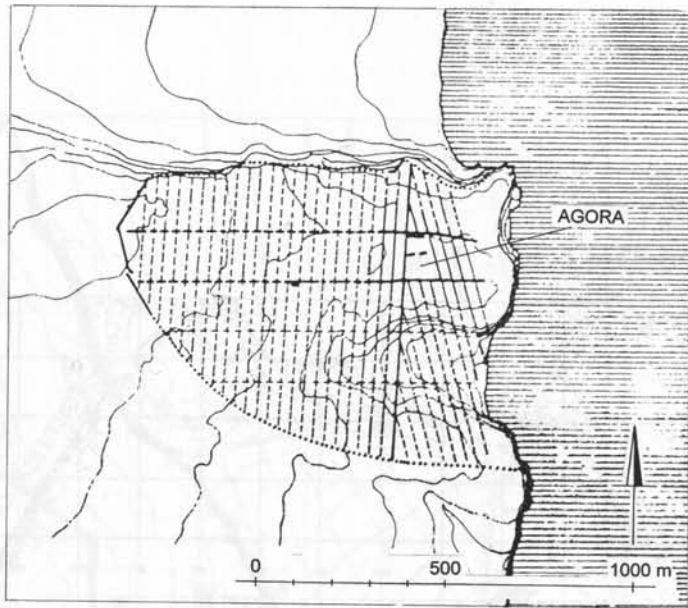


Fig. 6 – Megara Hyblaia (Hoepfner - Schwandner, p. 3, fig. 2).

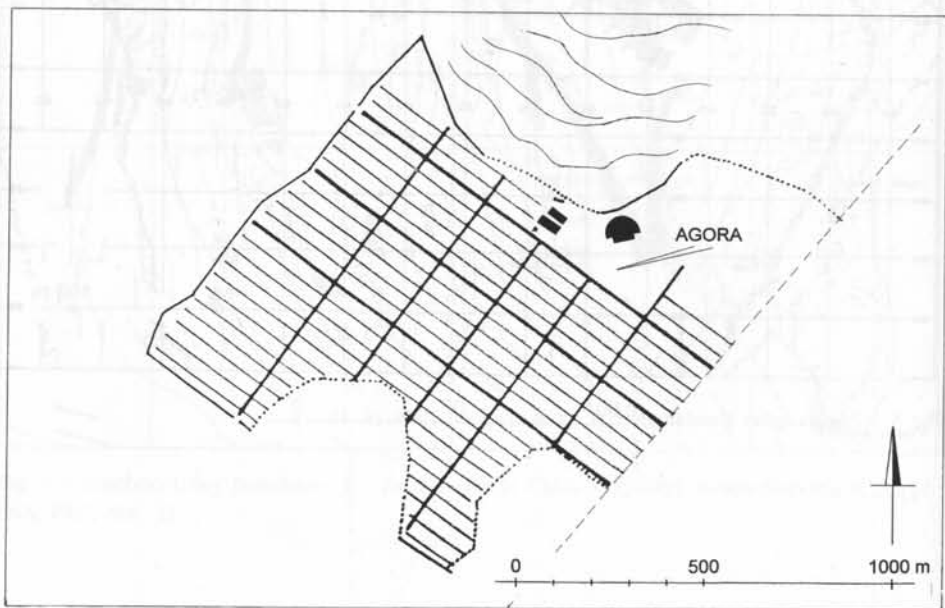


Fig. 7 – Metapontion (Hoepfner - Schwandner, p. 3, fig. 2).

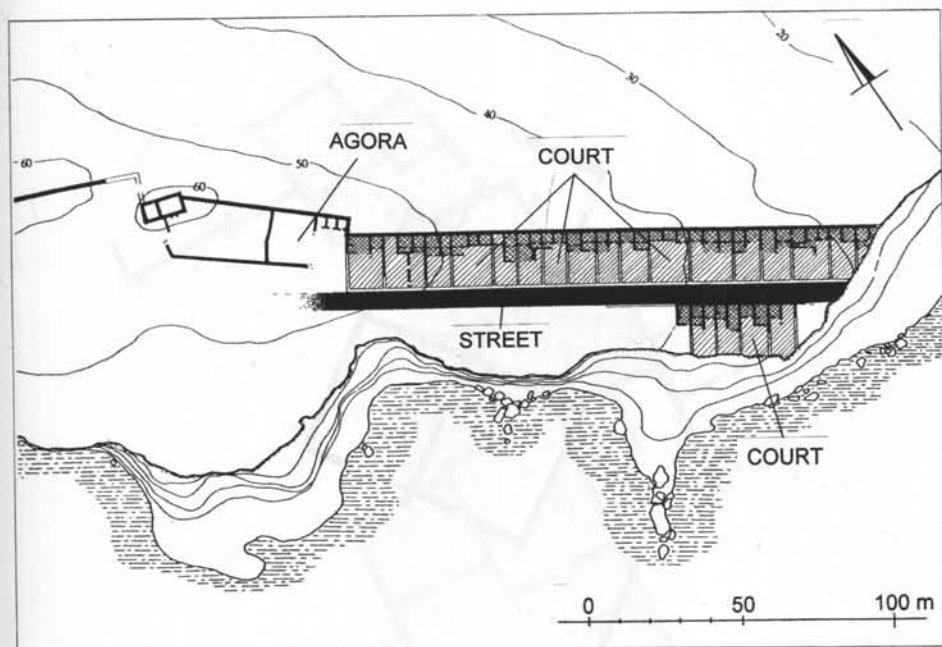


Fig. 8 – Vroulia (after Lang, fig. 65).



Fig. 9 – Eretria (after A. Mazarakis, *Antike Kunst* 30, 1987, 15 Abb. 10).



Fig. 10 – Emporio (after Boardman, *Excavations in Chios*, p. 45, fig. 22).

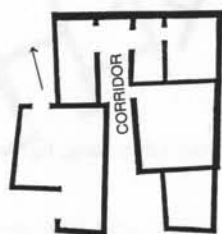


Fig. 11 – Athen (after Drerup, *O* 32, fig. 28).

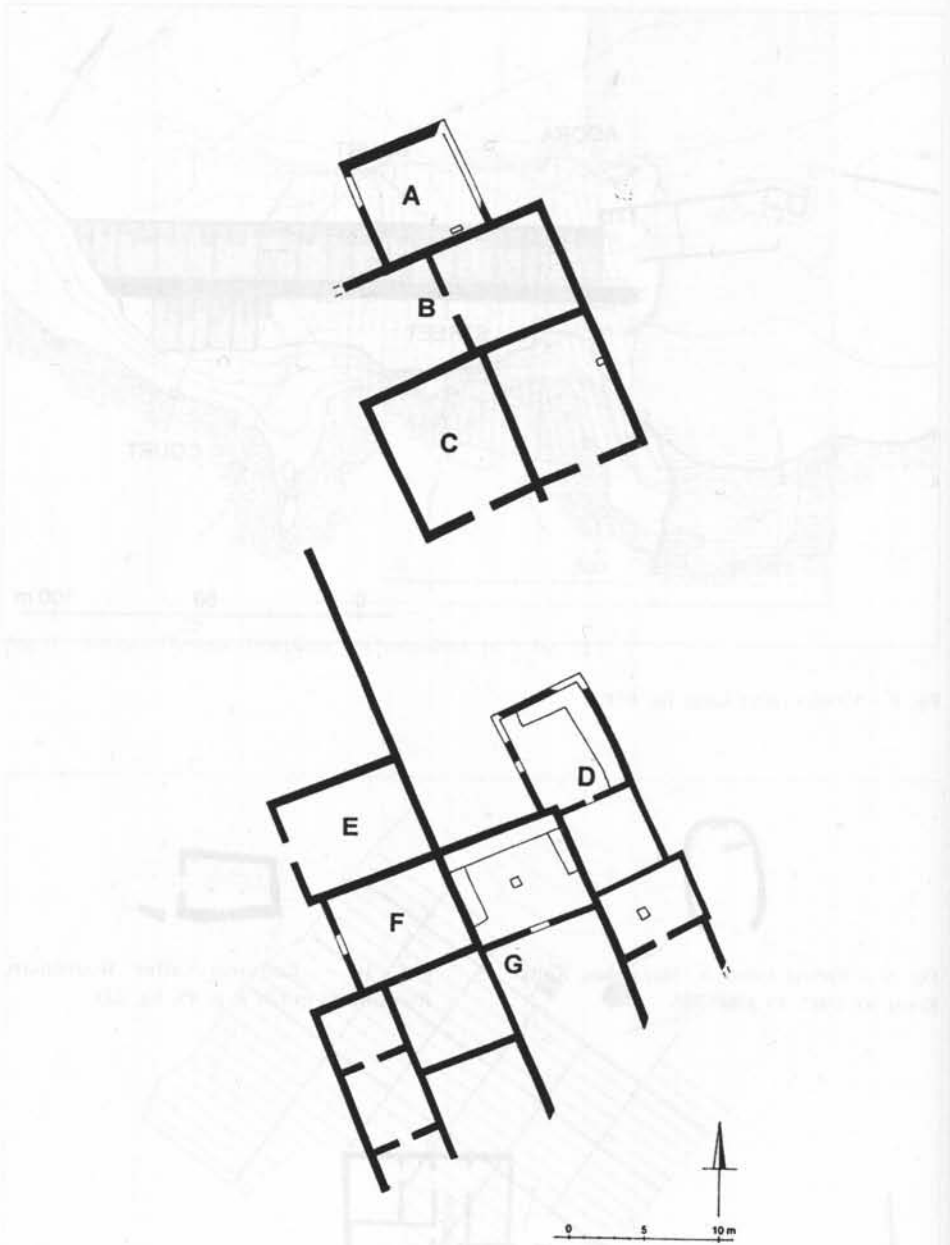


Fig. 12 – Zagora: late Geometric I houses (after Lang, fig. 55).

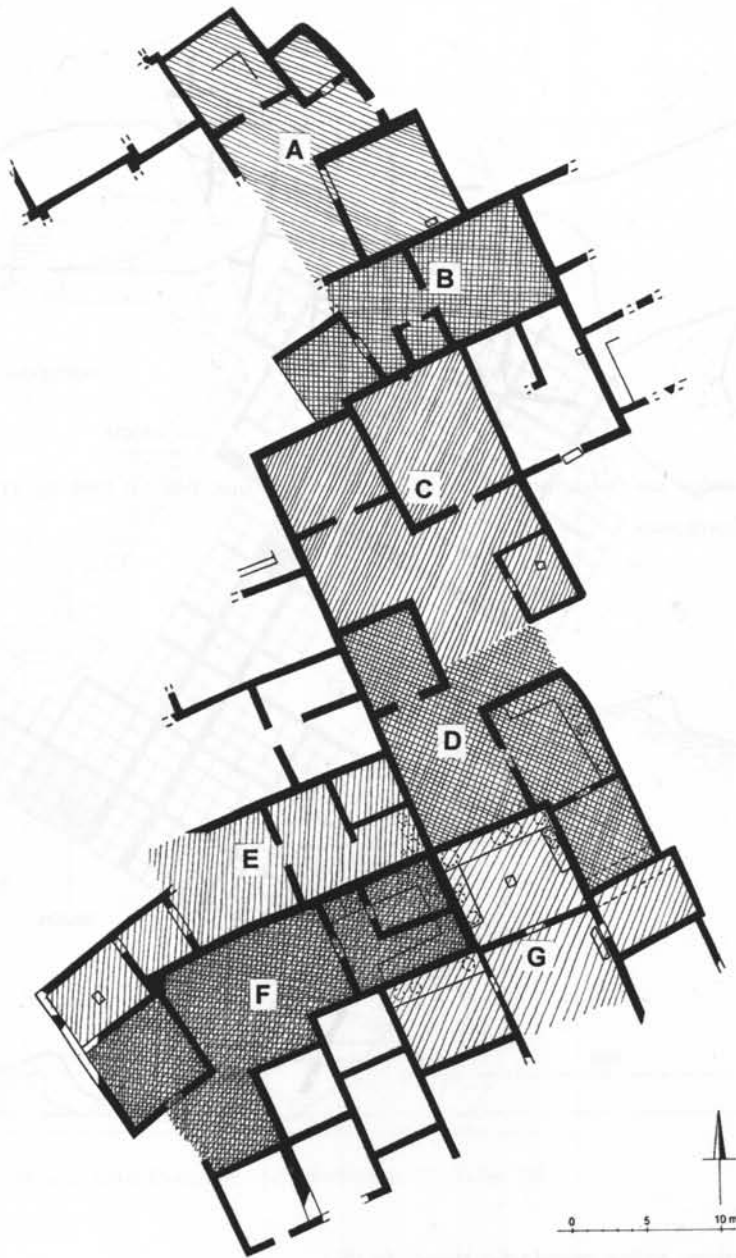


Fig. 13 – Zagora: late Geometric II houses (after Lang, fig. 56).

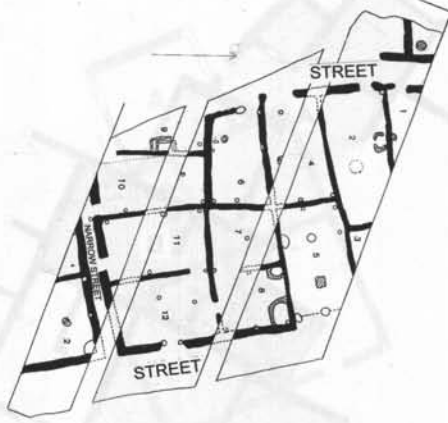


Fig. 14 – Kastanas: late Geometric period (after B. Hänsel, *Kastanas*, PAS 7.1, 1989, fig. 112).

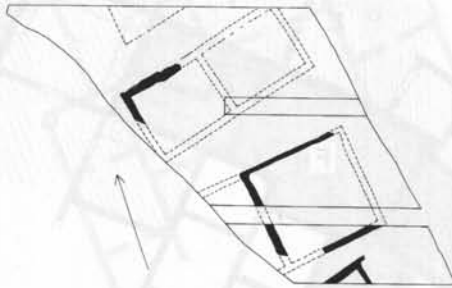


Fig. 15 – Kastanas: Archaic period (after Hänsel, fig.132).

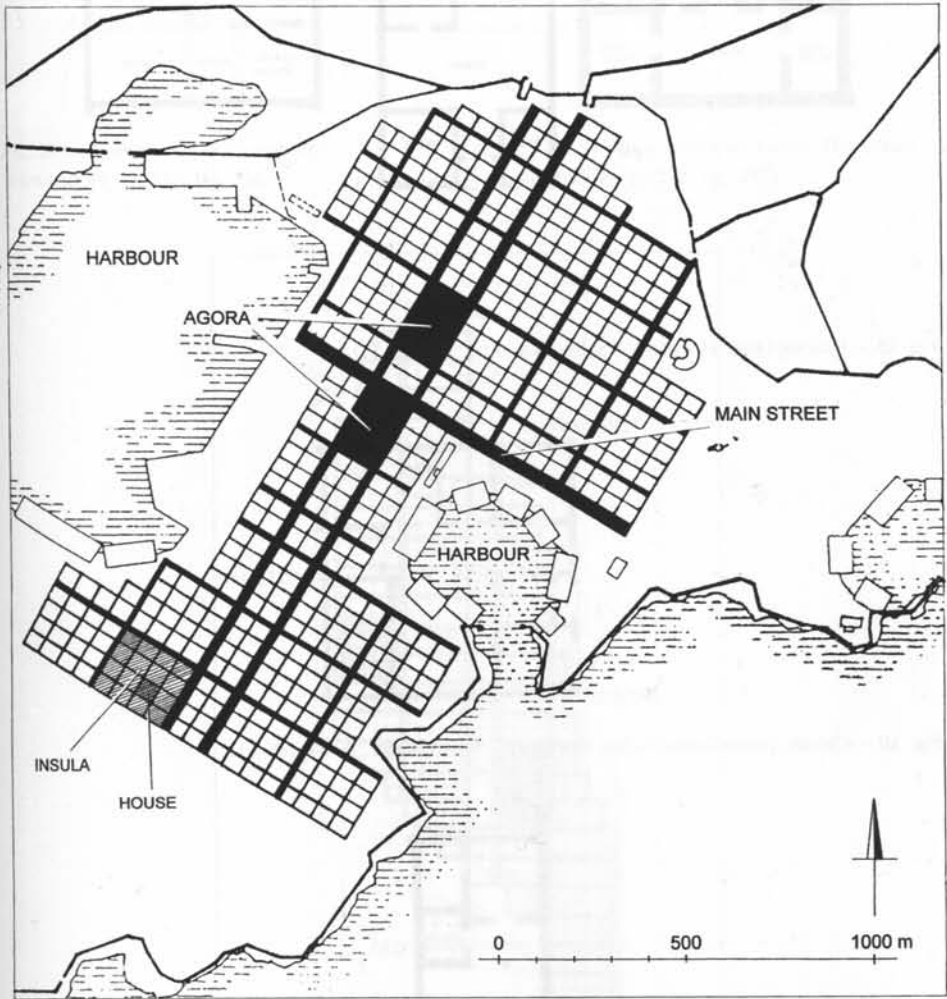


Fig. 16 – Piraeus (after Hoepfner - Schwandner, p. 22/23, fig. 14).



Fig. 17 – Piraeus (after Hoepfner - Schwandner, p. 39, fig. 31).



Fig. 18 – Olynth: pastas-house (after Hoepfner - Schwandner, p. 84, fig. 62).



Fig. 19 – Priene: prostas-house (after Hoepfner - Schwandner, p. 321, fig. 306).

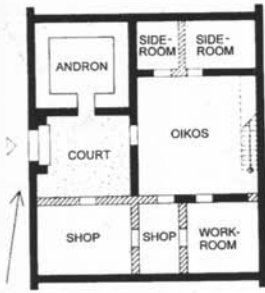


Fig. 20 – Kassope (after Hoepfner - Schwandner, p. 147, fig. 136).

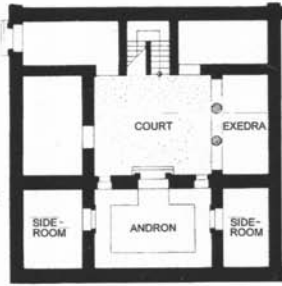


Fig. 21 – Dura Europos (after Hoepfner - Schwandner, p. 272, fig. 257).

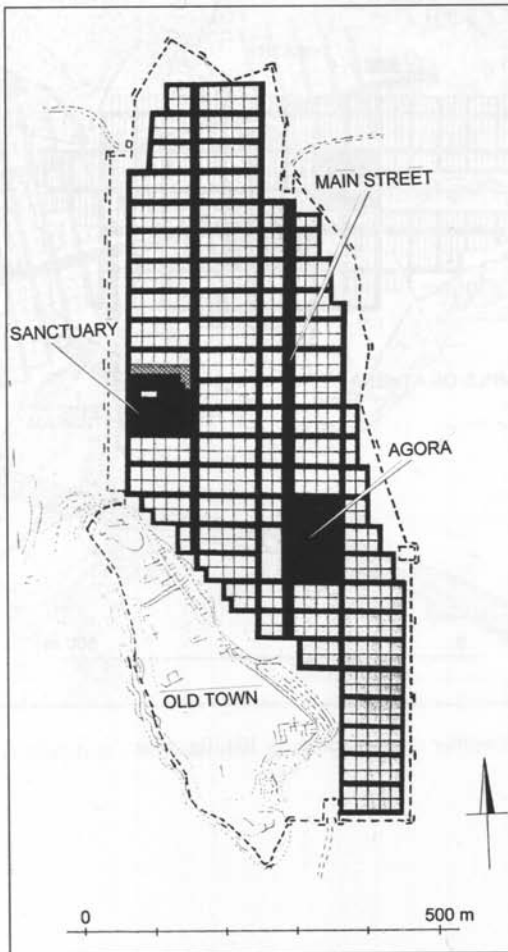


Fig. 22 – Olynth (after Hoepfner - Schwandner, p. 72, fig. 53).

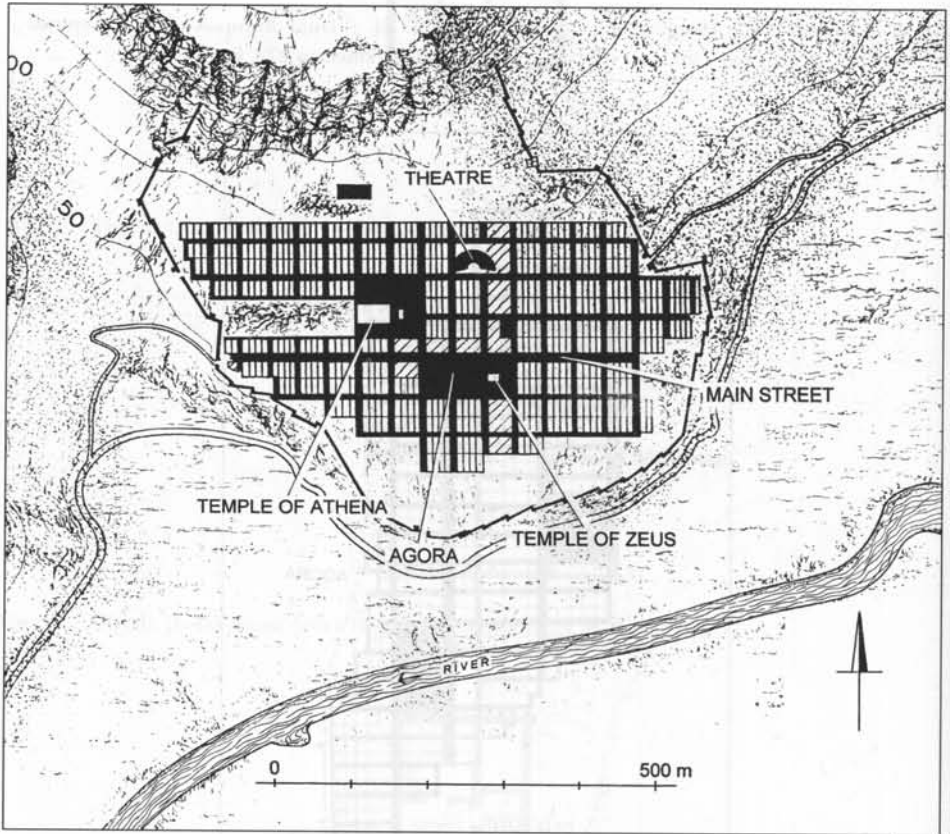


Fig. 23 – Priene (after Hoepfner - Schwandner, p. 194, fig. 180).

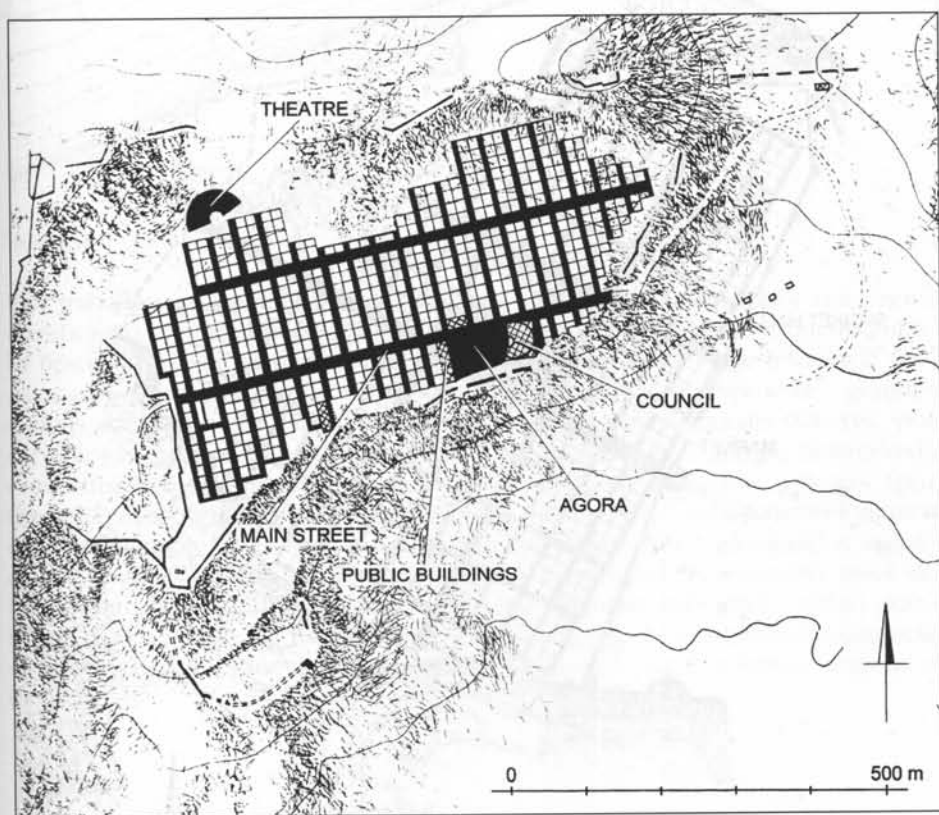


Fig. 24 – Kassope (after Hoepfner - Schwandner, p. 120, fig. 94).

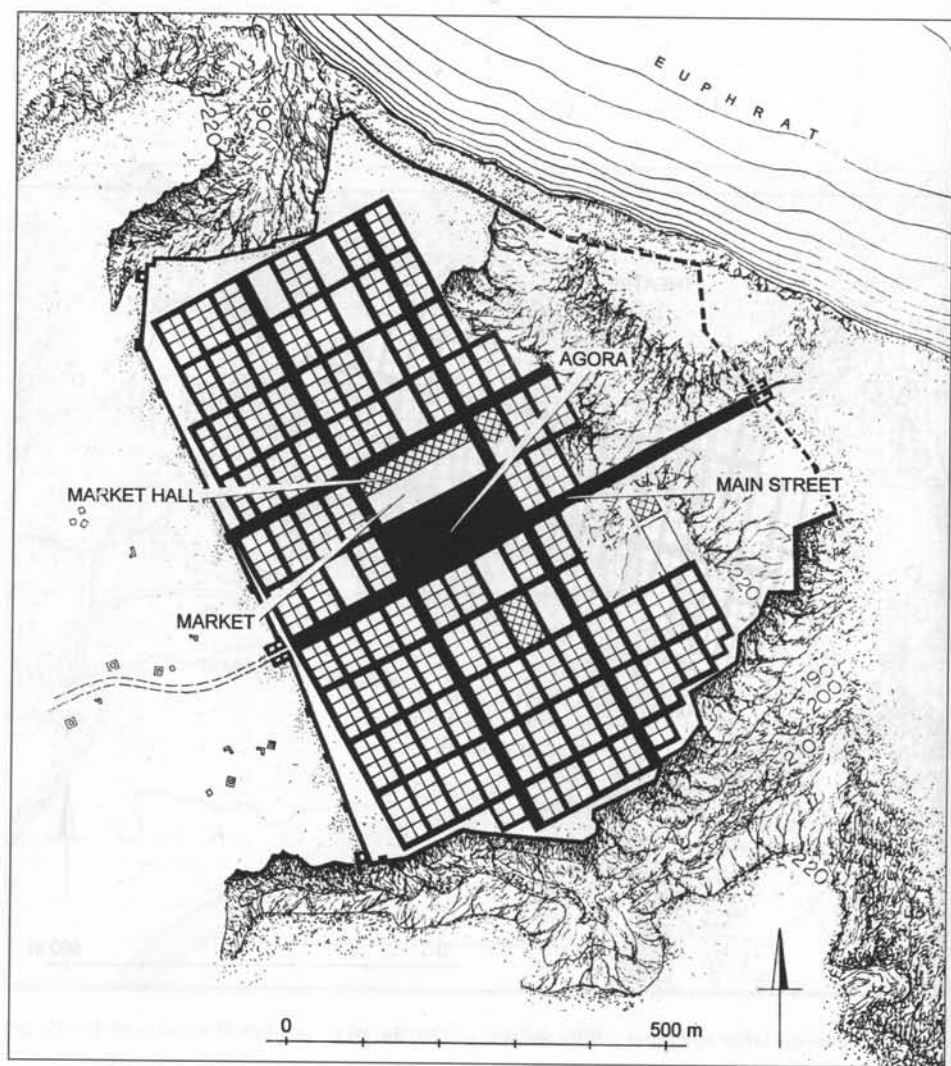


Fig. 25 – Dura Europos (after Hoepfner - Schwandner, p. 259, fig. 242).