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Boeotian landscapes. A GIS-based study for the reconstruction and interpretation of the archaeological datasets of ancient Boeotia.

Farinetti, E.

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II.4

Exploring the socio-political and cultural landscapes of ancient Boeotia

The landscape approach applied in the present work, as discussed thoroughly in earlier chapters (chapter I.1 and chapter I.2.2), includes the revised concept of the settlement chamber and combines older landscape approaches, such as the German *Landeskunde* tradition, with more recent approaches, such as the Community area theory and the taskscape concept.

In the chapters concerning individual *chorai*, the approach has been applied in the discussion of and comments on available archaeological data and landscape history within the individual micro-regions. Our *chorai* can be considered micro-regions within the region of Boeotia, within which several community areas can be active (see chapter I.1), with one gravitating on the main settlement centre (the *polis*). According to the same approach, in this final chapter I will examine settlement trends in the wider Boeotia region, considering different levels of landscape occupation and activities.

ANCIENT BOEOTIAN SETTLEMENT

As seen earlier in this work (chapter I.1), while considering micro-regions, settlement chambers can be more or less defined, but they are certainly more easily distinguishable when clearly marked by physical constraints. By examining the hypothesised boundaries of the micro-regions/*chorai*, gravitating around a historical centre at the *polis* level, in the Boeotian regional panorama, one can easily see how some of them are more clearly defined through physical landscape characteristics (the valleys around the Copais basin, for instance, where the lake also played a role in defining boundaries - see appendix III), while others are less easily definable (as in the case of the Parasopia area to the S/SE of the region). Within the micro-regions, we can localise micro-landscapes. Some of these can be considered to possess long term potential with regards to the presence of a nucleated settlement site, or an area of residential activities of some kind; others are not, and one cannot predict which character the site found there might have (see chapter I.1 and *chorai* chapters). Once again, the micro-landscapes are also more easily recognisable when there are marked physical constraints or environmental/physical characters (such upland plateaus, stream valleys, etc.).

As we saw in the individual *chorai* chapters, in some micro-landscapes a settlement can always be detected in the different chronological periods, even if a shift in

location sometimes occurs. For instance, in the Late Helladic/Mycenaean period settlements were located mainly on prominent hills, and in the Early Helladic they were located on lower hills, while in the Greco-Roman period settlement/habitation areas became to a large extent nucleated into larger centres, but actually, even if the settlements and other activity *foci* moved within the area, people living in it exploited and used the same land, the same territory, and experienced the same landscape.

Therefore, one should examine archaeological settlement 'continuities' or 'shifts' on a particular micro-landscape rather than on a particular location (see chapter I.1 – THE 'SENSE' OF CONTINUITY). Through the comparison between Prehistoric, Greco-Roman, and Medieval and post-Medieval data (Frankish or Ottoman)¹, and the modern settlement network, we can investigate the complexities of matching archaeological settlement 'continuities' or 'shifts' with population and ethnic continuity. This has been done for potential micro-landscapes (and corresponding settlement chambers) within each single *chora* chapter.

In order to recognise settlement trends and individuate micro-landscape and potential settlement chambers through the examination of the modern settlement pattern, I have examined the distribution of the modern villages (GIS layer: *choria*) as well as the boundaries of modern administrative divisions (GIS layer: *koinotites*), in an attempt to progress from the actual situation (the 'known') to the archaeological reconstruction (the 'unknown').

In the map in fig.1 it can be noted that modern *koinotites* (i.e. areas administratively belonging to a village²) include different landscape zones, such as different geomorphological and agricultural zones, parts of plain areas and of valleys, of foothills and of inner areas of mountains. In exploring boundaries, it can be noted, for instance, how rivers play an active role as physical

¹ For medieval and post-medieval period the information can come from highly informative historical sources (especially village tax registers for the Ottoman period).

² A *koinotita* might include one or more nucleated settlements, the main one of which gives the name to the *koinotita* itself.

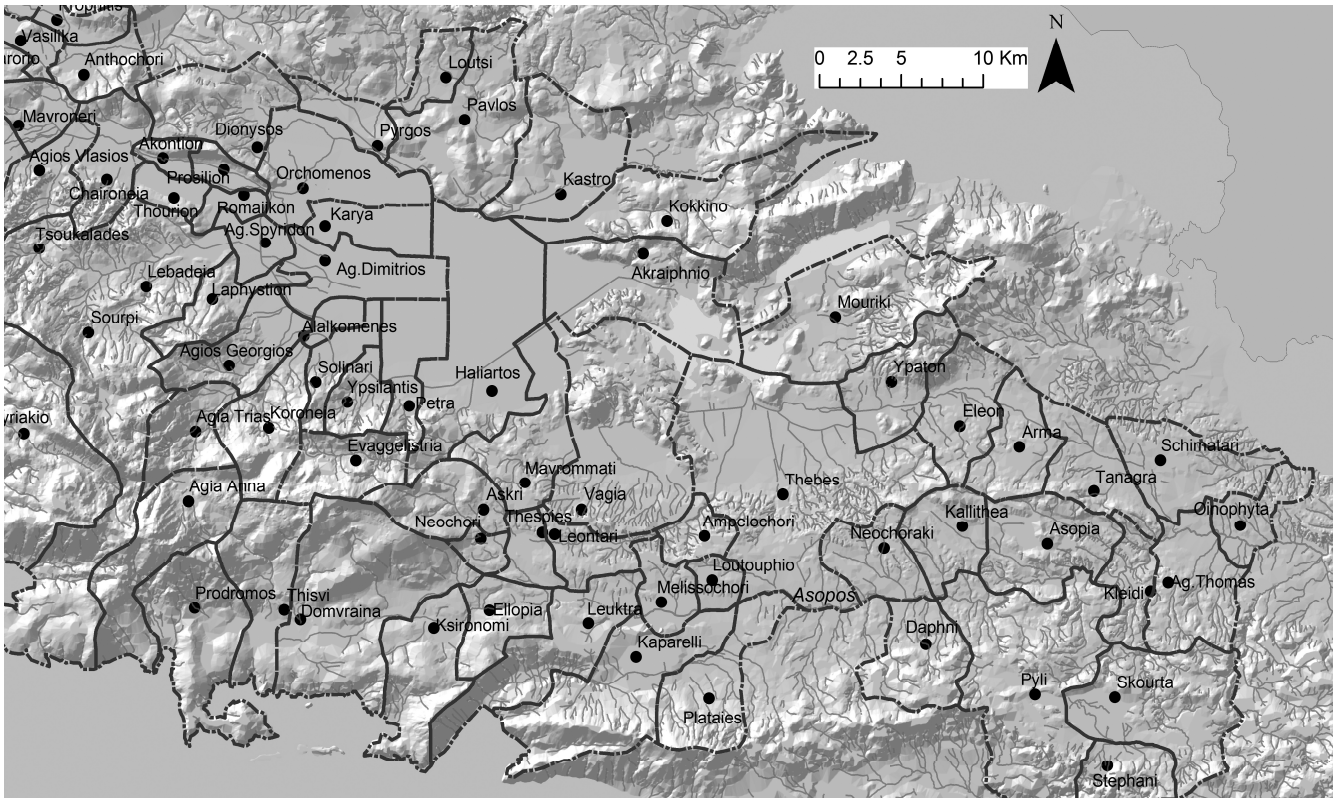


Fig.1. *Koinotites* (administrative divisions) and *choria* (villages) of modern Boeotia, based on the 1960 map updated in 1983 (Hellenic Statistical Service).

constraints: the Asopos river acts as a border line for the *koinotites* gravitating towards its valley, and so does the Melas (in another area of Boeotia, N Copais). Hillcrests also play a role as boundary lines³, as they would probably have done in ancient times. The hypothesised ancient *chorai* border lines usually follow hillcrests – see fig.1 in chapter III.2). For the Copais basin, communities gravitating around it would today divide the farming land available after the drainage (according to administrative partitions), while in ancient times, when the lake existed and water covered most of the land, boundaries would have worked in a somewhat different way, and the lake itself would have constituted a physical boundary. The line of this boundary would have greatly fluctuated according to the level of the lake water and the land actually covered by water as well as marshy areas (see appendix III for discussion on this and chapters on *chorai* around Copais).

Using GIS, I have made an attempt to explore the ancient settlement network of the Boeotia region, especially as far as the relationships between them and their distribution in space is concerned. I have applied cost-surface analysis to different data sets available for Boeotia region, and will illustrate here some results, as well as some indications they may provide about Boeotian landscape issues⁴.

³ An interesting analysis on watersheds (through GIS) has been carried out by A. Bevan on Prehistoric Kythera (Bevan 2002).

⁴ For the methods employed in performing the analysis see chapter I.2.2. See also the application of the cost-weighted

Different ranks of settlement were taken into account, often corresponding to different levels of information. One could note, for instance, how our degree of knowledge about ancient cities (*poleis*) is very high, while it is reduced considerably for towns and villages, and for some areas it can reach a very low level for the rural sites. The general picture of ancient Boeotia that we can obtain from site recognition carried out by means of archaeological, historical and extensive collection of data, has so far proved to be ‘naturally’ biased by a sort of either city-centred or historical place-oriented or archaeologists’ interests-oriented approach. This has resulted in a lack of information concerning second rank settlements and rural sites, and the full range of occupation phases of well known sites.

I will examine here in detail the three main levels of occupation in the Greco-Roman period, focusing on the 1st and 2nd rank settlements, which are better known for the whole region and constitute the main subject of this work.

1st level – *poleis*.

As seen above, the *polis* level is the best known. Historical sources give us names and information on the *poleis* of ancient Boeotia, and the archaeological record concerning them is today quite rich and fairly precise with regards to the period of occupation, even when the city sites were not investigated by means of excavation.

distance analysis in the long-term settlement analysis of each single *chora* (chapters II.3.1 to II.3.14).

The location of the majority of the Boeotian *poleis* is known by means of historical, epigraphical and/or archaeological sources, and in general it can be noted that Boeotian cities were situated in a location where they could exploit their own fertile land, and usually between mixed land types⁵.

In fig.1 of chapter I.2.2 can be seen the *poleis* of Boeotia and the hypothesised extension of their territories, according to historical, epigraphical, and archaeological sources, as well as topographical criteria. The division into ‘districts’, which characterises the Boeotian political landscape, would seem to find its origin in Boeotian history itself and the reasons for its particular application. The first historical sources group the inhabitants of Boeotia mainly by large areas, corresponding to the districts where they settled. Boeotians, coming from the N, would have settled first in the W area of the Copais basin, then the Thespieae region, and only afterwards the Asopos area (Buck 1979: ch.5; Van Effenterre 1989).

As Buck (1979: 91) points out, most of Boeotia was parcelled out among various Boeotian communities by 950 at the latest; by the end of the 9th C BC several nucleated centres had been formed, often by synoecism of local villages at a convenient (and often Mycenaean) site, sometimes as continuations of Mycenaean centres (Thebes and Orchomenos, for instance). These first ‘*poleis*’ included Orchomenos, Thebes, Thespieae, Koroneia, Haliartos, Akraiphia, Plataea and Tanagra. According to Buck (1979: 91), “*various ‘communes’ or districts composed of villages with no polis, though perhaps with a cult centre and place of refuge, still survived more or less independent units, including as it seems Chaeroneia, Lebadeia, Copae, Askra, the Tetrakomia, and Oropos*”.

From 900 to 500 BC archaeological evidence (both for sites and cemeteries⁶ - see map in figs.17 to 20) attests a general growth of population and prosperity in the whole region⁷. The development of the Boeotian concept of ‘district’, the basis of the later confederation(s), i.e. the grouping of various geographically close communities in order to pay taxes, and to cooperate in the supply and naming of representatives, as formalised during the 6th C BC (see below), would seem to find its root in an earlier stage, in particular in the first half of the 7th C, when some centres overcame (or tried to overcome) smaller or weaker neighbours. For instance, at Askra the population was expelled by Thespieae⁸, and Chaironeia was reduced

to a ‘*perioecic*’ condition (Roesch 1965), while Potnia was absorbed by Thebes, the larger neighbour city (Strabo IX 2.22). In the same time Thespieae, Tanagra⁹ and Thebes enlarged their territories, and certainly the area separating the Copais basin (and maybe also the E part of the Copais itself, from Medeon to Ptoion) and as far as the hills which separate the Theban area proper from Eastern Boeotia (Tanagra area), was under the control of Thebes around 500 BC. On the other hand, W Boeotia was earlier controlled by Orchomenos, which, before the end of the 8th C BC attempted to gain control over large parts of Boeotia, starting from the smaller centres in neighbouring areas, before being stopped by Thebes (before the end of the 8th C). Thus, immediately before and during the period when Hesiod lived (about 700 BC), Orchomenos dominated Chaironeia¹⁰ and Hyettos¹¹, Olmones¹², Hyria¹³, Lebadeia¹⁴ and probably also Koroneia and Copai. Afterwards, probably after the defeat of Orchomenos by Thebes, Lebadeia and Koroneia became independent minor cities¹⁵. In the early periods of history, the nucleated centres present in the Boeotian ‘districts’ might be considered as *proto-poleis*, all of which could potentially become *poleis* (see Snodgrass 1980 and Bintliff 1994b). Some of them, however, would remain at the level of small towns/large villages (*komai*¹⁶), as they were incorporated by stronger centres, which would slowly become proper *poleis*, and would constitute the panorama of Boeotian cities taking an effective part in the 1st Boeotian League (figs.19-20). Thus, the Boeotian idea of the ‘district’, already developed during the 7th C BC, became effective between the end of the 7th C and the beginning of the 6th C. Around 600 BC, Boeotia appears as divided into several

1931, quoting Plutarchus *Narr.amat.* 3. Only Fossey reports two Geometric sherds from the site [AE959] – *component TH_86*. In the late 6th C the attention of the Thespians became directed towards the gulf of Corinth and the harbours (Kreusis, Siphae, Thisbe and Chorseiai), but it was too late for Askra to become a real *polis*.

⁹ Tanagra absorbed Graia and gained the control over Aulis. In 560-550 Tanagra participated with Megara in the foundation of *Eraclea Pontica*, on the Black Sea.

¹⁰ See Roesch 1965.

¹¹ Hesiodus *frg.144*; Pausanias IX 36.6. Cf. Wilamowitz 1922: 19.

¹² Pausanias IX 24.3.

¹³ See Hesiodus *frg.143*. As an example of *proto-poleis* which never became a real historical *poleis* see the case of Askra (in the *chora* of Thespieae), Chorseiai and Siphai (in the area of Boeotia towards the Gulf of Corinth), and the towns of the *Tetrakomia* in Eastern Boeotia within the political sphere of Tanagra.

¹⁴ See Wilamowitz 1922: 18 f.

¹⁵ Between 550 and 525 as reported by epigraphical evidence (inscription on a bronze helmet found at Olympia - SEG XI 1208; Oikonomos, AE 1925/26: 87-94; Jeffery 1961: 93-95, n° 11; many other scholars, however, accept the date of 447 BC for the inscription, suggested by Larsen 1960 (see Hennig 1974; Buck 1970: 225; Sordi 1968: 68) Jeffery dates it to the third quarter of 4th C BC, and this would testify that in that period Koroneia was at least relatively independent at the same time that Orchomenos was, despite its defeat by Thebes, still relatively strong.

¹⁶ For the concept of *kome* see Hansen 1995.

⁵ See for instance the case of Koroneia, Lebadeia, Chaironeia, Thebes, Plataea and other Boeotian cities (see individual *chorai* chapters).

⁶ More than 50 Geometric sites and more than 90 Archaic sites are archaeologically attested.

⁷ Especially in central Boeotia, in the second half of the 6th C BC, as testified by the prosperity of cemeteries (the large and rich cemetery of Akraiphia – see chapter II.3.7) and of the Ptoion sanctuary (dedication of *kouroi* and tripods of high value), as well as of the Theban sanctuary of Kabiroi (rebuilding and restoration – see chapter II.3.12).

⁸ The inhabitants of Askra were expelled by the Thespians and found refuge in Orchomenos, probably around 750/700 BC. Sources say that around 650/600 they settled Eutresis (Goldman

districts, each one including several communities, some of which were about to absorb others. Thebes was culturally influential (see for instance the ‘artistic’ domination of Thebes visible in pottery styles¹⁷), politically important, and in progressive expansion for the control of territories, even though not yet the dominant city. Only in the following century (the 6th C) would history assign Thebes the task of unifying Boeotia or, rather, communities of Boeotians (considering the ‘ethnic’ character of the 1st League – see below).

According to some scholars, the Theban hegemony had already begun by the end of the 7th C BC¹⁸. According to others, only around the mid 6th C BC did Thebes enlarge its domination over smaller centres throughout the Teneric plain as far as Onchestos¹⁹. Most probably, it was around 525 BC (or in any case in the late 6th C) that the Confederation (the 1st League, the ‘ethnic’ confederation) originated²⁰, when the full development of the society and institution of the Boeotian League occurred.

The Boeotian Confederation has been long considered an ethnic structure of traditional type, in which the sharing of dialect²¹, cults²² and traditions (linked to a common origin from Boeotian ancestors – see above) plays a key role. According to this, the organism appears to be quite fluid, leaving to the member cities a fairly large degree of freedom²³, even as far as the conducting of separate wars. The League was probably first of all a ‘*symmachia*’, although implying other kinds of political ties as well (centralised structure, a sort of a ‘state’, with federal officers and common coinage), and was mainly an expression and instrument of Thebes’ will (Ducat 1973: 70).

For the so-called 1st Boeotian League (504-479 BC) a total of seven Boeotarchs (representative members) was proposed: one each from Thebes, Tanagra, Thespieae, Koroneia, Haliartos, Akraiphia and the *Tetrakomia*. When Orchomenos, Levadeia, Copai and Anthedon joined, they also had one Boeotarch each (Buck 1979: 110).

According to some scholars, the Boeotian Confederation loosened at the time of the Persian invasions, while around the mid 5th C are located two attempts to reconstitute it (Larsen 1968). In the so-called 2nd Boeotian League (existing from 447 BC), according to *Hell.Oxy.* (16 (11); text which clarifies the organisation of the Confederation in 395 BC, at the outbreak of the Corinthian War), there were eleven Boeotarchs. Of these, Thebes controlled four units (after having annexed Plataea, always seeking autonomy, and other small centres, probably in the Parasopia area); Orchomenos and

Hyyetos each provided two Boeotarchs²⁴; Thespieae with Eutresis and Thisbe two units; while Tanagra represented one unit only. The other two units were each represented by three small centres that would send Boeotarchs in turn to the League council (Haliartos, Levadeia and Koroneia, and Akraiphia, Copai and Chaironeia, respectively)²⁵.

Examining the ‘natural’ history of the Greek *polis* in different historical periods (referring to Bintliff’s 1994b article), in Boeotia we observe several processes concerning the relationship between communities on a territorial basis: the conflicts, takeovers and domination processes which characterise the region during the 8th C; the internal domination visible in the takeovers of smaller centres by larger settlements in the 7th C; the domination processes which lead to the swallowing up of the smaller settlements by the major centres all over the region in the 6th C; the phenomenon of the enlarged city territories and subordination which characterises the 4th C.

In the preceding paragraphs, I have tried to delineate general historical trends which worked within Boeotia at the *polis* level. In the following pages, I will discuss an attempt to explore the *polis* landscape of the region by means of GIS analysis, mainly the cost-distance analysis considered above, with special attention to the geographical ‘districts’ mentioned earlier as the key to the Boeotian League structure.

The result of the analysis can be seen in figs.2-3, where Thiessen/Voronoi tessellation (result of an allocation analysis employing a straight-line/Euclidean distance) is compared with the results of the tessellation of space based on cost-weighted distance from major *poleis*²⁶.

¹⁷ Coldstream 1968: 367ff; Desborough 1972: 202ff.

¹⁸ Guillon 1943: 66; Sordi 1966: 21.

¹⁹ Ducat 1973: 71; Schachter 1986, s.v. *Poseidon* (Onchestos).

²⁰ Its birth date “*rejoint ainsi en gros celle de la Ligue du Peloponnèse*” (Ducat 1973: 71).

²¹ See Schachter 1966.

²² See Schachter 1966: 13. See *Pamboiotia* for instance (Ziehen 1949, s.v. *Pamboiotia*, col.288).

²³ On the question of the autonomy of the Boeotian cities see Hansen 1996.

²⁴ In 447 Orchomenos would probably have controlled three units. Then it would have lost one when Chaironeia was taken from its control (Larsen 1960).

²⁵ For each Boeotarch the members were entitled to sixty councillors, and for each they provided 1000 hoplites and one hundred cavalry (*Hell. Oxy.* 19. 3-4). – from Schachter 2004: 46. For the organisation of the League see among others Larsen 1955 and 1968.

²⁶ For the methods employed in performing the analysis see chapter I.2.2.

II.4 LANDSCAPES OF ANCIENT BOEOTIA

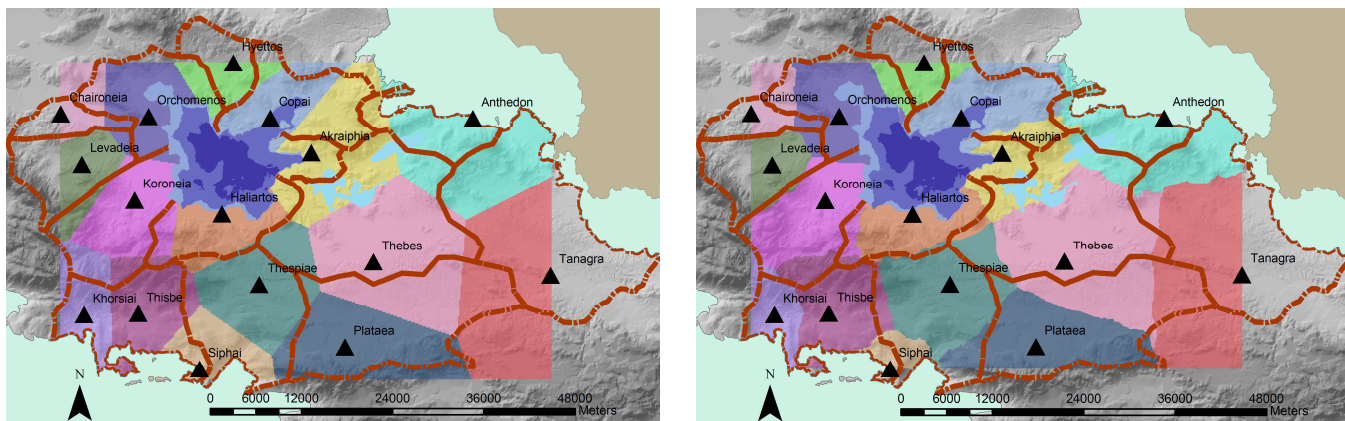


Fig. 2 (left) and fig.3 (right). Thiessen/Voronoi tessellation (based on straight-line distance) compared with the results of the tessellation of space based on cost-weighted distance from major poles.

Some remarks can be made about the second map (cost-weighted allocation fig.3):

- The lakes work as boundaries in the area between Thebes, Akraiphia and Anthedon. Without the lake, the natural cost border line would probably behave somewhat differently.
- In the case of ancient Akraiphia, the vicinity to a major settlement area, such as that of Thebes, also plays a role in the definition of the border.
- The low hills separating Copais from the Theban plains act as borders for cultural/historical reasons, while they would not constitute a barrier as far as natural morphology is concerned, as the application of the cost-distance analysis shows. No physical constraints seem to operate here as border factors. The line of hills functions also as a division between W and E Boeotia²⁷.
- As far as the borders between Thebes and the Plataea and the Parasopia area are concerned, the 'natural' territory of Thebes seems to have moved beyond the low hills of the Tertiary *tafel* (see chapter II.3.12) towards Plataea, including part of the Asopos basin/Parasopia. In this case the Asopos river would act as the natural border line, rather than the low hills to the N. The same is true for the boundaries of the modern *koinotites* (see above and fig.1). The modern *koinotita* of Thebes itself deserves a special examination: it today also reaches the Asopos river, as it would have probably done in the past (even if in the past it was larger, especially towards the N and W).
- The territory of Thebes is larger than the others, if we do not take into account the particular case of the wider Tanagra area discussed below. It is also

²⁷ Topographical characteristics, rather than well-defined topographical limits, would mark this main distinction within the region. Also socio-political factors, as examined in detail later in the text (*2nd level*). Fossey (1978) speaks about the 'two Boeotias'. In the late Prehistoric and early Historical periods, the division would also work politically: the two main centres of those regions being Thebes in the SE area and Orchomenos in the NW area (see also Farinetti 2003 for the conflict between Thebes and Orchomenos).

'naturally' larger and free of any clearly marked physical constraint. The principle of 'one's territory finishes where the territory of another begins' seems here to find its application, especially to the S towards Plataea and Parasopia. In fact, the strong influence of Thebes seems to have been a function since the beginning of the process of 'districts' formations.

- In contrast, the *polis* chambers in the Copais area are all well defined by physical constraints, and a comparison of the 'natural' areas (result of the cost-weighted allocation analysis) with the hypothesised historical boundaries of ancient *polis* territories (*chorai*) shows that the natural and political borders would correspond.
- The Tanagra area and the Easternmost area of Boeotia are characterised by an opening towards the Euboic sea as well as a dominant open landscape, allowing for an expansion along the N-S axis in certain periods of history and a fluctuating border in relation to the neighbouring major city of Thebes. Historical factors at a certain point of history (in particular in the Late Classical-Hellenistic period – see chapter II.3.14) influenced the settlement behaviour which would 'naturally' be represented by an area divided into small *polis* chambers. This could partially explain the tendency to autonomy which Mykalessos, Arma, Eleon and Pharai – the towns/*komai* of the *Tetrakomia* – always had (see chapter II.3.14). Conversely, since the 'incoming of the Boeotians' (as seen above, the last district they 'settled' was the lower Asopos valley and Tanagra area²⁸) and in the 1st Boeotian League (Tanagra apparently sent only one Boeotarch, the unique representative of the Eastern part of Boeotia, otherwise unrepresented), Easternmost Boeotia seems to have always comprised a large single unit²⁹.

²⁸ The northern part of the area in earlier periods was probably part of the Euboea region (as it was in Late Prehistory).

²⁹ In earlier periods it probably did not include the N part of the region, gravitating towards Euboea, while from the Late Classical-Early Hellenistic period the cities of the *Tetrakomia*

A comparison between the hypothesised extension of the *chorai* and the supposed extension of the corresponding city sites (according to the extensions suggested for the Boeotian *poleis* by Bintliff 1997 for the Classical period, and based mainly on the walled area) can give us an idea of the actual impact of some *poleis* on the territorial behaviour of the ‘districts’, which sometimes seems not to take into account the actual land available but to be dictated by other factors, examined in detail in the individual *chorai* chapters. Fig.4 is a histogram chart which compares *chorai* and *poleis* extensions (*polis* areas in sq.m. are exaggerated by a factor of 500 in order for the values to be graphically/visually comparable with the extensions in sq.m. of the *chorai*; *chorai* extensions are in ascending order). Generally speaking, one can note a certain regularity in the correspondence between *chora* areas and corresponding *polis* size. Some anomalous cases stand out though. As seen earlier, Thebes has available a large territory, but the oversized extension of the city (a supposed extension of 210ha compared to an average of ca. 20 to 50ha for the other *poleis*!) is mainly due to cultural and historical factors; on the contrary, Tanagra has (at least in some periods of history) an oversized territory compared to the actual size of the walled city. Thespieae, Koroneia, Orchomenos, Plataea would seem larger *poleis* compared to the actual extension of their *chora*. In the small-sized *poleis* regular trends seem to appear, with some exceptions, such as in the case of Haliartos and NE Copais, where the *chora* extension seems oversized compared to the *polis* area.

Clearly any comment must be taken with caution, as it is based on the comparison between two datasets (extension of *chorai* and of *poleis*) which cannot be proved in either case with certainty and are for the most part results of interpretation. Also, we should take into account that the micro-regions (or ‘districts’) would probably have been set up in very early periods, as seen above, while the population of the city sites, corresponding to the micro-regional centres, would have changed during time, often also considerably and within a short time span, as the archaeological record often attests. The area values employed in the graph are just indicative and probably of the Classical period³⁰.

A final issue to be examined is the location of the major settlement (*polis*) within its *chora*³¹. The distance from the geographical centre of the *chora* is greater in E Boeotia, as one can appreciate in fig.5, where

the geometric centre³² of the *chora* polygon is compared with the actual location of the *polis*.

In western Boeotia the *poleis* are very close to the geometric centre of their *chorai*. They deviate from the geometric centre of the *chora* only by a distance of between 600 and 3000m, since factors such as suitable topographical location (hilltops for the acropolis, dry land, strategic position), proximity to water and

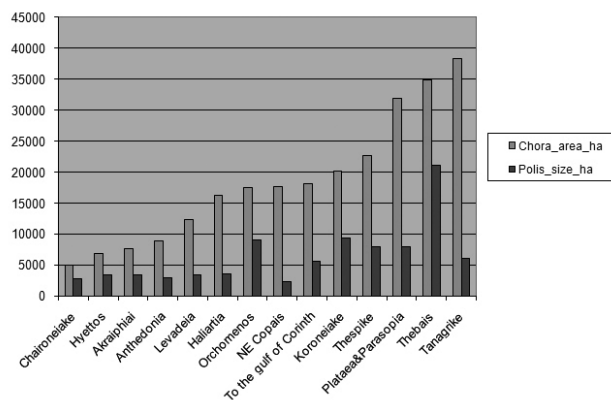


Fig.4. Histogram chart which compares *chorai* and *poleis* extensions (*polis* areas in hectares, taken from Bintliff 1997, are exaggerated by a factor of 500 in order for the values to be graphically comparable with the extension in hectares of the *chorai*; *chorai* extensions are in ascending order).

proximity to the contact point between two land-zones, play a role in the choice. This means that the cities, being in the centre of their *chora*, enjoy optimum exploitation of the whole *polis* territory. This central position is also related to the small size of the *chorai* of W Boeotia, as well as to the strong topographical constraints which define their boundaries.

On the other hand, in eastern Boeotia the deviation is larger (4000 to 7500m). The lack of strong topographical constraints corresponds to larger fluctuations of the boundaries over time and therefore to a non-central position of the main settlement. In some cases the *poleis* no longer stand at the centre of their *chora*, having incorporated the territories of former proto-*poleis*, e.g. Askra (in Thespieae *chora*), or of smaller *poleis*, e.g. Harma or Mykalessos (in the Tanagrike). In the case of Thebes, the historical settlement tradition (from Prehistoric times on the Kadmeia hill), as well as the position of the Kadmeia hill overlooking the Theban plains, create a natural centre of the area, whose boundaries, limited by few topographical constraints (mainly just the lakes to the N), fluctuate over time due to historical and political reasons. The strength of Thebes acts as a cultural constraint for the location of neighbouring *poleis* and the formation of their mutual borders. Plataea, for instance, does not lie in the middle of its *chora*, whose boundaries always fluctuated greatly, but in a suitable topographical location along the side of the Asopos plain opposite the location of Thebes.

(if not the Chalia peninsula also) were certainly part of the larger Tanagrike. Such a large unit with strong inner dynamics could even constitute a sort of ‘third Boeotia’, in addition to the main division into western and eastern Boeotia.

³⁰ Values are taken as they are from Bintliff’s 1997 article.

³¹ One can note how during the Greco-Roman period the major settlement tends to remain in the same location. Only in certain cases is there a shift, due to particular historical conditions or events, as in the case of Late Roman Orchomenos (shifted to Levadeia) or Haliartos (whose location shifted to Onchestos after the destruction of the *polis* by the Romans in 171 B.C.).

³² i.e. centroid = geometric centre of a feature (polygon)

II.4 LANDSCAPES OF ANCIENT BOEOTIA

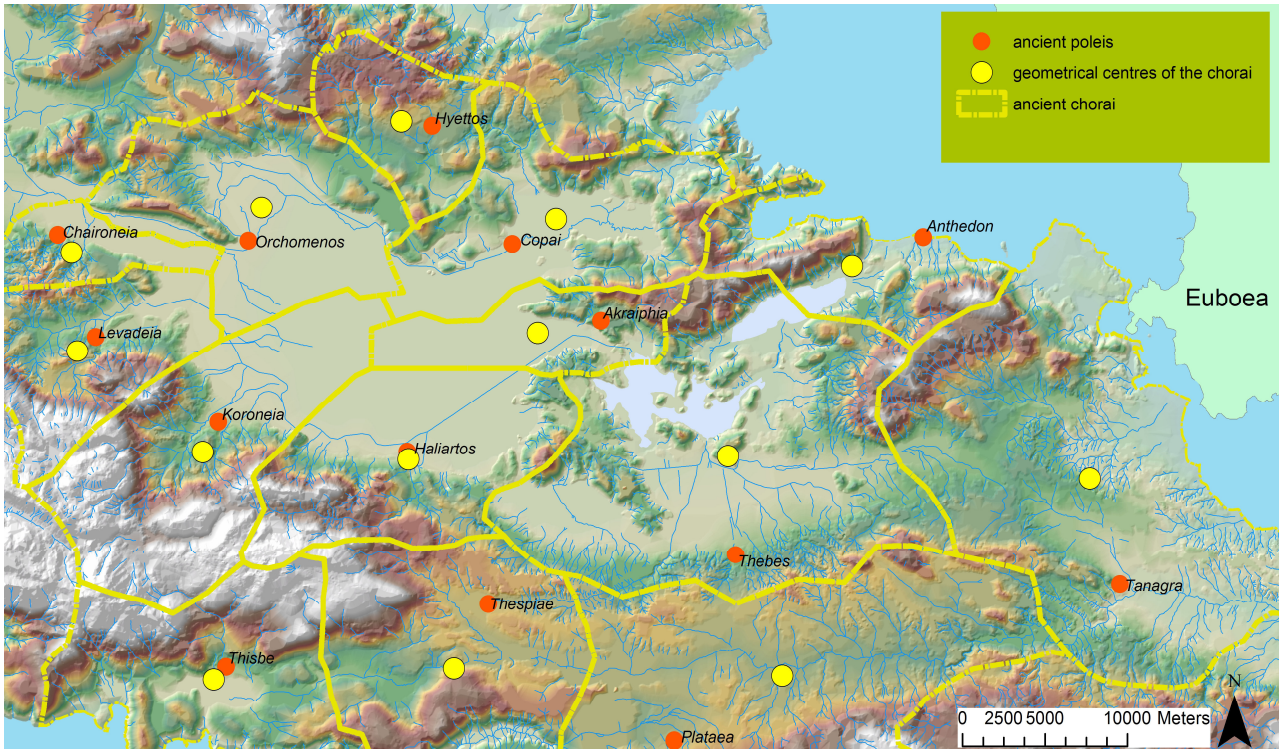


Fig.5. Map showing the geometric centres of the chorai polygons compared to the location of the major Boeotian poleis.

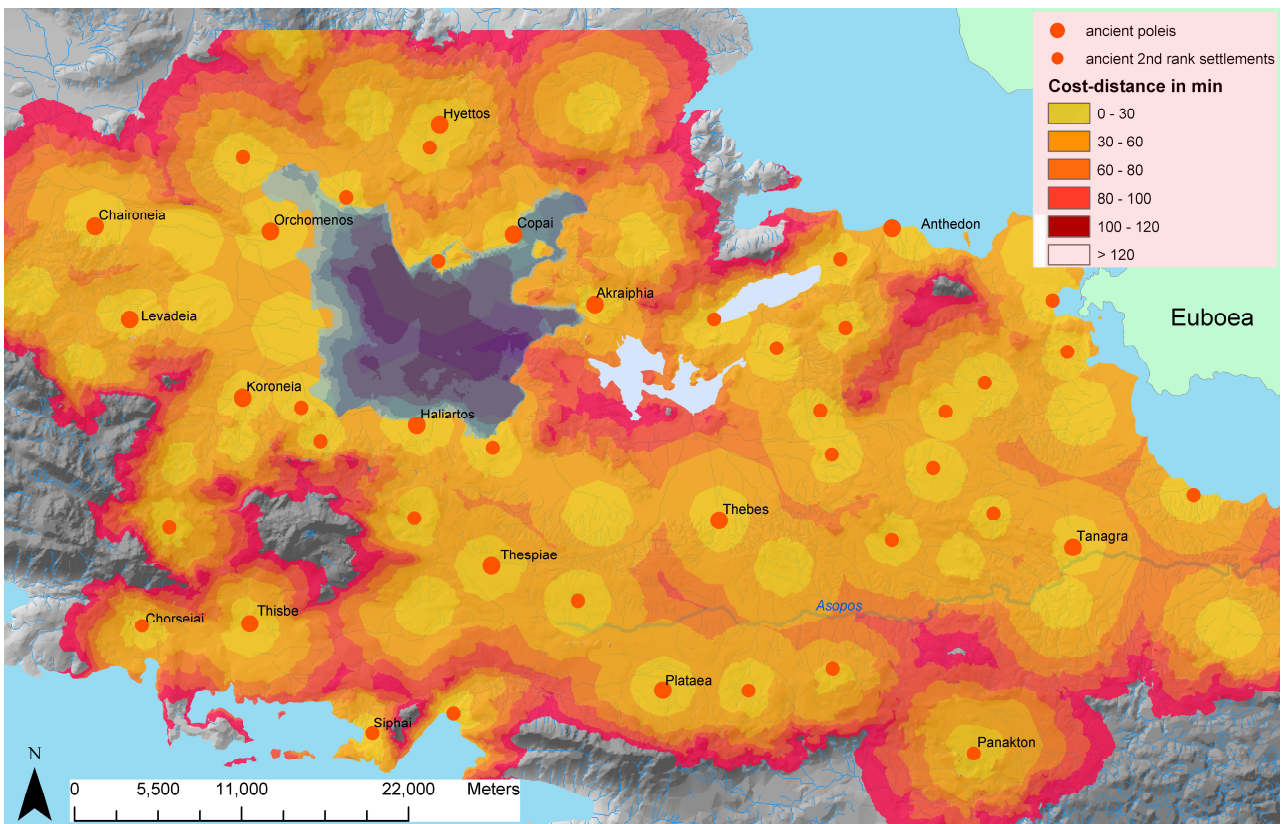


Fig.6. Classified surface representing the cost-weighted distance from 1st (larger dots) and 2nd rank (smaller dots) nucleated centres. Areas without dots indicate potential settlement chambers (see chorai chapters for discussion).

The location of the *poleis* within their *chora* also influences the location and distribution of the 2nd rank settlements.

2nd level – second rank settlements.

The available record for the second rank settlements, i.e. towns and large villages (*komai*), is certainly incomplete. We know this with certainty not only because of the existence of biases in archaeological research (indeed, villages do not have the attractive finds that a city does), but also because there are settlement names mentioned in the sources which have not yet found a suitable corresponding candidate, as in the case of small centres such as Pharaï, Eteonos, Slosos, Schedia³³, etc. For some of them, more than one identification has been suggested, as in the case of Aspledon, Tegyra, Schoinos and others (see *chorai* chapters and appendices). The result is that while cities have all been found and identified, there are still many villages to be found.

The GIS point layer used for the cost-surface analysis involving the 2nd rank settlements includes the main Boeotian *poleis* examined above as well as smaller nucleated settlements, including some that in an early (Geometric-Archaic) period could be considered *proto-poleis* (see above), and some that in the Classical-Hellenistic period are basic nucleated settlements, sometimes quite small, such as Eutresis or Teumessos, gravitating around the larger centres. In the archaeological record available, as seen in the *chorai* chapters, some settlement sites are only presumed on the basis of the presence of burials or a fortified acropolis, such as Pharaï (located by some scholars at Bratsi/modern Tanagra), Ypaton, Erythrai, Hysiai, or the supposed villages by Kallithea, the Neochorachion/Soros area and Asopia (see *chorai* chapters – LONG-TERM SETTLEMENT TRENDS - for details). The layer on which the analyses are performed represents primarily a possible situation for the Classical period. A similar test was made by Bintliff (1997), in a study on the population of ancient Boeotia. He had plotted on the 1:200,000 modern administrative map of the province of Boeotia the known or suggested Classical village sites, together with the known *poleis*, and then used Thiessen Polygon analysis to suggest the most likely areas of the landscape exploited or serviced preferentially by each of these settlements. In general, one can note that the hill and plateau land of intermediate elevation made up of flysch and soft limestones are nearly always preferred by settlement in every period.

Here, I have applied the same cost-distance analysis, performed for the *polis* level, to the 1st and 2nd rank settlement network. The analysis produced results which are somewhat comparable with those of Bintliff 1997, although the purely geometric Thiessen polygons have been replaced by tessellations resulting from a cost allocation analysis (see above). The result gives us an

³³ There are 35 place names mentioned in historical sources that could be considered to be Boeotian village settlements, but of these Leuktra is probably only the locality of the famous battle rather than a village (see chapter II.3.9).

idea of what could have been the large community areas gravitating towards cities, town and large villages (*poleis* and *komai*) in ancient Boeotia. Fig.6 maps the classified surface representing the cost-weighted distance from those nucleated centres. As stated above, 1st rank (*poleis*, centres of micro-regions) and 2nd rank nucleated centres are mapped together (1st rank *poleis* marked with a larger dot), as no ranks were differentiated in the analysis. In fact, the purpose was to delineate settlement trends over the landscape and try to understand settlement behaviour as well as territorial subdivisions, which could then explain rank differentiations³⁴.

Poleis are therefore treated here with the same basic land module as villages. One should not forget, however, that all the larger cities, as also pointed out by Bintliff 1997, possessed an administrative territory enclosing the individual territories agriculturally exploited by their satellite settlements (villages and *komai*), as well as their own core exploitation zone utilised by the city and surrounding farms.

What stand out clearly from the map (fig.6) are the cases in which an actual boundary role is played by physical constraints, such as mountains (Helicon, Ptoion, etc.) or rivers (Asopos).

Mountains are often perceived as border land. Sometimes the highest mountainous areas are seen as no man's land between two communities (usually used for pastoral activities or for wood production), not really belonging to anybody and free to be exploited, and used as a border between communities. Mountains, and especially hillcrests (marking watersheds), present geographical characteristics which 'naturally' mark boundaries. They have been used through history, since ancient times, as administrative borders between communities (see, for antiquity, Daverio Rocchi 1988, and see also discussion on borders in the individual *chorai* chapters).

Within Boeotia, treaties concerning the definition of the borders between two *chorai* are epigraphically and historically known. Boundary stones have been found: AE1108 (boundary stone between Koroneia and Orchomenos - Fossey 1988: 501); AE1212 (boundary stone between Copai and Akraiphia³⁵); AE1671 (boundary stone between Koroneia and Levadeia³⁶). A treaty is reported³⁷ between Koroneia and Thespieae for the exploitation of the Koukoura/Agia Anna upland plateau, which also played an important role at a strategic level (see below and chapter II.3.1), as well as the

³⁴ Bintliff has argued (Bintliff 1994b) that this network of village/city territories arose during the Greek Dark Age and Archaic period, when there was little difference between the exploitative and administrative territories of all these settlements, and power was much more diffuse across the landscape (see also Bintliff 2000a).

³⁵ IG VII 279. See also SEG XXX 440 for a possible boundary stone once again between Copai and Akraiphia, datable to the 6th – 5th C BC. The text suggested by Roesch reads: [ἡρόος Α]κραιφίον[ος] [κ]αὶ Κορ[αίων] (*Teiresias* 10 [1980], AE/2).

³⁶ SEG XXIII 297; SEG XXXV 406.

³⁷ IG VII 1870.

Skourta plain³⁸. The character of mountainous land as a border is marked also by the presence of forts and fortifications, which also gives a strategic role to mountainous zones and mountain passes. An example, for instance, is the area of Akraiphnia or Haliartos, where the role played by the mountainous area is very strong. These areas are situated in a central location within Boeotia, on the heights separating or overlooking the Copais basin to the NW and the Theban plains to the SE (see below as for their historical strategic importance).

As seen above, the borders are considered to be *eschatai* (the last land, the furthest land)³⁹. The borders are marked by strips of no-man's land, usually running along watersheds or around mountain peaks, although sometimes also in the lowlands (see for instance the borders between Boeotia and Attica to the SE of Dilesi, described in chapter II.3.14). Those areas/strips could be smaller or larger in extension. The fact that they are considered to be no-man's land does not automatically mean that they were not in use, even if in the majority of cases they were not permanently occupied. Such areas, especially when constituted by uplands, might have a high economic potential, for wood or pasturage land⁴⁰, and were certainly exploited in periods of expansion, such as in Classical times. According to this perspective, it becomes clear that the borders not only mark the furthest areas of the communities (marking the boundary line between them, in ancient as in modern times), but also divide economic areas. It might be of interest to note that, in modern times, *eksokklisia* (small countryside chapels) on mountain peaks (often dedicated to Prophitis Ilias) often mark the borders between administrative divisions (Nixon-Price 2001: 416-7) and link the cult with agriculture or pasturage zones. This is also true in a way for ancient times, when cult places, besides their religious role, often had an additional twofold function of border markers and of signs of specific economic areas, to which the worshipped cult was often linked.

As already remarked, a constant tendency of the Greek *poleis* was to reach a stable border, individuated by reference features, creating a 'linear border' (Daverio Rocchi 1988: 25), or individuating 'no-man's land' as separating areas officially recognised. Therefore, to the

border line was given a political importance as well as a sacral value⁴¹.

The map in fig.6 also clearly shows that the highest density of 2nd rank settlements can be observed in central and eastern Boeotia. Here we see large distances between the main *poleis* (Thebes, Plataea, Tanagra), and the intermediate areas are occupied by a ring of 2nd rank settlements around each of these *poleis* creating a 'village-based landscape' (see fig.6 and fig.8). On the other hand, in W Boeotia the density of *poleis* is higher and the number of 2nd rank villages smaller (fig.6). We usually observe only one 2nd rank settlement occupying the area between two *poleis*. Between Haliartos and Thespieae we find Askra, dependent on Thespieae and Onchestos, under the influence of Haliartos, creating a cross line between Haliartos and Thespieae. In the same way, between Haliartos and Koroneia we find the settlement of Alalkomenai, within the Koroneia *chora*. A low number of 2nd rank settlements are noted especially in the Copais area and towards the gulf of Corinth. This can be partially explained by the small distance between the *poleis* for topographical reasons in the Copais area, and by the mountainous character of the gulf area. When there is available land in the mountainous areas, then 2nd rank villages do appear, as for example in the case of the Koukoura/Agia Anna plateau (on Helicon, to the S of ancient Koroneia). Yet we should consider that a number of villages have not yet been identified, and they could correspond to the potential settlement chambers marked in the figure (fig.6).

As a next step, I applied cost-distance analysis considering distance ranges of 2.5km and 5km (½ h and 1h walking time respectively) from the settlement site (fig.7). The results are circles with 5km radius (calculated in time, 1h walking), as employed, in defining settlement catchment areas, by Renfrew-Wagstaff 1982 (Melos) and Bintliff (1977: 112) for Greece. On the other hand, Bintliff 1997c and 1999c (see above) calculates the 'standard village model' in circles of 2.5 km radius, based on a recurrent cross-cultural territory size associated with pre-industrial mixed-farming-based nucleated settlements of medium size (see above). The smaller radius around the nucleated centres is mapped in fig.8.

In both figures the empty plain area (with low rises) in the centre of the region to the W of Thebes is the most striking visually (reddish area in the map). This empty area without any known 1st or 2nd rank settlement sites, which is further than 1 hour's walk from the city of Thebes, as well as from the neighbouring centres, constitutes an area under the control of Thebes itself, and

³⁸ The Skourta upland plain was common pasture land shared by Boeotians, Athenians and even Corinthians (Munn - Zimmerman Munn 1990: 36-37; Schachter 2004: 56).

³⁹ For the concept of *eschatai* within the framework of the discussion of *polis* borders in the Classical period see, among others, Daverio Rocchi 1988.

⁴⁰ See examples from Tanagrike, Akraiphiai, as well as from the *chorai* marked by the presence of Mt.Helicon, such as Koronieake, Levadeia and Haliartos. For Boeotia, it can be pointed out that no intensive research was carried out in mountain lands, with the exception of mountain plateaus (e.g. Skourta plain – see appendix I.14), as field-by-field surveys devoted their attention mainly to ploughed lowland fields. On the other hand, as seen in the individual *chorai* chapters, some information on the occupation of the upland landscape can be inferred from the archaeological record also available from other sources, such as extensive topographical surveys or rescue excavation.

⁴¹ The border line had a political value, as an entity juridically more apt to express a political boundary, perceived as the limit of the portion of land on which the city-state's power realises its control in a natural and stable way. The border must be intended in relation to what it includes, i.e. the appropriation of the concept of *polis* in its physical, social and political dimension (Daverio Rocchi 1988: 25-26).

can be explained by cultural factors, such as the importance of the centre of Thebes and its higher population potential, clearly in absence of any clearly marked physical constraint which could limit the expansion of the territory. In this situation, there is space for a settlement but the settlement is not there⁴², and if we consider that even Onchestos was probably nothing more than nucleated houses in the area immediately below the cult place, the territorial influence of Thebes would be even stronger.

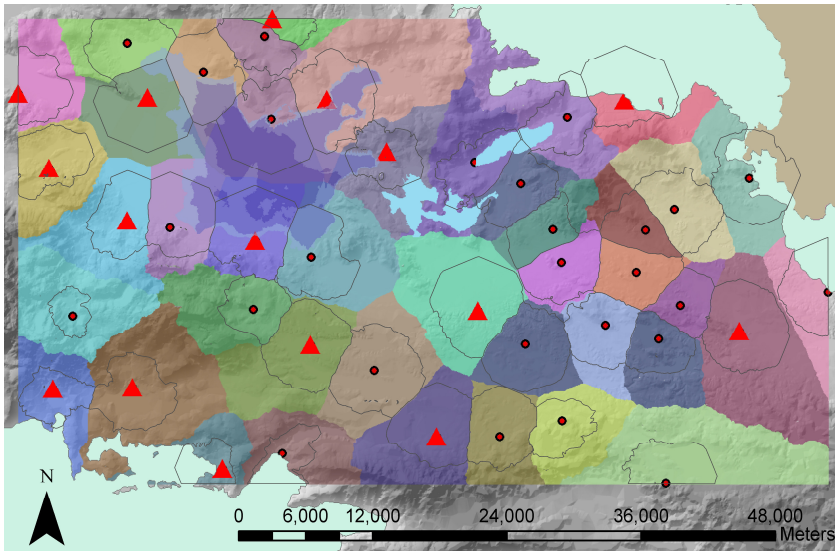


Fig.7. 5km radius area topographically corrected from poleis and 2nd rank settlements compared with the tessellation of space based on cost-weighted distance from the same points.

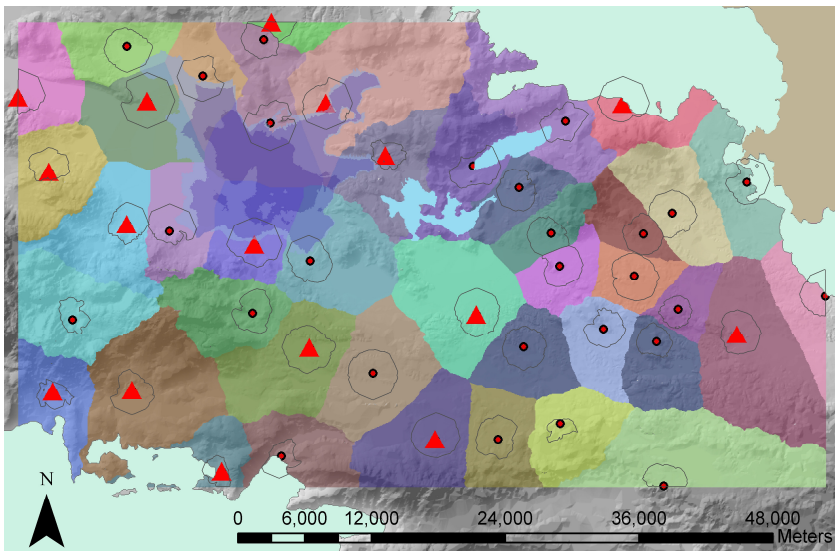


Fig.8. 2.5km radius area topographically corrected from poleis and 2nd rank settlements compared with the tessellation of space based on cost-weighted distance from the same points. In the picture we can appreciate the gaps and therefore the potential suitable places for other village settlements.

It is striking that the limit of the 5km radius areas frequently coincide with the topographically corrected 'tessellation'. On the other hand, in certain areas (Eastern Boeotia especially) the 2.5km radius works better, showing a denser infill of the landscape in mature periods (in this case the illustration corresponds to the Boeotian settlement situation in the Classical period).

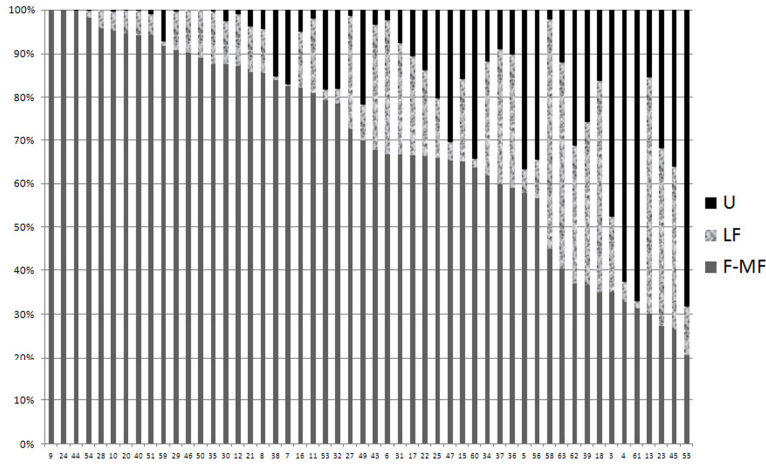
Considering the graphs in fig. 9, it seems that the majority of the settlements is associated with a large proportion of fertile and mid-fertile land in their territory. Graph 1 shows the occurrence of F-MF (fertile – mid fertile), LF (low-fertile) and U (unsuitable for agriculture) land in the immediate territory of the 1st and 2nd rank settlements (mapped in fig.10), while graph 2 summarises and shows the occurrence of 1st and 2nd rank settlements presenting different proportions of F-MF land in their immediate territory⁴³. As we can see, 42% of the settlement territories is characterized by fertile and mid-fertile land in a percentage of 80-100%. An additional 27% of the settlement territories presents fertile and mid-fertile land in a percentage of 60-80%. Therefore, the majority (69%) of immediate territories (½ hour walking time) of ancient 1st and 2nd rank settlements are characterised by the presence of more than 60% of F-MF (fertile-mid fertile) land, with a minimum percentage of 20% F-MF land in the case of the mountainous landscape of Chorseiai. In several cases of lower presence of F-MF land, LF land complements the areas suitable for agriculture. The analysis shows a definite preference for settlement locations which offer fertile territories in the immediate surroundings.

⁴² Excluding an extensive settlement in the Roman imperial period on the Klimataria peninsula jutting into the Yliki lake – component T_110.

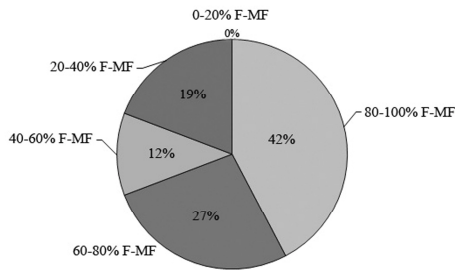
⁴³ The settlement areas of the Easternmost part of Boeotia are not included in the analysis as the geological map on which the land capability was based (see chapter I.2.1) is not available for the area.

II.4 LANDSCAPES OF ANCIENT BOEOTIA

Occurrence of land with different agricultural potential within 2.5km radius from 1st and 2nd rank ancient settlements



graph 1



graph 2

Fig.9. Graph 1: occurrence of F-MF (fertile – mid fertile) , LF (low-fertile) and U (unsuitable for agriculture) land in the immediate territory (1/2h walking time) of the 1st and 2nd rank settlements. The interested areas (numbered on the x axis of the graph) are marked in the map in fig.10. Graph 2: occurrence of 1st and 2nd rank settlement territories with different percentages of F-MF land.

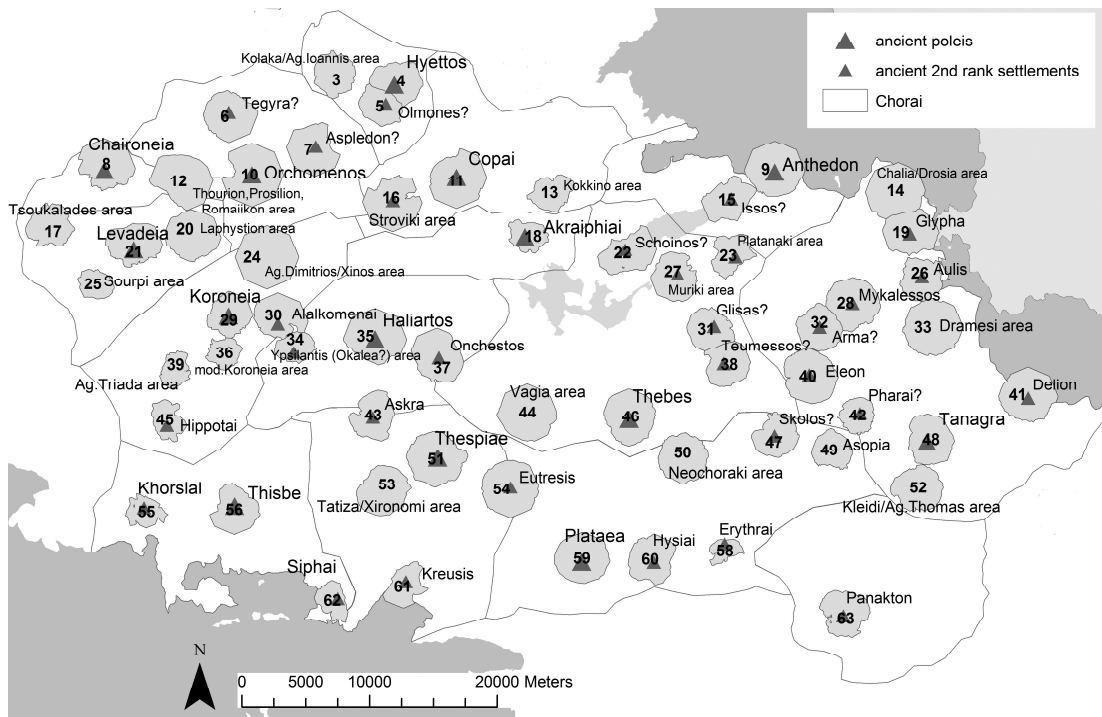


Fig.10. Ancient 1st and 2nd rank settlement network with 1/2 hour walking time radius around them.

Comparative analysis of the settlement network

The graph in fig.11a helps us to better compare the two main areas of the Boeotian landscape, marked by different geographical and topographical characteristics. The western part is dominated by the Copais and surrounding reliefs (Helicon up to the gulf of Corinth and the mountains to the E of Copais), while the eastern part is characterised by the presence of the two lakes Yliki and Paralimni, the central plains, the Tertiary *tafel* of Thebes, and the Eastern coastal plain towards the Euboic gulf. The two areas are comparable in size, measuring approximately 1,200 and 1,350 sq.km. respectively. The graph shows for each wide zone of Boeotia the percentage of settlement chambers associated with strong, medium, or low/absent topographical constraints (presence of mountain/ridges, lakes/marshes or permanent rivers), thus evaluating to what extent topography and/or cultural factors influence the presence of settlement chambers.

The graph in fig.11a shows a converse picture concerning the topographical constraints. In the landscape of W Boeotia, strong topographical constraints are actually defining settlement chambers. It seems also that marked topography leads to a greater fragmentation of the landscape between more *chorai* (9 *chorai* in the W compared to 5 *chorai* in the E). The more fragmented landscape in the W, as well as the larger number of defined *chorai* with relatively smaller size, is associated, as one would expect, with a smaller number of settlement chambers in the territory of each *chora* (three settlement chambers each, on average - see graph in fig.11b). When there is available land in the fragmented mountainous areas, where inner valleys open up, then more 2nd rank villages do appear, as for example in the case of Koroneia or Levadeia (with 6 and 4 settlement chambers respectively, mainly characterised by strong topographical constraints).

In eastern Boeotia the mild relief is associated with the existence of a smaller number of *chorai*. There is also, on average, a larger number of settlement chambers per *chora*, partially related to the larger size of the *chorai* in this Eastern part of Boeotia (see graph in fig.11b). The majority (60%) of the settlement chambers are associated with low topographical constraints (graph in fig.11a). The lack of strong physical constraints and the larger number of settlement chambers create a network of 2nd rank settlements associated with the main *poleis*, located quite regularly over the landscape. The only large gap, as noted earlier, is around Thebes (figs. 5-6-7). Low topographical constraints also allow for an open choice with regards to location of the main settlement (see above – 1st level). In these open landscapes, mainly social and political factors, as well as the mutual distance factor, define settlement chambers exploiting the plains and the rolling hills of Eastern Boeotia.

The detection of settlement chambers over the landscape is possible not only with strong topography. Distinctive and recognisable landscape areas gravitating around settlement foci changing over time also exist in areas where the division of the landscape into settlement units is mainly due to cultural and social factors. Comparison

of the settlement network in later periods and the pattern of known Prehistoric activity foci, examined in detail in each *chora* chapter, supports the existence of the landscape units defined as settlement chambers. In the Parasopia/Plataea area for example, the landscape is open without physical constraints but occupation is recurrent: all settlement chambers along the S side of the Asopos plain (and also Kallithea to the N) are occupied by a settlement in all periods. Also in the area of Thebes, settlement chambers are very weak, with low topographical constraints. Yet recurrent occupation in the same area and often on the same spot in all periods indicates the existence of settlement chambers (Hypaton, Platanaki and Mouriki).

II.4 LANDSCAPES OF ANCIENT BOEOTIA

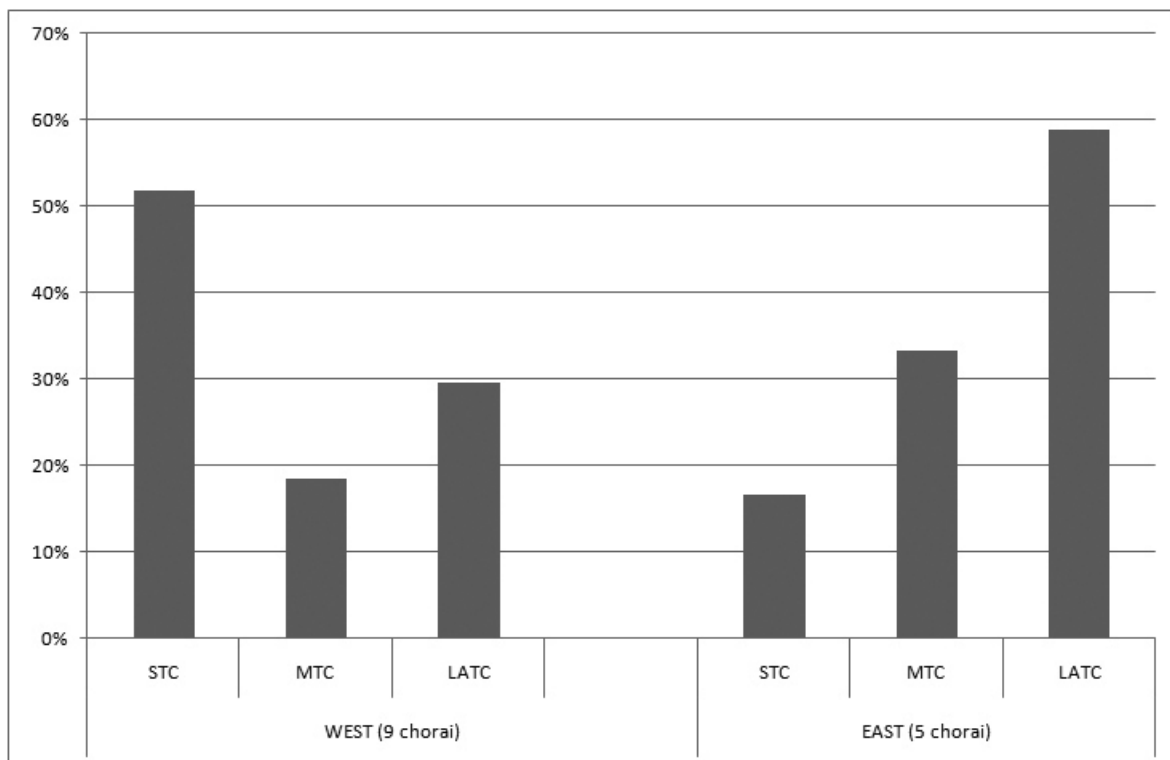


Fig.11a. Percentage of settlement chambers associated with strong (STC), medium (MTC), or low/absent topographical constraints (LATC) in W and E Boeotia.

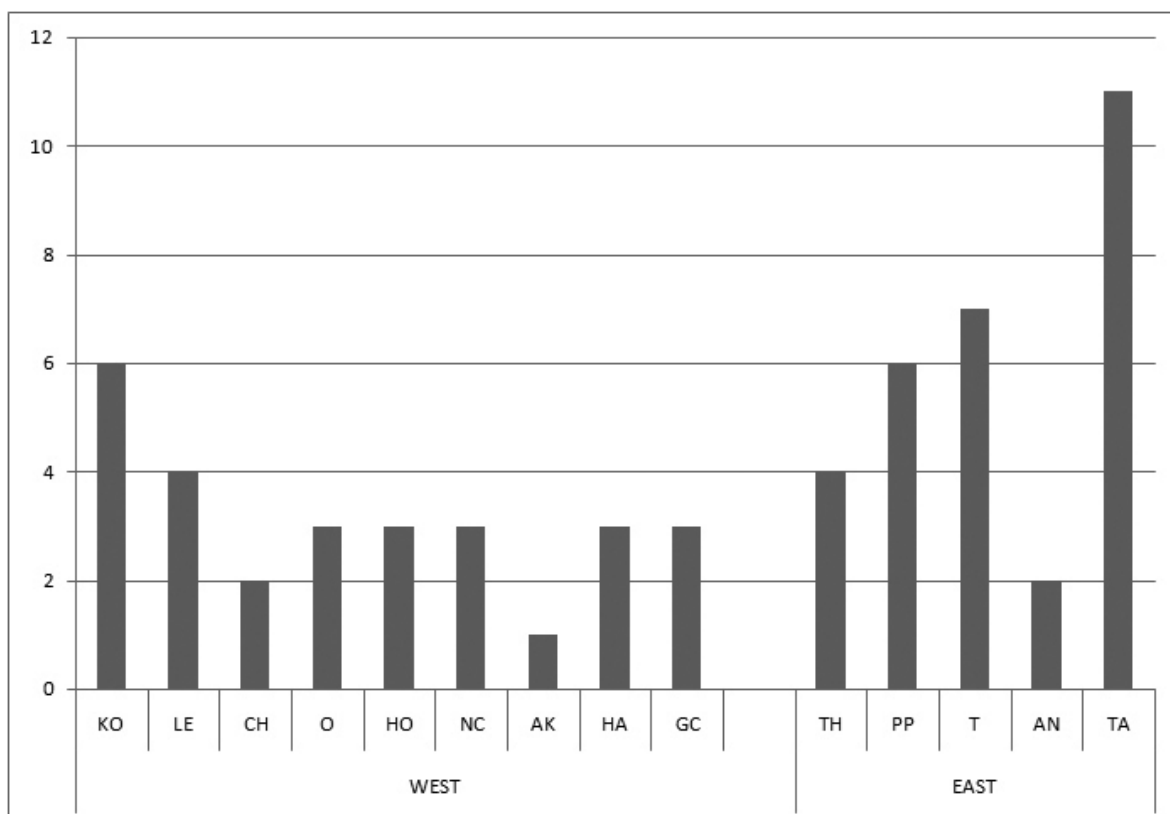


Fig.11b. Number of settlement chambers in each *chora* of W and E Boeotia.

Fig.11. *Topographical characteristics of the settlement chambers of W and E Boeotia.*

I will proceed next to a comparative analysis to investigate the issue of continuity over the Boeotian landscape, looking for the occurrence of settlement foci of different periods within a potential settlement chamber. The following periods are considered: Prehistoric, Greco-Roman, Frankish (represented in this analysis by the presence of known towers and castles), Ottoman and Modern. In this analysis, they are represented by the main settlements known for these periods, while for the Prehistoric period presence includes main activity foci recognised in the landscape (burials also), even without any particular evidence for a nucleated settlement. Within a settlement chamber one can point out some recurrent occurrences of the main periods, as shown in the graph in fig.12 and listed below. The list examines the continuity of occupation within the same settlement chamber but not necessarily on the same spot, although in many cases there is an actual overlapping of the main settlement site in the different periods in the same location, as examined in detail later.

ALL. Presence of a settlement focus in all of the main periods: ancient Koroneia (KO), Chaironeia (CH), Kastro (NC), Haliartos (HA), Askra (TH), Thisbi (GC), Plataea (PP), Thebes (T), ancient Tanagra, Bratsi/modern Tanagra and Harma (TA)

ALL but Fr. Presence of a settlement focus in all of the main periods except Frankish towers and castles: Orchomenos (O), Akraiphnio (AK), Eutresis/Melissochori (TH), Chorseiai (GC), Erythrai, Daphni and Kallithea (PP), Ypaton, Platanakia and Mouriki (T), Anthedon/Loukisia (AN)

ALL but Preh. Presence of a settlement focus in all of the main periods except Prehistoric: Levadeia (LE), Ypsilantis (HA)

ALL but Ott. Presence of a settlement focus in all of the main periods except Ottoman: Pyrgos (O)

Preh + Gr-Rom. Presence of Prehistoric activity and Greco-Roman settlement focus only: Siphai (GC), Oungra Paralimni (T), and probably Kastro Lykovouni and Glypha (TA)

Gr-Rom + Ott. Presence of Greco-Roman and Ottoman settlement focus only: Polygira (O), Onchestos (HA)

The majority of settlement chambers (22 of 31) show the presence of settlements of all the main periods, or of the four main periods with the exclusion of a Frankish tower. The lack of Frankish towers in certain settlement chambers is related to the fact that they are associated with larger territorial units, which correspond with the area of influence of Greco-Roman *poleis*, one often being present in each *chora*⁴⁴. A larger number of Frankish towers, which could be associated with settlement chambers, is known from the wider Tanagrike and in the

Thespieae area. The existence of four settlement chambers with Prehistoric and Greco-Roman finds only (see graph in fig.12) would mark a change in landscape strategy in later periods. Very weak settlement chambers (two), with a known settlement in only one period, are very rare, and they are present only in E Boeotia (see graph in fig.13), where open landscape does not allow an immediate recognition of separate potential settlement areas.

The graph in fig.13 compares W and E Boeotia in terms of multi-period settlement presence in the settlement chambers of the *chorai*. The fact that in Eastern Boeotia also, four or five periods are represented within each settlement chamber strengthens the hypothesis suggested earlier for the presence of settlement chambers in areas with a lack of strong topographical constraints also.

On the other hand, the presence of multi-period settlement foci in areas for which evidence for Greco-Roman 2nd rank settlements is lacking helps us to evaluate gaps in the landscape. Thus, in fourteen areas Greco-Roman settlement foci are hypothesised on the basis of the presence of settlements of other periods and of indications of Greco-Roman activity in the archaeological record (for example Ag.Triada and Mavrogeia/Ag.Dimitrios (KO), Kokkino (NC), Ellopia area (TH), Asopia (PP), where all the other main periods are represented with a settlement site).

The occurrence of settlements of different periods in the same area is related to the landscape history of the region. In the individual *chorai* chapters we noticed, for example, how in post-antiquity the main settlements of the region, corresponding to the former *poleis*, became in later periods smaller or larger villages (comparable to second rank settlements). Only Thebes and Levadeia remained as major centres throughout the Byzantine, Frankish and Ottoman periods. Socio-political factors and different strategies of land use might also affect the type and rank of habitation. Thus, for instance, the locations of second rank settlements of the Classical and Early Roman periods are taken up in Late Antiquity by large rural sites/villas. Yet we should also take into account the possible biases in the archaeological record, especially in the case of settlement chambers occupied by a *polis* settlement in the Greco-Roman period, where the presence of a settlement in all the main periods considered always occurs. In this case, intensive research on the historical *poleis* and their immediate surroundings often leads to a better understanding of the presence of other periods as well⁴⁵.

⁴⁴ Bintliff 2000e suggests that in Boeotia, during the High Medieval/Frankish/Late Byzantine period, Frankish towers associated with settlements, and the two main Frankish castles of Levadeia and Thebes, were established on or near the long-established towns and villages of earlier periods, marking a continuous development from the landscape of Late Antiquity.

⁴⁵ For example the recent work at ancient Tanagra located the Prehistoric, Frankish and Ottoman presence in the immediate area of the ancient *polis*.

II.4 LANDSCAPES OF ANCIENT BOEOTIA

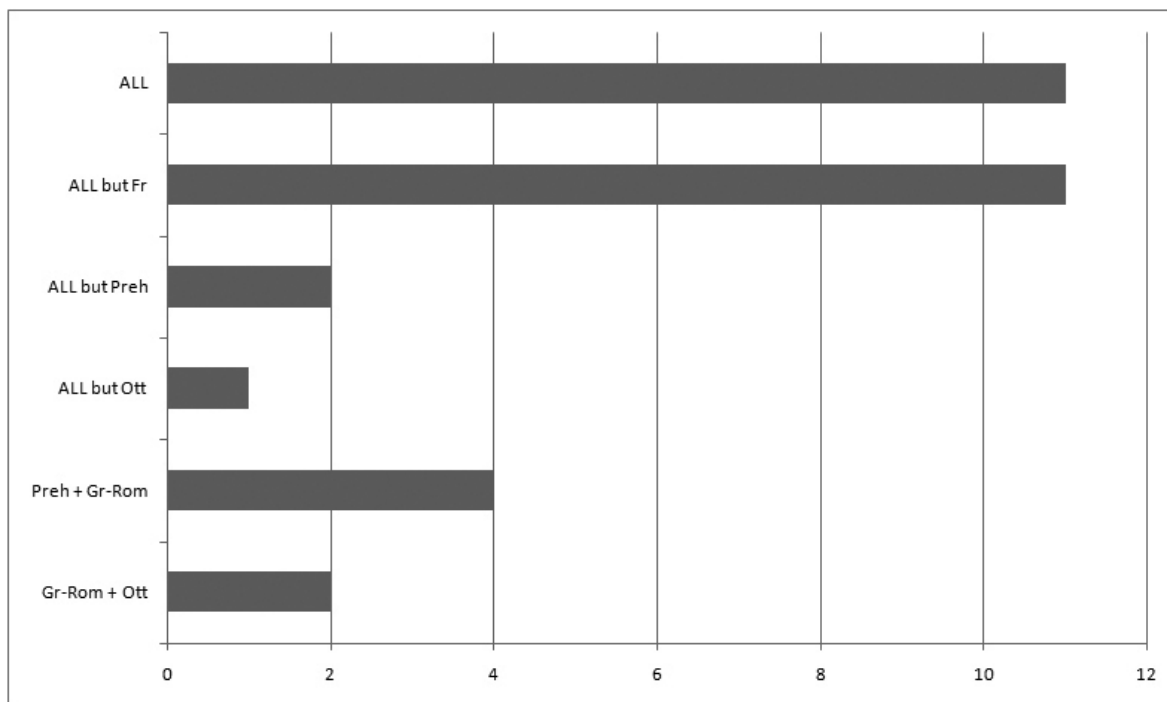


Fig.12. Recurrent occurrences of settlement foci of the main periods considered (Prehistoric, Greco-Roman, Frankish, Ottoman, Modern) within recognised Boeotian settlement chambers.

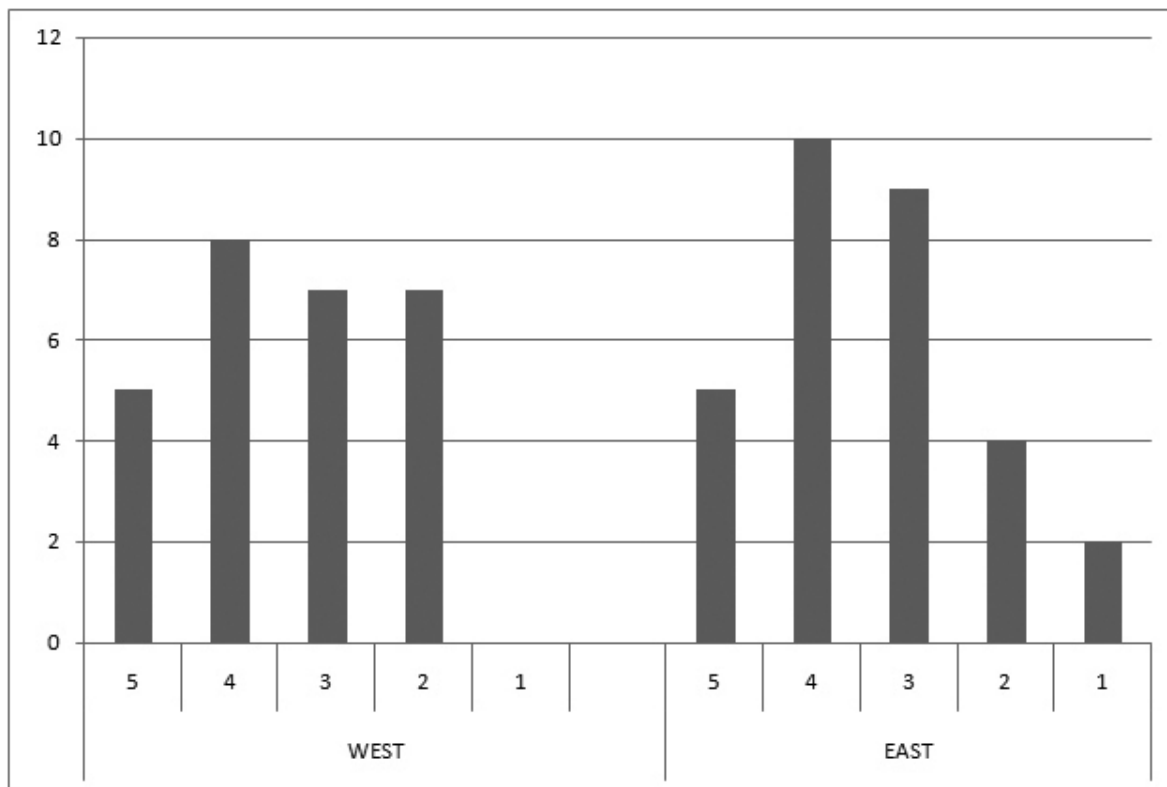


Fig.13. Occurrence of settlement foci of the main periods considered (Prehistoric, Greco-Roman, Frankish, Ottoman, Modern) –1 to 5- within recognised settlement chambers (y axis). Comparison between W and E Boeotia.

The locating of the main settlement on the same spot in different periods may mean, in terms of history of landscape, memory in addition to continuity. Apart from continuity within a certain settlement chamber, the preference for a precise location, creating recurrence, might indicate memory rather than any other specific reason of choice. Thus, in western Boeotia, for instance, which was less affected by population loss and subsequent Albanian colonisation in the Late Frankish period, villages registered in the Ottoman defters with Greek-speaking population form large nucleated villages close to the ancient Greco-Roman centre, keeping their traditional location and land use (Mediterranean polyculture). Another example, where there is memory but no ethnic continuity, is that of the newly established Albanian hamlets in the Late Frankish period, which in many cases occupy the location of deserted Byzantine villages. Remaining or ruined churches marking the positions of former Byzantine villages keep the memory in the landscape and mark locations which were resettled by the colonizers (see for example a series of medieval Byzantine villages in the Tanagrike studied by the recent Tanagra survey).

Examining the scale of movement of the main settlement across different periods, some remarks can be made. Some of the major Boeotian *poleis* lie below modern centres. This is the case of Thebes, Levadeia, Orchomenos, Chaironeia lower town, Copai/Kastro. In other cases, while the major (1st rank) settlement remained in the same location during the whole Greco-Roman period, in post-antiquity the corresponding settlement shifted its position. In the majority of cases the shift occurs within the same settlement chamber (for instance, Koroneia, Akraiphiai, Thespieae, Plataea,

occupying the lower area immediately below the slopes of the acropolis (e.g. Haliartos, Tanagra, Chaironeia). In other cases there is a movement to the upland or inland in the Medieval and especially in the Ottoman period (e.g. Alalkomenai and Solinari (KO), Kokkino area (NC), Thespieae (TH), Plataea (PP), Anthedon and Loukisia (AN)). Comparing ancient and modern settlements, a shifting in location in the same topographical zone occurs in several cases: ancient Koroneia and Ag.Georgios (KO); Hyettos and Loutsi, Palaiokastron and Pavlo (HO); Akraiphiai and Akraiphnio (AK); ancient and modern Haliartos (HA); ancient Thisbe and modern Thisbi (GC); Ypaton (T); ancient Eleon and modern Harma (TA) – the main difference being that in the Greco-Roman period, naturally defended locations on ‘natural’ *acropoleis* were preferred.

One notices how settlements corresponding to ancient 2nd rank settlements move much more around the landscape in the long term, compared to settlements corresponding to ancient *poleis*, but often within the same settlement chamber, as far as the available archaeological record indicates. The average scale of movement of the main settlement focus within a settlement chamber is 25 minutes’ walking distance, both in E and W Boeotia. The data set of which the mean was calculated included very low or null values, when the settlement occupies the same spot in the different periods. The minimum values are 0 min in the case of Orchomenos in W Boeotia and 0 min in five cases in E Boeotia. The maximum values are 60 min distance for the W (in the area of Kokkino; if we include the case of shifting of the main settlement from Haliartos to Onchestos in the Late Hellenistic/Early Roman period the distance reaches 65 min) and 56 min distance for the E (Oungra Paralimni). The fact that the maximum distance remains comparable in the E and W strengthens the idea that the presence of a settlement chamber is not affected by topographical reasons only (see above).

The choice of settling on the same spot recurs especially in certain periods, as shown in the graph in fig.14. Examining continuity of habitation at the same spot continuity can be seen in three broad succeeding periods (Prehistoric and Greco-Roman, Greco-Roman and Frankish, Ottoman and Modern) in several examples, indicating population continuity or same choice. Multi-period occupation (Prehistoric, Greco-Roman and Frankish) on the same spot is noted at very distinctive and prominent locations, as Pyrgos (O) and Pyrgos Paralimni (AN). Sometimes there are two preferred locations within the same settlement chamber chosen for the main occupation in different periods, such as in the case of ancient Koroneia and modern Ag.Georgios (KO), Copai/Kastro and Gla (NC), or Pyrgos and Magoula Pyrgos (O -

where the latter is preferred only in Late Prehistory). As for non-contiguous periods, the few examples of

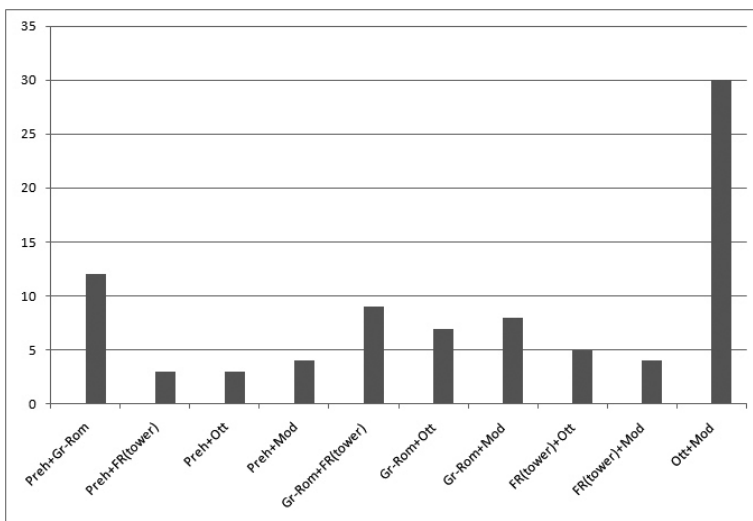


Fig.14. Recurrence of settlement foci in the same location in the main periods considered (Prehistoric, Greco-Roman, Frankish, Ottoman, and Modern)

Anthedon) and the settlement often moved very close to the location of the Greco-Roman *polis*, frequently

habitation on the same spot may reflect similar choices in the landscape.

I also performed cost-distance analysis from the modern settlement network (GIS layer: *choria*). The results are shown in fig.15. In the map one can observe that the mountainous area to the W of Copais is distributed among numerous villages (dispersed pattern), compared to the villages in the plain. This is mainly for topographical reasons, as the ‘tessellation’, the result of the allocation analysis based on cost-surface, shows clearly. This does not seem to happen, though, in the Greco-Roman period, where around Copais we have several *polis* communities controlling the single valleys as well as the surrounding mountains (ridges jutting into the Copais and higher mountains behind). On the other hand, in the plain area to the E, the modern situation looks much more similar to the ancient one. There, in the absence of real/outstanding physical constraints, the communities divide the available land among them. Only Thebes, as seen above, and Thespieae, and Tanagra to a degree⁴⁶, have enough strength (for historical cultural reasons) to control a larger territory. The settlement of Eutresis, though not so well investigated for historical periods of occupation (compared to the Prehistoric, which have attracted the interest of archaeologists at the site), seems to have played an important role with its location between Thespieae and Plataea (even though its available area would probably have been smaller, due to the presence of two ‘important’ neighbours to its E and W).

Furthermore, in the hilly landscape to the S of Thebes (between Thebes and Thespieae, and Thebes and Plataea), the modern landscape is marked by more settlements on the hills (Ambelochori, Vagia, Mavrommati, etc.) compared to the picture available for the Classical period. In considering the empty area in the centre of the region mentioned above and shown in the picture with *poleis* and 2nd rank settlements in the Classical period (fig.6), one can observe that in the modern landscape as well land is distributed among settlements which are positioned more or less in the same way as in ancient times, but two more settlements appear in the modern picture on the hills (Vagia and Ampelochori).

As stated by Bintliff (2000a), in Boeotia the top-level regional centres in the Greco-Roman period (as well as in Early Modern times) seem to present a spacing predicted by rural marketing theory, i.e. a day-return radius of 15km (comparable to Fossey’s empirical estimate of 14km – Fossey 1988)⁴⁷. The *poleis* level examined above

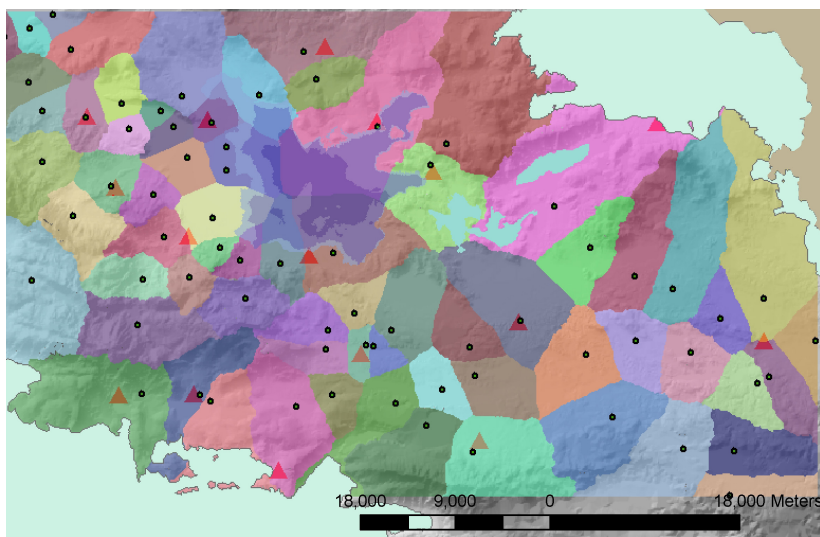


Fig.15. Allocation based on cost-surface from the modern settlements (*choria*). *Poleis* triangles marking ancient *poleis* have been positioned in the map in order to make clearer the location of modern villages within the landscape and the comparison with the above maps. For village names see fig.4 in chapter I.2.2.

would seem to show a pattern of this sort. On the other hand, below this network is an infill of *komai*, villages, hamlets, farms and villas whose density rises and falls, period by period, according to economic (economic development or decline, impact of specific land use⁴⁸) or social factors.

3rd level – rural sites.

The rural occupation of the landscape, probably the least well known segment of anthropic landscape, at least in the areas of Boeotia not covered by intensive surveys. I should point out here that the analysis of the Boeotian archaeological record carried out in this work has shown that at least for the region of Boeotia, from the picture provided only by extensive surveys and excavation data, the rural segment is certainly under-represented and the rural pattern difficult to understand, especially in the long-term. On the other hand, the information collected in smaller or larger windows through field-by-field survey helps in shedding light on general and local trends, and also allows one to understand to what extent the information from the ‘extensive’ record is lacking in order to produce a meaningful picture. Although we cannot assume total recovery of sites even with intensive and systematic surveys (Bintliff-Snodgrass 1985 assume for Boeotia a recovery of 50-60% of Classical sites), the high density of sites found in certain areas of Boeotia, such as the Valley of the Muses and the Thespieae SE

hypothesised (Fossey 1988 and Bintliff 2000a). From EH onwards “some of the villages may grow into regional central places and, in the most flourishing periods, many villages reach urban status” (Bintliff 2000a).

⁴⁸ In this sense, both the advent of plough agriculture and the Secondary Products revolution in the Final Neolithic-Early Helladic period, as well as the introduction of large estates in the Roman-Late Roman period, would have had significant impact.

⁴⁶ See above in the text and chapter II.3.14.

⁴⁷ For the later periods of Prehistory a network of nucleated hamlet-village settlements at around 2-3 km radius of territory across the cultivable zones of the province has been

area, which probably indicates high rate of recovery, allows us to make some remarks on the rural pattern. The existence of gaps between the sites would point to the possible presence of undiscovered sites, at different degrees of density according to the period considered (Bintliff-Snodgrass 1985: table 5; Bintliff 1991c: 156ff. and fig.29). We will use as an example an area for which intensive and systematically collected surface data are available, such as the surroundings of ancient Thespieae as far as the *chora* of Haliartos and including the Valley of the Muses and the *kome* centre of Askra⁴⁹.

In fig.16 one can see the rural sites known for the Classical – Early Hellenistic period in the area. Farms are located in the surroundings of the town level sites, responding to a model which sees them as starting at 1.3km from the city. The model (already suggested by Snodgrass 1987/9 as an urban-rural model for the Classical period, examining data from the Thespieae survey) seems to work in the case of Thespieae, Haliartos and Askra, as well as in another area where intensive survey work has been carried out recently, i.e. the surroundings of ancient Tanagra (where Classical- Early Hellenistic rural sites start at 1.8km from the city⁵⁰). Farms appear to start at a 1.3km straight-line distance from the city, and are also present in the area outside the 1h walking radius from the nucleated settlement site. The rural sites discovered closer to the urban centres are all from the Geometric-Archaic period (see three sites S to Haliartos, one site S of Askra and one E of Thespieae – mapped in figs.19-20). Generally speaking, apart from the area immediately around the *poleis*, the rest of the land seems to be shared ‘regularly’ in the Classical period (ca. 300m radius each farm – 5min walking distance - see Snodgrass 1987/9).

Around Thespieae and Askra the pattern seems to respond perfectly to the urban-rural model and in general to the usual dispersed pattern recognisable also in other regions of Greece (Alcock 1993; Alcock 1999; Alcock 1993; Jameson – Runnels – van Andel 1994 for Argolid; Cavanagh et al 1996 and Cavanagh-Mee-James 2005 for

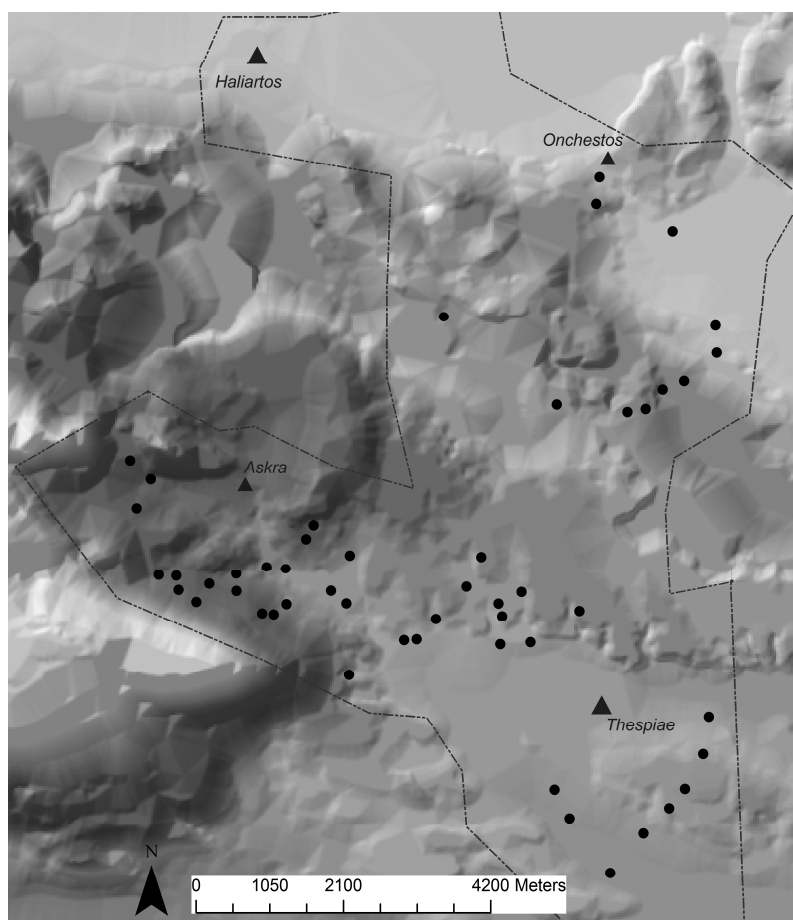


Fig.16. Rural sites recognised by the Boeotia Survey Project as in use for the Classical – Early Hellenistic period in the area of Haliartos and Thespieae.

Laconia). This is easily explainable as a system of small properties of land-owners and farmers exploiting the fertile area outside the area farmed by the town inhabitants themselves. In contrast, it is less easy to explain the pattern in the area N of Thespieae and E of Haliartos, namely the area where the Onchestos sanctuary lies (see chapter II.3.8). Here a settlement site would be possible by the Onchestos site also in the Classical-Hellenistic period (although better known is the settlement there in the Roman period, and in the Classical period it could have been only a small hamlet associated with the sanctuary), and the empty area to its S could be explained by the presence of unfertile rocky limestone hills. The other rural sites in the area around Onchestos are on the low hills of the Tertiary *tafel* and in the W part of the Teneric plain. Moreover, the emptiness around Haliartos might be explained by the relatively small area available which could be farmed directly by inhabitants of the city site. As seen above, the three rural sites known are all from the Geometric-Archaic period, when the city site was smaller.

The general filling of the landscape with rural settlement, which can be seen over all Boeotia in the Classical-Hellenistic period (see individual *chorai* chapters), shows

⁴⁹ The areas have been interested by the Boeotia Survey Project. Maps are accurate for the Thespieae S sector (published in Bintliff-Howard-Snodgrass 2007), while for other areas data are still at a preliminary stage.

⁵⁰ See also appendix I.14 – THE TANAGRA SURVEY PROJECT – for Tanagra. Also the absence of known rural sites in the small *chora* of ancient Akraiphia, if it is not a bias in research, could confirm the aforementioned Boeotian urban-rural model, being totally farmed by inhabitants of the city (see chapter II.3.7).

slight differences between the various *chorai*⁵¹. In the Thespieae area, we see the presence of medium-sized farms and hamlets rather than small farms (especially in the inner zones, where the urban centres of Thespieae and Askra are also located), and this seems to happen also in the environs of Thebes. On the other hand, finds in the area of Hyettos, Tanagra and Haliartos conform to the picture of relatively low rural density and a concentration of small to medium farms noticed also in other Greek surveys, in contrast to the picture of high rural density, including large Classical rural sites found in the survey sector S of the city of Thespieae.

Generally speaking, we can also say that farms in the Classical-Early Hellenistic period are usually not at network places (Bintliff-Howard-Snodgrass 2007). Their inhabitants choose the area they like, once living in the countryside is a matter of choice rather than a strict necessity⁵². Rural cemeteries (few of them are known from extensive survey, but some can be spotted by artefact surface surveys as they are easily recognisable due to their distinctive associated material culture⁵³) are associated with farms but are usually not in the same location (Howard 2007), and not really associated with roads, while the city cemeteries were associated with the road network (see *chorai* chapters for examples).

In the Late Hellenistic - Early Roman period, rural farms are almost non-existent in the archaeological record, and in general the sites show a retraction of settlement intensity, in accordance with the major decline in overall activity in all Boeotian *chorai*⁵⁴. For certain areas the decline is also marked by specific historical events, such as in the case of Haliartos, whose destruction by the Romans in 171 AD is followed by a spectacular collapse which also affects the rural landscape. For other areas, the decline seems less pronounced, as in the case of Tanagra. In the Mid to Late Roman period, the landscape undergoes a radical transformation with the appearance of villa complexes associated with forms of dependent labour.

Around the late 4th C AD, a radical change occurs in many parts of Boeotia, with the population rising again and the appearance of Roman villa and hamlet sites (Bintliff 1991b fig.6; Bintliff-Howard-Snodgrass 2007 fig.9.15). It seems that some areas do not participate in this recovery, such as the *chora* of former Haliartos, which never recovered after the destruction.

The peak is observed in Late Roman times, when the total surface area of rural settlements has been measured as twice the Classical-Hellenistic component (in the Thespieae area), redirected into a new pattern of land use, associated with valley soils and marketable and transportable crops as a major product (Bintliff-Howard-Snodgrass 2007: 154-158). The phenomenon has been noted elsewhere in Greece, and seems to be recurrent in Greek mainland rural landscape (Alcock 1993; Jameson – Runnels – van Andel 1994 for Argolid⁵⁵; Cavanagh et al 1996 and Cavanagh-Mee-James 2005 for Laconia). These new sites sometimes occupy the locations of previous rural sites, and sometimes choose new locations, usually somewhat prominent in the landscape, whether in open locations, or on lower terraces, within a river valley. The picture of the rural landscape in the Late Roman period differs considerably from the one of the Classical/Hellenistic period, and differences are related to both the topographical setting and the size of the sites, as well as to the distance from the city⁵⁶. Along with the changing of the property system (Alcock 1993; Alcock 1999; Bintliff 1991b; Bintliff et al. 2008), the larger estates (run by elites with the subordinate work of local farmers and slaves) appear to be closer to the urban centre than were the rural sites of the previous periods. For this, see especially the case of Tanagra, with (Roman)-Late Roman villa sites close to the city, where in the Classical period there were urban cemeteries (see appendix I.14 – THE TANAGRA SURVEY PROJECT). Revealing is the case of the *polis* of Haliartos, destroyed in 171 AD and occupied apparently only by rural establishments in the Roman and in the Late Roman period. A large villa also occupies the site of the Onchestos sanctuary (see chapter II.3.8 for details). A general picture of known sites of the Roman and Late Roman periods can be found in figs.25-26 and figs.27-28 respectively.

⁵¹ For general maps of Boeotia in the Classical-Early Hellenistic period see figs.21-22 and figs.23-24.

⁵² Certainly, we should not forget that rural sites involved in analysis and evaluation of settlement pattern might not be contemporary, and some of them could be short-lived. A large debate is still going on as regards the question of residential/non-residential/temporary farms (see Foxhall 2004, Osborne 2001, Pettegrew 2001; Osborne 1992; Snodgrass 1990; Snodgrass 1987: 117-19; Osborne 1985b as well as the survey project publications).

⁵³ Namely very few freshly broken pieces of fine ware (black-glaze usually), resulting from recent ploughing.

⁵⁴ This was already noted by Alcock 1997, in addition to the Boeotia Survey Project (Bintliff 1991b for an overview on Roman Boeotia using survey data available up to that time).

⁵⁵ In the South Argolid survey they reach the same results analysing their survey data using Thiessen polygons (Jameson-Runnels-van Andel 1994, fig. 6.20).

⁵⁶ These locational changes are discussed in appendix I.14 - THE TANAGRA SURVEY PROJECT- and chapter II.3.14 – RURAL SEGMENT.

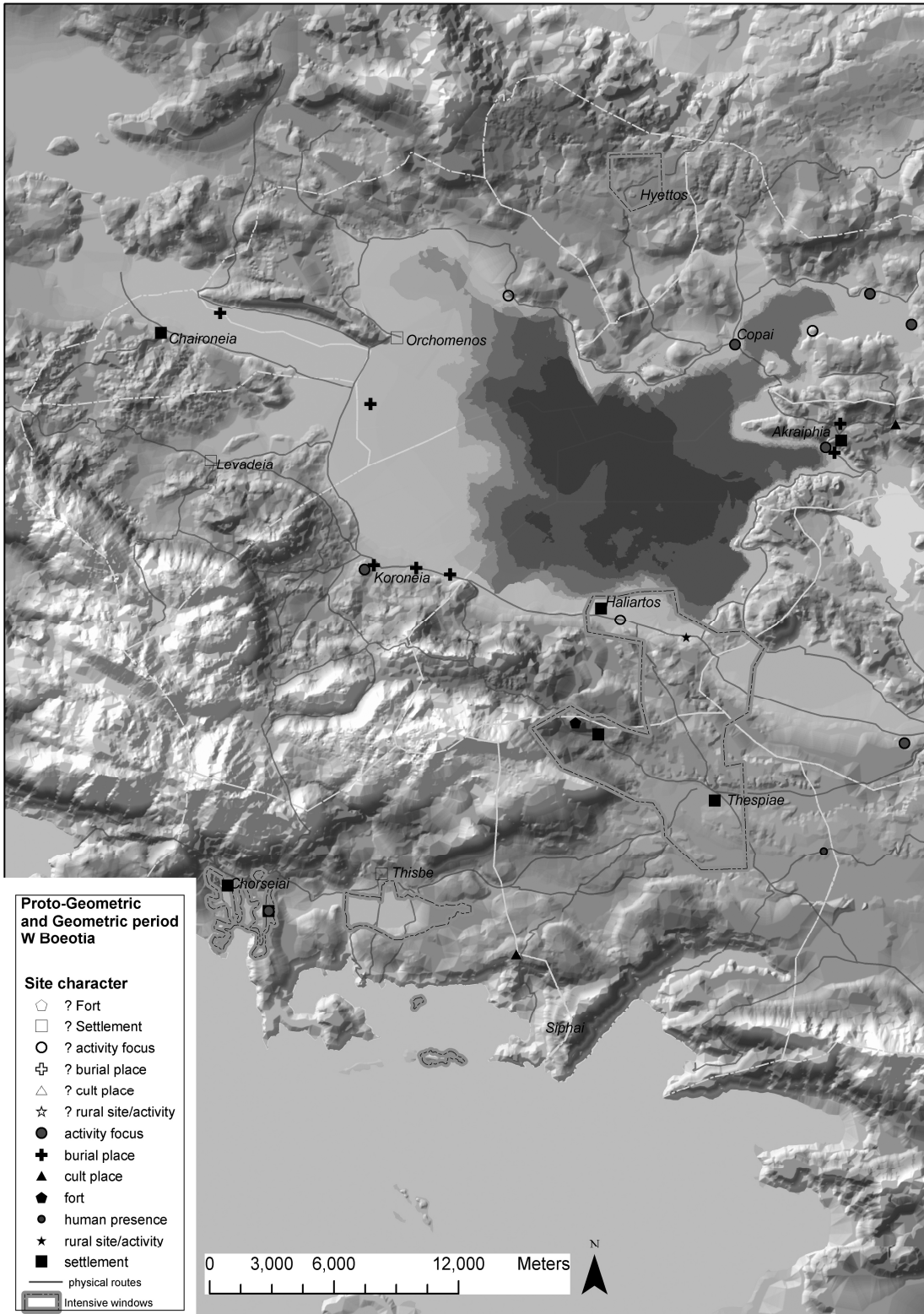


Fig.17. PG and G map of W Boeotia

II.4 LANDSCAPES OF ANCIENT BOEOTIA

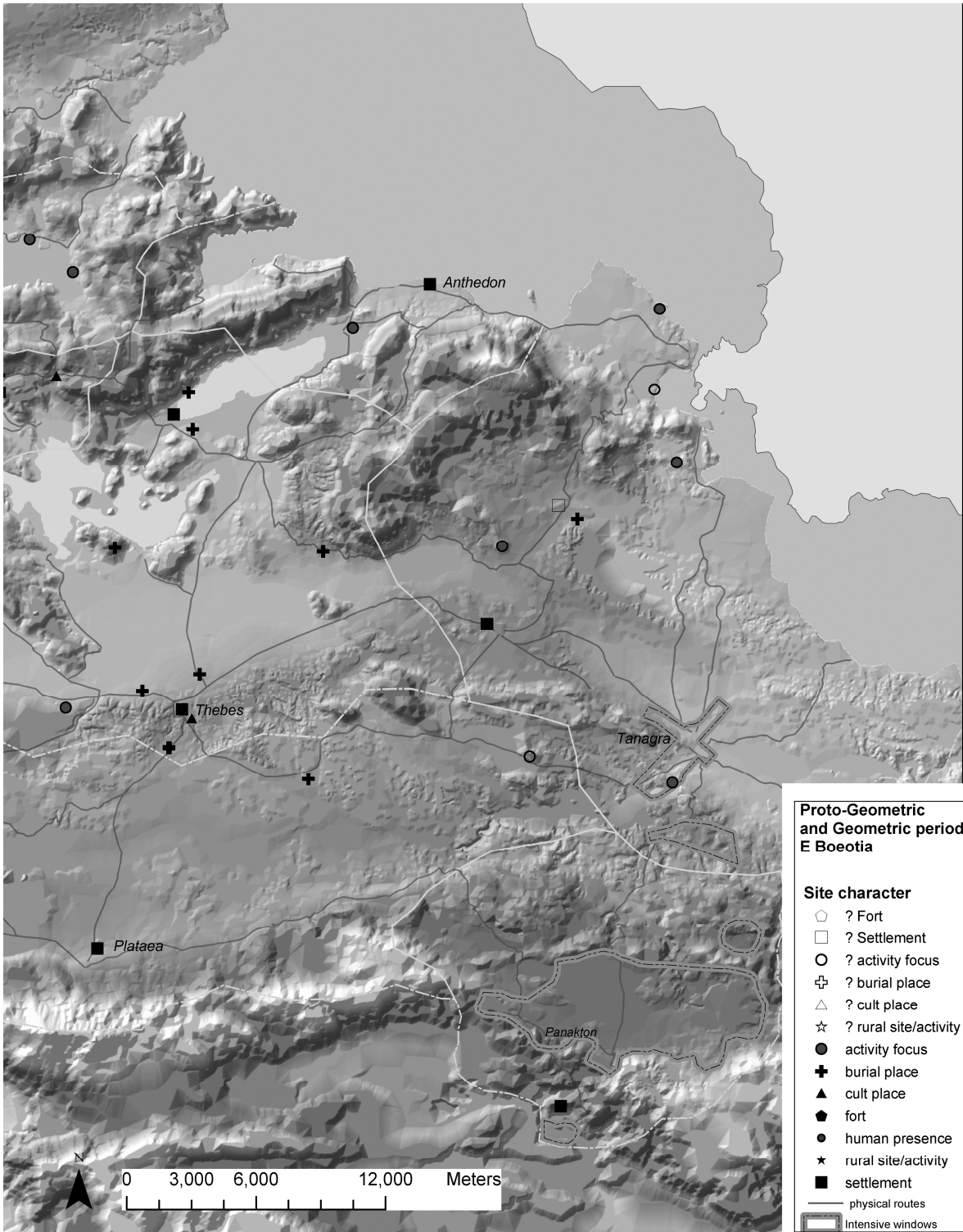


Fig.18. PG and G map of E Boeotia

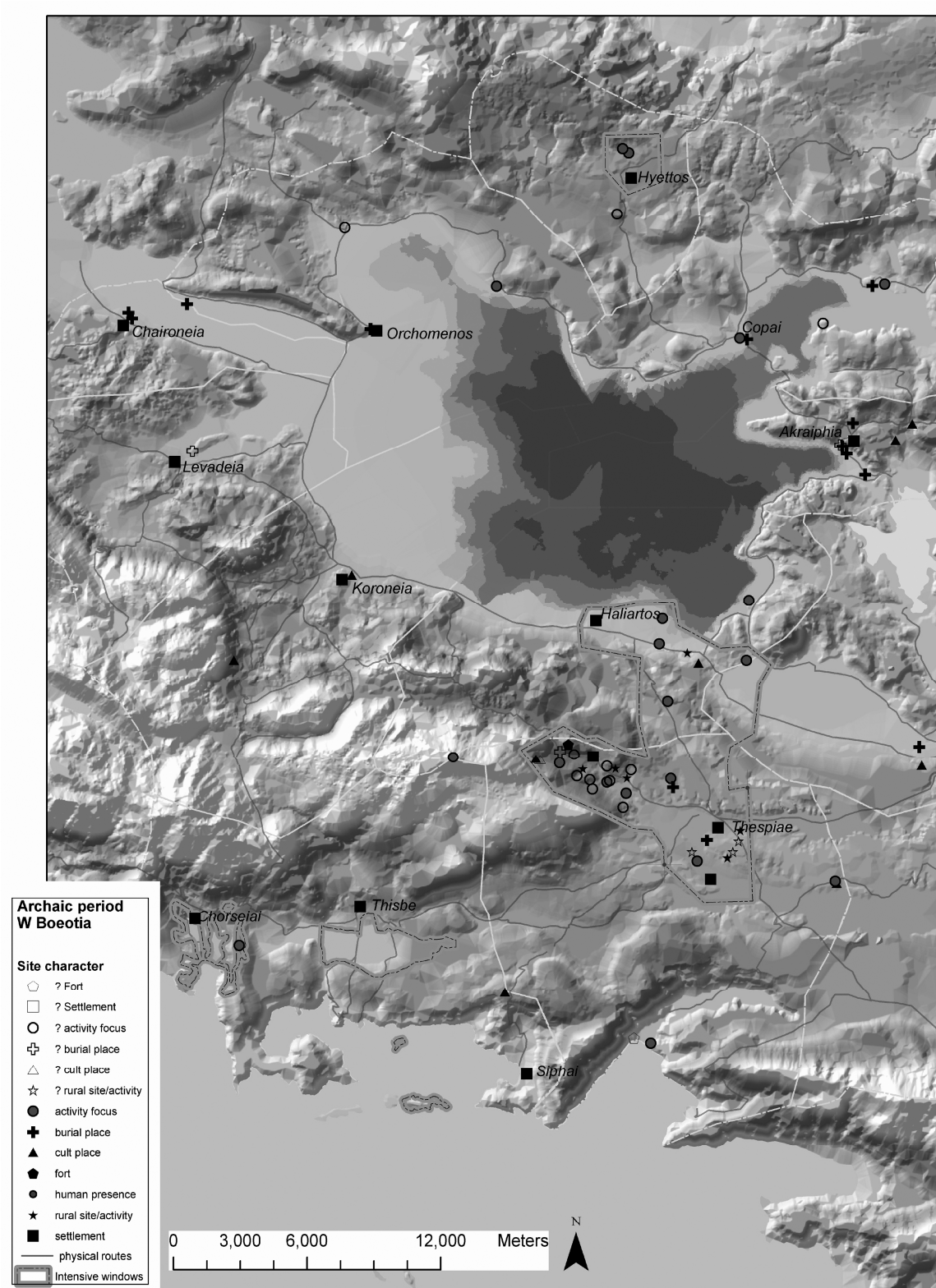


Fig.19. A map of W Boeotia

II.4 LANDSCAPES OF ANCIENT BOEOTIA

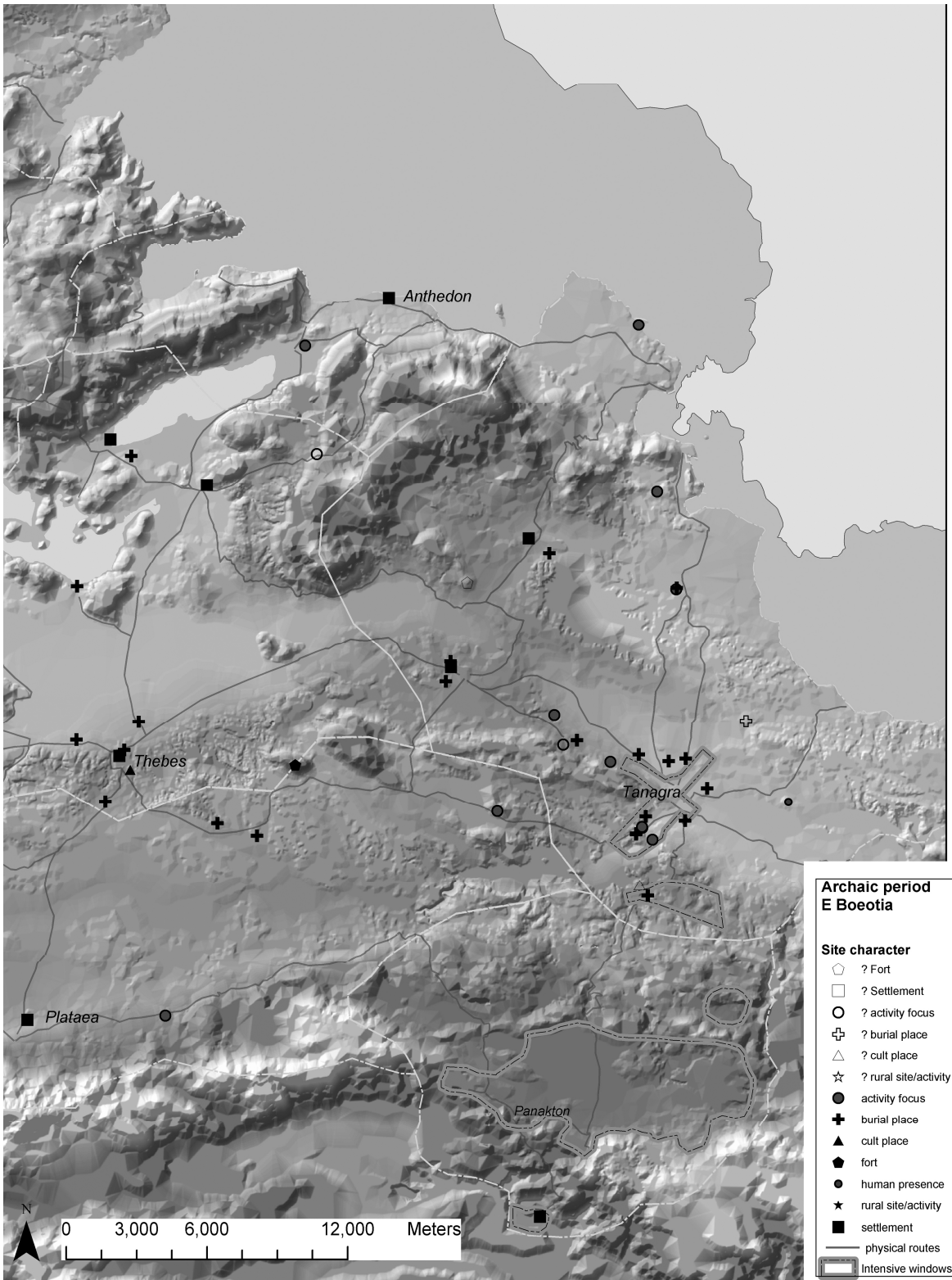


Fig.20. A map of E Boeotia

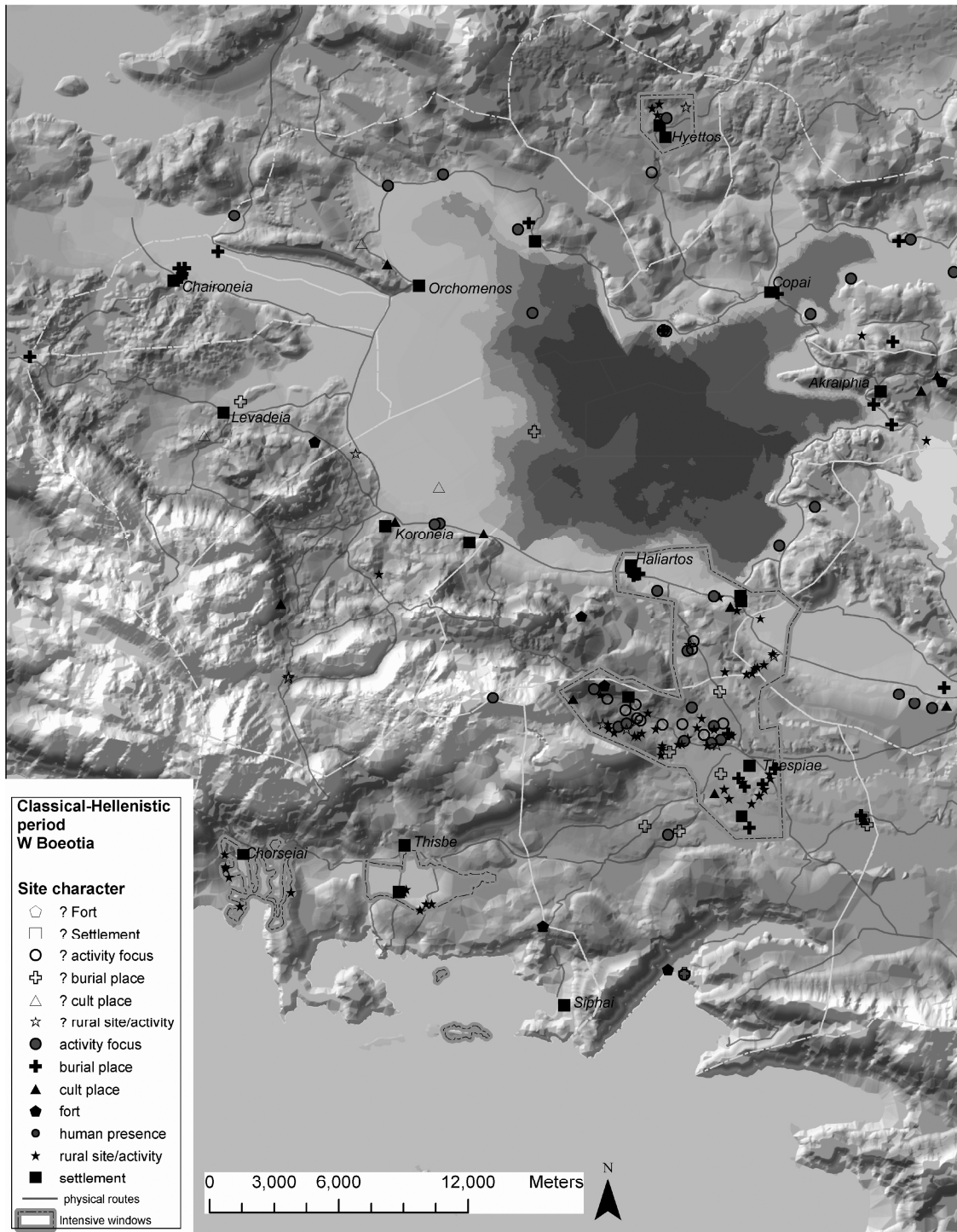


Fig.21. C-H map of W Boeotia

II.4 LANDSCAPES OF ANCIENT BOEOTIA

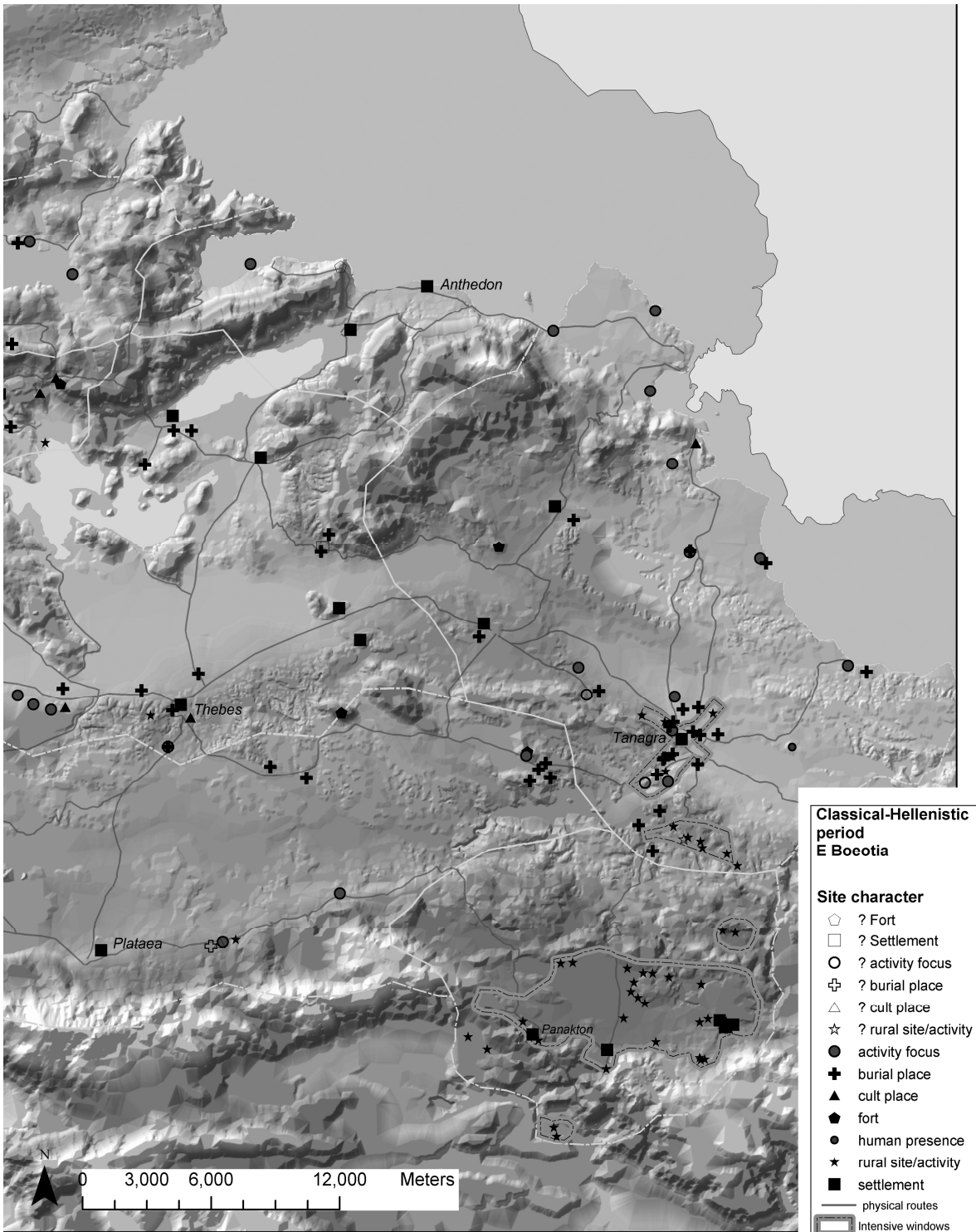


Fig.22. C-H map of E Boeotia

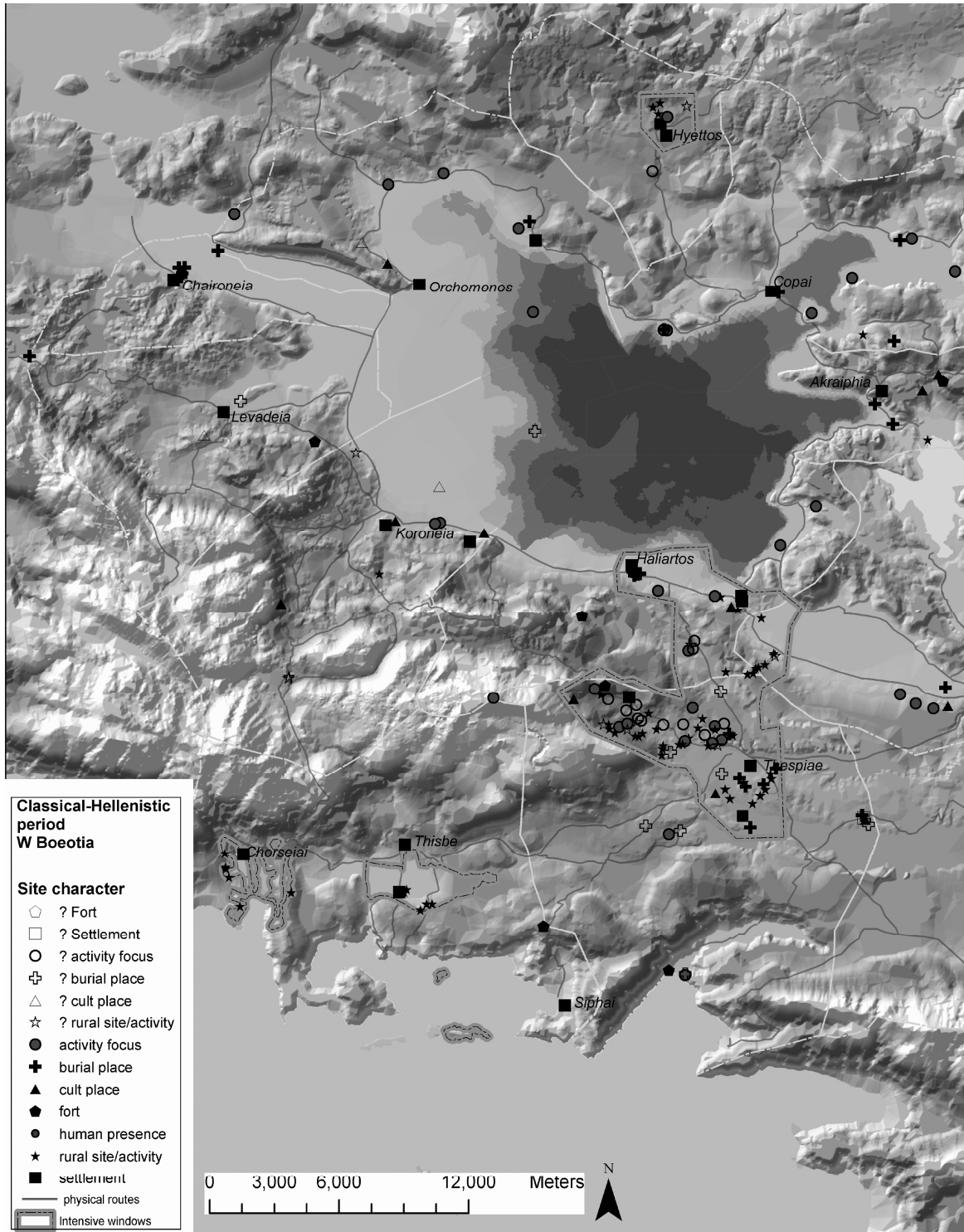


Fig.23. C-H map of W Boeotia (with the addition of the components generally dated to the Greco-Roman period)

II.4 LANDSCAPES OF ANCIENT BOEOTIA

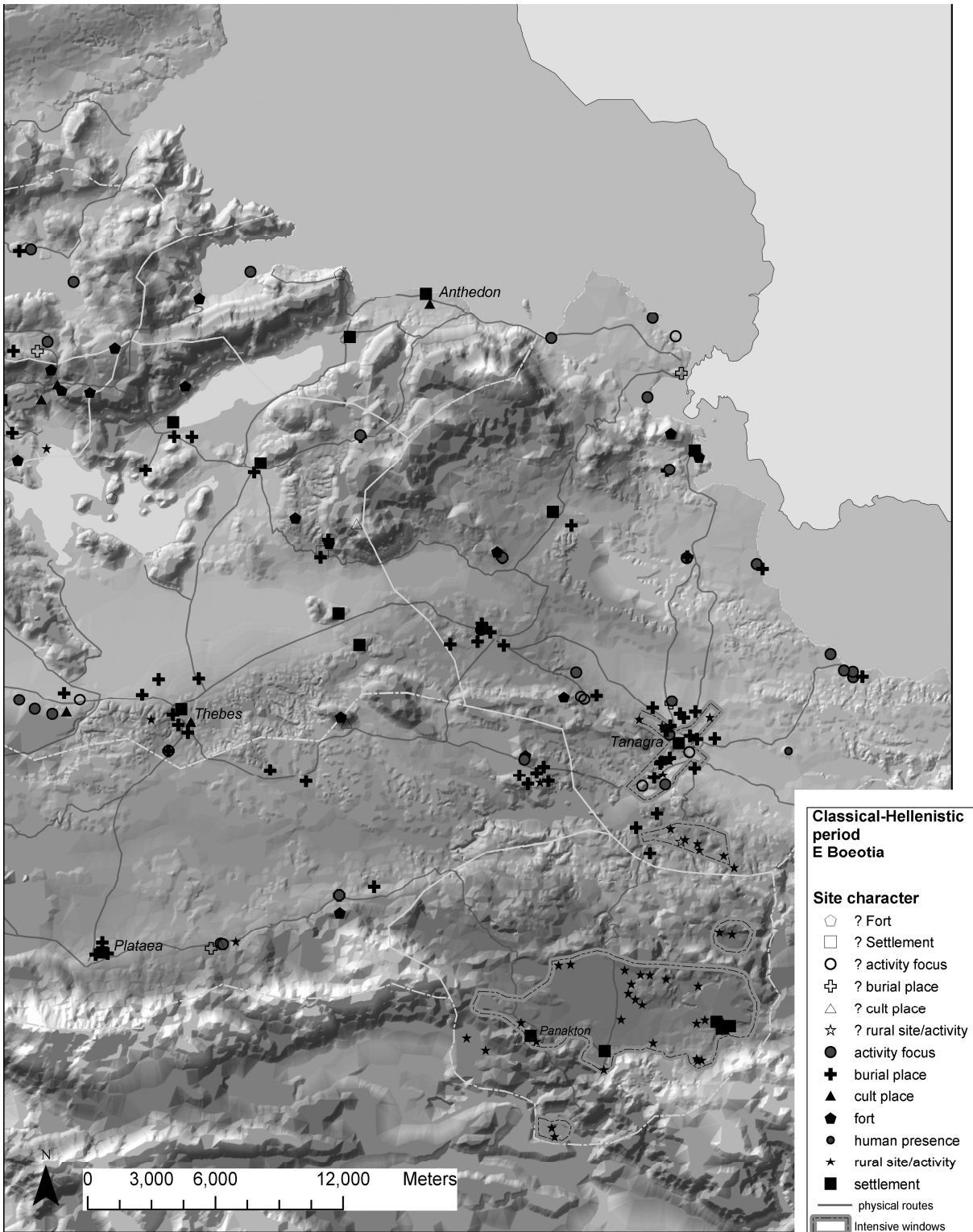


Fig.24. C-H map of E Boeotia (with the addition of the components generally dated to the Greco-Roman period)

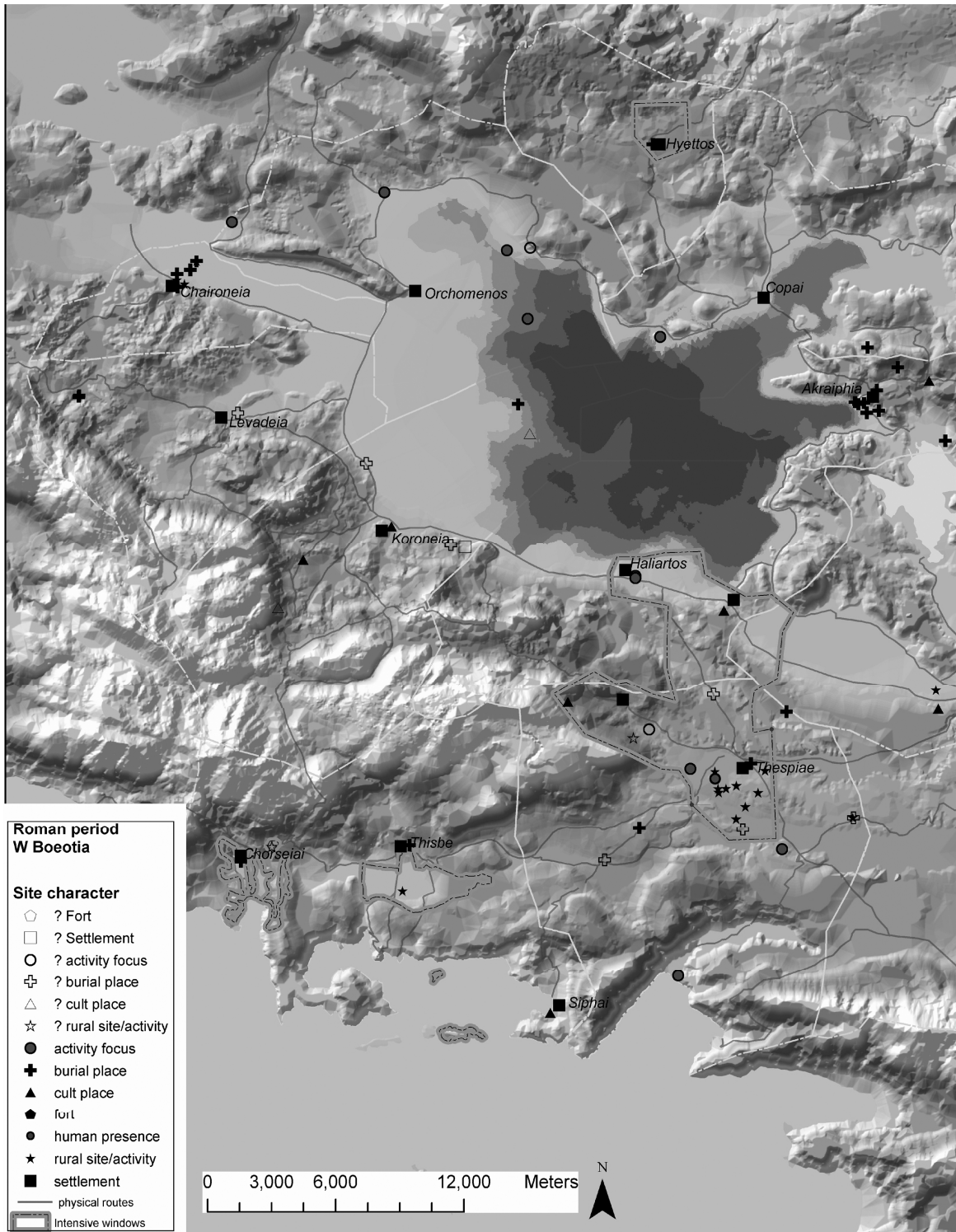


Fig.25. *R map of W Boeotia*

II.4 LANDSCAPES OF ANCIENT BOEOTIA

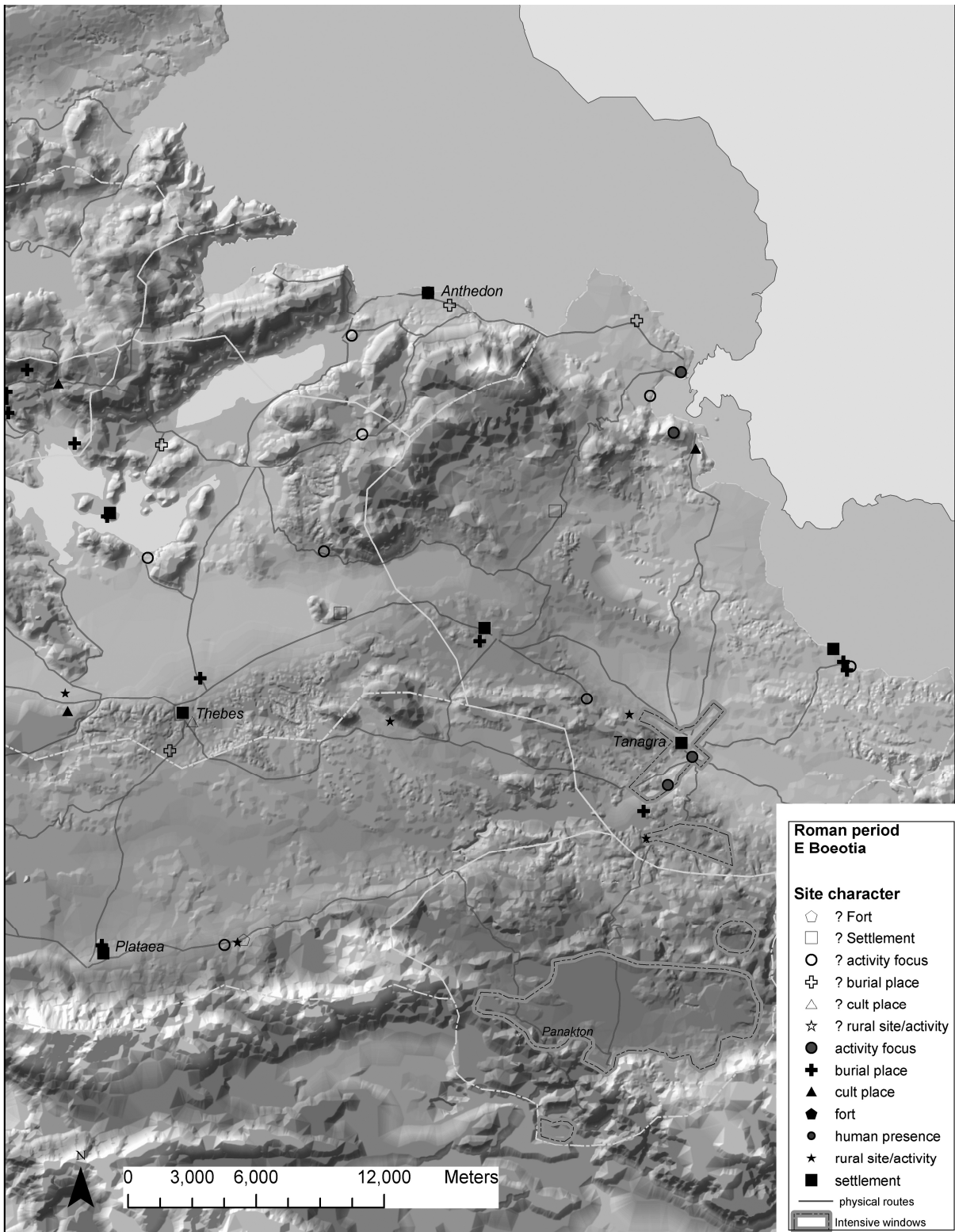


Fig.26. R map of E Boeotia

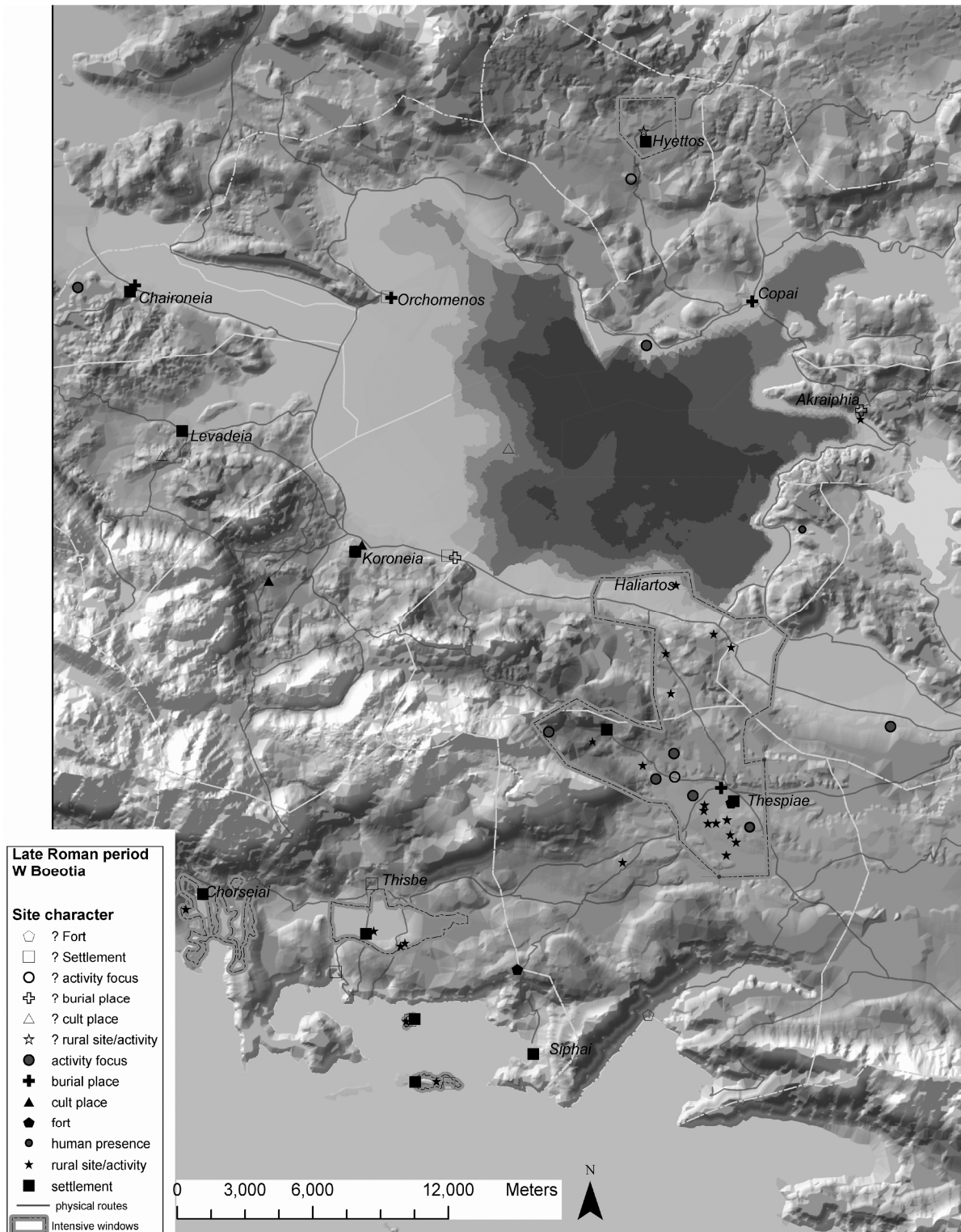


Fig.27. LR map of W Boeotia

II.4 LANDSCAPES OF ANCIENT BOEOTIA

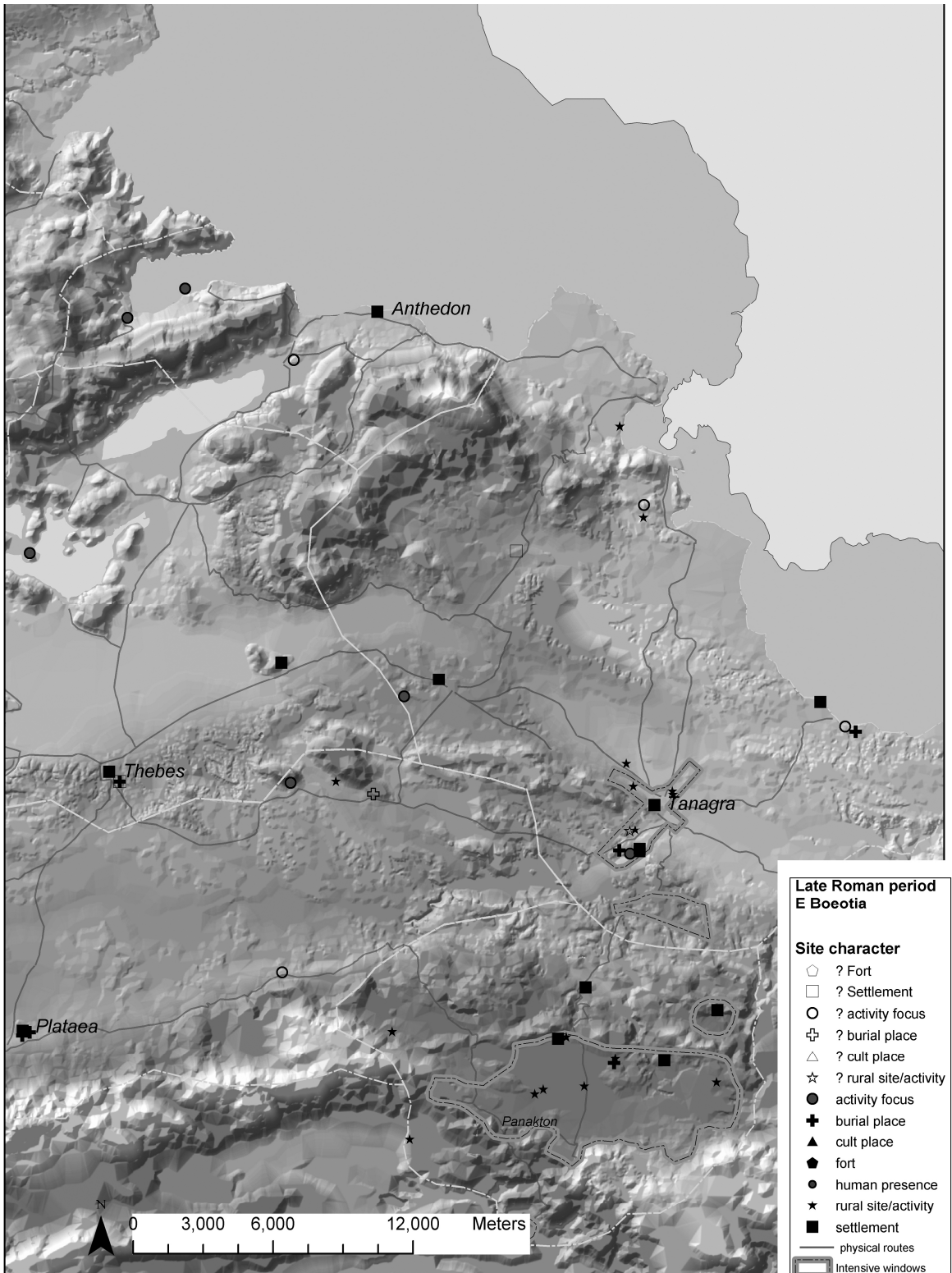


Fig.28. LR map of E Boeotia

THE LANDSCAPE OF THE BOEOTIAN CONFEDERATION

According to what has been pointed out earlier in this chapter, the district-structures which proved to be typical of the Boeotian landscape also constitute the territorial basis of the Boeotian Confederation. We could therefore focus on landscape structures/patterns which clearly marked the landscape and could be linked to historical dynamics put into effect by the Confederation.

On the basis of that which has been stated and discussed above, there are several diverse elements which can give an impression of the possible socio-political and cultural landscape of the Boeotian confederation. Some key themes have been chosen for analysis: the socio-political community chambers (examined above), as well as the fortified landscape of the confederation, and the federal sacred landscape (discussed in the following section).

The fortified landscape of the Confederation

Fortified settlements are often the subject of research within landscape archaeology, as well as forts, watch towers and fortifications considered in their mutual relationships and in relation to the surrounding environment and landscape (physical and cultural) features. The elements marking these landscapes are studied according to the topography and the environment in which they are situated, as well as according to their historical and socio-political values, in relation to the community which realises, uses and lives with them.

Fig.29 shows the Greco-Roman forts (including those both precisely and imprecisely located, as well as precisely or imprecisely dated¹). As one can see, the majority of the Greco-Roman forts (mainly dating or at least used in the mid-late 4th C BC – Theban Hegemony – which especially in the S part of Boeotia have a typical style and masonry²) are located on the hills separating the ‘two

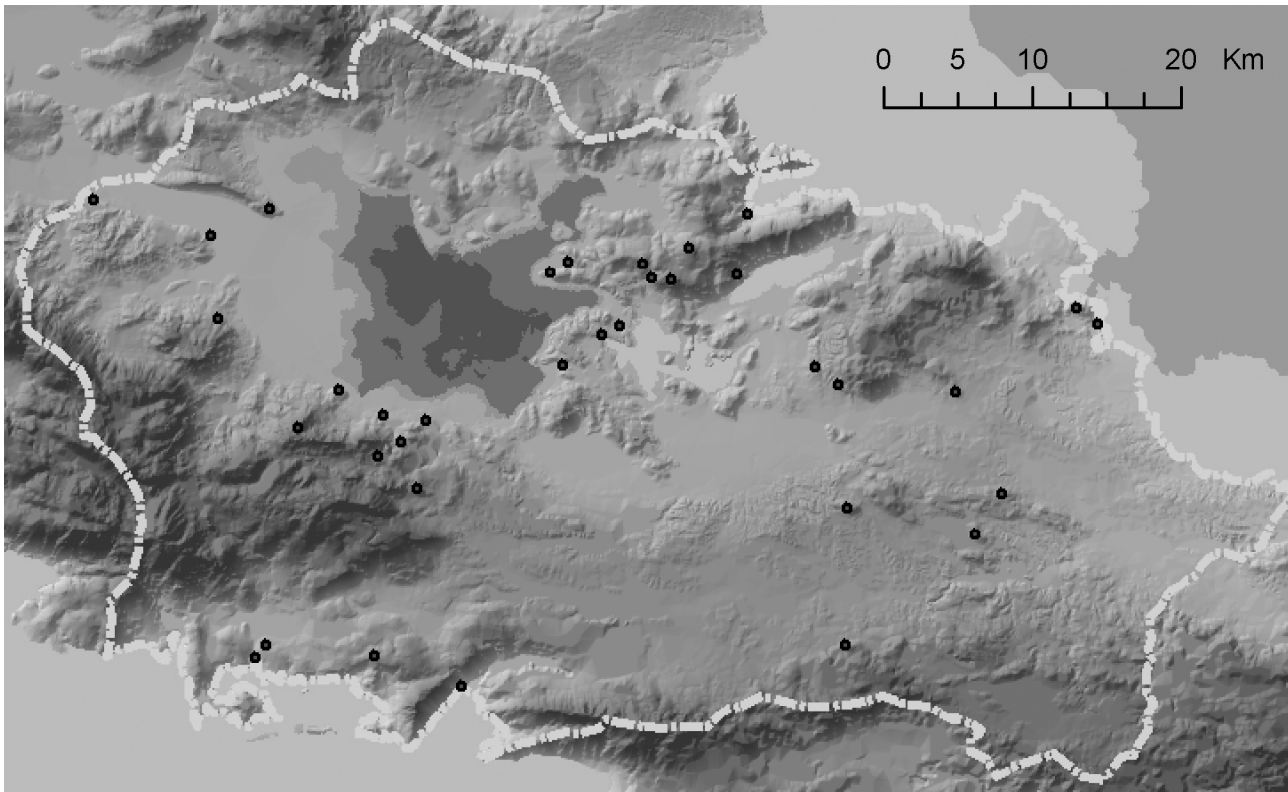


Fig.29. *Greco-Roman forts (including both the precisely and imprecisely located, as well as the precisely or imprecisely dated).*

¹ More certainly dated are the forts in the *chora* of Thespieae, carefully examined for masonry style by Fossey (1988: 142-3), and in general those in S Boeotia. The high presence of forts in the *chora* of Akraiphia is not dated with certainty (they are reported mainly by Lauffer, whose research was performed on the basis of Noack's work (AM 1894: 458-460), who thought the forts were Prehistoric – see chapter II.3.7).

² The typical S Boeotian style (mid-late 4th C) has been studied by Fossey 1992. On forts of mid-late 4th C see also, among others, remarks in Kallet-Marx 1989 and Camp II 1991 and Camp et al. 1992.

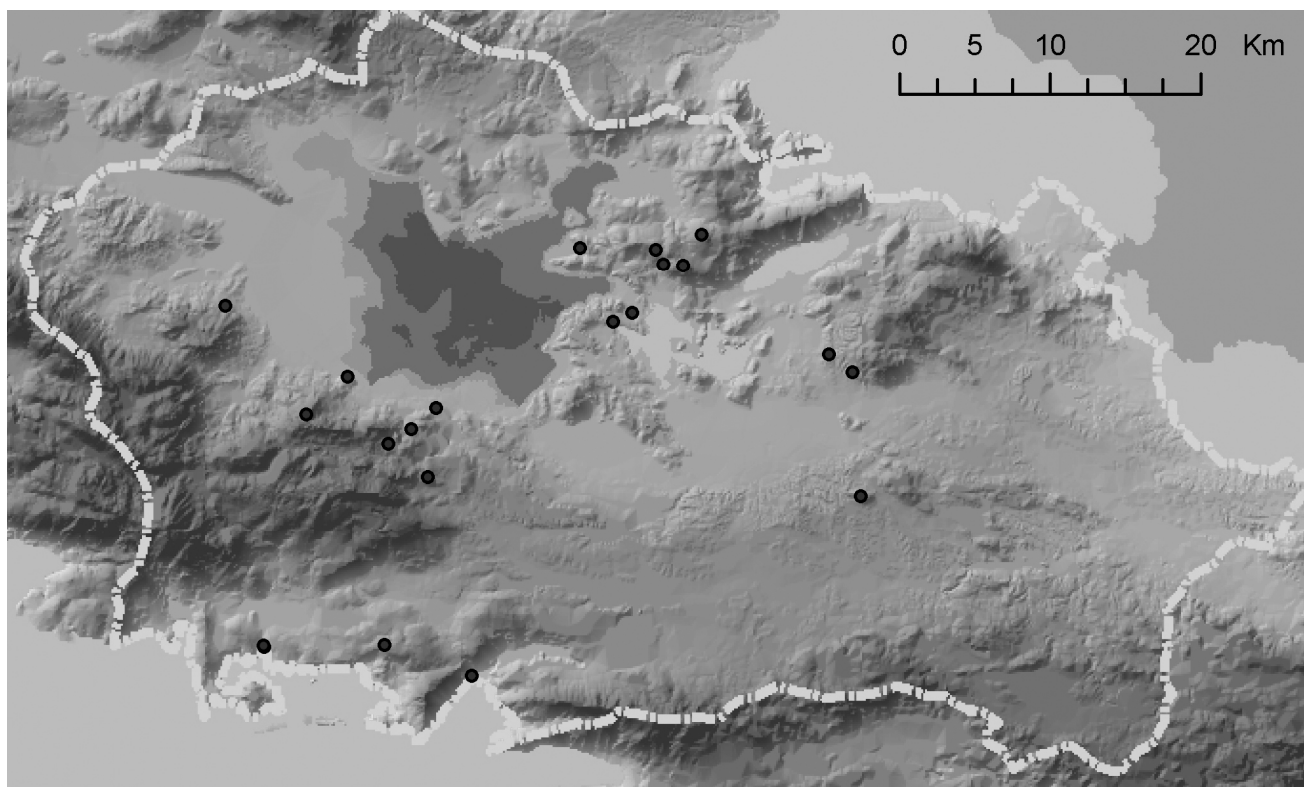


Fig.30. Forts (precise and imprecise location) most probably belonging to the mid-late 4th C fortification system.

Boeotias' (i.e the Copais area to the NW and the Theban plains to the SE – see above). Other forts have specific 'raisons d'être', such as those controlling bays or mountain passes (see for instance Ano Siphai – *component GC_13*). This is even clearer in fig.30, where the forts certainly or probably belonging to the mid-late 4th C BC – Theban Hegemony³ – have been mapped. They are all concentrated in the central areas, with the exception of the forts overlooking and controlling the main harbours on the gulf of Corinth and those controlling the pass from the E plain of Boeotia to the Theban plain (the centrality of Thebes is evident from the layout of the forts that the city most probably controlled). The westernmost tower is located on Laphystion ridge (Camp II 1991).

Fig.31 displays the results of a viewshed analysis⁴ carried out on the forts in certain positions and with most probability belonging to the mid-late 4th C fortification system. Only very general results can be obtained from the analysis and very general questions can be addressed, as the low resolution of the base DEM available and the scale of the map on which the positioning are based (see chapters 1.2.1 and 1.2.2) would not allow for further

details and precision. In order not to bias the analysis further, the forts with uncertain or unknown position were removed from the dataset. In considering the entire region of Boeotia, half of it is probably controlled by these forts. The majority of the controlled area is constituted by the fertile lowland plains, the Copais, and the mountain passes, with the exception of the Asopos valley (Parasopia). The latter would have been controlled probably by some of the forts of uncertain or unknown position not included in this analysis. *Components PP_47* and *PP_56* (on the Soros and at Prophitis Ilias above the modern village of Asopia) would probably meet this requirement - once checked with viewshed analysis, it transpired that they controlled the Asopos valley, in the Parasopia and also towards Attica and the sea, especially *component PP_56*, though the date is not certainly 4th C. Worthy of remark is that all of Copais is controlled (always the hardest for Thebes to control – see above), as well as the crucial/strategic passage from Phokis through the Chaironeia basin (from which external invaders from the N always came throughout the whole of Boeotian history). Other strategic passes are also controlled, such as that from the S through the Koroneia basin. The forts of Classical-Hellenistic date are not there to control places but to relay enemy movements, since most of them are intervisible in chains.

³ Theban hegemony over the whole of Boeotia, first of all, with the need for control over the other Boeotian *poleis*, which always sought autonomy (see Buck, Hansen, etc.).

⁴ For the concept and methods of GIS viewshed analysis see among others van Leusen 2002: chapter 6 and Wheatley and Gillings 2002. Viewshed analysis has been performed here using the module/routine provided by ESRI ArcGIS 8.1.

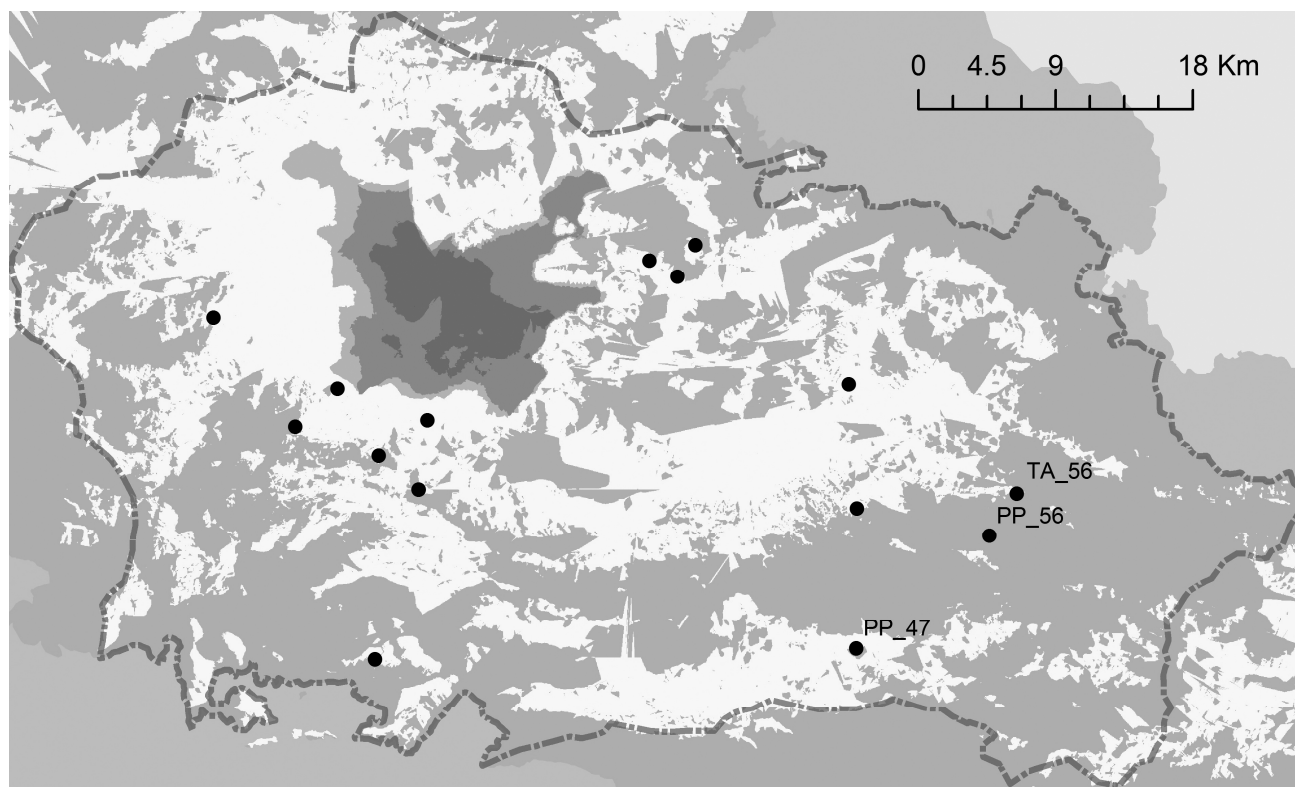


Fig.31. Forts precisely located and with most probability belonging to the mid-late 4th C fortification system and viewed analysis (visible areas are marked in light colour).

The Tanagra area was apparently not controlled, or only partially, along the Asopos by *component PP_56* (4th C BC date uncertain), and in the N part of its territory by *component TA_56*. Probably the lack is partially due to the incompleteness of the archaeological record, but the examination of historical factors (not examined here because they fall outside the immediate purpose of the study) could provide a better explanation. Certainly, we do have the Anaphorites long wall in connection with the Megalovouno fort (*component TA_144*), and this would have constituted a historically defined border for Theban territory⁵.

The federal sacred landscape

In the Greco-Roman periods, archaeological evidence, and historical and epigraphical sources contribute to the understanding of features and relationships between elements of the past human 'sacred landscape' and the communities of which they are material expressions.

Within the Boeotian landscape, cult places are known which can be linked to landscape activity zones. For instance, cult places are known in mountainous areas suitable for pasturage, and they are dated to periods when pastoral activities flourish (examples in the Boeotian record could be the Agia Triada cave site, the Ptoion sanctuary). Cult places in mountainous or border areas,

beside their cult/ritual role, often had an additional twofold function as border markers and signs of specific economic areas, to which the worshipped cult was often linked (see above). Cult places are also known in the plain and lowlands as possibly linked to agricultural activities or to the rural occupation of the landscape. Furthermore, cult places (or places of 'ritual'/sacred evidence) can be linked to the economic use and social relevance of marshy areas (see appendix III and chapter II.3.1), e.g. the Classical-Hellenistic Herakles sanctuary by the source of the Melas – *component O_35* ⁶, the possible Classical-Hellenistic cult place site in the locality of Xinos attributed to Apollo – *component KO_69* -, the Agioi Taxiarchoi sanctuary of Roman date in the Pontsa locality – *components KO_31 and KO_32* -), or even to drainage works and activities. The Boeotian landscape is also marked by some physical landscape features which receive a sacred value/meaning in themselves, as in the case of the Sphiggion mountain, i.e. the mountain of the Sphinx, or the sacred landscape of Ypaton/Moni Sagmatas, between the Thebes and Tanagra areas.

When dealing with the landscape of the Boeotian Confederation, one could take a closer look at some cult places to which can be attached a particular meaning within the social landscape in the Classical period. In this

⁵ As pointed out by Philippson (1951: 498), the road from Chalkis to Thebes would have run through the Anaphorites pass (400m).

⁶ The links of Herakles to water and watery zones are strong. See Pappadakis AD 2 (1916): 217ff for a list of cults of Herakles in the Copais.

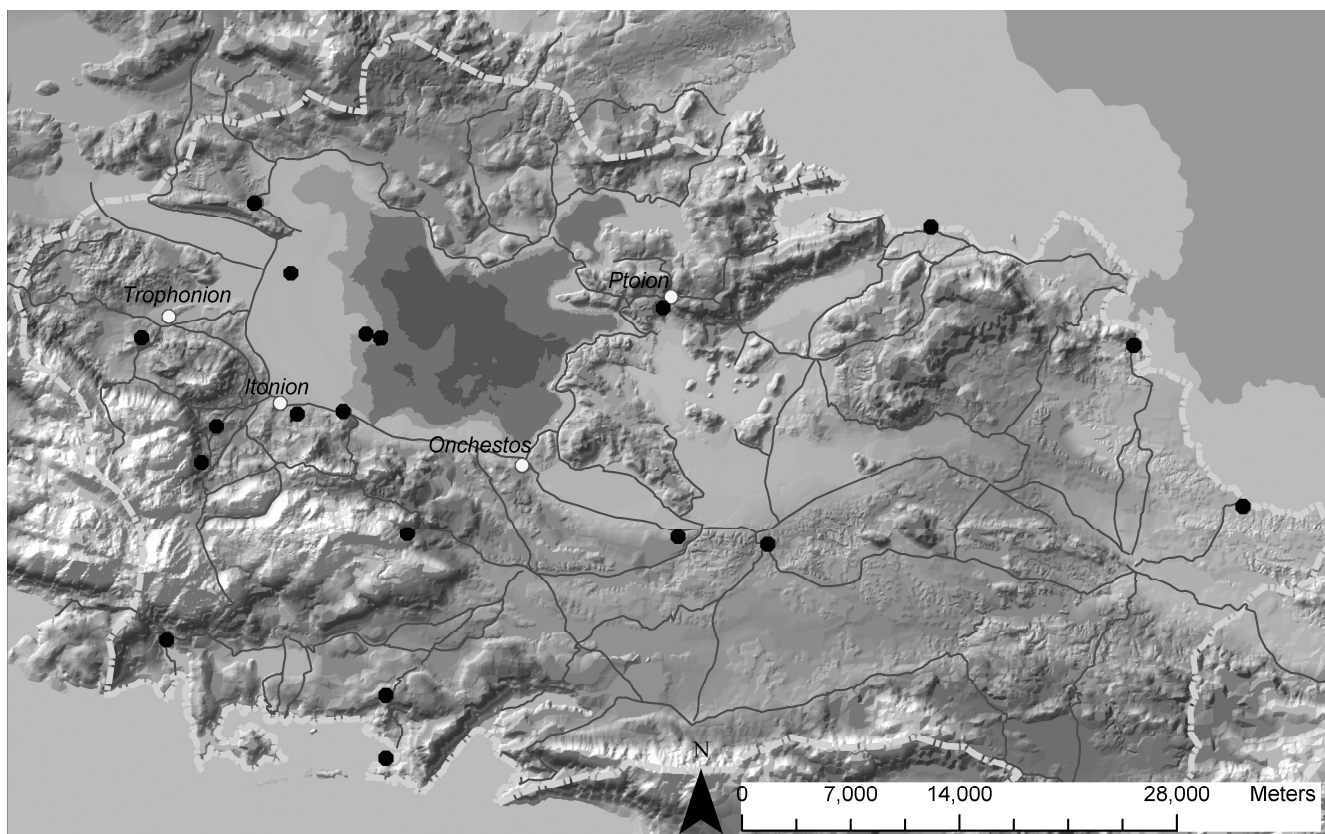


Fig.32. Map showing Greco-Roman temples and sanctuaries and physical routes. Federal sanctuaries are marked in the light colour.

way, we would find cult places marking the borders between communities, such as the temple of Zeus Laphystios (on the Laphystion ridge between Koroneia and Levadeia), the sanctuary of Poseidon at Onchestos marking a crucial passage between the Theban plains and the Copais area, or the sacred mountain of Ypaton between Thebes and Tanagra, as well as cult places which are linked to relationships between communities. The latter is the case for the federal sanctuaries, such as the Itonion by ancient Koroneia, dedicated to Athena Itonia, the Ptoion, dedicated to Apollo Ptoios on the Ptoion ridge, the sanctuary of Poseidon at Onchestos, and the prophetic shrine at Levadeia dedicated to the healing hero Trophonios. In addition, cult places are along and related to mountain passes, such as the Ptoion sanctuary, or along long-distance roads, which involve the issue of communication between communities).

In fig.32, we can see the cult places of the Greco-Roman period reported in the bibliographical record for Boeotia (comprehensive of federal, extramural and local sanctuaries) and their relationship with recognised physical routes. Cult places are located mostly along routes, either along roads exiting the city sites (extramural sanctuaries) or along long-distance communication routes, running both in the lowlands (for instance component NC_32, and components KO_27/28 at Petra) and through mountain passes (for instance the sanctuary and *heroon* at Kastraki and Perdikovrisi on the Ptoion – components AK_29 to AK_37).

The federal sanctuaries are located along the main routes (see fig.32): at the pass between the Theban plain and Copais (Onchestos), along the main perilacustrine communication route joining Attica and Thebes to Levadeia-Orchomenos and Phokis (Itonion), along the mountain pass joining Copais with the area of Thebes (Ptoion), and along the route exiting Boeotia to the NW, at Levadeia (Trophonion). At the sanctuary of Athena Itonia (Itonion, see chapter II.3.1 and appendix I.1 for identification) the *Pamboiotia*⁷ were celebrated, while at Onchestos, games, whose origin could be traced back to the Bronze Age, used to take place⁸. For the importance and socio-political meanings of the sanctuaries linked to the Confederation, see Schachter's book 1981-1994 and studies on the Confederation (Roesch 1965; Larsen 1968; Buck 1972 and 1979). For details of them see also the relevant archaeological components in the *chorai* chapters.

One could point out that even if non-federal cult places often lay along long-distance communication routes or along border lines as seen above, they were therefore anyhow linked to the relationship between communities, thus always involving the socio-political dynamics.

⁷ Pausanias IX 34.1; Strabo IX 2.29. Ziehen 1949. The feast had an essentially military character (Roesch 1965: 107f.; Amit 1971: 57f.).

⁸ Roesch 1965.

