

Issues in the Economic and Ecological Understanding of the *Chora* of the Classical *Polis* in its Social Context: A View from the Intensive Survey Tradition of the Greek Homeland

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This paper will present aspects of method and theory relating to our understanding of the *chora* of the Classical Greek *polis* in the Aegean homelands, and it will offer questions about related topics in the Black Sea colonial territories which I hope our many experts in that region can respond to.

Intensive surface survey in the Aegean today typically involves teams of fieldwalkers at 15-20 metre intervals crossing large areas of the landscape, systematically counting and collecting continuously surface artifacts, essentially potsherds, and also recording architectural and other surface debris. Concentrations of artifacts or clusters of distinctive finds are subsequently treated as “sites” and should be gridded for intensive plotting of finds. Even the largest surface sites such as major cities (Fig. 1) can be studied in the same way. Further study of sites can include geoprospection which can now be carried out for entire cities (Fig. 2) and detailed chronological and functional analysis of the surface finds by period experts.

(1) The *chora* was inseparable from the *polis*, and this depended in the homeland on the peculiar relationship between citizen rights and ownership of land. Indeed, since only around a half of the *poleis* had any kind of moderate democracy, the others being more narrowly oligarchic or under individual tyrants, our literary overemphasis on the unparalleled democracy of Athens is as always highly unhelpful in comprehending typical aspects of Classical town and country life. In any case, even those moderate democracies were largely providing full rights to the more substantial farmers of the hoplite class. It has been suggested that the kind of land holding or *kleros* in the homeland qualifying a farmer to this class or above was some 3.8-5.4 ha. On the other hand, variations regionally in the kind of land use and in climate might mean that both within the Aegean and especially so in the Greek colonies, plot sizes might vary both upwards and below this figure (e.g. obviously wine growing and pasture specialization could often imply respectively much smaller areas

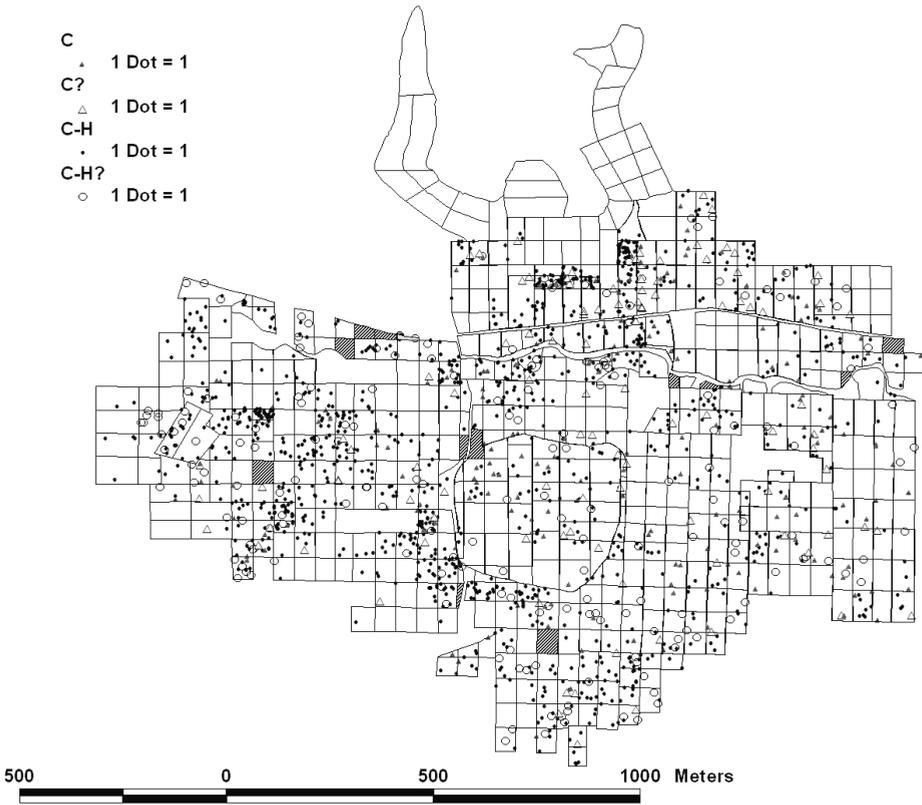


Fig. 1. Survey grid over the 100 hectare city of Thespiai, Boeotia, with the distribution of collected surface sherds of Classical and Classical to Early Hellenistic date.

or much larger being typical, whilst research in the Maghreb has shown that the relative size of ancient olive plantations was typically far larger than in the Aegean for climatic reasons). Nonetheless, it has recently been pointed out that there are strong limitations on the scale of estates in relation to available labour: a peasant family with a single ox-plough would be hard put in the Aegean to cultivate even as much as the 4-5 ha plot noted above, whilst growing wine or olives as major commercial crops – rather than for autoconsumption plus a small marketed surplus – requires at harvest extra labour, traditionally provided by hired workers in recent times in the Mediterranean.

Questions for the Black Sea: What is the position regarding holding sizes and land management here, or the roles of slave, hired labour and basic peasant family input?

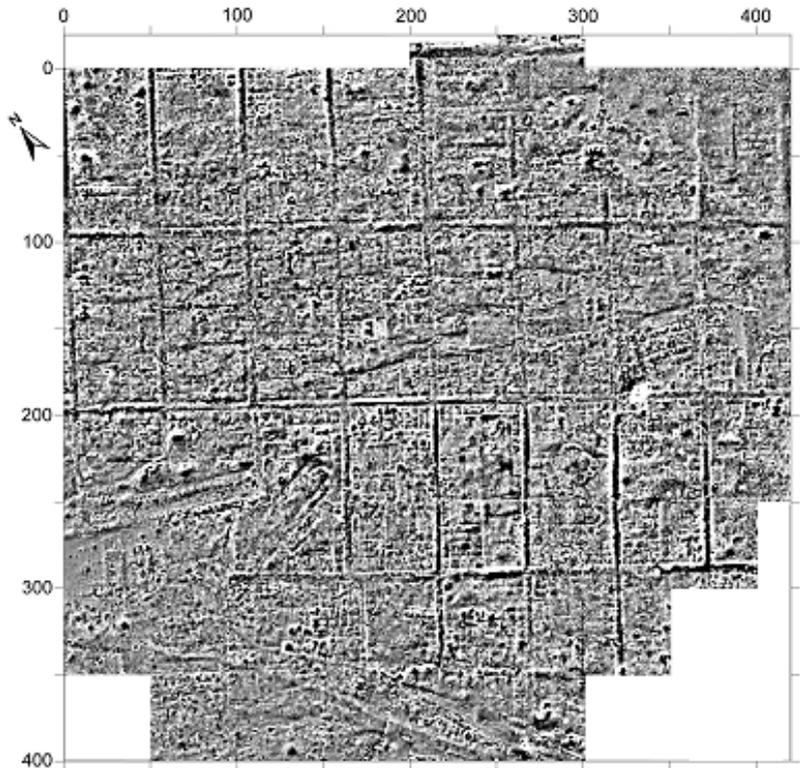


Fig. 2. Geophysical plots from the 30 hectare city of Tanagra, Boeotia (by Dr. B. Music and Prof. B. Slapsak, Ljubljana University).

(2) The close tie between the main city (*asty*) of the *polis* and its *chora* meant that in the homeland most citizens were full or part-time farmers. Although this should have meant that, as in Medieval Western Europe, a small percentage – 10-20% of the population – might have lived in towns (as craftspeople, merchants, or professional lawyers, the rentier class, etc.), with the rest in villages, hamlets and farms, intensive survey in the Aegean suggests rather that 70-80% of the Classical Greek population probably dwelt in urban settlements (which I would define here as 10 ha or more in size, or some to many thousands of inhabitants). In contrast then, only some 20-30% of the Classical population would typically have lived in the countryside at lower levels of the settlement hierarchy. This seems counterintuitive when we view the dense numbers of rural farms discovered by intensive surface survey in the Aegean, but many if not most of these seem short-lived, and even if we took all as contemporary, their estimated population summed is vastly overshadowed by the likely inhabitants of the large number of urban sites which they focus around. The reasons for this seem to be both socio-political and economic. On the one hand, the involvement of citizens, at least of the hoplite and aristocratic classes, in the political, as well as intense socio-cultural and ritual life of the *polis*, made *asty* residence highly desirable if not essential, and the same may have been true of the larger satellite settlements or *komopoleis* within the *polis* borders. On the other hand, as careful analysis by ancient historians has shown, the average territory in the Aegean of the typical or *Normalpolis*, is a mere 5-6 km in radius – so that in theory all the *asty* dwellers could reach the limits of the *polis* farmland in an hour or so of travel – a time considered by human geographers to be an approximate limit for regular and very effective exploitation in a mixed farming economy. In actuality, recent research suggests that often in practice the radius of direct exploitation from the *asty* proper was more like a mere half hour radius (2-3 kilometres), beyond which begin to appear substantial hamlets or villages with similar catchments (Fig. 3). Such forms of intensive land occupation in the Aegean can be associated with even more favourable conditions for farmers to prefer to reside in the *asty* or its *komopoleis*, and perhaps not surprisingly cross-cultural studies confirm that such 2-3 kilometre catchments are frequently observed in dry-farming cultures. One reason for the prevalence of satellite *komai*, apart from the efficient access to land for a society preferring to live in nucleations, is that many in the homeland were probably formerly autonomous communities (I have called these “proto-poleis”) in the early Iron Age to Archaic period, being later absorbed by a dominant settlement in its rise to local *polis* status.

Questions for the Black Sea: What is the pattern and role of subsidiary settlements to the *polis* here, and how do the human work logistics look regarding travel into the *chora*?



Fig. 3. Cellular pattern of villages (black circles) and towns (black triangles) reconstructed and hypothesized for Classical Boeotia, territory radius circles set at 2.5 km.

(3) These characteristics of the Aegean *Normalpolis* have been summarized in the concept of the *Dorfstaat* (effectively the typical *polis* was the size of a large traditional Aegean village of a few thousand people), where towns of 10-30 ha are common, larger rarer, and giant interregional centres such as Athens, Thebes (cf. Syracuse) of several hundreds of hectares can be termed *Megalopoleis*, operating on a very different geographical and functional level. Nonetheless, beneath the *Megalopoleis* we can discover the same structure of towns and dependent village-hamlets with similar catchments, imposed both by ergonomics and earlier autonomous settlement seeding (e.g. Boeotia and Attica) (Fig. 4). In Attica, despite the vast size of the Mainland *chora*, what we actually see is a mosaic of many *komopoleis* and village-hamlets operating over small catchments, with a putative intensive “market garden” zone or Greater Athens in the close-packed hamlets immediately around the walled town. It does seem to be often the case that colonial *chorai* could be much larger than those in the homeland (e.g. Anatolia, Magna Graecia). Joseph Carter at this conference told us about his remarkable project at Metapontion (see contribution in this volume), but a typical question that strikes one from his survey maps is how the relationship functioned between that city and the quite distant but dense scatter of Classical farms in its deep hinterland – were there also satellite settlements acting as foci in the larger *chorai*? We can show in Boeotia that,

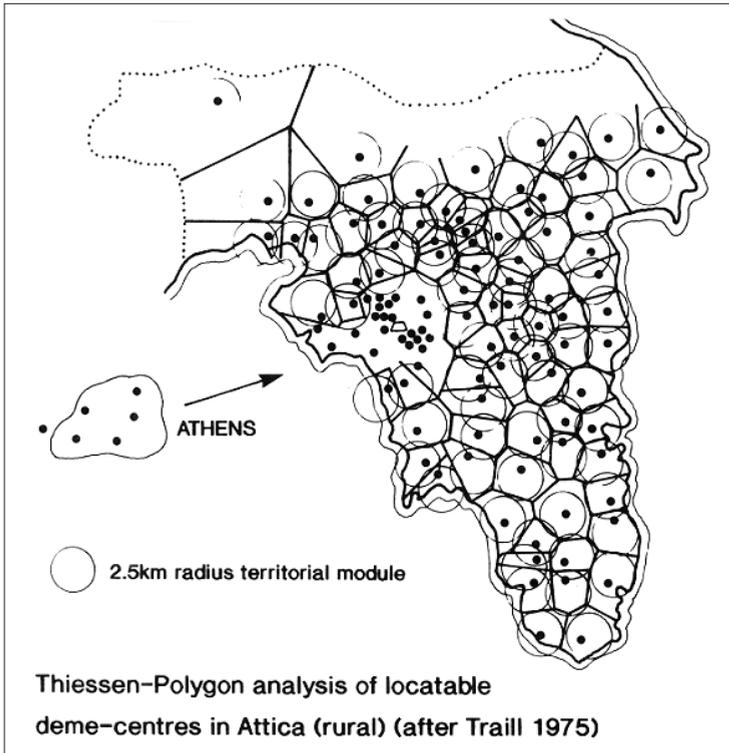


Fig. 4. Thiessen polygon territorial analysis of the likely catchment areas for the Classical demes or village units of Attica around the city of Athens, circle radius 2.5 km.

perhaps naturally, there can often be a gap of some 1-2 kilometres around the *asty* where farms are rare, since daily commuting to the land was barely constrained by distance.

Questions for the Black Sea: How large were the *chorai* of these *poleis*, and how did the settlement structure adapt to local environmental conditions and ergonomic restrictions?

(4) The point of residence at all in the Aegean countryside can therefore be problematized for Classical times, not of course for distances of more than 3 km and especially for more than 5 km from nucleated settlements in the larger *chorai*, but for dwelling within the typically far smaller radius found in the *Normalpolis* around the *asty* and its *komai*. Some of the rural farms found by intensive survey seem indeed to be temporary fieldhouses, for storage or seasonal use, but most found do still appear to possess a full domestic range of surface finds pointing to at least regular full family use – although placing slaves and/or hired labour on your estates is a known practice from the sources. The common finding of dining cups brings such common “family farm” assemblages into line with those found in urban houses, but we know

that even slaves could possess fine tableware. The need for careful gridding of rural surface sites, the plotting of different categories of finds such as tile and domestic pottery, and the gathering of relatively large collections of pottery, plus comparisons with the level and type of surrounding offsite artefact scatters, can be brought out by the following examples: firstly, the use of tile counts to identify major structures; secondly, quite a typical example in fact for the Aegean (Figs. 5-6) where in three consecutive periods of activity of the same rural site we can now argue for very variable site functions. Over entire landscapes the cumulative picture given by such analyses is now allowing us a much more nuanced view of landscape history (Fig. 7). Immediate details of land use can also be derived this way, e.g. the discovery of site haloes which seem to mark infield zones or gardens around estate centres, matched by reconstructions based on ancient agricultural writers.

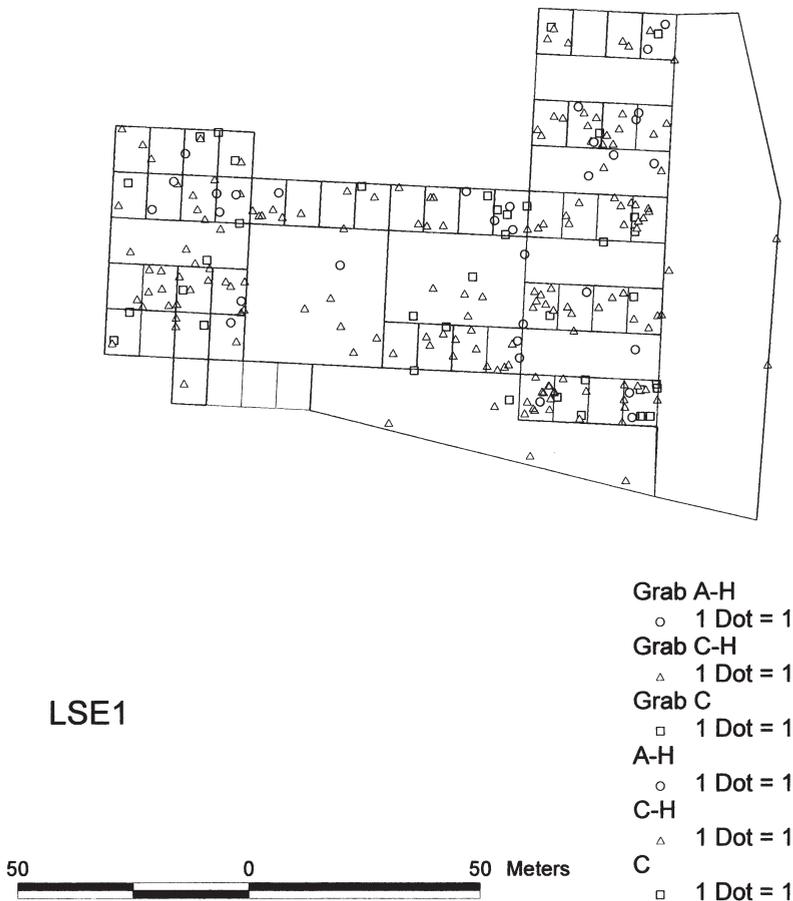


Fig. 5. A large estate centre in the south rural landscape of the city of Thespiiai, Boeotia. Surface collection grid shown with spread of collected sherds of Archaic to Classical and Early Hellenistic age. Interpretation – a large farm using all the site surface.

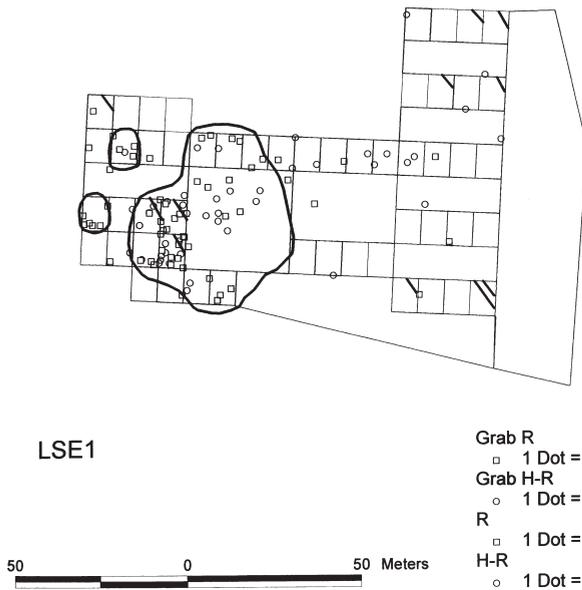


Fig. 6a-b.
 The same farmstead site with the spread of Early and then Late Roman surface sherds. Interpretation – in Early Roman a shrunken, small farm, in Late Roman slight activity at the site only (a farm store or temporary use, no permanent occupation).

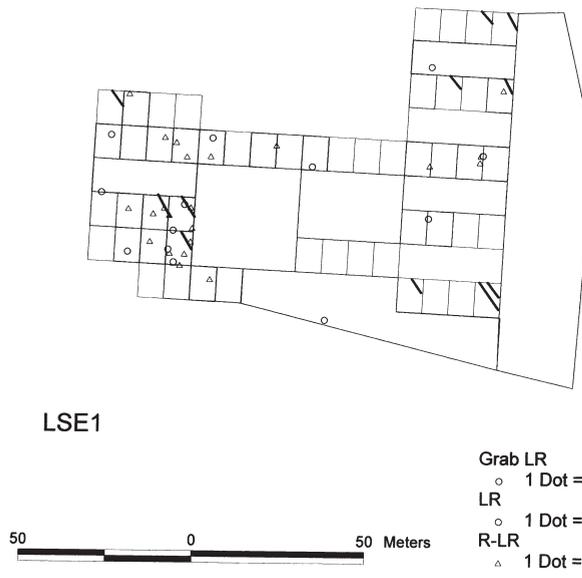


Fig. 6a.

Fig. 6b.

Questions for the Black Sea: Who lived on farms and/or worked the estates, how did this fit into *asty*, village and resident farm life?

(5) As for living in the country, the life of the wealthy gentleman farmer and poor peasant can both be suggested by the survey data from the Aegean. In the Atene deme of Attica, most farms seem to be those of wealthy farmers, whilst

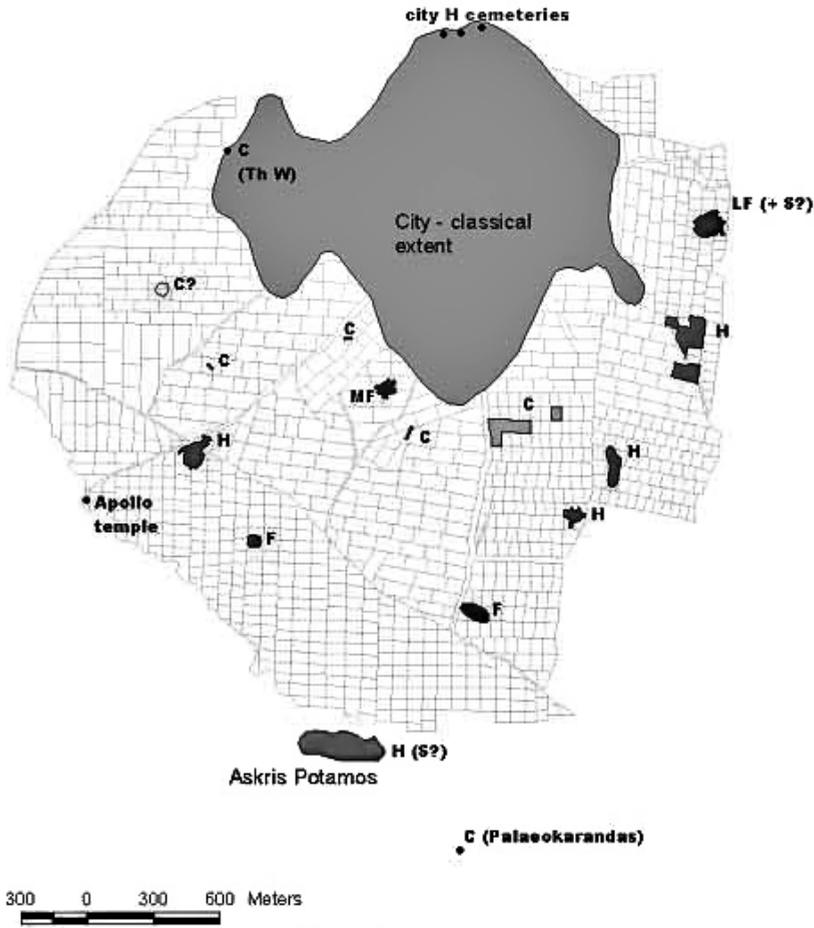


Fig. 7. Reconstruction of the size and function of the rural sites in Classical times south of the city of Thespiiai. Key: C = cemetery, LF = Large Farm, MF = Medium Farm, F = Small Farm, H = Hamlet, S = Sanctuary.

in Boeotia and elsewhere, the norm is a smaller, more basic and presumed family farm of five or so occupants. In either case it would have had economic advantages to be close to your estate, or at least if partible inheritance was common – the largest coherent block of your estate – so poorer peasants might literally reap a better income and the richer citizens could settle dependents in the landscape to enhance their income likewise.

Questions for the Black Sea: What do we know of the status of rural farm and estate owners and occupiers?

(6) One link to my colleague Susan Alcock’s interest (see contribution in this volume) in culturally-perceived and modified landscapes of Antiquity – is the

role that geographical analysis, especially using GIS, can help us investigate such aspects of rural life and town-country relations. My practical experience in the *chora* of the city of Hyettos in Boeotia supported the idea of visual and audio contact between rural farm occupants and the *asty*, but this may have been merely the inevitable and not intentional effect of the amphitheatre nature of the northern *chora* – since in our current city and country survey at Tanagra in east Boeotia, and in the south *chora* of ancient Thespiiai, also in Boeotia, the Classical farms almost intentionally seem to turn their visual and audio backs on the town. GIS study in Thespiiai found that no discovered farms were visible from the city and of course vice versa, but on the other hand – I think more for reasons of safety and support – all farms were intervisible with one or more other rural farms. Similar questions are raised by rural cemeteries. In Tanagra we seem to have an unparalleled chance to see the likely real density of such small sites due to the special conditions of intensive and continued tomb-robbing since the late 19th century. Around the *asty* as known elsewhere there is a zone of larger cemeteries, some aligned with city gates and roads, and textual sources from many cities and excavations, suggest that the position and layout of such cemeteries did reflect a desire to be publicly visible, at least for the richer monument-placing families. Associated inscriptions address passers-by. In contrast, the Tanagra rural cemeteries are generally small, occasionally even a single grave, and are so ubiquitous that road alignment is not relevant – indeed some are clearly off likely through-routes. In the Thespiiai South *chora*, GIS analysis shows that rural cemeteries are almost invisible until you come very close to them. Our current thinking is that such rural burials are tied to the position of family estates more than any other factor and are essentially private statements of family ownership and traditions of land use. The farms too may have more to do with the much-discussed privacy of the family home, usually dealt with under urban social life. However a warning is required – it has been pointed out that family burial plots in urban cemeteries and epigraphic study suggest that such grave groups correspond to short family lines of a few generations at the most – and rural survey suggests that most surface find cemeteries are also of limited life. The role of memory is likely to be confined, as far as individual family life and points in the landscape (something occasional texts also underline in terms of the problem of someone else's burials on your land).

Questions for the Black Sea: What can be said in response about the location and pattern of farms, graves here, and also in relation to roads? Are colonial systems affected by the cadastral placing of plots with set intervals and with associated access?

(7) One aspect where we might expect at first a notable contrast between the Aegean and the colonial world might be in the role of indigenous peoples. This could also vary if they lived at a distance and had their own landscape/

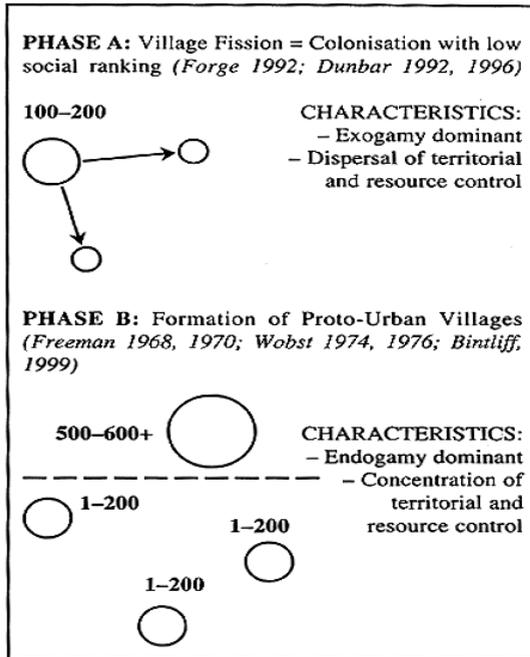


Fig. 8. Model for the origins of the typical Greek homeland polis as a Village-State.

economy, or were adjacent but used a similar and parallel land use, or were or became integrated – and also we often are dealing with progressive effects of Hellenisation. Actually this kind of two population element is not, surprisingly, absent from the homeland of the Aegean, where most *poleis* arose by the swallowing up of other communities who almost certainly were or included different ethnic or community groups e.g. Leleges, Pelasgians, or local cultural groups e.g. Minyans and Boeotians. Equally common are elite and serf groups at least claiming distinct ethnic origins e.g. Helots and Penestes in Laconia and Thessaly, and Serfs on Crete. But in the Aegean usually all these groups had relatively similar forms of land use and culture: on the other hand recent discussions in both the Black Sea and in Magna Graecia suggest that supposed Greek colonial populations were full of absorbed indigenous people. Gschnitzer some years ago made the important point that the incorporation of other *poleis*-peoples into an expanding Greek city state was associated in Greek laws with the merging of all land into *polis* ownership, giving the city the right to alienate, dispossess and buy land anywhere. Thus the “predatory” *polis* could therefore ensure its own core subsistence by controlling exports of critical products and its wealthier families could exploit distant land via slave and/or hired-tenant labour.

Questions for the Black Sea: Which were the “native”-colonial interactions and their relations in the *chora*?

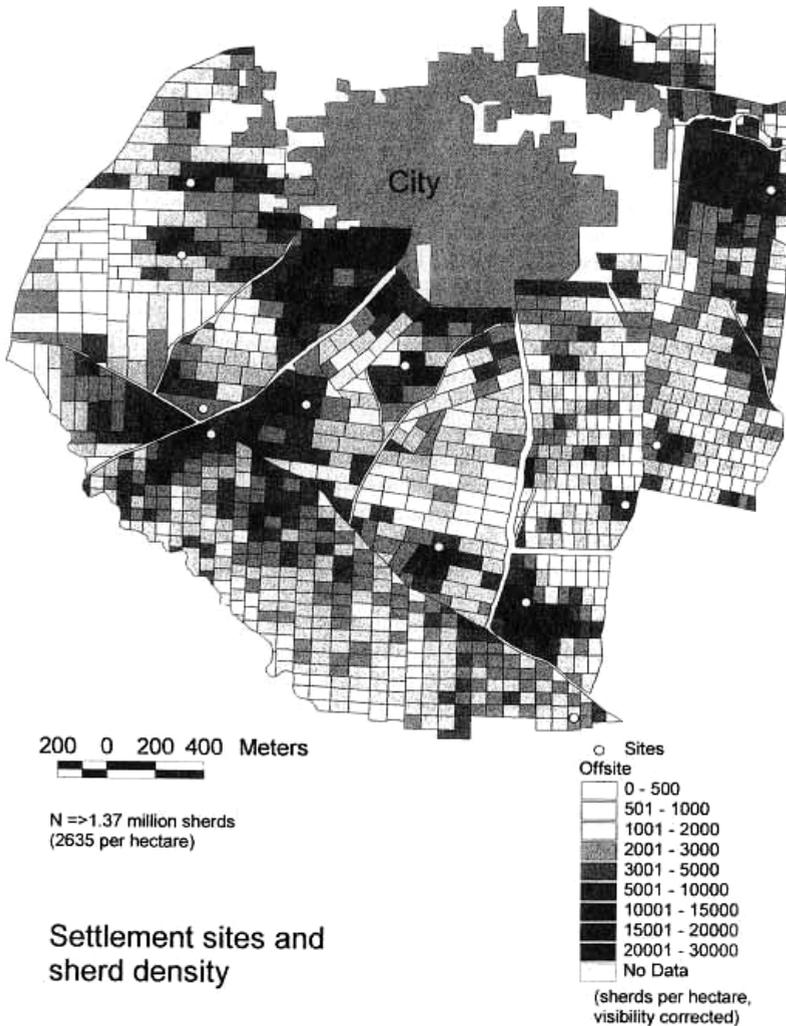


Fig. 9. The city of Thespiiai, rural sites (white dots) and offsite pottery (greyscale in sherds per hectare). The vast bulk of the offsite is made up of Classical manuring debris carried out of the city.

(8) Did the colonial scenario enhance the role of strategic-military factors as opposed to the Aegean homeland, in the *chora*, e.g. more nucleation, role of rural fortifications in the landscape? In the Aegean towers with farms are often seen as against robbers and to lock up possessions, as well as marking status, but also we have lookout towers due to the constant intercity warfare, and walling of all larger nucleations. In my own fieldwork experience in the Adriatic Greek colonial world similar watchtower systems were erected against indigenous enemies.

Questions for the Black Sea: Were there defences in the chora?

(9) Did the Black Sea colonies' role as provider of food surpluses, slaves, etc., to the Aegean and further afield change the nature of *chora* exploitation? Most *poleis* in the Aegean are seen as primarily focused on the self-sustenance of a special form of community introversion (cf. Fig. 8, the Corporate Community model for *polis* origin) with a minor export role for things not available locally. A related question is that of cycles of expansion and contraction of land use and rural settlement in the Aegean Greek countryside. In some areas it appears that overpopulation was accompanied by unparalleled levels of agricultural intensification marked today in survey by widespread and massive manuring scatters detected by offsite surface counting and dating (Fig. 9).

Questions for the Black Sea: What was the impact of exported products on the chora? Is there evidence for changing density and size of rural sites, also in relation to the changing size and status of poleis? Is there any evidence for off-site manuring?

(10) Concerning roads, routes, communications, the detailed study in the southern *chora* of Thespias suggests that roads were more like modern peasant farmer tractor trails, which get farmers around in the subdistricts of the *chora* rather than speed them to more distant destinations, and also exploit natural access routes.

Questions for the Black Sea: Did the peculiar steppe landscape of the north Black Sea and the effect of land cadasters, plus the role of export trade, produce a different system of communication?

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