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Chapter VI: General conclusions

VI.1 Patterns of habitation and land-use in the two survey areas

In most periods of the past when the survey areas were inhabited, the bulk of the surface material was found concentrated on a single location. These locations were usually referred to as the central sites. It has been generally accepted that major surface clusters featuring high artifact density and varied ceramic assemblages are the remains of past settlements[542]. Although there are no generally applicable rules, in most instances there are clear indicators, period and region specific, that one is dealing with remains of intense occupation: large quantities of architectural ceramics (though not necessarily), carbonized pieces of wattle and daub, fragments of cooking stoves etc. For the survey areas presented in this study, all major surface clusters were interpreted as settlement remains. They all usually featured balanced ceramic assemblages (roughly equal percentage of coarse – cooking, storage and transport vessels – and fine, table and utilitarian ware) and there were specific artifact categories that indicated domestic occupation, such as the abovementioned (brick and tile, pithos, braziers). On some of these sites we also found evidence for other types of activities, industrial and cultic. The sheer density and the extent of the central clusters preclude alternative explanations.

Needless to explain, the settlements are the central element of the inhabited landscapes. Their size and spatial arrangements directly reflect the size and structure of the local community, while their location indicates the focus of local production and attitudes to other types of resources, including security and communication. However throughout this study we saw that settlements or the central sites were not the only anthropogenic features in the landscapes. Apart from the settlement sites, the hyper-intensive surveys revealed a whole range of different phenomena in both survey areas. These include the intermediary and low density extensive scatters, the site halos and the off-site, as well as the so called satellite clusters, characterized by intermediary to high artifact density and areas much smaller than the central sites. What follows is a brief summary of the phenomena revealed by the surface artifact surveys in the two areas.

It seems that post-depositional processes at least partly contribute to the phenomenon of site edge. These narrow belts of intermediary density running along the site periphery have become differentiated by the smearing of freshly unearthed archaeological material or site erosion. The processes are initiated by natural forces, such as soil erosion, the activity of animals and cultivation. It partly explains the low state of preservation of the finds collected from the site periphery, as well as the fact that they can often be observed even on small, possible non-residential sites.They rarely measured more than 10-20 meters in width and they ought to be differentiated from the more extensive halos and off-site scatters that could very well be the product of original discard behavior. However, in certain cases when this intermediary belt is wider (the Late Iron Age in the first survey area, the Roman sites from the second survey), it is impossible to distinguish between natural and cultural agencies. Both the natural weathering of sites and the more intensive cultivation of the fields that are nearest to the settlement work to produce an extensive scatter of intermediary density or a site halo[543].

Perhaps the most controversial of all the phenomena discussed is the interpretation of the extensive low density scatters or the off-site. Basically the debate revolves around the following

[542] For various definitions see J.F. Cherry, 394-397, eds. D. R. Keller, D.W. Rupp, 1983; T.W. Gallant, 408-409, 1986; J. Bintliff, P. Howard, A. Snodgrass et al, 16-18, 2007.

[543] S.E. Alcock et al, 159-160, ed. I. Morris, 1994; J.L. Bintliff, E. Farinetti, et al, 665-674, 2006.

question: are the extensive low density scatters mainly the result of natural, post-depositional process of site weathering or are they the result of past anthropogenic factors or the remains of intense spreading of manure in the past[544]? Some of the findings of the surveys presented here provide clear support for the latter view. Most significantly there is ample ethnographic evidence pertaining specifically to the second survey area for the practice of spreading manure and other debris on the fields prior to the autumn and spring ploughing[545]. It is important to stress that these accounts date to the very beginning of the 20th century, the period to which the bulk of the off-site debris collected in the two survey areas was dated.

One problem with adopting the ancient manure hypothesis specific to these two small-scale surveys is that extensive zones of ancient manure are usually associated with larger urban centres, many times the size of the small, rural sites that were the subject of this study. To be sure, off-site scatters are not unique for large urban or semi-urban centres. Research has shown that the extent of this zone varies proportionally to the size of the settlement that has generated it[546]. Smaller sites will naturally leave smaller impact areas. But in the first survey area, (due to the low resolution of the large block survey) it sometimes proved rather difficult to determine if one is dealing with an ultra-thin off-site carpet limited to the same topographic unit as the settlement or with small, ephemeral satellite clusters. It seems that only for the Late Ottoman-Early Modern, the Roman-Late Roman and possibly for the Late Iron Age and the Late Byzantine-Early Ottoman periods is there clear evidence for intensive field manure.

At this point we need to make a distinction between the situations recorded in the first and the second survey. In the former a thin carpet of mostly Late Roman finds spread continually over the entire western half of the survey area, featuring maximum artifact density not greater than 1 fragment per 100 sq meters. In the eastern survey sectors, across the central valley, this thin carpet of surface material disappears and the Roman finds were found concentrated in small density clusters. We discovered an equally nuanced picture in the second survey area. On the basis of the artifact densities recorded by the transect and the grid survey, it was possible to distinguish between two off-site zones. The one nearer to the farm-sites and spreading over much of the survey's eastern half featured maximal artifact density of up to 5-6 fragments per 100 sq meters. This is the site halo, a zone characterized not only by higher artifact density, but also by more dramatic fluctuations than in the rest of the off-site[547]. The off-site segment further away from the sites and spreading over the western survey half was characterized by artifact densities consistently lower than 1 fragment per 100 sq meters. In terms of artifact density and patterns of distribution, this segment of the off-site is similar to the Roman-Late Roman off-site in the first survey area. At a first sight it appeared that site halos were absent around Roman-Late Roman sites from the first survey, although it is equally possible that we failed to document them. The micro-topography of the terrain in the first survey, as well as the peculiar locations of the Roman-Late Roman sites could further contribute to the weak prominence of this phenomenon. The largest site 5a-b was delimited on two sides by steep ravines and we weren't allowed to collect finds from the fields situated immediately to the east of the site. Similarly the Late Roman farm on site 8 was surrounded by overgrown stretches on all sides. However in both of these cases the off-site carpet did become slightly denser on the fields closer to the sites and in

[544] S.E. Alcock, et al, 160, 164-165, ed. I. Morris, 1994; A. Snodgrass, 197-200, the same volume; J.L. Bintliff et al, note 1, 2006.

[545] S. Tomić, 433, 1905.

[546] T.J. Wilkinson, tab. 1, 1989; J. Bintliff, P. Howard, figs. 2 and 3, 1999.

[547] Cf. J.L. Bintliff, 29-38, *Pharos* XIII, 2006; J. Bintliff, P. Howard, A. Snodgrass et al, 23-26, 2007.

the immediate surroundings of site 5a-5b it was possible to observe small, low peaks comparable to those recorded on the halos of the Roman sites in the first survey. Low density scatters were recorded even on the fields surrounding sites 13a-13b and 14, on the otherwise sterile eastern ridge, as well as around site 8 in the second survey, predominantly made up of architectural ceramics. Adopting the view that this increased density in the off-site is the result of intensive manure and discard of rubbish, the very presence and the extent of the halo zone is instructive of the residential nature of these sites.

In principle the Roman settlement in the second survey with its fairly structured off-site zone is only superficially unique, though it could signal different discard behavior and different agricultural practices, as well as different taphonomic conditions. But in essence the pattern is not much different than that recorded for the settlements from various other periods in the first survey. In both micro-regions, the total dispersal area of certain chronological category of finds was usually found limited to the topographic unit on which the contemporary settlement was located. During the analysis of the results, the total dispersal areas of the chronological categories represented in the surface record was regarded as an indicator of the settlement's impact area or its inner territory, regardless of the mechanisms that generated it. This doesn't refer exclusively to the land under intensive agriculture, nor is it necessarily defined by a continuous carpet of ultra-low density. We saw that the latter was characteristic only for a few periods in the past. Most of the pre-Roman periods discovered in the first survey, as well as the Medieval occupation in the second survey lacked continuously spreading off-site carpets. The main settlement was rather accompanied by a few or several clusters of intermediary density and a much smaller size. It is the distribution of these satellite clusters that was taken as indicator of the settlement's inner area. As explained earlier, these small and elusive clusters were usually discovered within the same micro-topographic units, at a distance of not more than a few hundred meters from the settlement. Their interpretation remains highly problematic, not least because they were often recognized only after the processing of the finds. Moreover it is obviously related to the interpretation of the settlement in social and economical terms and to the specific period in question. These phenomena can represent the remains of a number of landscape features normally associated with settled, agro-pastoral communities: animal sheds, industrial facilities, refuse pits, votive offerings and burials. Without comparative evidence from the surrounding regions, one can but speculate. At this point, one wonders if the settling of this issue remains beyond the limits of intensive surface survey. For most of these scatters, it is actually questionable if even excavations or geo-physical prospection can offer a solution to the problem[548]. For the purposes of the present study, it is important to acknowledge that their distribution roughly coincides with the limits of the same topographic entity occupied by the central cluster, the settlement.

As one might suspect, this fairly simple scheme of a settlement marking its inner territory by a series of satellite features or an extensive off-site carpet, usually limited to a single, micro-topographic entity wasn't necessarily the norm. In certain periods of the past in both survey areas, the human landscape was far more complex, extending over several topographic units. However the basic principles are not necessarily changed, merely the scale is different. This fact is best exemplified by the Late Iron Age settlement in the first survey area, where the scheme of one central and a number of satellite clusters is repeated at a micro-regional level.

[548] A.M. Snodgrass, Survey archaeology and the rural landscape of the Greek city, 113-136, eds. O. Murray, S. Price, *The Greek city from Homer to Alexander*. Oxford 1990. Also see the often ambiguous results of the Laconia Rural Sites Projects, W. Cavanagh, C. Mee and P. James, et al, 2005.

The Late Roman Period in the same survey area offers a seemingly similar picture. The entire basin, in this case, virtually its every corner was occupied or at least covered with a sparse layer of ceramic finds. In reality however, the situation is far more complicated. It is again possible to recognize a central cluster (site 5a) defined by its larger size and varied ceramic assemblage, but now it is accompanied by a larger number of satellite clusters, some of which are not much different from the central cluster. But there are also considerable differences between these secondary or satellite clusters. As mentioned, some are very similar to the central cluster in terms of artifact density, intra-site distribution or the composition of the assemblage, the only difference being the size (site 5b, the Late Roman phase on site 8). Others are characterized by the very small amounts of fine table ware and tile, often found in closely spaced, tiny clusters (such were the rare finds collected from field units situated south and southwest of site 5a and possibly the clusters from sector I). A third group of clusters, whose size remains ill-defined but is probably much smaller than site 5a are characterized by the composition of the ceramic assemblage, consisting almost exclusively of architectural ceramics and rare fragments of storage vessels. In addition there are what appear to be tiny isolated concentrations of architectural ceramics, such as those discovered on the southern tip of sector IX, near site 11 or on the two newly discovered forts, sites 9 and 10.All of this point to a highly developed and functionally stratified landscape, each of its corners being optimally exploited.

Also differing from the model of a central cluster plus satellites bound within certain topographic limits is the Middle Neolithic settlement. But in contrast to the far more extended and developed scheme characterizing the Late Iron Age and the Late Roman periods, during this phase the total dispersal area of the surface finds practically overlapped with the limits of the settlement. Not a single shard dating to the Mid-Neolithic was discovered outside the central cluster. These findings are in accord with what has been learned so far about the local Early and Mid-Neolithic cultures. Excavations have shown that at least some of the activities associated with locations outside the settlements in later periods, such as burial or refuse disposal, were carried out within the living space of the Neolithic communities[549].

The settlements from the Roman Period in the second survey and to a certain degree, the Late Bronze-Early Iron Age settlement in the first survey area, offer yet another different pattern. To be sure there are considerable differences between the organization of settlement during these two periods. A common characteristic for both phases is the existence of at least several clusters of roughly equal size, spaced at regular intervals across a single topographic unit. This scheme is most pronounced in the second survey area during the Roman Period, where it is impossible to single out one of the dozen clusters as the main focus of settlement. Rather they seem to be arranged in relation to the small fortification occupying the top of the ridge and lacking a substantial surface record. In the case of Late Bronze-Early Iron Age Sopot, it is possible to observe a central and a slightly larger cluster, surrounded by minor satellites spaced at short distances from each other. The further away from the central cluster, the sparser the network of satellite clusters. In both of these cases, it was suggested that at least some of the satellite clusters were the remains of domestic occupation. Apart from the artifact density there are no other indicators of their residential or non-residential character. It is quite possible that these are examples of dispersed rural settlements, a settlement type for which there are hardly any parallels in the archaeological literature from the region, but which are known from later historic

[549]M. Garašanin, 82-106, ed. A. Benac, 1979;M. Garašanin, 89, 1983; J. Chapman, "Rubbish dumps" or "Places of deposition": Neolithic and Copper Age settlements in Central and Eastern Europe, 347-362, ed. A. Ritchie, *Neolithic Orkney in its European Context*, Cambridge 2000; P. Halstead, ed. 1999.

periods, the Ottoman and Early Modern periods[550]. Admittedly this type of rural settlements, known as dispersed villages in the ethnographic and geographic literature, are usually associated with the rugged, mountainous regions, where animal husbandry plays an important role in the local economy. The two survey areas present a very different environmental setting in which the nucleated village was the norm, at least in later historic periods.

Most of the settlement sites discovered in the two surveys measured between 1-2000 sq meters and 1 hectare. This is not an untypical finding for intensive surveys, especially focused on the rural sectors[551]. A smaller group of domestic assemblages occupied less than 1000 sq meters, but these were either satellite clusters (a few of the Roman sites in the second survey) or vestigial remains of earlier prehistoric settlements of the former group (the Bronze Age settlement in the first survey or the ultra-thin, late prehistoric scatter in the second survey). It is quite probable that the smallest independent settlement unit measured not less than 1000 sq meters. Such small settlement sites could only represent individual farmsteads, consisting of a single building and probably, an adjacent yard[552]. Examples come from both survey areas and from different time-periods.These include the Bronze Age, the Roman phase on site 12 and possibly the the Hellenistic Period in the first survey, the Roman Period sites 6, 7, 10, 26 and 27 and the Medieval site 25 from the second survey.

Table VI_1: Size and possible rank of the settlement sites discovered in the two survey areas

First survey			Second survey		
Site num/dating	Area in sq m	Rank	Site num.	Area in sq m	Rank
Sites 3/BA	825	Farm	Sites 1-2/R	5-6000	Farm?
Site 4/LB-Eot	10 000	Hamlet	Site 3/R	< 500	Farm?
Sites 5a+5b/R	10 000	Hamlet?	Site 5-11/R	>3500	Farm
Site 5a/EI	>2-3000	Hamlet?	Site 6/R	1200	Farm
Site 6/EI	4000-5000	Hamlet?	Site 7/R	500	Farm?
Site 7/LBA-EI	>5000	Hamlet?	Site 10/R	2000	Farm
Site 8/LIA	36 000	Small village	Site 15-18/R	5500	Farm
Site 8/LRom	3500	Farm	Site 26/R	2500	Farm
Site 11/MNeo	8500	Hamlet	Site 27/R	1850	Farm
Site 11/Undat	9000	Hamlet	Site 25/Med	1750	Farm
Site 12/Hell	1800	Farm			
Site 12/Rom	1500	Farm			

When it comes to the Roman and the Late Roman periods, there is no reason to put the sites measuring up to several thousand sq meters into a different rank. Indeed there are examples of larger Roman villas from Serbia and Bulgaria occupying areas of over 1 hectare, while in Greece it's been ascertained that both Hellenistic and Roman farms tend to be larger, often

[550] J. Cvijić, 1918.

[551] T.W. Potter, 1979; J.F. Cherry, Appendix A: register of archaeological sites on Melos, eds. C. Renfrew, M. Wagstaff, 1982; M.H. Jameson, et al, tab. 4.7, 1994; R.W.V. Catling, 162-163, eds. W. Cavanagh et al, 2002.

[552] R.W.V. Catling, note 22, eds. W. Cavanagh et al, 2002; J. Bintliff, P. Howard, A. Snodgrass, et al. 134-135, 2007.

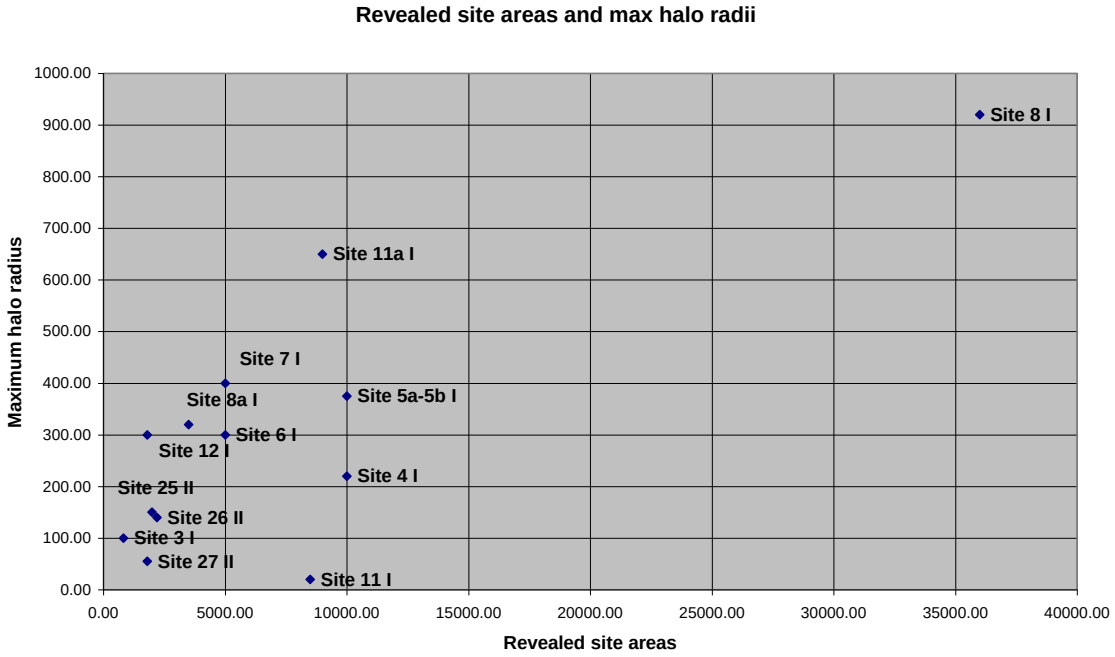
exceeding 0.5 ha[553]. But it is somewhat more problematic to determine the character of similarly sized settlement sites from earlier periods, such as sites 6 and 7 from the first survey. There are hardly any parallels in the wider region from the period of transition between the Late Bronze and the Early Iron Age or from the first couple of centuries of the 1st millennium BC. The few settlement sites from this period are almost exclusively hill-forts known from extensive surveys. In principle, the only difference between the prehistoric settlements on sites 6 and 7 in the first survey and sites 1-2, or 15-18 from the second survey is the lower maximal artifact density recorded on the latter.On the majority of sites from the Roman and Late Roman periods, the maximum artifact density rarely exceeded the threshold of 25-30 fragments per 100 sq meters. In comparison, the Early Iron Age settlement on site 6 in the first survey featured up to 45 fragments per 100 sq meters and its predecessor on site 7, over 50 fragments per 100 sq meters. This is not necessarily related to the longevity of occupation, as the prehistoric assemblages collected from sites 6 and 7 were dated within periods not longer than three centuries. However it could very well reflect a higher intensity of occupation during the prehistoric periods, changed living standards and different organization of the living space[554].

Basically the question is whether the small prehistoric sites from the first survey are individual farmsteads or very small, nucleated settlements consisting of not more than a few families or a single clan. It is obviously difficult if not impossible to answer this dilemma solely on the basis of evidence from surface artifact survey. On-site artifact density and distribution can merely offer ambiguous hints, as these variables are determined by a wider range of site-specific factors. With the data presently available, we can only conclude that in a number of periods in the past, rural settlement was of the rank of individual farmsteads or very small hamlets. In fact, the settlement rank most commonly associated with the present-day countryside, the Late Ottoman-Early Modern village was only achieved in the first survey area and only in certain time-periods. These include the Mid-Neolithic settlement and its successor on site 11, the Late Iron Age settlement on site 8, the Late Byzantine-Early Ottoman village (site 4) and possibly, the Roman-Late Roman settlement on site 5a-5b.

[553]D. Srejović, et al. *Gamzigrad: an imperial palace of late classical times*, Belgrade 1983;V. Dinčev, 1997; L. Mulvin, 377-413, eds. W. Bowden, L. Lavan, C. Machado, 2004; S.E. Alcock, 87-135, 1989; M.H. Jameson et al, 255-256, 1994; H. Bowden, D. Gill, Roman Methana, 77-83, eds. C. Mee, H. Forbes, 1997;

[554] J. Bintliff, K. Sbonias, Demographic and ceramic analysis in regional survey, 244-258, eds. R. Francovich, H. Patterson, *Extracting Meaning from Ploughsoil Assemblages*. Oxford 2000.

Graph VI_1: Maximum radii for the site halos and impact zones and estimated site areas



In order to have a fuller understanding of the land-use patterns during the different periods of settlement, we also had to turn to the other forms of surface artifact phenomena. Measuring the extent of the halos that surround the Roman sites in the second survey, we encountered a series of problems, despite the fact that we were dealing with more or less continuous artifact scatters. In the first survey, the task is made even more difficult by the absence of a continuous site halo. To be sure, we can easily measure the distance between the edge of the site and the furthest occurrence of an artifact from the same period, but one cannot be sure if this impact zone is fully identical to the halos around Roman sites in the second survey. Furthermore the comparability of the extent of the impact zones of the sites in the first survey is problematic in itself, as these sites date to different epochs, with different technological capacities and perceptions of the physical surroundings. Nevertheless the size of the settlement was certainly one of the decisive factors concerning the extent of the impact zones. The larger nucleated settlements from the Sopot survey predictably featured impact zones much larger than the halos surrounding Roman sites from Skopian Montenegro.

On graph VI_1 in addition to the sites from all known periods with clearly established site areas, we added two medium-sized Roman farms from the second survey, sites 26 and 27 and the Medieval farmstead on site 25. These three sites alongside the small Bronze Age farm from the first survey occupy the lower end of the scale. They would have been joined even by the largest Roman farms from the second survey area, as these too have radii shorter than 200 meters. In this respect the prehistoric and the Roman-Late Roman hamlets from the first survey area are a scale higher, with impact zones stretching over distances between 200 and 400 meters. In addition, the higher rank of the Late Iron Age settlement in the first survey is reflected in the very large radius of the impact zone, reaching nearly 1 kilometer. The close correspondence with the extent of impact zones around sites of different ranks and from different time periods in the

Levant is indeed striking[555]. There too settlements of the rank of farms or hamlets (lumped into a single category of settlements occupying less than 1.5 hectares) have halo radii between 200 and 400 meters, while villages (occupying between 2 and 9 hectares) have halo radii measuring between 600 and 1000 meters.

But as in the second survey the correlation between settlement size and the extent of the impact zone is not particularly strong and in a few instances there are considerable deviations. Apart from the Middle Neolithic hamlet leaving no visible impact on the surroundings but the narrow peripheral belt of intermediary density enveloping the site, these include the Hellenistic farmstead and the possible Late Neolithic hamlet on site 11. These two settlements have impact zones slightly larger than expected. The Hellenistic farmstead with a site area estimated at 1800 sq meters has an impact zone with a maximum radius of about 300 meters, while isolated finds possibly dating to the Late Neolithic were collected at distances of over 600 meters from the site's northern edge. It is possible that in both examples, at least some of the satellite clusters were traces of dispersed settlement units, which extended the radii of the impact zones. In fact the halo radius of the Late Bronze-Early Iron Age hamlet would also reach over 600 meters, if we didn't assign a settlement status to some of the clusters north of the central site.

The halo radii of the Roman to Late Roman hamlet on site 5a-5b and of the Late Byzantine-Early Ottoman hamlet on site 4 roughly equal the extent of the halos surrounding the smaller prehistoric sites, but they are still within the 200 to 400 meters range. The relatively small halo, spreading for about 220 meters to the north of the Late Byzantine-Early Ottoman site could be related to the low overall density of this material. In the case of the Roman to Late Roman settlements, it is symptomatic that the hamlet on site 5a-5b has a maximum halo radius only slightly larger than that of the Late Roman farm on site 8. It should be stressed that unlike the rest of the periods represented by settlement remains in the surface record, the impact zones of the Roman to Late Roman settlements in both survey areas were limited to the site halo and didn't include the farther off-site. If this thinner off-site segment is estimated in the impact zone, the maximum halo radius of the hamlet on site 5a-5b would increase to over 800 meters spreading over the entire southern foothills of Prisoj. The extent of the halo of the Late Roman farm on site 8 would remain unchanged, but still measuring considerable 370 meters from the site's northern edge. In this particular case however, it remains unclear if the slightly increased density at the foot of site 9 represents intense cultivation or a focus of separate activities. The same problem surrounds the low density scatters in the rest of the survey sectors in the first survey area, especially in sectors IX and XI.

Regardless of whether one calculates the farther off-site when measuring the site halo, the Roman-Late Roman sites from the first survey area feature considerably larger impact zones than the farms in the second survey area. The latter were spaced at distances not greater than 300 meters, with satellite clusters occurring at about 80-100 meters from the site edge. In this respect, they appear as a more condensed version of the pattern revealed in the first survey area. This disparity between the maximum radii of the halos around Roman settlements in the two survey areas further underlines the differences in settlement and landscape organization. It is possible that the two communities practiced different agricultural regimes and invested in different types of cultures. It was argued that the network of farms in Skopian Montenegro probably represent a different settlement category from the hamlet on site 5a-5b in Sopot. This would in turn imply differences in the patterns of ownership and agricultural exploitation.

[555] T.J. Wilkinson, tab. 1, 1989.

It is noteworthy that both the halos around the Roman sites in the second survey and the scatters that constitute the impact zones of the sites from various periods in the first survey are rarely spreading symmetrically around the settlement sites. In fact for the majority of periods represented by settlement remains, the settlement is located at the very edge of the impact zone. Such was the case for the possible Late Neolithic site, the Late Bronze-Early Iron Age, the Roman to Late Roman hamlet on site 5a-5b, the Late Byzantine-Early Ottoman hamlet on site 4 and for a number of Roman farmsteads in the second survey. Probably the most striking is the example of the Late Bronze-Early Iron Age assemblage, which was found exclusively limited to the east of the Sopot-Vetersko dirt road, despite the lack of topographic barriers and the fact that the settlement was positioned by this same road. We saw that the dispersal areas of the various chronological categories were usually limited to single micro-topographic units. This could very well reflect a genuine preference for certain sections of the survey areas regarding the agricultural exploitation and other non-residential activities.Unfortunately this cannot be correlated with the local pedology or the presence of other natural resources.

The detailed analysis of the survey results demonstrated that the remains of non-residential activities or the so called special-purpose sites are nearly impossible to identify solely on the basis of the surface record. In certain cases this was suggested by the location (site 5b or 14 in the first survey, site 3 in the second survey) or the absence of a site-halo (sites 3 and 20 in the second survey). In the case of the Roman and the Late Roman Period, we also pointed to a category of sites that almost exclusively consisted of brick, tile and small amounts of coarse ware (sites 2, 13a-13b, 14 in the first survey, 14 and 20 in the second survey). But as explained, this peculiar composition of the ceramic assemblage could very well reflect the local post-depositionalhistory rather than the original discard behavior. It is quite possible that at least some of these sites were locations of industrial, religious or other forms of non-residential activities, but we simply lack positive evidence.

The only site categories that can be related to non-residential activities with certainty are the fortifications, the Ottoman tower and the Late Iron Age mound necropolis. A common feature for all of these sites was the very low artifact density, the architectural remains being the only traces of anthropogenic activity. Not surprisingly these site categories invariably date to periods of population growth, such as the Late Iron Age, the Roman to Late Roman or the Ottoman Period. It is reasonable to allow that similar categories existed during other periods of settlement, but these were either humble buildings or slightly adapted natural features. One cannot ignore the fact that they always appear on the very periphery or outside the micro-regional units. The locations of most of these monuments aren't ideally suited for the exploitation of the surrounding land. In certain cases there is a very close topographical connection with the surrounding basins (forts 9 and 10, the mound necropolis in the first survey, the fort in the second survey), while in others these monuments belong to different micro-regional units and lack immediate access to the basin (the fort over the monastery of St. George or the isolated tower on the Vardar). It is possible that this distinction reflects the fact that the building of the latter two monuments wasn't initiated by the local community. Considering the size and the elaborate layout of the fort on site 10, it is likewise possible that we're dealing with a state-sponsored building. But the majority of these monuments were certainly built on the initiative and for the purposes of the local communities. Even these small agro-pastoralist groups could in certain periods produce architecture or earthworks of a monumental scale, showing a deep understanding of their physical surrounding and its place in the local geography.

VI.2 The relation between local, micro-regional and broader regional dynamics; the importance of the geographic setting

One of the general aims of this study was to compare the long-term developments in two micro-regions, featuring different environments and situated in contrasting geo-political contexts. Often dealing with difficult ground conditions and fairly rich data sets, this general goal rarely had the chance to come into the focus of discussion. It was necessary to process and correctly interpret the recorded field data and analyze the material collected, before we could even begin thinking about the relations between known, regional and the micro-regional developments. During this long and delicate process of data recording and analysis, there emerged a number of unpredicted, but not less important issues. We had to devote a great deal of time and efforts in explicating the adopted method of fieldwork and the reasoning behind the interpretations proposed, not only because they form the basis for further, more general analysis, but also because they present important research subjects in their own right. Actually in the end, it can turn out that some of the most important contributions of these two micro-regional surveys were precisely on the subjects that we failed to mention among the basic goals of the research, most prominently, the definition of distinct ceramic assemblages, but also a certain number of methodological and interpretative issues. Nonetheless a considerable portion of this study was devoted to the comparison of the long-term developments in the two survey areas and to their relations with the developments in the wider region of the Vardar Valley. In addition to paving the road for future research, it was possible to make a few important observations that deserve a brief summary.

Over the past decade and a half it has been argued that one of the major set-backs of the very intensive, regional surveys in the Mediterranean is their narrowness of perspective, especially when it comes to interpreting the local settlement dynamics[556]. More precisely, it has been suggested that by focusing on ever smaller geographic regions, survey archaeologists have given up the possibility to relate the local to the broader inter-regional developments. The accumulation of datasets of unprecedented detail and richness meant that the wider perspectives had to be sacrificed. Focused on ever smaller regions and often on the rural sectors of the landscape, contemporary regional survey projects can hardly hope to address issues such as inter-regional dynamics, settlement hierarchy or the impact of imperialism. To a certain degree this argument seems reasonable, but the call for a return to the less intensive, site-based approach is impetuous. Over the course of this study time and again it was stressed that at best, only a tiny fraction of the sites present in the surface record would have been detected using a less intensive survey strategy. In the particular case of the study areas and the broader region of the Vardar Valley, a more traditional extensive survey would have only confirmed and perhaps, expanded on the pattern already known from earlier research. As discussed in chapter I, the major archaeological sites in the region (mostly fortified hill-tops dating to the Late Roman and Medieval periods and the larger settlements and necropoleis from certain prehistoric periods) have been discovered and documented during the reconnaissance campaigns carried out over the past several decades. What is not known, the type of settlement during a number of prehistoric and historic periods, the rural settlement of the Roman and Medieval Periods, the size and the inner organization of settlements, these and similar goals can only be achieved by the means of

[556] E. Fentress, What are we counting for? 44-52, eds. R. Francovich, H. Patterson, 2000; R.E. Blanton, 327-329, *Antiquity* 75, 2001; and the criticism in M. Given, Mapping and manuring: Can we compare shards density figures? 13-21, eds. S.E. Alcock, J.F. Cherry, 2004; W.R. Caraher, D. Nakassis, D.K. Pettegrew, 7-10, 2006.

intensive and systematic survey inevitably limited to smaller geographic units. As a possible way out of this methodological dead-end, some scholars have justly stressed the importance of comparative regional studies, especially where intensive survey data are available[557]. This path however is not without its own problems, as sometimes even the comparison between the results of surveys in two geographically close regions requires that a number of conditions are met (comparability of recording and collecting methods, density estimates, site definition etc).

In general the debate seems to address the issue of compatibility between the means and the aims of the research. Obviously if one is interested in studying inter-regional relations from a core-periphery perspective, the distribution, size and positioning of small, isolated farmsteads or hamlets can be of little use, even when regions of 60-70 sq km are in question, let alone surveys on a "microscopic" scale, such as the ones presented in this study. However, if the basic goals of the survey are directed towards unraveling the type and the size of rural settlements and their locational preferences, it is difficult to see a fault in the approach adopted in these studies. Admittedly one can argue (and this was explicitly acknowledged during the analysis of the settlement histories in both survey areas) that it is difficult, if not impossible, to understand the local settlement dynamics having little or no information about the developments in the neighbouring micro-regions. Comparable data is certainly lacking, but the surveyed areas weren't blindly located in regions that were an archaeological and historical *terra incognita*. When choosing the survey areas, we had a good idea not only about the historical geography of the broader regional context, but also about the archaeology and the main historical developments in the region. As was hopefully demonstrated in the preceding chapters, much can be made of the existent historical and archaeological data, despite its raw character and the consequent problems of comparability[558].

In the first survey area with its millennia-long history of habitation, it was possible to put most of the discovered settlement phases within the wider network of the known, contemporary settlements in the region of the Middle Vardar and beyond. Thus the Middle Neolithic settlement fitted surprisingly well into the network of known Middle and Late Neolithic settlements occupying the extensive geo-pedologic zone of Neogene sediments that covers most of the Mid-Vardar Valley and the basins to the east. Moreover it filled-in an apparent gap separating the Middle Neolithic settlements on the Ovče Pole Plateau and those in the Skopje Basin, maintaining the 10-15 km interval between neighbouring settlements. It is also very probable that the Late Iron Age centre with its mound necropolis was a part of a similar wide network of contemporary settlements, occupying nearly identical geographic locations: the small, marginal lateral valleys that drain the Tertiary basins east of the Vardar. We even predicted the existence of a similarly sized, contemporary settlement in a valley, 7-8 km northeast of the survey area, where earlier surveys have reported funerary mounds that closely resemble those discovered near Sopot. The dispersed Late Roman settlement, with its combination of small hamlets or villas and fortifications finds numerous parallels, not only in the neighbouring micro-regions, but also in the more distant regions, featuring similar topography and resources[559]. On the other hand, for certain periods such as the Bronze Age, the Hellenistic or the Late Byzantine-Early Ottoman, finding parallels even in more distant areas proved far more difficult. For the first two periods, it

[557] S. E. Alcock, J.F. Cherry, Introduction, 1-9, eds. S.E. Alcock, J.F. Cherry, 2004; P.A.J. Attema, G-J. L.M. Burgers, P.M. van Leusen, 2010.

[558] Cf. E. Farinetti, *Boeotian landscapes: A GIS-based study for the reconstruction and interpretation of the archaeological datasets of ancient Boeotia*, Oxford 2011.

[559] A.G. Poulter, 51-97, ed. A.G. Poulter, 2007.

can be argued that the general scarcity of data is related to the character of the settlements: small, dispersed farmsteads, measuring not more than 0.1-0.2 ha can hardly be detected by the traditional method of extensive, site-oriented surveys. As for the Late Byzantine-Early Ottoman Period, the reasons may very well stem from the general lack of interest among scholars working in this region, with the exception of art historians and the historians of the early centuries of Ottoman rule. Finally, for certain periods such as the Eneolithic, the end of the Bronze Age or the Early Middle Ages, the very absence of data is paralleled not only in the region of the Mid-Vardar Valley, but in the central Balkans in general. This fact can very well reflect overall population decline or deteriorating living conditions, though it is equally possible that the material culture from these periods has "low visibility" and that we are barely beginning to recognize it[560].

In the case of the first survey area, one may conclude that the local developments were largely in accord with the broader regional dynamics, known from decades of extensive surveys and excavations. But in addition to simply putting the revealed local settlement history into a wider geographical context, we also tried to understand the local settlement dynamics from "within", on the basis of the local distribution of resources. In this context, turning back to the previously discussed criticism of the limited nature of intensive survey data, it is difficult to understand why should one give priority to broader regional or interregional data over local, micro-regional data? Following this line of reasoning, should we treat archaeological data pertaining to single, multi-period sites as of a lesser order and importance? Again it all depends on the particular research interests and goals: an intensive survey of the hinterland of a single rural settlement is certainly not the appropriate approach if one whishes to learn something about polity interactions or the emergence of social complexity. But this certainly doesn't imply that the study of micro-regional histories is an inappropriate research goal or that it can only be legitimately approached after the broader regional and interregional developments have been clarified.

When dealing with micro-regions or more precisely with the hinterlands of individual settlements, the settlement dynamics consists of two basic facets: diachronic changes in the size and rank and changes in the settlement locations and habitation strategies. The basic difference between micro-regional and regional or interregional analysis is that the former lacks the third aspect of settlement dynamics and this is the changing settlement hierarchy. The very size of the survey areas allows for the existence of not more than one community per period and in this respect, the surveyed areas were either inhabited or abandoned/absorbed into the territory of a neighbouring settlement. It is mostly this third aspect that naturally remains beyond the scope of the micro-regional analysis. Unless we have access to data from the neighbouring micro-regions or from the broader region, it is impossible to know if abandonment is related to a nucleation or to a general regional decline[561]. The same is to a large degree true about the first aspect, the changes in the rank and size: a contraction of the studied settlement could equally reflect its subordinate status in relation to a neighbouring settlement or an overall population decline. Concerning these aspects, the micro-regional analysis is inevitably limited to the charting of the local cycles of growth and contraction. It can hardly offer an unambiguous explanation, although nothing guarantees that a broader regional analysis will be more successful in this respect. But

[560] A.K. Vionis, J. Poblome, M. Waelkens, 147-165, 2009; J.B. Rutter, 137-142, eds. D. Rupp, D. Keller, 1983.

[561] N. Terrenato, Sample Size Matters! The Paradox of global trends and local surveys, 36-48; eds. S.E. Alcock, J.F. Cherry, 2004.

when it comes to the second aspect of settlement dynamics, the displacement of settlement, its nucleation and dispersal, there are no grounds to doubt the potential of an "internal", micro-regional analysis. Settlement location can readily be related to natural resources, (such as certain types of soils, proximity to freshwater springs and surface water) and communications. To be sure in this aspect too, exterior forces can be as influential as the interests of the local community, but the interplay between settlement and its physical environment are obvious and they cannot be justly ignored[562].

When trying to understand the long-term settlement dynamic, we're particularly hampered by our poor understanding of the chronology of the different pottery groups. This proved particularly problematic in the first survey where we had an obvious succession of assemblages comprising similar fabric groups. Because of the low chronological resolution, we don't know if the local settlement experienced continuous transformations or if there were gaps between two subsequent periods. In other words, we don't know for certain if the periods when the local settlements was of the rank of a farmstead represent isolated episodes or early stages in the medium-term cycles, culminating with the emergence of a hamlet. At least for the Hellenistic to Late Roman period, the latter seems to be the likelier scenario, although one has to allow for the possibility that in certain political and socio-economic circumstances, farmsteads (standing isolated or forming extensive networks) were the preferred settlement type. In other words, the appearance of individual or networks of farms shouldn't necessarily be seen as an episode of demographic contraction or the early stage of the development of a nucleated settlement.

We already stressed the strong continuity concerning settlement size in both survey areas. In terms of population size, the rural settlements in the first survey ranged between a single extended or a few individual families to a clan consisting of up to 30 families. Excluding the Late Iron Age, this upper limit was never exceeded. In general, this long term tendency can be determined by two separate constraining factors: the carrying capacity of the settlements' catchments and the underlining social structure of the local communities[563]. Analyzing the agricultural potential of the basin of Sopot and of portions of the neighbouring micro-regions, it was concluded that most of the local settlements could comfortably secure their subsistence by exploiting the natural resources of the area and even grow further. It seems that only the Late Iron Age settlement had stretched the agricultural potential of the area to its limits. This means that the chief factor limiting the size of the local communities was inherent to the nature of these societies. Featuring not more than 150 individuals, social order and cohesion in these groups could have been maintained through face-to-face relations or direct negotiations between families and individuals. Once the community exceeds the threshold of 150 individuals, this primordial regulating mechanism cannot be sustained, simply because there is a natural limit to the number of individuals with which a human can maintain face-to-face relations. This observation is based on the study of both groups of primates and traditional human societies, the fact that a subject can interact only with a limited number of individuals being predetermined by the size of the human brain[564]. Communities including between 80 and 150 individuals occur regularly across very different cultures and time-periods and this is surely an index of their strong stability. The fact that the fabric of society is woven through face-to-face communication eliminates the need for a permanent social hierarchy or horizontal subdivisions, threatening to

[562] Cf. J. Chapman, R. Shiel, Settlements, Soils and Societies in Dalmatia, 62-76, eds. G. Barker, J. Lloyd, 1991; J. Bintliff, P. Howard, A. Snodgrass, et al, 2007.

[563] J.L. Bintliff, 526-532, ed. G. Barker, 1999.

[564] R.I.M. Dunbar, 4-6, 1993

cause inter-societal tensions and eventually, settlement fission. There are however certain problems and perhaps the most significant is that in these societies intermarriage is not a viable solution. As a result, communities of this type are always exogamous and forced to maintain at least some kind of formal relations with the neighbouring settlements.

Closely related to the practice of exogamy is the inevitable dispersal of properties transacted between intermarrying families from different settlements.[565] Indeed apart from the chances of expanding their territories and wealth, avoiding this problem could be one of the chief incentives behind the settlement's tendency to grow beyond the threshold of 30 households. However in order to achieve a higher rank and become endogamous, a community needs to have at least 500 inhabitants to secure a sufficiently large genetic pool that would enable intermarriage between members of the same community and that would allow for the individual properties of the community members to remain concentrated within the limits of the settlement's territory[566]. This implies that there is a theoretical transitional phase characterized by populations higher than 150 but lower than 500; a phase when the population level is not high enough to initiate settlement fission or transformation into a so called corporate community[567]. At its peak Late Iron Age Sopot was probably in a similar state: it was considerably larger than all of its predecessors and successors, but it never reached the level of population that would enable it to grow into a corporate, endogamous community. Although both the size of the settlement revealed through surface artifact survey and the mortuary evidence suggest that it could have almost approached this status, estimating the agricultural potential of the survey area and its surroundings it was concluded that the Late Iron Age settlement probably never had more than 60 households. As indicated by the extent of the mound necropolis, Late Iron Age Sopot was probably qualitatively different than the settlements from other periods in the first survey area, the appearance of groups of smaller mounds probably indicating horizontal subdivisions into several clans. However we believe that this settlement failed to achieve the status of a fully autonomous polity and even if it came close to becoming a corporate community, it was only for a very brief period of time. The limited agricultural resources ensured that like its predecessors and successors, it remained a part of a wider network of settlements of a similar rank and size, occupying the small lateral valleys along the Mid-Vardar. Again comparable data from the neighbouring settlement niches is crucial in addressing this issue.

In the first survey area, for its size featuring a considerable variety regarding the distribution of natural resources, it was possible to follow the displacement of settlement from the eastern sectors, covered with lighter but less fertile Tertiary deposits, to the western sectors, covered with Quaternary, stony but more fertile soils. As might be expected, the earliest Mid-Neolithic settlement and its successor chose the former soils, which although less fertile were more suitable for primitive hand cultivation. In later prehistoric and historic periods, settlement was nearly always located on the Quaternary sediments on the western bank or on the flysch, covering the Vardar Valley floor. The only exception was the Hellenistic settlement, which for some unknown reason chose to return to the eastern survey sectors and was not only far away from the most fertile part of the landscape, but also lacked a freshwater source in its immediate vicinity. Obviously in this case, apart from the proximity to the basic natural resources other

[565] J. L. Bintliff, 532-533, ed. G. Barker, 1999.

[566] J. L. Bintliff, 532, ed. G. Barker, 1999.

[567] As observed by R.I.M. Dunbar, 3-4, 1993; "unlike bird flocks which can shed individuals through trickle migration as soon as the group exceeds the optimal number of individuals, human communities have to wait until they are sufficiently large to permit fission into daughter settlements."

factors were also at play. This is equally true for the settlements situated in the western survey sectors, which although exploited the same type of soils weren't always located on the same location. Thus unlike the settlements from earlier periods located closer to the foot of Prisoj, the Late Ottoman-Early Modern village and its Late Byzantine-Early Ottoman predecessor occupied a location very close to the small stream, near its confluence with the Vardar. It was suggested that for this community, gardening may have become a more important component in the local economy, along with the possibility of exploiting the power of running water.

But in order to understand the constant shifts of settlement location within the western survey sectors and the seemingly inexplicable withdrawal of the Hellenistic settlement, it was necessary to introduce yet another locational factor and this was the main line of natural communication in the survey area. Knowing that this was very likely an active section of the interregional road known as the Via Axia in the Roman Period, it was possible to examine the location of the settlements in relation to the main road roughly following the east-west axis of the surveyed basin. Finally, the size of the settlement can also be viewed as a separate locational factor. Except for the Late Iron Age, the rest of the settlements in the first survey area were of the rank of small hamlets or farms. As such, their inner territory was most probably limited to certain portions of the surveyed basin or at least, this is what the distribution of the off-site carpet and the satellite scatters suggests. We arrived at a similar conclusion after analyzing the carrying capacity of the valley of Sopot: during most periods of settlement, the size of the local community didn't exceed the agricultural potential of their immediate surroundings. Hence none of these settlements occupied the very centre of the basin, but rather tended to concentrate on certain micro-topographic units, usually on the lower western bank. In contrast the Late Iron Age settlement, the only one that came close to achieving the rank of a village and possibly exploiting the full potential of the surveyed basin, occupied the geometric centre of the integral area, assuming an equal access to both banks of the valley, although the focus was evidently on the western bank. For this settlement too, the proximity to the main line of communication doesn't seem to be of a particular importance. By its location, it belongs to the "sheltered" group of settlements, but the positioning of the mound necropolis on the top of the Jakupica Ridge, the eastern limit of the basin, clearly indicated that security wasn't a major concern for the Late Iron Age inhabitants. It is thus evident that when determining the importance of a certain resource (and communications in particular) as a locational factor, focusing solely on the location of the central settlement can often lead us into bringing incorrect interpretations. If the goal is to study the relation of the local communities to their physical surroundings, the integral surface archaeological record dating to a certain time-period has to be considered.

This type of analysis is reminiscent and partly inspired by the studies of ethnographers working within the framework of the early Anthropo-geographic School[568]. According to one of their central theories, given that all conditions are optimal, the settlement's location should reflect the consideration of a number of factors, including sufficient living space, access to good arable land and pastures, access to water, access to natural lines of communication, preferable exposure to the elements etc. If one or more of these factors is disregarded and the settlement location deviates from the optimum, then its location must be influenced by other, non-geographical factors. These may include particular historical developments, insecurity and

[568] J.L. Bintliff, 147-164, eds. R.A. Bentley, H.D. Maschner, 2008; A. Holt-Jensen, *Geography: History and Concepts*, London 1999; for an example of an early application of this approach, H. Lehmann, 212-238, , 1939, after M. Gkiasta, 72-75, 2008; this tradition has also been very influential in the old Yugoslav school of Human Geography, J. Cvijić, 1922; J. Trifunovski, 345-517, 1955.

demographic pressure, but also the work of external and internal political, ideological and natural forces. It is evident that this theoretical position is carefully formulated, so that it doesn't descend into a rigid geographic determinism. But despite its breadth and potential, especially for the analysis of the location of the Late Ottoman-Early Modern rural settlements, it was never applied systematically. On the other hand, its application to rural sites from the more distant past could be somewhat more problematic, simply because we lack information about the local historical conditions and developments, the local economic and environmental conditions. To take the most obvious example, the remains of ancient settlements are often found in presently barren and inhospitable environments, which wasn't necessarily the case in the more distant past when these settlements were active. At the same time working on a micro-regional level, one has few other choices but to relate the settlement locations with factors such as access to natural resources and communications. Giving up this or similar perspectives, it becomes impossible to make any sense of the constant displacement of the main settlement within the narrow frames of a single parish.

But it is important to recognize the main disadvantages of the archaeologist when attempting to apply this or similar geographic approaches to intensive survey data. Unlike geographers or ethnographers, archaeologists can rarely identify the recorded surface phenomena with the known habitational components with certainty. In fact an archaeologist can barely guess what proportion of the original artificial features in the studied landscape has survived in the surface record[569]. As we learned from the experience of these two small-scale surveys and from the large regional projects carried out over the past few decades, the settlement is but a single component of the inhabited landscapes. Clearly settlements are the central elements of human habitation and their locations are certainly instructive of the living standards, the economy and social conditions and perhaps even of the ways in which the local communities perceived their physical surroundings. However during most periods of the past there were a number of other features through which humans exploited and organized their environments (various agricultural and industrial facilities, field huts and animal sheds, *refugia* and cultic locations) and the logic behind their location is often totally opposed to the logic behind the locations of settlements. We saw this through the example of the Late Iron Age settlement in the first survey area. Equally illuminating was the Roman-Late Roman settlement in the same survey area, when there existed two parallel schemes reflecting two contrasting relations to the environment. When analyzing the factors that influenced the settlement location, one has to approach each of the settlements separately, taking into account other habitational components and acknowledging the possibility that they are simply not preserved in the surface archaeological record.

One last difficulty in adopting a purely geographic perspective when trying to understand the local settlement dynamics stems from the fact that this approach was primarily devised with the aim of analyzing the locations of contemporary settlements, possessing more or less equal technological capacities, similar economies and social organization[570]. This is hardly the case for an archaeological research whose subject of study is the long-term settlement dynamics from the Neolithic to the present-day. Needless to stress, over the course of the last 8 millennia there happened profound transformation of the technologies, the social and economic organization. Therefore while it isn't necessarily erroneous to define an optimal location for settlements dating to the same or historically close epochs, this is obviously unviable for the purposes of a diachronic analysis. The problem is that while geographers try to understand the logic (or its

[569] J. Bintliff, P. Howard, A. Snodgrass, 139-168, 1999
[570] T.K. Earle, R.W. Preucel, 501-513, 1987; with numerous comments and a reply by the authors..

absence) behind the settlement location in a known social and economic context, the goal of the archaeologist is to catch a glimpse of precisely these contexts on the basis of the sites' location and character. In other words, although seemingly striving towards similar goals, the path undertaken by the landscape archaeologist and the geographer cannot be fully convergent. Because of the differences in the starting points and the specific study subjects, but also because we had no access to past environmental data, the discussion of the "inner" settlement dynamics remained chiefly descriptive, although we attempted to establish a rough topology for both survey areas.

The case of the second survey area and the integral region of Skopian Montenegro nicely illustrate just how powerful the geographic factors can be in determining the location of settlements. For this region the accounts of the early 20th century ethnographers are particularly helpful, because they explicitly state the logic behind the positioning of the Late Ottoman-Early Modern villages[571]. The second survey area was carefully situated in the very centre of the fertile, gently rolling foothills of Mt. Montenegro, at an equal distance from the nearest contemporary settlements. In comparison to the first survey area, it looked much more promising and richer in natural resources. Also being slightly larger, we expected to find at least an equal number of periods represented in the surface record as in the first survey area. Indeed briefly estimating the carrying capacity of the intensively surveyed area, it was concluded that it could comfortably sustain a settlement of a similar rank to those discovered in the first survey. Understandably the carrying capacity of the theoretical catchments is much greater, allowing for the emergence of larger, town-like settlements. Furthermore in order to ensure the discovery of settlement remains, we carefully positioned the survey over the same type of topographic units occupied by the Late Ottoman-Early Modern villages. But as we saw in the preceding chapter, these expectations came to nothing. Although the survey did reveal traces of settlement from at least three periods of the past, the surface record was nothing like that in the first survey area, the prehistoric periods being particularly underrepresented. None of the settlements revealed in the second survey were of a nucleated type and there lacked a distinct, local ceramic production. Leaving aside the potential post-depositional factors, above all the possibility that earlier surface remains are buried beneath deep colluvial sediments, it was suggested that the relative scarcity of settlement traces in the surface record reflects genuine absence of settlements during most periods of the past. In fact we are still rather confident that if conditions allowed and if the survey was carried out in the immediate vicinity of one of the Late Ottoman-Early Modern villages, the results would have been similar to those obtained from the first survey.

When trying to understand the place of the secondsurvey area in the wider study region and the absence of a long history of settlement, it is important to take into account the wider geographical setting. The rugged plain at the foot of Mt. Montenegro is a larger and compact regional unit, measuring nearly 30 sq kilometers. There are no clear topographic divisions; the terrain consists of a series of narrow valleys, alternating with low, gentle ridges. These vague vertical divisions are complemented by a series of concentric terraces, dividing the ridges along the horizontal axes. Thus instead of series of small, physically separate valleys, the region of Skopian Montenegro is a mosaic of old lake terraces, broken up into separate shelves by the mountain streams. In this geographic setting the small valleys are too narrow to accommodate the settlement with its fields. Therefore the focus of human settlement was on the low ridges, with their gently sloping sides. Each of these "shelves" could accommodate a settlement with its inner territory. Prior to the field survey, we hoped that there was a greater dynamism in the

[571]S. Tomić, 433, 1905.

settlement history of the wider study region, with settlements shifting more frequently across the terraced landscape. But the survey results showed that this didn't happen particularly often, at least not in the intensively surveyed portion of the region.

Why was the central portion of the foothills, partly covered by the second survey, so resiliently avoided during most periods of the past? It offered nearly ideal conditions for the development of a small to medium-sized, if not larger agrarian community: a plenty of living space and fertile soils, access to water and communication. Maintaining the locational perspective which we briefly elaborated upon, we can repeat that the locations of the Late Ottoman-Early Modern villages are advantageous because they integrate one additional factor in their positioning and this is the access to the resources of the mountainside. Being located at the very foot of the mountain has the advantage of offering equal access both to the fields in the foothills and to the mountain resources. This positioning eliminates the major logistical problem of all agro-pastoral communities: the transport of the flocks from the winter to the summer pastures, especially during the early spring months, by which time most of the local cultures normally begin to sprout[572]. Locating the settlement in the midst of the plough-zone, a considerable portion of the agricultural land falling within the settlement's catchment has to be given up to houses and outbuildings, shelters for animals, the communal cemeteries etc. For the large communities that inhabited the wider study region over the past 5-6 centuries, arable land was simply too precious to afford such an arrangement.

In addition to these economical and logistical considerations, the early 20th century ethnographic record reveals another important factor that influenced the location of settlement, especially during later historic periods[573]. For the local inhabitants, the presence of the Medieval churches and monasteries in the immediate vicinity of the villages was of equal, if not of a greater importance. The saints to which these churches were dedicated were seen as patrons and protectors of the entire communities whose very large size was itself providing a sense of security. Recall that by the beginning of the 18th century, life in the small satellite hamlets in the mountainside has probably become perilous. Thus in this case, we see the purely economic factors being reinforced by symbolic or ideological means. One can imagine that the latter factors were particularly important, especially during the turbulent Late Ottoman Period, when they obviously played an important role in the preservation of the local Christian identity.

The surface archaeological record in the survey area and in the wider study region indicates that similar considerations influenced the types of settlement locations in the more distant past. The distribution of the thin off-site scatters of the Late Roman and the Late Byzantine-Early Ottoman finds points to the direction of the Late Ottoman-Early Modern villages as the location of these periods' settlements. This is further supported by the location of the monastic churches, mostly founded in the first half of the 14th century and also by the accidental discoveries of agglomerated Late Antique cist burials, both situated within the borders of the Late Ottoman-Early Modern villages and in their immediate vicinity. Obviously for these periods, we lack the nuanced ethnographic narratives and it would be too simplistic to project the economic and ideological perspectives of the Late Ottoman-Early Modern communities to their distant predecessors. Nevertheless the little evidence that we have, indicates that during these

[572] For a discussion of this issue from the point of view of the possibility of transhumance in antiquity, S.E. Alcock et al, 148-149, ed. I. Morris, 1994; P. Halstead, Traditional and ancient rural economy in Mediterranean Europe: plus ça change? 77-87, *Journal of Hellenic Studies* 107, 1987.

[573] S. Tomić, 453-54, 1905; J. Trifunovski, 1971.

two periods the local settlement pattern closely resembled the one that has survived until the present-day.

But the intensive survey of the central portion of the foothills, along with accidental discoveries in other parts of the wider study region suggest that this seemingly optimal pattern of settlement was fully or partly abandoned during at least three periods in the past. Does this indicate a change in the local economy, with the pastoral component loosing its importance? Understandably with the means presently at our disposal we can never be sure, but for a small and predominantly agrarian community, the locations of the Late Ottoman-Early Modern villages are certainly not the most convenient. Located at the very foot of the mountain, half of the villages' catchments will fall to the mountainside, mostly consisting of steep ridges and narrow valley floors, offering little cultivable land. From a purely agrarian perspective, the low ridges in the central parts of the foothills presented a more advantageous settlement location, offering immediate access to cultivable land on all sides. We may recall the locations of some of the prehistoric farms in the first survey area, boldly located in the midst of the modern plough-zone and near the central axis of the region. At the same time, one shouldn't forget that such locations are optimal only for settlements of a minor rank. A medium or large-sized village would have not only consumed a considerable portion of its arable land, but would also disrupt the existing pattern of villages with territories spreading into narrow elongated strips that cut across both the foothills and the mountainside. Thus one can argue that the present-day pattern with villages located along the mountain foot and the one characterized by farms and hamlets dispersed across the plain were incompatible, unless the smaller establishments in the plain are seen as satellites of the main settlements at the mountain foot.

In comparison to the first survey area, the second survey, as well as the wider study region of Skopian Montenegro is much more uniform concerning the geo-pedological substrate. More than 95% of the foothills are covered with moderately eroded, Tertiary deposits. In such conditions it is obviously impossible to include this factor in the analysis of the local settlement dynamics, although it has to be emphasized that there are much finer, local varieties of soil types. Unfortunately we only have a vague, general idea of their distribution. Thus when examining the distribution of the settlements revealed in the second survey area, we had to operate with two basic parameters: micro-topography and relation to the local road-network. The results were nevertheless satisfactory, because the analysis helped us explain the clear preference for settling on the upper portions of the eastern ridge. This was observed both for the later prehistoric settlement and for the agglomeration of Roman farmsteads. These locations close to the top of the ridge offered access to arable land and to the main road artery in the region. There were no freshwater springs in the immediate vicinity, but at the eastern foot of the ridge, on a narrow valley floor, which on the other hand didn't offer sufficient living space. The very top of the ridge was not occupied, probably in order to avoid the northerly winds that blow constantly from the direction of the mountainside. The only exception is the small site 3, a circumstance which along with the character of the ceramic assemblage was instructive of its special-purpose character.

While the Roman and the later prehistoric settlements occupy roughly identical locations, on two occasions during prehistory and the Middle Age, the opposite western ridge was briefly occupied. Although looking as an identical replica of the eastern ridge, this topographic unit presented a less favourable settlement location. It was not only drier and situated at a greater distance from the freshwater sources that issue from the foot of the eastern ridge, but it also lacked direct access to the main road-network. More precisely, it was connected to the local

road-network only via the site of the later village Kučevište. Access to both the outside world and to the mountain resources was only possible through the site of the larger settlement at the mountain foot.

This circumstance reflects the difference in status between the settlements that occupied the western and eastern ridges. The networks of Roman and possibly, late prehistoric farms that occupied the eastern ridge came closer to becoming a separate settlement. The distribution of Roman farms showed traces of spatial planning and perhaps even a settlement focus on the top of the ridge. Recall that in total, they occupied an area of nearly 3 hectares, sufficiently large to accommodate a small-sized village, though most probably the community consisted of about 10 families. In contrast the Medieval settlement on the western ridge was at least ten times smaller, leaving extremely faint traces in the surface record. This interpretation implied that the highly integrated and stable settlement pattern that characterized the wider study region during the past several centuries and possibly during Late Antiquity could predate the 14th century. Only during the Roman and the later prehistoric period was this scheme abandoned in favor of a more dispersed, (purely?) agrarian based pattern.

If we look at the broader context, we'll see that in general the settlement history of the survey area and the wider study region is closely related to the major developments in the Skopje Basin. Although difficult to interpret and lacking a geographically close parallel, the scant traces of Late Bronze or Iron Age activity in the second survey area are hardly surprising. As in the rest of the lateral valleys of the Skopje Basin, the first stable settlements date no earlier than the first millennium BC. There is very little or no evidence of Bronze Age or Neolithic activity in these parts of the plain. The group of Roman farms was also a part of a broader, regional network that extended across the entire region of modern Skopje. It was closely related to the foundation of Scupi and the colonization of the basin and the lateral valleys. During the period between the late 1st and the late 4th century AD, the entire Skopje Basin formed a part of the colony's agricultural territory. This extreme settlement pattern, with one very large metropolis and an unknown number of various agricultural estates and but a few hypothetical villages will never be repeated in the Skopje Basin and it is most probably unique for the entire country. The abandonment of this pattern during the period of Late Antiquity, accompanied by the retreat in the more mountainous regions and a possible nucleation was inevitably reflected in the survey area and in the wider study region. It is quite possible that for the first time in this period, the survey area became a part of the agricultural territory of a larger nucleated settlement. After a period of a few centuries of decline and possible complete abandonment of the wider study region, settlement returns in the area by the Mid-Byzantine Period. Again this corresponds with the establishment of Medieval Skopje as the main administrative and economic centre in the wider region. Unlike the Early and Middle Roman Periods, there were a number of other forts and nucleated rural settlements, especially after the 14th century. Nevertheless the ancient agrarian relations were basically restored, because a large portion of Skopian Montenegro, along with its inhabitants belonged to a major landowner based in Skopje, the monastery of St. George Nikephoros. This relationship will survive the Ottoman conquest and it will be maintained throughout the entire Ottoman Period. But despite of the observed continuity in agrarian relation, on the local level the settlement pattern had changed and the Roman villas and farms were replaced by nucleated communities of dependent peasants. In such constellations, the survey area became but a part of the agricultural territories of these newly developed nucleated settlements.

As for the first survey area it is possible to arrive at tentative, but well argued interpretations of the local settlement dynamics, despite the scanty archaeological and literary

evidence. But in order to approach the problem, it was necessary to take into account both the "inner" and the external factors, the relationship between the settlements and their physical environment and the wider, regional context. Obviously small-scale, micro-regional studies can hardly be informative about trends and developments outside the narrow limits of the survey areas, but they can be more than a mere methodological exercise. As exemplified by both case-studies and especially the second survey, micro-regions are certainly not enclosed micro-universes and it is impossible to understand the local developments, without at least a minimum insight into the broader context. At the same time however, they do exhibit peculiar inner dynamics, which can only be understood through careful study of the relationship between settlements and other habitational components and their physical surroundings.

We still need to address the issue of the apparent differences between the two survey areas in terms of their respective settlement histories. During the early stages of the research, it was deliberately decided to survey and compare two micro-regional entities that featured contrasting environmental conditions and that belonged to regions with different geo-political and historical backgrounds. This would obviously make direct comparison more difficult, but at the time it seemed more important to record the amount and distribution of surface material in various environments and open an insight into issues such as the size and types of rural sites through various periods of the past and across different natural settings. The first survey area roughly corresponds to one of the dozens small valleys that drain the banks of the Middle Vardar. Geographically this is a well-defined territorial unit, separated from the neighbouring valleys by low, but extensive and barren hills. At present this is a marginal, dry land with little fertile soils and no running water on the surface. Basically its only resource is its strategic location in the broader geographic context, as it occupies the point where one can most easily leave the Taor Canyon and continue southwards, towards Thessalonica and the Aegean. This micro-region is marginal not only in terms of agricultural and other natural resources, but also in a geologic, cultural and political aspect. In a number of historical periods, the area found itself at the very edges of the political entities that dominated the lands along the Middle and the Lower Vader. In contrast the second survey area and the wider region of Skopian Montenegro, throughout all of its known history lied in the heartland of the polities that dominated Skopje and the Skopje Basin. Ever since the Iron Age, this region was within a day-walk from the main regional centres, pre-Roman and Roman Scupi and Medieval Skopje. In terms of agricultural and other natural resources, it also offers far more favourable conditions than the barren, rocky landscape that surrounds modern Sopot. Apart from fertile and thicker soils, this region is rich in water and freshwater springs (in the past, Roman and Ottoman Skopje and their fields and gardens were fed from these springs), timber and pastures. To illustrate this contrast in the productivity and wealth of resources, it suffices to compare the modern population figures for the wider regions of the two survey areas: at present, roughly 8000 people inhabit the region of Skopian Montenegro, less than 200, the villages in the region of the southern end of the Taor Gorge.

All environmental, cultural and historical factors are more favourably inclined towards the second survey area and the region of Skopian Montenegro and yet the results of the intensive surveys proved counterintuitive. While the first survey area was inhabited in most periods during the last 8 millennia and it is still occupied by a small (albeit disappearing) village, the second survey area was thinly inhabited only in three unrelated periods in the past and never grew into a stable settlement niche that sustained a nucleated settlement. The specific mechanisms that brought about this seemingly paradoxical situation were analyzed separately in the preceding

paragraphs and at this point we can briefly summarize them. To a certain degree, the second survey area was unfortunately chosen, because it is located in the neighbourhood of a much more favourably positioned settlement niche and it remained but a part of the hinterland of the large nucleated settlements that occupied its northern neighbours. The basin of Sopot on the other hand, despite its barren and inhospitable appearance is a clearly delimited micro-geographic entity, a true settlement chamber that was inhabited in all, but the most precarious periods of the past[574]. The very fact that it was surrounded by an extensive area of dry and barren rock preconditioned restricted settlement mobility. The opposite is the case of Skopian Montenegro, where seemingly every corner of the 30 sq km large foothills offers a suitable settlement location. As was shown however, not all of its parts were equally suitable for the large agro-pastoral communities that inhabited the region over the past several centuries. They established a highly integrated pattern of settlement, where even small, localized displacements could affect the entire network. We believe that settlement in this region followed the same or similar patterns in most other periods of the past. Finally, unlike the hinterland of Sopot and to a certain degree the locations of the Late Ottoman-Early Modern villages of Skopian Montenegro, the second survey area lacked a visible physical integrity. Micro-topographically it is barely distinct from the surrounding basins and ridges, but for the people inhabiting this landscape it was but a section of a wider terrain, without clear borders or micro-topographic specifics that would've formed the basis for the development of a local identity. Again we see a synergy between the forces of nature and the cultured perceptions of humans, strongly influencing the choice of human habitat.

Perhaps the most striking implication of these findings is the incredible stability of the settlement niches in the regions along the Vardar Valley. Once occupied by a nucleated settlement even of a minor size, the prevailing tendency was that they remained inhabited, often until the present-day. In fact, it can be argued that in all micro-regions where settlement has survived to this day (even if presently lying in ruins), one can confidently expect to find settlement remains from a number of other historic and prehistoric periods. It took dramatic and extreme historic episodes to interrupt or relocate the established pattern of settlement, such as the foundation of Roman Scupi, the near collapse of society at the end of Antiquity or the radical modernization of the country after World War II. But even after such dramatic events, the chances were that once the old conditions returned, settlement will also return to the old niches rather than occupy alternative locations and completely replace the old settlement pattern. Having studied but a few potential niches, it is certainly too early to generalize on the basis of such a thin corpus of evidence. Indeed studying the historical toponomy in the region of the Middle Vardar Valley, we found a number of examples of villages relocated over distances of several kilometers and occupying completely different drainages. In all likelihood however, these are the exceptional cases. The fact that toponyms associated with the old village often survive in the landscape long after it's been abandoned, most plainly illustrates the profound connection between the community and its physical surroundings.

[574] Cf. J.L. Bintliff, 193-224, eds. A. Hurst, A Schachter, 1996.