Campus Argestaeus: The Chronology, Extent and Organization of Settlement in the Survey Area

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Abstract: This study is a continuation of the field report published in the previous issue of the journal Haemus (Donev, D. (2012) Campus Argestaeus: A Landscape Frozen in Time, 217-229, Haemus I.). After considering two methodological issues relevant to all surface artifact surveys, the author describes the distribution of the surface material by periods. Particular attention is given to the extent of the settlements, their inner structure and their locational preferences. In conclusion we point to possible directions for future research and explicate the difficulties and limitations in interpreting surface artifact scatters.

Key words: Ceramic survey, survey methodology, the Middle Vardar Valley

This study is a continuation of the paper that came out in the first issue of the journal Haemus\(^1\). There we described the survey area and the broader region, the method of fieldwork and the distribution of the overall surface record. We also pointed to the main periods represented in the surface record and suggested the possible land-use pattern. Having studied the fabrics and the shape of the material, it is now time to turn to the analysis of its distribution by periods. This will reveal the history of settlement, its size and rank and the micro-locations preferred by the local communities. However before we begin telling the story of human settlement in the survey area, it is necessary to briefly consider two important methodological issues.

Working with surface material is notoriously difficult for obvious reasons. This is even more so in our survey area, because the current land-use and ground visibility have preconditioned a rather poor quality of the surface finds. The fields on which the bulk of the material was found were either covered with wild vegetation or were lying fallow for at least a couple of years. As a result only a tiny percentage (approximately 1.5%) of the nearly 1200 fragments are feature shards, the great majority consisting of badly worn body shards. In such circumstances we had no other option but to classify the finds into different fabric groups and plot them onto the map. This laborious process quickly paid off, because it proved that most of the fabric groups tended to cluster only on certain sections of the survey area. For example, the fabric groups which we labeled Sk_N_A and SK_N_B appeared only on four contingent transects in the central survey section. Similarly most of the architectural ceramics occurred in the southern end of the survey area, with only rare, isolated examples in the central and northern survey sections. Moreover it soon became obvious that certain fabric groups feature overlapping distribution patterns: the fabric groups Sk_N_A and SK_N_B always appeared together, but never alongside larger concentrations of architectural ceramics. It was thus possible to observe at least three distinct

ceramic assemblages, concentrated on three different locations in the survey area. In other words there was a clear evidence of a highly pronounced horizontal stratigraphy. This circumstance was crucial for the dating of the surface material. Even when it wasn’t possible to point to an approximate date for a certain fabric group, its pattern of distribution was often indicative of its chronology. Predictably this chronological resolution is extremely raw. Fabric groups were very broadly dated to the Roman Period or the Iron Age, which prevents one from observing the settlement dynamic during the separate phases of occupation. In fact certain categories of coarse pottery were impossible to date, even in these broad chronological periods. These categories were left out of the analysis. The problem was partly alleviated by the fact that there are only a few possibly overlapping fabric groups. In general there is very little resemblance between the fabric groups that constitute the three assemblages, either indicating discontinuity in local pottery production and settlement displacement or both. In the end each of the three assemblages were roughly dated to the Neolithic, the Iron Age and the Roman to Late Roman Period, but the possibility that other periods are also represented by small quantities of unrecognizable or misclassified pottery remains open.

The second methodological issue pertains to the procedures of field data analysis. The principle aim of the method of field survey applied for this study is to quantitatively determine the locations and the limits of the sites. Counting and (in this case) total collections were therefore a necessary component of fieldwork. But the raw density figures estimated on the basis of these data don’t necessarily produce a realistic document of the ceramic spreads. In the particular case of this survey area, visibility conditions could vary considerably even within the limits of individual survey sections. The northern survey sector, the large field at the foot of Berudila is regularly ploughed and the chances of finding freshly excavated material are higher than on the overgrown fields in the central and southern survey sections. In other words artifact density isn’t solely determined by the presence or absence of archaeological remains beneath the surface, but also by the surface conditions at the time of the survey. Clearly one has to take into account this likely source of systematic bias before drawing the limits of the surface clusters on the basis of the raw density figures. In the regional survey projects in the Mediterranean ground visibility conditions are therefore regularly graded. In our case we adopted a simple scheme where ground visibility was graded on a scale of 0 to 1; 0 standing for optimal visibility or no vegetation cover, 1 for minimal visibility or 100% of the surface covered with vegetation. We adopted a quantitative approach in an attempt to compensate for the unequal visibility conditions in various parts of the survey area. The procedure is very simple. Depending on the visibility grade, the number of finds counted on each individual transect were increased by 25, 50, 75 or 100%. The 5 Roman fragments collected from an individual transect with average visibility (or 50% of vegetation cover) were increased by 50% or to 7, to avoid decimal numbers. In case of minimal ground visibility conditions (or 100% vegetation cover) the number of finds was doubled, but it has been observed that in low

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visibility conditions the number of finds remains relatively low even after correcting for the visibility factor.  

Although the grading of the ground visibility conditions is a widely adopted procedure, the correction for the visibility factor is still a controversial issue. Some researchers have stressed the importance of publishing both the raw and the corrected data or at least providing the reader with an explicit description of the procedure. We deemed it worthwhile to try and calculate the impact of the visibility factor and explore the alternative interpretations of the surface record. Simply ignoring this factor is certainly not a better option and giving descriptive accounts of the ground conditions in the various survey sections will make this text too long and illegible.

**The Neolithic**

The survey area was inhabited for the first time sometime during the Neolithic. About 70 fragments distributed into two fabric categories were all that could be dated to this period. A broken scraper or a knife made of quartz or quartzite also probably belongs to this assemblage. This represents only about 6% of the total surface record. But regardless of the fairly small size, this material is highly concentrated, appearing only on 6 individual transects or on less than 1% of the survey area. Not a single fragment dating to this period could be found on the rest of the individual transects. This is reflected in the very low average density of this material. Transect units on which Neolithic material was present feature artifact densities that are at least twice the local average (table 1).

<table>
<thead>
<tr>
<th>Total number and percentage of Neolithic finds</th>
<th>71/6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall average density</td>
<td>2 fragments per 1 hectare</td>
</tr>
<tr>
<td>District average</td>
<td>2 fragments per 1000 sq meters</td>
</tr>
<tr>
<td>Minimum density</td>
<td>3 fragments per 1000 sq meters</td>
</tr>
<tr>
<td>Maximum density</td>
<td>100 fragments per 1000 sq meters</td>
</tr>
<tr>
<td>Dispersal area</td>
<td>2300 sq meters</td>
</tr>
</tbody>
</table>

Table 1: Statistical distribution of the Neolithic material in the survey area

This circumstance seemingly makes the definition of the site limits straightforward. The main focus of activity was on four neighbouring transects on the southern bank of the Grizovec, on transects 11H, 11E, 11D and 9E (map 1). The density of Neolithic material ranges from 7 and 17 fragments per 1000 sq meters on the site periphery covered by transects 9E and 11D to over 100 fragments per 1000 sq meters on transect 11E on the site core. On transect 11H, on the southern periphery, artifact density drops to 42 fragments per 1000 sq meters, completely disappearing from the surface record on the surrounding fields. However, about 130 meters to the west-southwest of the site-core, again on the bank of the Grizovec, the Neolithic material reappears, albeit in much smaller quantities. On both transects 1E and 3E we recorded less than 3 fragments per 1000 sq meters or 1 fragment per transect unit in absolute numbers. This is almost three times lower than on the central site’s periphery, but it is still over twice the district average.

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Visibility conditions across this entire section are average to low and they couldn’t have played a particularly strong role in the overall distribution of the Neolithic finds. Correcting for the visibility factor merely increases the artifact density proportionally on all transect units, though the small concentration on transects 1E and 3E now equals the density on the site periphery, on transect 11D (map 2). Nevertheless, it is likely that the concentric character of the on-site pattern of distribution was at least enhanced if not created by the local land-use and ground visibility. Most of the finds from the core of the site on transect 11E, as well as on
the neighbouring transect to the west, 9E came from a narrow furrow, probably the remains of a derelict irrigation canal. Transects 11H, 11D, 1E and 3E were fallow fields, with 75% of the surface covered by vegetation. But the fact that much more finds were collected from transect 11H than from transect 9E warns us against giving too much weight to the local surface conditions. However the sudden disappearance of the Neolithic material from the surface of the neighbouring transect to the south could indicate that the site occupied a larger area or at least had clearer margins.

The concentration and the character of the finds on the central cluster clearly indicate that these were the remains of a permanent settlement. The documented area is very small area, stretching between 1000 and 1500 sq meters. One has to allow for wider margins, probably extending the site area to over 2000 sq meters. Like the majority of the settlement sites in the survey area, the Neolithic settlement clings on to a small island of Pleistocene sediments, surrounded by a sea of older Pliocene sediments and Paleozoic metamorphic rocks (map 3). To a certain degree, the location of the site is perhaps instructive of its chronology, because in the Early and the Middle Neolithic the majority of the known settlements are limited to flood plains or spring outflow areas. The discovery of an Early Neolithic settlement in a relatively barren area, away from the water-fed zones came as a great surprise. The very small size of the site can also be seen as an index of its later dating. However knowing so little about the natural history of the study region and the size of Neolithic sites in the country, one cannot rely solely on these indications in determining the chronology of the settlement more closely.

With so little information from the other regions along the Vardar Valley and the central parts of the Balkan Peninsula in general, it is difficult to bring forward an unambiguous

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interpretation. The only certainty is that during the Neolithic there developed a small hamlet in
the survey area, probably consisting of not more than several agglomerated households. The
small concentration of finds situated 130 meters to the west of the central site could signal the
diminished remains of an isolated dwelling or non-residential activities, such as pits or burials.
We can only hope to establish this through excavations or geophysical prospection.

The Iron Age

Although the exact chronology of the Neolithic material remains problematic, the absence
of the characteristic Eneolithic shapes and fabrics is a sure indicator that by the second half of
the 4th millennium BC the survey area was abandoned. During the next two and a half millennia,
the local community either moved to a different drainage basin or occupied the upper course
of the Dlabok Dol, deep into the mountain interior. The next phase of permanent settlement in
the area covered by the intensive survey dates to the first half of the first millennium BC or the
Iron Age. Because of the very poor state of preservation of the finds, it is again impossible to
suggest a more precise dating. Apart from simple vertical rims and polygonal handles, there is
hardly any diagnostic material including a few fragments decorated with finger impressions or
punctuations.

286 shards classed into 6 fabric groups comprise the Iron Age assemblage. This pottery
is characterized by very coarse fabrics, rough and porous surfaces, large numbers of different
types of inclusions and uneven firing. Fragments of vessels made of fine clay, with polished
surfaces are rather scarce, representing less than 30% of the Iron Age assemblage. This material
is finally accompanied by several dozen fragments of carbonized daub, which rarely appears
outside the main concentration of Iron Age finds. Including this category, the Iron Age material
represents about 25% of the total surface record in the survey area.

Its spatial and statistical distribution is very different from that of the Neolithic assemblage
(table 2). Finds belonging to the fabric groups datable to the Iron Age were collected from 72
transect units or nearly 10% of the surveyed terrain. Artifact density ranges between 1.2 and
39.5 fragments per 1000 sq meters, while the district averages for the central and southern
survey sections are 4 and 0.6 fragments per 1000 sq meters respectively. Thus we are clearly
dealing with a thinner and more widespread ceramic carpet, stretching over ten times the area
occupied by the Neolithic material. This creates problems when deciding about the limits of the
site, because almost 1/3rd of the transect units with Iron Age material feature artifact densities
close to the average values. More specifically on over 10,000 sq meters the density of Iron Age
finds fluctuates between 4 and 10 fragments per 1000 sq meters. In addition there is an even
more extensive zone featuring between 1 and 4 fragments per 1000 sq meters. Are we to treat
the integral carpet of Iron Age material occupying almost 3 hectares as a potential site area? We
believe that the total dispersal area of these finds truthfully reflects the impact zone of the Iron
Age settlement, though the area occupied by dwellings was certainly more contracted.

<table>
<thead>
<tr>
<th>Total number and percentage of Iron Age finds</th>
<th>286/24%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall average density</td>
<td>9 fragm. per hectare</td>
</tr>
<tr>
<td>District averages, southern and central</td>
<td>0.6/4 fragm. per 1000 sq meters</td>
</tr>
<tr>
<td>Minimum density</td>
<td>1.2 fragm. per 1000 sq meters</td>
</tr>
<tr>
<td>Maximum density</td>
<td>39 fragm. per 1000 sq meters</td>
</tr>
<tr>
<td>Dispersal area</td>
<td>29,900 sq meters</td>
</tr>
</tbody>
</table>

Table 2: Statistical distribution of the Iron Age finds

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The problem becomes even more accentuated when we look at the spatial distribution of this material (map 4). Over 70% of the finds were collected from the transect units on the narrow strip of land between the northern bank of the Grizovec and the main local road leading to the Vardar Valley. Artifact density stays above the limit of 10 fragments per 1000 sq meters over a compact area of nearly 1 hectare. To the south and west the cluster suddenly stops, with artifact density dropping to zero. We believe that this is an effect of the extremely low visibility on the stretch along the Grizovec and that there was at least a narrow belt of intermediary or low artifact density that we couldn’t detect in the field. It is even possible that a portion of the settlement proper spreads over these transect units, but because of the local topography the true limits of the site must be very close to those indicated by the survey results.

We managed to capture the northern and eastern limits of the cluster, where we see a gradual decrease in the artifact density, from 11 and 15 fragments on transects 57S and 57H to about 4 fragments on transects 56B, 56S and finally to about 2 fragments on the neighbouring row of transect units on the east. Only transect 55B spoils the concentric pattern, featuring slightly over 11 fragments per 1000 sq meters. A similar pattern emerged on the ploughed fields north of the main local road. Here we discovered an even sharper decrease, with artifact density staying below 3 fragments per 1000 sq meters on all but 2 transect units, while certain section along the northern periphery were completely sterile. Nevertheless this zone of ultra-thin density spreads over a larger portion of the northern survey section, isolated fragments appearing at a distance of nearly 200 meters from the northern edge of the central cluster. This is not a continuous carpet, but find-spots of single or a pair of finds, separated by sterile stretches. Depending on the size of the transect unit, they produce between 2 and 4 fragments per 1000 sq meters.

A similar discontinuous cluster spreads on the fields to the south of the Grizovec, in the southern survey section. But in this case the artifact density returns to the on-site levels recorded on the transects on the opposite bank of the Grizovec. On transects 13E and 15E the density of
Iron Age finds increases to 26 and 22 fragments per 1000 sq meters and it stays above the limit of 10 fragments per 1000 sq meters on the two neighbouring transects to the east and west of the central pair. Furthermore there is an apparent clustering of field units with intermediary and low artifact density on a number of transect units south of the central cluster. In fact on transect 16M, about 15 meters to the south, there is yet another smaller peak with over 11 fragments per 1000 sq meters, surrounded by a group of field blocks with artifact densities ranging between 2 and 5 shards per 1000 sq meters. Thus there is a compact but smaller cluster of high artifact density in the southern survey section, not unlike the cluster of Neolithic finds discovered about 150 meters to the northeast. Rare fragments belonging to the Iron Age fabrics also appear on the stretch between this smaller cluster and the southern bank of the Grizovec, but they give artifact densities lower than 4 fragments per 1000 sq meters. An exception is transect 45E at the northern foot of Mali Konjik, with over 10 fragments per 1000 sq meters, but unlike the other transect units with artifact densities higher than the district average it stands isolated.

There are no drastic changes when the survey records are corrected for the visibility factor (map 5). The limits of the two clusters in the central and southern survey sections remain unchanged, while on average, the artifact density increases for about 50%. Thanks to the lower ground visibility the increment is slighter on the central site. The transects that comprise the core of the site (58D-B, 57S, 57H, 57E, 92S-H-E-D, 93S-H-E-D etc) usually feature above 20 fragments per 1000 sq meters, while on the site periphery and on transects north of the main local road, artifact density stays below 10 fragments per 1000 sq meters. South of the Grizovec the smaller clusters centered on transects 13E, 15E and 16M become slightly more accentuated, because the lower ground visibility entails higher theoretical densities. On transects 13E and 15E the density of Iron Age material increases to over 40 shards per 1000 sq meters, elevating them to the same rank as the transects on the core of the central site.

[Map 5: Distribution of IA finds in the survey area, corrected for the visibility factor.]
On the transects that surround this satellite cluster the increase is proportional, though the difference between transects with higher and lower than average artifact densities now becomes more pronounced.

There are no doubts about the main focus of settlement during the Iron Age. This was the area between the northern bank of the Grizovec and the main east-west road. If we take the ceiling of 10 fragments per 1000 sq meters as a notional limit of the site, it occupied an area of approximately 1 hectare. Adding transect units with average or lower than average artifact density to the settlement area would imply that we are dealing with a much larger, dispersed type of settlement, stretching over an area of several hectares. We find this interpretation unlikely, because it leaves no room for the effects of site erosion and smearing of the surface material and the likely traces of non-residential activities (rubbish disposal, storage pits etc.)

The few worn fragments scattered across the fields north of the central site are incomparable to the much larger and better preserved assemblages from the central site. On the other hand, the smaller satellite cluster south of the Grizovec must be interpreted as another focus of settlement and this area of just under 2000 sq meters should be added to the total occupied area. The small cluster on transects 13E, 15E and 16M not only features artifact densities close to those recorded on the central cluster, but also has the typical on-site signature, with artifact density gradually decreasing from the core to the periphery. At the same time the area over which this concentration of material spreads is too large to be interpreted as the traces of rubbish or storage pits or other non-residential activities.

According to the surface archaeological record, during the Iron Age the survey area was occupied by a small village, consisting of not more than 30 households. For some unknown reason there existed two separate foci of settlement: one much larger in the central survey section, by the main local road and dominating over the small island of Pleistocene conglomerates, the other, many times smaller and occupying a more sheltered location, at the foot of Mali Konjik and away from the main local road. A small excavation on the satellite cluster south of the Grizovec would be a logical step in the future research on this Iron Age site. It will hopefully resolve the character of this cluster and clarify its chronology and relation to the central site.

The Roman to Late Roman Period

For the purposes of this paper we will limit the discussion to the analysis and description of the distribution of the surface ceramic material. It is to be read alongside the earlier summary descriptions of the surface architectural record, still awaiting its full publication. As with the previous two periods of settlement in the intensively surveyed area, the ceramic material can only be dated into very broad chronological terms. About a dozen and a half different fabric groups (including tile and coarse ware) can be dated to the Roman Period (i.e. between the 2nd and the late 6th century AD). As one may suspect, we are dealing with a local production, at least where the coarse ware is concerned. Making a distinction between coarse pottery produced and used during the Iron Age and the Roman Period on the basis of macroscopic observations is hardly achievable. It is perhaps better to leave this category out of the analysis and focus on the identifiable fabric groups.

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9 Cf. with the remains of the Late Iron Age settlement near Sopot (Veles) documented in a similar fashion, Donev, D. (forthcoming) Intensive survey and GIS: a few case-studies from the Middle Vardar Valley, Macedonian Heritage.
on the distribution of the architectural ceramics and the plain fabric groups, characterized by forms, production techniques and surface treatment that safely determine them as Roman to Late Roman. Later we will see that the fact that the clusters of Roman and Iron Age material are clearly spaced apart allows one to include the coarse fabrics into the analysis.  

In comparison to the Iron Age finds the Roman material is in a better state of preservation, with feature shards representing over 15% of the assemblage. This must be related to the local taphonomic factors, the Roman to Late Roman material coming almost exclusively from wild parcels, outside the modern plough-zone. Apart from the problematic coarse fabric groups, it is difficult to single out a predominant plain fabric group. Indeed it is rather symptomatic that there lack too many misfired or waster fragments, possibly suggesting an absence of developed local production.

In total the material dated to the Roman and the Late Roman Period represents 47% of the total surface record, 30% if only the secure fragments are counted (table 3). It is thus by far the most numerous chronological category in the local surface record. The study of the individual finds only confirmed our preliminary observations on the date of the architectural features and earthworks in the survey area. This landscape was almost certainly created sometime during the Roman-Late Roman Period. In terms of density ranges the Roman to Late Roman assemblage stands in-between the Neolithic and the Iron Age assemblages. Excluding the coarse ware, artifact density ranges between 1.2 and 71.1 fragments per 1000 sq meters. If we allow that most of the coarse pottery found alongside the rest of the Roman material also dates Roman-Late Roman, (considering the complete absence of Iron Age plain fabrics, a very likely scenario) the maximum artifact density increases to slightly less than 80 shards per 1000 sq meters. Thus the differences between transect units with high and average artifact density are fairly sharp, regardless of the large dispersal area. Finds securely datable to this period were collected on 129 transect units or roughly about 18% of the survey area. Including the coarse ware the carpet of Roman to Late Roman finds occupies nearly 30% of the survey area. This is between 3 and 4 times the total dispersal area of the Iron Age material and many times the area occupied by the carpet of Neolithic finds. As a result the overall average is slightly higher, reaching nearly 1.5 fragments per 1000 sq meters. There are nevertheless considerable differences between the survey sectors: 6 fragments per hectare were recorded in the central and northern survey sections, slightly less than 5 fragments per 1000 sq meters in the southern and eastern survey sector.

<table>
<thead>
<tr>
<th>Total number and percentage of R-LR finds</th>
<th>466/30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall average density</td>
<td>16 fragments per hectare</td>
</tr>
<tr>
<td>District averages, northern and southern</td>
<td>0.6/4.75 fragments per 1000 sq meters</td>
</tr>
<tr>
<td>Minimum density</td>
<td>1.2 fragments per 1000 sq meters</td>
</tr>
<tr>
<td>Maximum density</td>
<td>71 fragments per 1000 sq meters</td>
</tr>
<tr>
<td>Dispersal area</td>
<td>ca. 90 000 sq meters</td>
</tr>
</tbody>
</table>

Table 3: Statistical distribution of the Roman to Late Roman finds, coarse ware excluded

As evidenced by the stark contrast between the two district averages, the distribution of this material is far from even. Only about 25% of the Roman to Late Roman material was collected from the central and northern survey sectors, 65% from the southern sector and 10%...
from the small eastern sector. Almost one third of the transect units with Roman material feature artifact densities higher than the average for the southern sector. If we add all possible Roman to Late Roman finds, including the coarse ware, the higher than average density zone extends for over 100%, stretching over an area of almost 4 hectares. On the rest of the transects with Roman material there are between 1 and 5 fragments per 1000 sq meters, with a rather narrow zone of very low artifact density.

We’ll argue that in the case of the Roman to Late Roman assemblage, the zone of higher than average density (or > 5 shards per 1000 sq meters) was only partly covered by the settlement proper. Looking at the density figures on individual transect units, one notices that a large number of transects classed into the zone of higher than average density feature densities only slightly higher than the district average, most frequently between 5 and 7 fragments per 1000 sq meters. During the analysis of the distribution of the Iron Age finds we saw that the difference between the on-site and the district average densities was at least threefold. In absolute numbers the collections from transect units that feature between 5 and 7 fragments per 1000 sq meters consist of 2 or 3 Roman shards. These low quantities can hardly be interpreted as settlement remains, although we’ll see that in the local context of low artifact density they aren’t totally irrelevant nor can they be simply relegated to the off-site zone. The relatively large number of transect units that fall within the limits of this density range explains the unusually large extent of the zone of higher than average density.

The pattern of distribution of the Roman material is fairly irregular and focalized, though it is possible to observe local and general concentric trends. Transect units with very high artifact densities are always surrounded by transects featuring higher than average density or between 5 and 17 fragments per 1000 sq meters. We observed three, possibly four high concentrations. Predictably one of these clusters was located on the transects covering the small fort and its foothills (map 6).


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The highest concentration of Roman material was located at the southern foot of the hill-fort, on transects 50S, 50B, 50E and 50H, with a gradual increase from 13 fragments on 50S to nearly 80 fragments per 1000 sq meters on 50H, the maximum for the survey area. On the transect units covering the interior of the fort, the density of Roman material was closer to the district average, ranging between 3 and 13 fragments per 1000 sq meters. Because of the local topography and ground visibility conditions, the cluster has very sharp, unnatural limits. On the south it is bounded by the bed of the Dlabok Dol, on the west by a long overgrown stretch. Only on transects 51H and 51B, 90 meters to the west do we see the Roman material reappearing on the surface, but in quantities lower than the average. It is possible that we are actually seeing a portion of the “tail” or the “halo” of the site, mostly concentrated at the southern foot of the fort.13

Correcting for the visibility factor doesn’t have a particular effect on the local pattern of distribution (map 7). The transect units covering the interior of the fort are elevated above the district average, but the density is still many times lower than that predicted for transects 50B-50H. It is highly probable that transect 49R and possibly 48R, both on the southern terraces of the fort, were also occupied, but the density on the acropolis and the northern terraces are too low, even when corrected for the visibility factor. Taking into account only the area covered by the transects on the southern terraces and at the foot of the hillock and allowing for a wider margin along the western limit, this settlement measures between 2500 and 3000 sq meters.

The most extensive carpet of Roman to Late Roman material was recorded at the foot of Mali Konjik, in the southern survey sector. This sector is almost entirely covered with Roman material, with a particular concentration on 2 or 3 cores, near the southern and eastern edge of the foothills (map 8). The most extensive core stretching over 5 neighbouring transects, 18M, 20M, 20R, 20S and 33D is situated on the eastern edge of the foothills, about 250 meters west.

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of the hill-fort. However, very high artifact density was recorded only on transect 20S with over 20 fragments per 1000 sq meters, the rest of the transects featuring not more than 7-8 shards per 1000 sq meters. The density of Roman finds increases again on transect 18M, immediately to the west of the group, with almost 15 fragments per 1000 sq meters. West of this core there spreads a sparse carpet of Roman material with artifact densities ranging between 2 and 6 fragments per 1000 sq meters. It can be followed continuously for over 120 meters from the western edge of the site. If we limit the site to the transects featuring over 7-8 fragments per 1000 sq meters, it will measure almost 2000 sq meters. But admittedly the local pattern of distribution makes it rather difficult to draw the site limits in a non-arbitrary fashion, i.e. include the transect units with over 7 fragments per 1000 sq meters and exclude those featuring lower artifact densities. The difference between the densities recorded on the core and the periphery aren’t particularly pronounced.

Only a couple of dozen meters north of the cluster on transects 20M-20S, 33D, there is a second, smaller peak on transect 21E with slightly over 19 fragments per 1000 sq meters. This cluster extends over the neighbouring units 21H and 19E with 7 and 8 fragments per 1000 sq meters, leaving a less extensive halo, mostly limited to the east of the core. It extends for about 60 meters reaching the edge of the foothills. Typically for this zone the artifact density is average or lower than average, though there is another small peak on transect 10aS with 9 shards per 1000 sq meters. On the units to the north of this core and on the units covering the area between the sites on transects 21E-21H, 19E and 18M, 20M-20S, 33D, finds securely datable to the Roman and the Late Roman Period completely disappear from the surface record. This was evidently a smaller site, measuring slightly over 1000 sq meters.

South of the concentration on transects 18M, 20M-20S, 33D, after a brief sterile interval, the carpet of Roman finds reappears on the surface. It stretches almost continuously across the southern third of the foothills. Only about 15 meters south of the edge of transect 33D, there is a sudden, but low peak on transects 33St, 32B, 30M and 30R, with densities ranging between
5 and 8 fragments per 1000 sq meters. This irregular cluster is difficult to interpret as it lacks a clear concentric pattern and it is suddenly interrupted in the middle. We will see that this is very likely an artificial phenomenon.

The highest concentrations were recorded further south, on the transects covering the terraces along the southern edge of the foothills. On transects 34aS-37aS we recorded between 7 and 12 fragments per 1000 sq meters, while slightly lower densities were recorded on transects 35B, 35R and 35M, about 10 meters to the north of transect 35aS. In-between these two cores and on the transects to the east of the pair, the density of Roman material drops below the district average, fluctuating between 2 and 5 fragments per 1000 sq meters over a distance of almost 130 meters. Thus we have a pattern very similar to those discovered on the rest of the cores of Roman material at the foot of Mali Konjik: a group of not more than 4-5 transect units with higher than average artifact density is coupled by more extensive strips of average or lower than average density, usually spreading asymmetrically to the central core. Like the concentrations at the foot of the hill-fort and the one on transects 18M, 20M-20S, 33D it measures between 2 and 3000 sq meters.

A thin carpet of finds securely datable to the Roman-Late Roman Period also covers the slopes of Mali Konjik, in its southern half. The majority of these transects feature average or lower than average density of Roman material, but note the small peaks on transect 41aD and near the small quartz quarry, just outside the survey limits. Mostly thanks to the local context and the character of the finds, these remains were interpreted as traces of non-residential, industrial activities14.

The last concentration of finds datable to the Roman-Late Roman Period was discovered in the eastern survey sector on three neighbouring transect units, 140bE, 140bS and 140aS (map 9). The artifact density ranges from 7 shards on 140aS, 12 on 140bS to 17 per 1000 sq meters on transect 140bE. This is a small island in an otherwise sterile zone, with only isolated fragments

coming from transects 140aH, 140bH and 140cE. Again it is the local context and the character of the finds that were decisive in the interpretation of this cluster. These alongside the absence of an extensive zone of intermediary density indicated the existence of a necropolis on this location, contemporary with the small fortification and the surrounding settlement foci\textsuperscript{15}.

In the rest of the intensively surveyed area, including the northwestern half of the southern section, the carpet of Roman to Late Roman finds suddenly becomes extremely sparse and discontinuous. The average density drops below 1 fragment per 1000 sq meters, but there are nevertheless considerable fluctuations. Extensive sterile stretches are suddenly interrupted by low density peaks, such as those on transects 92S, 71E or 67E. On these transect units the artifact density suddenly increases to 5 or 6 fragments per 1000 sq meters, approaching the values recorded on the periphery of the clusters in the southern survey section. Are we to interpret these small concentrations limited to single transect units as potential foci of non-residential activities or subsidiary buildings? After all these increments are much higher than the average density for the central and northern survey sectors. The worn character of the finds and the absence of architectural ceramics exclude the possibility that we are dealing with a dispersed network of individual dwellings.

We were surprised to discover a more continuous and compact carpet in the northernmost group of transects, at the foot of Cucula. Here the density of Roman to Late Roman material never exceeds the threshold of 4 fragments per 1000 sq meters, but the carpet is continuous and could indicate the presence of another settlement foci, perhaps situated on some of the ridges drained by the ravine to north of the Grizovec. This drainage was left outside the intensively surveyed area and we expect future surveys to discover the remains of another Roman settlement, probably smaller than the one discovered on the northern bank of the Dlabok Dol.

As in the area of the fortification, correcting for the variable ground visibility conditions doesn’t alter significantly the pattern described in the preceding paragraphs (maps 10, 11).

\textsuperscript{15} Ibid.
However it does have the unperceived effect of further extending the zone of higher than average artifact density (although the average threshold is slightly raised). Thus only between 10 and 15% of the transect units with Roman material in the southern survey section belong to the zones of intermediary or lower than average artifact density. As a result of this correction, the roughly concentric pattern described earlier, completely loses its integrity. Although it is still possible to distinguish quantitatively between transect units covering the settlement proper and those covering its halo, the latter regularly featuring less than 10 fragments per 1000 sq meters, the zone of transition between the site and the off-site disappears. At the same time, the dispersed scatter of Roman finds in the central and northern survey sections becomes even thinner and most of the low, isolated peaks are relegated to the zone of intermediary density. The extensive carpet covering the northernmost group of transects becomes slightly more pronounced, with artifact density exceeding the average on three transects. Similarly the small concentration in the necropolis area becomes slightly denser and larger, spreading over the neighbouring transects to the north, 140aH and 140bH.

It is also worthwhile looking at the distribution of all finds possibly datable to the Roman-Late Roman Periods, corrected for the visibility factor (map 12). We get a visibly changed, but also a more comprehensible pattern. The coarse ware not only represents a considerable fraction of the Roman to Late Roman assemblage, but it is also distributed differently from the rest of the ceramic classes (map 13). As a result further increases in artifact density are limited only to certain portions of the zone of high density of fine, plain and tile fabrics. The threshold that defines the zone of higher than average density is raised to 16 fragments per 1000 sq meters and it is now limited to approximately 10% of the transect units with Roman material on the surface. The clusters at the foot of Mali Konjik receive clearer contours and we see a more extensive zone of intermediary density. The main cores persist: the one at the foot of the hill-fort, now clearly separated from the average density in the fortified area (note the complete absence of coarse pottery on this location, map 13), the one on transects 18M, 20M-20S, 33D and its smaller neighbour on transects 21E, 21H and
Map 12: Density of all finds possibly datable to the R-LR Period, visibility corrected.

Map 13: Distribution of all finds possibly datable to the Roman-Late Roman period, by fabric classes.
19E, and the one on the terraces along the southern edge of the foothills, now separated in two distinct clusters on transects 36aS-37aS and 35R-35M. One new cluster emerges on transects 29E and 29H, lying on the very periphery of the halo of the site on transects 18M, 20M-20S, 33D. Similar increases emerge on transects 14S and 33St, while the anomalous increase on transects 33St, 32B, 30M and 30R disappears, merging into the zone of average density. The small concentration on transect 41aD persists and there is an increased density on all transect covering the southern half of the face of Mali Konjik. Not much changes in the extent and the distribution of the cluster on the suspected necropolis area, although the artifact density is lower than on the major clusters in the southern survey section and we also see a more widespread carpet of low artifact density across the eastern sector.

Perhaps the most significant modifications occur in the zones of intermediary and lower than average artifact density. Combined they occupy almost 90% of the area covered by the carpet of Roman-Late Roman material and this extent is indeed proportional to the documented site area. Furthermore we see a regular concentric pattern, with transects featuring between 7 and 16 fragments per 1000 sq meters regularly clustering around transects featuring over 16 fragments per 1000 sq meters. In the central and northern survey sections this intermediary density zone nearly disappears, only to return on the transects covering the northernmost survey section.

These alternative readings of the carpet of the Roman-Late Roman material bring up the issue of the possible correlates of the integrity of the ceramic assemblages. Do integral, contemporary ceramic assemblages tend to leave a particular signature in the surface record? They do at least in conditions of flat or gentle relief and this phenomenon was observed with the very onset of intensive on-site survey in the Mediterranean. The difficulty with our Roman-Late Roman assemblage is that it covers a rather wide chronological period of almost 7 centuries. Even if the dating of the coarse ware was unproblematic, this period is simply too long. Settlement contraction, expansion or displacement is likely to occur and this will inevitably affect the shape and the structure of the surface cluster. Yet disregarding the coarse pottery, although methodically justified, amounts to taking away about one third of the assemblage and produces a rather unusual pattern. Perhaps this fact, alongside the limited number of fabric groups indicate that the life of this settlement was shorter, mostly falling within the second half of the period. The presence of a few fragments datable to the Early Roman Period can hardly affect the overall pattern.

During the Roman to Late Roman Period settlement in the survey area moved to the left bank of the Dlabok Dol and at the foot of Mali Konjik. It consisted of at least three farms or clusters of houses, plus the concentration at the foot of the hill-fort. The character of the latter site is somewhat problematic in view of the complete absence of coarse pottery, but one shouldn’t exclude the possibility that this is predetermined by the local taphonomic conditions. The large amount of tile and plain domestic ware are difficult to explain by referring to non-residential activities. In terms of settlement area, these clusters sum up to approximately one hectare, i.e. very similar to the Iron Age settlement. But the character of this settlement will remain unclear. Solely on the basis of the surface record it is impossible to decide if these are separate farmsteads or a dispersed hamlet. Either way it is difficult to grasp the extent of the architectural remains, the fortification and the terraces. We are obviously dealing with a stable community that invested in the surrounding landscape.

One final remark concerning the Roman to Late Roman Period is the shift in settlement focus from the central parts of the Pleistocene zone to the narrow belt of amphibolites that

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limits the survey area from the south and west. This part of the terrain hasn’t been ploughed in the recent centuries and it seems that this has always been the case. Compared to its prehistoric predecessors the Roman to Late Roman settlement lies hidden from sight; even the fort is not very visible from the main local road. This positioning makes perfect sense, as it not only leaves the entire cultivable area free from dwellings, but it also makes an optimum usage of the local topography. These farms or groups of houses were favorably exposed to the south, protected from the cold northerlies.

**Svećani in the post-Antique Period**

After the end of the Roman-Late Roman Period, the intensively surveyed area was definitely abandoned. Among the collected material there are no fragments datable prior to the late 19th-early 20th century. Thus we couldn’t confirm the tradition preserved in oral history and cartography that the site of the old village was closer to the Vardar, somewhere in the northern end of the survey area. The ruins of the village Svećani, abandoned in the early decades of the 20th century are situated in the upper course of the Dlabok Dol, over 2 kilometers southwest of the survey area as the crow flies.

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Although this may seem as an apparent retreat from the main agricultural resources and regional communication, the mountainous hinterland could have been equally attractive to the local agro-pastoralists thanks to the relative abundance of freshwater springs and pastures. In any case the survey area can be cultivated feasibly even from this location, as the walking distance to the fields at the foot of Berudištë and Mali Konjik is about half an hour.

The most direct evidence of a renewed presence during the Early Modern Period comes from a small group of pottery fragments scattered across the survey area, but with a visible concentration in the northern half of the survey and especially along the main local road (map 14). This is a tiny assemblage of about 20 fragments, made of fine ochre clay and often carrying traces of poor, vitreous glaze. However it is possible that the assemblage was larger, including two fabric groups that appear in larger quantities on a couple of transects in the central survey section. We remain cautious when it comes to their dating, because they could easily belong to the Roman-Late Roman assemblage. The only factor that distinguishes them from the rest of this assemblage is their pattern of distribution. They hardly overlap with the majority of the fabrics datable to the Roman-Late Roman Period. Moreover the majority of the fragments that belong to one of the two problematic fabric groups appear almost exclusively on one or two transect with visible remains of furrows for irrigation channels. Bearing in mind that over 90% of the finds are body shards, it is very likely that we are dealing with the fragments of a ceramic pipe that went out of use in the nearer past.

Including or excluding these two categories from the Early Modern assemblage doesn’t affect the interpretation of the settlement and land-use during the Early Modern Period. The settlement focus moved to the upper course of the Dlabok Dol, at the foot of Dvorski Rid and Markovica (map 15). This is a far more extensive zone of Pleistocene sediments; the remnants of an old lacustrine terrace, fragmented by the linear erosion into low ridges with rounded tops. Because of the rugged terrain large portions of this land are uncultivable, but in terms of
carrying capacity it represents an alternative settlement niche to the lower course of the Dlabok Dol. Svećani was a small village or a hamlet comprising between ten and a dozen households. In terms of rank it probably didn’t differ from the Iron Age and the Roman-Late Roman settlement that we discovered in the lower course of the valley.

Being a part of the same valley, the intensively surveyed area was incorporated into the agricultural territory of the new settlement. It is possible that at least some of the terraces were built or reused for agricultural purposes during the Early Modern Period. Although appearing in fairly small quantities, the presence of Early Modern finds in the surface record shows that this area was frequented and probably exploited by the inhabitants of Svećani. Access from across the Vardar or from the valley of the Svećanska Reka is more difficult and the exploitation of this small oasis of arable land is hardly feasible for the inhabitants of the neighbouring villages.

Conclusions and directions for future research

It is still too early to speculate about the long-term settlement dynamic in the valley of the Dlabok Dol. We still need to survey the rest of its lower basin and it is possible that we’re seeing only a fraction of a wider, continuous pattern. None the less the occupation of the alternative settlement niche in the upper course of the Dlabok Dol by the Early Modern Period points to one possible pattern in the long-term settlement history of the area. One should consider the possibility that this episode was repeated in other periods when the survey area was uninhabited, but it is equally likely that both settlement niches were inhabited simultaneously only during the Neolithic, the Iron Age and sometime during the Roman-Late Roman Period. It is unfortunate that the immediate surroundings of Early Modern Svećani are now lying overgrown, the low ground visibility preventing an intensive and systematic artifact survey. However it is possible to make intensive collections from the area of the village houses, which could give us an important clue to the date of this settlement and it can also detect the traces of settlements from other periods in the immediate vicinity. Another possibility is that the local settlement shifted between the banks of the Dlabok Dol, although because of its apparent dryness and openness the southern bank doesn’t look like a very promising settlement location.

The fact that during the three periods represented in the surface record of the survey area, the size of the local settlement didn’t exceed 1 hectare is hardly surprising in view of the carrying capacity and the agricultural potential of the wider study region. The valley of the Dlabok Dol could provide secure subsistence for not more than 30 families, assuming that each household consisted of 5 individuals and owned not more than 5 hectares of arable land. It was more surprising to discover a small, farm-sized Neolithic settlement, although the absence of this size-category from the country’s archaeological record could simply reflect the prevalent type of field survey method. Sites of this size dating to the prehistoric periods and especially the Neolithic are rare, even in regions covered by intensive artifact survey.

During the last phase of settlement most of the micro-regions along the Middle Vardar Valley were covered by a modular network of settlements, featuring roughly the same number of inhabitants or between 10 and 30 families. However this simple pattern is interrupted by larger villages such as Vinićani, with nearly 100 households. Another group of villages clusters around the limit of 50-60 households. It would be of great interest to extend the survey over some of the neighbouring settlement niches and look for evidence of larger settlements in the archaeological record. One possible candidate is the valley of the Vidin Dol, with the remains of a larger settlement at the site called “Vidin Grad”.

20 Јосифовска-Драгојевић, Б. (1965) Прилог локализовања града Аргоса у Пеонији, 117-136, Жива Антика www.haemus.mk
We would at last like to mention the character of the surface clusters which we termed sites and settlements in this survey. In contrast to the common perception and representation of archaeological sites as simple dots, this small scale survey demonstrated that these are far more elusive phenomena. Indeed this observation was made over a decade ago and in geographic settings as distant as southern Greece and central Europe\textsuperscript{21}. In “Old Svećani” we observed similarly complex patterns in the surface archaeological record. The ceramic assemblages were distributed into concentric density patterns, ranging from 0 to over 140 fragments per 1000 sq meters. In nearly all cases presented in this paper the concentric pattern was multifocal and irregular. This circumstance creates obvious problems of interpretation. It is often difficult to decide on the exact limits of the site solely on the basis of the density figures, or more specifically, it is almost impossible to separate the area covered by dwellings from the peripheral zone of the settlement proper and the site halo. The interpretation of the zones of low and intermediary density or the so called satellite clusters is even more problematic and most survey projects now combine surface artifact surveys with geophysical prospection or test-pits in the hope of clarifying the character of these phenomena\textsuperscript{22}.

In fact these irregular dispersed patterns in the distribution of the surface material shouldn’t be surprising if we think in terms of the complex series of pre and post-depositional events that created the archaeological record\textsuperscript{23}. The settlement with its dwellings and subsidiary buildings is but a single component of the inhabited landscape, including satellites, field huts, burial and sacred ground, intensively cultivated areas and so forth. Furthermore the settlement itself hardly represents a zone of homogenous activity. Instead it is a complex agglomeration of house floors, rubbish pits, ditches and fences, roads and public space that can hardly produce a compact artifact cluster on the surface, even if we exclude the impact of recycling and the local taphonomic factors. This makes us rethink the traditional concept of archaeological site as a discrete and compact area, a concept that can indeed be quite misleading for both landscape archaeologists and the people that work out strategies for cultural heritage protection.


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