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A Byzantine Church Discovered in the Village of Ağlasun (Burdur): Some More Light on Dark Age Pisidia

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Introduction

Research[1] for this article started with the identification of a number of limestone building blocks by members of the Sagalassos Archaeological Research Project in the staircase and east wall of a house in the village of Ağlasun in Burdur province belonging to Hasan Yasan, one of the workmen involved in the excavations and restorations at nearby Sagalassos. These stones were identified as elements of an altar platform (*bema*) and chancel barrier (*templon*) of a Byzantine church. According to the house owner, these blocks originated from one of his fields located on a gentle slope in the northeast part of Sakaraca Mahallesi, at a location known as Gavur Yıkığı or "Infidel's Ruin" (Fig. 1). This is a locally known source of building material. During the construction of the house many stones were allegedly brought from there.

Today no architectural remains are visible on the surface of the above-mentioned field. Continuous ploughing, however, has littered it with fragments of building ceramics, mortar, and pottery, while concentrations of rubble stones, bricks, and tile fragments as well as a few limestone ashlar blocks are present along the borders of the field. These materials appeared to corroborate the story of Hasan Bey.

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The discovery of the blocks and their alleged origin offered the opportunity to establish the location of a church for the first time in the village of Ağlasun. The village is known to have existed since antiquity as a rural settlement in the immediate vicinity of the ancient city of Sagalassos[2]. In addition to remains of antique monuments, unprovenanced architectural elements of churches in the shape of capitals and elements of chancel screens are known from the village[3]. Yet to date, no church, nor any other pre-Seljuk building for that matter, could be located with certainty[4]. Moreover, the wide distribution of surface material in the field and its immediate surroundings suggested more than just a single church, hinting at the presence of a settlement. The investigation of such a site would not only allow to improve our knowledge of the general settlement history of this rural part of the study region, but especially that of the Byzantine period, as little is known about the physical aspect and organization of rural settlements at this particular time[5].

A multi-disciplinary approach, involving a combination of archaeological and geophysical survey methods and techniques, was chosen to establish the plan and date of the supposed church building, as well as to ascertain the presence of other structures in its vicinity. The archaeological investigation of the field was conducted by the survey team of the Sagalassos Project while a team from the University of Cologne applied the geophysical techniques. Results of these different types of survey conducted during the summer campaign of 2016 will be presented first before attempting an interpretation of what these results mean in terms of settlement history for this area.

Architectural Elements

Our presentation of the results starts with an overview of the architectural elements that were found incorporated into the staircase and the east wall of the house of Hasan Yasan on Kazım Karabekir Caddesi, Sakarca Mahallesi in Ağlasun, Burdur province (Fig. 2a).

Firstly, a rectangular, pillar-like block in pink nodular limestone, a type of stone that was locally quarried during the Roman Imperial period[6], was found reused as the sixth step of a staircase present against the south façade of the house. The lower five steps were made of rectangular ashlar blocks in limestone which were allegedly brought from the same location (Fig. 2b). The pillar-like block had a total length of 0.91 m, a width of 0.34 m and a thickness of 0.23 m. A circular base (diameter: 0.20 m; thickness: 0.03 m) on a square plinth (side: 0.22 m; thickness: 0.04 m) was present on the west side of the block. On its top side a plain decorative panel (length: 0.675 m; width: 0.20 m) was carved with inward semicircular ends edged by a bevelled band imitating soffit decoration. The bottom side cannot be seen, so it is not certain whether it was decorated or left plain. Rectangular grooves (length: 0.80 m; width: 0.06 m; depth of 0.03 m) were present in the front and back sides of the block. These became wider towards the west side of the block (width: 0.125 m).

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2 Vanhaverbeke – Waelkens 2003, 72; Talloen 2015, 244.

3 Vanhaverbeke et al. 2009, 182-183.

4 The mosaic floor fragment located in the cemetery of Bala Mahallesi in the northeast part of the village quite possibly belonged to an Early Byzantine church (Vanhaverbeke et al. 2009, 182), but no plan of the building has been established, leaving the identification uncertain.

5 Akyürek 2008, 296. The very general treatment of the topic by Klaus Belke (2005) in his contribution to the volume on villages in the Byzantine Empire is much revealing.

6 Degryse et al. 2003.

Its shape and decoration allowed the block to be identified as part of the liturgical furnishings of a church. It represents one of the posts of a chancel screen or *templon* which held the stone slabs of the screen that closed off the altar area or *bema* in their place, and carried a small column or colonette, which in turn supported an epistyle. Judging by the slots on the sides of the post, the panels of the screen were about 0.80 m high and 0.06 m thick with an upper border of 0.12 m thick. Their width cannot be determined. Byzantine churches were provided with such a chancel barrier to separate the sanctuary on the east side of the building from the nave[7]. On the east side of the screen, accessible only to clergy, was the altar, the place for performing the liturgy. On the west side was the area for the congregation of worshippers. Less likely it was part of a screen between the central nave and the side aisles to organize the congregation[8]. No such barrier has thus far been noted for any of the churches at Sagalassos, while chancel barriers were a standard element of local basilica architecture[9].

Secondly, two rectangular blocks were allegedly brought from the same location. These beige limestone blocks, likewise from local quarries[10], were built into the east wall of the house on either side of a door opening. The first block, incorporated in the south part of the wall beside the staircase, had a visible length of 0.52 m, a width of 0.59 m and a thickness of 0.29 m, and a stepped upper surface (Fig. 2c). A rectangular groove present in the higher part of the upper surface of the block over its entire length had a width of 0.10 m. The second block, situated north of the door opening, had a visible length of 0.71 m, a width of 0.58 m. The thickness of the block could not be established. It equally featured a stepped surface (Fig. 2d). Two rectangular grooves were present in the top surface of the block, with a width of 0.09 m. They were interrupted over a length of 0.24 m in the middle of the block by a flat area provided with a dowel hole. As the grooves undoubtedly represent slots for the placement of chancel slabs, these two blocks can be identified as parts of the stylobate or *bema* platform on top of which the sanctuary screen was placed. The width of the flat area between the two grooves of the second block (0.24 m) corresponded to the width of the post described above and, together with the presence of a dowel hole, indicated that it was intended for the placement of this or a similar post. This strongly suggests that these architectural fragments indeed belonged to the same building.

Of the discussed elements only the post provides some chronological indications. The shape of the top of the post, intended to carry a colonette, indicated the development of a higher *templon*, replacing the lower chancel barrier of the earlier church architecture consisting of slabs held by low posts which was typical for the 4th and 5th centuries[11]. While the first examples of such high screens appeared in Constantinople during the 5th century, evidence for screens with posts carrying columns occurred in the provinces from the early 6th century onwards[12]. The soffit decoration on the front side of the post is typical of the Early Byzantine period[13]. This simple decoration can be distinguished from the richness of the carved decoration of architectural elements of Middle Byzantine churches from the 9th century onwards[14].

7 Vanderheyde 2007.

8 Peschlow 2006.

9 Talloen forthcoming.

10 Degryse et al. 2003.

11 Chatzidakis 1978, 327-328.

12 Vanderheyde 2007, 77.

13 Niewöhner 2008, 288.

14 Vanderheyde 2007.

Elsewhere in Anatolia, similar posts with soffit decoration have been recorded in the area of Aizanoi in Phrygia, where these were given an Early Byzantine date, and in the Basilica *extra muros* at Dağ Pazarı in Cilicia[15]. Yet, as already hinted at by Sodini[16], it is difficult to distinguish 6th century elements of liturgical furniture from 7th century ones, so it cannot be excluded that the *templon* was arranged during the 7th century. A date of origin in the 6th to 7th centuries therefore seems most likely for these elements of liturgical furnishings.

Archaeological survey

Surface surveys with artefact collection and study are an important archaeological method of assessing long-term settlement history over a wider area allowing for specific phases of settlement change to be appraised. There is a wide range of archaeological survey methods in scholarly literature which have their merits and demerits. The selection of a survey method influences the fieldwork outcomes[17]. Therefore, it is important to develop a survey design that meets the study area conditions as well as the research questions[18]. Since our goal was to obtain a detailed understanding of a presumed church site and to provide it with an archaeological context, the method of choice was an intensive pedestrian field walking survey. In Turkey this methodology is less frequently used by archaeological projects whereas regional reconnaissance approaches are better attested[19].

For this survey the field walkers were spaced 10 m apart in order to attain a high resolution which is needed to detect small activity areas. The fact that most of the agricultural fields were not wider than 60 m also played a role in this consideration. During the survey, the visibility of the fields was graded as it has an impact on the survey outcome. The surveyed transects themselves were 30 m long and 1 m wide. This way of surveying detects all artefact concentrations larger than 10 m in extent and differentiates shifting densities at intervals of 30 m. A total of fourteen agricultural fields (Fields 160-173 of the Territorial Archaeological Survey 2016, see Fig. 1) with a combined surface of c. 5.2 ha were surveyed in this manner in the area of Gavur Yıkığı, around the field of Hasan Bey, designated Field 171, which was the alleged source of the *spolia*.

Additionally, based on the results of the initial field walking, combined with the indications of the land owner and the visible presence of tiles and bricks on the surface, a more intensive strategy of gridded collection was employed along the northern edge of Field 171, covering the suspected location of the church. It was based on a grid of sectors of 5 x 5 m, measuring 25 m NW-SE and 15 m NE-SW (Fig. 3). With this method we aimed to gain a more detailed find collection at the alleged church site.

We first present an overview of the find categories before discussing some other field observations made at Field 171.

15 Aizanoi: Niewöhner 2007, 235-247 cat. n° 240-281; Dağ Pazarı: Gough 1975.

16 Sodini 2008, 15.

17 Banning 2002, 22-26.

18 Mattingly 2000.

19 Düring – Glatz 2015, 56.

Stone

Two limestone ashlar blocks were registered to the east and south of Field 171. The first ashlar block at the northeast corner of the field (length: 0.79 m, width: 0.48 m, thickness: 0.28 m) was provided with two clamp holes on its top side, one on each short side. The second ashlar block was found at the southwest entrance to the field (length: 0.98 m, width: 0.44 m, thickness: 0.48 m). These ashlars were comparable to the blocks that were reused as the lower steps of the staircase of the house of Hasan Bey mentioned above.

Furthermore, stone finds were collected as part of the survey of the field. Among the concentration of stones present on the east end of Field 171 were found a rhombus-shaped and a triangular-shaped piece of imported white marble (Fig. 4e), while a piece of dark granodiorite stone was collected in the field itself (Fig. 4f). These were most probably elements of stone inlay or *opus sectile* used for covering floors, and sometimes walls, of buildings. Other stone finds from the field included a fragment of a white marble slab with a thicker edge, possibly part of a slab of the chancel screen, and a flat piece of white marble with an upstanding rim, possibly part of a marble table, but with traces of mortar which suggests that it had been reused as building material.

Ceramics

Some 730 sherds of pottery were collected from the fourteen fields at Gavur Yıkığı. Presents an overview of the pottery per field and period. A large number of the collected sherds was not dateable due to fragmentation and lack of diagnostic features. By far the highest concentration of ceramic artefacts – sherds and building ceramics – was found in Field 171, where the church is thought to have once stood (Figs. 3, 6 and 7). Additionally, in Field 160 to the west, and in Fields 166-169 to the southeast of Field 171, slightly denser artefact concentrations were attested which contrast with the fields (162-165, 170) that were surveyed to the north of Field 171. For Field 172 the small number of finds is possibly related to the poor visibility of this field at the time of investigation.

Most of the collected materials from the area around Field 171 were mixed in date with a small amount of material from the Roman Imperial, Late Roman, Byzantine, and Ottoman periods. Even a few prehistoric (i.e. Late Chalcolithic) sherds were picked up. The majority of the Roman – Early Byzantine pottery could be categorized as Sagalassos Red Sip Ware, the locally produced table ware, which is predominantly present in most surface collections of the study area[20]. Their worn state was remarkable.

Pottery collected on Field 171 ranged in date between the 6th and 10th centuries CE, with (late) Ottoman sherds also present in some numbers (see Fig. 5). Sagalassos Red Slip Ware was almost completely lacking. Only sherds dated to the 6th century CE were retrieved but surprisingly in very small numbers and again in a very worn state (Fig. 4a). By far the most common pottery was locally produced coarse ware, comprising categories such as cooking ware, jugs, flasks, bowls, and large vessels for storage or *dolia* (Fig. 4d). The presence of pattern-burnished pottery among them, as well as characteristic flat bases and strap handles, suggests a Byzantine Dark Age collection[21]. Common ware is generally difficult to date, even more so

[20] Vandam et al. 2017, 335-339.

[21] See Vionis et al. 2009, 156-158; Poblome 2014, 633-635.

for pottery from the Dark Ages due to lack of diagnostic material, leaving many sites from this era unidentified[22]. But thanks to comparative material from excavations in nearby Sagalassos[23], these sherds could be attributed to this less known period of the 8th to 10th centuries. No lead-glazed wares were attested, suggesting that this coarse ware collection was in use before the former table wares became more common in the 11th to 13th centuries, as reflected by their presence at Sagalassos[24]. The ceramic evidence then suggests a gap in occupation until the (late) Ottoman period when materials reappear, belonging to the 18th to 20th centuries in the shape of locally/regionally produced pottery albeit in considerably lower amounts.

The building material found on the site consisted of brick, tile, and imbrices in fabrics and types that could be attributed to the Byzantine period, rather than the standard Roman Imperial to Late Antique repertoire known from urban Sagalassos (Fig. 4b). Fragments of brick and tile were found in substantial quantities in Fields 169 and 173, but especially in Field 171 where the highest concentrations were present in the northeast and southwest parts of the field (Figs. 3 and 7).

Finally, three pierced fragments of Byzantine tiles were found on Field 171 which can be identified as loom weights (Fig. 4a). Loom weights imply a large stationary loom and a degree of textile production in this area. The total number of weights used on a loom would depend upon the width of the yarn, the weight and thickness of the loom weights, and the width and desired threat count of the fabric being woven[25]. All but the narrowest of fabrics would require between 30 and 70 weights.

Glass

The blue handle of a glass vessel was found in sector 9 of the grid in Field 171 (Fig. 4c). It either belonged to a small jug or more probably an oil lamp as these were the most widespread type of glass vessels with a handle[26]. Such glass lamps were often developed from drinking vessels with the addition of small handles around their rim so that they could be hung from metal clasps or hooks. This would indicate the presence of hanging lamps for the lighting of a building. Similar lamps have been found at sites throughout the Byzantine world, dating from the 5th to 15th centuries[27].

Other finds

Surface collection in Field 171 yielded two pieces of production waste indicating the production of iron objects on the site. Iron ore is known to have been quarried at nearby Dereköy in late antiquity[28], and this site may well have continued to supply local metal workshops into the Byzantine period. Other finds included a single iron nail as well as an Epipaleolithic microlith.

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22 Anderson 2008, 236-237.

23 Vionis et al. 2009; Poblome 2014.

24 Vionis et al. 2010.

25 Mårtensson et al. 2009, 394-396.

26 Antonaras 2010, 403.

27 Antonaras 2010.

28 Degryse et al. 2007.

Field observations

During the survey of Field 171 some features were observed that can be related to the occupation of the site. Along the north side of the field, it was established that the bedrock of ophiolitic mélange and limestone had been partly carved away for the creation of a terrace in that area, over a length of approximately 40 m (Fig. 8).

At the northeast border of the field with Field 172, a water source was found at the bottom of a semicircular wall (inner diameter of 1.77 m) built of mortared rubble stone and oriented to the northeast, forming a kind of well (Fig. 9). The wall, with a thickness of 0.84 m, stands to a maximum height of 2.40 m. It was built on top of the limestone bedrock which was carved towards the east, possibly for the creation of a channel. The southeast extremity of the wall had been dismantled at some point, exposing the core of the wall. A similar wall of mortared rubble stones continued from the west end of the semicircular wall towards the west over a length of 2.50 m. A wall of dry-laid rubble stones was later built against it, probably in recent times. Water runs out of three openings or outlets at the bottom of the semicircular wall, two of which are present inside the well, and one immediately east of it; the latter was built of bricks. They fed a pool within the semicircular well. A channel consisting of terracotta water pipes running in western direction conducted the water from the pool in the direction of Field 171. The source was used for irrigating the adjacent fields, as it still is today, but the terracotta pipes indicate that it supplied drinking water as well.

Geophysical exploration

Geophysical methods of surveying have become commonplace in archaeological prospecting since the 1990s[29]. Recent examples of the application of geophysical techniques for the investigation of Byzantine churches in Anatolia include case studies at Germia and Nicaea[30].

The geophysical exploration of the field of Gavur Yıkığı covering a total area of 0.6 ha, consisted of three different techniques. The standard grid used for covering the surveyed area was 30 x 30 m. The grids were measured in a zigzag system with transects spaced depending on the individual method.

Geomagnetic survey

This technique involves the use of magnetometers to detect and record anomalies in the vertical component of the earth's magnetic field caused by variations in soil magnetic susceptibility or permanent magnetization[31]. This is closely linked to differences in magnetic distinctions between certain structures and the surrounding soil. The survey was carried out using a magnetometer (Geometrics G858) connected to four caesium probes. Under normal conditions this technique can identify features up to a maximum depth of 1.5 m. The data was collected with a sampling interval of 0.5 m along transects spaced 2.0 m apart.

On the magnetogram (Fig. 10) several anomalies of different origin could be seen. A very strong magnetic anomaly in the shape of a light circular spot present in the northern part of Field 171 (indicated with a blue circle on Fig. 11) pointed to thermoremanent magnetization

[29] Introduction to geophysical exploration and archaeological applications can be found, for example, in Scollar 1990, Aspinall et al. 2008, and Conyers 2013.

[30] Germia: Niewöhner et al. 2013; Nicaea: Rabbel et al. 2014.

[31] Clark 1996.

of brick and tile or materials related to metal production. Because of its round shape and size (diameter of c. 3 m) the anomaly could be interpreted as a kiln or furnace[32]. It was not clear whether the less intensive spot immediately south of it belonged to the same anomaly or represented a different one.

Furthermore, the geomagnetic survey showed the presence of elongated anomalies of higher magnetic susceptibility with an east-west orientation in the northern part of Field 171 (Fig. 11 No. 1), probably caused by fired brick and tile which were most abundant on the surface in that particular area (see Figs. 3 and 7). These white zones appeared to be delineated by non-magnetic anomalies due to the presence of stones, suggesting the presence of two parallel walls with an east-west orientation somewhat 2 m, apart and with a length of c. 20 m. They seemingly ran east from another wall with a north-south orientation.

Other non-magnetic aberrations due to the presence of stone walls appeared as dark lines in the magnetogram. In Field 171 they clearly revealed the presence of a north-south oriented rectangular structure in the southeast part of the field, measuring approximately 20 m by 7.5 m and consisting of several, probably three, rooms (Fig. 11 No. 2).

To the west of this building, in the southwest part of Field 171, a smaller rectangular structure (measuring c. 6.5 m by 3.5 m) with northwest-southeast orientation was again suggested by non-magnetic anomalies (Fig. 11 No. 3). This appeared to have been part of a larger complex of rooms, expanding in a stepped-like manner towards the west over a length of approximately 18 m, of which no clear plan could be established probably due to the nature of the terrain, which sloped steeply towards the southwest.

In the northern tip of the field, a northwest-southeast oriented non-magnetic anomaly could be observed over a length of 8 m (Fig. 11 No. 4). From its eastern end a stepped wall appeared to run to the north. After an opening of c. 2 m, the northwest-southeast wall continued for another 10 m.

Further towards the south in Field 173, another northwest-southeast oriented rectangular structure, measuring 7 m by 3.5 m, was brought out by faint non-magnetic aberrations which suggested another type of building material, possibly sundried brick (Fig. 11 No. 5).

The prominent non-magnetic anomaly in the eastern part of Field 160, running northwest-southeast, was definitely a stone wall, but the strength of the signal suggested one of considerable thickness, possibly a terrace wall (Fig. 11 No. 6). Such an interpretation was corroborated by the fact that the signal ran parallel to other present-day terrace walls to the northwest, and that area east of the wall was 1 to 2 m higher than the rest of the field. The east-west oriented lines to the west of this anomaly were most probably caused by recent agricultural activities, but the two orthogonal lines in the southeast corner of the field appeared to belong to a rectangular structure.

Electrical resistance survey

A resistivity survey is carried out by recording the electrical response arising from current input into the ground with the purpose of collecting information on the resistivity structure in the ground. A Geoscan Research RM85 resistance meter was used to log the data. Five electrodes

[32] These signals are very similar to those registered in the eastern *suburbium* of Sagalassos which could be identified as pottery kilns through excavation (Mušic et al. 2009).

connected via multicore cables with the measurement device in 0.5 m separation gave a profile of 2 m. The maximum recorded depth with this method is limited to 1 m.

This method proved very effective to determine the presence of walls at the site (Fig. 12). Aberrations of high resistivity in dark color could be associated with the walls and foundations of buildings. The clear anomalies suggested stone as construction material.

Georesistivity results confirmed the presence of an east-west oriented building with an approximate length of 20 m and a width of 9 m in the northern part of Field 171 (Fig. 13 No. 1), as already suggested by the non-magnetic anomalies. The south wall of the structure was particularly clear, as well as a rectangular space, measuring c. 4.70 m by 3.75 m, situated against the eastern extremity of that wall. The east end of the building was suggested by a somewhat less clear aberration running north from the eastern end of the south wall. A fainter continuation of the line of this south wall towards the east, together with two walls running south from this line in the eastern extremity of the field, suggested that the small rectangular space was part of a series of rooms built against the south wall of the building. Spots of increased resistivity also hinted at the presence of a parallel wall, c. 9 m to the north of the south wall. The walls of the structure were not everywhere fully visible as large amounts of building material have been removed as a result of pillaging and ploughing, resulting in the heaps of stones and bricks along the edges of this part of the field. Wall segments also appeared to have be spread over larger areas, possibly caused by their collapse and subsequent ploughing of the field. The building may have been preceded by a rectangular space to the west, measuring 6 m by 9 m, with a central opening in its west wall. The north wall of this space could be identified with the northwest-southeast oriented wall revealed by the geomagnetic survey in the northern corner of the field.

The resistivity results also corroborated the presence of the north-south-oriented rectangular building (measuring 20 m in length and 7.5 m in width) in the southeast part of Field 171, but the internal division was not that clear (Fig. 13 No. 2). Situated approximately 12 m to its east, and more or less parallel to it, another rectangular structure was suggested by highly resistive anomalies along the eastern border of the field over a length of 12 m (Fig. 13 No. 3). They could be identified as the remnants of its western and northern walls. The elongated area of lower resistivity along this west wall may indicate the presence of a road, which would correspond to the northern continuation of a field road leading to Field 171 still in use today.

In the northwest part of the field, anomalies in electrical resistivity suggested the presence of three parallel walls running northwest-southeast, spaced 5 m and 6 m apart (Fig. 13 No. 4). The northernmost corresponded to the north wall of the space preceding the east-west-oriented building mentioned above. The two southern walls appeared to be connected by a perpendicular wall, but a plan was difficult to reconstruct.

To the south of this building the complex of rooms with a stepped northern side, already revealed by the geomagnetic survey, was found but its appearance was less clear in the resistivity anomalies (Fig. 13 No. 5). An 8 m long northwest-southeast-oriented anomaly, 10 m south of the north wall, probably represented the south wall of the building, not visible in the magnetogram. Its relation to the adjacent strong aberration, undoubtedly a wall running towards the east over a length of c. 12 m before turning towards the south, was not clear.

In the space between these two buildings were two series of three circular anomalies with a diameter of 1.3 m (indicated with red circles on Fig. 13), the nature of which was more difficult to understand. While the southwestern one appeared to belong to the northeast corner

of the stepped northern wall, the others could not be associated with any particular structure. Filled-up wells were not likely given the nearby presence of a spring (see above), and buried large ceramic storage vessels or *dolia* should be clearly visible in the magnetogram, which they were not. Their identification must remain open at this time.

In the southwest corner of Field 171, more resistivity anomalies indicated the presence of structures which were not revealed by the geomagnetic survey (Fig. 13 No. 6). Combined they formed a northwest-southeast-oriented building consisting of (three?) parallel rooms with a length of 17.5 m and a width of 9.5 m.

Across the two surveyed areas of Field 173 a linear aberration running north-south over a length of c. 25 m could be recognized but not related to any structure (Fig. 13 No. 7).

For Field 160 the location of the alleged terrace wall was confirmed, as well as that of a rectangular structure in the southeast corner of the area (Fig. 13 No. 8). Further towards the west end of the field, the spread-out anomaly perhaps represented a collapsed terrace wall which was only vaguely visible in the magnetogram (Fig. 13 No. 9).

Ground Penetrating Radar

This method provides a 3D-scan of specific layers in the soil and structures cutting into those layers. A 400 MHz antenna connected with a SIR System-3000 control unit (GSSI) was used with an interval of 0.3 m for each profile. The short intervals for each profile characterize this as the slowest method. Structural investigation of walls and buildings are marked by hyperbolas in the scans. This is a visualization of a reflected signal sent by the antenna into the ground. The amplitude and the time required for the return of the reflected signal is logged by the control unit[33]. The depth of the recorded data depends on the antenna used. The 400 MHz antenna records up to a depth of approximately 3 m.

Contrary to the previously discussed techniques, the ground-penetrating radar did not provide good results in the surveyed areas. They were quite blurry, not allowing the identification of any buried structure. There were several reasons for this. Archaeological targets like clay, stone, or wooden structures buried by stony material or by wet clay have a poor feasibility for GPR. This clutter with too many small reflections was produced from stony material and could be confused for features of interest. Also, the high electrical conductivity of clay may severely attenuate radar energy[34]. In the surveyed areas the surface of the ground was relatively uneven due to (small) furrows and the high amount of stones in the soil. These reflected the radar waves in many directions and may cause the blurriness of the resulting data. Another reason could be the relatively wet soil which was helpful when conducting a geoelectrical survey but disadvantageous for the use of georadar.

Interpretation of the results

Before interpreting the results of these survey methods, there are some limitations which should be addressed, caused either by practical circumstances or which are inherent to the employed techniques. Firstly, some of the surrounding fields could not or could only partly be explored because of standing vegetation, or because they were under cultivation at the

[33] Conyers 2013.

[34] Conyers 2013.

time of fieldwork preventing the exact extent of the site to be established. Yet, it is clear from the overall distribution of pottery and especially of the building ceramics – a find category less likely to be spread by non-habitation activities – that the site extended over an area of approximately 1 hectare. Furthermore, results of geophysical prospection generally relate to clear anomalies in the soil matrix such as stone walls or foundations, not to constructions of sun-dried bricks or other perishable materials, which will leave some structures most probably undetected. Also, the question arises as to what extent the surface finds reflect the assemblages of the underlying strata. Given that the field has been under cultivation for quite some time, a regular turnover of artefacts in the soil is to be expected, which implies that at least part of the underlying spectrum would be represented at the surface. The presence of pottery from the first centuries of the Roman Imperial period and even from the late Chalcolithic period in some of the surveyed fields confirms this. We are therefore not dealing with a situation in which the simple chronological superposition of archaeological evidence can be expected, with the last phase of occupation prevailing in the surface record and completely obscuring earlier material. Any chronological bias to that extent will be less prominent.

The results of the archaeological and the geophysical surveys correspond very well with one another, however. In areas where anomalies and structures were identified, larger concentrations of artefacts have been discovered. In Field 171, the results revealed the presence of a large rectangular structure, approximately 20 m long and 9 m wide, along the northern border of the field. It was oriented roughly towards the east, with a slight southeast inclination following the local topography. According to the magnetic results, a space with a width of 2 m running parallel to the south wall was present inside the building. Against the southeast corner of the building a series of rectangular rooms appeared to have been built; the shape of its eastern extremity, however, was not clear. To the west, the building was preceded by a space accessible from the west through a central door opening. The latter space may have been open to the air as far less tile and brick were found there compared to the eastern part of the complex (see Fig. 3, Sectors 1 and 6).

Given that it was also in this very area that the owner of the land reportedly ploughed up the elements of the chancel screen discussed above, it seems obvious that we are dealing with the remnants of a church. The central and south parts of the building show up quite well in the data, with the higher magnetic conductivity in the area of the supposed south aisle most probably caused by the presence of ceramic material in the shape of tile and brick belonging to the roof and the arches that separated the aisle from the nave respectively. Its north side, on the other hand, has only been partly registered by the geophysical survey. Yet, a 2 m-wide northern side aisle can be assumed on the basis of the width of the structures preceding it to the west, and would also find corroboration in the terracing operation along the northern edge of the field. The north wall could have been built against this terrace as was the case for the 6th century church built in the eastern *suburbium* of Sagalassos[35]. This would identify the church as a three-aisled basilica, although a semicircular apse on its east side could not be positively distinguished on the basis of the geophysical research. The space preceding the building to the west could then possible be identified as the forecourt or *atrium*. The series of rooms built against the southeast part of the church may have had a liturgical role, such as chapel, but these may also represent the dwelling of the local clergy as recently excavated at

[35] Waelkens et al. 2015, 49.

the aforementioned church in the eastern suburbs of Sagalassos[36]. The discovered fragments of *opus sectile*, which are indicative for the floor cover of one of the buildings, most probably belonged to the church, as did the glass handle of a lamp (or vessel) which was found in this area. The size of the church, comparable to those of the town of Sagalassos, and the nature of the architectural elements (a chancel screen) and its decoration (an *opus sectile* floor) indicate a tripartite basilica of considerable status.

It is tempting to relate the strong magnetic anomaly immediately south of the church to the production waste found during the archaeological survey. This would point to the presence of a furnace for metalworking. As it is unlikely that a continuously functioning metal workshop would have been present immediately beside the sanctuary because of the polluting and dangerous nature of its activity, we could be dealing with a temporary installation related to production of metal objects such as nails used in the construction of the church[37]. Another explanation for the anomaly would be a kiln for ceramics, although no misfired pottery was present among the surface finds. A temporary installation for the firing of building ceramics, for example, would again be imaginable. A final possibility would be a lime kiln arranged on the site for production of lime mortar used in the construction of the church.

The church did not stand alone in the landscape. Further towards the south and west, the geophysical prospection revealed at least four rectangular structures composed of several, possibly interconnected, rooms which could be identified on the basis of the surface finds as dwellings, facilities for the storage of agricultural production and/or workshops in the immediate vicinity of the church. The location of each of these buildings was marked by high concentrations of buildings ceramics on the surface (see Fig. 7). Elsewhere in the region of Pisidia, at the Byzantine village of Palamutdüzü, a remote mountain site in the former territory of Termessos, similar buildings consisting of rows of interconnected rooms have been identified as houses for extended households[38]. This suggests that the church at Gavur Yıkığı was part of a settlement, as corroborated by the nearby presence of a freshwater source and a water channel of terracotta pipes leading towards the field. Indeed the basilica was not a funerary church as the geophysical survey of the surrounding fields did not yield any evidence of burials. There are also no signs of a monastery in the shape of a closed compound or series of small adjoining rooms (cells) for the monks, as was typical for such monastic complexes at the time[39]. We are therefore most likely dealing with a congregational church, probably serving a community of farmers, which would make the basilica contemporaneous with the settlement.

The chronological indications provided by the architectural remains and the ceramics allow for an approximate date between the 7th and 10th centuries for the occupation of the site, corresponding to the so-called Byzantine Dark Ages – the transitional period between the Late Antique period and the Middle Ages[40]. Although a 6th century construction date for the church cannot be excluded on the basis of the liturgical furniture, the limited presence of 6th century ceramics may go some way to suggest that the church was a later construction, possibly 7th century. Absence of later diagnostic material implies that the site was abandoned by the 11th century, only to be revisited in late Ottoman times, most probably only for agricultural

36 Waelkens et al. 2015, 49.

37 A furnace for metal working found near the temple of Antoninus Pius and dated to the early 2nd century CE has been related to the construction of the sanctuary (Waelkens 2005, 427-428).

38 Akyürek 2008, 306.

39 Akyürek 2008, 302-304.

40 See recently Decker 2016.

purposes as no building material could be associated with this phase and the amount of attested pottery was limited (see Fig. 5).

As this material is restricted to surface layers, there are, of course, methodological difficulties in postulating the contemporaneity of ceramics and structures. Having said that, the nature of the material does provide some clues. Sherds of Roman Imperial pottery (1-600 CE), for example, were few and displayed signs of heavy acid weathering that is most likely related to manuring activities (Fig. 4a). The fact that the sherds were few and equally distributed throughout the surrounding fields also points in that direction. Therefore, we believe that this material was brought in with refuse from elsewhere as fertilizer and not related to an actual settlement at the site. Similar off-site spreads of ceramics have been documented in different areas of the Mediterranean[41]. Both the quality and quantity of the Byzantine pottery (7th -10th centuries), on the other hand, suggests that it was used on site. We therefore seem to be dealing with the remains of a settlement of Middle Byzantine date consisting of an open group of buildings with the church on the highest location. In addition to playing an obvious role in the spiritual life of the community, the church appears to have been at least partly instrumental in structuring the topography of the settlement. It occupied the highest location and probably was the destination of a road arriving at the site from the south which determined the orientation of the rectangular buildings to the east and west. Also elsewhere, churches provided a focus for the physical layout of rural settlements[42].

The surface of the explored area and the related number of discovered structures are too limited to make any definite statements about settlement organization. Nevertheless, the relative proximity of the structures spread over an area of approximately 1 hectare suggests a nucleated rather than dispersed habitation. The general lack of overlap among these structures suggests that these were built either together or at the time when the other structures of the group were visibly present and therefore probably in use. The high density of artefacts and building material clearly identify Field 171 as the core of the site. In comparison to its direct surroundings, this field not only shows a much higher artefact density (Figs. 6 and 7) but a broader variety of material categories as well. The absence of any sign of fortification points to an open settlement, a general trait of Byzantine rural communities[43]. Obviously, the restricted surface of the site, confirmed by the much lower density of finds in the adjacent fields caused by non-habitation activities such as manuring, indicates that we are not dealing with a large village. Rather the settlement was composed of a group of buildings (houses?) forming a hamlet (20 to 60 inhabitants) which probably belonged to the existing village of Ağlasun but was physically separated from it. The considerable size of the church, somewhat out of proportion to the number of surrounding buildings (and their population), may suggest elite involvement in the construction of the basilica. On the other hand, the alleged road detected by geophysical survey leading to the church from the south may imply that people from outside the hamlet would also regularly visit the sanctuary, in which case a communal foundation would be possible. Such non-elite patronage of the church, based on the successful exploitation of the land by rural communities, is attested in Byzantine Macedonia[44].

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41 E.g. Wilkinson 1982; Bintliff et al. 2007.

42 Laiou 2005, 48. At the Dark Age village of Palamutdüzü in southern Pisidia, there was no church at the center of the settlement, but the *katholikon* of a monastery close by appears to have served as the religious focus of the community (Akyürek 2008, 307).

43 Laiou 2005, 37.

44 Dunn 2005, 274.

Discussion

While the village of Ağlasun existed at least by the Early Roman Imperial period, settlement activity in this part of the village appears to have been relatively new. Material earlier than the 6th century, other than the few worn Early Roman Imperial sherds as manuring residue found in adjacent fields, was absent. On the basis of the number of ancient *spolia* incorporated into the modern houses, the center of the ancient village is assumed to have been located towards the west, between the ancient/Roman road leading to the city of Sagalassos and one of the tributaries of the Ağlasun Çayı. Sakarca Mahallesi, on the whole, contains relatively few *spolia* of ancient buildings compared to other quarters closer to the presumed ancient road. It was also there that in the 13th century a Seljuk bathhouse, probably part of a caravanserai, was founded[45]. There are no obvious reasons why the population of the ancient village would have moved away from that area to the site of Gavur Yıkığı during the Byzantine Dark Ages, only to move back there in Seljuk times, especially as a levelling fill containing Byzantine Dark Age material was identified during test excavations in front of the Seljuk *hamam*[46]. This would mean that the area of the basilica was newly settled at the time, which can possible be seen as a sign of population increase. This is seemingly at odds with the general history of Anatolia, characterized by a sudden downturn in settlement numbers and size from the 7th century onwards[47]. The period of the 7th to 9th centuries, with evidence of the decline of the size and economic prosperity of cities, the collapse of trade networks, and political instability resulting in a fundamentally different society, economy and culture, are considered the Dark Age of Byzantine history[48].

Over the last decade, our understanding of the final stages of the settlement history of ancient Sagalassos has changed profoundly, from a model of Early Byzantine urban abandonment to one of continued community organization into the early 13th century[49]. Late antiquity (4th to 6th century) was a period of real growth for the territory of Sagalassos with a rising number and size of villages resulting from agricultural intensification and specialization[50], as confirmed by recent survey results from the Dereköy-Hisar area where eight new farmsteads/hamlets have been discovered[51]. Yet, several elements also indicated a downturn from the late 6th century onwards when Sagalassos acquired a distinctively less classical urban character[52]. The porticoes flanking the agoras, for instance, were subdivided into smaller units with eateries and smithies. This encroachment on public space was part of a more profound urban change that included the disappearance of urban amenities, for example, the conversion of public latrines in the Roman baths into a collector for dung. A large urban mansion in the eastern residential quarter, once the prime piece of private property within the city and home to one of the city's leading families, was subdivided into several units, the southernmost of which may have accommodated an inn.

45 Vanhaverbeke et al. 2005.

46 Poblome 2014, 631.

47 Anderson 2008, 237.

48 Whittow 2009; recently Decker 2016.

49 Poblome et al. 2017.

50 Poblome 2015.

51 Vandam et al. 2017, 335-339.

52 Waelkens et al. 2006, 231–235.

Around the middle of the 7th century an earthquake, with its epicenter in the immediate vicinity of the city, devastated many of the ancient urban monuments, therefore adding to the decline of the city's classical character[53]. Following this natural disaster, some areas of Sagalassos still continued to be used and inhabited, albeit far less densely with many parts of the urban fabric left in ruins. The focus of the settlement now shifted towards the promontory on the southern edge of the city. This commanding location, which originally housed the sanctuary for the imperial cult, was now enclosed by a fortification wall. There the community reorganized itself. This relatively small fortified precinct (c. 1.5 ha) can most probably be identified with the *kastron* mentioned in the 10th century *De thematibus* of Constantine Porphyrogenitus (XIV, 37), and the seat of the local bishops known from ecclesiastical sources such as the lists of the ecumenical councils[54]. The site of the former city thus continued to be inhabited, albeit by small-scale communities, into the 13th century CE[55].

At first sight, all this seemingly suggests a scenario of depopulation for the area of Sagalassos, befitting the traditional view of the Dark Ages as a period of decline. Recent modelling of the data from DNA-analysis of human remains spanning from the Roman imperial to the Mid-Byzantine period, however, demonstrated that overall population numbers were hardly affected by the aforementioned seismic event and other calamities of the Byzantine period[56]. This implies that the people of Sagalassos not only resettled in and around the *kastron*, but that part of the population must have been relocated elsewhere in the immediate vicinity for the genetic pool to remain largely unchanged.

If so, then where did these people go? This is where the "new" Byzantine settlement of Gavur Yıkığı may provide part of the answer. As a large, natural growth of the Byzantine population of Ağlasun seems unlikely to have caused an expansion of the village in this direction, the "sudden" emergence of the site in the Byzantine period may well be the result of the urban population partly resettling outside the civic center in the nearby countryside, illustrating a scenario of *dioikismos*. The term describes a process which involves the dispersion of a larger population group (of a city) over smaller units of settlement. Often employed by imperial powers in times of war throughout Greek history as a means of reducing the potential of regions to resist[57], here the dispersion of the populace may have been part of the local answer to problems of supply and production. While it is doubtful that this new settlement would have been completely independent from the *kastron* at Sagalassos, which probably remained the seat of the bishop and local administration into the 12th century[58], the fact that this new center of habitation arose at the time when parts of the old town were being abandoned suggests it to be part of an ongoing process of decentralization. In any case, it contradicts the general image of a population hiding in the mountains as often claimed for new Dark Age settlements such as the aforementioned village of Palamutdüzü, which is thought to have been settled for reasons of security since the area was less prone to raids from the sea, at a time when the nearby city of Neapolis was abandoned[59].

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53 Sintubin et al. 2003.

54 Poblome et al. 2017.

55 Poblome et al. 2017.

56 Ottoni et al. 2016.

57 Funke 2004.

58 Poblome et al. 2017.

59 Akyürek 2008, 306-307.

Such a scenario of decentralization seems to be in agreement with indications for a growing importance of the countryside at this time. A reevaluation of the archaeology of the territory of ancient Sagalassos already confirmed the stability of settlement and exploitation of the rural countryside from Hellenistic times until the Early Byzantine period[60]. At least until the end of the 6th century, and in many cases beyond, the villages in the territory remained occupied and active. Around the middle of the 6th century, Pisidia is mentioned as a region of "large and populous villages" in the *Novellae* of Justinian (*Novellae* 24.1: 535/536 CE). Moreover, a case has been made for some degree of rural population growth in the Early Byzantine period[61]. Another sign for the increased importance of rural settlements is provided by rural church building, with Early Byzantine basilicas attested at the villages of Ağlasun, Demirli, Kiprit, Mamak and Yazır[62], as the first widespread manifestation of monumental (religious) architecture in the countryside[63]. By the end of the 6th century, Sagalassos Red Slip Ware was no longer made in the workshops in the city's Potters' Quarter. The production of the local table ware was relocated, possibly to somewhere in the countryside. This relocation was not a small matter: the production process, the quality of the finished ware, and the typological choices depended on tradition. The relocation of pottery production from suburban workshops to presumed rural sites[64] appears to have been symptomatic for the fate of the city and corroborates an increased reliance on the countryside.

The composition of the ceramic collection that primarily comprises vessels for food processing and storage of agricultural produce reflects the domestic nature of the contexts. Although the presence of loom weights and metal production waste hints at some artisanal activity, this may also represent small-scale crafts to meet household needs. This material culture, dominated by coarse wares, is generally held to be indicative of a small and poor rural settlement, typical of Middle Byzantine Anatolia[65]. The architectural context of Gavur Yıkığı, on the other hand, suggests something else than a group of simple farms. The newly discovered church, a necessary asset of every Byzantine settlement, was not of the single-aisle type recently discovered elsewhere in the study area near Dereköy, which measures 10 by 5 m and would have served a small agricultural community[66]. We are dealing here with a large church, most probably a tripartite basilica, with high-end marble cladding and liturgical furniture produced by professional stone carvers. Such a building required a considerable investment on the part of the builder, either the community or an elite family, and represents economic strength and ability. Moreover, the image of a productive rural landscape is also brought out by the palynological record of the Ağlasun valley, which stands in contrast to that of other parts of the former territory of Sagalassos in this respect. Although conditions for working the land were clearly less favorable compared to the Roman Imperial period, with climatic deterioration (the so-called Dark Age Cold Period) accompanied by a partial shift from crop cultivation towards pastoralism occurring around the middle of the 7th century, there are indications for a degree of polyculture in the Ağlasun valley. Cereal and walnut cultivation remained present, and there are signs for the continuation of intensive farming of olives until the 11th century[67].

60 Poblome 2015.

61 Poblome 2015.

62 Vanhaverbeke et al. 2009, 182-183.

63 Niewöhner 2007, 95 and n. 444.

64 Poblome 2014, 634.

65 Anderson 2008, 236.

66 Vandam et al. 2017, 338.

67 Cereal and walnut cultivation: Bakker et al. 2012; olioculture: Vermoere 2004, 83-86.

Contemporary sites dominated by locally produced common wares, the sizes of which typically conformed to hamlets or small villages, have also been discovered elsewhere in the former territory of Sagalassos[68]. Survey work on the slopes of the Ağlasun Dağları, the mountain range along the north side of the Ağlasun valley, has identified a number of sites considered to be indicative of contemporary pastoralism[69]. Yet, it took concerted efforts of intensive surveying to identify these. From a methodological point of view, this implies the underestimation of such sites in non-intensively surveyed areas. In other words, even though fewer Dark Age sites have so far been identified in the former territory of Sagalassos compared to the Early Byzantine ones, it is premature to read much of a pattern into these data. In the light of the recent discovery of five new Byzantine Dark Age settlements in the area of Dereköy-Hisar, seven kilometers east of Ağlasun, some of which did not have indications of earlier occupation phases[70], one may even start to wonder whether the label "Dark Age" is still valid.

Conclusions

Investigations of the Byzantine Dark Ages have generally focused on urban change, the transition from the Greco-Roman city of late antiquity to the fortified town of the Byzantine era. Although it is often held that cities fell into decline from the 7th century while rural settlement increased[71], archaeological evidence supporting this thesis has so far remained wanting, certainly for Anatolia where research on the Byzantine countryside is limited[72]. This case study, focusing on the site of Gavur Yıkığı in the village of Ağlasun, presents evidence for rural settlement trends during this period and offers a more consistent view of the landscape as a whole. In attempting to locate a presumed church in the rural landscape through an interdisciplinary approach combining archaeological and geophysical techniques, the survey program discovered a site, probably a hamlet, dating to this less-known period of settlement history in the study region. According to the formulated working hypothesis, we are dealing here with a new settlement resulting from a reorganization of the urban population of Sagalassos. This would then illustrate a process of decentralization also designated as *dioikismos*.

In general, further research is necessary to understand the detail of what happened at Sagalassos and its rural hinterland during the Byzantine Dark Ages. But it already seems clear that the regional settlement history illustrates the dynamism and flexibility of the local communities in the face of crisis and change. The site of Gavur Yıkığı can serve as an example of how the decline of the ancient city and the accompanying decrease in social complexity did not imply the collapse of the local community but how this community, through reorganization of its settlement structure, managed to cope with the difficult times.

68 Vanhaverbeke et al. 2009, 181.

69 Poblome 2014, 631.

70 Vandam et al. 2017, 335-339.

71 Laiou 2005, 38.

72 Akyürek 2008, 296.

Abbreviations and Bibliography

Akyürek 2008 — E. Akyürek, "Palamutdüzü: A Medieval Byzantine Village Settlement in the Bey Mountains", Adalya 11, 2008, 295-316.

Anderson 2008 — W. Anderson, "Settlement Change in Byzantine Galatia: An Assessment of Finds from the General Survey of Central Anatolia", Anatolian Archaeological Studies 17, 2008, 233-239.

Antonaras 2010 — A. C. Antonaras, "Early Christian and Byzantine Glass Vessels: Forms and Uses", in: F. Daim – J. Drauschke (eds.), Byzanz- das Römerreich im Mittelalter, I. Welt der Ideen, Welt der Dinge (2010) 383-430.

Aspinall et al. 2008 — A. Aspinall – C. Gaffney – A. Schmidt, Magnetometry for Archaeologists (2008).

Bakker et al. 2012 — J. Bakker – E. Paulissen – D. Kaniewski – V. De Laet – G. Verstraeten – M. Waelkens, "Man, Vegetation and Climate during the Holocene in the Territory of Sagalassos, Western Taurus Mountains, SW Turkey", Vegetation History & Archaeobotany 21.4-5, 2012, 249-266.

Banning 2002 — E. B. Banning, Archaeological Survey. Manuals in Archaeological Method, Theory and Technique (2002).

Belke 2005 — K. Belke, "Das byzantinische Dorf in Zentralanatolien", in: J. Lefort – C. Morrison – J.-P. Sodini (eds.), Les villages dans l'Empire byzantin (IVe – XVe siècle). Réalités byzantines 11 (2005) 425-435.

Bintliff et al. 2007 — J. L. Bintliff – P. Howard – A. M. Snodgrass, Testing the Hinterland: The Work of the Boeotia Survey (1989-1991) in the Southern Approaches to the City of Thespiai (2007).

Chatzidakis 1978 — M. Chatzidakis, "Ikonostas", in: M. Restle – K. Wessel (eds.), Reallexikon zur Byzantinischen Kunst III (1978) 326-353.

Clark 1996 — A. J. Clark, Seeing beneath the Soil. Prospecting Methods in Archaeology (1996).

Conyers 2013 — L. B. Conyers, Ground-penetrating Radar for Archaeology (2013).

Decker 2016 — M. J. Decker, The Byzantine Dark Ages. Debates in Archaeology (2016).

Degryse et al. 2003 — P. Degryse – P. Muchez – L. Loots – L. Vandeput – M. Waelkens, "The Building Stones of Roman Sagalassos (SW Turkey): Facies Analysis and Provenance", Facies 48, 2003, 9-22.

Degryse et al. 2007 — P. Degryse – J. Schneider – N. Kellens – M. Waelkens – P. Muchez, "Tracing the Resources of Iron Working at Ancient Sagalassos (south-west Turkey): A Combined Lead and Strontium Isotope Study on Iron Artefacts and Ores", Archaeometry 49, 2007, 75-86.

Dunn 2005 — A. W. Dunn, "The Problem of the Early Byzantine Village in Eastern and Northern Macedonia", in: J. Lefort – C. Morrison – J.-P. Sodini (eds.), Les villages dans l'Empire byzantin (IVe – XVe siècle). Réalités byzantines 11 (2005) 267-278.

Düring – Glatz 2015 — B. S. Düring – C. Glatz, Kinetic Landscapes: The Cide Archaeological Project 2009-2011. Surveying the Western Turkish Black Sea Region (2015).

Funke 2004 — P. Funke, "Sparta und die peloponnesische Staatenwelt zu Beginn des 4. Jahrhunderts und der Dioikismos von Mantineia", in: C. Tuplin (ed.), Xenophon and his World. Papers from a Conference held in Liverpool in July 1999. Historia Einzelschriften 172 (2004) 427-435.

Gough 1975 — M. Gough, "Dağ Pazarı: The Basilical Church *extra muros*", in: G. Robertson – G. Henderson (eds.), Studies in Memory of David Talbot Rice (1975) 147-163.

Laiou 2005 — A. E. Laiou, "The Byzantine Village (5th-14th century)", in: J. Lefort – C. Morrison – J.-P. Sodini (eds.), Les villages dans l'Empire byzantin (IVe – XVe siècle). Réalités byzantines 11 (2005) 31-54.

Mårtensson et al. 2009 — L. Mårtensson – M. L. Nosch – E. Andersson Stran, "Shape of Things: Understanding a Loom Weight", Oxford Journal of Archaeology 28.4, 2009, 373-398.

Mattingly 2000 — D. Mattingly, "Methods of Collection, Recording and Quantification", in: R. Francovich – H. Patterson (eds.), Extracting Meaning from Ploughsoil Assemblages. The Archaeology of Mediterranean Landscapes (2000) 5-15.

Mušic et al. 2009 — B. Mušic – V. De Laet – F. Martens – D. Similox-Tohon – G. Verstraeten – J. Poblome – P. Talloen – I. Uytterhoeven – M. Waelkens, "Geophysics, Satellite Imagery, Urban Survey and Archaeological Excavations - Complementary Contributions to Reconstruct an Ancient Urban Landscape - The Case of Sagalassos (SW-Turkey)", in: W. Börner (ed.), Archäologie und Computer, 5.-7. November 2008, Workshop 13: Kulturelles Erbe und neue Technologien (2009) 1-23.

Niewöhner 2007 — P. Niewöhner, Aizanoi, Dokimion und Anatolien. Stadt und Land, Siedlungs- und Steinmetzwesen vom späteren 4. bis ins 6. Jahrhundert n.Chr. Aizanoi 1 (2007).

Niewöhner 2008 — P. Niewöhner, "Mittelbyzantinische Templonanlagen aus Anatolien. Die Sammlung des Archäologischen Museums Kütahya und ihr Kontext", IstMitt 58, 2008, 285-345.

Niewöhner et al. 2013 — P. Niewöhner – G. Dikilitaş – E. Erkul – S. Giese – J. Gorecki – W. Prochaska – D. Sarı – H. Stümpel – A. Vardar – A. Waldner – A. V. Walser – H. Woith, "Bronze Age Höyüks, Iron Age Hilltop Forts, Roman Poleis and Byzantine Pilgrimage in Germia and its Vicinity. 'Connectivity' and a Lack of 'Definite Places' on the Central Anatolian Plateau", AnatSt 63, 2013, 97-136.

Ottoni et al. 2016 — C. Ottoni – R. Rasteiro – R. Willet – J. Claeys – P. Talloen – K. Van de Vijver – L. Chikhi – J. Poblome – R. Decorte, "Comparing Maternal Genetic Variation across Two Millennia Reveals the Demographic History of an Ancient Human Population in Southwest Turkey", Royal Society Open Science 3, 2016. Doi: 10.1098/rsos.150250).

Peschlow 2006 — U. Peschlow, "Dividing Interior Space in Early Byzantine Churches: The Barriers between the Nave and Aisles", in: S. E. J. Gerstel (ed.), Thresholds of the Sacred: Architectural, Art Historical, Liturgical, and Theological Perspectives on Religious Screens, East and West (2006) 53-71.

Poblome 2014 — J. Poblome, "Shifting Societal Complexity in Byzantine Asia Minor and Dark Age Pottery", in: N. Poulou-Papadimitrou – E. Nodarou – V. Kilikoglou (eds.), LRCW 4: Late Roman Coarse Wares, Cooking Wares and Amporae in the Mediterranean. Archaeology and Archaeometry. The Mediterranean: A Market without Frontiers. BAR International Series 2616 (2014) 623-642.

Poblome 2015 — J. Poblome, "Life in the Late Antique Countryside of Sagalassos", in: H. Metin – B. A. Polat Becks – R. Becks – M. Fırat (eds.), Pisidian Essays in Honour of Hacı Ali Ekinci (2015) 99-109.

Rabbel et al. 2014 — W. Rabbel – E. Erkul – H. Stümpel – T. Wunderlich – R. Pašteka – J. Papco – P. Niewöhner – Ş. Barış – O. Çakın – E. Pekşen, "Discovery of a Byzantine Church in Iznik/Nicaea, Turkey: An Educational Case History of Geophysical Prospecting with Combined Methods in Urban Areas", Archaeological Prospection 2014 (DOI: 10.1002/arp.1491).

Poblome et al. 2017 — J. Poblome – P. Talloen – E. Kaptijn, "Byzantine Sagalassos", in: P. Niewohner (ed.), The Archaeology of Byzantine Anatolia. From Late Antiquity to the Coming of the Turks (2017) 302-311.

Scollar 1990 I. Scollar, Archaeological Prospecting and Remote Sensing. Topics in Remote Sensing 2 (1990).

Sintubin et al. 2003 M. Sintubin – P. Muchez – D. Similox-Tohon – G. Verhaert – E. Paulissen – M. Waelkens, "Seismic Catastrophes at the Ancient City of Sagalassos (SW Turkey) and their Implication for Seismotectonics in the Burdur-Isparta Area", Geological Journal 38.3-4, 2003, 359-374.

Sodini 2008 J. P. Sodini, "La sculpture byzantine (viie-xiie siècles): Acquis, problèmes et perspectives", in: C. Pennas – C. Vanderheyde (eds.), La sculpture byzantine, viie – xiie siècles. Actes du colloque international organisé par l'Ephorie des antiquités byzantines et l'Ecole française d'Athènes, 6-8 septembre 2000. BCH Supplement 49 (2008) 5-35.

Talloen 2015 P. Talloen, Cult in Pisidia. Religious Practice in Southwestern Asia Minor from Alexander the Great to the Rise of Christianity. Studies in Eastern Mediterranean Archaeology 10 (2015).

Talloen forthcoming P. Talloen, The Churches of Sagalassos (forthcoming).

Vandam – Poblome 2017 R. Vandam – J. Poblome, "Up in the Hills: The 2016 Sagalassos Archaeological Survey Results", Anmed 15, 2017 (in press).

Vandam et al. 2017 R. Vandam – P. T. Willett – J. Poblome, "Chapter 15: Living on the Margins. First Results from the Dereköy Archaeological Survey of the Sagalassos Project in the Western Taurus Mountains", in: S. R. Steadman – G. McMahon (eds.), The Archaeology of Anatolia: Recent Discoveries (2015-2016) Vol. II (2017) 321-346.

Vanderheyde 2007 C. Vanderheyde, "The Carved Decoration of the Middle and Late Byzantine Templa", Mitteilungen zur spätantiken Archäologie und byzantinischen Kunstgeschichte 5, 2007, 77-98.

Vanhaverbeke et al. 2005 H. Vanhaverbeke – Ö. Başağaç – K. Paul – M. Waelkens, "A Selçuk Hamam at Ağlasun, Burdur Province, Turkey", Turcica 37, 2005, 309-336.

Vanhaverbeke et al. 2009 H. Vanhaverbeke – A. K. Vionis – J. Poblome – M. Waelkens, "What Happened after the 7th century AD? A Different Perspective on Post-Roman Rural Anatolia", in: T. Vorderstrasse – J. Roodenberg (eds.), Archaeology of the Countryside in Medieval Anatolia (2009) 177-190.

Vanhaverbeke – Waelkens 2003 H. Vanhaverbeke – M. Waelkens, The Chora of Sagalassos: The Evolution of the Settlement Pattern from Prehistoric until Recent Times. Studies in Eastern Mediterranean Archaeology 5 (2003).

Vermoere 2004 M. Vermoere, Holocene Vegetation History in the Territory of Sagalassos (Southwest Turkey). A Palynological Approach. Studies in Eastern Mediterranean Archaeology 6 (2004).

Vionis et al. 2009 A. Vionis – J. Poblome – M. Waelkens, "The Hidden Material Culture of the Dark Ages. Early Medieval Ceramics at Sagalassos (Turkey): New Evidence (ca AD 650-800)", AnatSt 59, 2009, 147-165.

Vionis et al. 2010 A. Vionis – J. Poblome – M. Waelkens, "A Middle-Late Byzantine Pottery Assemblage from Sagalassos. Typo-chronology and Sociocultural Interpretation", Hesperia 79, 2010, 423-464.

Waelkens 2005 M. Waelkens, "Report on the 2003 Excavation and Restoration Campaign at Sagalassos", in: 26. KST, 2005, 421-438.

Waelkens et al. 2006 M. Waelkens – H. Vanhaverbeke – M. Martens – P. Talloen – J. Poblome – T. Van Thuyne – T. Putzeys, "The Late Antique to Early Byzantine City in Southwest Anatolia. Sagalassos and its Territory: A Case Study", in: J.-U. Krause – C. Witschel (eds.), Die spätantike Stadt- Niedergang oder Wandel? Akten des internationalen Kolloquiums in München am 30. und 31. Mai 2003. Historia Einzelschriften 190 (2006) 199-255.

Waelkens et al. 2015 M. Waelkens – J. Richard – J. Poblome – I. Jacobs – H. Uleners – I. Uytterhoeven – R. Van Beeumen – P. Talloen – J. Claeys – E. Torun – S. Ercan, "The 2013 excavations and restoration activities at Sagalassos", in: 36. KST, 2015, 35-60.

Whittow 2009 M. Whittow, "Early Medieval Byzantium and the End of the Ancient World", Journal of Agrarian Change 9.1, 2009, 134-153.

Wilkinson 1982 T. J. Wilkinson, "The Definition of Ancient Manured Zones by Means of Extensive Sherd-sampling Techniques", Journal of Field Archaeology 9.3, 1982, 323-333.

Özet

Burdur-Ağlasun'da Keşfedilen Bizans Kilisesi: Pisidia'nın Karanlık Çağı'na Biraz Daha Işık

Burdur İli'ne bağlı Ağlasun İlçesi'nde bir evin duvarında devşirme olarak kullanılan kireçtaşı mimari blokların aslında 6.-7. yy.'a tarihlenebilecek bir Bizans kilisesine ait altarın alt platformu ve templon düzenlemesine ait olduğu anlaşılmıştır. Söz konusu unsurların Gavur Yıkığı Mevkii'nde bir tarlada ele geçtiği bildirilmiştir. Bugün yüzeyde hiçbir mimari elemanın görülmediği alanda sürekli tarımsal etkinlikten dolayı mimari pişmiş toprak, harç ve çanak-çömlek parçaları etrafa dağılmış durumdadır ve moloz taşlar, tuğla ve kiremit parçaları ile kesme taş bloklar tarlanın sınırı boyunca öbek halinde yığılmıştır. Bu keşif ile Ağlasun'da ilk kez bir kilisenin yerini saptamak mümkün olmuştur. Üstelik, yüzeydeki malzemenin geniş bir alana dağılımı tek başına bir kiliseden ziyade etrafında bir yerleşmenin varlığına işaret etmektedir. Bu tür bir örenin araştırılması, yörenin genelde ve özellikle Bizans Dönemi yerleşme tarihi hakkındaki bilgimize katkıda bulunacaktır.

Öngörülen kilise yapısı ve yakın çevresindeki diğer yapıların planlarını ve tarihlerini saptayabilmek amacıyla arkeolojik ve jeofizik araştırma yöntem ve teknikleri kullanılan multi-disipliner bir yaklaşım tercih edilmiştir. Yüzey araştırması sonucunda yaklaşık 20 m uzunluğunda ve 9 m genişliğinde, büyük olasılıkla üç nefli bazilikal kilise olan büyük dikdörtgen bir yapının varlığı saptanmıştır. Yakındaki Sagalassos bazilikalarıyla kıyas götürebilecek büyüklükteki bu kilisenin ebatları ve templona işaret eden mimari elemanları ve opus sectile taban döşemesi gibi bezeme programı, önemli statüye sahip üç bölümlü bir kiliseye işaret etmektedir. Yapının güney ve batı yönlerinde ilerleyince jeofizik incelemelerde çok odalı en az dört tane dikdörtgen biçimli yapı saptanmıştır ki, bu da kilisenin bir yerleşmenin parçası olduğunu göstermektedir. Bu yapılar, yüzey buluntularına dayanarak konut, tarımsal ürün depolama yapısı ve/veya işlik alanları olarak tanımlanmıştır.

Mimari kalıntılar ve seramiklere dayanarak yerleşmeyi Bizans Karanlık Çağı'na denk gelen 7.-10. yy.'lar arasına tarihlemek mümkündür. Bazilikanın çevresine yerleşilmiş olması da Anadolu'nun yerleşmelerinin küçülmesi ve sayılarının azalması ile karakterize olan 7. yy. genel tarihiyle uyuşmamaktadır.

Sagalassos'un 7. yy. ortalarında kent merkezini yerle bir eden bir deprem sonucu gerilemesi de bu tür bir nüfus kaybı senaryosunu desteklemektedir. Ancak, son yıllarda insan kalıntılarından elde edilen DNA verilerinden geliştirilen modelleme ile genel nüfusun Bizans Dönemi afetlerinden pek de etkilenmediğini göstermiş bulunmaktadır. Eğer durum böyle idiyse insanlar nereye gitmiş olabilir? İşte 'yeni' Gavur Yıkığı Bizans yerleşimi bu soruya kısmi de olsa bir cevap verebilir. Bizans Dönemi'nde bu yerleşimin ortaya çıkması kentsel nüfusun yakındaki

kırsal alana yerleşmesinin bir sonucu olabilir ve bir *dioikismos* senaryosuna işaret edebilir. Bu terim, büyük bir nüfus grubunun (bir kent halkı gibi), muhtemelen tedarik ve üretim sorunlarına karşılık olarak, daha küçük yerleşim birimlerine dağılmasını içeren bir süreci anlatır.

Merkeziyetçiliğin dağılması, bu zamanda kırsal alanın, artmasa da süregiden önemine işaret eden hususlarla uyum içinde görünmektedir. Antik Sagalassos'un egemenlik alanında, dominat seramiği yerel üretim olan, küçük köy ve mezra büyüklüğünde Orta Bizans yerleşimleri tespit edilmişti. Yine de, bunları saptayabilmek için büyük çabalar gerektiren yoğun yüzey araştırmaları yapılması gerekmiştir. Metodolojik açıdan bakılırsa, yoğun olmayan yüzey araştırmalarında bu tür ören yerlerinin gözden kaçtığı düşünülebilir. Ağlasun'un 7 km doğusunda Dereköy - Hisar yöresinde saptanan ve Bizans Karanlık Çağı'na atfedilen beş yeni yerleşimin ışığında artık söz konusu dönem için Karanlık Çağ tabirinin halen geçerli olup olmadığı düşünülmeye başlanabilir.



Fig. 1 Aerial view of site with indication of field numbers; inset: location of house of H. Yasan in Sakarca Mahallesi.



Fig. 2 Architectural elements at house of H. Yasan; a: view of staircase with reused liturgical elements; b: limestone post of chancel screen reused in staircase; c: limestone block of altar platform reused in east wall of the house; d: limestone block of altar platform reused in east wall of house.



Fig. 3 Overview of Field 171 with indication of the grid and the number of fragments of pottery and building.



Fig. 4 Overview of find categories from Field 171; a: selection of ceramics; b: roof tile; c: glass handle; d: sherd of a storage vessel; e: marble opus *sectile* fragments; f: piece of granodiorite.

Field no.	Total amount	4200-3000 BC	0-300 AD	300-600 AD	SRW (200-600 AD)	600-1000 AD	1700 - 1923 AD	Modern	Undateable
Field 160	111.00	3.00	1.00	1.00	29.00	14.00	18.00	0.00	45.00
Field 161	26.00	2.00	1.00	1.00	4.00	2.00	6.00	0.00	10.00
Field 162	4.00	0.00	0.00	0.00	2.00	1.00	0.00	0.00	1.00
Field 163	10.00	1.00	1.00	0.00	0.00	5.00	0.00	0.00	3.00
Field 164	5.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	2.00
Field 165	3.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	2.00
Field 166	60.00	2.00	0.00	0.00	7.00	0.00	7.00	0.00	44.00
Field 167	35.00	0.00	0.00	0.00	6.00	1.00	2.00	5.00	21.00
Field 168	20.00	0.00	0.00	0.00	2.00	2.00	0.00	4.00	12.00
Field 169	99.00	1.00	15.00	0.00	14.00	6.00	4.00	0.00	59.00
Field 170	14.00	0.00	1.00	0.00	1.00	4.00	3.00	0.00	5.00
Field 171	322.00	0.00	5.00	6.00	13.00	172.00	13.00	0.00	113.00
Field 172	2.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Field 173	19.00	0.00	1.00	0.00	5.00	4.00	3.00	0.00	6.00

Fig. 5 Chronological overview of pottery finds per field.



Fig. 6 Overview of the surveyed fields with distribution of the pottery.

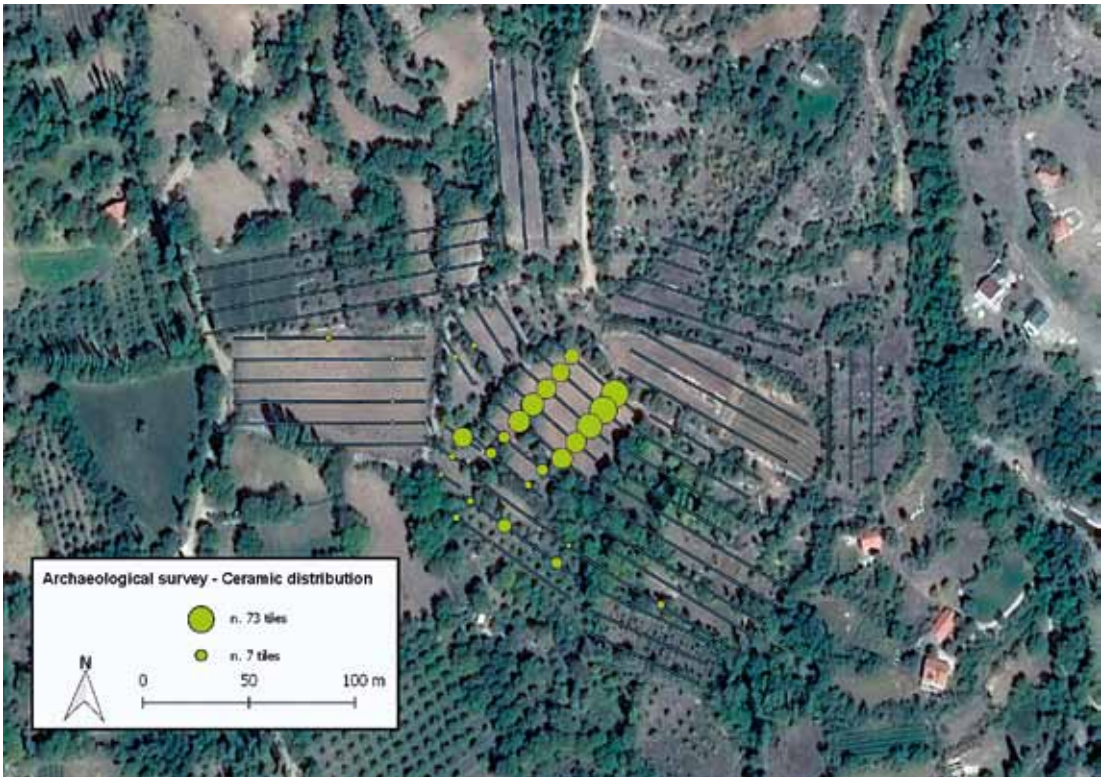


Fig. 7 Overview of the surveyed fields with distribution of building ceramics.



Fig. 8 View of the terrace cut into the ophiolitic mélange along the northern edge of Field 171.



Fig. 9 View of the water source between Fields 171 and 172.



Fig. 10 Magnetogram of the geomagnetic survey.



Fig. 11 Interpretation of the magnetic anomalies.



Fig. 12 Results of the electrical resistivity survey.



Fig. 13 Interpretation of the electrical resistivity anomalies.