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**RECENT DEVELOPMENTS IN THE ARCHAEOLOGY
OF THE POMERANIAN-PRUSSIAN BORDERLAND
IN THE EARLY MIDDLE AGES.
THE CASE OF THE SETTLEMENT COMPLEX
IN WĘGRY, NORTHERN POLAND**

ABSTRACT

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Between the late 8th and the turn of the 12th and 13th centuries, the territories east of the lower Vistula valley represented a borderland between eastern Pomerania and Prussia. The frontier area was generally uninhabited at least until the turn of the 8th and 9th centuries, when colonization from both sides (Pomeranian and Prussian) started. Significant changes in the colonization of the investigated area may be dated back to the 11th century, when a large settlement complex in Węgry was established. For at least seven decades, with its military, economic, trade, political and administrative functions, it was the most important culture-generating East Pomerania-related centre situated to the east of the lower Vistula river. Undoubtedly the stronghold in Węgry had a central function. The paper discusses new research on the issue of the making of the Pomeranian-Prussian borderland, and especially on the significance of the settlement complex in Węgry and its role in the cultural development of the area.

Keywords: Frontier studies, Early Middle Ages, central places, Pomerania, identity, cultural connections

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INTRODUCTION

Borderlands are ideal areas to study the interaction between communities representing different cultural traditions, and sometimes different ethnicities. On the frontier two or more distinctive cultural traditions meet. Such areas allow to explore the development and cultural change, also in their material aspect. On the other hand, cultural frontiers are one of the most complex and difficult research areas. This statement also concerns the so-called early medieval Pomeranian-Prussian borderland (the area of historical Old Prussian land of Pomesania). Obviously, when trying to determine the nature and course of such phenomena in prehistoric times we encounter many difficulties, and the reconstructed picture of such a frontier is incomplete. Many factors have an impact on this state of affairs, primarily difficulties in the interpretation of material remains in the form of archaeological data.

Archaeologists frequently look for an idealistic situation on the frontier, within which relatively homogeneous populations are separated by sharp borders which are visible in archaeological data. However, in practice a clear picture of the cultural and settlement reality on the frontier is extremely hard to achieve. The phenomena which often occurred on cultural frontiers are varied and difficult, or imperceptible in the material culture. Thus, we are often unable to see distinctive features and elements typical for one or another culture circle, and the borderland appears to be a zone of diffusion of mutual influences of populations from two culture circles. Perhaps we should just abandon this paradigm and stop expecting clear and obvious indicators of cultural and ethnic associations, allowing for plotting boundaries in both micro- and macro-regional scale. Perhaps the so-called 'cultural noise' should be regarded as standard.

It has been noticed that most of the archaeological research of borderlands and frontiers is formed by a colonialist perspective of core-periphery developments (Lightfoot and Martinez 1995, 471). As a consequence, models of culture change tend to be driven by the core-periphery framework, whereby the transmission of most cultural innovations proceeds from the dominant centre to the passive periphery. The same approach was used in previous research on the Slavic-Baltic, including Pomeranian-Prussian, borderland (e.g. Chudziak 1999; Bojarski 2002). Very often it is presumed that frontiers may serve as semi-permeable cultural barriers that can restrict social interactions, filter information exchange, and limit the movement of some material goods between peoples on opposite sides of the border (Hodder 1982; 1985, 141-159). Some scholars believe that we need to regard frontiers as 'possible zones of cultural interfaces in which cross-cutting, segmentary groups can be defined and recombined at different spatial and temporal scales of analysis. Research is directed toward issues concerning how people establish and maintain interethnic relationships in frontier context, how multiple kinds of interactions take place within and between groups that cross-cut both colonial and indigenous populations, and how frontier relationships can facilitate innovations in the lifeways of newcomers and

indigenes with varied backgrounds, beliefs, and world views' (Lightfoot and Martinez, 1995, 474).

The issue of the development of the Pomeranian-Prussian borderland in the Early Middle Ages is not a new research problem and these problems have been discussed in historical, archaeological, and onomastic literature in the past (e.g. Powierski 1965a; 1965b; Górniewicz 1980; 1987; 1989; Jagodziński 1997; 1998; Chudziak 1999; Bojarski 2002; Kowalczyk 2003; Wadyl 2013a; Sawicki *et al.* 2015).

The most important issue affecting controversies arising in the course of discourse is the lack of references to this border and frontier in early medieval written sources. As a result, in previous historical studies concerning borders of Prussian lands *The Chronicle of the Prussian Land* by Peter of Dusburg has been used commonly (see Petrus de Dusburgk 2007, 49). Thus, until recently in the literature the view of the border nature of the Vistula River formed on the basis of Peter of Dusburg's account (which mentions the extent of the Prussian land between the Vistula in the west to the Neman to the east) was quite strongly established (e.g. Biskup and Labuda 1988, 46-47). In earlier studies on the course of the Pomeranian-Prussian border, which attracted interest of both German and Polish researchers it is not difficult to notice that two opposing hypotheses dominated. The first one, advocated by German historians, assumed a borderline identical with the course of the lower Vistula (Quandt 1853, 205-216; Toeppen 1858, 7-16; Kasiske 1942). The other one, popular in the works of Polish historians treated the right bank of the Vistula basin as initially Slavic, colonized and populated by Prussians no earlier than in the 12th-13th century (Kętrzyński 1882; Duda 1909, 29-42; Pollakówna 1958; cf. Łowmiański 1931, 10-11; Górski 1933, 549-553). It is therefore not difficult to realize a great importance that national, ethnic and political factors played when studying issues such as ethnic, cultural, and administrative association of frontier lands in the past.

The area of the Pomeranian-Prussian borderland has been of interest for archaeologists since the last few decades of the 20th century. It is worth pointing out two unfinished research projects carried out by the Castle Museum in Malbork. The first one concerned research of strongholds and settlements of the Pomeranian-Prussian frontier. This project was undertaken in the 1960s (Haftka 1971; 1975) and its objective was to investigate the settlement transformation in the area of the Iława Lake District, Żuławy Wiślane and the Elbląg Upland. The other research program was carried out by Antoni Pawłowski mostly in the 1980s, and its objective was to examine strongholds in the lands of Pomesania and Pogezania (Pawłowski 1987; 1991). Those problems were resumed in connection with the completion of the 'Adalbertus' project associated with the celebration of the millennium of the martyrdom of St Adalbert. In 1995-1996 within the framework of the 'Adalbertus' project, a research task 'Slavic-Baltic borderland in the Early Middle Ages in the light of archaeological evidence of the Kujawy – Pomesania communication route' was carried out (Chudziak 1997; 1999). A series of excavations and archaeological data analyses were realized that aimed to reconstruct the settlement structure within the course of the route.

Another objective of that project was to define a maximum range of the Slavic circle to the north-east. Important research excavations were also carried out in the area between the Vistula and the Pasłęka rivers, which resulted in the catalogue of archaeological sites (Jagodziński 1997; 1998). It is worth to note results of the research programs: 'Poland in the era of the Congress of Gniezno and its place in the European Culture in the 10th-20th centuries' (1997-1998) (see Buko 1998; Chudziak 2000), 'Polish-Prussian borderland in the Early Middle Ages' (1997-1998), 'Polish-Prussian borderland in the Early Middle Ages: Loubavia land' (2005-2008) (see Grążawski 2006; 2009; 2012), and 'Slavic-Baltic borderland in the Early Middle Ages. Verification and trial excavations and verification of pottery' (2011-2012) (Wadył 2012; 2013b).

Research into toponymy is considered to be a significant part of settlement studies. The question of the making of the Slavic-Baltic borderland met with interest in the onomastic literature (for ex., Górniewicz 1975; 1978; 1980; 1987; 1989; Biolik 1992, 1994, 1989; cf. Semrau 1919, 26-42; Mańkowski 1923; Milewski 1939-1947, 21-84). Unfortunately there are no complete and correct publications concerning toponymy of the Slavic-Baltic borderland, and a significant part of toponyms from that area is extremely difficult for ethnolinguistic interpretation (see Wadył 2013c).

One of the most relevant research objectives set in the framework of research programs carried out so far was to define a maximum reach of the Slavic colonization to the north (from the perspective of Mazovia and the Chełmno Land) and to the east (from the perspective of Pomerania). During both research and trial excavations of most strongholds only pottery has been uncovered. It has to be stressed that discovering of archaeological ceramics in the so-called Slavic type has been a criterion allowing to define ethnic association of particular sites and settlement complexes. Obviously, strongholds and dwellings, where Slavic type pottery has been found were interpreted as Slavic settlements.

THE ORIGINS OF THE EARLY MEDIEVAL SETTLEMENT IN THE POMERANIAN-PRUSSIAN BORDERLAND. THE DEVELOPMENT OF THE SETTLEMENT STRUCTURES AND ETHNIC ASSOCIATIONS

The colonization of the Pomeranian-Prussian borderland appears to be a process which is particularly complex and difficult to study. The issue of the origins and the development of the early medieval settlement structures in the area of Żuławy Wiślane and the Hława Lake District is a particularly important problem. Research programs and excavations carried out in recent decades allowed to verify some previous hypotheses.

The process of the development of the aforementioned borderland was reconstructed on the basis of results of the comparative analysis of pottery from different micro- and meso-regions from the investigated area, as well as the results of recent archaeological

research on the settlement structures in this area. The analysis of the colonization of the investigated area was supported by results of field surveys carried out mostly in the framework of the Archaeological Record of Poland program. All this made it possible to create a vision of the making of the Pomeranian-Prussian borderland in the Early Middle Ages. The view presented below is based on part of Chapter IV of the dissertation: *The making of the Slavic-Baltic borderland in the Early Middle Ages on the basis of recent archaeological research* (Wadył 2013a, 455-478).

Until the turn of the 8th and 9th c., the area of the borderland was generally uninhabited and traces of the initial phase of colonization of the investigated area can be dated to the 9th century. There are settlement traces from the vicinity of Malbork that could be considered as a result of movements of human groups from the Eastern Pomerania. Nevertheless, both Żuławy Wiślane, and the north-western part of the Iława Lake District remained uninhabited in the initial phase of colonization.

Significant intensification of the colonization process in the investigated area can be dated to the 10th century. In the area of Żuławy, in the vicinity of Lubieszewo a concentration of settlement points was noticed. It was a manifestation of the development of a settlement complex. However, the most important settlement complex was established in Malbork-Wielbark, where probably in the 1st half of the 10th century a stronghold on the high banks of the Nogat river was erected. In the immediate vicinity of the stronghold a dwelling from the same chronological horizon was recorded. However, no other elements of the structure of that group were detected. Nevertheless, the vast majority of the central part of the Iława Lake District still remained uninhabited, and at that time the Prussian milieu did not exceed the line of the Dzierzgoń river, where not very intense traces of settlement were noted.

Quite significant changes in the settlement of the investigated area may be dated back to the 11th century. At that time there was a substantial increase of settlement density in the area of Żuławy, within the Lubieszewo settlement structure. A significant increase of the number of settlements in the area of Malbork has been noticed. It has been connected with the establishing of a large settlement complex in Węgry, which resulted in the reconstruction of the settlement structures. The same chronological horizon was recognized in the second phase of the stronghold in Malbork-Wielbark. Nonetheless, it is hard to answer the question of the nature of the relationship of those both settlement centres. Assuming the same horizon of both centres, we should consider the supplementary character of the Malbork-Wielbark stronghold. The discussed area was culturally associated with East Pomerania and was developed by the redistribution of human groups from the areas of the western bank of the lower Vistula river.

The intensification of the settlement activity was also observed in the areas lying further to the east. Major changes in the settlement occurred in the Dzierzgoń river basin, which remained uninhabited so far. The changes may be interpreted as an infiltration of small human groups from the interior of Prussia. We may assume that a concentration

of dwellings and settlements around Bagart, Święty Gaj and Kwietniewo is the result of these migrations. Probably the main centre of that concentration was the stronghold in Kwietniewo. Another significant accumulation of settlement points was found in the upper Dzierzgoń river basin, near Myślice and Lubochowo. Probably, a central element of that settlement structure was the stronghold in Myślice. In the light of previous studies, it appears that the central part of the Iława Lake District between Lake Dąbrówka in the west to the course of the Dzierzgoń river was an uninhabited zone, which can be regarded as a boundary area, separating two different cultural zones.

The territorial expansion of groups associated with the Prussian culture circle which was launched in the 11th century intensified in the 12th century. Territories to the south and east of the Dzierzgoń river were settled in that time and, during the colonization process, Prussian raids took place. They caused the collapse of the settlement structures in the southern part of the Iława Lake District associated with the Chełmno-Dobrzyń zone and East Pomerania. Probably, one of centres destroyed in such circumstances was the stronghold in Węgrzy. Undoubtedly, in the second half of the 12th century the entire Iława Lake District was inhabited. These territories are identified with the Prussian land of Pomesania, and such a picture of the settlement situation is presented in the historical records (for ex., Petrus de Dusburgk, 49).

RECENT RESEARCH OF THE SETTLEMENT COMPLEX IN WĘGRY

The settlement complex in Węgrzy seems to be a very unique centre in the lower Vistula region. It had a key role in the development of the area called Pomeranian-Prussian frontier in the 11-12th century. Even a brief mentions and short reports from the excavation indicated that in the early Middle Ages that settlement complex was the most important cultural centre located on the border of Iława Lake District and Żuławy Wiślane (see Wiącek 1966; 1968; 1969; Wiącek, Haftka 1968; 1969; Haftka 1977; 1987, 37-39).

The complex in Węgrzy is located in the lower Vistula region, between Żuławy Wiślane and Iława Lake District in the heart of northern Poland (Fig. 1). It developed approximately in the mid-11th century, and for at least seven decades, with military, economic, trade, political and administrative functions, it was the most important culture-generating centre situated to the east of the lower Vistula river and related to East Pomerania. It is the location of the centre in this area in the borderland between Pomerania and Prussia that is worth special attention. The complex is also exceptional due to its size as it covered approx. 5.25 ha and was protected with an elaborate system of fortifications.

The toponym *Węgrzy*, which is translated as Hungary, appeared for the first time in the written sources in 1530 when King Sigismund I the Old allowed Jan Baliński 'to build a canal in the direction of his village Polish Brunswald alias Wanger' (Czaplewski 1946,

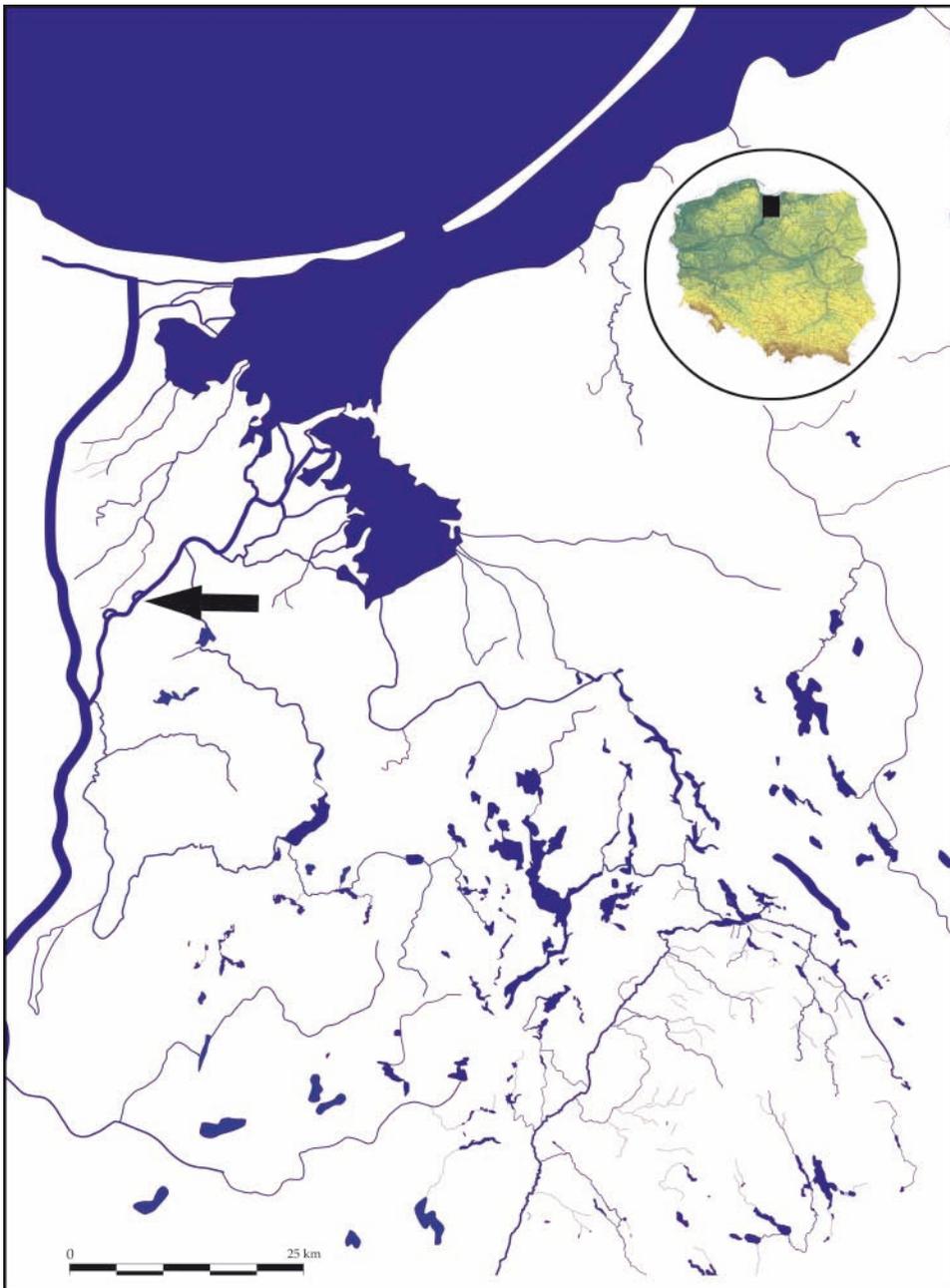


Fig. 1. Location of the settlement complex in Wegry.
Drawing S. Wadył, reconstruction of the hydrographic network after Bertram (1907)

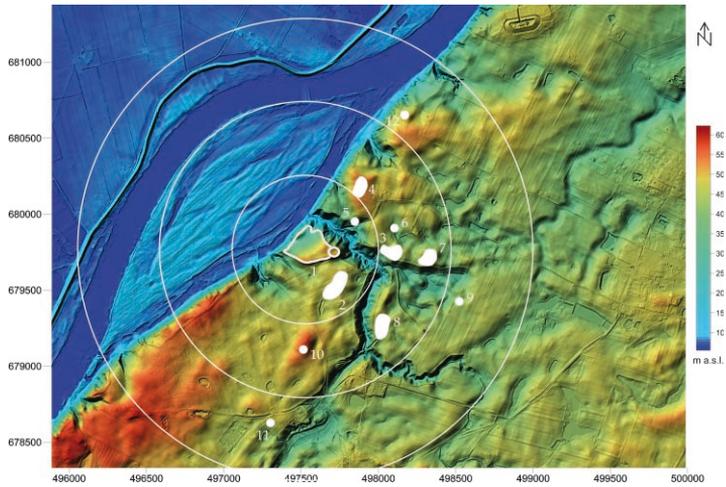


Fig. 2. Location of sites distinguished within the settlement complex against the background of the Numerical Terrain Model. 1 – Węgry, stronghold with a suburbium, Site 1–4(65–68), 2 – Węgry, Site 5 (69), 3 – Gościszewo, Site 7(7), 4 – Gościszewo, Site 11(11), 5 – Gościszewo, Site 9(9), 6 – Gościszewo, Site 10(10), 7 – Gościszewo, Site 8(8), 8 – Gościszewo, Site 6(6), 9 – Gościszewo, Site 5(5), 10 – Węgry, Site 8(18), 11 – Węgry, Site 15(39), 12 – Gościszewo, Site 18(18). By W. Małkowski, S. Wadył

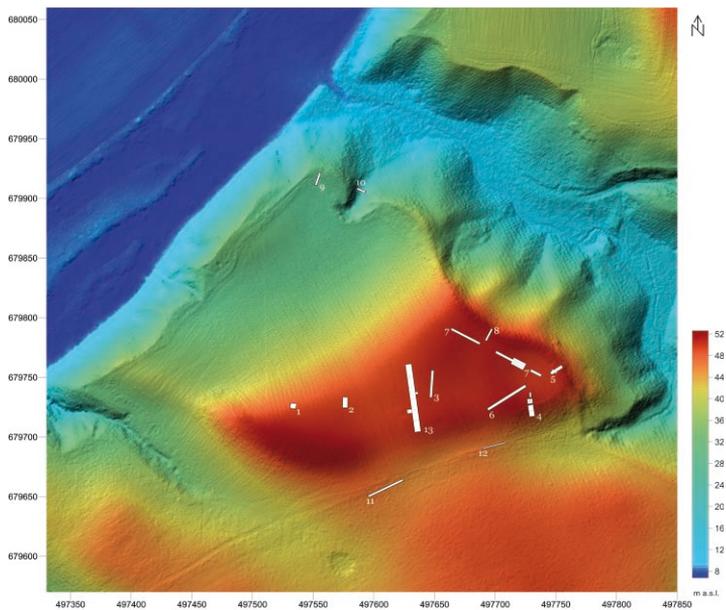


Fig. 4. Węgry, Sztum Commune. 1-13 – location of trial trenches against the background of the Numerical Terrain Model. By W. Małkowski, S. Wadył

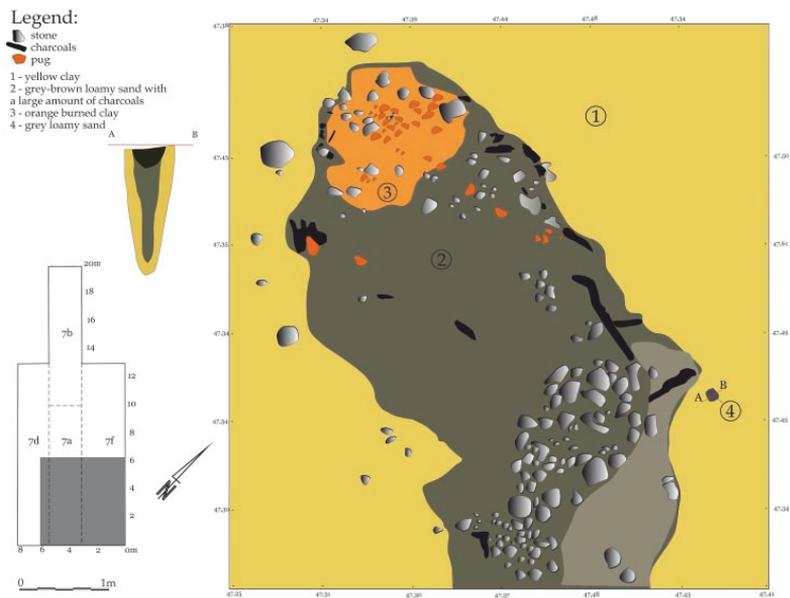


Fig. 5. Węgrzy, Sztum Commune, Trench 7, Plot A, D, F. Ground plan of a dwelling house. By E. Drozd



Fig. 9. Węgrzy, Sztum Commune. View of the rampart of the stronghold from the E side. Photo H. Raczyński

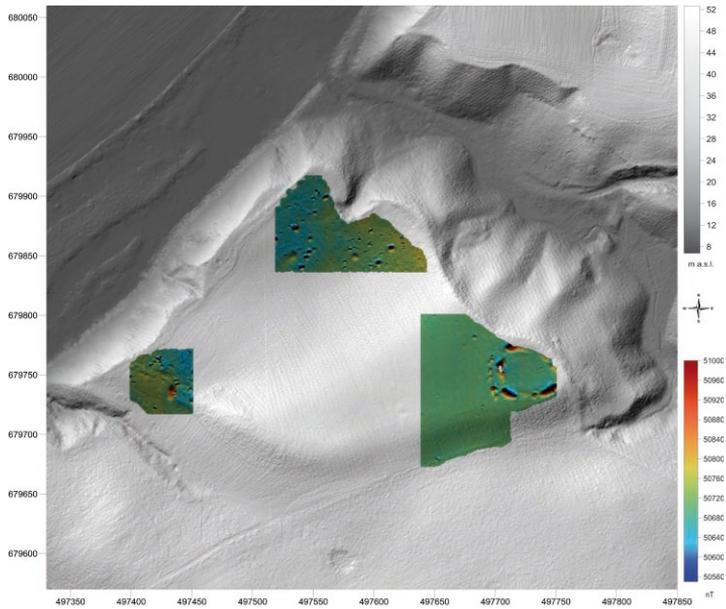


Fig. 10. Węgry, Sztum Commune. Interpretation of magnetic prospecting results. By W. Małkowski



Fig. 11. Węgry, Sztum Commune. Clay spindle whorl with an imitation of writing (a) and bridle strap divider in the form of a circle divided by the arms of a cross (b). Photo L. Okoński

90). Linguists believe that toponym *Węgry* has nothing to do with the name of the Hungarian State. H. Górniewicz reconstructs that place name as *Wingrai* and juxtaposes it with the Lithuanian *vingrus*, sinuous (Górniewicz 1980, 174-175). It was to refer to the shape of the river Nogat in this section. On the other hand, A. Semrau binds the name of the village with activities of inhabitants that is Charcoal burning, Polish *węglarstwo* (Semrau 1928, 48; Powierski 1968, 250).

Excavations in Węgry, situated 7 km to the south-west of Malbork, were initiated in 1962 as part of cooperation between the Archaeological Museum in Gdańsk and the Castle Museum in Malbork (Wiącek 1962). The archaeologists studied the site for 12 excavation seasons in total, trying to get to know the history of the settlement of this place. The site should be considered a multicultural settlement complex with the phase related to the Early Iron Age and the Early Middle Ages being the most marked. The present work focuses on the Early Medieval phase of the functioning of the settlement complex. Thirteen trenches (Fig. 4) explored during the research covered the area of 884.2 m², including 322.7 m² within the stronghold, 525.5 m² within the suburbium, 29 m² on the outer southern slope and 7 m² in the 'Parów Węgry' ravine. The estimated size of the stronghold complex is 525 ares, the stronghold itself covering 37 ares and the suburbium covering the remaining area of 488 ares.

Location of the site and geomorphologic conditions of settlement location

The settlement complex in Węgry is located in the area between the north-western part of Iława Lake District and Żuławy Wiślane, on the east bank of the Nogat river. The topographic analysis of the riverside zone from the bifurcation of the Vistula and Nogat rivers to the area near Malbork suggests that the area where the settlement complex was located had everything necessary for convenient settlement development. However, the decisive factor for choosing this location was probably the possibility of controlling the Nogat river route. The complex consisted of a stronghold, a vast suburbium and a dozen of settlement locations contemporary with the stronghold, interpreted as open settlements, arable lands and pastures (Fig. 2). The central point of the complex was the stronghold located on the highest, east part of a hill called 'Dębina Góra'. It had a developed system of sentry posts situated along the elements of the road network and harbours on the Nogat river.

In the south, complex bordered a vast outwash plain, covered by a forest (the Sztum Forest) both now and in the past. In the west, the complex stretched along a strip of upland next to the edge of the Nogat, bordering the southern, highest part of Żuławy Wiślane (up to 10 m above sea level). To the east, the area was bounded by a range of clayey moraines reaching up to 60 m above sea level (Haftka 1991, 123).

The location of the settlement complex in Węgry was exceptionally convenient. The complex functioning on the Nogat river, the main artery in the region, had a very abundant

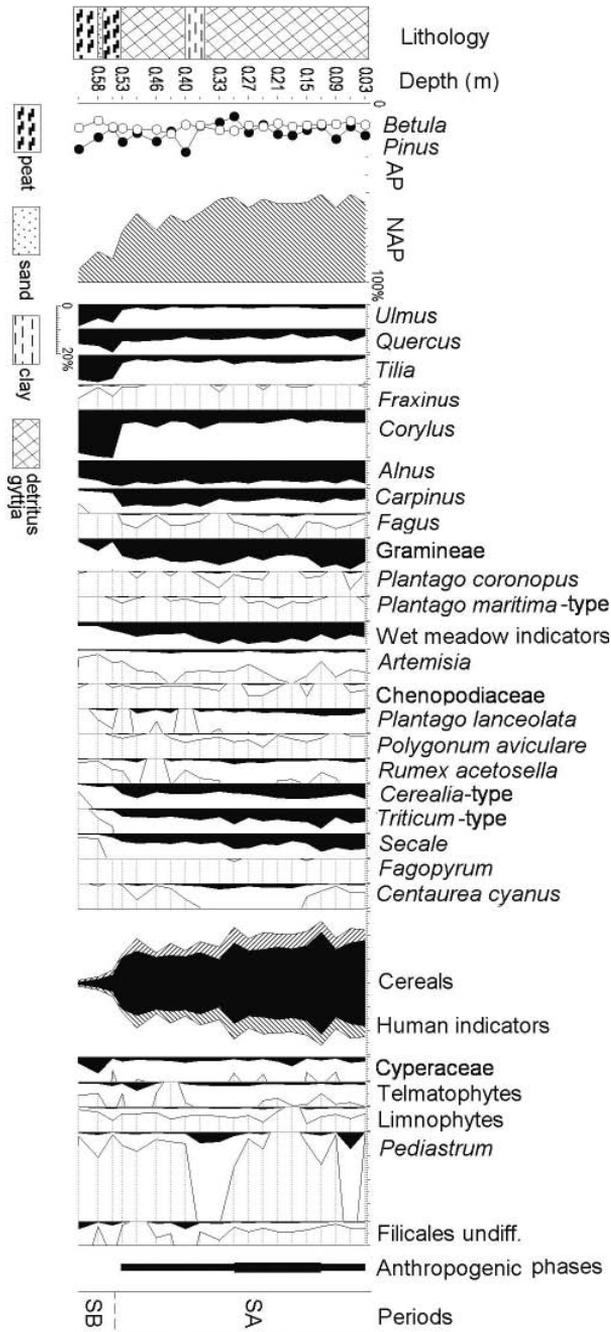


Fig. 3. Palyiological profile of sediments from the bottom of a postglacial lake. By J. Zachowicz

natural resources supply base (Kittel 2014). The two completely different physiographic units were notable for intensive farming, which possibly produced a surplus that could be used in trade exchange.

The dynamically developing settlement network within the oecumene in the 11th-12th centuries certainly contributed to changes in the landscape. A good illustration of these changes is a palynological profile of sediments taken from the bottom of a postglacial lake situated in the east of 'Parów Węgry', approx. 600 m to the east of the stronghold (Fig. 3). The latest phase of the Subatlantic Period reflected in the diagram, corresponding to the second millennium AD, indicates clear changes in the percentage composition of herbaceous plants, particularly a considerable decrease of mixed broadleaf forest elements to less than 10% and an increase of indicators of human economic activity (cultivated plants, weeds typical of arable lands, ruderal communities, dry pastures and fresh meadows) (Zachowicz 1984). Unfortunately, as the palynological analyses were realized in the early 1980's, the palynological profile has no radiocarbon dates. Recently, pollen analysis of the core taken from a small filled basin, 3 km south of Malbork were realized (Brown and Pluskowski 2011).

Structure and spatial organization of the settlement complex

The probable size of the stronghold complex is 525 ares, the stronghold itself covering 37 ares and the suburbium covering the remaining area of 488 ares (Fig. 4). The stronghold was situated on the eastern, highest part of the hill with a prominent oval shape. The diameter of the complex with the ramparts was approx. 60 m and the inside was an oval area of 40 x 38 m (16 ares). The stronghold was surrounded with a rampart on an oval plan.

Due to the topography of the area as well as the intensity and nature of settlement traces, the area of the suburbium has been divided into two zones: the upper suburbium and the lower suburbium. The knowledge of the area of the suburbium is very limited compared with the stronghold, which is mainly due to the small scale of the excavations carried out there (only 1% of the area has been excavated).

It is worth noting the defensive advantages of the stronghold's location, particularly the high and steep valley slope to the north-west and the slope of 'Parów Węgry' to the north-east. The valley slope certainly gave enough protection so there was no need to build additional fortifications to the north-west. The size of the ramparts and the way they were built depended on diverse local topographic conditions. Relics of a defensive rampart were recorded in all the trenches within the stronghold and some trenches within the suburbium. The total length of the fortifications of the stronghold measured along the central part of the rampart was approx. 175 m. The most information on the structure of the rampart has been obtained from the results of the study of Trenches 6 and 7. The western section of the rampart was the largest, its width reaching 16 m at the base. It was built on

a stone and clay base, mainly using grid structure, although at some places remains of box structure were recorded.

Apart from the stronghold, the system of fortifications protected also the suburbium. The length of the rampart built along the brink of a ravine was 225 m. The longest defensive embankment was built along the southern edge of a hill from the stronghold to the brink of a glacial valley. It measured approx. 350 m. It is only along the brink of the glacial valley that no fortifications were recorded, which is probably due to the considerable defensive advantages of the steep slope.

The inside of the stronghold covered an oval area of 40x38 m. In its centre, there were no buildings. Dwelling houses were situated along the inner line of the rampart. Relics of two buildings were unearthed, one recorded in Trench 7 (Fig. 5), the other in Trench 6. The analysis of the size of the discovered features and the available space suggests that within the stronghold, there may have been six or seven houses. The buildings were not adjacent to the side of the rampart but separated from it by a stone bank running along the inner line of the rampart, at the foot of it. They were built in a distinct hollow at the foot of the rampart.

The analysis of the areas of the suburbium where the most intensive traces of settlement were recorded indicates that building zones within it were planned. Three settlement zones have been identified, located in the most convenient places, mainly in terms of defence. The first settlement zone has been identified in the central part of the upper suburbium, where Trenches 3 and 13 had been dug. The second zone of compact building has been localised within the so-called lower suburbium, at the foot of the rampart surrounding the hill from the south-west, in the area stretching from the brink of the glacial valley to the slope separating this zone from the upper suburbium. The other zone of dense settlement has been identified within the central and eastern part of the lower suburbium, in a vast basin elongated in the N-S direction. This area is characterized by a very high thickness of cultural layers and a relatively large area of 65 ares. The main entrance road leading into the stronghold complex probably ran along the bottom of the 'Parów Wędry' valley towards the lower suburbium.

Material standard of living

An important issue was the assessment and interpretation of the material evidence of the activity of the past inhabitants of the settlement complex in Wędry. The cultural deposits of the settlement complex in Wędry revealed an abundant collection of products related to various aspects of functioning of the Early Medieval community. These sources provided important information about the material standard of living, farming activities undertaken by the inhabitants to support themselves, household equipment, aesthetic preferences, trade and cultural relations. The analysis of an abundant collection of finds made it possible to consider fundamental issues related to the functioning of the settlement

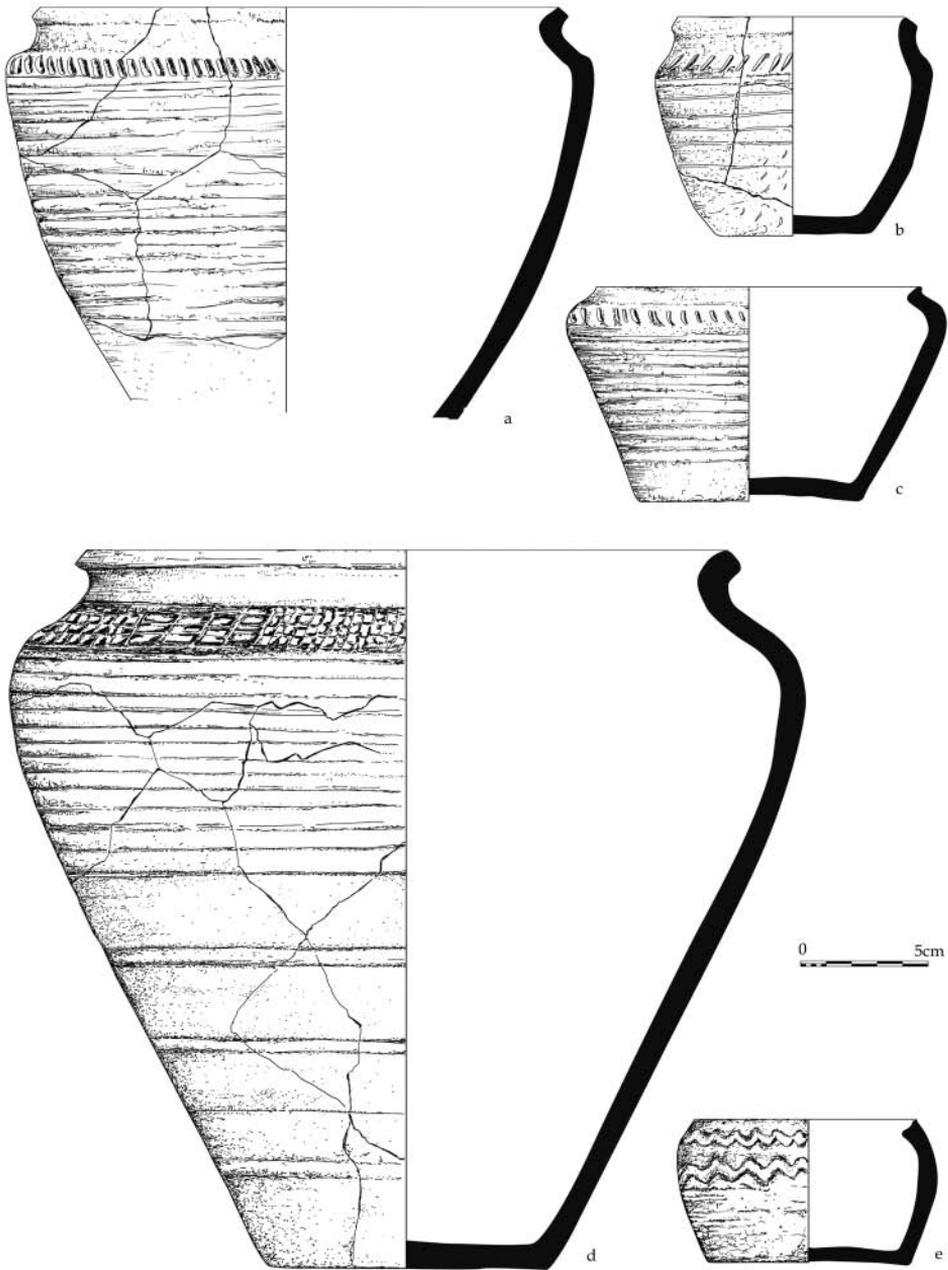


Fig. 6. Węgry, Sztum Commune. Selected vessels from Trench 6 (a-e).
Drawing D. Żak-Boryszko

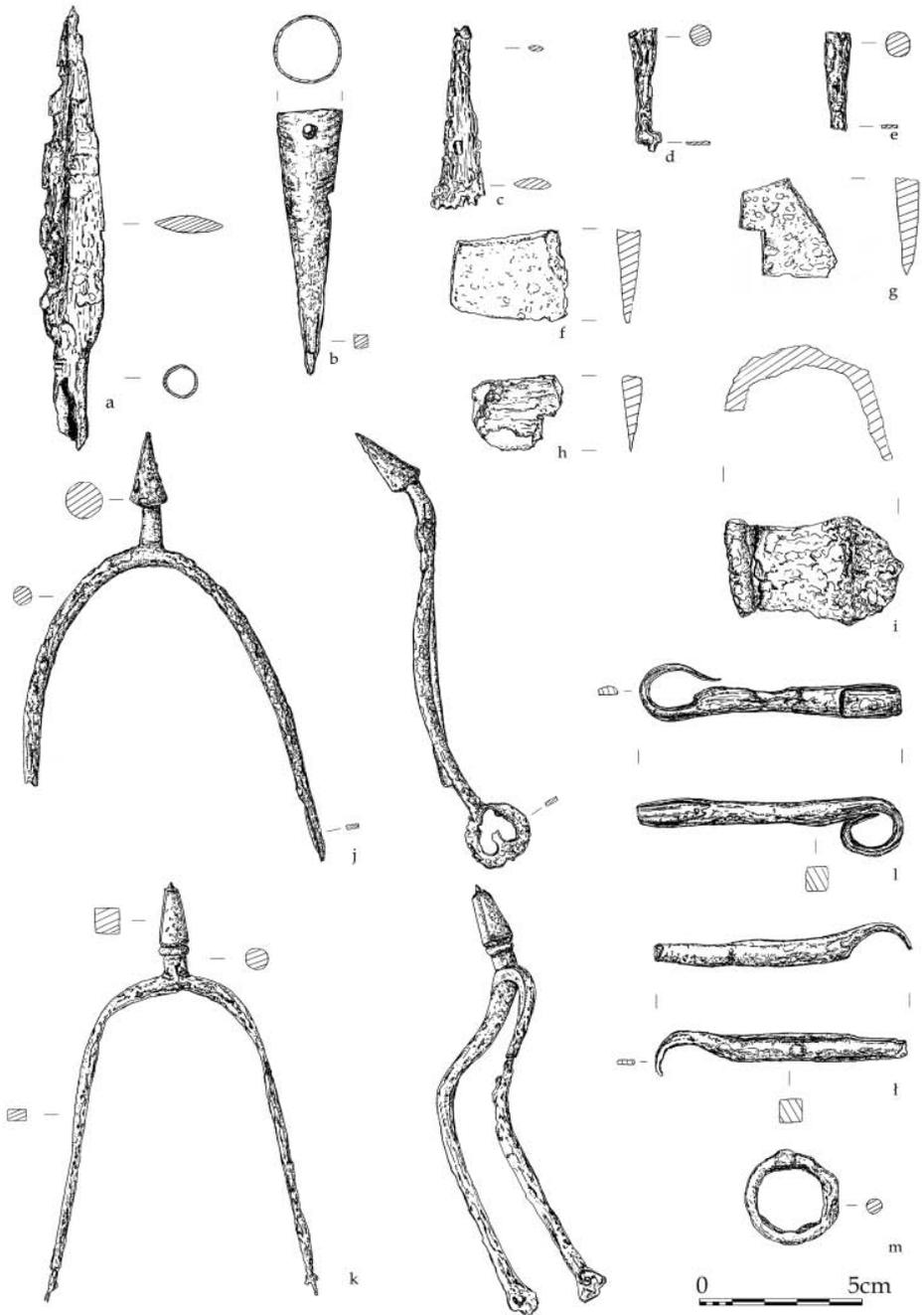


Fig. 7. Węgry, Sztum Commune: a-i – elements of arms, j-k – equestrian equipment, l-m – horse tack. Drawing D. Żak-Boryszko

complex in Węgry such as the question of farming and craft activities. There was also an attempt to assess and determine the nature and scale of these activities.

An especially valuable part of the research was the analysis of a large collection of pottery (Fig. 6), one of few analyses of this most common category of sources from the area of Pomerania. The results of the analysis of this category of sources became very important for determining the chronology of functioning of the settlement complex. In this respect, the results of the analysis of so-called special finds was also very helpful. The key to their analysis was dividing them into six function groups: A – household equipment, B – items related to manufacture and non-manufacturing activities, C – multifunctional tools, D – items related to obtaining food, agriculture, breeding and fishery, E – personal equipment (see Fig. 7), F – toys.

Chronology

The revision of views on the chronology of functioning of the complex may be considered a particular achievement. The first attempts to determine the chronology of the stronghold in Węgry, made on the 'basis of metals', indicated the 11th-12th century (Wiącek 1969, 317). In later works, researchers narrowed down the chronology, determining that the stronghold had functioned from the first quarter of the 11th century to the 1170s and 1180s (Haftka 1987, 38). The dating was essentially based on analogies to Early Medieval Gdańsk, the chronology of which (especially of its earliest levels) has been recently shifted at least 75 years forwards (see Kościński and Paner 2005). On the basis of a detailed analysis of the stratigraphy revealed in the trenches and the results of source material analyses, the authors decided to distinguish three stronghold settlement phases: the first 'pre-stronghold' one, the main 'stronghold' one, related to the functioning of the vast settlement complex, and the mysterious, little known 'post-stronghold' one. The results of the

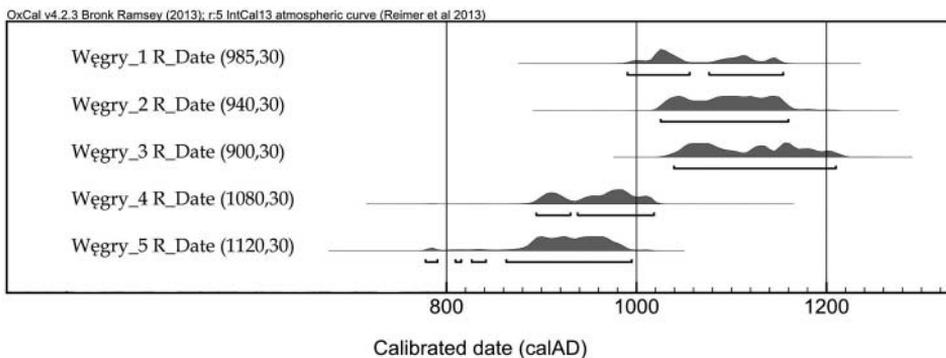


Fig. 8. Calibration curve for AMS radiocarbon dates. Materials dated are charred seeds (Węgry_1–3) and birch bark (Węgry_4–5) (Goslar, 2014)

analysis of the pottery and of the detailed analyses of other chronology indicators identified among the items found during the excavations, combined with the results of radiocarbon analyses (Fig. 8), made it possible to determine the rough chronology of the functioning of the settlement complex. It seems to have provided a reliable basis for dating the beginning and the end of the functioning of the settlement complex. The first phase, preceding the construction of the stronghold, may be dated to the first half of the 11th century and may have lasted until the beginning of building work that resulted in the construction of the vast stronghold complex. It was determined that this work had been done in the 1060s and 1070s. The complex probably functioned until the 1160s, although this date is only hypothetical. After the fall of the stronghold, its area was once more settled, as indicated by relics of furnaces and hearths found in Trenches 4 and 5. This phase, probably only transitory, may be roughly dated to the second half of the 12th century.

The chronology of the 11th-century history of East Pomerania and the knowledge of when the stronghold in Węгры was built seem to indicate that the attempt to extend Pomeranian administrative structures to the east bank of the Vistula river took place c. the mid-11th century. With a large degree of caution, these events may be associated with Kazimierz I the Restorer of Poland's regaining control of Pomerania in c. the mid-11th century and the attempt to strengthen and rebuild territorial and settlement structures as well as to take control of the important waterway of the Nogat river. However, it was certainly settlers from Pomerania that carried out the work, which can be seen in the strong connections with Gdańsk visible in the source material. What also supports this view is the fact that at the end of the rule of Bolesław II the Bold of Poland, the Piast dynasty lost control of Pomerania. The most thriving period for the settlement complex in Węгры was the last decades of the 11th and the beginning of the 12th century, i.e. the time when the whole of East Pomerania was controlled by local Dukes of Gdańsk.

The analysis of the available sources indicates that the stronghold functioned until the mid-12th century or perhaps the 1160s, although it is not improbable that the fall took place a bit earlier. Traces of fire, charred defensive structures (Fig. 9) and dwelling houses recorded both during the excavations and in the results of geophysical analyses (Fig. 10), as well as abandoned property indicate a sudden fall of the stronghold in Węгры.

The function of the settlement complex in Węгры and its role in the context of functioning of Pomeranian settlement in the right-bank basin of the lower Vistula

The settlement complex in Węгры was a strategic centre for the development of settlement and cultural relations in the right-bank basin of the lower Vistula river from the 1060s-1070s to *circa* the 1160s. The initial reports prepared by the authors of the research indicated its strong relations with East Pomerania, especially with the stronghold in Gdańsk, built in the bifurcation of the Vistula and Motława rivers. It was also thought that

within the settlement in question, there were relics of a stronghold built in the area near the Prussian border, mainly to block waterways.

In light of the results of the research, the discussed settlement complex with a central structure element in the form of a two-part stronghold seems to have been a multifunctional centre of great significance, a centre of social and political life for the population of the east bank of the lower Vistula river. Source materials obtained during research are material evidence of all kinds of aspects of functioning of the centre. The available sources subject to multifaceted analyses make it possible to draw conclusions about, e.g., crafts and other manufacturing activities (pottery, woodworking, weaving, amberworking (?), working of stone materials, ironworking and working of non-ferrous metals), non-manufacturing activities (trade/commerce – weights and a coin), farming activities (agriculture, breeding and fishery) undertaken by members of this community.

The stronghold complex in Węgrzy certainly had military and defensive functions. It can be seen especially in the well-developed system of fortifications surrounding the stronghold and the suburbium. The military aspect of the centre is indicated as well by elements of arms and equestrian equipment found in the layers of the stronghold (Fig. 7). Building the fortifications in Węgrzy undoubtedly required a lot of effort. The huge, 16-metre-wide ramparts of the stronghold offered effective protection and at the same time were a kind of deterrent to potential attackers. It may be assumed that similar well-developed stronghold complexes functioned as a protection for the population of nearby settlements.

During the research, a number of sources were obtained that justify attributing economic functions to this centre. The analysis focusing on drawing up an economic profile, has provided a lot of information about farming activities of various kinds. It has provided evidence of undertaking manufacturing activities: pottery, woodworking, weaving, working of stone materials and probably working of amber, antlers and bone. There are also fairly sound reasons for assuming that there existed an iron production centre where iron and non-ferrous metals were worked. It can be concluded, especially from the discovery of furnaces, semi-finished products in the form of rectangular lumps of iron, iron slag as well as melting crucibles. Economic functions are also indicated by activities related to obtaining and producing food. The already mentioned analysis suggests a great significance of cultivation (cereals, legumes as well as fibre and oil plants), breeding as well as fishery.

The stronghold had also an important trade function. It is assumed that activities involving trade exchange were one of the fundamental social relations determining social and economic development in the Early Middle Ages (for ex., Moździoch 1999, 25). Trade is commonly associated with finds of scales, weights and single coins. Among the items found in the deposits of the stronghold are two bronze-coated weights and an 11th-century silver German denarius. Moreover, what points to the function of the complex as an exchange centre is the fact that it was located at the intersection of routes, near the Nogat river crossing.

Stronghold complexes built and functioning in the 11th and 12th centuries, related to state structures or functioning within smaller, independent political and territorial units, which might be called duchies, usually had administrative and political functions. This role should probably be also attributed to the discussed centre. It was probably the seat of the local group of leaders, functioning as a governor-steward representing the ruler. What confirms, at least to a certain extent, the claim that among the inhabitants of the stronghold complex, there were representatives of the elites, is a collection of elite items found during excavations: an ornamented cylindrical padlock, a spindle whorl with a Cyrillic quasi-inscription (Fig. 11:a), a leather sheath fitting ornamented with a composition resembling the shape of a snake/dragon with a gaping maw, an ornamented bronze belt buckle, a fragment of a rattle, a comb sheath of Type II, Variant 3 according to E. Cnotliwy's classification, a bridle strap distributor in the form of a circle divided by the arms of a cross (Fig. 11:b) as well as a bronze bridle strap distributor in the form of a cross with the arms widening at the end.

Determining the function of the discussed centre is a question of fundamental importance. On the basis of the presented data, it should be considered as the main centre of the settlement complex on the Nogat river; as demonstrated, it had military and economic functions; it was probably a place where crafts and trade exchange were practised. Considering the above-mentioned factors, the settlement complex in Węgrzy may be considered the main culture-generating centre of the area to the east of the lower Vistula river from the mid-11th century to the 2nd half of the 12th century. Thus, it should probably be attributed administrative and political functions. It was certainly a multifunctional centre of great significance, a centre of social and political life, which could be used to control the Nogat river route and the Żuławy crossing to the west bank of the Vistula river. Moreover, it is worth mentioning that a potential distinctive feature of multifunctional centres of this significance is their multi-part structure which has been observed in the discussed settlement complex.

Are the probable administrative and political functions enough to consider this centre to be a castellany (Haftka 1988; Długokęcki and Haftka 2000, 82-83)? The two-part structure, the scale of fortifications in the context of the formation of a settlement zone related to Pomerania on the east bank of the Vistula river, the demonstrated multifunctionality, all this indicates that it was a cultural and settlement centre of significance close to castellan centres. Jan Powierski thought that, with the beginning of Pomeranian settlement to the east of the Vistula and Nogat rivers in the 11th-12th centuries, the administrative and political border of East Pomerania had moved in this direction (Powierski 1965, 7-32). He also believed that the stronghold in Węgrzy had had the central function within a Pomeranian castellany situated to the east of the lower Vistula river (Powierski 1996, 157). F. Duda discussed the possibility that the Pomeranian administrative centre for this area in somewhat later times (13th century) had been Santyr (1909, 27-55).

The first written sources mentioning East Pomeranian castellanies date back to the 13th century, although the castellanies probably formed in the 12th century (Labuda 1972, 546).

No source mentions a castellan centre in the area to the east of the Vistula river. Obviously, the silence of sources about this question does not need to be significant. Due to the fall of the centre in Węgry in the second half of the 12th century, the memory of the area that had functioned as part of Pomeranian structures vanished, and lists of castellan centres from 13th-century sources do not include information related to structures to the east of the Vistula river, because at first (in the last decades of the 12th century), they had been settled by Prussian communities, and since the 1230s, they had become part of the state of the Teutonic Order.

Cultural connections and trade relations

The function of the centre in Węgry as a place where trade exchange took place has been discussed above. In its proximity, the Nogat river route intersected with a land route leading from Prussia to the west through Żuławy in the direction of Gorzędziej, and then along the so-called 'via regia' through Pruszcz Gdański and Święty Wojciech to Gdańsk. Therefore, one should agree with the view of J. Powierski that this centre owed its importance mainly to the location of the Nogat river crossing, connected by road to the Gorzędziej-Słońca crossing and then through Lubiszewo and the area near Święty Wojciech to Gdańsk (Powierski 1996, 159). Thus, the centre could be used to control the Nogat river route and the Żuławy crossing. In this context, a matter of particular importance was the existence of a harbour, which was probably situated near the place where 'Parów Węgry' meets the oxbow lake in the old river bed of the Nogat. As it has been proved, there were favourable conditions for a harbour there.

The proximity of trade and travel routes made it easier to have relations with other areas on different levels. The source materials obtained during the research are strongly related to the area of Pomerania, especially to Gdańsk. The relation between the discovered pottery and the products from Gdańsk is so strong that it looks as though it had been made there. Such a large scale of pottery occurrence suggests the presence of potters from Gdańsk in this centre rather than a mass character of vessel trading. However, some items seem to indicate well-developed trade relations extending beyond the local area (a comb sheath from Wolin in Western Pomerania, phyllite and mudstone whetstones of Scandinavian provenance, a painted egg and a spindle whorl with a Cyrillic quasi-inscription indicating some connections with the East Slav lands, see Fig. 10).

The settlement centre in Węgry had a very abundant natural resources supply base. Two completely different physiographic units (Żuławy and Hława Lake District) were notable for intensive farming. Perhaps the food production surplus (cereal grains, meat) was one of the factors influencing the development of this complex and made it possible for the local people to participate actively in both local and long-distance trade. Apart from food, the exported goods may have also included skin and furs of wild animals.

When reconstructing historical exchange centres and trade routes, special attention is paid to silver hoards. A deposit with a chronology contemporary with the centre in Węgry

has been found in Gościszewo, situated close to the stronghold. The hoard of coins and ornaments was discovered within the 'great prehistoric settlement' and it is said to have included Arab and German coins. However, their number and exact chronology is not known, although it is possible to make a conservative assumption that the hoard dates back to the 11th century. Only two German denarii minted in Cologne and Metz have been identified (Kiersnowska and Kiersnowski 1959, 48, no.49). As suggested by W. Łęga, it is possible that two silver rings come from this hoard (1930, 588). Another deposit, probably dating from the 11th century, comes from Laski near Nowy Staw. On the bank of the Święta river, a hoard of 34 coins was found during land improvement work, including 6 unidentified Arab ones and 28 unidentified Western European ones (Kiersnowska and Kiersnowski 1959, 61, no.87).

SUMMARY

It has been demonstrated that the settlement complex in Węgry was a strategic centre for the development of settlement and cultural relations in the area of the right-bank basin of the lower Vistula river from the 1060s-1070s to *circa* the 1160s. Undoubtedly it played a key role in the process of the making of the borderland. The centre was probably established approximately in the mid-11th century, and with its military, economic, trade, political and administrative functions, it was the most important culture-generating centre situated to the east of the lower Vistula river and related to Pomerania for at least seven decades. It is the location of the centre in this area in the borderland between Pomerania and Prussia that is worthy of special attention. The complex is also exceptional due to its size as it covered approx. 5.25 ha and was protected with an elaborate system of fortifications.

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