BUILDING A CASTLE - PREPARING FOR WAR OR KEEPING THE PEACE?

CASTELLA MARIS BALTICI XIII CASTLES OF THE NORTH II ARCHEOLOGICA MEDII AEVI FINLANDIAE XXIV

Edited by Nils Engberg, Vivian Etting, Lars Meldgaard Sass Jensen, Claus Sørensen, and Dorthe Wille-Jørgensen



DR. RUDOLF HABELT GMBH • BONN

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Back side: The castle of Hammershus on the island of Bornholm. Photo: Nils Engberg.

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PREFACE

In 2015 the international conference of Castella Maris Baltici XIII in collaboration with the Danish Castle Research Association was held in Denmark at the end of August. The special topic of the conference was: "Building a Castle – preparing for war or keeping the peace", and the various papers shed light on the many aspects of this issue.

The conference took place in the towns of Vordingborg, Nyborg and Elsinore, which are well known sites for some of the larger medieval and renaissance castles in Denmark. It included excursions to various other locations such as the castles of Gjorslev, Dragsholm, Kalundborg, Sprogø, Gurre and the renaissance castle of Kronborg. The conference was supported by the Danish Agency for Culture, and we wish to express our deep gratitude for this contribution.

We are happy to present this book, containing 18 articles about castle building in the Baltic area and the reasons for their being built. The authors come from Germany, Finland, Russia, Estonia, Sweden, Latvia, Poland, Lithuania and Denmark, and this international assembly of researchers constitutes an important forum for the study of castles in northern Europe. Each article has been reviewed in order to ensure its academic quality. The book is volume XIII in the publications of Castella Maris Baltici and volume II of Castles of the North, published by the Danish Castle Research Association (Magt, Borg og Landskab).

The organizers of the conference wish to thank the following foundations and institutions for their support, which has made it possible to publish this book:

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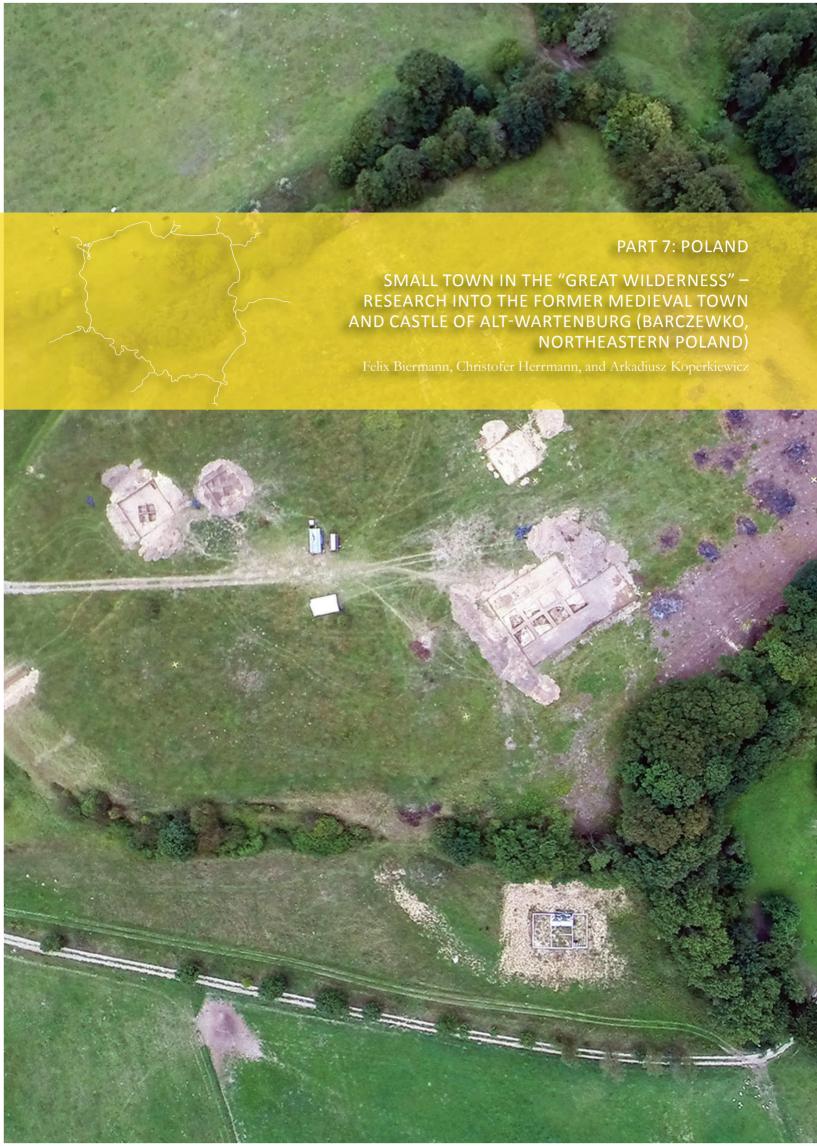
Nils Engberg

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Dorthe Wille-Jørgensen



SMALL TOWN IN THE "GREAT WILDERNESS" – RESEARCH INTO THE FORMER MEDIEVAL TOWN AND CASTLE OF ALT-WARTENBURG (BARCZEWKO, NORTHEASTERN POLAND)

Felix Biermann, Germany, Christofer Herrmann, and Arkadiusz Koperkiewicz, Poland

ZUSAMMENFASSUNG

Bei Barczewko, Woiwodschaft Warmia i Mazur (Nordostpolen), liegt die wüste Stadt Alt-Wartenburg, die in den 1320er Jahren vom ermländischen Bischof zusammen mit einer Burg gegründet und 1354 nach einer Zerstörung aufgegeben worden ist. Da der Ort später nicht überhaut wurde und seine Nutzung schlagartig zu Ende ging, gewährt er außergewöhnliche Einblicke in die frühe Entwicklung einer mittelalterlichen Lokationsstadt. Er war von 2013–2015 Gegenstand eines polnisch-deutschen Forschungsprojektes. Bislang konnten die Stadtanlage, mehrere Keller, die Befestigung, der Friedhof und das Kaufhaus erforscht werden. Der Platz liefert Informationen zur Gründung einer Stadt im Ordensland, zum Alltag von Kolonisten am Rande der sog. "Großen Wildnis" und über den dramatischen Untergang der Ortschaft. Der Aufsatz gibt einen Überblick zu den Forschungsergebnissen, insbesondere auch zur Einbindung des Burg-Stadt-Komplexes in militärische Belange.

INTRODUCTION

During the 14th century, the State of the Teutonic Order and its associated dioceses in Prussia experienced a period of permanent war due mainly to conflicts with the pagan Lithuanians. The intensive colonisation of inland Prussia that took place during this period was driven on by the Order and its allies in Prussia for both military and economic reasons. To facilitate the development of the large forests in the southeast of the country, castles were built to protect the countryside and the new settlements. These were supplemented by

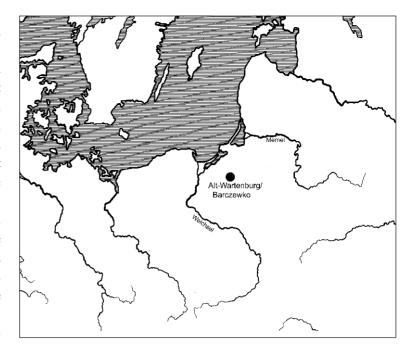
the fortified towns, which also served as military bases in a region was not yet fully under control. Foundation of Prussian towns thus fits well with the topic of the present conference volume, i. e. "Preparing for war or keeping the peace". In this case, though, they are not alternatives, but rather two sides of the same coin. Thus the new towns, which were often established in combination with castles, were intended not only to develop the country economically and culturally, but also to serve as bases for territorial defence and offensive military campaigns.

Previous page:
Aerial photograph of
"Altstadt" showing
the 2014 excavations
(photograph:
J. Miałdun).

The establishment of such towns is well illustrated by our research on the remains of Alt-Wartenburg (Barczewko) near Olsztyn (Woiwodship Warmia and Masuria, northeast Poland) (Fig. 1). Alt-Wartenburg was founded in the 1320s by the Bishop of Ermland (Warmia), and destroyed by the Lithuanians in 1354. The town was subsequently rebuilt, but at another location 7 km to the southeast (the present town of Barczewo). The remains of the original town are therefore undisturbed by later building activity. Together with the abandoned 15th century town of Nieszawa Toruń,¹ Alt-Wartenburg provides outstanding possibilities to investigate medieval urban settlement in this part of East Central Europe. Our research at Alt-Wartenburg in 2013–2015² provided insights into the establishment, organisation and development of the town, its fortifications and buildings and its economic and military utilisation, as well as into the decline of an urban settlement on the periphery of Central Europe.

HISTORICAL BACKGROUND

The Ermland diocese, founded in 1243, stretched from the Vistula Lagoon in the northwest to Galindia in the southeast, a territory sparsely populated by Prussian tribes and part of the primeval forest contemporarily termed "Große Wildnis" (Great Wilderness).³ The systematic colonisation of this region by German settlers began after the suppression of the last Prussian uprisings. The earliest towns



were established at the coast around 1280, with settlement progressing towards the inland woods in the 14th century. During the course of this colonisation process the Bishop of Ermland founded the castle and town of Alt-Wartenburg (guard castle) in Northwest Galindia in the 1320s, probably with immigrants from Silesia. The purpose was colonisation and defence: The Teutonic knights were at war with the Principality of Lithuania at that time. On both sides, the warfare consisted primarily of looting and killing in enemy territory. In 1354, Alt-Wartenburg was drawn into the conflict.

According to the Teutonic Order chroniclers Peter of Dusburg and Nikolas of Jeroschin, Alt-Wartenburg castle (*castrum* and *bure*) was founded in 1325,⁶ and the town (*civitas*) of Alt-Wartenburg existed in 1337.⁷ If we accept the meaning of these terms, both a castle and

Fig. 1 Map showing the location of Barczewko/Alt-Wartenburg (map: F. Biermann).

¹ Andrzejewski and Wroniecki 2015.

² Polish-German research project "Alt-Wartenburg / Barczewko – das ermländische Pompeji", funded by the Bundesbeauftragte für Kultur und Medien (Bonn), supported by the Universities of Gdańsk, Göttingen and Gmina Barczewo. The project will be continued until 2019.

³ Szorc 1990; Herrmann 2015, 12, p. 20–21.

⁴ Röhrich 1914; Riemann 1965.

⁵ Boockmann 1981, p. 151–169; Herrmann 2015, p. 14–15.

⁶ SRP I, p. 192–193, 607–608.

⁷ CDW I, no. 282, 286.

Fig. 2 Aerial photograph of "Altstadt" with superimposed geomagnetic map (illustration: P. Wroniecki, M. Jaworski and S. Rzeźnik).



a town named Alt-Wartenburg existed in the Middle Ages, the former being slightly older than the latter. As there is no archaeological evidence for the castle at present, its type and exact location remain uncertain, although it was presumably located near the town.⁸ The Teutonic Order herald Wigand of Marburg wrote that the Lithuanian Grand Dukes Kestutis and Algirdas captured the town in 1354 and killed all inhabitants.⁹ Just a few years later in 1356, the town is referred to as "antiquam Civitatem", i. e. ancient city. The founding of a new, relocated town is documented in 1364.¹⁰

ARCHAEOLOGICAL RECORD OF THE ABANDONED TOWN

The abandoned ("Stare town Miasto"/"Altstadt", Old Town) lies on a spur 350 m northeast of Lake Wadag. Its ramparts and ditches form an oval complex measuring around 220 × 160 m. Aerial photographs and geophysical findings indicate that parts of the surrounding area were enclosed by a ditch and were settled, although less intensively (Figs. 2-4). The investigations carried out in 2013-2015 confirmed that the location known as "Old Town" was in fact the original location of Alt-Wartenburg: They reveal an urban environment dated to the period in question on the basis of finds such as coins,

⁸ Klimek 2008, p. 216–217.

⁹ SRP II, 520; von Bönigk 1883; Szorc 1990, p. 166; Klimek 2008, p. 214–217.

¹⁰ CDW II, no. 235, 368; Herrmann 2015, p. 231.



Fig. 3 Aerial
photograph of
"Altstadt" showing
the 2014 excavations
(photograph:
J. Miałdun).

Fig. 4 Relief map showing 2014/15 excavations and the most important features (map: J. Miałdun, A. Koperkiewicz and F. Biermann).

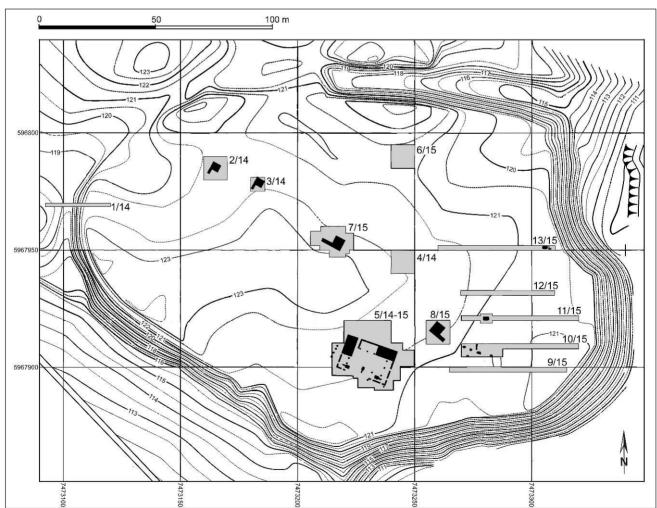




Fig. 5 V-shaped ditch forming part of the town fortification (photograph: F. Biermann).

pottery and jewellery and dendrochronological data from around 60 pieces of charred timber. Although the timber samples did not provide any exact data, the earliest "after" dates point to the 12th century and there was a clear preponderance in the first third of the 14th century. That youngest dates were "around or after" data for 1336/37, which fits well the town's purported destruction and abandonment in the 1350s.¹¹

The town seems to have been founded at a previously virtually uninhabited site in a rather thinly populated Prussian settlement territory,12 only a few older pottery shards having been found during the excavations. The oval shape of the town was determined by the natural fortification conditions. Inside, though, the structures were strictly regular: In the eastern part of the town centre there was a 40 × 60 m rectangular marketplace lined on three sides by house cellars and on the fourth (southern) side by a large building complex - the market hall. To the west, two parallel rows of cellars oriented northwest-southeast delineated two parallel streets. The northern row ends at the town gate, which is still recognisable as a depression in the rampart.

Approximately 25 cellar pits were detected within the town area by the geophysical survey. The buildings were erected facing streets or squares, and the parcels were delineated by shallow ditches. The presence in the courtyards of ovens, kilns and outhouses indicates commercial and production activities. Northeast of the marketplace there was a church, as evidenced by the discovery of several burials. The findings indicate that the town was professionally planned from the outset, and that construction continued during the town's 30-year lifetime. As evidenced by the incomplete cellar rows, not all the parcels were occupied when the town was destroyed. That urban development progressed slowly is not surprising, though, given the paucity of colonists in this remote place. On the whole, Alt-Wartenburg fits well with the characteristic pattern of late medieval urban development within the territories of the Teutonic Order,13 albeit that the town was rather small. The castle of Alt-Wartenburg mentioned in the written sources does not seem to have been located adjoining the town, in contrast to the situation at most other urban settlements in the Warmian bishopric.14

Investigation of the strongest part of the semi-circular fortification in the west (Fig. 5) revealed that it consisted of an earthen rampart about 1.1 m high and 8 m wide and a V-shaped ditch about 2.8 m deep and 9 m wide. The rampart must have been topped with a plank fence or a palisade, but no traces of any wooden structure were found.

Four of the approximately 25 cellars at Alt-Wartenburg were excavated. They had been built entirely of wood or wattle and daub. Although brick buildings were common elsewhere in Prussia at that time, ¹⁵ they

¹¹ Dr. K.-U. Heußner, German Archaeological Institute Berlin/Dr. T. Ważny, University of Toruń.

¹² Klimek 2008.

¹³ Wysocki 1998; Czaja 2015, p. 247, 252.

¹⁴ Herrmann 2007, p. 255-258.

¹⁵ Herrmann 2007, p. 107-113.

played no role in the backwoods of Galindia. The cellar pits were rectangular with a length and breadth of 4–6 m and a depth of up to 1.50 m: Access was via stairs or ramps in the corners (Figs. 6–8). This is characteristic for medieval urban construction in many pioneer towns established south of the Baltic during the 12th–14th centuries. The cellars served as storerooms.

Excavation of the back yards along the eastern side of the marketplace revealed remnants of ovens for household and production use, as well as an outhouse measuring about 4 × 3 m with a depth of 0.5 m. The outhouse contained a large non-ferrous metal kettle, several fallen pottery vessels, an iron skewer and a pitchfork (Fig. 9), and was probably a brewery or kitchen associated with the main building. Parallels for such outhouses are known from medieval villages and towns of Central Europe.¹⁷

The remains of the market hall in the southern part of the marketplace are particularly interesting. This rectangular, three-winged building complex, which measured approximately 17-24 m in length and breadth, contains rows of small wattle and daub-walled cellar pits and an 8 × 4 m surface building bordering a rectangular courtyard (Fig. 10). The numerous finds such as pottery, coins, iron tools, riding spurs, clothing clasps, fragments of metalworking crucibles, etc. indicate that the cellar pits were used as storage rooms for small workshops and shops. The presence of three large clay ovens suggests that some type or types of production took place. Alt-Wartenburg is the first economic-administrative building complex of this kind in Warmia to be clearly documented. In newly-founded urban complexes the main purpose of the market hall was economic rather than prestigious.

Fig. 6 Cellar 1 with fire debris, viewed from the north (photograph: F. Biermann).



Fig. 7 Cellar 2, viewed from the south (photograph: F. Biermann).



Fig. 8 Cellar 4, viewed from the north (photograph: F. Biermann).

¹⁶ Cf. e. g. Gläser 2001.

¹⁷ Villages: Biermann 2010, p. 299, 392; towns: Chorowska 1994, p. 13.



Fig. 9 Non-ferrous metal kettle, pottery vessels and a pitchfork in the fire debris of one of the outhouses (photograph: F. Biermann).

Only later in town development did the market hall become the representative heart of a town.¹⁸

Excavations in the northeastern part of the marketplace revealed part of a graveyard containing four inhumation burials – those of an adult female with a newborn child in a double burial and three small children. As

the burial with the female contained an iron knife, a grave gift known from contemporary Prussian but not German burials, ¹⁹ the woman may have been Prussian and the burial may document contact between immigrants and the indigenous population. A wooden church must certainly have been located in the vicinity.

The excavations also provide an insight into the 1354 catastrophe that abruptly destroyed the town, the cellar pits presenting a Pompeil-like situation. Thus pots were still in the same places they had been on the morning of that fateful day, as was the metal kettle, and the inhabitants' axes, scythes, picks and a plough were still leaning against the walls where they had been placed. The fire storm had distributed large amounts of grain throughout the interiors. Several of the cellars contained concentrations of coins that had presumably been hidden there during the conflict. Many pottery vessels had been melted and deformed by the catastrophic fire (Fig. 11).



Fig. 10 Remains of the market hall, viewed from the west (photograph: A. Koperkiewicz).

¹⁸ On market halls in Prussia, cf. Herrmann 2007, p. 283–286.

¹⁹ Cf. Biermann 2010, p. 198; Koperkiewicz 2013, p. 139-150.

The insight into this dramatic event at Alt-Wartenburg provided by the finds also indicates that the brutal details described in the Teutonic Order's chronicles were far from pure exaggeration intended to slander the opponent: This is evidenced not only by the fact that the whole town burnt down completely, with resultant abrupt cessation of everyday life, but also by discovery of numerous crossbow bolts and arrow heads (Fig. 12) and the bones of an infant buried by fire debris in one of the cellars.

THE FINDINGS AND THEIR EVIDENCE FOR ECONOMY, MILITARY AND CULTURAL CONDITIONS

The numerous finds provide an insight into everyday life in the town, into the living conditions of the inhabitants, and into their economic and social relations. These include weapons and horse riding equipment, clothing clasps, jewellery, buckles, belt fittings, iron keys, tools, spindle whorls, whetstones, pottery and 87 silver coins from The State of the Teutonic Order and the Diocese of Ermland. The oldest coins were minted in 1287-97 and the youngest in 1353-60, with most being minted between 1307-17 and 1347-48. The bulk of the pottery corresponds to the Late-Gothic flatbottomed vessels and jugs (Fig. 13) that were common in the region in the 14th century, influenced by the pottery from the colonists' homeland in the southwest. The finds also include a small amount of Prussian pottery that derived from contact with the indigenous population.

The economic basis of the settlement was agricultural, as indicated by the presence of farming implements such as a plough and colter, axes, sickles and picks (one with a charred handle) and remnants of grain in the cellars (mainly rye, barley and wheat). The concomitant presence of various types



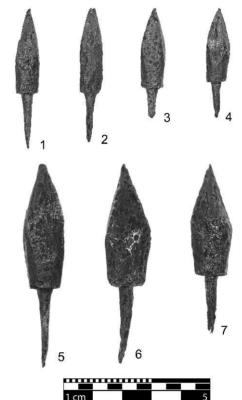


Fig. 11 Deformed and broken pottery vessel in the fire debris of one of the cellars (photograph: F. Biermann).

Fig. 12 Crosshow bolts excavated at Alt-Wartenburg (photograph: M. Pacholec).

of oven, crucible fragments and iron tools indicates that various types of production took place as well, especially metalworking. The coins underline the role of trade. The inhabitants also had contact with other towns, as evidenced by the presence of many pieces of fashionable clothing fasteners, jewellery, glazed imported pottery, etc. These finds indicate that the inhabitants were prosperous, that they had contact to the regional urban network, and that they attempted to import the homeland civilisation to the "Great Wilderness". They also provide



Fig. 13 Three restored jugs from Alt-Wartenburg (photograph: M. Pacholec).

archaeological evidence that the inhabitants performed military service, and demonstrate the economic function of Alt-Wartenburg as a market town and provincial centre in a rural region. Agricultural produce (mainly grain) was collected here for transport to the coast, from where it was fed into the Teutonic Order's Hanseatic trade.

CONCLUSION

The archaeological investigations at Alt-Wartenburg not only provide a useful insight into a late medieval town in Warmia, but also into the urbanisation of East Central Europe. The foundation of Alt-Wartenburg was clearly preplanned, the intention being to establish a town of the Central European type irrespective of existing settlement patterns in the region. This large-scale project also bears witness to a huge logistic achievement. Extensive preplanning and organisation were central elements in the restructuring of East Central Europe in the High and Late Middle Ages, which often involved colonisation by German immigrants.²⁰

The investigations also provide interesting insights into economic and living conditions during the foundation of a small, latemedieval town on the periphery of the Central European cultural domain. On the one hand the buildings were relatively modest wattle and daub structures with the market hall more resembling a farmyard than an urban representational building. On the other hand, everything characteristic of an established Central European town was present, i. e. market hall, church, marketplace, workshops, shops, two main streets, town fortifications and, according to written sources, a mill. Moreover, the nature of the finds indicates that the inhabitants are likely to have been immigrants from Silesia who successfully transferred an urban culture and lifestyle from their homeland to a foreign country, literally building it up from scratch. They seem to have had at least some contact with the indigenous population.²¹

Another important outcome of our research is archaeological confirmation of historical records pertaining to the rise and fall of Alt-Wartenburg. Because the general credibility of the Teutonic Order chronicles has repeatedly been questioned, our finding is of broader interest. This applies for example to the archaeological evidence of brutal violence such as described in the chronicles. Our research shows that the town was not just a civil economic centre, but also – like a castle – a base for the defence, government and protection of the region, i. e. a military facility in a territory that was in a permanent state of war. The inhabitants had no choice but to play a military role when faced with a deadly attack that they do not seem to have provoked personally. Research on this important urban site will be continued.²²

²⁰ Cf. Biermann 2010, p. 348-356.

²¹ See for the relations between Prussians and colonists Boockmann 1981, p. 134–135; Vercamer 2009.

²² Initial proofreading: Dr. M. Wittwar.

BIBLIOGRAPHY

Sources

- CDW I, II: Codex Diplomaticus Warmiensis oder Regesten und Urkunden zur Geschichte Ermlands, 1 (1231–1340), 2 (1341–75). Mainz 1860, 1864.
- SRP I, II: Scriptores rerum Prussicarum. Die Geschichtsquellen der preußischen Vorzeit bis zum Untergange der Ordensherrschaft 1, 2, T. Hirsch, M. Töppen and E. Strehlke (eds.), Leipzig 1861, 1863.

Literature

- Andrzejewski, A. and Wroniecki, P. 2015: W Poszukiwaniu zaginionego miasta: 15 lat badań średniowiecznej lokalizacji Nieszawy, Łódż.
- Biermann, F. 2010: Archäologische Studien zum Dorf der Ostsiedlungszeit. Wünsdorf.
- Von Bönigk, G. 1883: Die Stätte der alten Stadt Wartenburg und die Wallberge der Umgebung. *Altpreußische Monatsschrift*, NF 20, 152–160.
- Boockmann, H. 1981: Der deutsche Orden. Zwölf Kapitel aus seiner Geschichte, München.
- Chorowska, M. 1994: Średniowieczna kamienica mieszczańska, Wrocław.
- Czaja, R. 2015: Polish town plans as expressions of political and economic power. In: *Lords and towns in Medieval Europe. The European historic towns atlas project*, A. Simms and H. B. Clarke (eds.), Farnham, 235–254.
- Gläser, M. ed. 2001: Lübecker Kolloquium zur Stadtarchäologie im Hanseraum III. Der Hausbau, Lübeck.
- Herrmann, Ch. 2007: Mittelalterliche Architektur im Preußenland. Untersuchungen zur Frage der Kunstlandschaft und -geographie, Petersberg.
- Herrmann, Ch. 2015: Burgen im Ordensland Preußen. Handbuch zu den Deutschordens- und Bischofsburgen in Ost- und Westpreußen, Petersberg.
- Klimek, R. 2008: Terra Gunelauke, przewodnik archeologiczny, Barczewo/Gady.
- Koperkiewicz, A. 2013: Cmentarzysko w Bezlawkach (stanowisko XV), Badania w latach 2010–2011. In: *Bezlawki. Ocalić od zniszczenia*, eadem (ed.), Gdańsk, 137–159.
- Riemann, E. 1965: Wortgeographie und Besiedlungsgeschichte Altpreußens. *Jahrbuch des Vereins für niederdeutsche Sprachforschung* 88, 72–106.
- Röhrich, V. 1914: Die Kolonisation des Ermlands. Zeitschrift für die Geschichte und Altertumskunde des Ermlands 19, 173–306.
- Szorc, A. 1990: Dominium warmiński 1243-1772, Olsztyn.
- Vercamer, G. 2009: Der Übergang der prußischen Stammeseliten in die Schicht der "Freien" unter der Herrschaft des Deutschen Ordens und der Kulturtransfer von der "deutschen" auf die prußische Kultur. In: *Mittelalterliche Eliten und Kulturtransfer östlich der Elbe*, A. Klammt and S. Rossignol (eds.), Göttingen, 169–192.
- Wysocki, J. 1998: Wyniki dotychczasowych badań archeologicznych terenów starych miast województwa Olsztyńskiego i ich wykorzystanie w procesach rewaloryzacji. In: *Badania Archeologiczne Starych Miast Warmii i Mazur a problemy ich rewaloryzacji*, Nidzica, 41–52.

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