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**On the origins and chronology of the Wolin emporium**

*Abstract.* The paper concerns the problem of the origin of Wolin as an emporium in the early Middle Ages. The excavations conducted in the 1960s and 1970s in the Old Town of Wolin recorded extremely rich cultural deposits of considerable thickness, in some cases exceeding eight meters. Results of recent studies on the finds and on the archival documentation from these excavations indicate that it can be dated to the period between circa 800–1400. During this time four main stages of land-use in the place are clearly visible. The second of them, dated since circa 850 up to circa 1100, involved a large settlement of the area of a few hectares with a tightly packed, regularly laid-out wooden buildings and wood-paved communication roads leading to the port. The size of the settlement, its regular layout and a building style are alien to the Baltic Slavic region of that period. Considering also remains of intense craft production recorded on the site, it may be concluded that in that period there was a craft and trade settlement with all the features of a Baltic emporium. This was established in the place of an older, small, seasonal settlement. The transformation and the growth of the settlement must have been related to the development of the so-called Baltic economic zone of the Viking period and can be also attributed to a change in communication routes in the mouth of the Oder and the collapse of the craft and trade settlement in Menzlin on the Peene.

*Keywords:* early Middle Ages, Viking Age, emporia, Wolin, early towns, Pomerania.

Beginning in the second half of the 8<sup>th</sup> century, some settlements began to emerge as places of trade and craft production on the southern coast of the Baltic Sea, as they also did in Scandinavia. Such centres are variously defined in the literature. For example, let us quote a few names taken from English, German and Polish publications: emporium, ports-of-trade, trading place, nodal point, *Seehandelsplatz*, *Frühstadt*, *Handel und Handwerk spezialisierte Küstensiedlung*, *osiedle rzemieślniczo-handlowe*, *wczesne miasto*, and others (Bogucki 2010, p. 151; Kleingärtner 2014, pp. 60–73). Regardless of the differences in nomenclature

emphasising their particular features, from the 8<sup>th</sup> to 11<sup>th</sup> century they were usually addressed together because of their functional similarities. They are also widely regarded as the initial stage of early medieval urbanisation. Meanwhile, it was convincingly shown years ago that settlements of this category on the Slavic coast of the Baltic Sea differed from one other in some respects, and two different models of their origins can be distinguished. The main difference between the two consisted in their completely different patterns of spatial organisation and in the different places they occupied in the pre-state socio-political structures of the Baltic Slavs (Łosiński 1994, p. 102 *ff.*). The first group, of which the strongholds in Szczecin and Kołobrzeg are representative examples, includes native settlements created within traditional settlement structures and not differing in size (about 1 ha) or spatial organisation from other Slavic fortified sites of that period (Leciejewicz 1962; Łosiński 1994, pp. 107–108; see recently Messal 2017, pp. 111–112). The second group, meanwhile, is of spatially much larger settlements with a fairly regular layout and a building style alien to the Baltic Slavic region. Settled exclusively by craftsmen and merchants, they were built on the model of similar settlements in Scandinavia and in the Baltic zone of Scandinavian influence. It has recently been proposed that they be referred to as colonies. Classic examples of such settlements include Menzlin, Rostock-Dierkow, Ralswiek and Groß Strömkendorf (Łosiński 1994, pp. 103, 115–117; see also Messal 2017, pp. 112).

Even as the scheme presented above was still being formulated, Wolin raised fundamental doubts as to its proper classification into either group. Needless to say, the problem concerned a centre quite widely regarded to be among the most important early-urban settlements on the Baltic coast at that time, one readily described as an emporium and about which a great deal of literature has been written<sup>1</sup>. Władysław Łosiński was quite cautious in suggesting that Wolin may have been begun as a settlement laid out according to patterns that were foreign and that subsequently transformed significantly throughout its existence (Łosiński 1994, footnote 10). Sebastian Messal followed in this direction, adapting the theory to create a third model for Wolin, in which an original Slavic settlement of uncertain character was transformed into a colony under the influence of foreigners (Messal 2017, p. 112). It can be assumed that the difficulties in including Wolin in one of the two basic models, and thus with answering the question about the genesis of the emporium there, stemmed from two factors. The first was the enormous size of the entire settlement complex, which stretched for several kilometres along the left bank of the Dziwna Straits (Fig. 1), while the second was the almost complete lack of source publications presenting successive stages in the layout and

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<sup>1</sup> It need not be recalled in its entirety here. Most of the works are compiled in the bibliographies of collective volumes published in recent years (*Wczesnośredniowieczny Wolin 1* 2013; *Wczesnośredniowieczny Wolin 2* 2014; *Wolin – the Old Town 1* 2019a; *Wolin – the Old Town 2* 2019b).

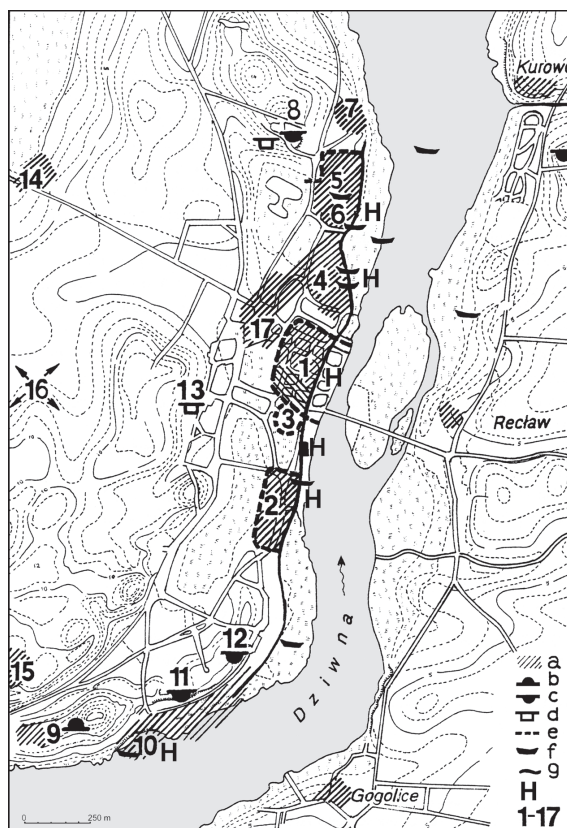


Fig. 1. Location of early medieval archaeological sites in Wolin (1–17). Old Town site marked as number 1; a – extent of sites, b – barrow cemetery, c – flat cremation cemetery, d – flat inhumation cemetery, e – supposed extent of rampart, f – boat wreck finds, g – supposed shoreline, H – port (after W. Filipowiak)

development of what can be assumed to be its main constituent parts, i.e. the settlements in the Old Town (Stare Miasto) – site 1 and on the Silver Hill (Srebrne Wzgórze) – sites 5 and 6. With regard to the first factor, the situation changed recently as a result of a full study of the sources and the archival documentation from two excavations (numbers 6 and 8) in the Old Town that were investigated several decades ago (*Wolin – the Old Town* 2019a; 2019b)<sup>2</sup>. This, and the fact that the settlement in the Old Town is commonly regarded as the oldest part of the entire settlement complex, allowed the issue of the origins and chronology of the Wolin emporium to be raised anew.

<sup>2</sup> The work was prepared under the grant 0212/NPRH2/H11/81/2013, entitled ‘Ujście Odry we wczesnym średniowieczu. Wolin i Lubin – edycja źródeł archeologicznych’ (‘The mouth of the Oder in the early Middle Ages. Wolin and Lubin – an edition of the archaeological sources’).

*Natural conditions*

The archaeological site in the Old Town occupies a small, elongated moraine elevation currently of 7–9 m a.s.l. on the left bank of the Dziwna Straits; the elevation is in the Dziwna's peaty valley, where the area lies only slightly above the water level in the strait (Figs. 1, 2). To the west and north, this islet is surrounded by a depression that was formerly swampland periodically flooded with the waters of the Szczecin Lagoon (Malinowski 1973, pp. 14–15; Borówka *et al.* 2014, p. 28). The area has long attracted the interest of archaeologists. This resulted much of the Wolin market square being excavated by German researchers from 1934 to the first years of World War II (Kunkel, Wilde 1941, p. 25 *ff.*, Abb. 1d, 2) and eight other excavations of various sizes that were explored under the direction of Władysław Filipowiak in the second half of the last century (Fig. 3) (Stanisławski 2013a, pp. 14–30). These contained extremely rich cultural deposits of considerable thickness, in some cases exceeding eight metres.

A reconstruction of the original topography and water relations is essential to understanding the origins of early medieval settlement in this particular place. However, such a reconstruction is extremely difficult, both in the face of successive land transformations and changes in water level in the past for very diverse reasons (Rotnicki 2009, pp. 62–64 for representative views; Harff *et al.* 2017). The multiplicity of causative factors makes it very much more difficult to obtain potentially accurate estimates of changes in the level of the Baltic Sea in the Middle Ages. The general trend observed for the entire Holocene indicates a progressive regression on the Scandinavian coast of the Baltic Sea, with a simultaneous rise relative to the southern coast (Harff *et al.* 2017, Fig. 2.3). According to estimates made for Pomerania, the sea level rose over a period of several hundred years beginning in around 850 (e.g. Latałowa 1999, pp. 226–227; Rotnicki 2009, pp. 66–68). In Wolin itself, environmental analyses of areas adjacent to the Old Town to the north and south suggest a rise of about 50 cm in the water level during the 10<sup>th</sup> century, which transformed coastal areas into flooded swamp areas and shifted the shoreline inland (Latałowa *et al.* 1995; Latałowa 1999, p. 226 *ff.*; Borówka *et al.* 2014, pp. 29–31, 47; see also Indruszewski 2000, pp. 178–182, Fig. 6.6). According to other assessments based on archaeological observations, the water level in the Dziwna around 900 AD may have been about 1.6 m lower than the present level (Filipowiak 1993, p. 269). Even if this value is overestimated, it should be borne in mind that the difference in water level may have fluctuated by around one metre between then and now. Similar assessments, ranging from 0.5 to even 1.5 m, have been made for the Hedeby area in the 9<sup>th</sup> to 11<sup>th</sup> centuries (Hoffmann 1998, pp. 114–115; Kalmring 2010, p. 289 *ff.*; Rösch 2018, p. 31).



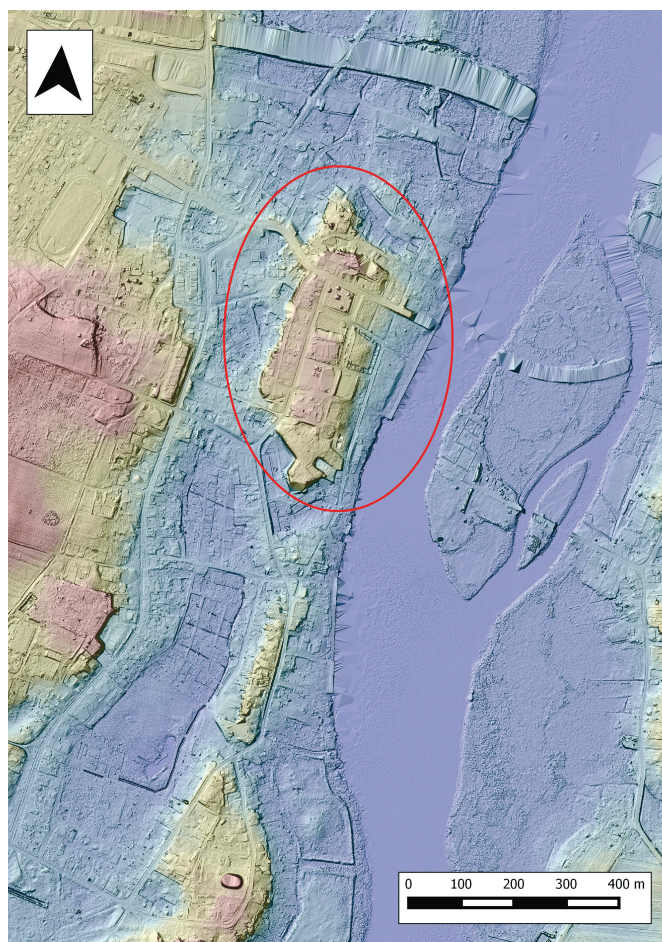


Fig. 2. Wolin. Visualisation of laser scanning results. Old Town marked with red ellipse (after G. Kiarszys)

Taking into account the above data, we must assume that the width of the moraine islet of the Old Town in the 9<sup>th</sup> century was between about 175 m and 200 m, which with a length of approximately 400 m means that it covered from 7 to 8 ha. To the east it was bordered by the channel of the strait, and on the other three sides by periodically flooded land depressions occupied by peat and swamps. Taking into account the thickness of the cultural sediment that has accumulated since then and the probable water level in the Dziwna at that time, it can be assumed that the highest parts of the islet reached only 4–5 above the water level in the strait, while its borders were within just one metre. This also means that periodic fluctuations in the water level, for example in the form of inundations from the Dziwna Straits may have significantly impeded the area's exploitation for settlement purposes.

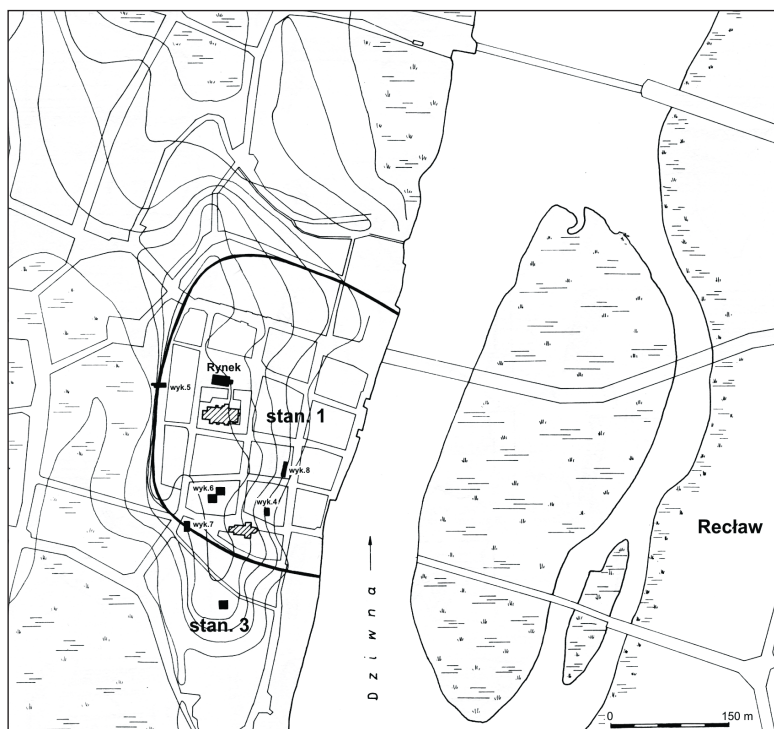


Fig. 3. Wolin. Plan of archaeological excavations explored within site 1 (Old Town). Black line marks course of city walls in late Middle Ages (after A. Janowski)

### *The chronology of initial settlement*

The oldest Early medieval layers were discovered within excavation 6, which means that it is at the summit of the moraine islet that the initial record of Wolin should be sought to be established. Analysis of only a certain part of the pottery collection once dated the oldest layers to the latter 8<sup>th</sup> century (Cnotliwy *et al.* 1986, p. 73). This evaluation has sometimes been questioned due to discrepancies between it and the oldest radiocarbon dates obtained from the excavation (Awskiuk *et al.* 1986, whose results were calibrated a few years later in Pazdur *et al.* 1994, p. 148 *ff.*; Michczyński, Pazdur 2003; Michczyński 2011, pp. 84–108). They became the basis for debate among archaeologists and a source of some controversy (the debate is discussed by Dulnicz 2001, p. 41 *ff.*; 250; Wehner 2007, pp. 27–29; Łosiński 2008, pp. 33–34, 38). On the basis of radiocarbon dates, it was suggested that settlements

had existed here during the Migration Period, and the beginnings of early medieval settlement were placed in various time intervals from the 7<sup>th</sup> century to the early 9<sup>th</sup> (Filipowiak, Gundlach 1992, pp. 35–36; Filipowiak 1994, pp. 119; 1995, pp. 94–96; 1997, pp. 255–256; 2002, p. 201; 2004, pp. 48–49; Dulinicz 2001, p. 251; Filipowiak, Stanisławski 2014, pp. 387–388). The oldest stratigraphical units recorded in this place were thus considered to be pits dug in the ground.

To verify the chronology of the layers, the stratigraphy was analysed recently again and several new radiocarbon dates were taken for bones and samples gathered during the research that have been stored till today. The above resulted in, among other things, the stratigraphic position of some of the pits being corrected and the mixed nature of their infills being proven (Polak, Rębkowski 2019a). The chronological model of the stratigraphic units recorded in the excavation that was created based on statistical analysis indicates that the oldest layers and pits can be quite confidently dated to the latter 8<sup>th</sup> century (Michczyński, Rębkowski 2019, Fig. 96). This result corresponds quite closely to estimates based on new analysis of pottery collections. Those from the oldest layers of excavation 6 were dominated by Slavic Feldberg pottery, which accounted for almost 70% to over 80% of the total collected, with no participation of another group of early Slavic ware, namely Sukow pottery. Similar compositions of pottery groups at other archaeological sites in Pomerania have been dated to the end of the 8<sup>th</sup> century and possibly the first half of the 9<sup>th</sup> (Dworaczyk 2019, pp. 33–34).

### *Settlement phases in the early and high Middle Ages*

By far the largest part of the thick cultural sediment preserved in the Old Town was formed in the Middle Ages, between around 800 and around 1400. In many respects, however, it was not a homogeneous period. Even the observations made during the German research indicated the existence of several settlement phases (Kunkel, Wilde 1941, Abb. 3; Wilde 1953, pp. 11–24). In the light of the data recorded during the post-war excavations, four main stages of land use are clearly visible. They are distinguished by completely different spatial organisation, as well as differences in techniques used to erect and lay out buildings. At this point we will exclude the youngest of these, which is associated with the chartering of the town under German law in the latter 13<sup>th</sup> century, when buildings were based on timber-frame houses, and soon thereafter also on masonry-wall structures (on the chartering of Wolin; Bollnow 1964, p. 40 *ff.*; Lucht 1965, pp. 61–62). Let us briefly present the three oldest phases, which date back to the early and high Middle Ages.

The first stage sees a relatively small settlement with an irregular layout (Polak, Rębkowski 2019b, pp. 123–124; Rębkowski 2019, pp. 136–137). Its characteristic

remains were pits dug into the ground, most likely of diverse function, and destroyed stone hearths, which were identified only in excavation 6. No similar settlement phase has been recorded in any other excavation investigated in the Old Town. Therefore, also taking into account the natural conditions reconstructed for this period, we can assume that the first settlement occupied a relatively small area in the southern part of the summit of the moraine elevation that stretches along the left bank of the Dziwna Straits. The settlement was established no earlier than the latter 8<sup>th</sup> century, and possibly not until around 800. We place the end of its existence with quite some certainty in the first half of the 9<sup>th</sup> century – most likely not long before 850. However, we cannot be certain that it functioned uninterrupted all this time.

The second settlement phase involved a settlement with a tightly packed, regularly laid-out wooden buildings built using several different construction techniques (Polak, Rębkowski 2019b, pp. 124–129; Rębkowski 2019, pp. 137–145). Its layout was marked by wood-paved roads running perpendicular to the bank of the Dziwna Straits and its port (Fig. 4). They were lined on either side by rows of tightly-packed houses. The uniform orientation of all the discovered structures was therefore very characteristic. The settlement's operation should be dated at between around 850 and the end of the 11<sup>th</sup> century. Such dating requires not only a statistical model of the site's chronology based on radiocarbon and dendrochronological dates, but also a chronological evaluation of the pottery collections and two cross denarii from the latter 11<sup>th</sup> century found in the youngest settlement level associated with this settlement phase. Numerous traces of charcoal layers and corrections to the course of the existing buildings allow at least a few basic stages for this phase of settlement to be distinguished.

One of the great peculiarities of the settlement that existed at that time was the wide variety of techniques used in erecting buildings. Initially, they were palisade structures and most likely robust timber-filled post frame huts, but from some point structures known in Polish as *konstrukcja międzysłupowa* (post-clasped structures)<sup>3</sup>. At least a certain portion of the latter were not remnants of residential buildings, but constituted earth-filled platform structures upon which houses were then erected. There was change in the first half of the 10<sup>th</sup> century, with post-clasped structures spreading while pre-existing steady rules on settlement layout remained in place (Polak, Rębkowski 2019b, pp. 117, 125–126). It is thus very possible that this change should be associated with the rising water level in the Baltic Sea and the Dziwna Strait.

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<sup>3</sup> This term was introduced into the literature by Eugeniusz Cnotliwy to describe one of the basic techniques of erecting wooden structures recorded for a certain period of Wolin's existence (Cnotliwy 1962, pp. 50–53). The name refers to structures the walls of which form horizontally lying timbers, stacked on one another. These were stabilized by being clasped between posts driven into the ground on both sides.

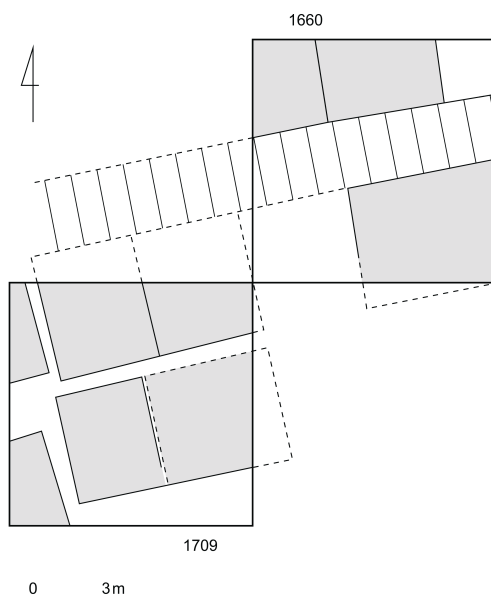


Fig. 4. Wolin. Scheme of buildings dated to latter 9<sup>th</sup> century and discovered in two ares of excavation 6. Shaded rectangles represent relics of buildings (drawn by K. Ignaczewska)

The extent of the settlement of this phase, and changes therein, can be reconstructed only approximately. It can be assumed that it initially occupied part of the moraine islet that was highest above the water level in the Dziwna at that time. The results of old excavations in the market square show that, as at the site of excavation 6, the settlement spread to this part of the island as early as the 9<sup>th</sup> century<sup>4</sup>. To the west it was delimited by a topographical depression, on the border of which a low rampart reinforced with a palisade was very soon erected (perhaps in the latter 9<sup>th</sup> century or around 900) demarcating the settlement's reach (Cnotliwy 2014, pp. 200–201). On the strait side, building structures initially did not exceed more-or-less the modern-day 5-m contour line. The existence of residential buildings at this elevation in the 9<sup>th</sup> century can be excluded based on the results obtained in excavation 8. It was, at that time, a coastal area that was at least periodically flooded and on which a port wharf was built only in the years 890–900 (Filipowiak 1993, pp. 263–264; Filipowiak, Konopka 2008, Fig. 7; Filipowiak, Filipowiak 2014, p. 373, Fig. 231). Only some time later (probably before the mid-10<sup>th</sup> century)

<sup>4</sup> Although the authors of pre-war studies dated the beginnings of settlement somewhat later, the need to shift this chronology to the ninth century, or even to the middle of that century was mentioned many times (Wilde 1953, pp. 84–85; see also, e.g. Leciejewicz 1962, p. 58; Cnotliwy *et al.* 1986, pp. 65–66).



was the area covered with post-clasped structures analogous to those recorded in excavation 6, which indicates that the wharf had also moved. The 10<sup>th</sup> century is also the period to which the oldest building structures discovered in excavation 4 should be dated; they are located only a few tens of metres south of excavation 8, at the same height relative to the shoreline (Fig. 3). Though initially dated to the 9<sup>th</sup> century (Cnotliwy 1962, p. 44; Cnotliwy *et al.* 1986, p. 64 *ff.*), a recently acquired series of radiocarbon dates requires that the chronology be corrected<sup>5</sup>. It was pointed out long ago that the oldest cultural layers recorded in this excavation may have been fertilised, and that they were created as a result of the infilling of the Dziwna valley, which increased the area available to be built on (Cnotliwy *et al.* 1986, p. 83).

The observations presented above indicate that in the latter 9<sup>th</sup> century the settlement stretched along the left bank of the Dziwna, stretching at least approximately 150–200 m (and probably more) and not more than 150 m wide. Bearing this in mind, and taking into account terrain conditions and reconstructed water relations, its area can be estimated at between approx. 2 and to approximately 6 ha. Unfortunately, we are not able to indicate the exact course of the coastline at the time, nor the location of the wharf that already existed and that should be assumed to have lain west of the present-day 5-m contour. It was only in the last decade of the 9<sup>th</sup> century or around 900 that the wharf was moved to this line, though this was not caused by a drop in the water level. At probably the same time there was another construction investment – the erection of the earth rampart with palisade, which was rebuilt several times over the following centuries (Cnotliwy 2014). It can be judged to have been semicircular, and to have surrounded the settlement on three sides. Even before the middle of the 10<sup>th</sup> century, once the wharf had already been destroyed (its relics were discovered in excavation 8), there was another stage of expanding the building area towards the Dziwna, and thus the occupation of the wetlands. This must indicate that the wharf had once again moved eastwards. It is hard to consider anything other than that these changes were a consequence of increasing demand for building space, especially in view of the observations that indicate a possible rise in the water level during this period. The area of the settlement in the 10<sup>th</sup> century may thus have been as much as 5–9 ha (Fig. 5).

The last phase of the area's settlement in the high Middle Ages, which dates from the late 11<sup>th</sup> century to the third quarter of the 13<sup>th</sup>, is characterised by a completely different spatial organisation. In broad terms, it was characterised by a significant thinning of building density, as reflected in the existence of large unbuilt areas (Polak, Rębkowski 2019b, pp. 129–130; Rębkowski 2019, pp. 146–149). This was accompanied by a marked change in the construction techniques. At that time, post-clasped structures disappeared, and the dominant form of houses were the log huts apart from which occasional wattle structures appeared.

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<sup>5</sup> An article by Doctor Wojciech Filipowiak on this topic is in preparation.

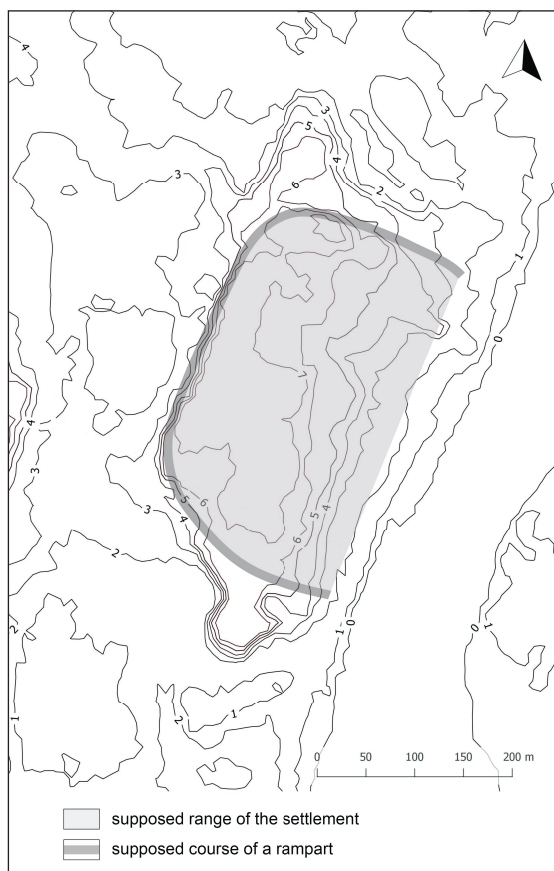


Fig. 5. Wolin. Reconstructed extent of settlement in Old Town in the period of peak spatial development at the turn of the 11<sup>th</sup> century (drawn by K. Ignaczewska)

### *The emporium period*

The successive stages of settlement of the Old Town islet in the early and high Middle Ages that we have synthesised above correspond to three consecutive settlements of different character. Each had its own peculiarities and must have been related to a specific socio-political and economic reality. In addressing the titular issue of this paper, particular attention must be paid to the densely built-up settlement dating from the mid-9<sup>th</sup> century to the end of the 11<sup>th</sup>. This is because this timeframe covers most recorded finds evidencing handicraft production and trade. Without elaborating on this issue, let us simply recall that the oldest traces of intensive craft production were identified in the layers formed shortly after



the regular, densely-packed buildings came into being, and are dated to the latter half of the 9<sup>th</sup> century. From then until at least the mid-11<sup>th</sup> century, several crafts were practised on a large scale in the Old Town. The most important of them, as confirmed by traces of mass production, were: horn-working (Cnotliwy, Słowiński 2016; Wywrot-Wyszkowska 2019), amber-working (Wojtasik 1991; 2013; Ciombor, Romanowicz 2019) as well as glass-working and the production of glass beads (Olczak, Jasiewiczowa 1963; Kokora 2019). There were also workshops that processed non-ferrous metals and iron (Janowski 2019; Stachowiak 2019). On the other hand, layers dated to the 10<sup>th</sup> and 11<sup>th</sup> centuries contain concentrations of objects of foreign origin and those related to trade. Among them, products – and especially ornaments – of Scandinavian provenance are of particular interest. Up to twenty such finds were obtained in total in excavations 6 and 8<sup>6</sup>. Taking into account the above data and comparing what we know of the Old Town settlement from the excavations against the settlement context in the mouth of the Oder River and other Baltic lands in this period, let us try to establish the settlement's character and proper historical meaning.

Besides the location itself, very particular features of the Old Town settlement were its size and spatial organisation. At peak size, after the development zone had expanded towards the Dziwna, the settlement covered at least 5–6 ha, and was most probably even slightly larger. In all examined excavations in the various parts of the Old Town, the layout and character of the buildings dating from this period are notable for their uniformity. Therefore, there is no reason to presume that the space was divided into separate areas. We must therefore assume that at the time it was a settlement of many hectares, with a homogeneous internal spatial organisation and tightly-packed, regular buildings surrounded on three sides by a rampart. We should also immediately note that it does not resemble other Slavic strongholds of this period, most of which are several times smaller and have a different character of internal buildings (e.g. Łosiński 1982, p. 99 *ff.*). Even the largest of them, the so-called Feldberg-type fortified settlements, do not bear up to comparison. They differ in usually being located on plateaus, in size, in buildings oriented in rows along ramparts, and in construction methods of houses, but also in chronology, which end within the 8<sup>th</sup> and 9<sup>th</sup> centuries (e.g. Łosiński 2001; Biermann 2011; Kieseler 2019). Instead, there is a clear structural similarity between the Wolin settlement and emporia such as, for example, Ribe, Birka or Hedeby (e.g. Jankuhn 1986; Jenssen 1991; Ambrosiani, Clarke 1998; Maixner 2010).

This assertion is confirmed by yet another observation. Very characteristic of such emporia was their use of several cemeteries nearby, where the dead were

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<sup>6</sup> We do not discuss here the extent to which these finds can be considered as an indicator of the ethnicity of some of the settlement's inhabitants (see recently, especially Duczko 2000; 2013; Morawiec 2009; Stanisławski 2013b; 2013c; otherwise, e.g. Leciejewicz 1993; Gardela 2015; Sikora 2019).

buried according to very varied funeral rites. This was due to the multi-ethnicity of their inhabitants and visiting traders. This is best illustrated in the necropolises in Birka and Hedeby (e.g. Gräslund 1980; Arents, Eisenschmidt 2010). Over the course of the 10<sup>th</sup> century, this phenomenon also appeared in Wolin. South of the Old Town morainic island, from the 9<sup>th</sup> century onwards, there was the barrow cemetery on the so-called Hangmen's Hill (Wzgórze Wisielców) (Zoll-Adamikowa 1975, p. 259–269). In the latter 10<sup>th</sup> century (though an earlier date cannot be excluded), to the north of the Old Town, a vast flat cemetery was established, known in the literature as Millhill (Młynówka), where both cremation and inhumation graves were discovered. The necropolis had been used throughout the 11<sup>th</sup> century (Wojtasik 1968; Zoll-Adamikowa 1975, pp. 252–259). Finally, a cemetery with characteristic Slavic, Alt Käbelich-type graves has recently been identified a few hundred metres west of the Old Town<sup>7</sup>. The diversity of funeral rites on the cemeteries, and the finds of foreign origins discovered within the settlement, lead us necessarily to assume that, apart from the Slavs, Wolin was also inhabited by groups of ethnically and culturally foreign people – probably traders and craftsmen (Filipowiak, Konopka 2008, pp. 268–271). This observation accords well with the widely-known and frequently commented-on record of Adam of Bremen in the second half of the 11<sup>th</sup> century, indicating the presence of peoples from other parts of Europe in Slavic Jumne, which must be recognised as Wolin (*Adam of Bremen* 1917, II, 22; see also Kiersnowski 1950, p. 36 ff.; Bollnow 1964, pp. 9–16).

Beginning in the 10<sup>th</sup> century at the latest, and possibly at the end of the previous century, to the north and south of the settlement in the Old Town, two settlements, known as Gardens (Ogrody) and Southern Suburb (Przedmieście Południowe), were established in the partially flooded area, which should be considered further evidence of economic prosperity at the mouth of the Oder River at that time (Filipowiak 2004; Filipowiak, Konopka 2008; Filipowiak *et al.* 2013). A port wharf must have been in operation at each of them. The total length of the wharves in the latter 10<sup>th</sup> century may be estimated at several hundred metres, up to even 1 km (Janowski 2013, p. 56). A separate place in this settlement was occupied by the settlement on the Silver Hill (Srebrne Wzgórze) that lies several hundred metres north of the Old Town and is at least partially skirted by a rampart. It was probably established in the 10<sup>th</sup> century (Cnotliwy *et al.* 1986, pp. 80–83; Łosiński 2008, pp. 33–34). The lack of publications from the excavations conducted there (only Wojtasik 1999) makes it impossible to assess its character, but attention must be paid to the high number of hoards of silver and artefacts attesting to craft production in that area (Bogucki 2013, pp. 345–347).

It is also noteworthy that in the immediate vicinity of the emporium that existed on the Old Town morainic island, no stronghold has yet been identified.

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<sup>7</sup> Unpublished research by Doctor Wojciech Filipowiak.

This problem touches on the key issue for understanding the basics of how the Wolin settlement functioned in this period. As we know, Viking-age craft and trade settlements in Scandinavia and throughout the Baltic region (as well as towns in other historical contexts) developed usually under the initiative and protection of a central power. In Slavic Pomerania the political control of early-urban settlements in this period is attributed to tribal elites (Bogucki 2010, pp. 160–161), although this is not the only possibility that we can consider. This raises the question of the nature and location of the political centre controlling the Wolin emporium in the 9<sup>th</sup> to 11<sup>th</sup> centuries. It seems very unlikely that any one of the Wolin settlements would have played such a role. Such a function was certainly not performed by the fortified settlement in nearby Lubin at the Świna Straits, which was built later (*Lubin. Early medieval stronghold* 2018). The current candidates are limited to the stronghold of Kamień on the opposite bank of the Dziwna Straits, a little over 10 km from Wolin, though little is still known about it for certain (Łosiński 2008, pp. 37–38), or a completely unidentified settlement complex that is likely to have existed at a similar distance to the north of today's town of Wolin. This problem can only be solved if excavations are undertaken at both sites.

### *Conclusions*

Summarising the above data, we conclude that between about the mid-9<sup>th</sup> century and the end of the 11<sup>th</sup> there was a craft and trade settlement in the Old Town of Wolin with all the features of a Baltic emporium. It belongs to the second, 'foreign' or 'colonial' trend in the beginnings of urbanisation on the Slavic Baltic coast in the early Middle Ages. The settlement was established on the site of an older, small, seasonal settlement that may have acted as an export point for local raw materials. Its character is indicated by some of the finds recorded within it. Moreover, the same has been concluded regarding the oldest traces of settlement preceding the creation of craft and trade settlements in Rostock-Dierkow and Groß Strömkendorf (e.g. Kleingärtner 2013, p. 101; Tummscheit 2011, p. 144 *ff.*). The choice of the site for the both consecutive Wolin settlements – the morainic island that was only slightly above the water level in the Dziwna Strait, and the bog/flood areas surrounding it on the other sides – is significant. The disadvantages of this location for permanent settlement of the area were compensated by the site's transport benefits, including direct access to the shoreline. One of the consequences of that choice and the changes in the water level over time was the need to build special earth-covered platforms using post-clasped construction technique in order, only then, to be able to build houses.

The Wolin emporium was established in the mid-9<sup>th</sup> century, shortly after the fall of analogous settlements in the western Slavic Baltic coast that had been

founded in the first phase of Baltic urbanisation, namely Groß Strömkendorf (Reric) and Rostock-Dierkow (Kleingärtner 2014, pp. 82–85). Like the others, the Wolin settlement must have developed in connection with the development of the so-called Baltic economic zone of the Viking period. On the other hand, there was a clear leap in the economic development of Wolin (which we see in, for example, the intensification of craft production, especially glass-making, amber- and horn-working, and the influx of large amounts of silver) around the middle of the 10<sup>th</sup> century, and it lasted for some part of the next century (on the influx of silver to Wolin; Bogucki 2013, p. 345 *ff.*; Horoszko 2014, p. 290; Bogucki *et al.* 2016, pp. 577–601). This growth can be attributed to a change in communication routes in the mouth of the Oder and the collapse of the craft and trade settlement in nearby Menzlin on the Peene (Schoknecht 1977, pp. 112–113; Kleingärtner 2014, p. 85). For at least the next several decades, until around the mid-11<sup>th</sup> century, Wolin was the main centre of craft production and trade at the mouth of the great navigation route that was the Oder River. We can assume that it was from here that mainly craft products were distributed inland, while forest products (leather, fur, wax), grain, salt produced on the Slavic Baltic coast, and most likely slaves were transported to the Baltic Sea.

Contrary to some opinions, the Wolin emporium did not collapse before the middle of the 11<sup>th</sup> century as a result of the invasion of Magnus the Good, ruler of Norway and Denmark, in 1043 (on this invasion see, e.g. Kiersnowski 1950, p. 40; Morawiec 2009, pp. 349–390). The settlement in the Old Town functioned unchanged in the latter 11<sup>th</sup> century, perhaps even until the end of the century. Its collapse thus coincides with the time of abandonment of Hedeby and the establishment of a new economic centre of a new type in nearby Schleswig (recently, see Müller 2016). In the case of Wolin, this phenomenon can be associated with the final collapse of the so-called Baltic economic zone on the one hand (see, e.g. Callmer 1994, pp. 76–80; Łosiński 2008, p. 144 *ff.*) and, on the other, with the period of settlement changes on the Szczecin Lagoon and in the Lower Oder valley that were caused by the strengthening power of dukes of Pomerania in this region (Rebkowski 2020, pp. 100–102). These changes, with their economic and political dimension, ultimately resulted in the new shape of the settlement that arose in place of the collapsed craft and trade settlement. It is also only then that the stronghold was built here. Its existence was confirmed by historical records in the 12<sup>th</sup> century (*Ebo* 1969, II, 7; *PUB* 1970, I, 111).

Finally, it is worth paying attention to the very characteristic pattern of settlement changes in the Old Town that took place over several hundred years in the Middle Ages – of which the emporium was just one part. The succession of settlements in the one place is as follows: small, open settlement – craft and trade settlement – stronghold with adjacent open settlement – chartered town. This is no one-off: an analogous pattern of settlement transformations is known

for other places on the Slavic Baltic Sea coast with particular communication advantages. Rostock situated at the mouth of the Warnow river is a good example. The first settlement there was established as early as the 8<sup>th</sup> century and soon after developed into an emporium (Kleingärtner 2013, Abb. 2). After its collapse, a new political and economic centre of the region, with the stronghold named Petribleiche, was established about a kilometre south of the old craft and trade settlement. In turn, the town located under German law in around 1200 was founded several hundred metres away from the former one, on the other (left) bank of the Warnow River, occupying only part of one of the older settlements adjacent to the stronghold (Mulsow 1993, pp. 51–52; 2016, Abb. 1). What is exceptional about Wolin is that in successive stages of its development, the settlement centre was always located – and, notably, still is – in the same place. This has resulted in the Old Town having diverse cultural deposits of considerable thickness, and in the structures related to the functioning of the emporium having been obliterated by successive transformations.

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