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The Benedictine monks and the formation of the monastic aspect of Poland under the Piast dynasty to the mid-12th c. The state and needs of inquiry and some remarks on persistently unrecognised problems Summary

From the moment of their emergence monasteries were a religious phenomenon that developed in an organised way based on tradition and over the centuries subject to various evolutions and transformation. They were closely connected with the structures and life of the Church and the society within which they functioned. To a large extent they reflected the religious life of a particular period.

The article presents a synthetic recapitulation of the results of the inquiry into the beginnings of the Benedictine order in Polish lands from ca mid-10th to ca mid-12th c. and discusses the "initial" period, ie the time of the monks' arrival together with the baptism of Poland under Mieszko I in 966 and the related forms of organisation and location of the first seats (cell) of the order together with the unresolved disputes about this issue, and next the second stage – the main period of the development of the monastery network in the sense of coenobis, or foundation and functioning of the monasteries from the mid-11th till the end of the 12th c. The author has tried to briefly opine on the hypotheses that have been appearing in the historiography in the context of the most questionable problems related to the issue (the state of research is presented in footnotes and bibliography). The work ought to be seen as an introduction to further studies into the still unresolved and disputed topics of the formation, dissemination, significance and role of the Benedictines and the monks' everyday life in the first centuries of Poland's existence as a state. Since many of the issues discussed deserve separate monographs, the author tries to indicate the direction of future research, postulating the use of a comprehensive interdisciplinary range of methods that will allow to broaden the former picture, such as detailed studies in history, history of art, archaeology, the sciences and assisting physico-chemical analyses, so as to either consolidate or verify the views prevalent in historiography.

The beginnings of Tyniec Summary

The paper focuses on the beginnings of the Tyniec Abbey – the first Benedictine settlement during the "second" stage of monasticism in Polish territories. It discusses the problems of the foundation of the monastery, its endowments and the question of the construction of the monastery's church, all controversial issues in historiography. It contains four sections. The first part concentrates on the role of the Benedictine monks during the early stages of the Christianisation of the Piast state following their arrival in the entourage of the first missionaries. The author emphasises that our first bishops: Jordan – probably formerly a monk from the Aventine abbey, Unger – the former bishop of the Memleben abbey, and the bishop of Prague St Wojciech (St Adalbert) - later the patron saint of Poland, were all Benedictine monks. The second part discusses the problem of the "second" stage of monasticism in Polish lands after the crisis of the first Piast monarchy and the restoration of the state under Kazimierz Odnowiciel, with a brief description of the king's foundation policy which involved the foundation of the Tyniec abbey. In the third part, drawing on written sources and lengthy research, the author tries to answer the question of who and when founded the abbey in Tyniec and considers the problems of the original endowments and enlargement of the monastery's property. The chapter also includes a presentation of the results of architectonic and archaeological discoveries of the church and monastery buildings and the related results of research of the tombs of the first Tyniec abbots and the supposed burial of the Abbey's founder. The last, recapitulating section presents the role of Tyniec in the mediaeval history of Poland and the Polish Church. The author stresses the status of the Tyniec Abbey among all other Benedictine communities.

Political and broad cultural backdrop of the establishment of the Benedictine abbey in Lubiń

(streszczenie)

The Benedictine abbey in Lubiń in southern Wielkopolska has been the subject of a plethora of detailed publications containing information drawn from written sources as well as the remains of architecture discovered over years of excavations. The present article attempts to follow the determinants that accompanied the foundation of the abbey and the various tasks and functions performed by the monks.

The political context of the abbey's foundation was basically connected with the restoration of the Polish state and renewal of Christianisation following the 1034-1039 collapse. The foundations of Benedictine abbeys, saddled with the task of spreading Christianity and evangelization among the population of the country freshly united after the crisis, included the Nativity of the Holy Mary Abbey at Lubiń in southern Wielkopolska. The monks arrived at the close of the 11th c. (1065) from Leodium (today's Liège in Belgium). The Abbey's founder, king Bolesław Śmiały, granted a generous endowment. The location of the establishment had been carefully chosen to suit the needs of the Church as well as the state. Missionary work was undoubtedly the priority, yet an important duty of the Abbey was stabilising and encouraging human settlement and the economic development of the area. In view of the earlier destruction of many strongholds and oppida from the first Piast monarchy, its location close to the main trade routes made the monastery a major strategic post.

The establishment of the Abbey occurred in two stages, known as foundations I and II. The first, ambitious in scope, was never fully accomplished. The construction of a sizeable abbey church in the form of a three-nave basilica was only begun, with the foundations partially laid. Unhappily, the fall of the founder-king in 1079 made further work impossible. The monks were forced to leave Lubiń and returned only at the close of the 11th c.

Śmiały's work was taken up by Bolesław Krzywousty (1085-1138) in partnership with the leading Adwaniec family, who decided on a new foundation of the monastery in Lubiń (foundation II). Since the financial means the abbey got at that time were considerably reduced, the construction stretched long over the years. At that time Lubiń, already a settled Benedictine abbey, performed a number of roles. The first and foremost was Christianisation of the local population. This major task was accompanied by establishment of new churches and new parishes. At the same time, the Benedictine monks initiated economic development of the area. From the West they brought along new methods of cultivation, horticulture, fish farming in ponds and food processing. The new techniques, gradually adopted by the local people, resulted in an abrupt settlement increase in the abbey's vicinity. The village of Lubiń, which developed and grew around the abbey, achieved the status of a trade settlement. Radomicko and Starygród, owned by the Abbey, were settlements of the same type. New towns were also established under the municipal charter in the vicinity (eg Krzywinie, Święciechowo).

The Benedictines of Mogilno – their role and significance in the Wielkopolska– Kujawy borderland

Summary

The complicated history of the abbey at Mogilno has already been a subject of insightful studies since the second half of the 19th c. The 1913 discovery of a Romanesque crypt under the church's chancel initiated a discussion about the oldest Romanesque architecture. The turning point of studies of the object was the architectonic and archaeological work carried out by the Team for the Research of the post-Benedictine Object in Mogilno, headed by K. Żurowski and J. Chudziakowa. The Mogilno monastery was established in a peculiar moment of Polish history. Kazimierz Odnowiciel's mission, undertaken together with the monastic clergy from Cologne, originally concentrated on the restoration of defensive places in strategic locations of the country. In this context, alike to Tyniec, the construction of a new Benedictine monastery in Mogilno was an effective element of a long-term policy of reconstructing the Church and, basing on the indestructible fortified settlement, an attempt at a restitution of the state's defensive functions. The oldest Benedictine abbeys, following the expectations of their founders, performed a number of roles. In the Middle Ages the Mogilno Abbey was not just a piece of the ecclesiastical structure but also, or even mainly, a border outpost, a shelter and a fort supporting the neighbouring dioceses. This is manifest in the extraordinary location of the buildings within the old fortifications of the settlement. The architectonic scheme of the monastery's church with a massive tower further indicates the founder's intention, the tower representing the best possible models of churches with a defensive role to play. This particular function of the Abbey was maintained for many centuries. The Benedictines' impact on the growth of local human settlement cannot be overemphasised. It was due to them that the fortified settlement situated away from the main communication routes was able to develop into a proto-urban centre and then, at the close of the 14th c., into a town.

Architecture of Benedictine abbeys in the early mediaeval Poland Summary

Benedictine foundations in Poland began as early as the 10th c. and continued until the end of the 13th c. Reliable tradition shows that the first monastic communities functioned already under Bolesław Chrobry. Their seats reportedly included Poznań, the isolated monastery in Międzyrzecz, the Holy Mary Abbey in Łęczyca, St Martin's in Wrocław, and possibly the Wawel hill, prior to the transfer of the monastery to Tyniec. Only two are more substantially confirmed in the sources: Międzyrzecz which functioned in 1002-1003 and Kazimierz near Szamotuły. There were probably also two female communities (Kraków and Gniezno). The credit for the restoration of the diocesan organisation after the crisis of the 30s 11th cent. goes to Kazimierz Odnowiciel, and the work was continued with the foundations of abbeys by Bolesław the Brave and Bolesław the Wrymouth. The clergy was arriving mainly from the centres on the Rhine and the Meuse. Tyniec, Mogilno and probably Lubiń were established in the 11th c., to be followed by Święty Krzyż, Sieciechów and Płock in the mid-11th c. The abbey at Ołbiń in Wrocław was founded by Piotr Włostowic ca 1126. The list should include the mysterious abbey in Łęczyca, which existed before 1136.

Admittedly, despite attempts galore not one building dated to the times of the first monarchy can be unequivocally linked with the Benedictine eremites or cenobites in Poland under Bolesław the Great. On the other hand, a formal analysis of churches erected for the Benedictines brought along by Casimir the Restorer after 1039, as long as the formal features can be clearly linked to artistic centres, basically confirms the suggestions so far put forward by scholars, to wit, that the clergymen were mainly recruited from ecclesiastical centres on the Rhine and the Meuse and that they spread their home architecture in Poland. Together with the monks arrived the "Rhine pillar" with a half-column found in Tyniec, and the western tower with a crypt in Mogilno and Lubiń. The Lubiń monks most probably came from Leodium on the Meuse, those in Mogilno - from the Bavarian Niederaltaich on the Danube, and the Tyniec monks probably from one of the abbeys on the Rhine. The predominance of the group can be also noticed under the next rulers: Bolesław the Brave and Władysław Herman, and particularly under Bolesław the Wrymouth and prominent patron of art Aleksander of Malonne, bishop of Płock. The intermittent presence of motifs connected with other artistic milieus can be explained away by the characteristic Polish practice, already brought up by Zygmunt Świechowski, of recruiting travelling builders and sculptors into the construction teams each time the necessity arose. At that time was erected the three-nave church of canons regular in Czerwińsk, containing a pseudotransept stylistically related to the Meuse river artistic patterns, yet furnished with a Saxon double tower façade adorned with a north Italian portal.

Elements of Benedictine spirituality pertinent to the integration of mediaeval and modern Europe Summary

The paper presents some of the author's ideas about the role and significance of the Benedictines in shaping the spiritual side of the European civilization and the reception of the values they had spread by the contemporary world. It points to several important aspects of the Benedictine spirituality which contributed to the integration and development of our continent from the Middle Ages, when the communities of St Benedict's were particularly active in the formation of Christianity, until the present day, when following the spirit of the times they become more and more open to ecumenism and inter-religious dialogue.

The paper is divided into six parts which discuss the most relevant areas of Benedictine activities. The first, referring to the famous Benedictine motto "ora et labora", brings forward the role of St Benedict's disciples in the appreciation of work and the awareness that spiritual exaltation could be achieved in performing the most mundane chores of everyday life. The second part focuses on the Benedictines' role in the development of modern medicine and psychology, following their centuries' long experience in herbal medicine and meditation. In the third the author concentrates on the idea of "peace" advocated by the monks and shows that inner harmony ensuing from prayer and work influences the external peace in interpersonal relations. The fourth part refers to the immemorial question "to have or to be", the answer to which, in the author's opinion, should be sought in the contemplative and meditative traditions of the Benedictine communities. The last two chapters discuss the problems of dialogue and tolerance. It is emphasised that a proper spiritual stance presented by the Benedictines on this issue has a highly positive impact on ecumenical values and inter-religious dialogue. The author's reflections end up with a poem about "silence" which alludes to the tradition of mysticism which is very much alive in European monasticism.

A suggestion on the standardisation of the geomorphological description of archaeological sites Summary

The term "archaeogeomorphology" has been suggested to cover the geomorphological research that is a component of geoarchaeological conclusions. Above all, the aim of the research is a reconstruction of the landform and the surface geological structure as well as a reconstruction of the transformations of these elements of the geographical environment in relation to former settlement and economic processes. The research should result in conclusions concerning the geomorphological factors of settlement location, and a description of the stages in anthropogenic transformations of the morphology and surface structure of the area against the chronological stages of its development and adaptation. In order to standardise the research conclusions about the locations of objects, sites or complexes (clusters) of archaeological sites a definition of the percentage ratio of the selected morphological zones within the 0.5 and 1.0 km equidistants from the centres of the investigated settlement points is proposed.

Barrow burial rite of the Tumulus Culture in the territories of south-western Poland. Construction of the tumuli and their location in the landscape Summary

The paper discusses the dispersion in the landscape and the construction of the mounds of the Tumulus Culture in the Śląsk-Wielkopolska borderland during the Middle Bronze Age. The analysis of the tumulus burial grounds, first to be performed, revealed a deliberate choice of the landscape for setting up a necropolis. The analysis at a microregional scale shows that there had to exist specific hydrographic and altitudinal conditions which would permit the construction of tumuli. The next stage of research involved the analysis of the mounds' construction with all kinds of internal structures. The use of statistical methods allowed to define the most frequent tumulus construction types which are compositions of particular formal features. Synchronisation of chronology with diagnostic elements of grave inventories and the burial type (inhumation or cremation) allowed to date the internal structures within the framework of P. Reinecke's chronological scheme. The conclusions drawn from the analyses can be used for further research of the socio-cultural diversification within the Tumulus Culture phenomenon.

Stone shaft-hole axes of Corded Ware culture from the area between the Gwda and Łobżonka rivers. A note on the research into the reconnaissance of Corded Ware settlement in Pojezierze Krajeńskie Summary

The article discusses stone shaft-hole axes identified with the Corded Ware culture which with one exception come from the collections of the Regional Museum in Piła and the Muzeum Ziemi Złotowskiej in Złotowo. K. W. Struve's typological scheme (1955) was used to classify the axes. The artefacts, covering a fairly wide time span, are typical of KCSZ 2-4. Correlated with the Kujavian periodisation, their use is placed somewhere between the years 2850 - 2200 BC. Their precise localisation is in most cases unknown. Nevertheless, they yet again confirm that Pojezierze Krajeńskie was intensively infiltrated by Coded Ware groups and so encourage further search for the remains of the population which initiated the Kruszki group/stylistics.

Janusz Czebreszuk, Mateusz Jaeger, Łukasz Pospieszny, Mateusz Cwaliński, Jakub Niebieszczański, Mateusz Stróżyk

Exemplary non-invasive survey of forest areas - Krotoszyn Forest. Study of cultural landscape transformations in the prehistory of Wielkopolska (Great Poland)

Summary

Presented paper concerns the methodological issues related to the protection of the archaeological heritage in forested areas, using a set of modern non-invasive methods. These procedures are shown on the basis of the specific example, namely the forest area called Krotoszyn Forest, located in the southwestern Poland (district Krotoszyn, Great Polish voivodship), which in total covers an area of about 40 km².

Today forested areas, which survived radical landscape transformation of Central Europe during last centuries, are the only places where one has a chance to encounter prehistoric sites in their original form (mounds, megalithic tombs, fortifications, et al.). To such kind of regions Great Poland with its southern, wooded part indisputably belongs. Moreover, these natural conditions, most importantly dense afforestation, enabled preservation of larger structures made up by individual objects, thus allowing for research on the evolution of prehistoric cultural landscape.

Las Krotoszyn is in this respect a particular area. Due to the specific geological conditions it consists in a large part of oak trees, often more than 100 years old, which ensures that in the period of greatest anthropogenic pressure associated with introduction of intensive agriculture, there has been no destruction of relics of prehistoric settlement in aforementioned area.

The first stage of the survey was the query of archival data, followed shortly after by non-invasive, as well as, invasive archaeological examination of the most threatened by destruction barrow. Collected data, including several registered barrows, confirmed the unique value of Krotoszyn Forest, as a kind of natural reserve of prehistoric cultural landscape within the Great Poland province. This fact became an impulse to include Krotoszyn area in program of non-invasive spatial study (Light Detection and Ranging - LIDAR) of cultural heritage, funded by the National Heritage Board of Poland. The main step of this program was to cover the entire area of Krotoszyn Forest by airborne laser scanning (ALS), which resulted in a digital terrain model. Further procedure included the following lines of research:

- Identification of potential archaeological sites by LIDAR,
- Field verification of archaeological objects shown by LIDAR,
- Designing and managing digital documentation of archaeological objects
- Integration of digital data within a GIS database,
- Assessment of the state of preservation of archaeological objects and identification of potential threats,
- Carrying out a magnetometric prospection on previously selected archaeological objects.

As a result of the above outlined research 176 archaeological objects were registered, which later were subjected to a verification procedure. Finally, it was possible to separate 124 barrows and less numerous objects of a different kind (such as for example early medieval settlement). Each of the discovered sites had been cataloged basing on a unified procedure. Obtained data has a great potential for further research and forms an important source of information for heritage conservation in a regions characterized by unique cultural landscape such as Krotoszyn Forest.

Flint objects from the Lusatian culture stronghold in Mirakowo-Grodno (site 6), Toruń *powiat*Summary

Excavations conducted in 1997-2012 inside the remains of a Lusatian culture stronghold in Miraków-Grodno (site 6) near Chełmża revealed, beside wooden constructions dendrochronologically dated to 787-684 BC, sundry traces of everyday life of the inhabitants. Beside numerous fragments of pottery vessels and items made of bronze, antlers, bone and horn there were many stone and flint objects. In particular, the latter's presence within a metal-era settlement provokes a closer look at their possible relationship with the period in which the stronghold flourished. Although flints were found at many sites with traces of Lusatian culture settlements (strongholds included) and cemeteries, a more comprehensive validation of their connection with the times of metal has been addressed in Polish archaeological literature only since the 90s of the last century.

The series of flints comes from excavations carried out in the years 2000-2004 and covers 120 artefacts. Morphological analysis allowed to isolate several groups of products: cores and core forms, blades, flakes, chips and typological tools. The latter, importantly, include blade and flake end-scrapers, flake scrapers, retouched blades, retouched flakes, flake perforators and a trapezium. A noticeable majority of the flint artefacts were made of grey and grey-black Baltic erratic flint.

In terms of chronological and cultural attribution several stylistic groups can be identified. The first group includes specimens linked with the late Palaeolithic (a blade chipped off a double platform core, a Tarnovian end-scraper). The second (largest) contains probably Mesolithic objects (cores and microlithic blades, flake scrapers, retouched flakes, burins and a small blade end-scraper). It cannot be excluded, however, that some objects might be related with the Lusatian culture (two artefacts might be much degenerated Zele-type back knives). The next group covers Neolithic specimens. They are, among others, chocolate flint products (a trapezium, "raw" and retouched blades with parameters noted in the Montbani technique) and objects of Baltic flint (macroblades). The last group contains objects in splintered technique (splintered cores and scaled pieces). They can be linked with the flint production of the Lusatian culture population.

In view of the chronology and nature of the site and the absence of any traces of earlier settlement it seems that the inhabitants of the fortified settlement, along with the production of flint tools in splinter technique, were engaged in gathering flint objects found in the neighbouring deforested areas surrounding the place they occupied. This is the reason why the discovered assemblage contains objects typologically related to the Stone Age. Little is known of the use the flint tools were put to (both those that could have been produced at the site or those collected in the vicinity). Still, they must have been of some importance for the Lusatian culture people; similar objects (next to other items, for example metal ones) were quite frequently added to cinerary urns and some skeletal burials. The custom was noted in many Lusatian culture cemeteries, both in the younger Bronze Age periods and the early Iron Age.

The jewellery hoard from Podbiel, Otwock *powiat*Summary

In February 2009 in Podbiel (gmina Celestynów, powiat Otwock), in Mazowsze voyvodship, Mr. Mirosław Piętka from Skorupy, gmina Kołbiel, came across a hoard of jewellery. According to the finder, a small hollow 35 cm deep and about 40cm in diameter, lined with yellow sand, contained bronze bracelets, a torque, a decorated pin, a chain and numerous small chain links, bronze spiral beads threaded on an iron wire separated by glass beads and other bronze ornaments jumbled with glass beads and a large number of small shells. After sieving the hoard he handed it over to the Archaeological Museum in Poznań.

As the artefacts had been found in the Mazowsze voyvodship, the Director of the Poznań Archaeological Museum asked the Mazowsze Voyvodship Monuments Conservator for permission to take the hoard in deposit. In September 2009, in ruling no. 1059/2009 the Mazowsze Voyvodship Monuments Conservator handed over the hoard of the Lusatian Culture artefacts as a deposit to the Archaeological Museum in Poznań.

The bronze artefacts are represented by two types of multi-coil bracelets, an open spirally twisted torque with a hookshaped clasp, a multi-element pendant of chains and small pendants, a pair of pince-nez-shaped pendants, a pair of spiral pendants, six knobs/buttons - metal circular discs, a pin with 4 discs, a fragment of an ornament with a circular disc, a collar of glass beads decorated with a wavy line and undecorated, a fragment of a complex necklace made of tubes of spirally twisted tubes separated by single or double blue glass beads threaded on an iron wire, and a tubular bead. Spirally twisted torques with ends coiled into hook-shaped eyes are forms widely spread in Middle Europe. They are dated within a comprehensive timeframe from Bronze Age IV until Ha C. Multi-coil bracelets are present over a considerable chronological period and appear in assemblages dated to the end of the Bronze Age until the Hallstatt period. Knobbed discs appeared in Middle Europe already in the Bronze Age C period. It is assumed that larger discs were used to decorate horse harness, while the smaller ones were used to decorate leather head bands worn by women. Such ornaments had already appeared in Bronz Age V as imports from the Hungarian territories, then gained in popularity and were produced locally. They are found in assemblages dated as late as the end of HD period. The Podbiel hoard is remarkable for the presence of bronze artefacts thought to be a Kujavian production from the HD period related with the Stanomin centre. This is a pin with four disks and a bracelet with massive ends. Another ornament from the hoard that deserves mention is a multi-element pendant consisting of four small chains connected with small wire links. The most exceptional find in the hoard was the large number of well preserved beads made of different materials. The biggest number are beads made of blue glass. Some of them are decorated with yellow or white glass substance circularly embedded into the bead in a wavy or zigzag line. Some of them, smaller in diameter, remained undecorated. Another necklace element found in abundance are tubular spiral beads separated by single or paired glass beads ornamented with a wavy line. They originally made up the complex necklace. In terms of the material used an extraordinary discovery in the hoard were tiny flat beads. Petrographic and chemical analysis has shown them to be made of a conglomerate of finely crushed quartz sand. Various types of pendants make up a separate group of bronze artefacts. They include pince-nez pendants, two of which (a pair) were found in the Podbiel hoard. Such ornaments were common artefacts found in assemblages dated to the late Bronze Age and the early Iron Age. The hoard discussed contained two pieces of scrap bronze - a bracelet half-product in the form of a spiral disk with a broken tang and an ornament fragment in the form of a double-coil bronze tape.

Undoubtedly, an interesting part of the jewellery in the Podbiel hoard are numerous beads of cowrie shells. According to J. L. Łuka, Hallstatt-dated sites in the Polish territories yielded only 30 cowrie specimens. They were found in the Pomeranian culture cemeteries, hung as ornaments/earrings on cinerary urns and put directly into the urns together with bone remains. The cowrie shells found in Podbiel are evidence of far-reaching trade exchange along the Vistula river route during the Hallstatt period.

The ornaments in the hoard had been known and used for a long time. Some of them, such as the chains or spiral ornaments are fairly common and can be seen in assemblages dated to the Vth period of the Bronze Age. Most of the ornaments, however, including the glass beads, pins and Stanomin type bracelets suggest dating the whole hoard to Hallstatt C and D.

The valuable objects were hidden in the forest in the Vistula bayou, close to the right bank of the river. The hiding place was on the trade route that followed the course of the Vistula. The contents of the hoard confirm a cultural diversity. Pins and bracelets (greaves) come from Kujavian centres. Glass beads and cowrie shells must have come along the Vistula trade route from the faraway south.

The most probable hypothesis concerning the reasons for the deposition of the hoard seems to be the fear of robbery on the trade route, so the hidden treasure might have belonged to a merchant.

Cowrie shells in the jewellery hoard from Podbiel, Otwock *powiat*Summary

The paper discusses the collection of cowrie shells found among the artefacts in the Lusatian culture hoard from Podbiel, powiat Otwock. The hoard contains objects made of bronze, glass, amber and shells, and is dated to the Hallstatt period. The shell beads discovered in the hoard are a unique find as the largest collection of cowrie shells found so far in the Polish territories. The Podbiel cowrie shells are shell beads, with the dorsal side containing an opening made with a sharp tool and often abraded on a flat stone to smooth out the edges. All beads belong to one species *Erosaria annulus* (family Cypraeidae) which can be found throughout the Indo-Pacific. The small shells probably came to the Mediterranean region and Europe by way of the Near East (?). They were procured all along the coasts of the Indo-Pacific, probably mainly on the eastern coast of the Red Sea, the Gulf of Aden, the Persian Gulf, the coasts of East Africa and the western coasts of India. At the end of the Bronze Age and the beginning of the Iron Age *E. annulus* together with *E. moneta* were the most frequently occurring cowrie shells found at archaeological sites in Europe and the Near East, mostly used as material for the production of ornaments.

Cowrie shells finds in the Polish territories are rare and, similarly to the majority of finds in Europe, mainly come from cemeteries. The oldest ornaments of this type found so far were discovered at sites connected with the Pomeranian culture. As shown by their numbers, they were objects of great value – usually single specimens are found in graves. There also exist their imitations in clay. Furthermore, the shells are found in graves with relatively rich furnishings. It would seem that the cowrie shells probably reached Pomerania by way of the regions of southern Europe (Italy?) without the agency of the Lusatian culture, as the latter's sites show no evidence of cowrie shells.

The nearest analogy to cowrie shells found in the Podbiel hoard can be traced to the Carpathian Basin, where large amounts of *Erosaria annulus* beads were found in female graves from the early Iron Age (the 2nd half of the 6th c. BC to the 3rd/2nd c. BC). Their widespread distribution in the early Iron Age was probably caused by their use as jewellery in barter trade (similarly to amber). It seems probable that apart from their role as ornaments, cowrie shells also functioned as amulets/talismans guarding against evil spirits and disease.

Petrographic and chemical analysis of beads from Podbiel, Otwock *powiat* Summary

The beads are part of an inventory known as the "Podbiel hoard". SEM EDS petrographic and chemical analyses refuted the previous descriptions of the material, defined as shells. They have shown the beads to be made of a conglomerate of finely crushed quartz sand bound with silica. Natural stone material has also been excluded.

"I myself was inside there, and saw all." Obłaczkowo – from Neolithic settlers to a medieaval village Summary

The 2006-2009 excavations in Obłaczkowo, prompted by construction works in the area, were carried out by the Poznań-based Archaeological Conservation Workshop under Henryk Klunder. In total, an area of 463 ares was surveyed and 2546 archaeological registered (Fig. 1). 82 222 movable sources were obtained during the research, the largest collection being pottery (54 706 pieces and whole vessels) and animal bones (10 298 specimens). Both movable and immovable evidence was assigned to eight taxonomic units under, respectively, the Funnel Beaker Culture (58 objects), Corded Ware Culture (6), Lusatian and/or Pomeranian Culture (190), Przeworsk Culture (705), the Early Middle Ages phases D and E (108), the Late Middle Ages (159) and the Modern Age (6).

The objects were divided into several functional categories. The list includes: large on-ground objects, probably intended as human dwellings, homesteads, pithouses/houses, wells, ovens connected with particular dwellings, and objects whose precise purpose could not be determined; furthermore, there are hearths, tar pits, smokepits, cellar pits, lime kilns, a metallurgical oven, construction post pits, graves, a water tank (?), ditches, a mill and pits with indeterminate function. The discovery of two graves – one related to the Corded Ware population, the second – with the Przeworsk Culture people – is of exceptional significance (Table 1).

For the Funnel Beaker Culture, the discovered numerous objects and movable materials they contained provide a starting point for future research on construction forms, spatial planning of objects and techno-stylistic features of pottery. Any conclusions drawn from these sources may constitute a major piece in the reconstruction of Neolithic settlement in Wielkopolska lands.

In terms of chronology and funeral ritual, the discovery of a Corded Ware Culture grave (object E8) is of particular importance for the studies of the Neolithic. It was unearthed on the peak of a culmination in the north-western section of the archaeologically surveyed area (Figs 8; Photo 1). One common rectangular pit contained 3 burials – a child, a woman and a man.

A significant source base was obtained in the case of the Lusatian and /or Pomeranian Culture settlement. Numerous objects of diversified function and a considerable number of movable sources were discovered, which can assist dating and be used in comparative studies.

The Przeworsk Culture population settlement has produced plentiful evidence as well. The settlement has displayed a distinct spatial planning, involving the location of large hall-like buildings, pits embedded into the ground and accompanying infrastructure objects, such as wells or ovens. Altogether, the remains of about 10 hall-like buildings were discovered, all aligned in perceptible rows of posts found over a sizeable area of sector A, particularly in its central, southern and south-western parts (Fig. 4a). It might as well be emphasised that post pits made up as much as 47% of all objects registered at the site, with the decided majority relatable to the above-mentioned hall-like constructions. A find of exceptional source value for research on settlement in the late stages of the Przeworsk Culture was the discovery of 13 wells, most of which provided valuable material for dendrological studies - their results are contained within the 2nd half of the 4th c. This is of great importance for comparative studies, since such a sequence of objects of this type provides a basis for highly precise labelling of the final stage of the development of the Przeworsk population settlement at the close of the Roman Period and during the migrations of the peoples within the microregion as well as within a more extensive framework, covering at least Wielkopolska. This particular settlement is the third in Wielkopolska to display to such an extent the specific development containing arrangements of hall-like buildings that has been recently surveyed (following the settlements in Konarzewo, site 5 and Poznań-Nowe Miasto, site 46). The multi-burial grave (object J100) containing the much burnt bone remains of several individuals (Fig. 16) is connected with this stage of the Przeworsk Culture settlement. It was discovered on the peripheries of the area where the relics linked with this settlement phase occurred. The object is of immense importance for the exploration of funeral customs at the final phase of the Przeworsk Culture.

A large amount of movable objects was obtained for the early mediaeval settlement; dated to phases D and E, they provide a sound basis for analytical research. The discovery of numerous objects, dwellings included, allows to perform an in-depth description of the construction forms and the arrangements of objects within the topographic context.

The remains of a mediaeval village are a unique, not just by the yardstick of Wielkopolska, instance of the original spatial arrangement that may have been effected by the adoption of settlement law under the Magdeburg law. The village was situated along the road that connected Obłaczkowo with Białężyce. A quite unusual find was the unearthing of remains

apparently linked with the working of the mill. The results of dendrological analyses of wood obtained from the well are important for research on the chronology of mediaeval settlement. They are contained in the 1st half of the 14th c.

The excavation research and test excavations carried out in 2012 (Pawlak 2012) have yielded solid evidence that allowed to extend the area of the site (which largely overlaps with the area of the mediaeval village), its surface possibly covering 15-18 hectares. It stretches along the nonexistent road from Obłaczkowo to Białężyce, on a belt of land about 600 m long and about 350-370 m wide (Fig. 1)

Methodological aspects of soil profile transfer in the *Genius loci* reserve Summary

In June 2012 the Archaeological Museum in Poznań opened the Genius loci archaeological reserve. The new museum object is situated in Ostrów Tumski, at the site where very well preserved remains of early mediaeval city ramparts were discovered. It is the crowning achievement of a project whose aim was to combine the exposition of the original historical substance with a multimedia visualisation of the old structure in the space of a modern museum. The main element of the Genius Loci reserve was to be a huge excavation trench showing the preserved 10th c. rampart constructions in their original location: wooden boxes, fascines and a drawing of soil profiles presenting the burnt elements of wooden fortifications. Development regulations and safety issues prohibited leaving the trench inside the new museum building - it had to be reconstructed. The biggest problem facing the designers and the executive team was the reconstruction of the trench walls, or soil profiles. The methods of documentation and obtaining profiles employed so far were unable to meet the demands of the new exposition. Photographic, graphic or pictorial imitations do not allow a reconstruction of a space that would echo the reality of place, history and material, while the lakprofile reflect the trench walls in a mirror image. The situation forced the team to work out a new procedure inspired by methods used in monument conservation for transferring wall paintings. The paper presents the concept of the work, its premises and conservationist issues, a comparison of methods for obtaining soil profiles and mural transfer, and a description of the proposed methodology of transferring soil profiles. Particular procedures and the concomitant technical requirements are described. The conducted experiments produced very good results and were fully accepted by the employer, with the resultant implementation of the technique - tens of square metres of soil profiles were transferred from the archaeological trench to the Genius loci reserve building constructed at its site. This method of archaeological transfer employed has as yet no precedent in archaeological expositions in museums. Its distinctive feature is the possibility of exhibiting large, continual and structural diversified soil profiles in a positive image.

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