



ADAM MICKIEWICZ
UNIVERSITY
POZNAŃ



Treasures of Time

Research of the Faculty of Archaeology
of Adam Mickiewicz University in Poznań



Location of the main research areas.
Numbering, compare the table of Contents.



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Editor's Address

Faculty of Archaeology, Adam Mickiewicz University in Poznań,
Uniwersytetu Poznańskiego 7, 61-614 Poznań, Poland

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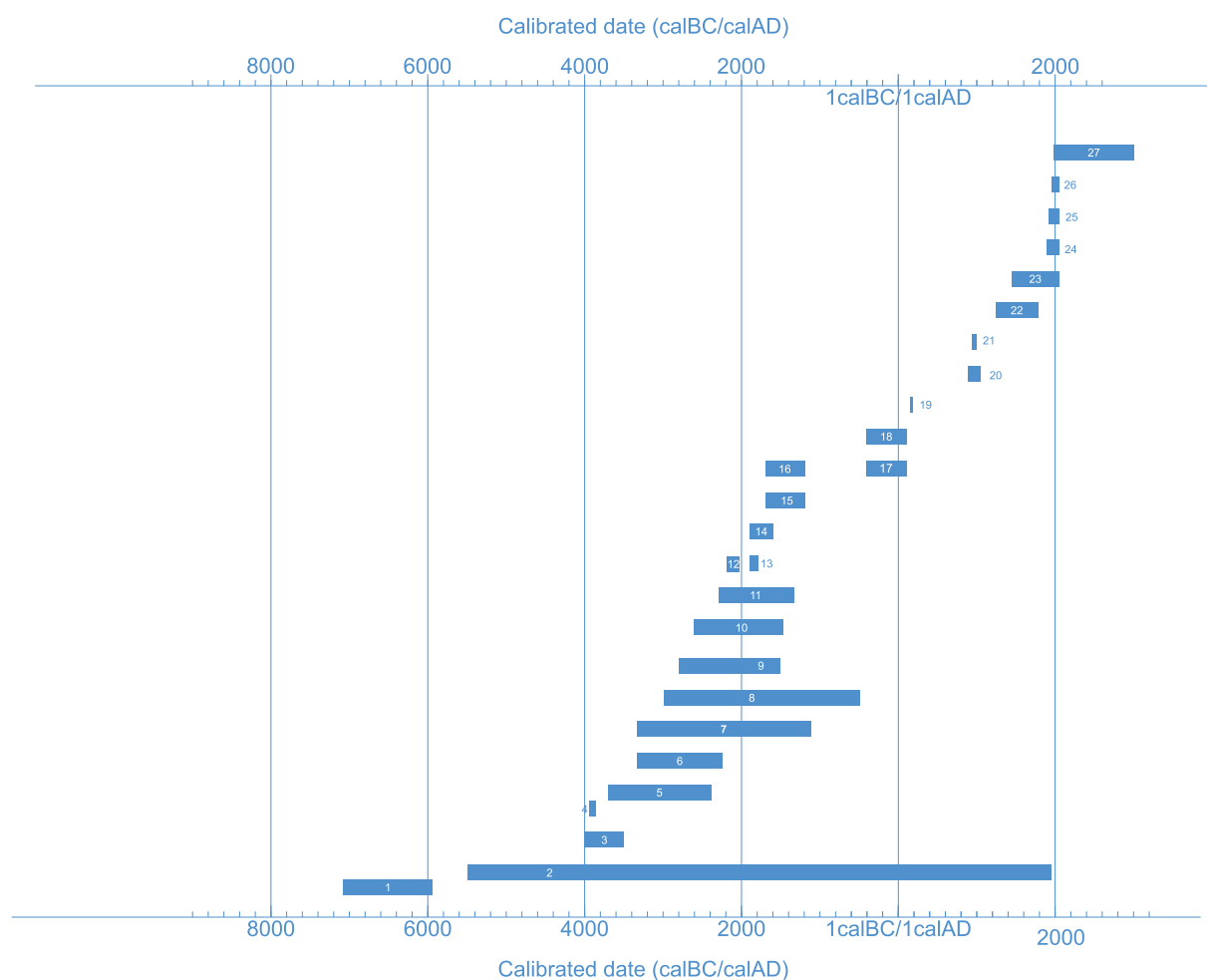
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Treasures of Time: Research of the Faculty of Archaeology of Adam Mickiewicz University in Poznań

Introduction

In 2019, archaeology at the Adam Mickiewicz University in Poznań celebrated its honourable 100th anniversary! The establishment of archaeology at this university was associated with the strong influence of the authority of Prof. Józef Kostrzewski and a succession of eminent scholars, many of whom we today call Masters.

The year 2019 was a real breakthrough. We started the second century of existence within the Alma Mater Posnaniensis with a new structural independence and quality that the academic archaeology of Poznań had not yet known for its one hundred years of existence. This change, the formation of the first Polish Faculty of Archaeology, has opened new chances and possibilities of which we are now taking advantage.



Calibrated date
(calBC/calAD)



Prof. Józef Kostrzewski
(1885-1969)

Currently, the Faculty of Archaeology of Adam Mickiewicz University is formed by a number of teams, each with their own leaders. In the majority of cases, these teams are united by interdisciplinarity, which integrates within selected projects the experience of many so-called 'auxiliary' sciences of archaeology. This trend is paralleled by the development of specialised laboratories armed with the latest equipment in the Faculty of Archaeology.

This publication presents the current scientific interests creatively developed by such teams at the Faculty of Archaeology of Adam Mickiewicz University. The research of these teams covers vast areas in time and space, summing up at least the last 9,000 years of prehistory. The following articles, arranged in chronological order, allow us to explore the prehistory of various areas.

The adventure begins around 7100 BC, in the Neolithic settlement of Çatalhöyük located in Turkey. Then, we move on to the loess uplands near Krakow, where the first farmers from the south of Europe had just arrived (5500 BC). A little later (4000-3500 BC), and a little farther north, in the area of Greater Poland, some of the first megalithic constructions in this part of the world were built. Around the same time, about 800 km to the southeast, a settlement

of the Trypillia culture remains in the phase of development (3950 BC). The end of the Stone Age in Poland was described in the history of Late Neolithic communities on a hill in the center of Kujawy region (3700-2400 BC). Farther east, in the forest-steppe area of Ukraine, significant cultural and social changes resulted in the formation of the Yamnaya culture (3350-2250 BC), beginning the Bronze Age.

Intense elements of this era can be traced in the area of southern Europe in the Greek Anthemous Valley (3350-1150 BC), in Attica (3000-500 BC) on the plains of the Hungarian Lowlands (2600-1450 BC) and to the Upper Dniester Valley, where numerous burial mounds were formed (2800-1500 BC). A similar chronological range is presented in the articles devoted to a unique site in Bruszczewo, Greater Poland (2300-1350 BC), which not only accumulates valuable metal artefacts, but is also the subject of interest of an interdisciplinary team focused on reconstructing its environmental context.

The next text take us far to the east, to the area of Iraqi Kurdistan, where we can appreciate the importance of Mesopotamian influences in shaping the picture of the Early Bronze Age (2200-2150 BC).

Subsequent texts describe the discoveries of Poznań scientists in Syria (1906-1787 BC) and in Greater Poland (1900-1600 BC). These two distant points describe various aspects of life in contemporary communities in the Middle and Early Bronze Age.

The characteristic archaeological materials of the later centuries of the Bronze Age (1800-1200 BC) reveal an intensification of military conflicts and migration processes (1700-1200 BC). The turn of the eras is illustrated in this volume by texts on the interpretation of representations on ancient Greek and Roman sculpture (400 BC-100 AD), as well as the cultural situation in the Polish lands (400 BC-100 AD).

We are introduced to the new era by an article on the funerary customs of communities from the Polish lowlands describing discoveries at the site of Mirosław (160-175 AD). Moments of the formation of elements of Polish statehood are referred to in texts describing towns at Grzybowo (919-1050 AD) and Poznań in the early Middle Ages (950-1000 AD).

Later parts of the Middle Ages are described by sacral monuments located also in the area of the contemporary city of Poznań: the Collegiate Church of St Mary Magdalene (1263-1802 AD) and the still extant Church of the Blessed Virgin Mary on Ostrów Tumski, founded around 1431 AD in the immediate vicinity of the previously described early medieval site of the 'origin' of the city of Poznań.

The final texts of the volume do not refer directly to a particular period of prehistory, but present the history of Polish archaeological research on the Iberian Peninsula, the contemporary perception of prehistoric art by the inhabitants of present-day Canada and Siberia, and the development of methodological thought among Poznań archaeologists.

The volume closes with a text describing one of the many perspectives currently faced by the staff of the Faculty of Archaeology of Adam Mickiewicz University in Poznań: the new ArchaeoMicroLab.

We look to the future with great hope that the Staff of the Faculty will provide ideas for many more volumes of Treasures of Time. We trust that this set of articles will present archaeology at the Adam Mickiewicz University in Poznań in its new structure as a Faculty and show its potential. We would thus like to encourage you to get acquainted with our Poznań perspective on archaeological studies, and to reflect on ways of exploring the past.

Andrzej Michałowski

Danuta Żurkiewicz



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Archaeological research of the Gothic Church of the Blessed Virgin Mary on the island of Ostrów Tumski, Poznań

Olga Antowska-Gorączniak

Abstract

Between 1999 and 2015 an archaeological research of the interior and the immediate vicinity of the Church of the Blessed Virgin Mary on the island of Ostrów Tumski in Poznań was conducted.

This hall church, whose consecration took place in 1448, is part of the architecture style connected with the workshops of Master Builder Hinrich Brunsberg. Interestingly, the traceries of the study church windows correspond to similar elements from the churches in Brandenburg and Chojna (Brunsberg's work). But the fragments of Gothic pinnacles from the gable (according to written sources) were probably built by Lorek from Kościan. Also, the tracery decoration at the western portal of the Poznań cathedral, which was discovered during the post-war renovation works, confirms the presence of a similar façade decoration of the Poznań cathedral to that in Brandenburg. What is more, a fleuron found in the church of the Church of the Blessed Virgin Mary on the island of Ostrów Tumski is analogous to the same decorative element of the town hall in Tangermünde. This suggests that the workshops associated with that master builder, most probably participated in the rebuilding of the Poznań cathedral at the turn of the century (XIV/XV) and in the designing of the St Mary's Church, which was completed after Brunsberg's death.

The archaeological research included the cemetery that was operational from the 2nd half of the 15th century to the end of the 18th century, during which time, the deceased were buried inside the church. It was also where remains of several brick tombs/crypts were discovered. The youngest burial is an ossuary found in the middle of the nave, which contains bones moved there from the cathedral in 1784-1785. The brick and stone wall enclosing the cemetery was built in 1465-1466. Originally, the church and the cemetery were situated on a small hill, the slopes of which were reinforced.

Keywords: Gothic architecture, Hinrich Brunsberg, traceries, Poznań Cathedral, churchyard cemetery

1426-2021 AD



Figure 1. Church of the Blessed Virgin Mary and Cathedral on the island of Ostrów Tumski, Poznań.

Introduction

This article is based on the results of archaeological research carried out by the staff and the students of the Faculty of Archaeology (formerly the Institute of Prehistory) of Adam Mickiewicz University in Poznań under the supervision of Professor Hanna Kóčka-Krenz in 1999-2015 in and around the Church of the Blessed Virgin Mary (NMP) as well as the data obtained from other places on the island of Ostrów Tumski. The archaeological sources presented here and the conclusions based on them are part of the doctoral dissertation written by the author of this text, whose title is 'Gothic architecture on the island of Ostrów Tumski in Poznań. An architectural and archaeological study' (Poznań 2019, unpublished). The research of the terrain around the Gothic church, whose main purpose was to identify the pre-Romanesque *palatium* from the times of the reign of Mieszko I and Princess Dobrava, provided an impulse for the study of the 15th century building workshops, the technique of erecting the Church of the Blessed Virgin Mary, and the identification of its surroundings.

The church

The Gothic church is located in the western part of the island of Ostrów Tumski (Figure 1) and was built on the site of the palatial chapel dating to the 2nd half of the 10th century bearing the same name as the island (Kóčka-Krenz, 2016). In the Middle Ages, this site was slightly elevated, as indicated in the written sources from the late 14th and 15th centuries, which referred to it as '*in Summo Posnaniensis*' or '*S. Mariae in Summo*' (Nowacki, 1951, pp. 318, 325). The archaeological investigations confirmed that on the south-western, southern and south-eastern sides of the Gothic church there was a gently sloping hill.

Records collected from the Acts of the Chapter and the Consistorial Acts by Fr. J. Nowacki (1951) suggest that the old princely chapel must have stood in its original place until the construction of the Gothic church began, as it was mentioned when describing the location of the cathedral school in 1405 and 1407. On the basis of the archaeological research it was confirmed that at the beginning of the 15th century, some construction works were conducted at that site, probably with the aim to extend the school or to reorganise the immediate vicinity of the pre-Romanesque chapel. This is indicated by remains of the foundations and the foundation pit of the unfinished building identified to the west of the gothic church and below its floor, along the southern nave.

The first ideas to build a church and perhaps also the beginning of construction works, in relation to the fundraising *pro fabrica ecclesiae*, can be traced back to 1426. This fact is also confirmed by numerous written records made before the middle of the 15th century, and information that the construction had probably commenced by 1431. However, some publications refer to 1433 or 1432 as the beginning of the construction of the Gothic church (i.a. Kohte, 1896, p. 32; Machowski & Włodarek, 1995, p. 189; Radacki, 2007/2008, p. 32). It must be acknowledged that this uncertainty in the date of the beginning of construction might affect attempts to establish the facts connected with the construction workshop. Unfortunately, as early as in January 1433, a shortage of funds for the completion of the church was reported. Consequently, the construction works were not resumed until 1444 – under the pontificate of Bishop Andrew of Bnin (1438-1479). Detailed records make it possible to trace the sequence of operations and some of the contractors are even mentioned by name. During 1444, the construction was supervised by *vicecustos* Michał Kuczkowski. In the summer of 1444, the perimeter walls were finished by Hanusz Prusz (a bricklayer/mason) and on August 12th, he returned the unused brick and a masonry tool known as a larry. Around the same time, at the general session on July 1st, 1444, the Cathedral Chapter decided that two peasants from the nearby bishop's and the chapter's estates should be sent to carry the timber for the Church of the Blessed Virgin Mary (Nowacki, 1951, pp. 326-327). That decision is confirmed by the tree-felling dates (1444-1445) for the still preserved medieval, timber roof truss of the church, obtained thanks to dendrochronology (Krapiec, 2013). Furthermore, according to written sources, roof trusses were installed and Lorek of Kościan built the gable and covered the roof with tiles in 1445. In the years 1447-1448, Niklos from Poznań and his son (of the same name) vaulted the interior. The church was consecrated in 1448.

Construction techniques and architectural technology

The foundations of the Gothic building reveal a secondary use of rubble obtained from the pre-Romanesque palatium, together with some remains of a bonding layer of gypsum, while in addition to the use of fragments of brick rubble and large, undressed boulders bonded with lime mortar. In the higher parts of the foundation and in the lower sections of the ground course, reused stone ashlar and regular blocks of travertine were also found. The last of the enumerated materials should be associated with demolition and rebuilding of the Poznań cathedral organ-loft at the turn of the century (14th and 15th). When building the foundation, narrow trenches, unbonded stones and rubble were used. Outside the building, the upper parts of the trenches were widened so that the masons had an easy access to the erected foundations and to the walls bonded with lime mortar.

The Church of the Blessed Virgin Mary is a two-and-a-half-span church with an ambulatory, from the east terminated in a pentagonally enclosed presbytery. Its naves are separated by arcades supported by pillars. One half of the span, on the west side, merges into the wall to design an area for the vestry, over which double galleries were built. The pillars, so to say, 'sunk' into the added wall. This element is indicated as a trace of the original intention to build a much larger building. Unfortunately, the archaeological research conducted outside did not confirm the planned extension of the building to the west – no continuation of built foundations or foundation trenches were recorded. Some art historians suggest that there were plans to extend the church (Kurzawa, 1983, p. 62; Kurzawa & Kuszczalski, 2006, p. 67; Kowalski, 2010, pp. 179, 182-183) and the then existing church was eventually supposed to serve as its chancel. However, this thesis has not been proved. Instead, the archaeological investigations have shown that the original bases for all of the pillars were octagonal plinths. Similar octagonal pillar plinths with profiled supporting ribs are in the church of St. Catherine in Brandenburg. Today, only the pillars in the eastern part of the church in Poznań have an octagonal plinth, while the others have a simplified, hexagonal one – as a result of renovations conducted in the 19th century. The aforementioned brick church was built in the Gothic cross bond brickwork and was characterised by the use of a variety of mouldings covered with very dark olive green glaze. Both inside and outside, there is a noticeable change in the mouldings used from about 2/3 of the height of the building and a simplification of the upper part of the walls and the façades, which is interpreted as a trace of the change of construction workshops in the second stage of the works continued from 1444 (Kowalski, 2010, p. 185). The similarities to the churches built by Hinrich Brunsberg and the related workshops are evident – especially from the outside. The plinth used in the church was a slightly protruding stone and brick structure, finished with stacked *scotia* mouldings and roll mouldings which are characteristic also of St. Catherine's Church in Brandenburg, the Church of the Blessed Virgin Mary in Chojna and St. Stephen's Church in Garz. The cornices in Poznań are made of unglazed mouldings, which are the result of renovation works conducted from the 19th century. However, the old, gothic ones, were covered with dark olive glaze (evidenced by those recorded in the case of the 19th century altar and the fragments found during the excavations). The pilaster strips carried

into the interior with the characteristic corner mouldings and the trefoil supporting ribs running through the centre, refer to the aforementioned objects and can be treated as a 'showcase' of the workshop. Both the pilaster strips and the portals were trimmed with glazed and red-brick mouldings, used alternately. In the case of the pilaster strips of the Church of the Blessed Virgin Mary – there are pairs of statuary niches that are semi-circular in the cross-section and – similar to the church of St. Catherine in Brandenburg – prepared for an installation of statues/sculptures. This idea might have been partially implemented, because during the renovation of the church conducted at the beginning of the 21st century, in one of the niches on the northern side there was a trace of an iron pin in all probability left from the presence of (ceramic? wooden?) statue.

The resemblance of the Church of the Blessed Virgin Mary in Poznań to the church of St Catherine in Brandenburg an der Havel was first pointed out at the end of the 19th century (Kohte, 1896, p. 34). Julius Kohte attributed the construction of the Poznań church to the workshops from Brandenburg or Stettin (Szczecin), he also believed that the same workshop built the church in Kórnik. It should be noted that the church in Brandenburg has a ceramic inscription which mentions Master Hinrich Brunsberg from Szczecin (*magistrum Henricum Brunsbergh de Stettin*) as the architect of the church in 1401 (Schumann, 2015, pp. 41-42). Although only this building has the 'architect's signature' left, based on style – it has been possible to include further buildings in the works of the same building master. Max Säume (1926) included the Church of the Blessed Virgin Mary in Poznań in this group, along with the churches in Chojna, Szczecin, Stargard and Garz as well as the town halls in Chojna, Szczecin and Tangermünde. L. Therefore, Przymusiński, who expanded on this idea, rightly pointed out the similarity of profiles and composition of the pilaster strips and the portals of the Poznań church with Brunsberg's line of development representing the period of c. 1430. Usually, an apprentice or a member of the closest circle of Hinrich Brunsberg was indicated as the first builder of the Church of the Blessed Virgin Mary (Przymusiński, 1956). However, suggesting that it was Hanusz Prusz, mentioned in the sources (Kurzawa & Kuszczalski, 2006, p. 66), is devoid of any strong basis. This name appears in relation to the final stages of construction after the aforementioned change of workshop in 1444.

Some researchers question the possibility of attributing so many completed structures to a single architect, occasionally using the term 'architect's legend' (e.g. Skibiński, 1995, p. 122). However, the proposed interpretation of Hinrich Brunsberg perceived as a mason master and 'entrepreneur' seems truly compelling and might alleviate some of these scholars' concerns (Böker, 1988, p. 235; Schumann, 2015, pp. 44, 54-56). According to this interpretation, Brunsberg would have had a managerial role supervising other skilled building workshops and so he might have been involved in several projects at the same time – just like an entrepreneur. The author expands on this topic in the further part of this work and shows Hinrich Brunsberg's participation not only in the construction of the Church of the Blessed Virgin Mary, but also of the façades of the Poznań Cathedral.

The workshop of Hinrich Brunsberg

Thus the question is what features, according to researchers of architecture, are associated with the works of Hinrich Brunsberg? The following characteristic features of his workshop belong to the most frequently stressed:

- Hall churches with an ambulatory, having in the plan a polygonal termination, projecting from the east end and a system of buttresses carried to the interior with chapels between them (Zaske, 1978); the basilica church in Stargard is an exception to this rule,
- The use of lierne vaults in most buildings (Schumann, 2015, p. 54),
- Pilaster strips with characteristic decoration made of alternately arranged glazed and unglazed mouldings. Characteristic corner mouldings and a central supporting rib, pairs of niches (ultimately – with statues of saints) on 2-3 floors and a tracery detail (Radacki, 2007/2008; Badstübner, 2015, p. 37; Schumann, 2015, pp. 45-47),
- A specific form elaborate detailing, defined by N. Zaske as brick impressionism (Zaske, 1978, p.180); this distinguishing characteristic is to be found in many publications (e.g. Radacki, 2007/2008, p.17; Schumann, 2015, p.41),
- A blind window with two arches and a rosette, created with the use of elaborate openwork traceries discussed as a 'decorative motif' and traced through several phases of development (Oleś, 2015).

As far as the Church of the Blessed Virgin Mary is concerned, the above requirements are met thanks to the form of the structure – a hall with ambulatory, the lierne vaults, the method of construction, and the decoration of the pilaster strip. It should be noted that the chancel of the Poznań cathedral dated to the turn of the century (14th and 15th) also has an ambulatory.

Fragments of characteristic construction ceramics can shed further light on the problem of which workshop built the Cathedral and the Church of the Blessed Virgin Mary on the island of Ostrów Tumski in Poznań. In addition to the mouldings, which can be admired until now in the body of the Church of the Blessed Virgin Mary, some elements of 'artistic ceramics' representing fragments of traceries and pinnacles, have also been identified in various places of the study the area (Antowska-Gorączniak, 2014). The first collection of them – 48 fragments of traceries and a few more found years later in the warehouses of the Museum of the History of the City of Poznań (branch of the National Museum in Poznań), and described as 'a cathedral rosette 1963' (*rozeta katedralna* 1963) (inventoried in the 1970s, No. MNP/DA25/ from b tor) – is characterized by an ornamental, three-dimensional design, truncated edges, triangular or diamond-shaped indentations and dark-olive-green glaze. The most numerous group is the openwork decorations of the façade (the lowest, small traceries) with carved motifs of large and smaller crosses (Figure 2). Analogy to this design can be found on the façade of the northern chapel of the church in Brandenburg (Figure 3: a, c), as a frieze at the tower of St Mary's Church in Stargard (Figure 3: b, d) and as a frieze made of unglazed elements on the Świecka Brama in Chojna (Figure 3: e). It seems likely that the in situ remnants of them were seen c. 70 years ago by Fr. J. Nowacki, who described the western façade and portal as follows: 'The next part of the wall up to the base of the great window was adorned with

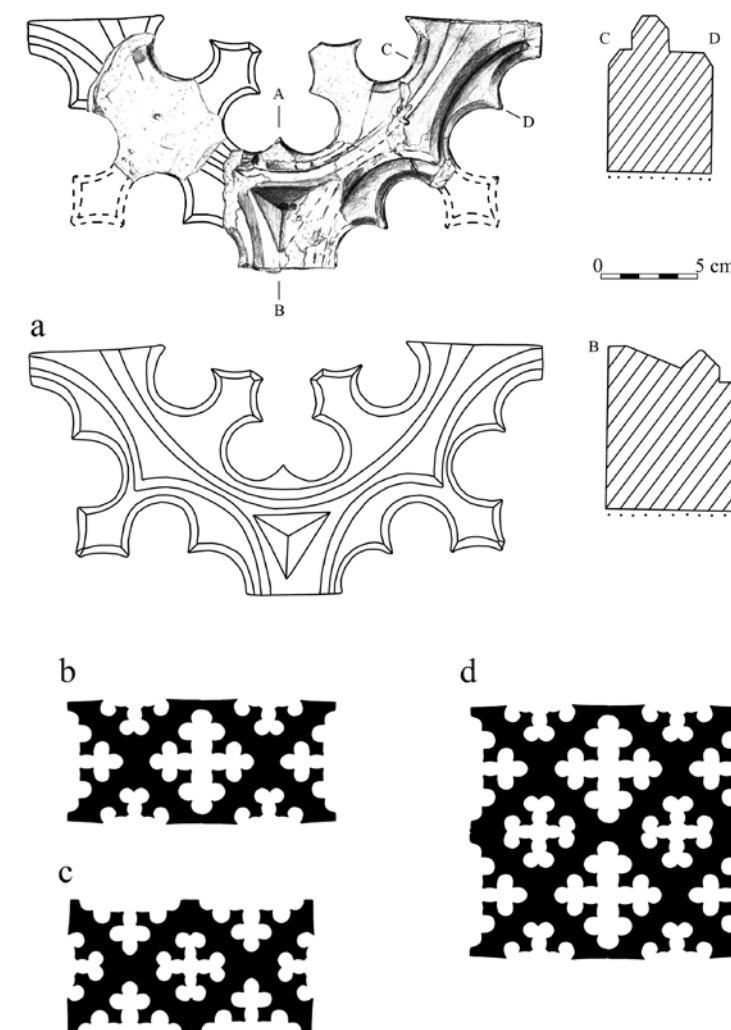
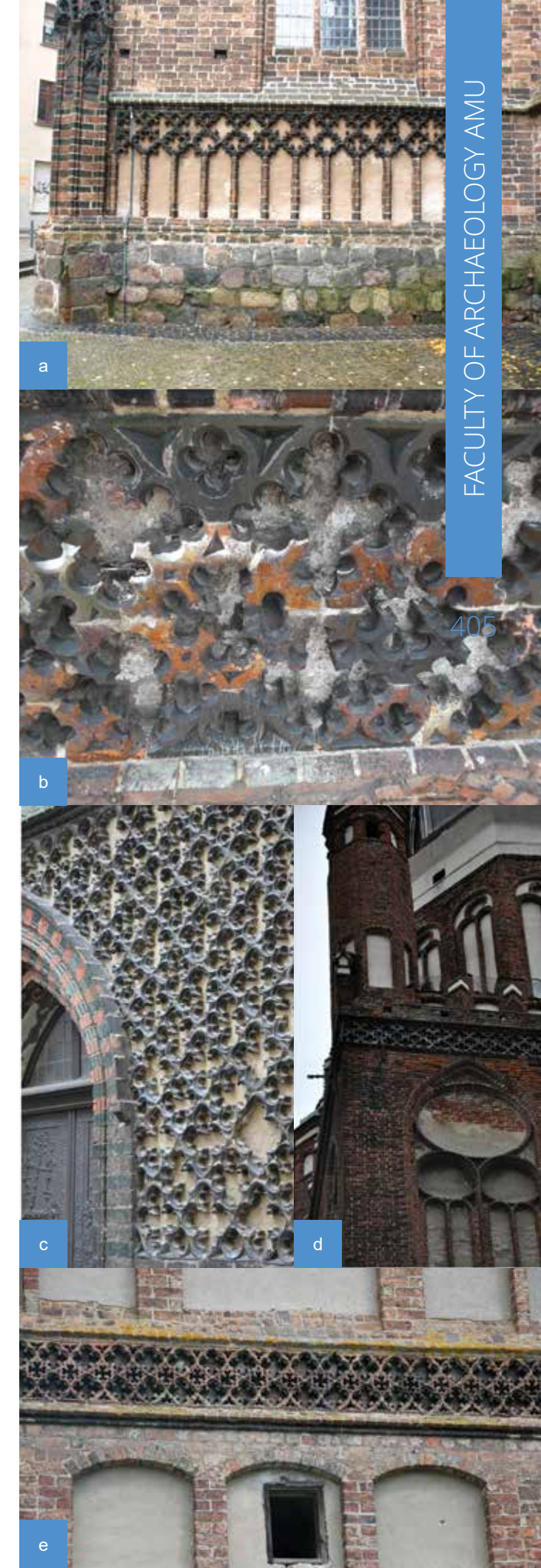


Figure 2. Examples of traceries (a) from the friezes or elevations of the buildings on the island of Ostrów Tumski in Poznań and a reconstruction of the cross bond brickwork (b-d).

Figure 3. Tracery decoration of the façades: Church of St Catherine of Brandenburg, side of the northern chapel – a; portal area of the north façade – c; parish church in Stargard, tracery frieze on the tower – b, d; Świecka Brama in Chojna, frieze – e.



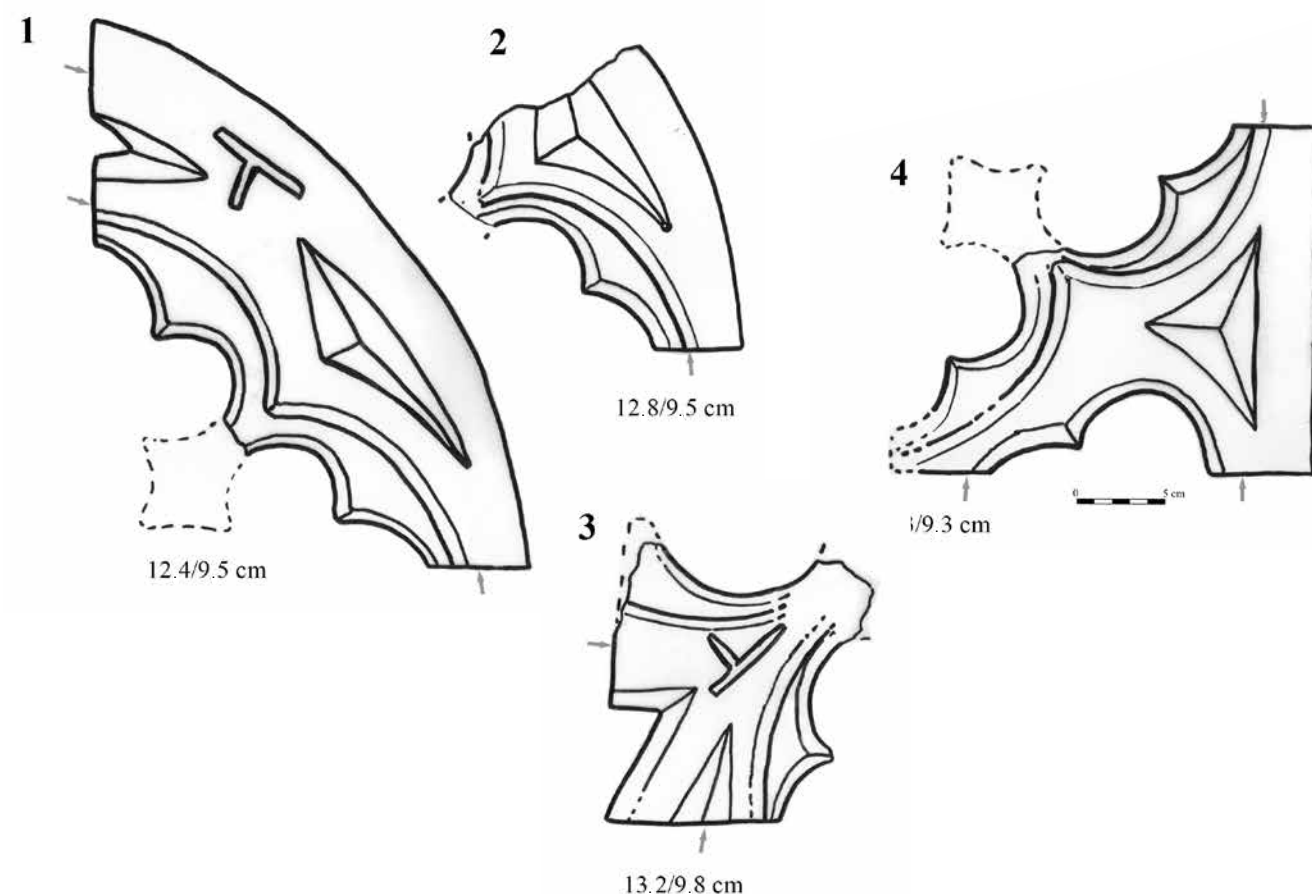


Figure 4. Cathedral traceries from the research of the 1950s (Collections of the Museum of the History of the City of Poznań, a branch of the National Museum in Poznań; No. MNP/DA25) (1-4). Reconstruction of the ogival blind windows (5).

a sumptuous tracery, the remains of which were found when the Baroque layers were being removed' (Nowacki, 1959, p. 98). Unfortunately, their reconstruction during the post-war regothicisation works was abandoned. It is likely that the west façade of the Poznań cathedral most closely resembled the traceries from the portals of the northern chapel in Brandenburg, where the openwork traceries with the motifs of large and smaller crosses reach the line of the window sills. The flat-faced traceries in the tower of St Mary's Church in Stargard covered with honey-coloured glaze are slightly less similar.

It is noteworthy that the large, massive traceries (height from 13.1-13.6 cm) did not just decorate the face of the façade but constituted self-supporting structures, for example, in the attics, on the ogival windows or the blind windows, which was confirmed by the discovery of mounting holes (diameters from 0.9 to 2.6 cm) made with the aim to connect these elements, probably using iron wall ties/anchors. Three fragments which come from windows terminated in a sharp arch or blind window (Figure 4). The closest analogy to the above reconstructions are the traceries from the blind windows on the façade of St Mary's Church in Chojna, where they were used for decoration of the pilaster strips (Figure 5: a, b). Each element of this ogival blind window from the church in Chojna was engraved exactly in the same way, including the indentations of the triangles and the openwork on the top. According to the workshop crite-

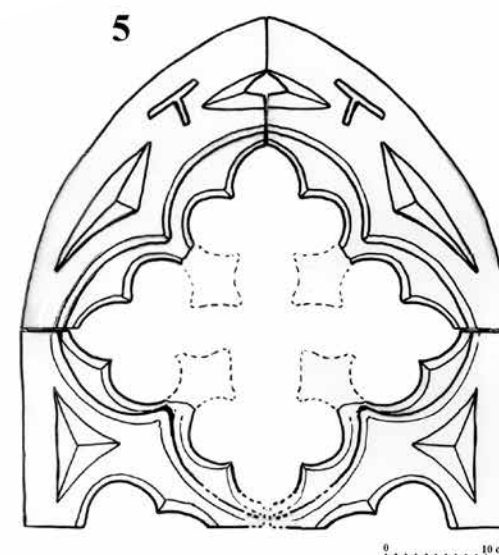
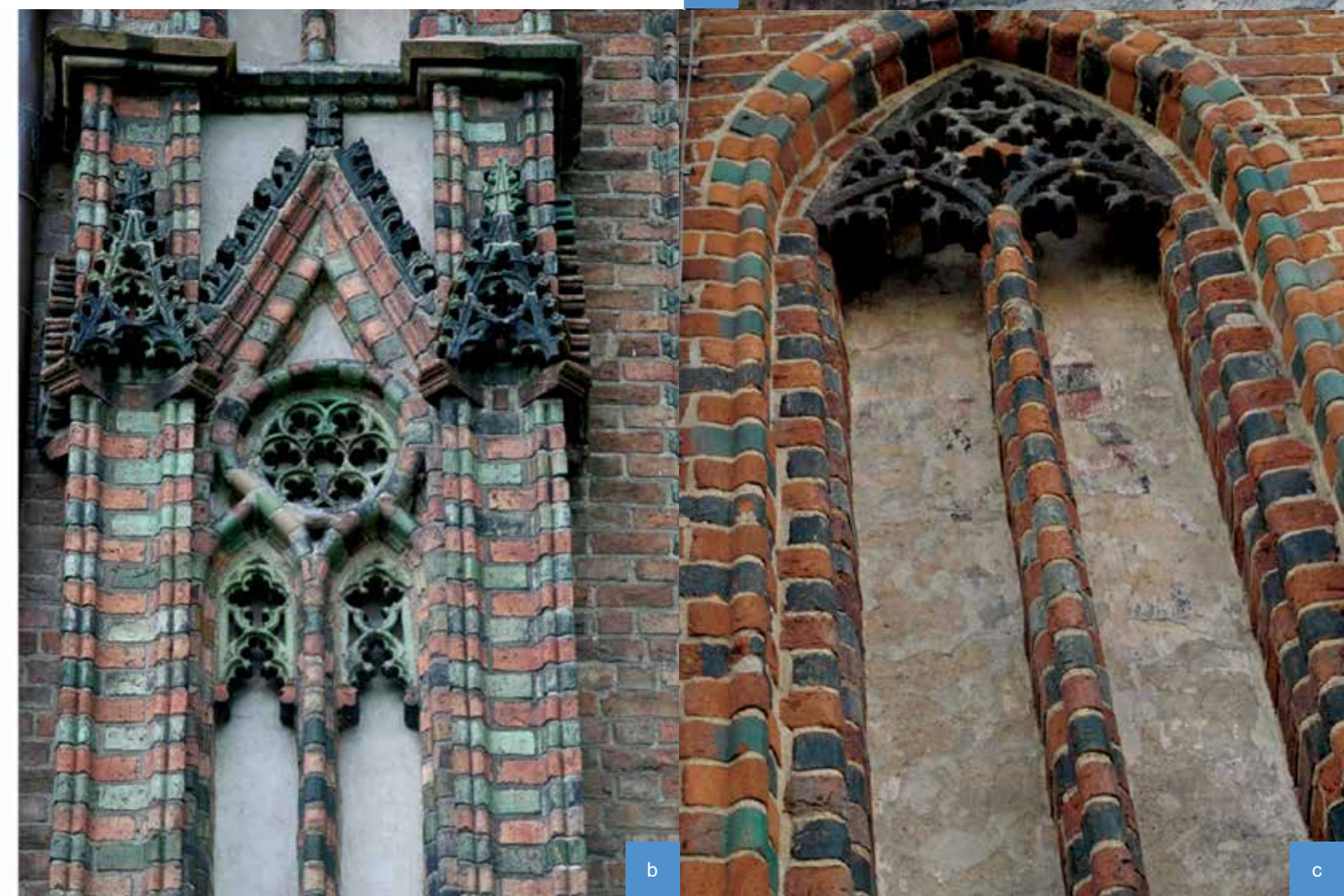


Figure 5. Traceries on the blind windows: St Mary's Church in Chojna – a, b; town hall in Szczecin – c.



ria set out by K. Oleś, this analysis of the blind windows and the rosette should be referred to as the Brunsberg motif and can be used to identify the work of the master builder Hinrich Brunsberg (Oleś, 2015, pp. 29-32). Furthermore, they can be used to phase his works. For example, the parish church in Chojna represents the third phase in the pattern of development of Brunsberg's structural design. Equally elaborate, decorative traceries but with a slightly different design are found in the blind windows located in the southern elevation and at the entrance of the town hall in Szczecin (Figure 5: c). The next elements of tracery acquired from the warehouses of the Museum of the History of the City of Poznań are fragments of rosettes (Figures 6: 1-4, 7: 1-8). It is possible to reconstruct two different types of rosettes. Some of them allow a reconstruction of two different decorations of this type. The first of the rosettes is a fragment

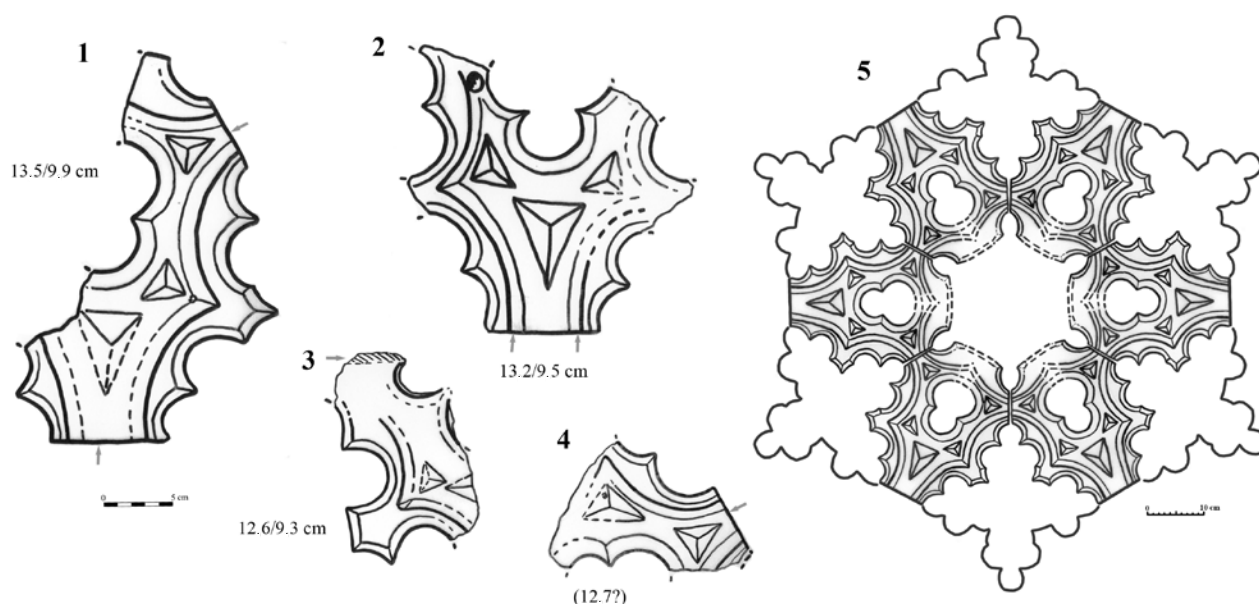


Figure 6. Traceries (Collections of the Museum of the History of the City of Poznań, a branch of the National Museum in Poznań; No. MNP/DA25) and a reconstruction of rosette 1.

of the central part, richly engraved with motifs of a star/flower, fischblase ornament, crosses made of quatrefoils with engraved triangles on the upper surface (Figure 6: 5). The second of the rosettes (Figure 7: 9) is a reconstruction of its circumference, about 1 m in diameter, with motifs of rosettes and the fischblase ornaments. Similarly engraved and spatially moulded, rosettes with *chiaroscuro* effect are known from the top of the town hall in Tangermünde (Figure 8: a, f) and from the church of St. Catherine in Brandenburg (Figure 8: b-e). Particularly similar are the rosettes of the gable parapeted walls in the northern chapel, where the motifs of crosses, fischblase ornament and rosettes were also used. The Poznań rose windows were probably originally located in the cathedral attic.

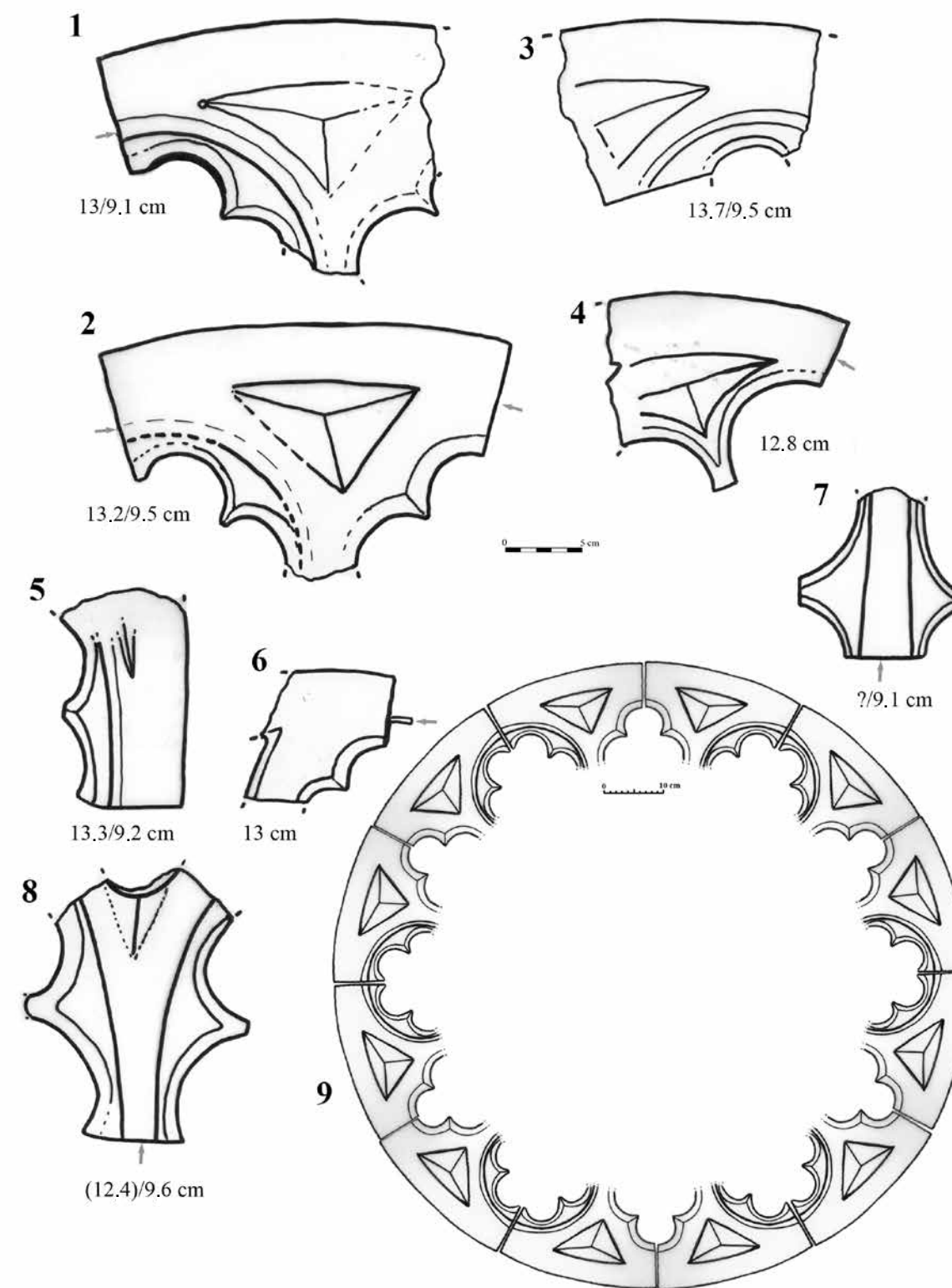


Figure 7. Traceries (Collections of the Museum of the History of the City of Poznań, a branch of the National Museum in Poznań; No. MNP/DA25) and a reconstruction of rosette 2.



Figure 8. Rosettes on the gables and in the attic: town hall in Tangermünde – a, f; Church of St. Catherine of Brandenburg – b-e.

e

f



Another group of characteristic elements of building ceramics are fragments of a fleuron and pinnacles. The fleuron with a mounting hole in its base and reconstructed from 15 fragments (Figure 9: a, b) was excavated from the foundation of the vicarage which had ended up in the brick rubble as reused building material where it was discovered. The fleuron finds a direct analogy in a similar element from the town hall in Tangermünde, where it decorated the ornate gable with openwork rosettes (Figures 9: c; 8: a, b). In contrast, heavily fragmented pieces of pinnacles (13 fragments) recorded in the immediate surroundings of the Church of the Blessed Virgin Mary, and particularly in the 19th century layers on the west side of the church, find no analogies in the architecture typical of the West Pomeranian workshops. Their edges are decorated with 'flounce-shaped' mouldings, grooves and dimples (Figure 9: d-f). It can be assumed that this is the work of the author of the gable mentioned in written sources – a mason from Greater Poland, Lorek from Kościan (Antowska-Gorączniak, 2013b).

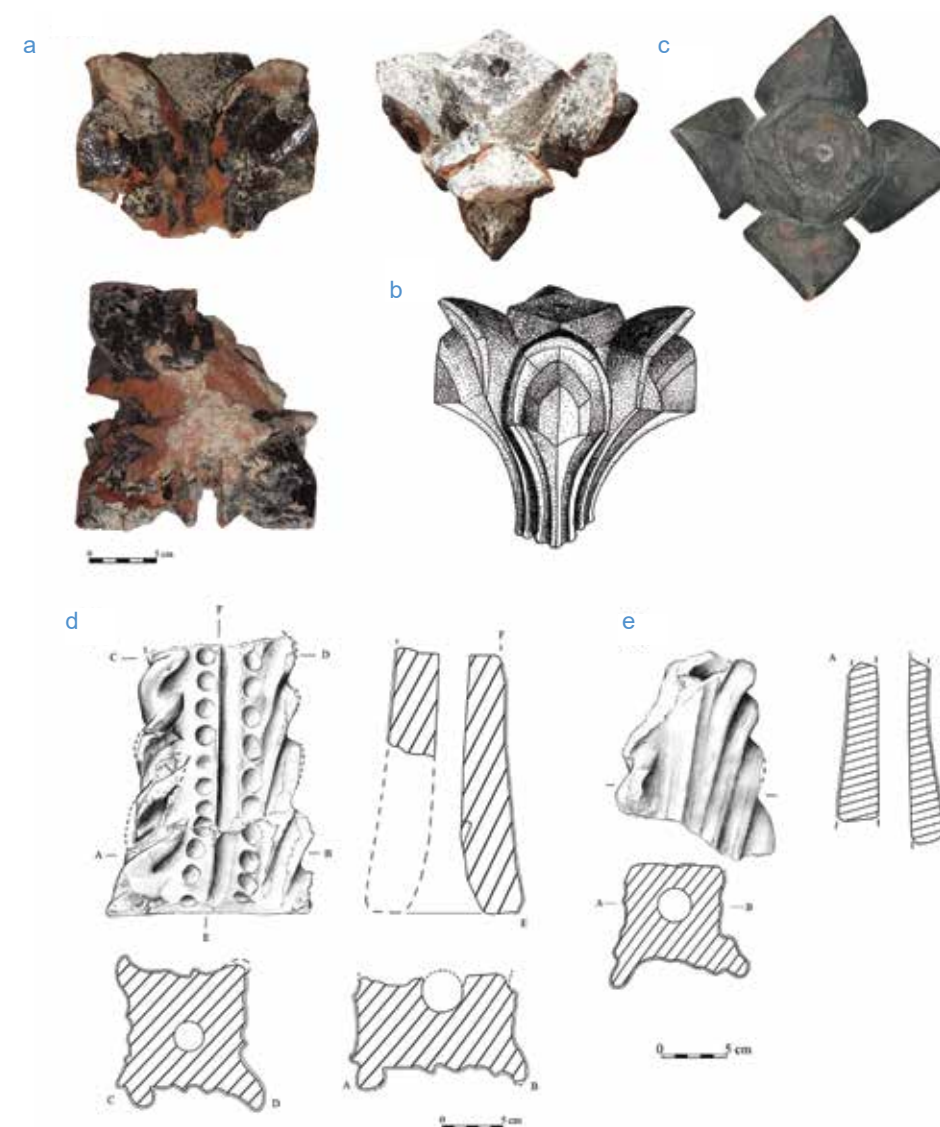


Figure 9. Fleurons and pinnacles: fleuron presented in the vitrine in the town hall in Tangermünde – C; fleuron from the foundation of the vicarage located at 3 Posadzego Street on the island of Ostrów Tumski – A and its reconstruction – B. Fragments of pinnacles from the gable of the Church of the Blessed Virgin Mary – D-E.

Some of the presented fragments of traceries and the fleuron were deposited in the well-dated layers or foundations, in a buried trench belonging to the uncompleted building along the southern nave of the Church of the Blessed Virgin Mary and in the foundations of the 16th century defensive walls and of the vicarage. On this basis, it can be concluded that they come from the cathedral in Poznań, which at the end of the 15th century and at the beginning of the 16th century was strongly affected by some construction disasters caused by a gale and a lightning strike (Antowska-Gorączniak, 2013a, p. 213).

Reconstruction of the cathedral organ-loft lasted from the 14th century to the beginning of the 15th century, during which period Brunsberg's workshops ran such construction projects as the parish church in Stargard, the St Mary's Church in Chojna, the church of St Catherine in Brandenburg, the church of St Stephen in Garz and the town hall in Tangermünde. The characteristic construction detail and a similar duration of work on the cathedral are in line with the concept according to which Master Brunsberg should be perceived as an entrepreneur. Although no written sources confirm his presence in Poznań, there were certainly some West Pomeranian Brunsberg construction workshops operating in this region. Also, it is highly likely that Hinrich Brunsberg contributed to the design of the Church of the Blessed Virgin Mary on the island of Ostrów Tumski in Poznań, as its design seems to be a miniature version of the Church of St Catherine of Brandenburg – a showcase of the said Master. Perhaps it was created in parallel with the work on the Poznań cathedral's façades. In the light of the information that the fundraising for the erection of the Church of the Blessed Virgin Mary commenced in 1426, and the last known mention of Brunsberg in document dates to 1428 (related to an inheritance case after the death of another builder – Nicolaus Craft), his contribution to this construction project cannot be explicitly denied. The exact date of Brunsberg's death is unknown but it is assumed that it was after 1428 (Zaske, 1990; Schumann, 2015, p. 44). Therefore, perhaps the interruption of the works on the construction of the Church of the Blessed Virgin Mary in 1433, resulting from a lack of funds, should also be viewed through the context of the death of its alleged architect – the coordinator of the construction work.

The cemetery in the vicinity of the Church of the Blessed Virgin Mary

There was a cemetery both within and around the church (Figure 10). Preliminary investigations lead to the conclusion that the burials should be related to the Gothic church, and people were buried in this place from the second half of the 15th century up to the modern times. No older graves associated with the pre-Romanesque chapel of the princely palace have been identified, though. So far more than 160 skeletal burials of single bones and bone concentrations have been recorded in the layers and the ossuary. The cemetery was not reserved exclusively for the clergy, which is evidenced by the fact that the discovered remains included bones of females and children in addition to males. It may be assumed that in addition to the clergymen of the Poznań church (grave 114 contained prayer beads, grave 136 contained an embroidered stole) the benefactors of the church and their families were also buried there. Inside the church, the bodies were usually buried in coffins placed along the longitudinal axis of the building and oriented E-W (with a slight SW-NE deviation) with their heads to the west, there is one exception where the head was to the east. A more concentrated,

multi-layered arrangement of the human remains was recorded in the northern nave and in the central section of the southern nave. Some burials were located in specially built brick crypts or tombs (Figure 10:4). Here, the arrangement of the remains of the deceased was consistent with the course of the walls of the crypt. Only the crypt in the north-eastern part of the presbytery, which contained the skeletons of three individuals and mixed bones of others, was examined in its entirety. Based on the burial goods, it may be dated to the second half of the 17th century. Several steps used to lead to the crypt from the north-western side. The crypt was buried due to the destruction of its vault and the breach in the vault of the crypt and its covering with rubble was probably caused by a construction disaster recorded in the first half of the 18th century. At that time, in 1762, the gothic lierne vaults in the eastern part of the church were replaced with sail vaults supported on buttresses (Kurzawa, 1983, p.62). Finally, the crypt may have been covered with flooring during the 19th century renovations, as they are mentioned in an earlier inspection of the church 'bury the vaults and the bones of the deceased present there' (Kurzawa, 2003, p. 367). Interestingly, the construction process of that crypt resulted in the demolition of the older stone and brick structure – probably also a tomb – was fragmentarily preserved on the western side. The western part of a brick crypt/tomb in a symmetrical arrangement to that in the north-eastern presbytery was identified in the southern aisle. Other remnants of a tomb were uncovered in the middle of the nave. Interestingly, the only preserved wall was the eastern, shorter one with remains of toothings projecting at the end of the side walls running westwards. The toothings were made of irregularly arranged Gothic frog bricks (bricks with a 'frog' indentation made with fingers) with sections of clearly recognisable Gothic brickwork and lime mortar with smooth joints. The location of the tomb i.e. in the central part of the nave – *in medio ecclesiae* – reflects the high social standing of the person who was buried there. The building material used indicates a late-medieval provenance of this feature, but the burial itself was not preserved. The other three walls of the tomb were pulled down during the secondary relocation of human bones to become part of the mass burial – the ossuary (Figure 10:6). However, it is possible to determine when the bones were placed in the central part of the church and from where they were moved based on written sources. A note by Canon Ludwik Richtter, says that '[...] in the Year 1784 in the month of November the deceased Bishops, Canons and *Cleri Minoris* were moved from the basement of the Cathedral Church of Poznań and buried. In this Church of the Blessed Virgin Mary, in the middle of the church, a *Sepultura* was held, at which, as a clerical student at the Seminary of Poznań, I was present at the time' (Kurzawa, 2003, p.367). The day the bones moved from the cathedral were buried – October 20, 1785 – can also be found in the archival documentation (Archdiocese Archives in Poznań, General Records of the Church of the Blessed Virgin Mary *in Summo* in Poznań, No. 0A X 131). The documents of Archbishop Leon Przyłuski contain a sketch of a slab which used to be located above the ossuary, with a relief of the skull and crossbones and the inscription '*PIIS MANIBUS CONFRATRUM AC PRAEDECESSORUM SUORUM CAPITULUM CATEDRALE POSNANIENSE IN SOLENNI OSSIUM IN HOC LOCO SEPULTURA ANNO DOMINI 1785 DIE MONUMENTUM POSUIT*' (Kurzawa, 2003, p. 372). The relocation of bones from the graves of the cathedral crypts has been related to the many years of reconstruction of the building after the fire of 1772 (Warkoczewska, 2003, pp. 110-113). The two layers of bones separated by a thick layer of sand discovered during excavation of the deep pit suggest that the

exhumation of bones from the cathedral and re-inhumation in the church ossuary might have been carried out twice; this would explain the difference in dates (1784 vs. 1785). Anthropological analysis helped to determine the MNI of adult specimens as 229 and of children as 17 and revealed that the ossuary contained the bones of adult males, females as well as children (Kubicka 2014, pp. 78-82, 84-86). This strongly suggests that the ossuary was not only the burial site of clerics that were moved from the cathedral crypts.

On the basis of their layout, the burials identified outside the church can be associated with two phases in the lifecycle of the cemetery. The older phase (15th-16th century) was represented by the graves on the E-W axis (SW-NE deviation), usually with the head to the west. The younger, modern phase (17th-18th centuries) was represented by the graves found aligned mainly NW-SE, with the head to the south – although the layout of some younger burials corresponded to the older phase (the cemetery of the Blessed Virgin Mary Church is currently being studied in detail). The cemetery territory was originally separated by brick and stone fencing, which was unearthed during archaeological investigations (Antowska-Gorączniak & Sikorski, 2003). It was built using some relics of older structures (Figure 10: 2, 3). Sometime after the mid-15th century, the south-west, south and east sections of the fence were added, built on a pier and post foundation (Figure 10: 1). The fragments of the fence can be related to the Consistory Files, which mention the construction of the enclosure around the church of the Blessed Virgin Mary in the years 1465-66 by the legacy of the church custodian Wojciech Szamotulski (Nowacki, 1951, p. 328). Around the second half of the 17th century, a brick crypt was added in the central part of the southern course of the enclosure. The enclosure itself existed at least until 1787 – the date of publication of Ignacy Lasota's plan, on which the wall was marked for the last time. The ruined fence was pulled down at the turn of the century (18th and 19th). Today there is no trace of the cemetery. At the beginning of the 19th century, the Gothic church of the Blessed Virgin Mary was also threatened with demolition – fortunately though, it was thoroughly renovated in the middle of the 19th century (Kurzawa, 2003, pp. 364-372).

The occupation level around the church in the cemetery zone was slightly lower than the current one, reaching the foundation offsets (20-40 cm). However, outside, the walls reinforced with buttresses, the area sloped strongly down to the south-west, south and south-east. The slope of this elevation was reinforced with a layer of paving made of small pieces of rubble, strongly compacted and supplemented with fragments of brick rubble and animal bones (mainly finger segments). This layer articulates with the face of the cemetery wall and based on stratigraphic principles, can be dated to after the construction of the cemetery wall. In the early 16th century, the area outside the enclosure was levelled and a cobbled fieldstone road running along the wall with deep gutters was built there instead.

Conclusions

This year, another major renovation of the Church of the Blessed Virgin Mary along with the revitalization of its immediate surroundings have been completed. Due to the joint exhibition project of the Archdiocese of Poznań, the City of Poznań and the Archaeological Museum – 'Everything began here – an exhibition of the testimonies to the beginnings of the Polish

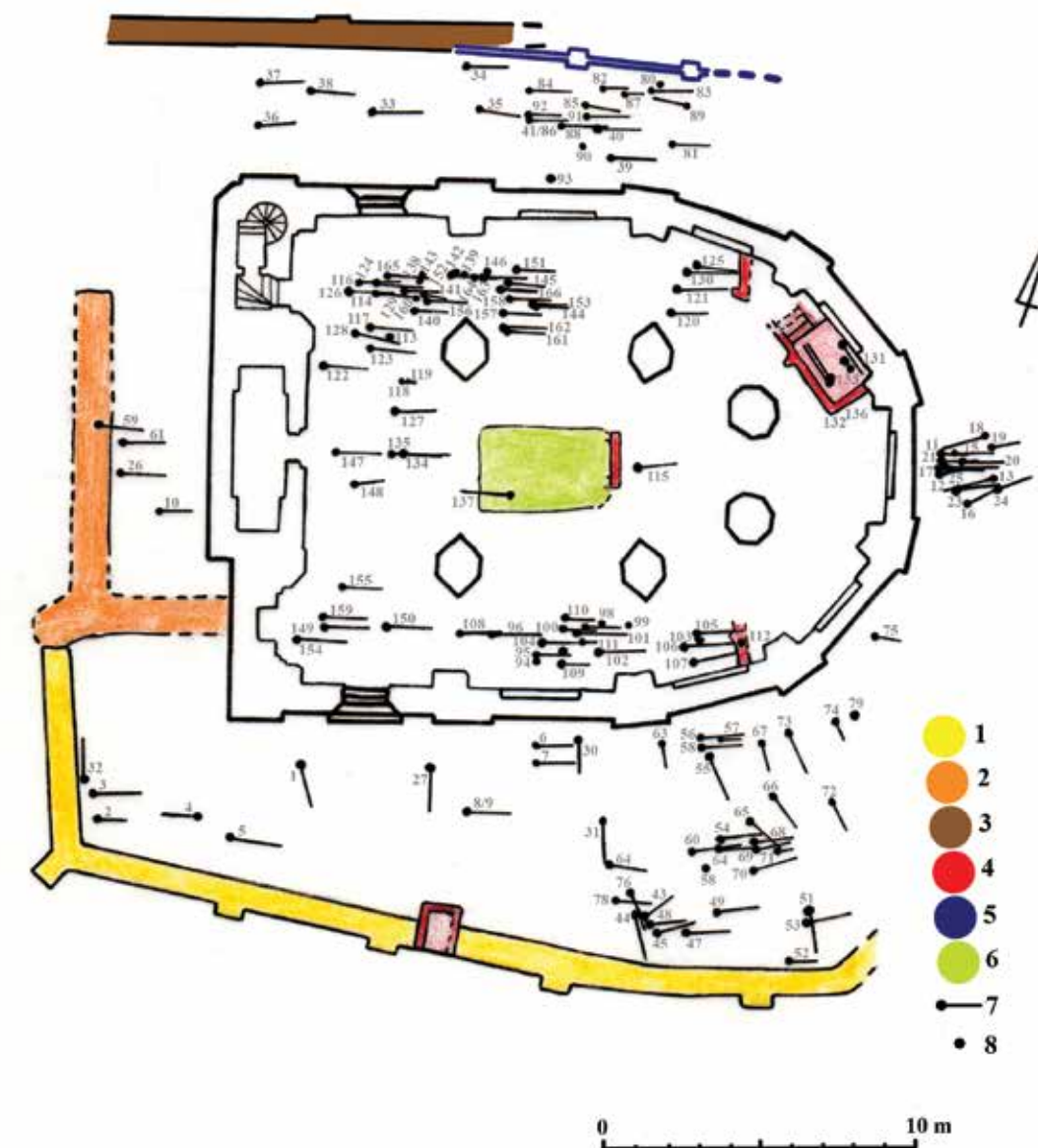


Figure 10. Cemetery of the Church of the Blessed Virgin Mary: distribution of burials documented in the years 1999-2015 and representation of the perimeter wall; 1 – cemetery enclosure on the pier and post foundation; 2 – older brick and stone foundations; 3 – cemetery perimeter wall discovered in 1946; 4 – brick crypts; 5 – modern fencing; 6 – ossuary; 7 – burials with determined orientation; 8 – clusters of human bones with indeterminate burial orientation.

statehood on the island of Ostrów Tumski in Poznań' (a project co-financed by the European Regional Development Fund as part of the Greater Poland Regional Operational Program for 2014-2020) both the interior of the building and almost the entire adjacent area are excluded from the possibility of conducting excavations for several years. A glass installation showing the course of the walls of the *palas* of Mieszko and new floors using brick tiles whose size is analogous to the ones obtained during the excavations have been provided. Further investigations of the graves from the cemetery of the Church of the Blessed Virgin Mary and the architectural relics have therefore been left to future generations of archaeologists.

References

- Antowska-Gorączniak, O. (2013a). Ceramika budowlana z badań na stanowisku przy ul. Posadzego 5 z 2009 r. In H. Kóčka-Krenz (Ed.), *Poznań we wczesnym średniowieczu*, Vol. 8 (pp. 203-226). Poznań: Wydawnictwo Nauka i Innowacje.
- Antowska-Gorączniak, O. (2013b). Szczyt kościoła Najświętszej Marii Panny na Ostrowie Tumskim w Poznaniu. Budowa, ikonografia, źródła archeologiczne. *Eclessia. Studia z Dziejów Wielkopolski*, 8, 125-139.
- Antowska-Gorączniak, O. (2014). Brunsbergowskie inspiracje w Poznaniu – nowe źródła dotyczące wpływu architektury zachodniopomorskiej w Wielkopolsce. In T. Janiak, & D. Stryniak (Eds.), *Średniowieczna architektura sakralna w Polsce w świetle najnowszych badań* (pp. 241-263). Gniezno: Muzeum Początków Państwa Polskiego.
- Antowska-Gorączniak, O., & Sikorski, A. (2003). Cmentarzysko przy kościele Najświętszej Marii Panny. *Kronika Miasta Poznania. W kręgu katedry*, 71, (1), 57-64.
- Badstübner, E. (2015). Gotyk ceglany na побереżu Bałtyku w XIV i XV wieku. Tendencja i nurty u progu wczesnego renesansu. In M. Gierke (Ed.), *Innowacja i tradycja. Henryk Brunsberg i późnogotycka architektura ceglana Pomorza i Brandenburgii. Biblioteka Rocznika Chojeńskiego*. Vol. II (pp. 29-40). Chojna: Stowarzyszenie Społeczno-Kulturalne „Terra Incognita” w Chojnie; Deutsches Kulturforum östliches Europa e.V.
- Böker, H. J. (1988). *Die mittelalterliche Backsteinarchitektur Norddeutschlands*. Darmstadt: Wiessenschaftliche Buchgesellschaft.
- Gałka, W. (2001). *O architekturze i plastyce dawnego Poznania do końca epoki baroku*. Poznań: Wydawnictwo Miejskie.
- Kohte, J. (1896). *Verzeichnis der Kunstdenkmäler der Provinz Posen (Vol. II), Der Stadtkreis Posen*. Berlin: Verlag von Julius Springer.
- Kowalski, J. (2006). O kościele kórnickim i wielkopolskich halach obejściowych. In J. Wiesiołowski (Ed.), *Wielkopolska, Polska, Europa. Studia dedykowane pamięci Alicji Karłowskiej-Kamzowej* (pp. 197-211). Poznań: Poznańskie Towarzystwo Przyjaciół Nauk.
- Kowalski, J. (2010). *Gotyk Wielkopolski. Architektura sakralna XIII-XVI wieku*. Dębogóra: Fundacja św. Benedykta.
- Kóčka-Krenz, H. (2016). Palatium poznańskie na tle wczesnośredniowiecznych zespołów rezydencjonalnych. In M. Przybył (Ed.), *Archeologiczne tajemnice palatium i katedry poznańskiego Ostrowa* (pp. 21-46). Poznań: Muzeum Archeologiczne w Poznaniu.
- Krapiec, M. (unpublished). *Historic Buildings Conservation Office for the City of Poznań*, 2013.
- Kubicka, A. (2014). Analiza antropologiczna materiału kostnego z wykopów 69 i 70 ze stanowiska Poznań-Ostrów Tumski 9/10. *Folia Praehistorica Posnaniensis*, 19, 69-88.
- Kurzawa, Z. (1983). Kościół sukursalny pw. Najświętszej Marii Panny. In E. Linette & Z. Kurzawa (Eds.), *Katalog zabytków sztuki w Polsce. Seria nowa, Miasto Poznań. Ostrów Tumski i Śródka z Komandorią*, Vol. 7 (1) (pp. 62-66). Warszawa: Instytut Sztuki PAN.
- Kurzawa, Z. (2003). Dziewiętnastowieczna restauracja „starożytnicznych” budynków na Ostrowie Tumskim. *Kronika Miasta Poznania. W kręgu katedry*, 71(1), 364-388.
- Kurzawa, Z., & Kuszelski, A. (2006). *Historyczne kościoły Poznania. Przewodnik*. Poznań: Wydawnictwo Świętego Wojciecha.
- Machowski, M., & Włodarek, A. (1995). Kościół kolegiacki p.w. Wniebowzięcia Panny Marii. In A. Włodarek (Ed.), *Katalog zabytków*. In T. Mroczko, & M. Arsyński (Eds.), *Architektura gotycka w Polsce*, Vol. 2 (pp. 188-189). Warszawa: Instytut Sztuki PAN.

Nowacki, J. (1951). Kolegiata Najświętszej Maryi Panny w Poznaniu. *Miesięcznik Kościelny Archidiecezji Poznańskiej*, 6, 314-341.

Nowacki, J. (1959). *Dzieje Archidiecezji Poznańskiej. Kościół Katedralny w Poznaniu. Studium historyczne* (Vol. 1). Poznań: Wydawnictwo Święty Wojciech.

Oleś, K. (2015). Z Pomorza do Wielkopolski. Kościół Najświętszej Marii Panny na Ostrowie Tumskim w Poznaniu jako przyczynek do dyskusji nad tzw. „stylem brunsbergowskim”. *Przegląd Zachodniopomorski*, 30(1), 19-50.

Przymusiński, L. (1956). Architektura kościoła N. P. Marii w Poznaniu. *Biuletyn Historii Sztuki*, 18(2), 302-303.

Radacki, Z. (2007/2008). Poszukiwania kryteriów działalności twórczej Henryka Brunsberga ze Szczecina. *Materiały Zachodniopomorskie*, 4/5(2), 5-57.

Schumann, D. (2015). Mistrz budowlany Henryk Brunsberg – architektura ceglana końca XIV wieku pomiędzy tradycją a innowacją. In M. Gierke (Ed.), *Innowacja i tradycja. Henryk Brunsberg i późnogotycka architektura ceglana Pomorza i Brandenburgii. Biblioteka Rocznika Chojeńskiego* Vol II (pp. 41-56). Chojna: Stowarzyszenie Społeczno-Kulturalne „Terra Incognita” w Chojnie; Deutsches Kulturforum östliches Europa e.V.

Säume, M. (1926). Hinrich Brusberg ein spätgotischer Baumaister. *Baltische Studien*, 28, 215-326.

Skibiński, Sz. (1995). Pomorze Zachodnie i Nowa Marchia. In T. Mroczko & M. Arsyński (Eds.), *Architektura gotycka w Polsce* (pp. 110-123). Warszawa: Instytut Sztuki PAN.

Warkoczewska, M. (2003). Ostrów Tumski na dawnych widokach i fotografiach. *Kronika Miasta Poznania. W kręgu katedry*, 71(1), 105-125.

Zaske, N. (1978). Henryk Brunsberg, jego twórczość i znaczenie. In H. Fruba (Ed.), *Sztuka Pobrzeża Bałtyku* (pp. 167–202). Warszawa: Wydawnictwo Naukowe PWN.

Zaske, N. (1990). Hinrich Brunsberg um 1350 – nach 1428. In U. Lammert (Ed.), *Große Baumeister*, Vol. 2, Berlin: Henschelverlag.

Author:

Olga Antowska-Gorączniak, Faculty of Archaeology, Adam Mickiewicz University, Uniwersytetu Poznańskiego 7, 61-614 Poznań, Poland.
ORCID: 0000-0002-5732-4474, e-mail: olgaag@amu.edu.pl



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