TEUTONIC ORDER CASTLES IN THE CHEŁM REGION IN THE LIGHT OF NEW RESEARCH OF SELECTED SUBJECTS

MARCIN WIEWIÓRA

The architecture of Teutonic Order castles in the Chełm region has been explored for a long time and is still an important topic, as is evidenced by recent academic and popular publications on the architecture of the Teutonic Knights state.1 These publications are only partly based on systematic archaeological and architectonic research, which so far has been carried out only in selected castles. The castles of the Chełm area are an architectonic, historic and artistic phenomenon that singles the region out from other lands that belonged to the Teutonic Knights state between the 13th and the 16th century. Despite their unquestionable cultural, symbolic artistic and historical values, they have not been thoroughly researched in an interdisciplinary perspective including studies on architecture, art, building technology and widely understood material culture.

Such a research programme was initiated in 2005 by the Section of the Archaeology of Architecture of the Institute of Archaeology in Nicolaus Copernicus University (Toruń). In the case of the castles in Grudziądz and Wąbrzeźno, which have not survived until today, the aim was to excavate the relics and examine their present condition. Another objective was to initiate a discussion on the form and stages of construction of those castles, which are only known from written or iconographic sources. As regards the castles in Radzyń Chełmiński and Papowo Biskupie, the project was aimed at verifying the previous findings concerning the settlements existing there before the Teutonic Order era, as well as the plan and form of the castles.

Papowo Biskupie

The castle was located on a small hill cut with wide shallow gorges² (fig. 1). The high castle was built, according to various historians, between 1280 and the 1st half of the 14th c.³ Some construction work was still being done at the beginning of the 15th c.⁴ At that time the earliest mentions of damage were recorded: ⁵ the northern wing was destroyed and many parts of the castle needed repair.⁶ A considerable damage was also caused by the war in 1454.⁷ In the 16th c. the castle lost any military significance and fell into decline.⁸

Before 2005 no extended archaeological excavations had been carried out in the castle. The aim of the excavations undertaken in 2005 was to explore the layers of material accumulated in the high castle

¹ A.P. Bachtin, B.J. Kurakow, (ed.), Zamki i ukrierlenia niemieskogo ordiena w siewiernoj czasti wostocznoj prussii, Kaliningrad 2005; R. Boguwolski, L. Hyss, Zamki krzyżackie powiatu grudziądzkiego, Grudziądz 2004; A. Pabian, W. Rozynkowski, Zamki krzyżackie na ziemi chełmińskiej, Toruń 1997; D. Polinski, Gród czy zamek? Z badań nad najwcześniejszymi krzyżackimi obiektami obronnymi w ziemi chełmińskiej, "Archaeologia Historica Polona" (AHP), vol. 15/1, p. 181-196, Toruń 2003; idem, "Chełmińskie" warownie Zakonu na pograniczu krzyżacko-pruskim i krzyżacko-polskim, (in:) Pogranicze polsko-pruskie i krzyżackie, t. II, (ed.) K. Grążawski, Włocławek-Brodnica, p. 155-178, Brodnica 2007a; idem, Krzyżackie warownie drewniano-ziemne w świetle badań archeologicznych, AHP, vol.17, p. 241-257, Toruń 2007b.; T. Torbus, Die Konventsburgen im Deutschordensland Preussen, Schriften des Bundesinstituts fur Ostdeutsche Kultur und Geschischte, vol. 11, München 1998; idem, Zamki krzyżackie, Wrocław 2010.

² I. Sławiński, *Opis techniczny do inwentaryzacji zamku krzyżackiego w Papowie Biskupim powiat chełmiński woj. bydgoskie*, the Archives of Wojewódzkiego Konserwatora Zabytków (WKZ) [Regional Monument Conservation Office] in Toruń – no. W/690. 1959, p. 1; M. Arszyński, *Ruiny zamku krzyżackiego w Papowie Biskupim pow. Chełmno wojew.*

bydgoskie. Dokumentacja historyczna do prac konserwatorskich opracowana do użytku Przedsiębiorstwa Państwowego Pracownie Konserwacji Zabytków, typescript, the Archives of WKZ in Toruń, no.W/687, 1958, p. 7.

³ T. Mroczko, M. Arszyński, Architektura gotycka, tom 2, Warszawa 1995, p. 181, and the bibliography therein; M. Dorna, Bracia zakonu krzyżackiego w Prusach w latach 1228-1309. Studium prozopograficzne, Poznań 2004, p. 260; J. Frycz, Architektura zamków krzyżackich, (in:) Sztuka pobrzeża Bałtyku. Materiały sesji historyków sztuki, Gdańsk, listopad 1976, Warszawa, 1978, p. 44-46; T. Torbus, Konventsburgen..., p. 127; M. Arszyński, op.cit., Toruń 1958, p. 14; J. Długosz, Roczniki czyli Kroniki sławnego Królestwa Polskiego, księga 11, rok 1411, p. 201-202

⁴ M. Arszyński, op.cit., Toruń 1958, p. 14.

⁵ J. Długosz, op.cit.

⁶M. Arszyński op.cit., p. 15-16; W. Rozynkowski, *Średniowieczne dzieje Papowa Biskupiego*, Papowo Biskupie 1995, p. 19.

⁷ M. Haftka, *Zamki krzyżackie w Polsce*, Malbork-Płock 1999, p. 224 ; W. Rozynkowski op.cit. p.18-19.

⁸ M. Haftka, op.cit., p. 224; M. Arszyński op.cit., p. 16, 21; W. Rozynkowski, *Zarys dziejów gminy Papowo Biskupie*, Papowo Biskupie 1996, p. 9; T. Torbus, *Konventsburgen...*, p. 575

and the fore-castle, to establish chronological links between the excavated layers and the castle walls, and to reconstruct the history of the building on the basis of the excavated artefacts.

The research revealed the construction details of the spot footing of three castle wings. The level of footing was reached and the relationship between the walls and the revealed culture layers was established. Excavations were also carried out in the basements along the northern wing adjacent to the courtyard and in the basements of the western and southern wings. The research also brought valuable data on building technologies and details of castle interiors (fig. 2).

The material and technologies used to build the castle in Papowo had been studied thoroughly in the 1950s by I. Sławiński.9 The relics of the fore-castle and the outer walls revealed in 2005 are varied in this respect (fig. 3-4). The walls of the fore-castle were built of granite blocks and pebbles, bound with lime mortar; the same material was used in the high castle. The surviving rims, jambs and wall coping at the floor level of the machicolation were built of bricks arranged in a mixed bond (squinch arches, window jambs and niches) or in the Vendian bond (the wall face). The vaults and the filling of the squinch arches were constructed of shorter bricks, known as "nines". In the basements and on the ground and first floors there are surviving fragments of pendentives in abutments and of cross vault arches. The chapel and the chapter-house, located in the northern wing, had ribbed cross vaulting.¹⁰ The vault abutments were based on decorative limestone consoles (fig. 5).¹¹ Some of the interiors were certainly covered with beam-framed floors, as is indicated by beam brackets. On the ground floor and in the basement there are characteristic slotted openings made of granite blocks.¹² The window openings in the chapel and the chapter-house were splayed on both sides and framed with ordinary and voussoir bricks. Other openings were constructed in

¹⁴ op.cit., p. 8; 10.

a similar way – from the outside they were vertical embrasures framed with granite blocks and covered with stones or blocks¹³ (fig. 6). Only four doorways have survived until today but they are so badly damaged that only remnants of rebates and recesses can be distinguished. The doorways on the first floor leading to the chapel and the chapter-house are in a similar condition. A little can be inferred about the gallery – it had two or three storeys. More details are known about the courtyard – excavations revealed well-preserved cobbles covering the pathway in the gallery and the underpinning of the arcade (fig.7). The courtyard, close to a square in shape, had a leanto roof, sloping towards the yard and covered with ceramic tiles.¹⁴

Particularly exquisite among the castle interiors was the chapter-house, situated most probably on the first floor on the west side of the northern wing¹⁵ (fig. 8). The room was covered with a three-bay ribbed vault supported with stone roots and clustered columns with consoles.¹⁶ Five examples of such structures have survived in the chapel and eight in the chapter-house. In many places it is possible to discern fragments of various kinds of shaped bricks, used to soften the corners of window openings and recesses.¹⁷ In the chapel there were three pointed-arch windows in the northern wall and one in the western wall.¹⁸ Some interior details in the chapter-house are similar to those found in the castle in Gniew.¹⁹

It is known that Jorge Beschiden, a famous vault builder, came to work in Papowo in 1405, and in 1407 an anonymous carpenter was employed.²⁰ It is not known, however, what works they did. The profile of the ribs suggests that the vaults were constructed at the end of the 13th c., when the whole body of the castle was built. The finds from the chapel include eight rib bricks of pear-shaped profiles, which were used since the end of the 13th c., and very popular in the 14th c. on a par with bricks with curves on both sides.²¹ Each of the shaped bricks found in the chapel

⁹ I. Sławiński, *Opis techniczny do inwentaryzacji zamku krzyżackiego w Papowie Biskupim powiat chełmiński woj. bydgoskie*, typescript, the Archives of WKZ in Toruń, no. W/ 690, Toruń 1959, p. 4.

¹⁰ I. Sławiński, op.cit, p. 6

¹¹ op.cit, p. 6-7.

¹² op.cit., p. 7.

¹³ op.cit.

¹⁵ C. Steinbrecht, *Die Baukunst Des Deutchen Ritterordens In Preussen*, Berlin 1888, p. 22, 24.

¹⁶ M. Haftka, op.cit., p. 222.

¹⁷ I. Sławiński op.cit., p. 6.

¹⁸ M. Arszyński op.cit., p. 12.

¹⁹ T. Torbus, Konventsburgen..., p. 127.

²⁰ M. Arszyński, op.cit., p. 14.

²¹ M. Małachowicz, Ceramika budowlana średniowiecznego Wrocławia, (in:) Wschodnia strefa Starego Miasta we Wrocławiu w XII-XIV wieku, ed. C. Busko, p. 111-134, Wrocław 2005, p. 117; B. Bielec, Ceramika budowlana z zamku krzyżackiego w Papowie Biskupim, typescript in ZAA IA UMK [the Section of the Archaeology of Architecture of the Institute of Archaeology of Nicolaus Copernicus University] in Toruń, 2007, p. 1-21.

had the builder's assembly marks; similar marks were found on ceramic elements in the castle in Malbork.²²

The building materials found in the course of excavations in Papowo can be dated from the 14th to the 19th c. (fig. 9). Most of them comes from the backfill layers accumulated during the deconstruction of the castle walls.²³ Outside the castle, near its eastern wall, two fragments of a doorway reveal (?) were found, made of fine-grained limestone. The reveal, of trefoil profile, was formed of three adjoining shafts. Few floor-tiles were found, including only three unbroken specimens.

Data on the castle foundations came from four trenches. They made it possible to reconstruct the building methods used in the first phase of the castle construction. In all the trenches the spot footing was reached. The continuous footing of the northern curtain wall was a solid structure located in a wide foundation trench. It was constructed of large erratic blocks, partly dressed, arranged horizontally, with smaller blocks filling the gaps, and bound with lime mortar. The trench next to the southern face of the southern wing wall revealed the face of the strip foundation, built of huge rocks, smaller errand blocks and little pebbles. 1.2 metres below the ground level a second set-off was found. To this level the stones were bound with lime mortar, while between the second set-off and the footing - with clay. Another trench revealed a solid continuous footing of the northern wall of the southern wing. As the southern wing had cellars, the massive foundation for the walls was placed over four metres below the courtyard level (fig. 10). Archaeological research proved unquestionably that the southern wing of the castle had also had a cellar (fig. 11). In the backfill layer of this interior there was the coping of a partly demolished partition wall between two vaulted rooms of unequal height.

Three trenches revealed remnants of the corner of the southern wing (the so-called 'commander's house') and the western wing. In the south-eastern corner of the western and southern wing buildings a fragment of the wall coping was disclosed, as well as remnants of a stone reveal(?) of the southern wing entrance (fig. 12). The trench at the eastern face of the eastern outer wall revealed a fragment of a cellar with a well-preserved support of a rib vault.

Radzyń Chełmiński

Radzyń Chełmiński is located in the north-eastern part of the Chełm region. The castle is situated on a small moraine hill²⁴ (fig. 15). To the east of the castle there used to be a lake, now overgrown, on whose east-western side there had been a settlement since the 7th century. At the beginning of the 13th c. Radzyń was one of the major centres of Prince Konrad's administration. In 1218 the Radzyń estates were taken over by bishop Christian, and in 1231 they passed to the Teutonic Order.²⁵ The first mention of the Radzyń commander comes from 1251.26 The exact time of starting the construction of the castle is unknown; it is now assumed to be between 1270 and 1330.27 Historical sources indicate that the main chapel existed before 1285. The whole castle was probably completed before 1329.28 It was destroyed several times during the war between the Teutonic Order and Poland in the 15th c.²⁹ and then during the Polish-Swedish war in the 17th c.³⁰ The first serious conservation works were undertaken by Conrad Steibrecht in the years 1886-1890. After WW II preliminary historical research was done and architectural inventories were carried out in the years 1956-1984 and 1988-1989. In 1961-1968 the cellars were partly cleared of debris and preservation works were undertaken.³¹ The first systematic

²² M. Arszyński, *Technika i organizacja budownictwa ceglanego w Prusach w koncu XIV i pierwszej połowie XV wieku*, Studia z dziejów rzemiosła i przemysłu, vol . IX, 1970, p. 44, fig. 8 i 9.

²³ B. Bielec op.cit. p. 1-2.

²⁴ M. Arszyński, Z badań nad zamkiem pokrzyżackim w Radzynie, Rocznik Grudziądzki, vol. II. Grudziądz 1961, p. 43

²⁵ M. Arszyński op.cit., p. 50.

²⁶ T. Torbus, *Konventsburgen...*, p. 595.

²⁷ T. Torbus, *Konventsburgen*..., p. 601-602. According to Prof. Arszyński the Radzyń castle was built in three phases: phase 1 – the *castrum* was built within the southern fore-castle; phase 2 - the first castle was built about 1251 within the southern fore-castle in connection with establishing the commandery ; phase 3 – after 1270 the construction of the convent castle is started - M. Arszyński, op.cit. p. 59-60; T. Mroczko, M. Arszyński, op.cit, p. 198-199.

²⁸ M. Arszyński op.cit., p. 59-69; T. Torbus, *Konventsburgen...*, p. 601.

²⁹ M. Arszyński op.cit., p. 74.

³⁰ M. Arszyński op.cit., p. 75.

³¹I. Sławinski 1957, Zamek krzyżacki w Radzyniu. Inwentaryzacja, typescript, PKZ [Monument Conservation Workshop] Toruń, in the archives of WUOZ [Regional Office of Monument Protection] in Toruń; 1962, Inwentaryzacja odkrywek architektonicznych, typescript, PKZ Toruń, in the archives of WUOZ in Toruń; 1964, Inwentaryzacja klatki schodowej zamku w Radzyniu Chełminskim, typescript, PKZ Toruń, in the archives of WUOZ in Toruń; 1965, Inwentaryzacja odkrywek architektonicznych, typescript, PKZ Toruń, in the archives of WUOZ in Toruń; 1965, Inwentaryzacja odkrywek architektonicznych, typescript, PKZ Toruń, in the archives of WUOZ in Toruń; 1967, Inwentaryzacja: architektura, zamek w Radzyniu, typescript, PKZ Toruń, in the archives of WUOZ in Toruń; I. Sławinski, M. Czaplińska, P. Majewski 1984, Inwentaryzacja budowlano-

archaeological excavations were done in 1957,³² and further research was carried out in 1963-1964.³³

The research undertaken in the years 2007-2009 was aimed on the one hand at verifying the plan of the castle drawn in the 19th c. by Steinbrecht and on the other at exploring the western curtain wall and the construction details of the continuous footing (fig. 16). The trenches at the eastern face of the outer walls at the western side of the castle revealed remnants of outbuildings. The layer under the floor and the cobbled surface contained fragments of ceramic vessels and glazed stove-tiles dated to the 17th-18th c. Also, the original face of the western basement wall in the western wing was uncovered. Near the basement wall there was a regular aggregate of hand-shaped Gothic bricks, sized 30-32 x 15-15 x 9-10 cm, piled on a 2 x 2.5 m surface. The arrangement of layers and the brick flooring suggest that the final demolition of the cellar did not take place immediately after the deconstruction of the vaults. This is evident from layers of debris, clay and soot that accumulated gradually during subsequent works and repairs (ryc. 17). The exploration of the parcham the strip of ground between the western outer wall of the castle and the wall of the toilet tower (dansker) - brought technical data on the foundations of the

western curtain³⁴ (fig. 18). The results of the excavations confirmed the data from historical sources, according to which the western wing was in ruins already in the 15th c.³⁵ and the restructuring work in the castle continued throughout the 16th c. The cellar discovered under the flooring dated to the 17th c., covered with a cross vault, was probably liquidated as early as in the 16th c.

Grudziądz

The castle in Grudziądz, like the castle in Wąbrzeźno, has not survived until today. Its remnants were explored in 2008 (after A. Pawłowski's death) and in 2009 (fig. 20). The key issue was to research the architecture of the castle and the phases of its construction. Until 2009 the knowledge about the castle was based only on inspection reports and inventories from the 15th -18th c., scarce iconographic sources and descriptions from the 19th and early 20th c.³⁶ All those sources indicated that the castle complex had consisted of the high castle, with the convent house located on the highest part of the hill, and the fore-castle, situated to the south of the high castle³⁷ (fig. 21). The principal rooms of the convent were located in the southern wing, which was divid-

³⁶ X. Froelich, Geschichte des Graudenzer Kreißes, Bd. I; II, [Bd 1] Die allmählige Gestaltung der Grundverhältnisse und Besitzrechte, die Entstehung, Bevölkerung, Verwaltung und Zusammengehörigkeit der Kreis Ortschaften, die Entwickelung des städtischen und ländlichen Kommunalwesens, der Adelsrechte, des Steuer-, Militair-, Kirchen- und Schulwesens und der Justizverfassung. Bd 2: Die Zeit- und Kulturgeschichte. Aus vorhandenen Urkunden und archivalischen Nachrichten dargestellt von Graudenz 1868-1872, Graudenz 1868-1884;

konserwatorska odkrywek archeologicznych z rozwarstwieniem. Mury obronne przedzamcza, przedmurze z Gdaniskiem, typescript, PKZ Toruń, in the archives of WUOZ in Toruń. In 2007 archaeological-architectonic research in the high castle was started by the Institute of Anthroplogy and Archaeology of Pułtusk Academy of Humanities, under the supervision of D. Gazda and by the Section of the Archaeology of Architecture of Nicolauc Copernicus University. The research was done in the western wing, which was the commander's residence -Pabian, Rozynkowski 1997, p. 90-91; M. Wiewióra, *Badania archeologiczno-architektoniczne na zamku głownym w Radzyniu Chełminskim*, typescript in ZAA IA UMK in Toruń, 2008, p. 1-22. ³² G. Mikołajczyk, *Wyniki prac archeologicznych na zamku w Radzyniu Chełminskim w 1957 roku*, Ochrona Zabytków, No. 1-4, 1960, p. 89-98.

³³ B. Janikowski, *Dziennik wykopalisk*, manuscript in the archives of WUOZ in Toruń 1963a; idem, *Sprawozdanie z prac wykopaliskowych na przedzamczu krzyżackim w Radzyniu Chełmińskim*, typescript in WKZ in Toruń, 1963b.

³⁴ Particularly interesting were the results of excavations in trench no. 15, adjacent to the face of the *dansker* wall. The excavations in that area were intended to verify the data from the documantation of the architectonic research from the 1980s, when remnants of an unidentified building, including a furnace outlet (?), were uncovered near the *dansker*. The trench revealed a fragment of a brick wall coping, going from the east to the west. Further research is needed to interpret those finds.

³⁵ M. Haftka op.cit., p. 270; M. Arszyński, op.cit., p. 74.

J. Heise, Die Bau- Und Kunstdenkmäler der Provinz Westpreussen - Kreis Graudenz, H. 9, (in:) Die Bau- und Kunstdenkmäler der Provinz Westpreussen, H. IX, Danzig 1894; B. Schmid, Zur Baugeschichte der Ordens- und Bischofsschlösser in Preußen, Zeitschrift des Westpreußischen Geschichtsvereins 69, p. 55-68, Graudenz 1929; idem, Gebietiger-Gemächer in den Ordenshäusern, Mitteilungen für die Geschichte von Ost- und Westpreußen, 17 (1943), no. 3, p. 40-43, Konigsberg 1943; C. Steinbrecht, Baukunst der Deutschen Ritterorden in Preusen, Bd. II: Preusen zur Zeit der Landmeister 1230-1309, Berlin 1888; and inspection reports, e.g. Lustracja województw malborskiego i chełmińskiego 1565, ed. S. Hoszowski, Gdańsk 1961; Lustracja województw Prus Królewskich 1624 z fragmentami lustracji 1615, ed. S. Hoszowski, Gdańsk 1967; Lustracja województw Prus Królewskich 1624 z fragmentami lustracji 1615, ed. S. Hoszowski, Gdańsk 1967.

³⁷ H. Jacobi, Die Ausgrabungsergebnisse der Deutschordensburgen Graudenz und Roggenhausen. Ein Beitrag zur baugeschichtlichen Entwicklung der Ordensburgen, bearb. und mit e. Nachwort versehen von Udo Arnold, Braubach,

ed into two unequal parts by the entrance passage. This building housed prison cells, storage rooms, the chapter house and the refectory. In its eastern part there was the castle chapel, dedicated to the Virgin Mary, completed in 1299. Over the main floor there were granaries and a machicolation along the southern wall.³⁸

All the historians interested in the origins of the castle complex assumed that the construction of a brick castle started in connection with establishing the commandry in Grudziądz.³⁹ The descriptions of a visitation in 1667 and an inspection in 1739 mention the castle chapel built around 1290 or 1299.40 It was supposed that the oldest brick buildings had already existed about the year 1267, when Grudziądz was the seat of the country master.⁴¹ Further mentions of the castle come from 1288 and 1291.42 In the 1330s the castle must have been a complete fortification, since in 1330 it was the headquarters of the Teutonic Order army fighting with King Ladislaus the Elbow-high of Poland.⁴³ All the analyses stress the irregular outline of the castle, whose trapezium shape places it in between irregular strongholds (e.g. Pokrzywno, Bierzgłowo, Toruń), similar in form to East German feudal castles, and newer structures which evolved from the regular four-sided convent

³⁸ K. Szymański op.cit., p. 97-104.

³⁹ por. T. Torbus op.cit., p. 80-82.

castle (the oldest regular strongholds were Brandenburg, constructed in 1272 and Malbork/Marienberg, constructed c. 1274).⁴⁴

The results of archaeological research conducted in 2008 and 2009 are largely convergent with the earlier assumptions about and reconstructions of the spatial arrangement of the castle. It was an irregular trapezium-shaped complex, dominated by the massive southern wing with the main gate leading into the courtyard. Its layout is reminiscent of the strongholds in Toruń or Bałga.45 The excavations revealed its interior divisions and some relics of vaults. The western outer wall is only discernible in cuts. Small fragments of the western parcham buildings were disclosed but no fragments or even cuts of the northern curtain could be found. The only well-preserved element of this part of the castle is the sewer and a fragment of the north-eastern corner, called the trapezium cellar. Thanks to the architectural stratification of the walls and to excavation results it was possible to distinguish six major phases in the history of the castle⁴⁶ (fig. 22). The first phase, especially the date of starting the construction of the castle, was previously hypothesised to coincide with the appointment of the first commander of Grudziądz, i.e. c. 1250.47 However, a new analysis of the historical

^{1996;} R. Boguwolski, Zamek konwentualny w Grudziądzu. Kalendarz Grudziądzki, Grudziądz 2008; R. Boguwolski, L. Hyss, Zamki krzyżackie powiatu grudziądzkiego, Grudziądz 2004; X. Froelich, Geschichte des Graudenzer Kreißes, t. I-II, Graudenz 1868; idem, Góra Zamkowa w Grudziądzu, translated by J. Hinz, P. Grochowski, Grudziądz 2002; L. Kajzer, J. Salm, S. Kołodziejski, Leskykon zamków w Polsce, Warszawa 2001; A. Pawłowski, Grudziądz - Zamek. Relikty wieży Klimek. Dokumentacja z badań archeologiczno-architektonicznych reliktów wieży Klimek w 2007 r., Karpiny 2007; A. Pabian, W. Rozynkowski, Zamki krzyżackie na ziemi chełmińskiej, Toruń.1997; W. Sieradzan, Atlas historyczny miast polskich, t. 1: Prusy Królewskie i Warmia, z. 4: Grudziądz, Toruń 1997; M. Szajerka, Romańska? wieża, Spotkanie z zabytkami, no 11, 2000, p. 26-27; K. Szymański, Dzieje zamku grudziądzkiego, Rocznik Grudziądzki, vol. 1, 1960, p. 73-104; Wolnikowski 1963; K. Zielińska-Melkowa, Lokacja Grudziądza w roku 1291. Studium historyczno - archiwalne, Toruń 1991.

⁴⁰ H. Jacobi op.cit., p. 70; S. Jóźwiak, J. Trupinda, Zamek komturski w Grudziądzu w średniowieczu na podstawie źródeł pisanych. Chronologia powstania i układ przestrzenny, (in:) Zamek w Grudziądzu, Toruń 2012.

⁴¹ E.g. B. Schmid, Zur Baugeschichte der Ordens- und Bischofsschlösser in Preußen. Graudenz, Zeitschrift des Westpreußischen Geschichtsvereins, 69, 1929, p. 55-68, p. 64; K. Szymański op.cit., p. 77.

⁴² K. Szymański op.cit., p. 77.

⁴³ K. Szymański op.cit., p. 78.

⁴⁴ B. Schmid op.cit., p. 66-67; T. Torbus op.cit., p. 82-84; M. Kutzner, Propaganda władzy w sztuce Zakonu Niemieckiego w Prusach (in:) Sztuka w kręgu Zakonu Krzyżackiego w Prusach i Inflantach, Studia Borussico-Baltica Toruniensia Historiae Artium, 2, 1995, Toruń, p. 17-66; recently K. Pospieszny, Castrum Thorun po 1300 roku a "klasyczny" model zamku komturskiego w Prusach, (in:) Sztuka w kręgu władzy, Materiały LVII ogólnopolskiej sesji naukowej Stowarzyszenia Historyków Sztuki, poświęconej pamięci profesora Szczęsnego Dettloffa (1878-1961) w 130 rocznicę urodzin, Toruń, 13-15 listopada 2008, Toruń, 2009, p. 75-90.

⁴⁵ Z. Nawrocki, *Zamek krzyżacki w Toruniu. Dzieje budowy, upadek, ponowne zagospodarowanie,* Rocznik Muzeum Okręgowego w Toruniu, T. XIII/XIV., 2005, p. 7-72.

⁴⁶ (ed.) M. Wiewióra, Zamek w Grudziądzu w świetle badań archeologiczno-architektonicznych. Materiały i studia, Toruń, 2012; M. Wiewióra, Próba rekonstrukcji etapów budowy i układu przestrzennego zamku w Grudziądzu w świetle badań archeologiczno-architektonicznych, (in:) Zamek w Grudziądzu, 2012, Toruń; W. Chudziak, M. Kurzyńska, Osadnictwo wczesnośredniowieczne na Górze Zamkowej, (in:) Zamek w Grudziądzu, Toruń, 2012; B. Zimnowoda-Krajewska, Analiza źródeł architektonicznych, (in:) Zamek w Grudziądzu, Toruń, 2012

⁴⁷ Assuming that the earliest phase of the castle construction could have been wooden fortifications, the first stronghold could have been built just after 1234. Undortunately, the excavations did not fully confirm that such fortifications had realy existed.

sources suggests that the construction of the castle was probably started between 1270 and 1283.48 The first phase of the construction was probably limited to building a part of the southern wing and all the four curtains. The second phase was the building of the western part of the southern wing; this phase included the completion of the chapel in 1299. It seems that the western wing was started only in the third phase, i.e. after the completion of the southern wing, which had the first floor added. This phase ended with a construction disaster in 1388. In the fourth phase a narrow drain was built in the middle of the northern part of the outer wall, leading to the second fore-castle. At that time the parcham wall had already surrounded all of the high castle. This phase also included the completion of brick buildings along the northern curtain. In 1388 disastrous rainfalls caused the subsiding of the ground and the collapse of the buildings on the Vistula embankment, leading to intensive works in the castle in the 15th c. In the fifth phase the brick buildings at the western and northern curtains were finished.⁴⁹ It is unclear when the building in the north-eastern corner over the trapezium cellar was liquidated. The last inventory of the castle, made in 1796, suggests that the buildings at the eastern curtain had already been demolished at that time. This phase was marked with the slow but irreparable degradation of the buildings surrounding the high castle.⁵⁰

Wąbrzeźno

The last complex explored in the course of the project was the bishops' castle in Wąbrzeźno, whose remains are located in the north-eastern part of the town. The stronghold was erected on an artificially heightened end of a peninsula on the Castle Lake (fig. 23).⁵¹ The bishops' residence looked like a typical convent castle of the Teutonic Knights (fig. 24). It was founded by the bishop of Chełm, Herman

von Prizna, before 1321. Its brick walls were based on a stone foundation. The complex consisted of a three-winged castle on a square plan, with an internal courtyard surrounded on three sides by one-axis residential wings, probably two-storeyed. On the eastern side the castle was closed by the outer wall with a high octagonal tower in the middle. Contact with defensive positions on the outer wall was maintained through the brick outbuilding protecting the gate.⁵² The elongated fore-castle was narrower at the eastern side, making a 117 m x 65 m trapezium. The fore-castle could be exited through gates in the outer walls and through the pillared bridge, whose part was a drawbridge, over the exceptionally wide moat.

The castle was rebuilt after the damage caused by the war of 1454-1466. The works were probably finished around 1499.⁵³ In the years 1611-1613 the complex was extended in the baroque style. After 1655 the castle, damaged by a fire, fell into disrepair. Throughout the 19th c. the ruins were gradually being demolished. After WW II archaeological excavations were probably undertaken once but no information is available on the scope and results of that research. ⁵⁴ In the early 1960s the castle in Wąbrzeźno, like many other historic buildings of the Chełm region, was explored from the architectural perspective, which resulted in preparing its inventory.⁵⁵

The grandest part of the high castle was probably the southern wing, with St Mark's chapel and the refectory. It was surrounded by a brick gallery on the first floor level, with the ground floor occupied with utility rooms. In the remaining two wings on the first floor there were bishop's apartments and rooms used as offices, while the ground floor and the basement were used as armoury, storehouses and utility rooms (e.g. the kitchen), and the highest floor as a granary.⁵⁶ The only surviving remnants of the high castle are fragments of the octagonal tower, not exceeding two meters in height, a southern cellar with fragments of vaulting, and small fractions of the outer wall on

⁴⁸ S. Jóźwiak, J. Trupinda, op.cit.

⁴⁹ op.cit., p. 7.

⁵⁰ op.cit.; B. Zimnowoda-Krajewska, op.cit.; on the location and functions of particular buildings in the modern period, cf. B. Wasik, *Zabudowa zamku górnego i przedzamczy na podstawie* źródel pisanych i ikonograficznych z XVI-XVIII wieku oraz w okresie średniowiecznym, (in:) Zamek w Grudziądzu, Toruń, 2012.

⁵¹ A full survey of the literature on the previous research and the history fthe castle in: J. Baciński, *Zamek biskupów chełmińskich w Wąbrzeźnie*, Wąbrzeźno 2004, p. 9-17; 43-52; M. Rzeczkowska-

Sławińska, *Zamek biskupi w Wąbrzeźnie*, typescript, PSOZ [State Monument Conservation Service] in Bydgoszcz, 1961, p. 18-20; 21-28; *Zamek w Wąbrzeźnie*, Rocznik Grudziądzki, vol.4, 1965, p. 7-27; among others B. Guerquin, *Zamki w Polsce*, Warszawa, 1974, p. 301-302.

⁵² J. Baciński op.cit., p. 43-52.

⁵³ M. Rzeczkowska-Sławińska 1961., p. 10, footnote 14.

⁵⁴ J. Baciński, op.cit., p. 43, footnote 221.

⁵⁵ M. Rzeczkowska-Sławińska, op.cit..

⁵⁶ M. Rzeczkowska-Sławińska, op.cit., p. 23-26; J. Baciński, op.cit., p. 43 ff.

the eastern and western side. Analyses show that the foundations of the southern wing were slightly lower than in the other wings. It is supposed that the western and northern wings were built in the first phase of constructing the castle, while the southern wing was erected later.⁵⁷

Excavations were started in the south-western part of the southern wing in order to uncover the relics of the southern curtain wall and southern wing cellars (fig. 25). A major find was a meticulously set pebble pavement, marking the original level of the southern wing basement. Other finds included fragments of a brick vault pillar and relics of the southern curtain, which had been almost completely demolished (fig. 26-27). Further excavations were made in the western wing to establish the level of the spot footing of the walls. Results indicate that the north-western corner was not part of the original design but was built during the reconstruction of the castle. It turned out that the continuous footing of the western and partly the southern wall of the wing had been placed on a demolition layer (burnt bricks and rooftiles), indicating a fire. This is probably a trace of the castle being reconstructed after it was damaged in the 1454-1466 war. Further digs revealed the wall coping of the interiors with staircases, marking the routes that used to link the cellars with the courtyard (fig. 28). In the northern part of the parcham, between the eastern curtain and the fore-castle wall, remnants of a timber-framed building from the 17th-18th c. were discovered. Its foundation, consisting of bricks and two layers of stones bound with lime mortar, was placed only 0.5 m below the ground. An important find in the north-eastern part of the castle was a well-discernible fragment of a stove. Its condition proves that this part of the castle was not totally destroyed and can still provide data on the functions and design of the rooms.58 Best-preserved relics of old architecture were found in the trench located in the embankment of the former moat and in the eastern parcham. Those were fragments of the brick wall of the parcham, which was simultaneously the facing of the moat, placed on a 202-cm-thick stone

foundation (fig. 29-30). The whole facing structure that was discovered measures c. 385 cm, 95 cm of which is the foundation. The foundation was built of fieldstones, most probably arranged in layers. The face of the foundation and of the brick wall make one surface, without a set-off. Immediately on the foundation a layer of headers was placed, with the higher part of the wall exhibiting the Gothic bond. The face also includes irregularly placed overburned brick headers, forming no pattern.⁵⁹ Finally, the excavations brought numerous pieces of ceramic details, including several kinds of shaped bricks, fragments of a frieze/cornice, tracery, floor-tiles and roof-tiles. In the Chełm region friezes made of very similar bricks can be found in the eastern façade of the post-cathedral church in Chełmża and in the church of Our Lady in Chełmno, which were both completed in the first quarter of the 14th c., like the castle in Wabrzeźno⁶⁰ (fig. 31).

The project discussed above, carried out for several years now, is aimed at initiating interdisciplinary studies of the Teutonic Order castles in the Chełm region, combining issues of history, architecture, art and material culture, and applying achaeozoological and geomorphological analyses, in short at implementing a professional research programme. The research that has already been done has on the one hand stimulated new discussions based on entirely new archaeological and architectonic data, and on the other hand resulted in preparing conservation programs based on the exploration of historic brick substance both visible above the ground level and hidden below. Such programs have already been worked out during the excavations in Radzyń Chełmiński and Papowo Biskupie by Dr Rajmund Gazda and Wrocław Technical University, while in Grudziądz by the Department of Fine Arts of Toruń University.

Translated by I. Szymańska

dr hab. Marcin Wiewióra Nicolauc Copernicus University, Toruń Institute of Archaeology Section of the Archaeology of Architecture

⁵⁷ J. Baciński, op.cit., p. 46.

⁵⁸ M. Wiewióra, Nowe źródła do dziejów zamku biskupów w Wąbrzeźnie, in print; idem, Wstępne wyniki badań archeologicznoarchitektonicznych zamku biskupów w Wąbrzeźnie w 2011, typescript in ZAA IA UMK 2011; idem, Opracowanie wyników badań archeologiczno-architektonicznych na zamku biskupim w Wąbrzeźnie w 2011 roku, typescript in ZAA IA UMK in Toruń, 2012.

⁵⁹ B. Wasik, *Opis reliktów muru parchamu odkrytego podczas badań zamku w Wąbrzeźnie,* typescript in w ZAA IA UMK in Toruń, 2011.

⁶⁰ T. Mroczko, Architektura gotycka na ziemi chełmińskiej, Warszawa 1980, p. 47-48, 126, il. 29-31, 57-58; M. Majewski, Detal architektoniczny z badań na Zamku Biskupim w Wąbrzeźnie (stan 1), przeprowadzonych w 2010 roku, typescript in w ZAA IA UMK in Toruń, 2011.