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**Residential tower of the Koło castle in the light
of the latest archaeological research***

Abstract. The Koło castle (Wielkopolskie voivodeship) is the best-preserved royal stronghold in the broadly defined historical province of Wielkopolska (Greater Poland). The castle owes this status not so much to the scale of the structures preserved to this day (i.e., ruins of the bergfried; the west curtain walls, still visible today in full length and considerable height; the greater part of the north curtain wall; and a section of the south one), but rather to the dilapidated condition of other castles founded by Polish monarchs. For a number of years (1977–1983), the Koło castle was subjected to archaeological research led by Łucja Pawlicka-Nowak (Regional Museum in Konin). Among other things, the excavations uncovered the residential tower discussed in this paper. The excavations at the time covered the western half of the building's interior, both of its outer southern corners, and the north-western area. The research was resumed in 2019, and the authors of this paper faced the challenge of verifying the earlier fieldwork, the extent of which was very wide and not fully documented. The investigations presented here shed completely new light both on the construction history of the Koło castle, and the issues concerning its chronology, which, in the light of current research, would have been as follows: Casimir the Great acquires the village and founds the town of Koło in 1362; the construction of the castle commences and the work on the site of the residential tower quickly progresses following 1365 (or 1367); the monarch dies in autumn 1370, before or shortly after the unfinished castle is consumed by fire. The article concludes with a chapter showing the Koło tower against the background of similar structures in Europe.

Keywords: Koło, castle, defensive architecture, Greater Poland, historical archaeology, Middle Ages.

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1

Picturesquely situated on the Warta River, the Koło Castle (Wielkopolskie voivodeship) is the best-preserved royal stronghold in the broadly defined historical province of Greater Poland. The castle owes this status not so much to the scale of the structures which have survived to this day (i.e., ruins of the bergfried; the west curtain walls, which survived in full length and considerable height; the greater part of the north curtain wall; and a section of the south one), but rather to the dilapidated condition of other castles founded by Polish monarchs.

The obvious uniqueness and undisputed beauty of the ruins at Koło have encouraged authors of more or less scholarly publications on medieval castles of the Polish Plain (especially those presumed founded by Casimir III the Great) to use photography to best illustrate the site. However, those familiar with the features of a castle's utility programme must have been struck by the fortress-like nature of Koło and the absence of an evident residential area. Only an analysis of the ground plan and a look beyond the courtyard into the void in the middle of the north curtain revealed that a vestigially preserved edifice protruding beyond its defensive perimeter was also part of the castle. The void left by the almost completely demolished royal residential tower seems almost symbolic, as it can be related both to the degradation of an important part of our cultural heritage, and perhaps more sadly, to its overall oblivion (Fig. 1).

* * *

The revitalisation of the Castle at Koło initiated in 2019 by the City Authorities was an opportunity to address the situation, if only partially. First, the east section of the castle's north curtain, which was threatened with imminent destruction, was stabilised. The structural relationship between the repaired relic and the east part of the residential tower (which we will also refer to as a donjon) made it necessary to include the latter in the conservation and construction programme. This, in turn, led to archaeological surveys carried out by the authors of this paper. However, before we move on to present the findings, we should briefly review the history of the castle, as well as the outcomes of the authors' field and inhouse research, recently summarised by one of the authors (Olszacki 2012).

The oldest direct mention of the castle comes from Jan of Czarnków's *Chronicle*, where the author discussed the local theatre of the civil war after the death of Luis the Great. According to the chronicler, in 1383:

[The] knight Ścibor, son earlier of Mościc of Ścibor, the Kuyavian, as well as the knights Jan Oswaldowic of Płomnikowo and Krystyn of Koziegłowy, the Starost of Koło, having left the castle [at Koło: T.O., A.R.], on various days plundered horrendously Turek and Grzegorzewo with their dependencies. Bodzanta, the



Fig. 1. Castle at Koło, Wielkopolskie voivodeship. View from the north-west side of the ruins of Casimir the Great's castle during archaeological research (photo by A. Różański)

Archbishop of Gniezno, was then in his castle in Uniejów and, although he could, did not want to resist (*Janko z Czarnkowa* 1907, p. 138).

In his *Annales* (written in the second half of the 15th century), Jan Długosz attributed the foundation of the castle to Casimir III the Great. Importantly, he did not mention the castle in his 'Kronika katedralna krakowska' (written shortly after the death of the last crowned Piast). In the section beginning with the words: *Quomodo regebat regnum et populum...*, he listed the royal brick edifices known to him, namely churches, castles and town fortifications (*Cronica* 1896, p. 188; *Roczniki* 2009a, pp. 440–442).

Another source of valuable insight are monarch's itineraries, which show that although Casimir the Great founded the town of Koło in 1362, his presence there was never recorded. Still, there are many records of visits by the first Jagiellons: Władysław II Jagiełło (seven stays, mainly late in his reign) and his younger son, Casimir IV Jagiellon (up to fourteen stays) (Rutkowska 2012). The visits were connected to the practice of the king's meetings with the nobles and knights, which at first (during the reign of Władysław) took the form of congresses, and later, of provincial assemblies (Rutkowska 2012, p. 71 *ff.*). For Casimir IV, the castle at Koło was one of his most important residences. At that time, nonetheless, it remained mostly pledged to starosts-tenants, of whom Jan Hincza of Rogów held it for life (i.e., without obligations) from 1463 until his heirless death in 1474 (Gašiorowski 2012, pp. 34–42). An exception to the pledged status was the periods between 1474

and 1476, and from 1481 to 1490. It is important to note that we have knowledge of Casimir IV staying at the castle for several days. The longest of these stays was from Christmas 1475 to 25 January 1476. He also stayed at the castle from 9 to 22 February 1485. Notably, both visits took place at a time when the castle was not under pledged tenancy (Rutkowska 2012, pp. 81–84).

It seems beyond doubt that the monarch stayed at the castle. Within its confines, the only brick building, the residential tower, must have met high utility standards if it was chosen as a seat of the court in winter. As a side note and in the context of the current harsh events, we may add that the longest of Casimir's IV stays was probably related to the forced isolation of the monarch's family for the duration of the epidemic that was brought to Koło. As noted by Długosz, the royal couple received members of the wedding retinue of Princess Jadwiga returning from the Bavarian Landshut, but 'the lords and knights, matrons and girls (returned) infected with the sweeping plague, which was then rampant in Bavaria and Germany. Many of them died in Koło ... They gave the King great fear lest this plague should spread to others and onto him' (*Roczniki* 2009b, p. 384).

After granting the Starostwo of Koło and the castle to Duchess Anna of Sochaczew (widow of the Mazovian Piast Władysław I), the tower served as the Dutchess' residence between March 1476 and March 1481 (Gąsiorowski 2012, pp. 39–40). After her death, it returned into royal hands, or more precisely, under the tenure of a court dignitary of the late Duchess Sławiec of Niemygłów. Apart from Anna's permanent residence and infrequent royal visits, the tower was also the main residence of several starosts. Two Krystyns of Koziegłowy (father and son) resided both here and in Koziegłowy (also in a donjon they built) in the late 14th and the 15th century, followed by Jan, son of Zawisza Czarny, Sławiec of Niemygłowy and Jan Jarand Brudzewski (Gąsiorowski 2012, pp. 62–63).

In 1506, Starost Jarosław Sokołowski from Wrzącza undertook to renovate the castle, spending 500 florins (*restaurationem castris Colo in muro et in habitationem aedificiis*) (Pietrzak 2003, p. 114, footnote 1079). Once the work was completed, he probably lived in the donjon with his French wife, Marie de Marcellanges (Gąsiorowski 2012, pp. 45–47). In 1513, King Sigismund the Old stayed in Koło, possibly in the castle (Rutkowska 2012, pp. 85–86, 100). Later, however, the condition of the building steadily deteriorated, leading to its abandonment by the starosts, who moved to the nearby Kościelec.

A drawing made by Erik Jönsson Dahlbergh during the Swedish Deluge became the basis for a copperplate engraving created at the end of the 17th century. The inscription *castellum destrucatum* next to the castle suggests that it had been abandoned before 1655 (Fig. 2) (*Pufendorf* 2013, Fig. 9). Despite the far-fetched generalisation and obvious mistakes (e.g., the way the bergfried is depicted), the image is of exceptional value, as it shows the massive extant donjon, albeit without a roof. Furthermore, between 1696 and 1763, the ruins provided post-demolition

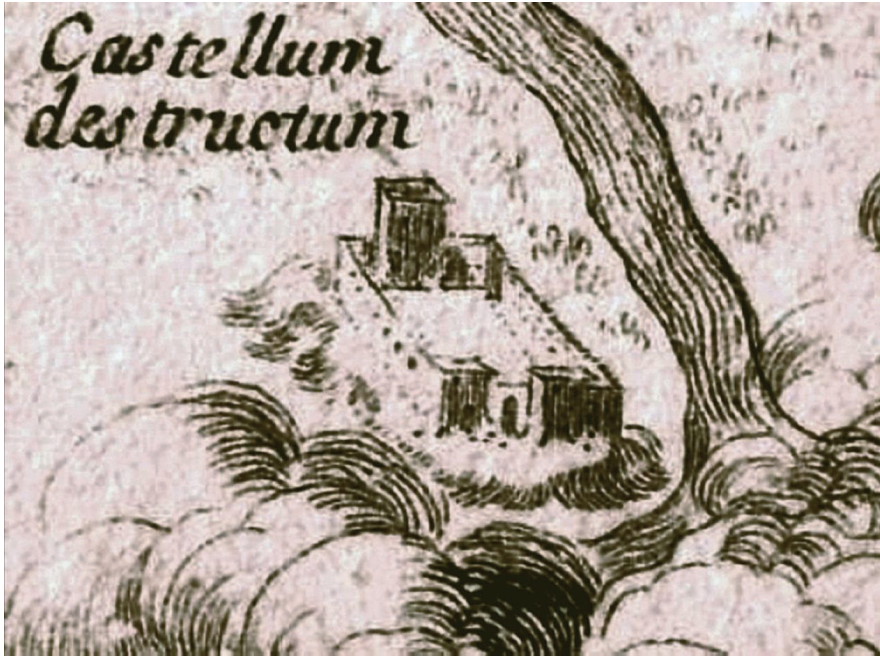


Fig. 2. Castle at Koło, Wielkopolskie voivodship. *Castellum destructum*, drawing showing the castle in 1655, published in a work by Samuel Pufenrorf (after Pufendorf 2013)

materials to the Bernardine monastery, but due to problems with extracting bricks from the walls, the works were discontinued (Pietrzak 2003, pp. 114–115). Lastly, in the 19th and early 20th century the castle was often depicted on engravings and photographs, but unfortunately these do not contribute to research on the residential tower (Baciński 2005).

2

The Castle at Koło was the subject of a long-term archaeological project (1977–1983) led by Łucja Pawlicka-Nowak of the Regional Museum in Konin. This included the discovery of the residential tower. The excavations covered the west half of the building's interior: both its south outer corners and the north-west area. Unfortunately, the considerable research effort was never widely disseminated, and the passage of time contributed to the loss of some of the documentation, which was of varying quality nonetheless (Fig. 3) (Pawlicka-Nowak 1980)¹. These shortcomings

¹ A collection of unpublished documentation listed – see Olszacki 2012, pp. 111–112, footnote 25.

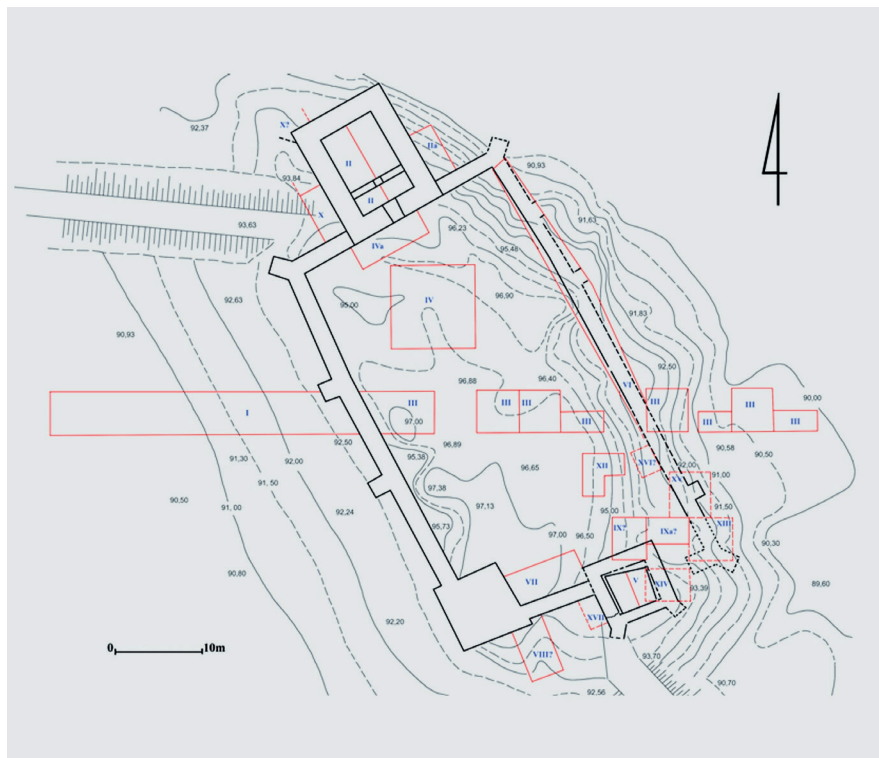


Fig. 3. Castle at Koło, Wielkopolskie voivodeship. Distribution of archaeological excavations during the research project conducted by the Regional Museum in Konin (1977–1983) (after Olszacki 2012)

were to some degree made up for by a short monograph by Jarosław Baciński, who, based on part of the documentation, collected some iconography and formulated his own conclusions for conservation (Baciński 2005). More extensive archival research, in the context of more recent interpretations, was presented in 2012 by one of the authors of this text in a paper cowritten with Piotr Lasek (Olszacki 2010; 2012; Olszacki, Lasek 2011).

In every case, based on scarce data and due to difficult field analysis, the tower was considered older than the castle, built either in the period of the short-lived but rich in foundations rule of the Přemyslid Dynasty, as suggested by the presence of sandstone blocks in its lower part (Tomasz Olszacki, Piotr Lasek); or in the times of Władysław the Elbow-high (Tadeusz Poklewski-Koziełł, Jarosław Baciński) or Casimir III the Great (Janusz Tomala, although in a later work he also supported its pre-Casimirian origin) (Poklewski-Koziełł 1992, p. 53; Baciński 2005, p. 57; Tomala 2011, p. 225; 2013, p. 102). Nevertheless, considering the scant sources and random information on the findings, these deliberations were of limited merit.

Embarking on the 2019 survey, the authors of this paper faced the challenge of verifying the earlier fieldwork, the extent of which was very wide and not fully documented. To record the preserved layers as best as possible, two main trenches were excavated (1 and 2/2019) on the east side of two chambers. These were not contiguous with the Regional Museum in Konin trenches on the opposite halves of the chambers but were slightly shifted to enable exploration. The new excavations were explored in stages, aiming to reveal not only the west profiles, but also the sections crosswise to their west edge.

The damage to the original stratigraphy was more extensive than expected due to landslides, whilst the necessity to use timbering made observation difficult. Despite this, the results of the excavations can be considered more than satisfactory. Apart from the abovementioned trenches, two more were excavated in the outer north corners of the donjon (3 and 4/2019). Moreover, work in the area that was dissected from the exposed original stratification context revealed the crown of all the tower walls to fully exhibit its plan. Subsequently, the 2020 rescue survey explored the area to the east of the tower where a strip foundation stabilising the supports would have been (Fig. 4).

The above-described survey sheds completely new light on the construction history of the castle at Kolo, as well as its chronology. The residential tower was built on a sandy dune on the Warta River, the top of which was located in what was to become the northern chamber. During the 'pre-castle' phase, intensive settlement took place on the dune. In the light of the discovered materials, it can be traced back to the first half of the 14th century. In 2019, its remains were found in the form of an object reminiscent of a stone-lined trough-shaped storage or waste pit (under a section of the NE corner of the south chamber). Also, a cultural layer was discovered, pushed under the foundation of the donjon's eastern load-bearing wall during a subsequent levelling of the terrain.

The residential tower was founded on a rectangular plan of 12.10 x 15.47 m around the outer edges (187.2 m²); it was larger than earlier literature had acknowledged. All the building's load-bearing walls were approximately 2.55-metre-thick on ground level (wall S: 2.50 m, walls N and E: 2.56 m, wall W: 2.60 m). The tower interior was divided by a 0.68-metre-thick partition wall (on ground level), which had been originally planned, but completed after the outline of the external walls was built. On the lowest level, the partition separated two spaces: a south one (space A) measuring 2.30 x 6.80 m, and a north one (space B) of 6.80 x 7.20 m. The foundations of the south and north load-bearing walls were situated at a similar level, and the foundation of the partition wall was slightly deeper. The construction of the foundations was quite complex and identical for all the walls with only slight differences in the height of the individual zones. With the exception of the inner faces of the east and west load-bearing walls within chamber A, the remaining structures began with a layer of 'flexible' foundations of erratic stones covered

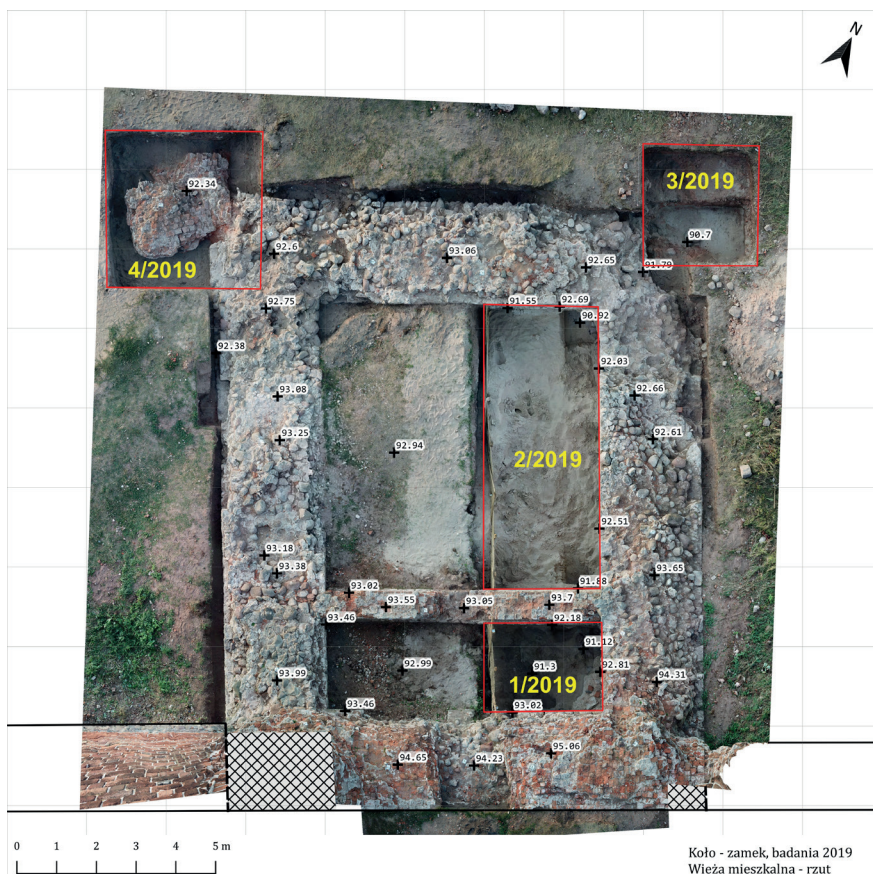


Fig. 4. Castle at Koło, Wielkopolskie voivodeship. Photogrammetric image of the tower plan with highlighted archaeological excavations of 2019 (development by P. Wroniecki, T. Olszacki, A. Róžański)

with layers of sand, arranged in a narrowly spaced trench. Higher up, in a widened trench, there were erratic stones enhanced with fragments of bricks.

The difficult conditions of construction on loose sands required the use of timbering in the next foundation layer. This made the laying of the wall face inconvenient and thus it was filled with haphazardly arranged erratic stones and random sandstone blocks. At the entire base of the timbering there was a compact construction layer. After this, part of the wall was erected, the timbering was removed, and the sandy embankment was levelled. There, another compact building layer was deposited. This time, it was connected to the construction of the higher part of the tower (Fig. 5).

Above the 'timbered' foundation, all the masonry was built using sandstone blocks arranged in regular layers, completed with sandstone chips creating a facing

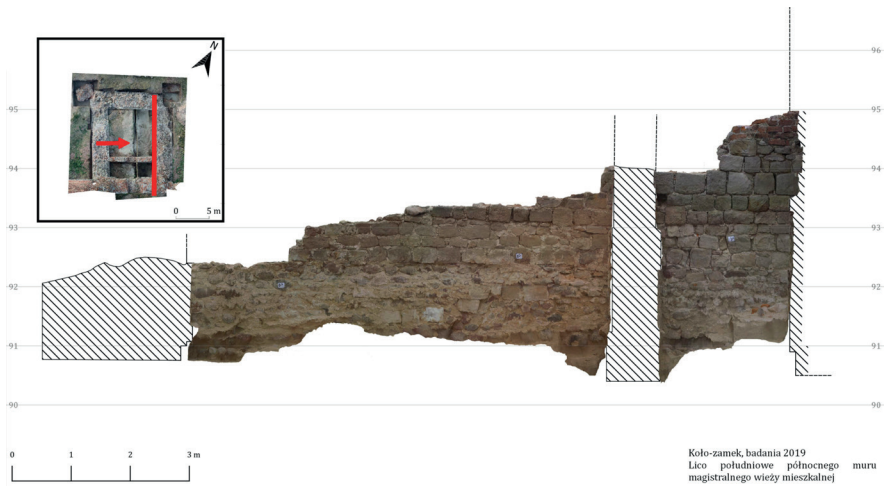


Fig. 5. Castle at Koło, Wielkopolskie voivodeship. Photogrammetric image of the inner side of the tower's eastern wall (development by P. Wroniecki)

for the brick and stone infill. This *opus emplectum* wall was higher within the load-bearing walls (up to about 2.05 m), and lower in the partition wall, where it reached 1.02 m. The level marked by the berm of the partition wall was also the reconstructed support level of the donjon's lowest floor. This featured fully bricked faces of the dividing wall and chiselled faces of the other walls up to a height of about 1.40 m from floor level. Higher up (and in the subsequent storeys) it was all the faces were probably made of brick. The last-mentioned height also likely determined the level of the entrance to chamber B from the side of the courtyard.

The described floor was the only and incompletely preserved one. It was a basement in relation to the interior of the castle, and the ground floor in relation to the surrounding area. This also determined the approximate level of the entrance to the donjon, which was probably not very high: about 1.50 m above the level of the courtyard (and may not have been the main entrance).

As shown by monitoring and the survey of 2020, there had been an extensive fire on the south side of the castle in the early stages of construction. This occurred during the sand-filling of the courtyard, when it was already surrounded by a low wall (to raise it to the usable level) and during the sand trimming of the exterior of the residential tower when it was relatively advanced but still unfinished. The wooden scaffolding and ceilings most likely caught fire and burned to the ground, which must have halted the development for a long time. When the project was resumed, and perhaps as a result of some disturbing changes in the meantime, the NW corner of the residential tower was reinforced with a previously unplanned low brick buttress measured on a plan of 2.70-metre-sided square.

The blocks used for the construction of the residential tower, which previously encouraged almost all researchers to suggest an early chronology of the building, are in fact, materials that bear numerous traces of early-medieval stonework (incisions, bush-hammering), the remains of mortar typical for the buildings of that time, as well as evidence of its removal resulting in the erosion of the face layer. All this, as well as the dimensions of the sandstone quarters, prove that the stones were obtained from the demolition of a building erected in the 12th or early 13th century and that the builders collected the material to use it in the lower part of the donjon. Thus, in the first place, one should consider the demolition of part of the Romanesque church of St. Andrew in Kościelec Kolski, which had always been the seat of the castle's parish due to its territorial proximity and administrative connections. It is likely that the western tower of this church was abandoned at that time, as the number of duplicates is considerable (Róžański 2010, pp. 111–160). Gothic courses of bricks of $x=87-97$, $y=119-125$ and $z=265-276$ were used consistently in all parts of the preserved brick wall.

The considerable thickness of the tower's load-bearing walls, as well as the known analogies, allow us to assume that the donjon at Koło could have been divided into five or even six brick storeys, and therefore its walls were about 20 m high. They were probably much higher than the crown of the castle walls preserved in the vicinity of the donjon (11 m above ground level). Moreover, judging by E. J. Dahlbergh's engraving (with all the reservations concerning its accuracy), it could have been higher than the walls by almost half. Furthermore, the absence of a vaulted ceiling in the uppermost surviving wall in chamber A indicates that, like the first usable level, the floors above it were covered by wooden flat ceilings. Moreover, the relatively small thickness of the partition wall suggests that in its masoned version, it may not have reached above the lowest storey.

The preservation of the medieval usable level where the floor was situated more or less on ground level, limited the research possibilities of a functional interpretation of the lower storey, although, apart from analogies, there are some indications that it was of a service/housekeeping nature. From the layers interpreted as the level deposited under the floor during its many years of cleaning, very large quantities of fish remains (i.e., scales and bones) were recovered in the area of chamber B. These, unlike the remains of mammals or birds, could have penetrated much more easily between the cracks in the boards. Earlier investigations in the western part of chamber A uncovered a well with quadrilateral lining, which makes it probable that the lowest usable level of the residential tower performed the function of a kitchen and storage area. Above it, there was a usable layer dated by the historical material to the 16th century, connected with the floor that was lower in relation to the medieval one and, in contrast, was laid directly on the ground. Above it, there was a concurrent levelling mound containing a large amount of floor brick rubble and, possibly, the building material of a heating device, which can be linked to

the raising of the usable level at the beginning of the modern era. Unfortunately, contemporary usable layers were not preserved.

The function of the remaining storeys is purely hypothetical, based on the purpose of the building (a stately royal residence) and certain analogies. The most noteworthy is the residential tower in Gołańcz from the third quarter of the 14th century. Its construction was commenced by Bishop Maciej of Włocławek from the powerful Pałuki family, and completed by his nephew, Judge Tomisław of Kalisz. Another important example is an older donjon in Siedlęcín in Silesia, erected between 1313 and 1315/1316 by Duke Henry I of Jawor (Olszacki, Róžański 2015; *Wieża księżęca* 2016). The two lower storeys at Koło probably fulfilled auxiliary or housekeeping functions, whilst the third one constituted a public level with a stately grand hall. The royal character of the tower and the absence of other residential buildings in the castle suggest that the private residential area was duplicated on two storeys. The sanitary fittings probably consisted of (as in the cited examples) latrine jutties, urinals and lavabos. From about the mid-15th century onwards, the donjon was definitely heated by masonry heaters.

Presumably, above all this, there was another storey for storage and defence purposes, covered perhaps with a hipped roof (in any case, the only iconographic source from the time of the building's existence does not show any gables). It is worth emphasising the 'gable' disposition of the donjon in Koło. This consists in the plan of the whole building with its shorter side in relation to the northern wall of the peripheral courtyard, and the treatment of this elevation as the front one with the main entrance opening. The solution differentiated the Castle at Koło from the two towers mentioned earlier. Still, it made it parallel to, for example, the two donjons of the Czech Karlštejn (the Great and St Mary's Towers) erected by Charles IV of Luxembourg: first as secular edifices, and after his coronation as emperor in 1357, transformed into sanctified symbols of imperial power (Chudárek 2006). We must not ignore the issue of the spread of the 'ideal monarch's' model and the imitations of his creations serving the construction of a propaganda system. At the same time though, we can suspect that the potentially different location of the building, whilst maintaining its axial position in the northern curtain, could push its eastern load-bearing wall too far out towards the riverbed (Fig. 6).

Moving on to the second subject, namely the chronology of the above presented architectural and stratigraphic facts, we should begin with discussing a fortunate find. This is a coin of Casimir the Great, which was found on a construction layer: a limestone screed deposited by the partition wall in chamber B. The coin is a relatively well-preserved silver half-grosz (*kwartnik*) of Kraków minted from 1365 or (1367) to 1370. After Casimir's III death it was quickly withdrawn from circulation and smelted for profit by Starost General of Greater Poland, Grzymalita Przeclaw of Gułtowy (Paszkievicz 2008, p. 43 ff.). In the context of chronology, the finding should be treated as a *terminus post quem* for the building process of the



Fig. 6. Castle at Koło, Wielkopolskie voivodeship. Reconstruction of the royal residential tower, based on existing research (development by P. Rajski)

residential tower, but also, based on the minting data, a very likely *terminus ante quem* for the analysed foundation.

Bearing in mind a mention in a document of 1330 by Piotr from Koło (probably of the Pomian Coat of Arms) and a thesis formulated on this basis by Krzysztof Witkowski stating that Koło must have been in private hands (Gołdyn, Grzanka, Witkowski 2014), it is very likely that the monarch took over the former village before 1362 together with the owners' manor. It is impossible to make any definite statements, but one might consider the remains of a 'pre-castle' settlement in the area of the dune on the Warta River as the assumed site of this residence. This is supported by the 'defensive' form of the terrain, the dating of the historic material (first half of the 14th century), and the rather eccentric location of the brick castle in relation to the town. The latter could have been influenced by the earlier function of the site.

The chronology of events would have been as follows: Casimir the Great acquires the village and founds the town of Koło in 1362; the construction of the castle commences and the work on the site of the residential tower quickly progresses following 1365 (or 1367); the monarch dies in autumn 1370, before or shortly after the unfinished castle is consumed by fire. This, in turn, explains the absence of Koło from the list of royal developments in the previously mentioned *Quomodo regebat regnum et populum...*

We can consider 1383 as a probable *terminus ante quem* for the completion of all the work on the donjon and most of the construction work on the castle fortifications. This is when the castle appeared in the Jan of Czarnków's *Chronicle*, in the context of a looting expedition by the first Starost of Koło, Krystyn of Koziegłowy. It could also correlate with the discovery (by Regional Museum in Konin) of a Teutonic coin in the donjon's well (the coin was minted by Vinrych von Kniprode, Grand Master of the Teutonic Order between 1351 and 1382). Krystyn's financial involvement in the construction work, as well as the ruler's respect for his strong rights to the castle, is also suggested by Władysław II Jagiełło's consistent and prolonged omission of Koło (in favour of the nearby Konin) during his countrywide tours. The only exception was his stay in 1392, followed by a three-decade-long absence.

The times of the castle's greatest splendour are poorly illustrated by artefacts found during the recent surveys. Fragmented ceramic material from the tower can be dated to the 15th century, as well as a denarius of Władysław Warneńczyk (trench 3/2019). In addition, a shilling of Jan von Tiefen (between 1489 and 1497) was found, and a second Teutonic coin was recovered from the well in the donjon during the earlier survey. It is also likely that an iron crossbow quarrel excavated from trench 2/2019 also dates to this time (or even to the 14th century).

In 2020, in another part of the castle, fragments of Gothic tiles were found, related most probably to the residential tower's heating devices from the times of Casimir IV Jagiellon. Undoubtedly, a fragment of a gothic tile from around the

mid-15th century can be regarded as the oldest one. Quite primitive in detail, it depicts a male figure with a shaved face, wearing a high, segmented cap (like a hat used to mockingly depict jesters, but also the so-called 'wild men'). The hat is tilted to the side and the figure is holding a deer by its hind leg. The tile, preserved in about one third of its original size, is covered with light-olive glazing. To understand the content of the representation requires comparative research, and for now it can be regarded as an allegorical or fantastic image.

Yet another fragment of a Gothic tile shows the head of a horned dragon with an open toothed mouth. The animal has a round eye and a segmented neck. The specimen is covered in a near honey-coloured glaze, with a more pronounced brown tinge. It is undoubtedly a representation of St George slaying a dragon, which was a popular theme in the world of chivalric imagery. The latter is rendered in an archaic style characteristic of, for example, 15th-century tiles known from Bohemia (Pavlík, Vitanovský 2004, pp. 213, 341–342).

It is possible that heraldic tiles covered with a honey-coloured glaze come from the same kiln as the latter piece specified above, including a specimen probably depicting a fragment of the Ostoja coat of arms (with a visible fragment of a crescent and a cross). Another one might depict the Leszczyc coat of arms. Yet another specimen showing the Godziemba coat of arms was obtained during the earlier surveys. A fragment of an unglazed tile with the image of a saint in a draped dress and coat is probably attributable to the Gothic period. Unfortunately, the head is not preserved. The figure is holding a book and probably has a pastoral behind his left hand, which suggest that he was a saintly bishop. Despite the fact that the Gothic tiles from Koło are few, they deserve special attention as there are not many interior decoration features in Polish castles that can be so reliably connected with royal residences of the Middle Ages.

3

The last part of this text will be devoted to the status of the donjon at Koło in the history of residential and defensive architecture. Although the tower was not completed during the lifetime of Casimir the Great, it was an immanent part of the Casimir foundations and should first be compared to other royal constructions of the 'great masonry' period.

To begin with, it is important to note that this type of building was unique among the constructions of horizontal interior disposition, and the towers we know, most of which were very poorly investigated, are related to specific monarchic foundations.

The first of these is the tower bearing the historical name of Kurza Noga (formerly erroneously referred to as Łokietkowa; translator's note: a reference to King Ladislaus the Short) in Kraków. The building constitutes a vertical accent

in Casimir the Great's secular development of Wawel. In construction terms, the tower which dominates over the former capital city was an annex added to the 13th-century palatial edifice (Szyszko-Bohusz 1932, pp. 26–28; Firlet, Pianowski 1999; recently Pajor 2020, pp. 286–287). The building, on a plan of 12.70 m by 13.0 m, was originally divided by flat wooden ceilings into three storeys. It was furnished with large Gothic rectangular window openings filled with elaborate stonework. Already at the time of Casimir, or (as Tomasz Ratajczak convincingly argues) during the reign of Queen Jadwiga of Poland, the building acquired central pillars supporting four-field 'umbrella' vaults (Ratajczak 2014; polemically Pajor 2020, pp. 237–238). The pillar in the lowest storey was massive and lacked finesse. The chamber was about 5.50 m high. A hexagonal pillar, with vaulting ribs blending into it, was set at a higher level. Here, there were two magnificent window openings with sedilia, a fireplace and a latrine jutty suspended from the east side on rafters. The whole interior served as an exclusive chamber. The third, public storey, relating to the demonstration of royal magnificence, was distinguished by the presence of a stunning twelve-sided column, onto which ribs resting on twelve wall brackets flowed down. The height of the hall reached about 9.50 m (Szyszko-Bohusz 1932, pp. 32–33; Fischinger 1989).

In all probability, the long-defunct construction in Łobzów near Kraków was a residence of a donjon type, whose centre and probably only brick structure was a two-space residential tower (Kieszkowski 1935, pp. 10–13, 21, 24–27; Rączka 1982; Lasek 2013, pp. 89–90). Although at the time of its construction it was called a *fortalicium* (as evidenced by an inscription on the foundation plaque), contrary to the opinion of Janusz Bogdanowski, it was not a building which displayed any significant defensive features (Bogdanowski 2001, p. 14). The Latin term should be associated with the vertical form of the building (this also is supported by the uncovered dimensions of its plan), which is how contemporary sources called the prestigious and defensive wooden towers in the fortified seats of the feudal elite. These were mostly found in Greater Poland and were described as *curia cum fortalicio* (a horizontal mansion with a neighbouring tower, usually situated on a mound) (Grygiel 2001; Olszacki, Różański 2015, p. 27 ff.). The lack of any confirmed Casimir III's visits in Łobzów proves the absence of a chancellery, which seems justified by the proximity of the capital city's Wawel and the fact that Łobzów was intended as a place of royal recreation. This might also be the reason behind the information about a garden founded on the initiative of Casimir III. The manor at Łobzów, situated outside the town, was built in 1367. The date is recorded on the foundation plaque (Walczak 2006, pp. 134–136, 350).

Another royal donjon of Casimir's provenance was built at the provincial castle in Wąwolnica. It was situated in the western Lublin region, on the culmination of Wzgórze Kościelne, in the former town meaningfully (and ephemerally) named, perhaps by the will of Casimir III will, Kunigisberg (Kutyłowska 2007,

pp. 341–343; Pisarek-Małyszek 2007, pp. 83–94, 125 ff.)². The building, measuring approximately 8.40 x 10.20 m, housed a 6.0 x 6.0 m vaulted locality in the lowest (cellar?) storey, and its 3-metre-thick eastern side protruded beyond from the line of the town wall. It was not planned (at least in the brick part) to be too high since its other walls were only 1.20 m wide. The tower in Wąwolnica was located within the town limits and incorporated into its defensive perimeter. Together with the two-storey St. Adalbert's chapel situated about 30 m to the south, it functionally formed a complex which may have been related to the administration centre of the domain, the royal station and jurisdiction (confirmed by castellan court sources existing since 1381) (Pisarek-Małyszek 2007, pp. 79–81).

Finally, apart from the chain of small tower houses of the so-called 'Jurajskie strażnice' (watchtowers) additive structures associated with the castles in Będzin and Wieliczka, as well as the tower in Ojców (which requires further research and is presumed to have had a residential function), the examples given above probably exhaust the subject of donjons founded by Casimir the Great. With the exception of Koło, there are no such foundations in the lowland regions of the Polish Kingdom (Lasek 2013, pp. 88–112).

The discussed buildings (as far as our limited knowledge allows us to judge) seem to be of important symbolic and functional value. Kurza Noga is a dominating feature of the parade area of Wawel: the centre of the Kingdom, a place associated with the opulence and splendour of majesty. The donjon on the 'Royal Mountain' or Kunigisberg/Wąwolnica is similar, albeit in a provincial dimension. Furthermore, the donjon at Łobzów, erected at more or less the same time as the tower at Koło, was probably characterised by comfort and splendour, in addition to being surrounded by a garden. Thus, it was part of a circle of similar projects built by European monarchs as places for royal recreation away from their capitals, which in the Trecento era belonged to the sphere of *curiositas* demonstrating the ruler's magnificence and wealth (Olszacki 2010b).

The practice of erecting great towers representing, as it were, an ideogram of monarchical majesty was common in Latin Europe from around the second quarter of the 14th century to the beginning of the 15th century, wherever political transformations favoured it. In the city of Avignon, Provence, the Tower of Angels (*tour des Agnes/du Pape*) was erected above the new papal palace complex in the first half of the century. The donjon, with a side of 18 m and about 50 m tall, housed

² This would correspond to the 14th-century Central European manner of creating monarchic castles and towns through a clear reference of their names to the ruler. This was particularly patent in the numerous activities of Charles IV of Luxembourg. In the politics of Casimir the Great it was demonstrated by, e.g. name of the Castle of Ojców (*castrum oczec*), as a reference to his father King Władysław the Elbow-high; the location of the town of Kazimierz near Kraków (1335); the location of Bydgoszcz – Kunigisburg (1346) (Pajor 2020, pp. 254, 265 ff.). An analysis of the oldest documents and city seals is presented by Katarzyna Pisarek-Małyszek (2007, pp. 41–62).

the residence of the earthly head of the Church (Vingtain 1998, pp. 101–123). In the mid-14th century, Charles IV of Luxembourg, the greatest monarch of Central Europe, erected the aforementioned doublet great towers of Karlštejn, which became perhaps the most eloquent architectural image of the divine origin of imperial power. Divided into six storeys, the more massive and higher Great Tower was built on a rectangular plan measuring 16.50 x 25 m (Durdík 2002, pp. 41–46; Chudárek 2006). Slightly later, in the 1360s, Charles V de Valois (known as the Wise) finalised and extended the structure commenced by John the Good in Vincennes, at the time a town near Paris, by erecting a large donjon, with a side of about 16 m and 52 m tall, framed by cylindrical towers. Surrounding it, beyond the outline of the inner fortifications and in the line of the quadrangle of the outer perimeter wall, stood nine lower residential towers intended for the royal vassals. The ‘political cosmos’ of the Kingdom of France was eloquently illustrated using the same architectural language (Mesqui 1997, pp. 407–411). In Edinburgh, the Tower of David became the symbol of the revived Kingdom of Scotland. The construction of the monumental donjon measuring 15.8 x 17.1 m in plan and some 30 m in height, was initiated by David II of Scotland in the late 1360s and completed by Robert II, the first of the Stewarts (Tabraham 2005, pp. 47, 56). The palace of the Grand Masters of the Teutonic Order in the capital of their state, Malbork, probably completed in the early 1490s, became a particular emanation of the *topos* of monarchical grand towers. Jutting out from the complex of buildings of the middle castle and dominating it, the palace exemplifies a remarkable architectural illusion, with a window-lit, palm-topped Summer Refectory hall in the upper storey (Jarzewicz 2006, pp. 163–174; Pospieszny 2018, pp. 103–159).

It is difficult to say what functions the last of the crowned Piasts had in mind for the castle at Koło, since he did not live to see the completed development. Nonetheless, the dimensions of the local donjon, probably the largest of all of this type of his foundations (larger than Kurza Noga at Wawel), suggest an important residential function with strong symbolic features: an architectural *signum* of the king’s domination rising at the gates of the not always faithful Wielkopolska. It resulted from the tradition of independence, strong in the region, which, after the rebirth of the Kingdom of Poland under the reign of Casimir the Great’s father, Władysław the Short, had to give way to the leading role of Lesser Poland and its elites. Faced with the loss of political influence, the magnates of Greater Poland and the multitudes of knights supporting them found no understanding for the increase in fiscalism associated with the establishment of a strong central power. The rebellion of Greater Poland’s most powerful lord, Voivod Maciej Borkowic, who was captured and sentenced to death by starvation, and the transfer of district administration after several years into the hands of Wierzbęta of Palowice, the Silesian Starost General, who had no qualms about implementing the King’s programme of power, were a telling testimony to this (Łojko 1977, pp. 29–57; Kurtyka 2001). The

message was reinforced by the incorporation of the residential tower into the defence perimeter (they were erected simultaneously). This was surrounded by buttresses which enclosed a regular quadrangle covering an area of about 1300 square metres, with a bergfried in the south-west corner and a gate annex within the south curtain. This plan, which corresponds to the type of lowland castellum founded by King Casimir (with close analogies to castles in Inowłódz, Konin, Łęczycza, Ostrzeszów, Przedcze, Wielen and Złotoria), was, like other European castles of the castellum type, inextricably linked with the construction of a strong territorial authority (Olszacki 2012, pp. 139–149; 2013, pp. 118, 129–136)³.

The motif of superiority in terms of height was very attractive for the Polish monarchs. It turned into a permanent feature of the relations between the ruler and the nobility, becoming apparent in the era of emerging parliamentarism.

At first, the assemblies of noblemen and knights convened by Jagiełło, and then the provincial sejmiks of Greater Poland held in the presence of Casimir Jagiellon, probably took place in the immediate vicinity of the castle, in the shadow of its mighty royal tower. Some episodes may also have taken place inside, in the great hall.

In the next Jagiellonian generation, Sigismund the Old, having designated the centrally located Piotrków Trybunalski as the centre of national political debate, erected on its eastern outskirts a residential brick tower on a square plan of a 20 x 20 m: an impressive palais-cum-donjon with brickwork by master Benedict called Sandomierzanin (Ratajczak 2011, pp. 35–80). On the highest usable level, there was a stately hall, most likely used as a place of the inaugural meeting of the assembling states (Lileyko 2003, p. 36). The demonstrative nature of the architecture is already well-established in academic literature (Jakimowicz 1972, pp. 33–38; Ratajczak 2011, pp. 57–58), but we should remember that both the form of the tower (as recently pointed out by Piotr Lasek (2013, pp. 186–191) and the symbolic context were not the product of modern ideological transformations, but a simple continuation of medieval tradition.

Ultimately, a hypothetical, but highly probable sequence of symbolic and formal emanations of the discussed phenomenon would open with Kurza Noga tower at Wawel (from the mid-14th century), followed by the donjon in Koło, whose construction started in the second half of the 1360s, and which fully functioned throughout the 15th century. This might have also included the less impressive local creations, for example, the earlier-mentioned Wąwolnica; the gate tower of the Łęczycza castle, which accommodated a royal residence; or the recently identified early Jagiellonian donjon in Szydłowo. Finally, the sequence would close with the

³ In the central European context, this phenomenon is discussed, among others – see Durdík 1994; Albrecht 1995; Kajzer 2000; Boguszewicz 2010. With regard to the building projects of Casimir the Great – see Olszacki 2012; 2013.



Fig. 7. Castle at Koło, Wielkopolskie voivodeship. View from the north side of the ruins of Casimir the Great's castle after completing the wall fragments (photo by A. Róžański)

parliamentary *turris in modum arcis* in Piotrków built between 1512 and 1519 (cf. Fischinger 1989; Kajzer, Olszacki 2012, pp. 202–205; Olszacki 2012, p. 157)⁴.

* * *

The conservation project mentioned at the beginning of this text concluded with the reconstruction of the south-east corner of the tower and a defence wall featuring a superstructure and a triangular flowing formation of the adjacent fragments of the donjon walls. Simultaneously, the previously exposed structures were preserved and the courses of sandstone faces and Gothic bricks were restored with due care. Subsequently, the donjon has now gone from being completely invisible to perhaps not very strongly articulated but still, the castle's conspicuous feature. The conducted work and research have at least slightly reduced the void left by the gap in the northern wall, which was equally symbolic as the tower itself (Fig. 7).

⁴ An overview of the problem of residential towers in the Middle Ages in Poland (including those built on the royal initiative) can be found in English in the following papers – see Lasek 2013, summary, pp. 284–289; Lasek *et al.* 2019.

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