

Architectus

2021 4(68)

DOI: 10.37190/arc210412

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Bastion fortifications in Wiązów and Żórawina as an example of less known Silesian implementations by Hans Schneider von Lindau

Introduction

Hans Schneider von Lindau was a fortification builder in the 16th and 17th centuries. Today, he is noted for his works in large cities such as Gdańsk, Wrocław, Brzeg, and Nysa. However, he also conducted works in smaller centers. The aim of the article is to present the figure of this fortification builder and his bastion works in two smaller towns, namely Wiązów and Żórawina in Lower Silesia. The author also intends to answer the question whether they were modern defensive layouts in line with the latest fortification trends and bastions built by him in larger cities. This is especially important in the case of the fortifications in Żórawina, which in source literature to date have been linked with the construction activities of Valentin von Säbisch the younger (1577–1657) or Albrecht von Säbisch (1610–1688).

The figure of Hans Schneider von Lindau was not unknown to researchers of defensive architecture, but most often they focused on typological assigning of a specific work to him and determining the chronology of its construction. A study by Alwin Schultz on the city architects of Wrocław is important for the topic under consideration. This author in his work described the life and professional activities of, inter alia, Hans Schneider von Lindau [1, pp. 115–137]. Also Maria Ludwika Lewicka-Cempa in her text outlined his professional path and his career as a fortification builder [2, pp. 29–53].

When it comes to the fortifications of Wiązów, Kurt Engelbert [3, pp. 72–85] and Kurt Bimler [4, pp. 117–123]

described the development and appearance of the town's fortifications and on the basis of archival sources they also found that the author of the early modern bastion fortifications of the town was Hans Schneider von Lindau.

The first scientist to undertake research on Żórawina was Alfred Gellhorn – he reconstructed the island's buildings, marking the church, the manor house and the preserved bastion fortifications [5, pp. 39, 73, Fig. 26]. Bimler defined the chronology of the fortifications for the 17th century, suggesting that the reason for their erection was a desire to be secured during the Thirty Years' War [6, pp. 61-63]. Jerzy Rozpędowski recognized Valentin von Säbisch the younger as the author of the fortifications in Żórawina. Moreover, he assigned them to the Dutch bastion fortification school [7, pp. 43-46], [8, pp. 62, 95]. According to Józef Pilch, the author of the fortifications was Albrecht von Säbisch and the time of erecting the fortifications fell in the 1st half of the 17th century [9, pp. 478, 479]. On the basis of the research carried out, Lewicka-Cempa recognized Hans Schneider von Lindau as the author of the bastion fortifications in Zórawina and claimed that the renovation of the church, the construction of the manor, as well as the construction of the fortifications were carried out at the same time as part of the transformation of the building into a fortified manor with bastion fortifications [2, p. 38]. In the source material, Piotr Oszczanowski found a poem by Balthasar Exner from 1606, which described the then existing earth fortifications along with a church, a manor house and an arsenal [10, pp. 79–87].

Hans Schneider von Lindau

Hans Schneider von Lindau, also known as Jan Schneider of Lindau or Hans of Lindau, was born to a middle-

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class family in the free town of Lindau situated on Lake Constance in southern Bavaria on October 9, 1544 [11, p. 33]. His first documented work was the construction of the English House in Gdańsk in the years 1568–1570, where, as a construction manager, he collaborated with Hans Kramer (died 1577), the then building master of the Gdańsk city council. Their close professional relationships were sealed with the marriage of Schneider and Kramer's daughter [12, pp. 534, 535].

Hans Schneider von Lindau worked both in Pomerania and in Silesia. In his Pomeranian period of activity, in the years 1570–1580, he worked as a master builder of the town council in Elblag. In 1580, he was employed as a city architect in Gdańsk and reconstructed the city fortifications after the damage caused during the siege of the city by Stefan Batory. It was him who in 1582 designed new fortifications of Wisłoujście Fortress in the type of the carré fort (four-sided) after the war of 1577. The fortifications were built on a rectangular plan because the previously existing fortifications (a lighthouse with defensive objects) were included in the defensive perimeter. The curtain acquired an angular form in this section. Four bastions were built on the corners of the fort. The southern bastion was the first to be constructed (1586), then in 1587 the eastern bastion under which warehouses were built under the curtain of the embankment. The northern and western bastions received more massive faces. In the northern bastion, cross vaults on pillars were built inside it, which was more advantageous for its fortress and storage purposes. Originally, the entrance opening to the fort (situated on the land side) was to be protected by the bastion's orillon. Changes in the design, however, deprived it of this protection, but it was still within the range of its flanking batteries [2, pp. 39–41].

On March 18, 1584, the Wrocław City Council asked Hans Schneider von Lindau, who was in the service of Gdańsk, to take the position of the city architect. Being bound by the contract, he could not agree to this proposal, nevertheless, he accepted the commission to design specific defense objects.

The first work in Wrocław, whose final stages of construction might have been consulted with Hans Schneider von Lindau, was the Imperial Bastion (next to the imperial castle), which was built in the years 1577–1584 [13, pp. 211, 212]. Ceglarski Roundel Bastion, which was situated within the fortifications of Wrocław, was demolished on February 12, 1585, and in its place Ceglarski Bastion designed by Hans Schneider von Lindau was built. On May 9, 1586, the cornerstone for the construction of Ceglarski Bastion was laid. Already in 1587, the bastion was completed. It was a corner earthwork layout with a stone pre-rampart and two-level casemates. Behind the orillons of the bastion there were gun emplacements [2, p. 33, 34].

The confirmed presence of Hans Schneider von Lindau in Wrocław dates back to 1587, when General Starost of Silesia, bishop Andreas von Jerin in his letter of July 22, 1587, asked Wrocław councilor Simon von Hanniwaldt to contact him as regards the possibility of temporary employment of the fortification builder who erected new The River Oder bastion fortifications on [14, p. 125].

The north-eastern section of the Wrocław River Odra bank was devoid of fortifications. Hans Schneider von Lindau stayed in Gdańsk and supervised the fortification works there, whereas the implementation of his projects in Wrocław was undertaken by Friedrich Gross who was the city architect. In 1588, the buildings near the Holy Spirit Church were pulled down and in this place Sand Bastion was built, in the old Italian type with a high buttress and an earth parapet of the embankment. Behind the orillons of the bastion, casemated three-level flanking gun emplacement were located. The earthen parapet of Sand Bastion was connected with the parapet of Ceglarski Bastion [14, p. 126]. Also in 1588, the works on Bernardyński Bastion began and they were completed in 1590, to the south of Ceglarski Bastion. The bastion had a high buttress with casemated flanks protected by rectangular orillons [13, p. 211].

On March 27, 1591, Schneider von Lindau signed a contract with the Wrocław City Council. It offered him a salary higher than the one he received in Gdańsk and the council did not oppose his scientific trips around Europe [2, p. 35], [12, p. 541]. The high salary and the urgent need to extend the Wrocław city fortifications prompted the city council to limit the activities of Hans Schneider von Lindau to investments made for the city only. Still in 1590, residential buildings were demolished for the construction of a new rampart gate, i.e., Piaskowa. In 1592, the works on its construction started and in 1593 the works on the casemate part were completed. In 1594 a wooden bridge (the so-called Sand Bridge) was built over the river, whereas in 1595 a stone façade was embedded in the outer face of the gate.

Also in 1593, the works on Sakwowy Bastion were started, an earthen and masonry work with highly developed and casemated flank gun emplacements which were protected by long orillons. This bastion was a twin structure of Ceglarski Bastion. The relics of two bastions, i.e., Ceglarski and Sakwowy have survived to the present day. In the place of Job's Roundel Bastion, the construction of a semi-bastion started in 1594. The constructing and profiling of the embankments were finished at Piaskowy Bastion, where even The Holy Spirit Church was demolished because it prevented the work from being carried out. The ramparts of Sakwowy Bastion were completed in 1598 and the rampart Sakwowa gate was also built, which was secured in terms of artillery by the right orillon of the bastion. The northern and eastern sections of the town's defensive perimeter were finally secured in around 1600 [2, p. 36], [14, pp. 126, 127].

Hans Schneider von Lindau prolonged his contracts with the city council of Wrocław. Initially, he focused on the extension of Wrocław's fortifications, however, other nobles in Silesia were also interested in his services. As early as in 1584, General Starost of Silesia, bishop Andreas von Jerin addressed him, but then the fortification builder had to refuse him. He remained in the service of Gdańsk, whereas for Wrocław he consulted the projects of fortifications only. When he signed the contract with Wrocław, he initially had to focus on urban projects. However, as the construction of the Wrocław fortifications pro-

gressed and the city's security level increased, he was able to start working for other principals.

In 1587, the owner of Żórawina, Simon von Hanniwaldt, on the recommendation of bishop Andreas von Jerin, contacted Hans Schneider von Lindau. His task was to obtain the services of a fortification builder for the bishop during building the fortification of his two cities, i.e. Nysa and Otmuchów. Finally, in 1594, he undertook the modernization of the fortifications of two bishop's towns, i.e., Nysa and Wiązów [3, p. 81], [4, p. 120]. The death of bishop Andreas von Jerin in 1596 interrupted the works at the bastions in Nysa. At the same time, his death resulted in the employment of Hans Schneider von Lindau by Simon von Hanniwaldt during the reconstruction of the Żórawina complex in the years 1597–1602 [2, p. 38], [10, pp. 74–76].

In Brzeg, where he stayed twice in the years 1596 and 1598 at the invitation of Joachim Fryderyk, Duke of Legnica and Brzeg (29/09/1550–25/09/1602), Hans Schneider von Lindau modernized the Castle Bastion on the River Oder. He gave it a new plan – as a result of the remodeling, the object gained a form similar to Ceglarski Bastion in Wrocław [14, pp. 131, 132].

In Oleśnica, in the years 1602–1603, he supervised the construction of a rampart gate in the form of a barbican and the earthen fortifications of the castle from the foreground, where two bastions and a curtain were built [15, p. 69].

In 1605, he visited the castle in Chrzelice twice and designed bastion fortifications. They were not implemented, perhaps because Hans Schneider von Lindau died on November 22, 1606 in Wrocław and their execution would have been deprived of his professional supervision [16, p. 212].

Wiązów – example of a carré type fort

Wiązów is situated halfway between (about 40 km from both centers) Nysa and Wrocław, by the River Oława and smaller watercourses – Babica, Łękawka and Młynówka. From the Middle Ages it was the bishop's property, being a safe stopping place on the communication route between the bishop's Nysa and Wrocław, the capital of the region [17, p. 623]. Bimler defined the original layouts protecting Wiązów with the term "maceria" (which means ruins) – they had the form of a fence additionally reinforced with a moat. In 1580, their condition was unsatisfactory and they did not fulfill their defensive functions. In 1590, Bishop Andreas von Jerin (1541–1596) initiated their general reconstruction. He entrusted the work of reconstruction to Schneider von Lindau. On April 25, 1594, the bishop received the message that the outline of the fortifications had been marked out and the work was done by Melchior Festenberger who worked according to the guidelines of Schneider von Lindau. The early modern earthen curtains partially repeated the medieval course of the fortifications (elliptical), whereas four bastions were located in the corners and were open from the city side. The ramparts and bastions were equipped with parapets.

In the place of the old moat and the medieval embankment, similar to the shape of an ellipse, a layout with four bastions at the corners was established on a rectangular plan (Fig. 1). Longer curtains of the embankment were about 300 m long, whereas the shorter ones were about 150 m. The whole complex was additionally surrounded by a wet moat. New city gates were built at the city exits leading to Wrocław, Brzeg, and Nysa. Wooden platforms led to them and the gates themselves were equipped with bascule bridges. The first to be completed was Nyska Gate which was presented in the drawing by Friedrich Bernhard Werner. It was made of stone, embedded in the embankment, and covered with red roof tiles. Already Bimler noticed that it was enlarged (possibly significantly over-scaled) by the author of the drawing and protruded significantly beyond the parapet line. The drawing does not show the remaining towers, hence his assumption that the two remaining gates had a less extensive architectural program, perhaps only the gate passage itself, which was covered with a ceiling or a vault with a room for guards on the gates [3, p. 81], [4, pp. 119–121].

In Wiązów, in the areas by the River Młynówka and Spacerowa Street (south-western part of the town), there



Fig. 1. Fortifications in Wiązów (German: Wansen) in the map section from 1750 (source: BUWr, Oddział Zbiorów Kartograficznych, 59-IV.B)

Il. 1. Fortyfikacje Wiązowa (niem. Wansen) na wycinku mapy z 1750 r. (źródło: BUWr, Oddział Zbiorów Kartograficznych, 59-IV.B)



Fig. 2. Wiązów, reconstruction of the preserved bastion with curtains (elaborated by R. Śledzik-Kamiński)

II. 2. Wiązów, rekonstrukcja zachowanego bastionu z kurtynami (oprac. R. Śledzik-Kamiński)

are relics of earthen town fortifications, i.e., a bastion with curtains and the remains of a moat. The preserved embankment curtains in a trapezoidal cross-section, 9–10 m wide at the base, were about 84 m long (by Młynówka) and 35 m (in Spacerowa Street). The height in relation to the ground level was about 1 to 1.5 m and about 2.5 m, counting from the preserved relics of the moat. The preserved bastion's left face was about 44 m long and the right face was about 26 m long. The left flank which connected the curtain with the face was about 8 m long, whereas the right flank was about 18 m long (Fig. 2).

Żórawina – an example of a fortified residential complex with bastion fortifications

Żórawina is situated about 15 km from Wrocław on Wrocław Plain in the confluence of Żórawka and Żalina. The village has a medieval origin¹ and in the early modern period it was owned by the von Prockendorf family. The death of Matthias von Prockendorf in 1579 allowed the Bishop of Wrocław to take over the town [10, pp. 32, 33].

Bishop Martin von Gerstmann (1527–1585) handed over Żórawina to Simon Hanniwaldt von Eckersdorff (1529–1599) in 1584. During the reign of Bishop Kaspar von Logau (1524–1574), Simon von Hanniwaldt worked for the Silesian Chamber as its secretary and later as a chancellor. For his service to the church, he was awarded a lifetime award to the village of Czernica near Wrocław (in 1572). The death of Bishop Kasper von Logau (in 1574) did not interrupt his career in the church administration. Martin von Gerstmann, who was elected bishop in 1574, entrusted him with the office of chancellor. In 1575 Simon Hanniwaldt von Eckersdorff received another church fief – Pilczyce. From 1576, he

was also an advisor to princes as well as states of Lower and Upper Silesia. Andreas von Jerin, a new bishop of Wrocław from 1586, also entrusted him with the office of counselor. On the bishop's recommendation who wanted to modernize the fortifications of Nysa and Otmuchów (in 1587), Simon von Hanniwaldt got familiar with the new Wrocław fortifications and with their author Hans Schneider von Lindau [10, pp. 56-58]. Already Simon von Hanniwaldt saw Żórawina as the center of the family estates, but it was his successor Adam von Hanniwaldt (1567–1621) who took decisive steps to achieve this goal. From 1591, he was an advisor to bishop Andreas von Jerin and from 1597, a counselor to Duke of Oleśnica and Ziębice, Charles II of Podbieradowicz (15/04/1545-28/01/1617). He also held an elder land office and a lay judge of the vassal court in Weichbild and Wrocław Principality. He was also a diplomat for the services of Maximilian II Habsburg² (31.01.1527–12.101576) and Maciej Habsburg³ (24.02.1557–20.03.1619). He also carried out diplomatic missions for Emperor Rudolf II Habsburg (18/07/1552-20/01/1612) who made him an advisor to the Silesian Chamber. On September 22, 1608, he obtained a patent from Rudolf II in Prague, which changed the existing church fief of Żórawina into a free castle fief and the village received town privileges [5, pp. 64, 65].

The first investments which were connected with the change in the status of the village were made in the years 1600–1602, when the renovation of the church began. The works on furnishing the temple were carried out until 1604. It was also then that the fortifications surrounding

A history of Zórawina, ownership changes in the village, as well as the architectural layout of the Holy Trinity Church were described in detail in the monograph [10].

² King of Bohemia from September 20, 1562 to October 12, 1576, King of Germany from November 28, 1562 to October 12, 1576, King of Hungary and Croatia from September 8, 1563 to October 12, 1576, Holy Roman Emperor from June 13, 1564 to October 12, 1576, Archduke of Austria from July 25, 1564 to October 12, 1576.

³ King of Hungary and Croatia from 1608 to March 20, 1619, Archduke of Austria from 1608 to March 20, 1619, King of Bohemia from 1611 to March 20, 1619, Holy Roman Emperor from June 13, 1612 to March 20, 1619.

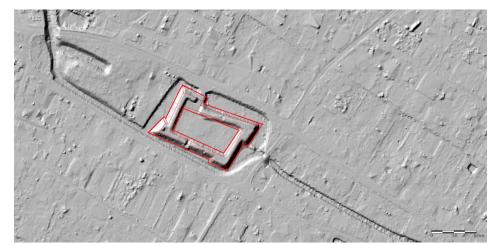


Fig. 3. Żórawina, reconstruction of bastion fortifications (elaborated by R. Śledzik-Kamiński)

II. 3. Żórawina, rekonstrukcja fortyfikacji bastionowych (oprac. R. Śledzik-Kamiński)

this complex were extended in the years 1597–1602 [2, p. 38]. Nowadays in Żórawina, earth fortifications in the form of embankments with three semi-bastions (the fourth one was pulled down in the 19th century) and a moat have been preserved around the Holy Trinity Church which was rebuilt into a mannerist one (Fig. 3).

The first researcher to recognize internal buildings within the embankments was Gellhorn. He made an attempt at reconstructing the island's development, where, apart from the church, he marked the relics of the manor and the preserved fortifications [5, pp. 39, 73, Fig. 26].

Bimler defined the initial chronology of the preserved fortifications for the 17th century, which suggests that the reason for their formation was the desire to be secured during the Thirty Years' War that was going on at that time [6, p. 62]. Rozpędowski described the layout in Żórawina as a structure with a regular rectangular plan which was surrounded by a trapezoidal earth embankment and reinforced with bastions in the corners as well as surrounded by a deep watered moat [7, pp. 44-46]. The ramp, which was located at the southern curtain, next to the brick rampart gate with a drawbridge, led to the embankment. The corner bastions were given the form of semi-bastions (they had one bastion face and one bastion flank which connected the flank with the curtain, whereas the line of the bastion's head was also the curtain's wing). On the south-eastern semi-bastion, relics of the parapet have been preserved, which suggests that it existed along the entire length of the defensive perimeter.

Under the earthen embankments, there are relics of the southern gate with a clearance of 2.8 × 2.5 m, limited by counterfort and buttresses, which might have been covered with a ceiling or vault (Fig. 4). A wooden bridge, partly a drawbridge, led to it.

The length of the curtains was 37 and 86 m, the face of the bastion was 30 m long, the flank of the bastion was 4 m, the width of the curtain at the flank (at the narrowest point) was 6 m, the angle of the bastion was 60°, respectively. The height of the embankments was 1.7 m (from the ground level) and 5.5 m from the bottom of the moat [8, p. 95].

As already mentioned, by noticing analogical fortification designs in Żmigród and Uraz, where the use of semibastions was also planned, Rozpędowski considered Valentin von Säbisch the younger to be the author of the Żórawina fortifications in the Dutch type. At the same time, he criticized the findings of Gellhorn who had defined the origin of the manor house on the island, demolished in 1880, at the turn of the 17th century, in this way leaving the findings and more detailed determination of the chronology to future researchers [7, pp. 43–46], [8, p. 62]. The authorship of Valentin von Säbisch the younger was accepted by most specialists as certain, or almost certain, and the date of their construction was also established for year 1630 [18, p. 59], [19, p. 1110].

Józef Pilch recognized the son of Valentin Albrecht von Säbisch as the author of the fortifications, specifying the



Fig. 4. Manor house in Żórawina. Southern fortress gate. Relics of the building and the outer bank of the moat (photo by Z. Nowakowski, 1981, source: Dolnośląska Biblioteka Cyfrowa, DUN1/15999)

II. 4. Dwór w Żórawinie. Południowa brama forteczna. Relikty budynku i zewnętrznego brzegu fosy (fot. Z. Nowakowski, 1981, źródło: Dolnośląska Biblioteka Cyfrowa, DUN1/15999) time of formation of the fortifications, i.e., the 1st half of the 17th century [9, pp. 478, 479].

Oszczanowski in his monograph on The Holy Trinity Church cited two verse descriptions of the temple and its immediate surroundings. In the first, from 1606, the author of which was Balthasar Exner, we find the following verses [translated from the Polish translation]: [...] that the throne of the temple would not be robbed, / And either [not to be robbed] the Heroines of the temple, / Wonderful images of heroines, [Adam von Hanniwaldt] surrounded the buildings with a rampart. / The embankment was filled with ditches, and the ditches were filled with water. / From the face you can see the new bulwark [arsenal] armed with the hand of Mars. / Thanks to this, being free of any enemy, you can attend to sacred things. / Who, however, can entirely count the weapons of that Mars? / Walker or rider, go on foot, / You have bullets against enemy missiles at hand [...] [10, p. 75]. In the second one, from 1610, Georg Reutter included his description of the island's buildings with earth embankments surrounding the newly remodeled church as well as a manor house known as a castle and an arsenal [10, p. 75].

Thanks to these two poems, it was possible to clarify the chronology and spatial development of the island, where already in the 1st decade of the 17th century, apart from the renovated church, there were earth fortifications with a moat, a manor house (called a castle) and an arsenal.

Both Lewicka-Cempa and Oszczanowski, on the basis of their research, recognized Hans Schneider von Lindau as the author of the bastion fortifications in Żórawina. Not only was he responsible for the design of the mannerist remodeling of the church, but also for putting up the bastion fortifications that surrounded it [2, p. 38], [10, pp. 79–87].

At the time when the fortifications in Zórawina were built, Hans Schneider von Lindau was an active fortification builder in Silesia. He must have known Simon and Adam von Hanniwaldt personally because of the clerical functions they performed. Bimler claimed that due to the high remuneration which the city decided to pay him, his services were reserved only for Wrocław [14, pp. 126, 127]. While this could have been the case at the beginning of his work in Silesia, at the end of the 16th century most of the Wrocław fortifications had already been designed and their construction was underway. Anyway, the possibility of using the services of the Wrocław fortification builder by General Starost of Silesia – Bishop Andreas von Jerin - was by all means beneficial to the interests of Wrocław. A line of communication opened up between the city and the most important royal official in Silesia. The possibility of using Schneider's services by members of the von Hanniwaldt family, who occupied high positions in the clerical hierarchy, was no longer unusual if we take into account their interrelationships and contacts.

Summary

Reconstructing the list of countries and places where Hans Schneider von Lindau gained his professional experience is difficult today. However, the measures of length which were used by him when designing fortifications give some clues as to the places of his studies. The Viennese foot⁴, which he used, was most likely an adjustment to the measures used in Silesia, which were known and applied by his local co-workers. However, the cubit which he also used and in metric values equaled 53 cm, was characteristic of the city of Reggio in northern Italy [11, p. 96]. It can therefore be assumed that he was educated in Reggio or its immediate vicinity, or possibly in Hungary, where the fortifications of the New-Italian school were constructed by northern Italian fortification builders [11, p. 120].

In the fortifications he erected, he used three forms of bastions. Bernardyński Bastion from Wrocław and the bastion which was situated to the south of Mikołajska Gate in Nysa are bastions of the New Italian type with old Italian elements. They had rectangular orillons and the parapet of the upper embankment which surrounded the faces. It was also possible to establish additional fire positions behind the orillons.

Ceglarski Bastion and Sakwowy Bastion in Wrocław were earthen layouts with a stone parapet of the pre-rampart. Additionally, in order to increase the firepower, they might have been equipped with a cavalier. They were modeled on the assumptions of the treaty, the author of which was Daniel Specklin (Speckle).

The third type of bastion was connected with Wisłoujście Fortress and the Nysa fortifications, a bastion with stone and brick face and with earthen parapet, with long lowered orillons which were used by Hans Schneider von Lindau for smaller architectural objects. Its origins should be sought in Szatmár Fortress in Transylvania [11, p. 68].

On the basis of the material from which the fortifications in Wiązów and Żórawina were built – soil, turf, fascine – they could be classified as the Dutch type. However, knowing their author, the period in which he lived and worked, as well as his professional experience and the time of their construction, it would be necessary to change their typological affiliation to the mixed Old and New Italian type. In Hungary, already from the beginning of the 16th century, there were many Italian engineers and fortification builders who constructed bastion fortifications which were supposed to survive and stop attacks of the Ottoman Empire. Due to the lack of time necessary to erect stone fortifications and a necessary material (stone, brick), the Italian-type bastion fortifications began to be built of wood and earth. Builders erected log grates which were filled with wet earth and then compacted, whereas the external walls were reinforced with fascine [20, pp. 23-29].

The bastion fortifications which were constructed around Wiązów and Żórawina constitute an example of the Italian-type bastion fortification and in Silesia they were built with the use of Hungarian techniques. Hans Schneider von Lindau used fort carré (four-sided) as the basis for his projects. He had already successfully used this solution in Wisłoujście Fortress. He adapted it to local conditions

 $^{^4}$ The Viennese foot -31.61023 cm, was used in Silesia and in Hungary in parallel with the Silesian foot -28.8 cm.

and needs, thanks to which it was possible to build modern bastion fortifications around Wigzów in a short time. As a result, they increased its defensive values. While remodeling the church in Żórawina, he also planned new bastion fortifications, which, supplemented with a court and an arsenal, transformed this complex into a renaissance noble residence, fully fortified. The bastion fortifications which were designed by Hans Schneider von Lindau did not differ from the European models at the turn of the 17th century [21, p. 21 et seq.]. The outbreak of the Thirty Years' War in the 17th century subjected them to a fire test. Wrocław Fortress was not threatened by a direct attack thanks to its extensive bastion fortifications which were managed by over 2,000 city soldiers, whereas in 1642 Brzeg successfully repelled the Swedish siege, which lasted four weeks. Of course, one can argue that both Wiązów [3, p. 282] and Żórawina [10, p. 36] were conquered during this conflict, which may indicate that the strengthening of these two centers was inadequate. It should be emphasized, however, that this was not due to

the weakness of the fortifications, but due to an insufficient number of soldiers. In order for the fortifications to effectively fulfill their military function, there should be 200 soldiers and 3–4 cannons per one bastion (taking into account the rotation, where some of the fire team fought, some rested, and some were on standby to support their fighting colleagues) [22, pp. 87–95]. An insufficient number of soldiers necessary to man the fortifications and to fight in the field was, however, a constant problem of the imperial army [23, pp. 173–177].

The bastion fortifications around Wiązów and Żórawina also served non-utilitarian purposes. Winning a famous fortification builder, i.e. Hans Schneider von Lindau, financing the construction of fortifications, their preservation and maintenance, was a demonstration of the social position, prestige, wealth, as well as political aspirations of the founder.

Translated by Bogusław Setkowicz

References

- Schulz A., Die Breslauer Stadtbaumeister in sechzehnten Jahrhundert. Friedrich Gross – Hans Schneider von Lindau, "Schlesiens Vorzeit in Bild und Schrift" 1870, Bd. 1, 115–137.
- [2] Lewicka-Cempa M., Jan Schneider z Lindau a twierdza w Wisłoujściu, [in:] P. Molski (red.), Zespół forteczny Gdańsk-Wisłoujście. Problemy ochrony zespołów pofortecznych, Towarzystwo Przyjaciół Fortyfikacji, Gdańsk 1998, 29–53.
- [3] Engelbert K., Geschichte der Stadt Wansen und das Wansener Haltes, Verlag Dr Hermann Eschenhagen, Ohlau i. Schl. 1927.
- [4] Bimler K., Die schlesischen massiven Wehrbauten, Bd. 2, Fürstentum Brieg, Komission Heydebrand-Verlag, Breslau 1941.
- [5] Gellhorn A., Die Friedhofanlagen Schlessiens unter besonderer Berücksichtigung ihrer Situierung und Gestaltung, Heitz, Strassburg 1918.
- [6] Bimler K., Die schlesischen massiven Wehrbauten, Bd. 1, Fürstentum Breslau, Komission Heydebrand-Verlag, Breslau 1940.
- [7] Rozpędowski J., Warowne kościoły w Jaszkotlach, Lutyni i Żórawinie, "Zeszyty Naukowe Politechniki Wrocławskiej. Architektura" 1957, nr 20, 31–48.
- [8] Rozpędowski J., Kościoły warowne na Śląsku, "Roczniki Sztuki Śląskiej" 1968, t. 6, 54–97.
- [9] Pilch J., Leksykon zabytków architektury Dolnego Śląska, Arkady, Warszawa 2005.
- [10] Oszczanowski P., Casus Żórawiny. Kościół Trójcy Świętej w Żórawinie około 1600 roku, Piotr Oszczanowski & Starostwo Powiatowe we Wrocławiu, Wrocław 2007.
- [11] Lewicka-Cempa M., Szesnastowieczny projekt fortyfikacji bastionowych Nysy Jana Schneidera z Lindau, PhD thesis, Instytut Historii Architektury Sztuki i Techniki Politechniki Wrocławskiej, Wrocław 1980.
- [12] Hauke K., Hans Schneider von Lindauein Baumeister des 16. Jahrhunderts im deutsche Osten, "Zeitschrift für Ostforschung" 1959, Bd. 4, 533–549.
- [13] Rozpędowski J., Fortyfikacje bastionowe z lat 1544–1693, [in:]
 Z. Świechowski (red.), Wrocław. Jego dzieje i kultura, Arkady, Warszawa 1978, 210–215.

- [14] Bimler K., Hans Schneider von Lindau ein Breslauer Stadtbaumeister, "Zeitschrift des Vereins für Geschichte Schlesiens" 1934, Bd. 68, 118–132.
- [15] Starzewska M., Oleśnica, Zakład Narodowy im. Ossolińskich, Wrocław 1963.
- [16] Bimler K., Die Piastenburg in Schelitz, "Der Oberschlesier" 1935, Nr 17, 212–214.
- [17] Eysymontt R., Kod genetyczny miasta. Średniowieczne miasta lokacyjne Dolnego Śląska na tle urbanistyki europejskiej, Via Nova, Wrocław 2009.
- [18] Przyłęcki M., Budowle i zespoły obronne na Śląsku. Geneza, modernizacja i ewolucja do XVII w., Towarzystwo Opieki nad Zabytkami, Warszawa 1998.
- [19] Zabytki sztuki w Polsce. Śląsk, S. Brzezicki, Ch. Nielsen, G. Grajewski, D. Popp (red.), Krajowy Ośrodek Badań i Dokumentacji Zabytków, Warszawa 2006.
- [20] Gerö L., Włoskie fortyfikacje bastionowe na Węgrzech, "Kwartalnik Architektury i Urbanistyki" 1959, t. 4, nr 1–2, 23–42.
- [21] Specklin D., Architectura von Vestungen, wie die zu unsern Zeiten, an Stätten, Schlössern und Claussen, zu Wasser, Land, Berg und Thal mit ihren Bollwercken, Cavaliren, Streichen, Gräben und Läuffen mögen erbawet, auch wie solche zur Gegenwehr wider den Feindt, sampt dem hiezu gehörigen Geschütz, ordentlich und nützlich sollen gebraucht werden: Jetzt aber auffs new ubersehen, mit Fleiss verbessert, auch vielen anderen Visierungen vermehret, Lazari Zetzners, Strassburg 1599, https://www.e-rara.ch/zut/content/structure/2160661 [accessed: 20.03.2020].
- 22] Maroń J., Wojna trzydziestoletnia na Śląsku. Aspekty militarne, Wydawnictwo i Agencja Informacyjna WAW Grzegorz Wawroczny, Wrocław–Racibórz 2008.
- [23] Pruski Sztab Generalny, Pierwsza wojna śląska 1740–1742. Część I: zajęcie Śląska i bitwa pod Małujowicami, Napoleon V, Oświęcim 2019.

Abstract

Bastion fortifications in Wiqzów and Żórawina as an example of less known Silesian implementations by Hans Schneider von Lindau

The article is devoted to early modern fortification builder Hans Schneider von Lindau. The aim of the work was to present a professional career of this fortification builder and his bastion fortifications thanks to the studies of source literature as well as archival iconographic and cartographic materials. The fortifications in two smaller centers, i.e., Wiązów and Żórawina, were researched. In Żórawina, it was possible to determine the hitherto uncertain authorship and to pinpoint the construction time of fortifications, namely for the years 1597–1602. In general, the author of the article claims that the fortifications designed by Hans Schneider von Lindau in smaller centers were as modern as the bastion fortifications he erected in larger towns.

Key words: bastion, bastion fortifications, early modern period, Hans Schneider von Lindau, Wiązów, Żórawina

Streszczenie

Fortyfikacje bastionowe w Wiązowie i Żórawinie jako przykład mniej znanych śląskich realizacji Hansa Schneidera von Lindau

Artykuł jest poświęcony nowożytnemu fortyfikatorowi Hansowi Schneiderowi von Lindau. Celem pracy było przybliżenie – dzięki studiom nad literaturą przedmiotu, archiwalnymi materiałami ikonograficznymi i kartograficznymi – zawodowej kariery tego budowniczego oraz wykonanych przez niego umocnień bastionowych. Badaniom poddano umocnienia w dwóch mniejszych ośrodkach: Wiązowie i Żórawinie. W Żórawinie możliwe było ustalenie niepewnego dotychczas autorstwa i uściślenie czasu budowy fortyfikacji na lata 1597–1602. Uogólniając, autor artykułu pokusił się o stwierdzenie, że projektowane przez Hansa Schneidera von Lindau fortyfikacje w mniejszych ośrodkach były równie nowoczesne jak umocnienia bastionowe wznoszone przez niego w większych miastach.

Słowa kluczowe: bastion, fortyfikacje bastionowe, okres nowożytny, Hans Schneider von Lindau, Wiązów, Żórawina