# THE DEVELOPMENT OF TOWN-SHIELDS' PLANNING IN BISHOPRICS OF LIVONIA DURING THE 13TH–14TH CENTURIES

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**Abstract.** *Traditions of the Christianity centres' formation can be found in Jerusalem's oldest part where instead of domestic inhabitants' dwellings the second king of Israel (around 1005 BC–965 BC) David built his residence on a top of the Temple Mount surrounded by deep valleys. His fortress – the City of David protected from the north side by inhabitants' stone buildings on a slope was an unassailable public and spiritual centre that northwards extended up to the Ophel used for the governance. David's son, king of Israel (around 970–931 BC) Solomon extended the fortified urban area where Templum Solomonis was built. In Livonia, Bishop Albrecht obtained spacious areas, where he established bishoprics and towns. At foothills, residential building of inhabitants like shields guarded Bishop's residence. The town-shield was the Dorpat Bishopric's centre Dorpat and the Ösel–Wiek Bishopric's centre Haapsalu. The town of Hasenpoth in the Bishopric of Courland (1234–1583) was established at subjugated lands inhabited by the Cours: each of bishopric's urban structures intended to Bishop and the Canonical Chapter was placed separately in their own village. The main subject of research: the town-shields' planning in Livonia. Research problem: the development of town-shields' planning at bishoprics in Livonia during the 13th and 14th century have been studied insufficiently. Historians in Latvia often do not take into account studies of urban planning specialists on historical urban planning. Research goal: to determine common and distinctive features of town-shield design in bishoprics of Livonia. Research novelty: town-shield plans of Archbishop's and their vassals' residences and capitals in Livonian bishoprics subjected to the Riga Archbishopric are analyzed. Results: study formation of Livonian town-shields' layout and structure of the 13th and 14th centuries. Main methods: inspection of town-shields in nature, analysis of archive documents, projects, cartographic materials.*
*Keywords: Bishopric centre, cathedral building-type, town-shield, fortified urban structures, the State of the Teutonic Order.*

## Introduction

In Europe, the population increased, large land properties were formed, and noble representatives got inheritable political power. Lands inhabited by the Balts and Finnish-Ugrian tribes came under the authority of Pope and Emperor of the Holy Roman Empire. There were founded church-states, or bishoprics. In Livonia, early medieval towns were formed in German and Italian building ways. The planning of bishoprics' capital cities defined by functional solutions, relief,

earth-roads and waterways also influenced the layout of fortified urban structures, defensive system and the placement of dwelling and single houses. Residences were built in Bishoprics' centres.

Historian, Professor Paul Johansen (1901–1965) born in Reval (Estonian: *Tallinn*) in 1955 noticed common features in several plans of Livonian towns: the residence was included into a united system with a town implemented the function of a shield. Such complexes are called as front-castle towns (German: *die „Vorburgstädte" oder Stadtsiedungen „auf dam Schilde" der Burg*). Grouping town-shields according to their planning peculiarities, Johansen used German town-shield Lippstadt (in Westfalia) founded by Bernhard of Lippe (also Earl Bernhard II, Latin: *Bernardus de Lippia*; around 1140–1224), who in the war against Archbishop of Cologne from 1177 to 1181 took the side of Duke of Saxony (1142–1180) Henry the Lion (German: *Heinrich der Löwe*; 1129/1131–1195). Bernhard participated in the establishing of Marienfeld Abbey. In 1194, he left his possessions in German lands to his son Hermann and entered the Cistercian Order. For several years, obeying the statute of the order, he studied the Holy Scripture and led an ascetic life, redeeming his previous sins. Historian of art, Dr. phil., Professor Armin Tuulse (until 1936 Armin Neumann; 1907-1977) used Johansen's concept in compilation research about the history of Livonian fortresses "*Die Burgen in Estland und Lettland*" /Castles in Estonia and Latvia/ and collated town-shield plannings in his studies.

**Previous researches on Livonian town-shield plannings of Bishoprics' centers**: old descriptions of Hasenpoth (Latvian: *Aizpute*) and Pilten towns are included in the Governorate of Courland land surveyor Schulz's book „*Beschreibung der Provinz Kurland*" /Description of the province of Courland/ (Schulz 1805) and Ulrich Freyherren von Schlippenbach's (1774–1826) travel notes „*Malerische Wanderungen durch Kurland*" /Picturesque walks through Courland/ (Schlippenbach, 1809). On 31 December 1826, the government of the Russian Empire issued a decree for the protection of ancient castles and buildings. From 1827 to 1830, in order to follow the instructions, the collection of views, layouts and positions of Livonian castles named after Governor-General of the Governorate of Livonia, Marquis Filippo Paulucci delle Roncole (1779–1849) was prepared. The collection included drawings of Hasenpoth (Paulucci, 2008, 84–87) made by Auditor of Pilten and Hasenpoth Heinrich Johann Cramer. Plans of Pilten (Paulucci, 2008, 108–111) were drawn by Auditor of Goldingen (Latvian: *Kuldīga*) Carl Willong. The plan and façades of Haapsalu stronghold (Paulucci, 2008, 264–267) were drawn by land surveyor, Auditor Carl Faehlmann, while Ronneburg (Latvian: *Rauna*) stronghold plan with the town building (Paulucci, 2008, 160–163) was drawn by land surveyor, Auditor Wilhelm Tuch. Gross-Roop (Latvian: *Lielstraupe*) Castle surveyed by Wilhelm Tuch was drawn by Christoph von Kuntze (Paulucci, 2008, 178–181). Wilhelm

Siegfried Stavenhagen (1814–1881) his drawings of cultural and historical sights published in) *"Album baltischer Ansichten"* /The Album of the Baltic views/ (1857–1867), but Carl Meißner in the book *"Das schöne Kurland. Ein deutsches Land"* /The beautiful Kurland. German country/ in that included a view of a steel carving on the Church Hill in Aizpute (Meißner, 1917, 134). Architect Rita Zandberga (1929–1993) wrote *"Aizputes arhitektoniski pilsētbūvnieciskās struktūras attīstības vēsture"* /The history of Aizpute urban structure development/ (Zandberga, 1980), but architect Irēna Bākule carried out research of Aizpute in nature (Bākule 2.sēj., 1990) and prepared the regeneration proposal (1990, 2006) (Bākule 3.sēj., 1990). However, the essay of Aizpute's history is published in the encyclopaedia *"Latvijas pilsētas"* /Cities of Latvia/ (Latvijas pilsētas, 1999).

In the Courland Society for Literature and Art (German: *Die Kurländische Gesellschaft für Literatur und Kunst*, 1817–1939) D.F.G. Bray read in 1823 a report on the history of Kokenhusen (1209) *Castrum* and published the text (1840) in French (Ose, 2001, p. 65). Information of Ronneburg (Caune & Ose, 2004, p. 380–384), Kokenhusen (Latvian: *Koknese*) (Caune & Ose, 2004, p. 251–257), Lemsal (Latvian: *Limbaži*) (Caune & Ose, 2004, 298–302), Roop (Latvian: *Straupe*) (Caune & Ose, 2004, p. 283–287), Hasenpoth (Caune & Ose 2004, p. 53–55) and Pilten (Caune & Ose, 2004, p. 366–370) strongholds and towns has been included in the encyclopaedia *"Latvijas viduslaiku pilis, IV. Latvijas 12. gadsimta beigu – 17. gadsimta vācu piļu leksikons"* /Latvian Medieval Castles, IV. The lexicon of German Castles in Latvia, end of the 12$^{th}$–17$^{th}$ century/ compiled by archaeologist, Dr. hab. hist., Professor Andris Caune (b. 1937) and Dr. hist. Ieva Ose. Mg. arch. Silvija Ozola in the publication "Sacral Building in Towns of the Bishopric of Courland" (Ozola, 2015) emphasizes that two kinds of medieval urban structures can be distinguished in the Bishopric centre building, depending on Bishop and Courland Canonical Chapter's activity. Specialist of the Archeology and History Department of the State Inspection for Heritage Protection, historian Edgars Plētiens has studied the planning of the town of *Roop* (Plētiens, 2015), as well as published his study on Livonian small towns (Plētiens, 2016).

The main subject of the paper: the town-shields' planning in Livonia. Research problem: the development of town-shields' planning at bishoprics in Livonia during the 13$^{th}$ and 14$^{th}$ century have been studied insufficiently. Research novelty: analysis of town-shield plans of Archbishop's and their vassals' residences and capitals of bishoprics in Livonia subjected to the Riga Archbishopric. The goal of research: to determine the common and distinctive features of town-shield design in bishoprics of Livonia subjected the Riga Archbishopric. Main methods used: this research is based on analysis of archive documents, projects of urban planning, cartographic and graphic materials, photo fixations, studies of published literature and inspection of town-shields in nature.

## The planning of towns for Archbishop of Riga seat during the 13th – 14th centuries

Riga became the administrative center in the Church State of the Riga Archbishopric (Latin: *archiepiscopatus provincia Rigensis*; 1255–1562) subjected to Pope of Rome and the Emperor of the Holy Roman Empire. Archbishop of Riga (*sancte Rigensis ecclesie archiepiscopas, der hilligen kerken to Righe ertzbisschop*) by his court lived in Kokenhusen every year from Pentecost, festival in the Christian church, to Michaelmas, or the Feast of Michael and All Angels on September 29, but by 1420, his winter dwelling from Michaelmas to Candle Day on 2 February was Rownenborgh (Latvian: *Rauna*) Castle, and from Candlelight to Pentecost – Lemsal Castle of stone (Šterns, 1997, p. 42, 44).
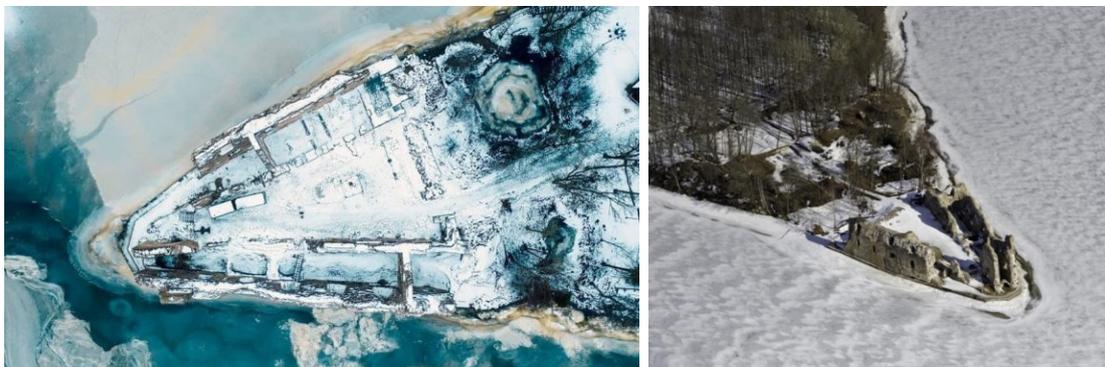


*Figure 1 **The line segment Kokenhusen fortress** (photo by, Uldis Photography, online 23.02.2019, source: https://g1.delphi.lv/images/pix/659x380/-3MYRNbvpRM/kokneses-pilsdrupas-3-50711477.jpg)*
*Figure 2 **Kokenhusen Stronghold** (photo by giskim, online 23.02.2019, source: http://img.fotoblog.lv/515/704/900.jpg)*

Conquerors invaded the Latgalian hillfort where following the outline of destroyed wooden fortress of triangular layout, the Livonian Brothers of the Sword built one of the first Riga Bishop's residences of dolomite – the castrum *Kukonois* (*Kocanois*; 1209) of irregular planning (Fig. 1). Two two-storey blocks mutually placed in a narrow angle (Fig. 2) created the building volume (Fig. 3) included in the unified protective system formed by the defensive wall. The place of the old gate was not changed. At the lower floor, there was a kitchen, a water container by a well in the yard, a brewery, storeroom for gunpowder and a prison, but on the top floor – the Chapter Hall, a chapel, dwellings and a wooden gallery facing the yard. The front-castle surrounded by the defensive wall matching highlands profile located at the background of the residence where two dry moats created in zone of breaking limestone separated wooden buildings from the residence: the first was a deep ditch by convertible bridge for its crossing, but the second ditch eastwards separated the castle-front from the settlement (Heinrici,

1993, 373). On the yard's side, wooden dwellings covered by one-sided roof adjoined the defensive wall (Malvess, 2010, p. 246). There were also wooden buildings (the 13ᵗʰ–15ᵗʰ century) in the yard (Fig. 4). In Europe, the fortification of such a planning was called as the "line segment castle" (German: *Abschnittsburg*) (Fig. 5). In the 13ᵗʰ and 14ᵗʰ centuries, administrators of Kokenhusen Stronghold were mostly members of the powerful Livonian Tiesenhausen family.
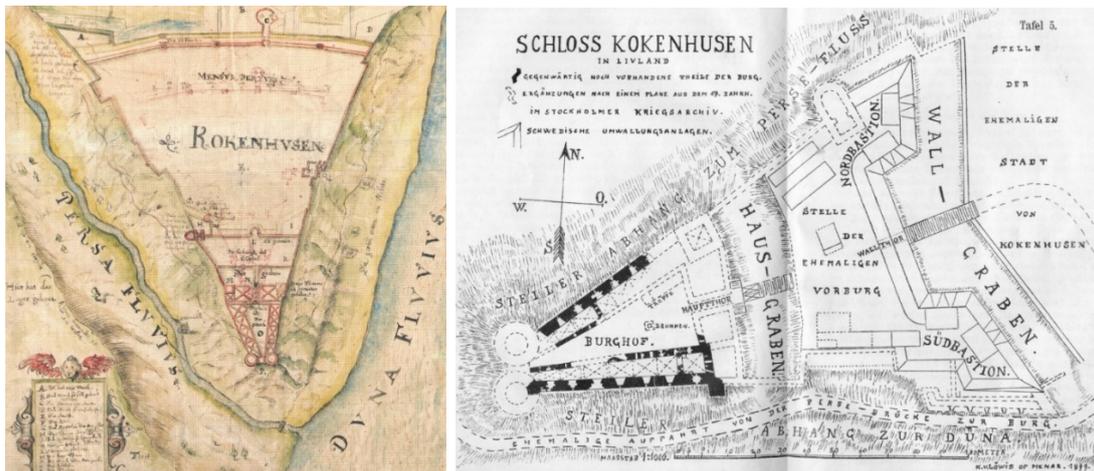


*Figure 3* **Fecit Georgius Schwengell. Plan of Kokenhusen Stronghold, castle-front and town: C – City Gate, E – town, F – church, H – tower, L – placement of the old wall, M – tall tower, N – bridge over the ditch, O – castle, P – towers, Q – Water Gate. Around 1630** (Stockholm, Kungl. Krigsarkivet)

*Figure 4* **Karl Woldemar von Löwis of Menar (1855–1930). Kokenhusen Castle plan by outer bailey and the gate between outer bailey and the town by the marketplace, the church, the main and side gates. 1899** (Menar 1900)
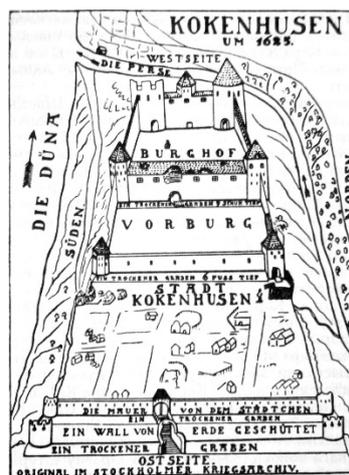


*Figure 5* **Schematic drawing of the line segment Kokenhusen fortress around 1625** *(the original is located at Stockholm, Kungl. Krigsarkivet, online 23.02.2019: https://upload.wikimedia.org/wikipedia/commons/1/1d/Koknese1625.jpg)*

In 1255, Pope (1254–1261) Alexander IV confirmed, that Kokenhusen fortress (Fig. 4) as the base for the conquest of the Daugava waters belonged to Archbishop of Riga elected by the Canonical Chapter of Riga and confirmed by Pope. On 13 July 1277, Archbishop of Riga (1273–1284) Johanness I of Lune awarded the castle settlement by the Riga Law (German: *Rigisches Recht*) and determined town's borders, mentioning that defensive wall (destroyed in 1680s to build new fortifications and firing square or esplanade) for Kokenhusen had been built (Caune, 2014, p. 7). A tall tower (until 1382) of square layout for a cellar emphasized the northeast end of the fortress block facing the *Pērse* River, the tributary of the Daugava. In the defensive wall, adjoined the tower, the Water Gate facing the Daugava was made. Symmetrically on either side of the longitudinal axis orientated from the residence towards the Land, or the Town Gate with the zwinger in the town wall's north part building of settlement arranged. From 14 July 1397, the fortress belonged to archbishops of Riga, who transformed the residence: in the north side, the yard was marked off by an open gallery in front of the old refectory. Buildings next to the deep ditch separated the residence from the castle-front, in whose defensive wall towers were included. Three towers (the late 15ᵗʰ century) protected the west side of the fortress (Caune & Ose, 2004, p. 253). By the 15ᵗʰ century, the castle has undergone numerous modifications.

## The planning of town-shields in bishoprics of Livonia during the 13ᵗʰ –14ᵗʰ centuries

In spring of 1223, Bernhard of Lippe who in 1185 became an influential figure in the hierarchy of church authorities and made a planned town of Lippstadt (Fig. 6), where later Augustinian Monastery (1281) and four churches were included (Fig. 7), along with crusaders returned from German lands to Livonia and organized a war against the Estonians which did not want to accept the German feudal power and the dominance of the Catholic elite. The Dorpat Bishopric (German: *Bistum Dorpat*; 1224–1558) was founded. On a strategically significant hill at the Emajegi (Estonian: *Emajõgi, ema* – mother, *jõgi* – river) River the fortified centre *Castrum Tarbatae* (1224–1279) was established. At the Cathedral Hill's foot, where, possibly, there already had been a wooden church, St. John's Church was built instead the oldest wooden building of the early 13ᵗʰ century and several streets at the beginning of the circular street took eastwards perpendicular to the Emajegi River flow and divided the residential area into sections. On the most popular street trading took place. In 1234, around the town-shield building of stone fortifications began. On 8 January 1235, Bishop of Leal Hermann obtained the title of Bishop of Dorpat. In 1262, Grand Prince Alexander Newsky's son Dmitry (Russian: *Дмитрий Александрович*) arrived in Dorpat

with troops and destroyed it. Dorpat (Latvian: *Tērbata*, Estonian: *Tartu*, Latin: *Tarbatum*, Russian: *Дерпт*, since 1893 *Юрьев*) was restored and achieved the City Law (1262). A long defensive wall around the Dorpat Bishopric's capital city of the triangular layout was built (Fig. 8). The most important streets took to the gate in the town's defensive wall, directed towards the waterway: on the northwest side at the end of streets the Jacob's Gate was made, on the east side – the Russian and Monks' Gates, on the south side – the St. Andrew's Gate, but at the end of the Market Square – the German Gate. The Dome Gate was in the defensive wall of Bishop's yard. Cathedral complex, Bishop's residence, and inhabitants' houses, surrounded by walls, were included in the united defensive system.



*Figure 7 **Panorama of Lippstadt town-shield** (Braun, G., Hogenberg, F. (2008). Cities of the World. Hong Kong, Köln, London, Los Angeles, Madrid, Paris, Tokyo: TASCHEN)*

In Haapsalu, on the plain of the seacoast, westwards from a market place and the castle (Fig. 9) on the Cathedral Hill surrounded by a curving street, town-shield (Fig. 10) protected by natural water obstacles, were made. *Haapsalu* (Fig. 11) was awarded (1279) by the Riga Law revised in 1294, considering the local conditions. The Riga-Haapsalu Law were the third version of the Riga Law. In the 13ᵗʰ century, the capital city Haapsalu of the Ösel-Wiek Bishopric (1279–1560) was conquered by the Teutonic Order, and in 1300, the first stage of the fortress building was completed. Bishop of Ösel-Wiek regained the residence in 1302 and moved it to Arensburg in *Saaremaa*. Haapsalu lost its political significance and became the local trade centre (14ᵗʰ – 16ᵗʰ cent.). At the fortress' east side the Zwinger was made in front of the gate, and two towers of square layout were erected (14ᵗʰ century). The defensive wall was reinforced. In 1507–1508, a big castle-front, where household buildings located, was finished.
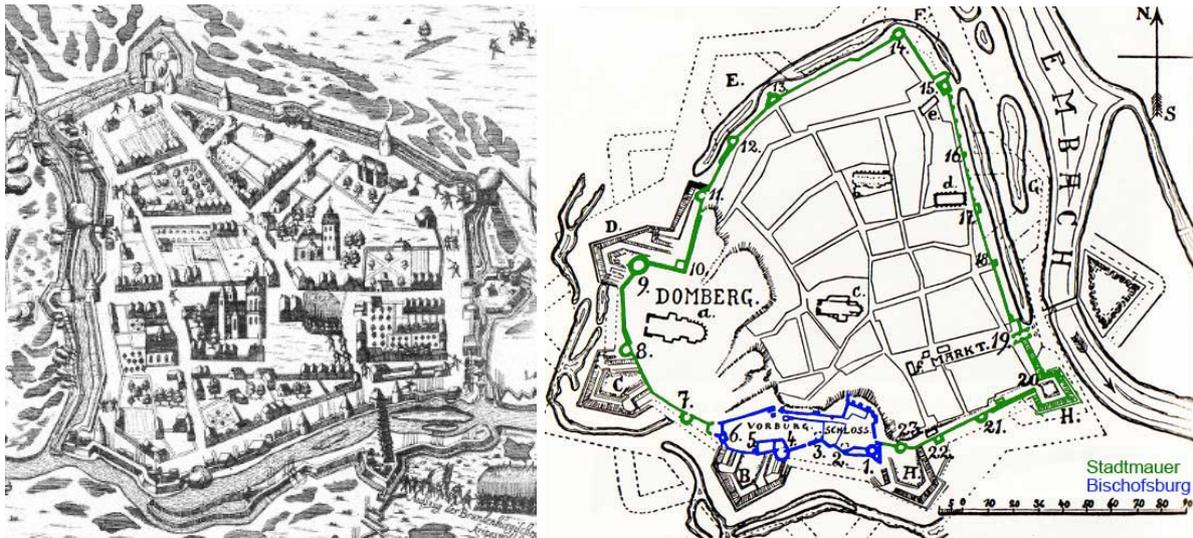
*Figure 6* **General view from the bird's eye view with siege in town-shield Lippstadt (1184–1185). 1623** *(Gesamtansicht aus der Vogelschau mit Belagerung im: Lippstadt, online 19.06.2017, source: http:commons.wikimedia.org/wiki/File:Lippstadt_Belagerung-Anno.1623.djvu)*
*Figure 8* **Researcher of castles Dr. phil. Karl Woldemar von Löwis of Menar (1855–1930). Plan of the fortified town-shield Dorpat: a – the Dorpat Chatedral, b – St. John's Church (1323), c – St. Mary's Church (1842), d – the main gate, e – house, f – the Town Hall. 1922** *(Menar, 1922)*
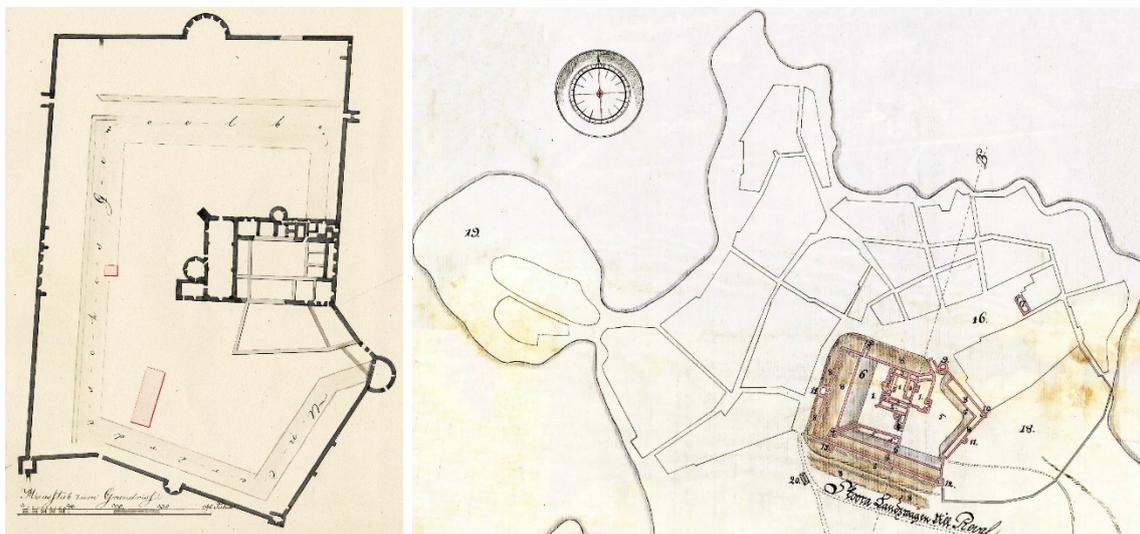


*Figure 9* **Plan of Haapsalu Castle** *(Paulucci 2008)*
*Figure 10* **Plan of Haapsalu town-shield** *(State Archives of Latvia, Fund 6828, Description 4, Case 593-1)*
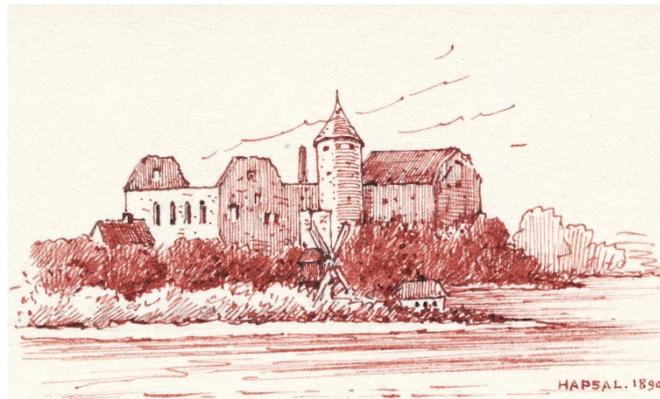
*Figure 11 **The drawing of Haapsalu Castle. 1890***
*(Academic Library of the University of Latvia, Library of Misins, Ms1185-6-128)*

In Pilten, volumes of stone castle (before 1309) of a regular layout were organized around the courtyard were included in the defensive wall's trace. The front-castle took up the biggest part of the strong fortified area. Merchants and craftsmen surrounded their houses by a palisade fence. The time of the first church's building is unknown. The castle with its front-castle and town made two separated parts on the fortified building complex of triangular layout. Each of them had its own defensive system. On 20 June 1557, the last Bishop of Courland (1540–1560) Johannes IV of Münchhausen once again confirmed the Riga Law for Pilten.

In Courland, a fortified building complex for the Canonical Chapter was created, and in Hasenpoth, St. John's the Evangelist Church (crashed down several times and again restored in 1733, 1860, 1887 and 1908) on the southwest part of hill's plateau was built around 1290 (Ozola, 2019). A stone house for Courland Canonical Chapter, recorded in the document on 8 September 1338, were built, supposedly, at the east end of the church. A ring wall surrounded the hill's plateau, but perimeter building conformed to surface of relief. Southwards and eastwards sides of the defensive wall were straight, but northwards they probably created a curved or broken line. Merchants, using the port at the Saka River estuary, took their goods in barges to Hasenpot, where the trade centre with two-stage building structure of the town-shield was established in the early 14<sup>th</sup> century (Fig. 12). Economic activities promoted formation merchants and craftsmen's settlements (Latin: *oppidum*) or suburbs (Latin: *urbs mercatorum*, also *suburbium*) and four streets (now *Liepājas*, *Atmodas*, *Jāņa* and *Katoļu*) at the castle mound's (Fig. 13) foothill, where at traffic routes each member of the community was allocated a piece of land for residential and household building. One could get into the castle-settlement, surrounded by palisades and ditches, over a wooden bridge across a ditch and through the palisade gate (Zandberga, 1980, 43, 50–51). On 17 March 1378, it was awarded the Riga Law, which Goldingen

and Windau (Latvian: *Ventspils*) had already obtained, and the city (*civitas*) border was determined. Each part of the Bishopric of Courland capital city Hasenpot's triangular layout had different defensive system.



*Figure 12* **The Church's Hill by the Church of the Courland Canonical Chapter's building complex in town-shield Hasenpoth. The late 19ᵗʰ century**
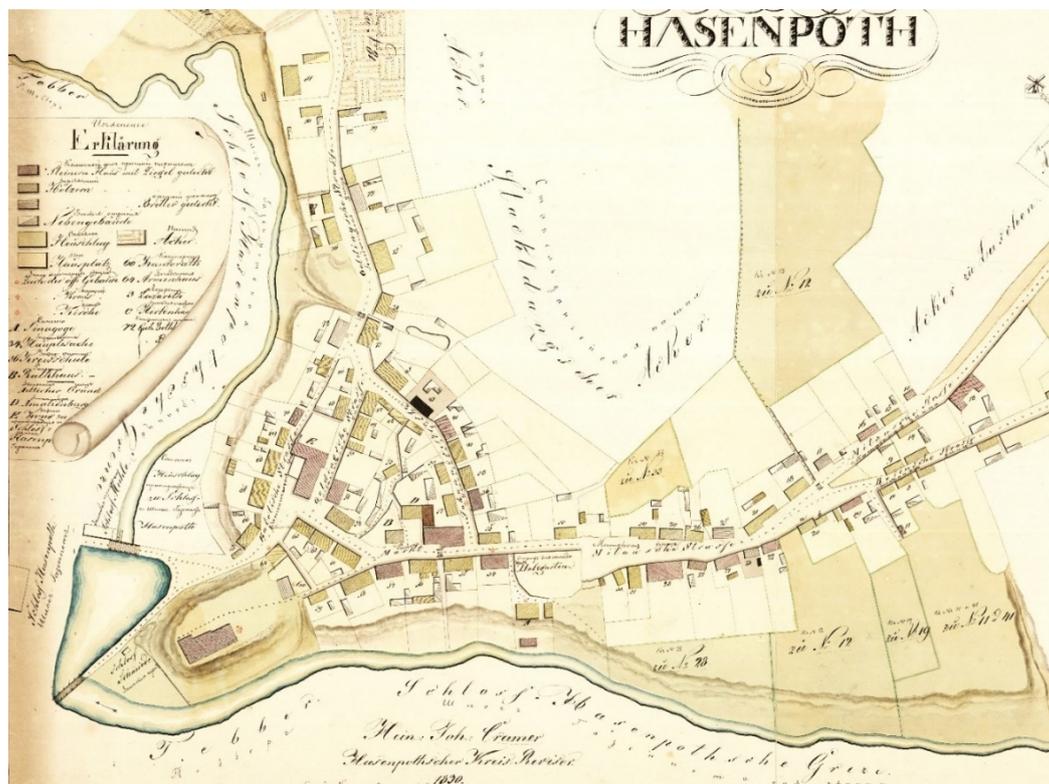*(Aizpute Local History Museum, postcard Hasenpoth)*



*Figure 13* **Auditor of Pilten and Hasenpoth Counties Heinrich Johann Cramer. Plan of town-shield Hasenpoth and the Church's Hill by the Church of the Courland Canonical Chapter's building complex. 1830**
*(State Archives of Latvia, Fund 1679, Description 162, Case 1, File 1)*

Most of the Riga Archbishopric's territory was given to Riga Canonical Chapter, or vassals contributed establishment of the settlement near the residence. At *Gross-Roop* Castle there were few usable areas, and a town-shield (*stat to Rope*, mentioned in 1352) enclosed by palisade was built closely (Fig. 14). Citizens had small gardens at their homes. From the castle's gate on the town's side the road led over a ditch and a large bridge called a high bridge during the city fire in 1531. Near the highway, there was a market in the middle of the town. St. Georgi Chapel worked. It was also possible that the Town Hall was near the market. On the northeast and northwest side of the castle and town obtained the Riga Law in 1374, two ditches and a rampart between them located.
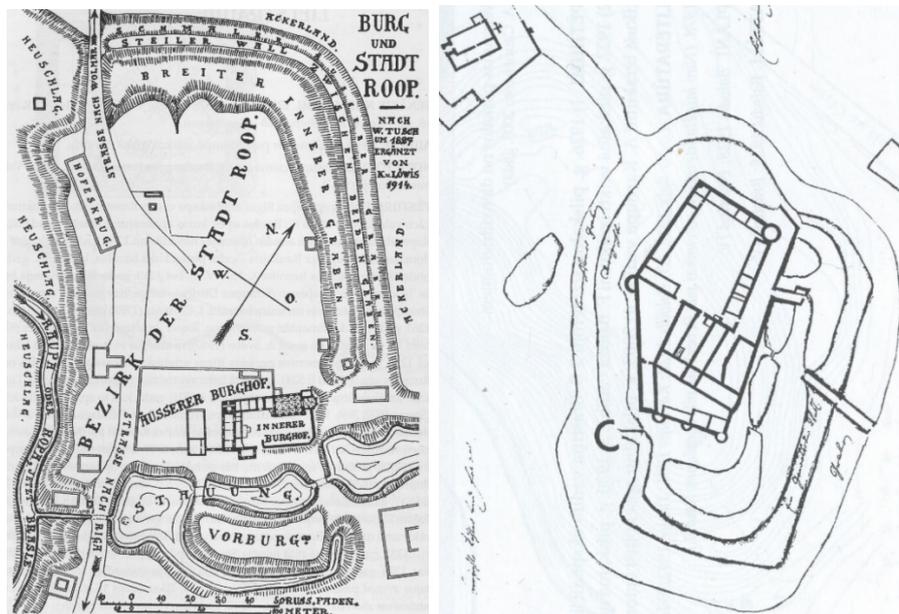


*Figure 14* **Karl Woldemar von Löwis of Menar. Situation plan of the Gross-Roop Castle and town-shield Roop** *(Menar 1922)*
*Figure 15* **Plan of the Ronneburg Stronghold. The 17ᵗʰ century** *(Stockholm, Kungl. Krigsarkivet)*



*Figure 16* **Town-shield Ronneburg. Around 1810** *(online 23.02.2019, source: https://upload.wikimedia.org/wikipedia/lv/9/93/Rauna.jpg)*
*Figure 17* **Town-shield Ronneburg. Before 1908** *(National Library of Latvia, postcard Livland. Schloss Ronneburg. Лифляндія. E. O. S. M. S)*

Since 1420, Archbishop of Riga had near the Latgallian hillfort *Tanīskalns* his main residence Ronneburg (Fig. 15) – one of the three residences which in the mid- 16th century documents listed as winter dwelling-house where he lived from Michaelmas (September 29) to Candle Day (February 2). A settlement *Rownenborgh* (Latvian: *Rauna*) (Fig. 16) without a protective wall on the bank of the Rauna River occupied an area of 4 km lenth from the present-day *Lorenči* to the *Cimziņa* River estuary. Rauna (Fig. 17) in 1590 won the City Law, but during the wars between the 16th and 18th centuries the town was completely destroyed.

## Conclusions

1. The city of Lipstadt founded by Bernhard of Lippe was used as a model in Livonia for planning of capital cities in bishoprics subjected the Riga Archbishopric. The bishop's residence and the cathedral erected at the hill's highest point was protected by the town-shield: at the hillfoot a circular street was created and streets began to divide the area into residential blocks. At bishoprics' centers established in the subordinate Prussians' lands such a plan was not characteristic, as cities had regular planning.
2. Archbishop of Riga and his vassals in the neighborhood of their residence set up an area where the town-shield was installed.

## References

Bākule, I. (1990). *Pilsētas izpēte dabā 1989. – 1990. gadā. Aizputes pilsētas reģenerācijas priekšlikums. Volume 2*. Rīga: Restaurācijas institūts.

Bākule, I. (1990). *Reģenerācijas priekšlikums. Aizputes pilsētas reģenerācijas priekšlikums. Volume 3*. Rīga: Restaurācijas institūts.

Broce, J.K. (2002). *Zīmējumi un apraksti. 3. sējums: Latvijas mazās pilsētas un lauki*. Rīga: Zinātne.

Caune, A. (2014). Arheoloģiskā pētniecība Latvijas 13. – 16. gs. mazpilsētās. In *Latvijas Zinātņu Akadēmijas Vēstis. Part A., Volume 68, Nr.* (5–6), 4–22. Rīga.

Caune, A., & Ose, I. (2004). *Latvijas viduslaiku pilis, IV. Latvijas 12. gadsimta beigu – 17. gadsimta vācu piļu leksikons*. Rīga: Latvijas vēstures institūta apgāds.

Dirveiks, I. (1992). *Lielstraupes pils komplekss. Arhitektoniskā izpēte*. Rīga: manuscript (Archives of National Heritage Board of Latvia, file Nr. 39.195-48 III).

*Heinrici Chronicon*. (1993). Rīga: Zinātne.

Jemeļjanovs, E. (2001). *Pārskats par arheoloģiskās uzraudzības darbu veikšanu Straupes viduslaiku pils un vecpilsētas teritorijā no 2001. gada 14. līdz 18. augustam*. Turaida: manuscript (Archives of National Heritage Board of Latvia, file Nr. 58583-8 I).

*Latvijas pilsētas*. (1999). Rīga: Preses nams.

*Livonijas piļu attēli no marķīza Pauluči albuma = Abbildungen der Livländischen Burgen im Album des Marquis Paulucci*. (2008). Rīga: Latvijas vēstures institūta apgāds.

Von Löwis of Menar, K. (1922). *Burgenlexikon für Alt-Livland*. Riga: Walters und Rapa.

Von Löwis of Menar, K. (1900). *Kokenhusen und Umgebung*. Riga: Verlag von N. Kymmel.

Malvess, R. (2010). Kokneses pils būvvēsture. 13. gadsimts–17. gadsimta 20. gadi. In *Latvijas viduslaiku pilis, VI. Pētījumi par Vidzemes un Zemgales pilīm*. Rīga: Latvijas vēstures institūta apgāds, 237–273.

Mäesalu, A. (1997). Über den Stand der archäologischen Forschungsarbeit in Dorpat (Tartu). In *Lübecker Kolloquium zur Stadtarchäologie im Hanseraum: Stand, Aufgaben und Perspektiven*. Lübeck: Schmidt-Römhild, 343–350.

Meißner, C. (1917). *Das schöne Kurland. Ein deutsches Land*. München: R. Piper & Co Verlag.

Ose, I. (2001). *Latvijas viduslaiku pilis, II. Latvijas viduslaiku piļu pētniecība 18. – 20. gadsimtā*. Rīga: Latvijas vēstures institūta apgāds.

Ozola, S. (2019). The Development of the Catholic Cathedral Building-type at Bishoprics' Towns on the Baltic Sea Southern Coast during the 13th – 14th Centuries. In *Landscape Architecture and Art. Volume 14, Number 14* Jelgava: Latvia University of Life Sciences and Technologies, 23–43, DOI: 10.22616/j.landarchart.2019.14.03.

Ozola, S. (2015). Sacral Building in Towns of the Bishopric of Courland. In *Art Tempus. Volume 3*. Daugavpils: Institute of Art, Daugavpils University, 66–104.

Plētiens, E. (2015). Livonijas mazpilsētas: kas tās bija un kāda bija to ietekme? In *Latvijas Vēstures institūta žurnāls. Zinātniskie raksti. Nr. 3 (96)*. Rīga: Latvijas vēstures institūts, 5–44.

Plētiens, E. (2016). Pils un pilsēta Livonijā 13. – 16. gadsimtā: Straupes piemērs. In *Latvijas viduslaiku pilis, IX. Pētījumi par Vidzemes, Kurzemes un Zemgales pilīm*. Rīga: Latvijas Vēstures institūta apgāds, 176–208.

von Schlippenbach, U.F. (1809). *Malerische Wanderungen durch Kurland*. Riga, Leipzig: C.J.G. Hartmann.

Schulz, A. (1805). *Beschreibung der Provinz Kurland*. Mitau: J. F. Steffenhagen und Sohn.

Šterns, I. (1997). *Latvijas vēsture. 1290–1500*. Rīga: Apgāds Daugava.

Vasiļjevs, J. (1969). Pilsētu plānojuma attīstība. In *Latviešu etnogrāfija*. Rīga: Zinātne, 175-181.

Vītola, T. (1999). Raunas pils rekonstrukcijas mēģinājums. In *Latvijas viduslaiku pilis, I. Pētījumi par arhibīskapijas pilīm*. Rīga: Latvijas vēstures institūta apgāds, 241–257.

Zandberga, R. (1980). *Aizputes arhitektoniski pilsētbūvnieciskās struktūras attīstības vēsture*. Rīga: Latvijas PSR Kultūras ministrijas Kultūras pieminekļu restaurēšanas projektēšanas kantoris.