The Development of the Catholic Cathedral Building-type at Bishoprics’ Towns on the Baltic Sea Southern Coast during the 13th – 14th Centuries

Silvija Ozola, Riga Technical University

Abstract. The oldest Catholic cathedral is the five-naved Archbasilica of St. John in Lateran erected in Rome, but the Lateran Palace (Latin: Palatium Apostolicum Lateranense) was given as a present to Bishop (Latin: episcopus) of Rome for his residence (from 4th until 14th cent.). The perimeter building set up the structural complex of L-shaped layout where the Lateran Castle and the Archbasilica were included. In Western Europe largest cities were also archbishoprics’ centres, in which neighbourhood Catholic church-states, or bishoprics were founded. Local conditions and relationships between the ruler and inhabitants determined the development of Christianity centres. Its main structural objects included in the fortified building complex were the Catholic cathedral which altarpiece (Latin: presbyterium) by the main altar was turned toward the east facing the rising sun, headquarters of the Canonical Chapter (German: Domkapitel) and Bishop’s strong fortified residence resembled a lower tower, or a palace separated from the town, or built outside the town. In the late 12th century, bishoprics began to establish on the Baltic Sea southern coast at subjugated lands of the Balts and the Baltic Finns. At bishoprics’ centres Bishops’ fortified yards (German: der Bischofshof) were formed. A housing combined with a sacral structure was included in the perimeter building around the spacious court and integrated into the unified defensive system of the structural complex. In Riga, the Germans established centres of secular and spiritual power, as well as the main military economic base for the Baltics’ expansion. The political and economic dualism was created. The representation of civil authority became the third alternative force. Each of centres characterized by its own structural elements. The main cult building for city inhabitants was the church of citizen’s parish. Research problem: the development of the Catholic cathedral building-type in bishoprics’ towns on the southern bank of the Baltic Sea during the 13th – 14th centuries has been studied insufficiently. Research topicality: the impact of cathedral building complexes on formation of medieval urban structures on the Baltic Sea south coastal lands during the 13th – 14th centuries. Research goal: analysis of the structure and layout of Catholic cathedrals in Livonia and the Prussians’ lands to determine common and diverse features. Research novelty: evolution of the layout and structure of Catholic cathedrals on lands inhabited by the Baltic ethnic groups have been analysed in regional and European context. Results: study formation of the Catholic cathedrals’ layout and structure on the Baltic Sea south coastal lands during the 13th – 14th centuries. Main methods: inspection of cathedrals in nature, analysis of archive documents, projects, cartographic materials.

Keywords: Bishopric centre, Bishop’s residence, Catholic cathedral building-type, fortified urban structures, fortified structural complex of L-shaped plan, the State of the Teutonic Order

Introduction

In Rome, on the Palatine Hill’s (Latin: Mons Palatinus, Collis Palatinus) southwest side where it slopes down towards the Circus Maximus, the reputed dwelling-place Casa Romuli of the legendary founder, the first king of Rome Romulus (traditional dates 771–717 BC) was situated. Probably, the term Palatin was derived from the name of ancient Italian deity Pales.

Since the 9th century, palaces began to built in the royal sense: initially, they were wooden buildings, but later – stone and brick structures. The German name Stadtschloss marks the impressive residence of majesty, but terms Palast and Schloss used for a great first class secular building often overlaps. In languages of many nations the word Palast became excellent housing’s (Latin: palatium – "palace") synonymous and also was involved with diningrooms (German: Speisesaal). In cloisters, the space associated with palatium was emphasized.

The term "palace" (German: der Palast, Spanish: palacio, Italian: palazzo, Franch: palais, Polish: pałac, Dutch: paleis, Catalan: palau, Swedish: palats) marks a representative medieval building, or a fortified housing in the town, but the term "castle" in German (Begriffe Schloss and Palast) and other languages is used differently: the word Palas makes out the castle’s housing block, but the word Pfalz means the royal, or imperial palace. The word Pfalzgrafen, also Paladin is applied for a short-term inhabited building used for meetings, guests’ welcome and service.

In Riga, Bishop’s residence was a lower tower for habitation performed protection functions, or an adjacent structure, called palas, into the perimeter building of Riga Bishop’s first yard. A building site for a new fortified-complex of Riga Bishop’s second yard was chosen next to local people’s settlement.
Two urban structures related to the Riga Cathedral (Latvian: Rīgas Doms) which became the Riga Archbishopric’s (Latin: archiepiscopatus provincia Rigensis; 1255–1562) main building formed the most important Christianity centre in Livonia and mutual correlation between the Canonical Chapter and Bishop’s residence. In Dorpat (Estonian: Tartu, Latin: Tarbatum, Russian: Юрьев since 1893), Haapsalu, Marienwerder (Polish: Kwidzyn), Frauenburg (Polish: Frombork) and other fortified Christianity centres, building could have been placed along the perimeter of Bishop’s yard. The planning and structure of fortified dwellings of priests and secular representatives were different. The Catholic cathedral building-type evolved under the influence of local conditions.

Previous researches on cathedrals and sacral buildings of Bishoprics’ centers in Livonia: the book “Tartu Toome Hill” (1968) by historian Aili Suur (1933–2002) was published in three languages, but the issue “Tartu toomhärrad 1224–1558” (1998) by Tõnis Lukas was dedicated to the Dorpat Cathedral. Description about Haapsalu Bishop’s Castle and fortification plans by the Castle Cathedral are included in the book by Estonian art scientist Professor Dr. phil. Armin Tuulse (1907–1977) “Die Burgen in Estland und Lettland” [52]. Ülla Paras published the book (2003) about Haapsalu Bishop’s Castle Cathedral – the largest single-nave building in the Nordic and Baltic countries. Historian of churches Karl Ludwig Tetsch (1708–1771) wrote the history of Courland churches “Kurländische Kirchen Geschichte” (1767–1770) [50] where five churches have been mentioned in Hasenpoth (Asenputten, Hasenputten, Latvian: Aizpute) [55, 44] – each of them had a specific function. Information about St. John’s the Evangelist Church [55, 49] served needs of the Courland Canonical Chapter (German: Domkapitel), historian of churches, Priest Johann August Theodor Kallmeyer (1809–1859) included in the book “Beiträge zur Geschichte der Kirchen und Prediger Kurlands” dedicated to Lutheran churches and parishes, and survey “Die evangelischen Kirchen und Prediger Kurlands” (1890) [24]. Thanks to young merchant Theodor Tide (Latvian: Teodors Tide) who came from Goldingen (Latvian: Kuldīga) to Hasenpoth where at the current 9 Atmodas Street opened a shop of photo supplies, became the only person of Hasenpoth – publisher of typographically multiplied postcards, nowadays we can look into the past and see St. John the Evangelist Church in the late 19th century. The oldest post stamps on Hasenpoth postcards are from 1899. M. Jakobson and S. Freidlin from Libau (now Liepāja) also published postcards with sights of Hasenpoth by World War I. Postcards with sights of Aizpute after
World War I were issued by Fredrich Rosenstein’s bookshop in Aizpute, but photographer’s name is not known. Possibly, it was Katrīna Celmiņa owned a photo workshop at the current 16 Kalvenes Street during the 1920s and in the early 1930s. At the current 12 Atmodas Street, but later 18 Atmodas Street, Kārlis Ernstsone, but most of all, the person from Rīga Krišjānis Viburs (Fotobron) has taken sights of Aizpute during the 1930s [44, 42]. Old photos of St. John the Evangelist Church in Aizpute can be seen in the edition “Latvijas evangēliskas luteriskas baznīcas. Mārtiņa Luter Mazā katķisma un Augsburgas ticības aplicētās 400 gadu atcerēt” (“Evangelical Lutheran Churches of Latvia. Certificates of Martin Luther’s Small Catechism and Augsburg Confession for 400 Years of Remembrance”; 1929/1930) issued during the Latvia Republic period by the Church Central Administration [27]. The history of Aizpute and its churches was published in the edition “Latvijas pilssētas valsts 20 gados” (“Cities of Latvia during 20 Years of the State”; 1938) dedicated to Latvia anniversary [29, 328–329]. Architect Rita Zandberga (1929–1993) wrote “Aizputes arhitektonisķi pilssētbūvniecīšās struktūras attīstības vēsture” (“History of Aizpute Urban Structure Development”; 1980) [56], but architect Irēna Bākule (1945–2013) carried out research of Aizpute in nature (1990) [2] and prepared the regeneration proposal (1990, 2006) [3]. To create a culture-historical skech on this city the first post-war teacher at Aizpute, researcher of local history, folklore specialist, publicist Mirdza Birzniece (b. 1926) published the essay of Aizpute urban history in the edition “Aizpute. Cēluvedis pa pilssētu un tās apkārtni” (“Aizpute. Guidebook along the Town and its Neighbourhood”; 1996) [6, 17] and in the booklet “Aizpute” (2004) [5, 75–77, 180] where is a small description of St. John the Evangelist Church. However, architecture has not been analysed. The professional achievement of Ambassador Extraordinary and Plenipotentiary of Latvia in Israel Ivars Silārs (b. 1938) and engineer, photographer Vars Sants (b. 1964) jointly created the album “Aizpute. Pagātne un tagadne” (“Aizpute. The Past and Present”; 2014) with the sights of churches before World War II and in the 21st century [44, 28–31].

In the book “Latvijas mākslas vēsture” (“History of Latvian Art”; 2004) [8] Dr. art. Laila_Bremša, Dr. art. Aija Brasliņa, Mg. art. Dainis Brūģis, Dr. art. Stella Pēše, Mg. art. Inta Pujāte provided a survey of sacral architecture and art in Latvia. Historian, inspector of culture monuments to be protected Vitolds Maņovskis (b. 1942) describes cultural and art values of St. John’s Church in Aizpute [31, 28–32], as well as churches of Gross-Roop (Latvian: Lieli-Straupe) and Ronneburg (Latvian: Rauna). Architect Agrita Tipāne in doctoral thesis “Kurzemēs un Zemgales dievnamu
Fig. 8. Igaunijas guverņu reidents Carl Fahlmann. Plan of the double-block Haapsalu Castle [30, 267].

Fig. 9. Architect Bronius Kruminis (1928–2000). Reconstruction project of the double-block Trakai Island Castle (not realized). 1962 [Astitomi Trakų pilies centriniai rūmai. Courtesy Vilnius County Archives. F.2.50-14/384, f. 1, fol. 4; Balulis A., Mikalionis S., Miškinis S. (1991) Trakų miestas ir pilys [The city and castles of Trakai]. Vilnius: Mokslas, pp. 251, fig. 176; online 19.02.2019, http://www.lietuvospilys.lt/images/2002-liublin-fig-1.jpg].

Fig. 10. Dr. Gintautas Rackavičius, drawing by V. Abramauskas. A sketch project of Vytautas residence in the Trakai Island Castle at the beginning of the 15th century. Plan of the double-block Trakai Island Castle. [Vytauto Didžiojo kultūros muziejuo mėtrožis. Kaunas, 1941, t. 1, lent. XIV; online 16.02.2019, http://old.aruodai.lt/upload/20061223203915/trakai011.jpg].

architektūra” (“Architecture of Churches in Courland and Semigallia”; 2009, scientific advisor Dr. hab. arch., Professor Jānis Krastiņš) described St. John’s Church in Aizpute very imprecisely and carelessly: “The castle church was situated in the south-west corner of the castle” [51, 105]. Archaeologist, Dr. hab. hist., Professor Andris Caune (b. 1937) and Dr. hist. Ieva Ose in the encyclopedia “Latvijas viduslaiku māra bāznicas. 12. gs. beigas – 16. gs. sākums” (“Medieval Stone Churches of Latvia. The late 12th century – the early 16th century”) analyse St. John’s Church in Aizpute in a great detail. Mg. arch. Silvija Ozola in the publication “Sacral Building in Towns of the Bishopric of Courland” (2015) [39] emphasizes that two kinds of medieval urban structures can be distinguished in the Bishopric centre, 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 Gross-Roop Castle and the town of Roop (Latvian: Straupe) [41] which German name Roop is the Brasla River name originated from of the Livs language word Ropa, or Raupe, as well as published his study on small towns in Livonia [40].

Previous researches on the cathedrals’ building-type development in lands of the Prussians: builder of Danzig City (Polish: Gdańsk) Bartel Ranisch (also Bartlomiej; 1648–1701) in the work “Beschreibung aller Kirchen-Gebäude der Stadt Dantzig” (1695) [43] has studied architecture of churches in Danzig. Architect from Prussia Conrad Steinbrecht (1849–1923) dedicated the “Die Baukunst des Deutschen Ritterordens in Preußen” (1885) [46] to building art in Prussia. Carl Wünsch analysed the East Prussian landscape, history, buildings, also the Königsberg Cathedral, and artworks in his book “Ostpreussen” (1960) [55]. Bishop Jan Władysław Oblák in the publication “Katedra w Fromborku” (1969) [36] characterized the Frombok Cathedral, but Teresa Mroczko analysed Gothic architecture of Kulma land in the article “Architektura gotycka na ziemi chełmińskiej” (1980) [34]. Art historian, Professor Dr. hab. Christofer Herrmann (b. 1962) has specialized in the research of medieval architecture in the Prussian lands and dedicated the edition “Mittelalterliche Architektur im Preußenland: Untersuchungen zur Frage der Kunstlandschaft und -geographie” (2007) [17] to the history and architecture of castles and abbey churches. Teresa Czerniewicz-Umer, Jerzy Majewski and Malgorzata Omilanowska included the overview of Polish urban architecture and history and the information on cathedrals in Prussian lands in the book “Eyewitness travel Poland” (2012) [13]. Art historian Dr. Liliana
Kranz-Domasowska (b. 1954) in the publication “Double cities in the Teutonic State on the example of Toruń” (2013) [26] analysed cathedrals’ planning and structure of Prussian double cities in the 13th century. She dedicated to the Marienwerder Cathedrale editions (Lilianna Krantz-Domasowska (1999) *Katedra w Kwidzynie*. Toruń: Wydawnictwo UMK; Lilianna Krantz-Domasowska, Jerzy Domasowski (1982) *Katedra i zamek w Kwidzynie*. Warszawa-Poznań-Toruń: Państwowe Wydawnictwo Naukowe).

The main subject of the paper: development of catholic cathedral building-type in bishops’ towns on the Baltic Sea southern coast during the 13th – 14th centuries. Research problem: on lands of the southern coast of the Baltic Sea, subjugated by the Holy Roman Emperor, initially, churches were included in the perimeter building of bishops’ centres in the same way as the Archbasilica of St John the Baptist Cathedral in Lateran. The status of churches increased, and they obtained the name cathedral, that still does not change the typology of the building. Later, in structural complexes of bishops’ centres the Catholic cathedral building-type developed. The impact of cathedral building complexes on the origins of Livonian and Prussian urban environment and building formation has been studied insufficiently. Self-isolation within the framework of one branch promotes assumption of inaccuracies and mistakes in the research of cult buildings by Latvian historians, art scientists, architects. Research novelty: analysis of cathedrals’ planning and spatial structure of cathedrals in bishops’ centers on Livonia and the Prussians’ lands are carry out in the regional and European context. Goal of the research: analysis of Catholic cathedrals’ historical planning and construction in bishops’ urban centres of territorial structures on Livonia and the Prussians’ lands subjugated by the Riga Archbishopric to define common and different characteristics and to determine the significance of cathedrals as architectural dominances in spatial composition of towns. Main methods applied: analysis of archive documents, projects of urban planning, cartographic and graphic materials, photofixations, studies of published literature and inspection of cathedrals in nature and its impact on the urban environment.

**The perimeter building of courtyards in the Baltics’ oldest bishopric centers**

In Europe during the 11th – 12th centuries, most of inhabitants were the Christians. The Holy Roman Empire started by the mid- 12th century to spread Christianity at the Balts’ and the Baltic Finns’ lands on the southern coast of the Baltic Sea. Churches, monasteries, cities were founded for colonization, and Christianity centres were made. The Germans arriving in the foreign land of the Lower Daugava met the Livs not united in a common state.

Priest Meinhart (Latin: Meynardus, Meinnardus, middle upper German: Meynhart; around 1130/1140 – 1196) from Segeberg Augustinian Abbey also took part in preaching the Christian faith on the Lower Daugava. In the solitary Üxküll Village (Latvian: Ikšķile, Liiv: īks (ūks) + kila or one + village) populated by the Livs since the 11th century a small St. Mary’s Church (1184) by a square planning hall for praying and choir was built on a dolomite rock of the Daugava River right bank. The building’s façade faced the village. During archaeological researches (1967 – 1973), archaeologist, Dr. habil. hist., Professor Ėvalds Mugurēvičs (b. 1931) discovered that the first church next to Üxküll Bishop’s residence was a wooden building on foundations of loaded stones [48, 341]. In summer of 1185, close to the church’s eastern façade an almost square planning two-room building – *palatium* was erected [4, 16 – 17]. A separate yard for every building was made by a protective wall created into an unified defensive system a fortified structural complex of the L-shaped plan [11, 214] equally like the Archbasilica of St. John the Baptist Cathedral in Lateran on the Caelian Hill. The Archbasilica connected with the Council Hall was perpendicular tightly attached to the Lateran Palace (Fig. 1). Üxküll Bishop’s residence included in the L-shaped perimeter building had a yard facing the Daugava waterway and creating a cover (Fig. 2).

Archaeologist, Dr. habil. hist., Professor Jānis Graudonis (1913 – 2005) found (1972) that the church included in the defensive wall was part of Bishop’s structural complex. Cistercian monk Theodoricus of Buxthoeven (also Thidericus; around 1150 – 1219) – half-sister’s son of the Livonian Crusades organizer Archbishop of Bremen Hartwig II of Uthlede, arrived from Bexhövede Village. The Üxküll Bishopric (Latin: *Episcopatus Iscolanensis*; 1186 – 1201) was founded under the subjugation of the Bremen Archbishopric. On 1 October 1188, Meinhart became Bishop of Üxküll, but St. Mary’s Church gave the status of Üxküll Bishop’s Cathedral. Priests came to Üxküll Village and created the Canonical Chapter approved by the *Regula Sancti Augustini*.

At the Livs’ village Holme (English: Island, Latvian: Sala) opposite the Dole upper end Meinhart and Theodoricus choose a place for the other centre where Priest Daniel built wooden St. Martin’s Church for the parish. At the Lower Daugava vicinity the Germans under the guidance of stonemason from Gotland built in the late 12th century the first stone buildings for warehouses and merchants’ settlement. *Castrum Kirchholm* (1186 – 1187) was erected. In the 13th century, Holme began to call as Kirchholm (Church-island), or Alt-Kirchholm (Old Church-island). Pope confirmed several castles...
in Archbishop’s of Riga ownership, and since 1255, Kirchholm fortifications appeared a new name – castrum Kercholme [12, 442]. Kirchholm since the 17th century began to call as Martin’s Island (Latvian: Mārtiņsula). In the Üxküll Bishopric two building complexes were made as separate urban structures – Bishop’s yard in Üxküll Village included an architecturally simple St. Mary’s Cathedral made of stone, but on the Church-island the Canonical Chapter’s yard included wooden St. Martin’s Church built for the parish.

On 28 March 1199, Pope (1198–1216) Innocentius III consecrated Theodericus’ brother Albrecht of Buxthoeven (1165–1229) as the third Bishop of Üxküll. In the bull on 5 October 1199, he invited the Christians of Saxony and Westphalia to fight against the pagan Livs. Already in the following year, 23 ships arrived in the Lower Daugava. On ships, there were Bishop Albrecht and knights who after severe battles captured the Livs’ leader. In a falsehood way they managed that on the right bank of the Daugava a place (locum) for the German settlement next to the Livs’ village was allocated. Natural obstacles – waters and marshy surroundings determined its formation on gently sloping peninsula between the Daugava and the Rīdziņa River. However, the port in the Lower Rīdziņa extension at the local inhabitants’ village had crucial significance. Innocentius III supported Theodericus’ proposal of April 1200 to preach Christian faith in the Livs’ land (Latvian: Līvzeme) and forbid merchants to visit the Semigallian Port. Riga at the beginning of two waterways near estuaries of the Daugava and the Lielupe River obtained the monopoly rights significant for trade.

In the northeast of the Germans’ settlement on the Rīdziņa’s coast the third strong fortified domus episcopi (bishop's yard, curia, castle) on the Livs’ land in 1201 was built [16, 369]. The Riga Bishopric (diecese Rigensi, Rigensi ecclesia; 1201–1255) was founded, and Albrecht (Latin: Adalbertus Canonicus Rigensis) became Bishop of Riga [11, 248]. His brother, Dean of Convent (1202–1209) Engelbert of Buxthoeven from Neumünster Augustinian Abbey (1127) managed the Canonical Chapter. The first Riga Bishop’s yard (1201–1215) separated from the town by cult building included into the unified defensive system was created. Initially, it seems the perimeter building consisted of two freestanding houses – a big residential (?) tower and cult building which side façade faced the town. The first Riga Bishop’s St. Mary Cathedral (ecclesia beate Marie) in 1206 was mentioned. Later, Bishop’s palace (Latin: palacium nostrum lapideum), probably, destroyed by big fire on 4 March 1215, joined both buildings [12, 392]. The Canonical Chapter’s house situated in one building, or in its appendage (monasterium) [9, 248]. On Kalēju Street side, a vacant square to Riga City’s defensive wall was reserved. A fortified building complex of the L-shaped plan was built for the most important Christianity center in Livonia (Fig. 3).

In 1202, the Semigallians attacked Üxküll Village. The Germans left the Church-island, moved a market to the peninsula at the Rīdziņa Port and took over its lower. Implementing territorial and administrative changes, in new-founded administrative centres the presence of military forces – monks-knights was planned. Regulations defined knights’ duties and lifestyle in the monastery. Bishop of Riga Albrecht along with Theodericus, using acquaintance in the Bremen Archbishopric, in 1202 founded Knights Brotherhood of Christ in Livonia (German: Schwertbrüder, Latin: Fratres militiae Christi Livoniae; 1202–1237), or the Livonian Brothers of the Sword in order to involve monk-knights in military expeditions. During the fourth Crusade (1202–1204), the first Master of the Livonian Brothers of the Sword (1202–1209) Winno of Rohrbach (Latin: Vinnenus, Wenno, Wynno) next to Riga Bishop’s yard built domus Wittenstein of dolomite, or St. Georgi (sente Uriān; 1204, destroyed in 1297) mentioned in the Livonian Chronicle of Henry (Latin: Heinrici Cronicon Lyvoniae). In the yard’s south part, the cult building (domus, capella, ecclesia fr. milice), or St. Georgi Church was erected between 1204 and 1209. In the chronicle this church is mentioned three times without indicating the precise place [9, 234]. The Riga Bishopric center contained two proximal urban structures – the yard of the Livonian Brothers of the Sword and the first Riga Bishop’s yard separated by a wall in the east part. On the west side the perimeter building complex of L-shaped plan was deached by the wall of domus Wittenstein. On the northeast side the spacious St. George’s yard located. Riga City’s defensive wall was erected on the north side. The first Bishop’s yard was included into the unified defensive system of Riga. It is possible, that initially both yards were separated only by the common boundary-wall [11, 296].

The first Riga Bishop’s Cathedral burned down on 4 March 1215, when at night fire began in the city. "The city’s first part burned, that is, built first and encircled by the first wall, from the Church of St. Mary burned along with big bells to Bishop's appartament house with proximal houses and to Knights Brotherhood's Church" (Latvian: “Dega pilšetas pirmā daļa, tas ir, vispirms uzceltā, ko apņēma pirmais mūris, no Svētās Marijas baznīcas, kas nodēga kopā ar lielajiem zvaniem, lidz bīskapa mājai ar blakus esošajām mājām un līdz ordēga brāļu baznīcai”; 16, XVIII-6). "The Convent dwelled in the church built within the first city. After this church and city burning, they began to
build the Church of St. Mary outside the city wall near the Daugava and live there." According to the text by the Livonian Chronicle of Henry, historians concluded that there have been two cathedrales – one in the oldest part of the town and the other one later – on the coast of the Daugava where the second Riga Cathedral located nowadays [9, 235]. During archaeological surveillance (1988–1989) in Jāņa Street 6 – 18, under the basement floors of existing houses not only found remnants of older stone houses, but also some testimony of a former wooden building.

Instead the first Bishop’s yard in 1235 obtained by Dominicans a monastery was made, but instead the ruined cult building which was very important for the city founded in 1201 St. John's Church was built. It for the first time was mentioned in 1297 [25]. It could be the early dating of this building. The church was extended around 1330 [45, 98]. On the basement under the altarpiece of St. John’s Church, can be seen fragments of walls made of roughly trimmed big dolomite blocks which layout does not correspond to the plan of St. John's Church. Masonry pattern with brick and stone insertion and cohesive substance enable us to recognise stone origin of Riga [45, 99]. At the side of Skārņu Street, close to a short choir part of St. John’s Church a spacious hall-type congregation's room was made of red bricks. A steep red-tiled ridged roof covered the church decorated by a small shed (roof) [45, 100]. Strict urban building regulations determined the church’s north-south orientation. In the façade along Skārņu Street, one can notice a breach. Builders made smooth and emotionally reluctant external walls complied with aesthetic impressions about monastery church’s simple architecture and coincided with ideological principles expressed by Dominicans – avoid external luxury [45, 101]. In the article “Svētā Jāņa Evaņģēliski luteriskā baznīca” (“St. John the Evangelical Lutheran Church”; 2007) [45, 99] art scientist Dr. hab. art., Professor Ojārs Sparlītis describes the plan of St. John’s Church created in the place of the first Bishop’s yard where formerly located the first cult building erected by Bishop of Riga.

In summer of 1205, the Germans continued to subject the Daugava waterway. Bishop’s of Riga vassal Daniel already in 1201 had feud – Dievukalns (Goods’ Hill) on the right bank. In 1205, the Livs’ ancient town burnt down, and next year Daniel at the Lower Rumbina began to build Alt-Lennowarden (also Lenneworde, Lenewarde, Lenewarte) fortress. On hill’s plateau northern edge a defensive wall made of dolomite was installed [37, 74]. The tall building of residence by a closed inner courtyard and a tower of quadrangular layout situated at the end of the cape, and a castle-front in the west of it. Defensive walls covered the large yard [12, 291–295].

At the end of 1207, Bishop of Riga Albrecht along with the Livonian Brothers of the Sword divided the land of Thoreida (Latvian: Turaidas): on the right bank of the Gauja River, Bishop founded the Bishopric of Livonia (Latin: Episcopatus Livonensis, 1207–1255). In summer of 1211, influential church leader, the founder of town-shield Lippstadt Bernhard of Lippe (also Bernard II, or Lord of Lippe) from a noble family arrived with a large crusader troops in Livonia. On the Estonians’ land Ridala (Estonian: Ridala, Latin: Rotalla), the Leal Bishopric (Latin: Episcopatus Lealiensis), or the Bishopric of Estonia (Latin: Episcopatus Estiensis vai episcopatus de Hestia; 1211–1224), was founded. Immediately after Thoreicus was ordained as Bishop of Leal, his brother Albrecht, who was the de facto head of the Germans armed expansion in the Baltic lands, appointed Bernhard as Abbot (1211–1217) of the Cistercian monastery in Dunamunde (Latvian: Daugavgrīva) located at the mouth of the Daugava. Bernhard led the forces of Thoreida’s defenders against the invasion of the well-organized the Estonians’ troops and ordered to block Estonian ships’ movement through the wooden log dam across the Gauja. The Estonians’ attack on water was repelled and the episcopal administration retained its authority over these territories. In 1212, Bernhard took part in the siege of Satesele Castle and restored peace with the Livs. There was a major uprising of the Baltic peoples against the hegemony of German colonists and feudal lords. The Livs initiated the Autin uprising later joined by the Autins’ Latgals. Under the command of Bernhard the army participated in the massacre of wooden castle’s defenders. As a result, the peace treaty with the Livs was extended. Fortifications of Fredeland (1214) on the Livs’ hillfort by steep hillsides were built. Defensive wall surrounded hillfort’s plateau by a perimeter formed the fortified complex of an extended layout. On the courtyard’s west side, Bishop's fortified residence (1214), or palatium, was included in the wall’s trace. The main entrance was in the north of courtyard. The complex of the second largest Christians’ center outside Riga in 1239 was mentioned by the name of Thoreida. Typically building of medieval castles in countries under German influence was a tall flying-tower Bergfried which was not designed for permanent habitation. However, this was the characteristic difference between the freestanding Bergfried – a tall slender tower with little internal room, few vaults and windows and the freestanding central tower-castle Dungeon (French: donjon Latin: dominionus; Russian: донjon) located in the most protectable and hardest accessible place of the fortified area. Living quarters of the castle and the Bergfried separated by an adjacent building palatium combined functions of habitation and
defence. In Bishop's yard of Thoreida, a cylindrical Bergrfd was built, but later a small south front-
castle was created. The complex of Thoreida was
studied by Professor Jānis Graudonis [14, 59–111]
and Honorary Doctor of the Latvian Academy of
Sciences, architect Gunārs Alfrēds Jansons
(1928–2013) [19; 20 112–146]. The Brothers of the
Sword got the lands on the left bank of the Gauja
which became a borderline.

Bishop of Riga Albrecht in 1215 began to build
the second Bishop’s yard (1215–1234) surrounded
by a defensive wall and separated from Riga
Canonical Chapter’s building complex included
the Riga Cathedral and the monastery. It is possible, that
defensive walls of the Canonical Chapter’s yard and
Bishop's yard alongside the Daugava were built
simultaneously with Riga enlargement. In Riga
defensive wall’s track the side-wall of a long-
extended residence by two towers, or palatium, and
the Chapel of Apostle Bartolomey was included.
The second Riga Bishop’s yard perimeter building
complex of L-shaped plan by probably had stone
houses – horse stables, reminded the L-shaped
layout of perimeter building complex created by
Bishop’s of Rome residence on the Caelian Hill.
Walls facing against the city were not so massive
and high [12, 395]. The first and the second Bishop's
yards were located on the strong fortified city’s
outer boundary line. Riga became an important trade
and crafts city on waterway and earth road crossings
and the Teutonic Order’s main military economic
base, but later – the Riga Archbishopric Centre made
of two urban structures on flat relief, or fortified
yards adjoined close by Riga defensive wall.

Two urban structures of the Bishopric centers

Bernhard of Lippe on 21 September 1217 took
an active part against Estonian forces in the
historically significant St. Matthew's Day Battle
at Fellin (from 1919 Estonian: Viljandi),
German knights and their subordinate soldiers, in
cooperation with the baptized Livs and units of the
baptized Latgilians (about 3000 people), fought
against the Estonians’ defending united army (about
6000 people). As a result of the battle, the Estonians
recognized the power of German invaders and
agreed to re-adopt the Catholic faith and swear
allegiance to Pope.

In spring of 1218, the successful conquest of
Bernhard of Lippe, Bishop of Riga Albrecht and
Bishop of Leal Theodoric went to the Landtag in
Schleswig. There they actually persuaded the Danish
king (1202–1241) Valdemar II to set off with an
aggressive campaign against the Estonians in order
to subordinate and further economic colonization.
Waldemar agreed to a campaign against the
Estonians and gathered a powerful army of
volunteers. Bernhard’s son Otto of Lippe who at that
time (1216–1227) was Bishop of Utrecht, at the end
of 1218 was consecrated to Bishop of Selia.
Bernhard also participated in the consecration of his
second son Gerhard II of Lippe (Latin: Gerardus;
1190–1258) as Archbishop of Bremen whom also
conformed to Bishop of Riga. Archbishop of
Bremen Gerhard II at the age of 29 also proclaimed
himself Bishop of Hamburg which in 1224 was
confirmed by Pope Honorius II.

The road to Saaremaa (Danish: Øsel; English
(historically): Øsel; Finnish: Saaremaa; Swedish
and German: Öse) Island led along the hillfort of
Leal (Estonian: Lihula) where in 1215 Estonian
fortifications were destroyed. On Ridala inhabitants’
hillfort the Swedes in 1220 began to build the
Leal Fortress (1220–1238) which the Brothers of the
Sword allocated Albrecht's brother, Abbot
of Bremen St. Paul's Benedictine Monastery (German:
St.-Paul-Kloster; 1050) Hermann of Buxthoeven
(1163–1248) who on 10 April 1220 became Bishop
of Leal. Bernhard participated in the Estonian lands’
second redistribution between the Livonian Brothers
of the Sword, Bishop of Riga and Bishop of Leal
who once again approved rules of the first division
in 1216. The Brothers of the Sword in cooperation
with Bishop of Leal established the Leal Bishopric’s
center. A yard was formed by defensive walls
conformed to relief. Buildings were built to yards’
inner side and Bishop's residence (1220–1238)
was erected. Towers also were included in the
unified defensive system. An isolated courtyard
separated by a protective wall and residential blocks
was formed, and two functionally different zones
was created. The first church in Leal was built in the
13th century at the main building’s southern wing.
The castle settlement and Cistercian monastery
(probably destroyed in 1570) were established in the
fortress’s vicinity. The Leal Castle of stone
(Stenberg) was built after the agreement of 1238
with Bishop and the Teutonic Order [1, 315].

On 1 October 1228, Bishop of Riga Albrecht
linked up the Leal Bishopric with the Wiek Vogtei
and the conquered Saarema Island and created the
autonomous Øsel-Wiek Bishopric (Estonian:
Saare-Lääne piiskopkond, Saare-Lääne Diocese,
German: Bistum Øsel-Wiek, Latin: Ecclesia
Osiliensis; 1228–1560). Pope’s policy implementer,
legate (1224–1251) Wilhelm of Modena
(Latin: Guilielmum/Guilielmus Mutiensis) built
a church in the Øsel-Wiek Bishopric and strictly
defined boundaries of the diocese which was legally
established on 10 September 1234. The assigned
Bishop of Øsel-Wiek (1234–1260) Heinrich I moved
his residence from Leal to the coast of the Pärnu
Bay where a port in the Pärnu River estuary in 1242
mentioned for the first time. He made Old-Pärnu
(German: Alt-Pernau, Estonian: Vana-Pärnu; 1251)
at the mouth of the Pärnu River’s right affluent
Perona (now Sauga), built residence and the cathedral (1251). The Lithuanians in 1263 destroyed Old-Pärnu [50, 134].

In spring of 1223, Bernhard of Lippe 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. Bernhard on 15 August took Fellin where the Livonian Brothers of the Sword in 1224 started on the land of Sakala to build stone castle [1, 313] instead of destroyed Estonian wooden fortifications by the Navest River. The residence by layout adapted to hillfort’s relief was included in the unified defensive system of a fortified complex.

The Livonian Brothers of the Sword in 1223–1224 destroyed the biggest Estonians’ wooden fortress Tarbatae. The Dorpat Bishopric (German: Bistum Dorpat; 1224–1558) was founded, but on a strategically significant hill at the Emajegi (Estonian: Emajõgi, ema – mother, jõgi – river) River the fortified centre Castrum Tarbatae (1224–1279) was established. Palatium was included in the perimeter building of Bishop’s yard of an irregular layout. Bishop of Riga Albrecht’s brother, Abbot (until 1219) of Bremen St. Paul’s Abbey, Bishop of Leal Hermann of Buxthoeven (1163–1248) in 1224 obtained secular power. On separate area of the Cathedral Hill (Estonian: Toomemägi) freestanding St. Peter and Paul’s Cathedral as a basilica began to build, but a half-type building was created: the nave and the altarpiece were built already in 1299. On the Cathedral Hill’s highest spot behind Bishop’s fortified yard and the castle-front separated from urban building by a stone safety-wall, the Canonical Chapter’s residence and the Dorpat Cathedral (Estonian: Tartu toomkirik; German: Dorpater Domkirche; 1224–1279) were completed in the late 15th century. On a hill above the city, the layout of the stronghold is poorly recognized and very hypothetical. It probably consisted of the upper castle and the west fortified outer bailey separated from it by a moat. The upper castle was equipped with a cylindrical main tower, standing next to the eastern wing of the castle probably in a mixed brick and stone structure. The outer bailey was reinforced with at least four towers and gate towers. The entire complex was connected to the city’s defensive walls. Bishop’s fortified residence separated from city building by the defensive wall and the cathedral formed the center of Dorpat by two urban structures arranged side by side. On the western façade of the Dorpat Cathedral two massive, tall twin towers what German churches began to get in the 11th – 12th centuries became the architectonic dominant of the Bishopric’s centre where both urban structures formed a building complex in the Cathedral Hill’s north part (Fig. 4).

Double-block fortresses of secular and spiritual power centers

The Daugava waterway contributed development of Latgalian countries, but in the early 13th century the situation rapidly changed. German merchants no longer wanted to accept the local inhabitants’ brokerage in commercial relations, therefore a successful struggle for the Daugava waterway’s control began. Bishop of Riga Albrecht along with the Livonian Brothers of the Sword to control the Daugava waterway and to repel the Lithuanians’ invasions took over wooden fortifications on Latgalian hillfort, built from dolomite two two-storey blocks mutually placed in a narrow angle (Fig. 5), to create one of the first Riga Bishop’s residences an irregular layout Castrum Kukonois (also Kocanois, Latvian: Koknese; 1209) by four towers on the cape at the estuary of the Pērse River in the Daugava following the outline of destroyed fortress of triangular planning. The Canonical Chapter hall, chapel, dwellings and wooden gallery opening to the courtyard located on the upper floor. A castle-front surrounded by defensive wall consistent of plateau relief left behind the residence. Pope (1254–1261) Alexander IV in 1255 confirmed that the Kokenhusen Fortress as the base for the conquest of the Daugava waters belonged to Archbishop of Riga. On 13 July 1277, Archbishop of Riga (1273–1284) Johannes I of Lune awarded the castle settlement by the Riga Law (German: Rigosches Recht) and determined town’s borders, mentioning that defensive wall (destroyed in the 1680s to build new fortifications) for Kokenhusen had been built. Both residential blocks were included in the unified defensive system created by protective walls. The fortress since 14 July 1397 belonged to Archbishop of Riga who transformed his residence.

In 1260, the Courts, Semigal, Latgalian and Prussian riots started. During the 1260s, Bishop chose for the Osel-Wiek Bishopric’s new centre Haapsalu on the coast of the Baltic Sea. On the Cathedral Hill protected by water obstacles Bishop began to build a double-block structural complex (until 1279). Fortified Bishop’s residence directed towards the Market Place and the Canonical Chapter’s house was included into the track of defensive walls. In the single nave Bishop’s Castle Cathedral (1260) (Fig. 6) not incorporated in the unified defensive system (Fig. 7, 8) the throne, the official chair of the Bishop situated and the Chapter of the Bishopric worked. The inner walls were covered with paintings, the floor consisting of the gravestones of clergymen and distinguished noblemen. A unique round baptismal chapel was built during the second half of the 14th century. The western ends of the Haapsalu Castle’s two parallel blocks (Fig. 8) connected by buildings (Fig. 7) creating structure of a rectangular layout around the courtyard surrounded by cloisters (15th cent.).
Fig. 11. Plan of the double-block Łowicz Castle [15, 208].

Fig. 12. Plan of the double-block Borysławice Castle [15, 114].

Fig. 13. Plan of the compact double-block Liw Castle [15, 200].

Fig. 14. Architect, restorer, art historian Tatjana Vītola (1920–2007). Reconstruction of the 17th century plan of the Ronneburg Fortress. 1999 [54, 250].

Fig. 15. Architect Karl Rudolf Hermann Seuberlich (1878–1938). Plan of the triple-block Ronneburg Castle [52, 208].

Fig. 16. German-Baltic artist Wilhelm Siegfried Stavenhagen (1814–1881). The Ronneburg Fortress and church. 1866 [online 23.02.2019, https://upload.wikimedia.org/wikipedia/lv/0/00/Rauna_1866.JPG]
The castle-front situated in the west of the courtyard, and a 29 m tall tower (13th cent.) for the neighbourhood observation protected the main entrance. This tower during the 15th century increased by 9 m and the bell was placed. On St. Nicolas Cathedral’s south side the Christen Chapel and sacristy (Fig. 7) was built (15th cent.) next to the altarpiece. The first written record of the church is the charter of Haapsalu where Bishop Hermann I, the founder of the town wrote: "...we, the ones having established the cathedral in Haapsalu and having provided our canons with the appropriate dwellings and income, determined a certain site to be a town, where everybody who has chosen it as their place of living together with us, could gather and find shelter there; and if needed would be able to defend the church with all the means at their disposal."

In the Lithuanian State also a double-block fortress was built. In one of the largest Lithuanian State’s centres Trakai, three castles were built at different time during the 14th century. The oldest one was the wooden castle of Old Trakai (Lithuanian: Senieji Trakai) surrounded by a stone and brick defensive wall [53, 260]. This castle lost its meaning when Lithuanian Grand Duke Kęstutis (1297–1382) on the peninsula between Galvė Lake and Luka Lake built Trakų salos pilis (Trakai Island Castle) (Lithuanian: Traku salos pilis) (Fig. 9) – two parallel residential blocks linked by a defensive wall and a built-in high gate tower (Fig. 10). In the fortress of a two-division layout, a deep ditch separated residence from the castle-front. Lithuanian historian, Dr. Algirdas Antanas Baliulis (b. 1936), Lithuanian architect Stanislovas Mikulinonis (1935–1992) and Antanas Miškinis (1905–1983) have developed a hypothesis that the beginning of building of the Island Castle was the first half of the 14th century. They presumed that in the Island it was initially built in castrum, transitional to castle, style containing Romanesque features. In archaeologist Birutė Liasauskaite’s opinion, the construction of the Trakų Island Castle began in the second half of the 14th century. Archaeologist Albinas Kuncevičius (b. 1957) assigns the Trakų Island Castle to the second period of building brick and stone castles in the Grand Duchy of Lithuania, the beginning of the 15th century [Dr. Gintautas Rackevičius “Old new facts about the late-gotic exterior of the Grand Ducal residence in the Trakai Island Castle” (2002)].

In Poland, on a strategically significant island of the Bzura River Archbishop of Gniezno (1342–1374) Jaroslav of Bogoria and Skotniki (Polish: Jaroslaw Bogoria Skotnicki) built the Łowicz Castle (Polish: zamek w Łowiczu; around 1355) made of brick, which since the 13th century was an Archbishopdom manor evolved into its main residence. The castle was extended at the end of the 14th century. A second building block was erected on the courtyard’s opposite south side. A compact double-block volume of parallel blocks surrounded by the defensive wall (Fig. 11). One block was meant for flats, but the second one was used for household needs. It had the form of a small courtyard surrounded by a wall, and a building stood along its northern side. A gate tower by an entrance gate was built in the east part of the rectangular courtyard [15, 208] provided the fortress’ constant defence. A chapel was placed on the tower’s upper floor. The whole complex was additionally surrounded by an oval wall and a moat. On the island of the Rgilewka (Polish: Rgiłówka) River, political and religious leader, Archbishop of Gniezno (1423–1436) Wojciech Jastrzębiec built the double-block Borysławice Castle (Polish: Borysławice Zamkowe; around 1423) surrounded by the defensive wall. A tower by the entrance gate located between two parallel residential blocks (Fig. 12) created a rectangular courtyard [15, 114]. At the hill’s top on the left bank of the Liwiec River knights for defensive needs built a compact double-block Liw Castle (Polish: Zamek w Liwie; 1429) consisted of two parallel residential blocks and a tower by the entrance gate. Later, one block knocked down (Fig. 13) to make a courtyard [15, 200].

**Triple-block fortresses of bishopric centers**

In Courland, which had not been subjugated to the knights’ power yet, the Riga Bishopric achieved Donedange (Donedange, Latvian: Dunđaga) district, and on September 1234, the Bishopric of Courland was founded de jure. Around 1235, candidates began to divide the land, but the Cours took part in forays through Zhemaitia. The Semigallian and Zhemaitian troops led by the Grand Duke Vikintas (Zhemaitian: Vikints, Lithuanian: Vykins; ?–around 1253) on 22 September 1236 in the Battle of Saule defeated severely the Brothers of the Sword. After the heavy defeat, knights of the Livonian Brothers of the Sword added to the Teutonic Order had already taken in 1235 over properties and knights of the Dobrin Brothers of the Sword. By the support of Pope Gregorius IX on 12 May 1237 a new autonomous structural unit of the Teutonic Order – the Brotherhood of the German House of Saint Mary in Jerusalem in Livonia (Latin: Fratres de Domo Sanctae Mariae Theutonicorum Jerusalemitana per Livoniam) formed for subjugation of the Baltic tribes. Regulations of the Teutonic Order’s statutes on religious life and course of the war were binding [48, 420]. The Teutonic Order’s Master (German: Deutschmeister des Deutschen Ordens, 1219–1230, Landmeister von Preußen des Deutschen Ordens 1229–1239) Hermann Balk, Bishop of Breslau.
Thomas I (?–1268) and Duke of Silesia (1201–1238), High Duke of Poland (1232–1238) Henry the Bearded signed an agreement for establishment of new cities [21, 102, 101] in the State of the Teutonic Order (Latin: Civitas Ordinis Theutonici, German: Staat des Deutschen Ordens; 1230–1525). Taking over tenures of the Livonian Brothers of the Sword, the Livonian State (1237–1561) was founded, including in it the Selonian and Samogitian lands, the biggest part of Estonian lands, the southeast part of Latgalia and two thirds of Courland [49, 96–97]. Hermann Balk was appointed its Grand Master. Luebeck (German: Lübeck) located on the coast of the Baltic Sea and Hamburg located on the coast of the North Sea in 1241 signed a trading agreement which can be considered as the beginning for the German Hansa (Latin: Hansa Teutonica, German: Deutsche Hanse) those centre was established in Visby. German merchants from Luebeck needed new support places near big waterways and river estuaries. They in journeys included the southern coast of the Baltic Sea, took over the trade and built settlements at the most important destinations and interspaces, also in Riga implemented building and administration according to the German sample.

The impact of the Teutonic Order increase in Courland where on 19 April 1242 allowed the building of a fortress, or a town on “the most convenient spot” at the Venta (Wynda, Winda) River. On a strategically convenient place by the ford in the Venta southwards the Cours’ Hillfort, Livonian Master (1242–1245) Dietrich of Grüningen decided to build the fortress for surveillance of the Prussian–Riga earth-road and the Venta waterway. In 1243, the Prussians started their first revolt [33, 98]. Vice Master (1240–1241, 1248–1253) Andreas of Felben on 1 October 1243 signed an agreement with bishops of Riga, Dorpat and Osel-Wiek and founded the Confederation of Livonia (Latin: Terra Mariana; 1243–1561) [49, 105]. A wooden fortress for the administration and military centre at the Venta was built in 1244, and the second stone fortresses construction period (1237–1400) in Livonia was related to activities of the Teutonic Order which from 1244 till 1251 worked out a new version of regulation (German: Ordnungsräu). In 1245, the Riga Canonical Chapter received Dondangen district owned Bishop of Riga (1229–1253) Nikolaus of Nauen (Latin: Nicolaus de Nauen, Nicolaus Canonicus Rigenis), but the Curonians rose in rebellion. On a flat relief peninsula surrounded by the Pāce River and Mill Pond, the building of an elongated square layout three-block Dondangen Castle of stone built close to the fortified settlement Kalnādāres (Mountain garden) began until 1290 [12, 165]. The middle volume was
the first erected. An excavated ditch in front of it made difficulties to access the peninsula. Later, two parallel shorter side-volumes facing towards peninsula’s banks created the U-shaped plan. A defensive wall connected ends of blocks created a closed courtyard. In the fortress got crossing the castle-front included together with the residence in the unified defensive system. Riga Canonical Chapter its fortress and lands belonged to him in 1434 sold to the Bishopric of Courland.

The Archbishop’s of Riga residence and major center of power located from the 14th to the 16th century on the left bank of the Rauna River at the estuary in the Gauja near the Latgalian Tanīškalsnī on the borderland of the Confederation of Livonia. Along the great trade route leading from the Gauja Valley to Pskov and Novgorod the first Archbishop of Riga (1253–1273) Albert III (Albert Suerbeer, Latin: Adalbertus Westphalus (Saurbier) of Cologne around 1262 built the largest and also the safest one castle of the Riga Archbishopric. On a top of the high hill by steep slopes a fortified Ronneburg Castle (Rownenborngh, German: Schloß Ronneburg, Latvian: Rauna; 1262, 1273–1284) made of stone (Fig. 14) was Archbishop’s seat each year from 29 September to 7 February. Open two-story galleries surrounded the yard of the triple-block Ronneburg Castle which had a rectangular U-shaped layout made in the 17th century (Fig. 15): at the southern block’s end there was the chapel and the Canonical Chapter Hall which walls decorated by portraits of bishops and archbishops of Riga. In the west block diningrooms (German: Remter, Latin: refectorium) were placed. Archbishop of Riga (1509–1524) Jasper Linde (Latin: Gaspar Lindius, Casparus Linde) built a tower “Tall Caspar” of square layout to the end of the north block of bedrooms (Latin: dormitorium) and made a large-scale reconstruction of the castle, as well as ordered to create towers and fortification ramps of the fortress. The residence had three castle-fronts surrounded by defensive walls included five cylindrical towers. In the north castle-front, there were stables, cattle-sheds, buildings for household. Water barriers formed the fortified building complex incorporated into the walls’ track and the united defensive system [12, 381, 383–384]. The Livonian War from 1558 to 1583 did not touch the Ronneburg Castle, but after the Riga Archbishopric liquidation its political significance lost. Ronneburg Town (14th–18th cent.) next to the fortress (Fig. 16) existed until the Great Northern War (1700–1721) [28, 22].

At a fortress of Marienburg (Polish: Malbork) on 27 April 1276 named after the Teutonic Order’s patroness St. Mary around 1290, mutually linked four blocks of an even height were grouped around a square-shaped inner courtyard created the fortress of square layout [33, 108]. It reminded a monastery by cloisters and was named by Estonian art historian, internationally renowned architect of fortress architecture, the first Estonian art Professor at the University of Tartu Armin Tuulse (until 1936 Armin Neumann; 1907–1977) in the Latin phrase domus conventuales, but in the book published in 1942 it was called as the convent-house (German: Konventhaus) [38, 130].

Bishopric centers’ perimeter building complexes of the L-shaped plan

The Lemsal (Latvian: Limbaži) Castle belonged Archbishop of Riga, consisted of two volumes (Fig. 17) created building of L-shaped layout, but later – three volumes arranged around the inner courtyard created the castle of U-shaped plan [12, 301–302]. A square planning tower located at the castle’s north corner. Between both volumes, the tower by the main entrance gate was into the defensive wall provided defense. Above them – a tall tower of square layout covered by a four-sided roof. The ringwall included the fortress separated from the castle-front by the ditch. The castle and castle-front obtained an autonomous defensive system.

The Peace Treaty of Christburg was signed [33, 107], and the Prussians in 1245 finished revolts. Grandmaster made a decision on territorial division of the Prussians’ land, began to establish administrative structures and erected wooden fortifications of an irregular layout instead former Prussian buildings. During the second half of the 13th century, building of castles expanded. Authorised by Grandmaster of the Teutonic Order in Livonia (1251–1254) Eberhard of Sayn (Latin: Everhardus Seyn) turned to the land conquists separated Prussia from Livonia. During two months’ time in 1253, a stone castle of Memelburg (castrum Memele, castrum inter Memelam et Dangam, castrum Memelburg, borch to Mimelburgh) was built on an island on the Dange (Lithuanian: Dane, Danija, Akmena) River. In Memel (now Klaipėda), Bishop of Courland and the Teutonic Order on 8 February 1253 dealt with each other the new-built Memel Castle. In a document was mentioned that in Memel Courland Bishop’s cathedral and residence had to be built. The Memel St. John’s the Evangelist Church (German: St. Johanniskirche, St. Johannis evangelische Stadtkirche) was erected. On 19 April 1260, Pope Alexander IV confirmed that the Bishopric of Courland still did not have the Canonical Chapter. Bishop of Courland (1263–1299) Edmund of Werde mentioned in a document of 1263 that Goldingen should be Bishop’s of Courland home. The Teutonic Order regulation dated from 1264 pointed that castle-region’s all brothers of the Order together – brothers-knights, priests and servants called the
convent [48, 418–420] had to live in monasteries and had to give the monks’ promises of poverty, chastity and obedience. They had promise to fight against pagans. The Curonian riots had stopped, and on January of 1290, Bishop Edmund founded Courland Canonical Chapter. In the document, issued on 7 February 1290, Bishop presented half of the Memel St. John’s the Evangelist Church to the new Canonical Chapter [47, 13]. On the opposite left bank of the Dange, the settlement made by the Market Place obtained an unofficial name ”Neu Dortmund” (”New Dortmund”).

In Courland the resistance of the population was overcome and two centers were established in the Bishopric of Courland. Under the Archbishopric of Riga fortified building complexes for bishopric centers were built, and a church was included in the perimetral building around the courtyard. Pitlen in the Bishopric of Courland was chosen for Bishop’s residence placement on the right bank of the Venta River near the Vinda Port. Wooden castle of the Bishopric’s political, economic and cultural centre on the peninsula in Pitlen got under the Teutonic Order’s control and was replaced by stone castle (before 1309) of a regular layout. Prof. Ēvalds Mugurēvičs’s research “Piltenes pilis 14. – 16. gadsimtā un arheologiskās liecības par tās tītu” /”The Piltene Castle during the 14th–16th centuries and Archaeological Evidences about its Bridge”/ [35, 164–184] has been published in the collection of articles “Research on Courland and Semigallian Castles”. Hasenpot in the Bishopric of Courland was chosen for Courland Canonical Chapter’s placement on the right bank of the border- river Tebra. On the peninsula, the high Bleida Hill populated by the Curonians was the centre of Bandava castle-region. In Courland the resistance of the population was overcome and a fortified building complex for the Canonical Chapter was created [2; 3]. Around 1290, in the southwest part of hill’s plateau St. John’s the Evangelist Church (crashed down several times and again restored in 1733, 1860, 1887 and 1908) (Fig. 18) was built [28, 45]. Information on Hasenpot and Pitlen strongholds has been included in the encyclopaedia “Latvijas viduslaiku pilis, IV. Latvijas 12. gadsimta beigu – 17. gadsimta vācu pilšu leksikonš” /”Lexicon of German Castles in Latvia, IV. In the late 12th – the 17th century”/ compiled by Professor Andris Caune and Ieva Ose, but about the churches – in the encyclopaedia “Latvijas viduslaiku mūra baznīcas. 12. gs. beigas – 16. gs. sākums” /”Medieval Stone Churches in Latvia. In the late 12th – the early 16th century”/ [11].

---

Fig. 21. Plan of the fortified Marienwerder building complex with the first and the second Bishop’s residences and the Marienwerder Cathedral. Marienwerder building complex [online 07.04.2015, http://zamki.pl/?idzamku=kwidzyn).

Fig. 22. Reconstruction of the plan of the second stone fortress for Bishop’s residence and the Marienwerder Cathedral around 1360 [23].

Fig. 23. Plan of the Frauenburg Cathedral [55, 45].

Fig. 24. German lithographer and artist Heinrich Wilhelm Teichgräber (1809–1848). The Frauenburg Cathedral. 1839 [online 16.02.2019, https://upload.wikimedia.org/wikipedia/commons/9/9c/Dom_zu_Frauenburg_Teichgr%C3%A4ber.jpg].
In autumn of 1206 and winter of 1207, Priest Daniel arrived in Idumei to preach the Christian faith. Near the Brasla River he created yard, but the first wooden church (1206, burned down in 1211) in Raupe (Latvian: Straupe) was built on the Baukalns [16, X, 15, XV: 2]. On the left bank of the Brasla Archishop’s of Riga vassals won the property. In the 13th century Vassal Fabian of Rosen built a fortified residence close to the road (hellewech) from Riga to Dorpat. In the southeast, the hydraulic pond system of the Brasla tributary blocked the access to the Gross-Roop Castle (before 1310) surrounded by water obstacles. Knights Wolmar and Henneke during 1350 got the land had been hatched by their father Otto and a fortified residence called the Rosen House (husz tho Rosen). In 1374, Wolmar from Rosen family became Governor of the city and also the Gross-Roop Castle that during lots of centuries due to rebuilding got a complicated planning around the courtyard surrounded on the west and north sides by buildings created the perimeter building complex of L-shaped plan, but on the south and east sides – by the defensive wall. In the west of the brick castle, the large outside yard surrounded by a wall was adjoined to the town. Two almost perpendicular buildings (15th cent. (?) were added to the castle dominant – a four-storey tower-castle of square layout, which, possibly, was the oldest building. In the castle’s west structures, there were residential rooms, but the castle’s main gate located in the north building. St. Anna’s (?) Church (15th cent. (?)) of three-nave and four-bay, erected at the end of the perimeteral building and used by the citizens’ parish, was included in the unified defensive system (Fig. 19), therefore an elongated altarpiece by a polygonal closing is not precisely orientated eastwards. The church had two entrances created into the northern and western walls. There have also been two vicaries. The church owned a large garden, building plots and houses in the town of Roop.

The structural complexes of Bishopric centers in the Prussians’ lands

On lands populated by the Prussians monk Christian (Christian von Lekno; around 1180–1245) from the Oliva Monastery in 1222, became Bishop and by Pope (1216–1227) Honorius III’s support founded the Bishopric of Culm (Kulmerland, German: Bistum Kulm; 1245–1566/1577). At time of construction of the Marienburg Castle, the regular planning Old Town of Thorn created in two building stages [22, 97] became the capital city of the State of the Teutonic Order. Thorn composed of three parts: the Old Town in the west, the New Town in the east and the Castle in the southeast. The Old Town of Thorn was formed around the Old Town Market Place. Major buildings there include the Old Town Hall, Church of the Assumption of the Blessed Virgin Mary and the Cathedral Basilica of St. John the Baptist and St. John the Evangelist (Polish: Bazylika katedralna Świętych Jana Chrzciciela i Jana Ewangelisty w Toruniu; 1236–15th cent.) (Fig. 20) which construction in the first decades of the 14th century commenced. Three naves were built, but later, the former church was knocked down. The new building’s appearance is unknown, but it is assumed, that the middle-nave was built, the western façade was extended, partly walls and pillars were erected, the altarpiece was made and next to it – a square planning tower. In 1351, fire partly destroyed the cathedral, which during the third building period was renewed: one nave was extended, on the west side a new tower and the north nave, as well as side chapels were built. A hall-type building during the fourth building period was created. The increased volume obtained a modern look. From 1475 till 1480 chapels were built on the south side. The tower collapsed, and a massive tower during the 1480s was built instead of it. The height of the nave increased, and the stellar vaults were made.

The Teutonic Order’s knights built a fortress (1233) of stone instead of the Prussian wooden fortress on a precipice by the Liw’s River estuary, and the settlement created at the foothill. The garrison town Marienwerder (Polish: Kwidzyń; the City Law in 1233), named after the Holy Mary, was founded. In the west of the church, the second stone fortress (1242–1250) was built for Bishop’s residence. The Pamede, or Pomesania (German: Bistum Pomesanien, Polish: Diecezja pomezańska; actually from 1249 (1259–1527) Bishopsric was founded, and in capital city Marienwerder for more than a century there were simultaneously two stone fortresses (Fig. 21). The cathedral was built (1264–1284) instead of the church close next to strongly fortified Bishop’s residence, and in several building stages a structural complex was made, to separate Bishop’s residence and a castle-front from the town. In 1285, the Canonical Chapter was established and the first church for citizen’s parish obtained the status of the cathedral. Around 1325, St. John’s the Evangelist’s Cathedral (Polish: katedra św. Jana Ewangelisty; 1284–the 2nd half of the 14th cent.) of brick (Fig. 22) was started on a steep hill. The building’s five-nave hall (86 m long and 25 m wide) by side-naves of 14,5 m high adjoined the west end close to the square planning fortress (1322–1347) with the courtyard, strengthening the defence of the Capitular Castle. Stellar vaults covered the cathedral’s 21 m high middle nave and two-storey altarpiece (around 1335/1340) in the apse. The Mariewerder Cathedral (German: Domkirche von Marienwerder; 1343–1384), used also for citizen’s parish, performed defensive functions, therefore in the east end, two massive octagonal planning stair towers were built on the sanctuary. In the southwest corner at the
interconnection with the fortress, a belfry for the
neighbourhood observation was erected, but in the late
15th century, the top part for was made, increasing the
height up to 59 m [15, 191]. The Marienwerder Cathedrals tower, built next to it, quite possible, before
reconstruction was used for observation. The well
tower was built on the northeast side of the fortress.

One of the four bishoprics in the Prussian’s lands
was the Archdiocese of Warmia (Latin: Archidioecesis
Varmiensis, German: Bistum Ermland; 1250–1512),
fl 191,

founded in 1243. Warmia for the first time mentioned
in 1249, but from 1262 till 1299, there appeared the
term “Ermelandi”. Tenure of Bishop and the Canonical
Chapter stretched from the Vistula Lagoon far away
into the inland and as a wedge pushed in between the
lands ruled by the Teutonic Order, separating the old
tribal regions. Instead of the Prussian settlement
Brusbergue on the side of the Vistula Lagoon the
Teutonic Order founded Bishop’s residence
(1250–1340) Braunsberg (Polish: Braniewo), which the
Prussians destroyed in 1261. Dwellers from Luebeck in
1273 arrived in a new place restored Braunsberg
by the Paslenka (Polish: Pasłęka) River, and Bishop of Warmia (1278–1300) Henryk I Fleming (Heinrich/Henricus I Fleming) started to
make the Old Town fortified with a ditch and
defensive wall. In 1278, Braunsberg became the
capital city of the Bishopric of Warmia, Bishop
made (1278–1284) a fortified residence included in
Bishop’s yard and a square planning tower
(13th cent.) with a gate for entrance into the yard.

In the northwest of the yard development of building
started. Henryk I Fleming in 1284 awarded the
Luebeck Law. Since 1466, Braunsberg was
incorporated in the Teutonic Order’s State.

In 1280, Bishop of Warmia Henryk I Fleming his
residence moved to fishermen settlement, where
a castle (castrum) (1278–1284) [15, 150] was built and
the Canonical Chapter’s house was placed.
In Frauenburg (Polish: Frombork), the capital city of
Warmia (Ermland), the Town Hall was built at the
marketplace. On the Cathedral Hill (Polish: Wzgórze
Katedralnego) was built the first and main bishopric’s
wooden church, which in 1288 obtained the status of
the cathedral (Latin: Ecclesia Warmiensis). Bishop of
Ermland Eberhard of Neisse (1250–1326) awarded
Frauenburg the Luebeck Law, which already had lot of
Hansa cities. On the Cathedral Hill, Bishop of Warmia
(1329–1334) Henryk II Wogenap in 1329 started to
erect from the east westwards a freestanding three-
nave Archcathedral Basilica of the Assumption
of the Blessed Virgin Mary and Saint Andrew
(Polish: bazylika archikatedralna Wniebowzięcia
Najświętszej Maryi Panny i Św. Andrzeja Apostoła;
1329–1388) of 97 m long rectangular layout
(Fig. 23) [55, 79], Cathedral meant also for defence
functions. The middle-nave of the prayer’s hall was

Fig. 25. Professor Dr. hab. Tadeusz Zagrodzki (around 1911–2007). The reconstruction plan of the Frauenburg Cathedral’s ensemble. 2002 [online 19.06.2017, http://zamki.res.pl/frombork.htm].

Fig. 26. Plan of Frauenburg [online 16.02.2019, http://wolneforumgdansk.pl/files/plan_113.jpg]

Fig. 27. Plan of Königsberg. 1581 [7].

Fig. 28. Plan of the Königsberg Cathedral (1333–1380). Around 1830 [55, 42].
divided into eight bays, and an altar for each canon was placed in a separate compartment. Octagonal pillars, arranged in two lines, supported the stellar vaults and separated the middle-nave from side-passages. On the main axis of the middle-nave the richly decorated chancel, consecrated in 1342, was placed. In cathedral’s corners, stair towers of octagonal layout were higher and covered by steep roofs, in order to save proportions and join the inner part of the building with defence porches. The little belfry on the ridge of the gabled roof was joined together with the building’s massive volume, which reminded of the Cistercians’ Monastery building (Fig. 24). Richly decorated portal on the cathedral’s west façade between the porch (anteroom) and middle-nave was especially beautiful. A very widely spread element in Rhineland during the 12th–13th centuries was the arcade, which also decorated the cathedral’s façade. In the north of the wall by the porch extra semicircle stairs were added and enabled access to the organ swell-box. In 1388, Bishop of Warmia (1373–1401) Henryk III Sorbom completed building of the cathedral, which was connected in two places with building structures, arranged around the perimeter (Fig. 25). In the south and west of them, a big yard surrounded by cloisters located. Bishop’s residence (around 1350) and the Canonical Chapter’s house were included in the building complex placed in the east part of the Cathedral Hill (Fig. 26) [13, 278]. Defensive walls were built in the 1430s [42, 5]. The Belfry (Polish: wieża Radziejowskiego; mid-14th cent.), Copernicus Tower (Polish: wieża Kopernikowska; 14th cent.) and octagonal bastion with the Big Tower (1448) included in the northwest part, but the West Gate (Polish: Bramę zachodnią) was erected on the wall’s west side. The Holy Spirit Hospital and St. Anna’s Chapel (Polish: szpital św. Ducha i kaplica św. Anny; late 15th cent.) also were included in the fortified ensemble of the cathedral (Polish: zespół katedralny: Katedra Wniebowzięcia NMP i św Andrzeja Apostoła, Pałac biskupów warmińskich, Kanonie, Obwarowania obronne).

In Sembia, where in the early 9th century the Prussians major centre had sprung up on a strategically and geographically convenient place at the Pregel River estuary in the Baltic Sea, Sembian wooden fortifications Twangste (Prussian: tvinksta – “a pond made by a sluice”) on a high hill were destroyed. The Königsberg (Prussian: Kannegsgehsabs, Lithuanian: Karaliaučius, Polish: Krolewiec; from 1946 in Russian: Калининград) Castle for the waterway’s surveillance were built on the left bank of the Pregel River, but on the fortifications’ southern side, St. Nicolay’s (Niclas) Church (1264, destroyed in 1828) was erected. Pope’s legate William of Modena in 1243 founded the Samland Bishopric (Bistum Samland; actually in 1252–1525) on the Sambians’ land. At estuary of the river (Russian: Приморская) on the coast of the Baltic Sea the Schönnewitzer Schloß for Bishop’s residence (till 1525) was built until 1266. On its neighbourhood a village was formed in 1266. Bishop of Samland (1295–1318) Siegfried of Reinstein founded Wisklauten (Vyschuzin, Russian: Моковое, Lithuanian: Viskiautai). On 14 September 1305, Fischhousen was awarded the City Law, but its name Castrum Vischhusen obtained in 1326. On 13 September 1333, the cathedral (German: Königsberger Dom; 1333–1380) in Königsberg (Fig. 27) began to built, but around 1440, the three- naves Königsberg Cathedral began to be rebuilt. Twin towers crowned with spikes (destroyed by fire in 1544) highlighted the western façade of the cathedral which had a deep altarpiece (Fig. 28). Prayer’s hall covered by star vaults was made under one roof.

Conclusions
1. Traditions of Christianity centers’ formation rooted in the remote past when the City of David in the site of domestic inhabitants’ settlement was set up outside the modern city walls of Jerusalem. Establishing bishoprics in Livonia and the subordinate Prussians’ lands bishops chose a place for their residence and the cathedral near settlements of domestic inhabitants: bishoprics’ centers were set up in the hillforts where at the highest point the courtyard of irregular layout was created. Newly erected buildings involved in the perimeter building so that palace and bishop’s cathedral also perform a defence function. The layout of the perimeter building complex by the bishop’s palace, the Canonical Chapter’s hall and the cathedral resembled the main cult building complex on the Caelian Hill in Rome where the Archbasilica and the Bishop’s residence were included in the perimeter building formed a fortified, confined courtyard. The Chapter’s hall clinged to the Archbasilica of St. John in Lateran formed a link with the perpendicularly oriented bishop’s residence, thus creating a fortified building complex of the L-shaped layout. The first Riga Bishop’s St. Mary Cathedral destroyed by fire in 1215 was probably involved in the perimeter building of the first Riga Bishop’s yard and located in a place where Dominicans later built St. John’s Church. In the mid-13th century, the fortified building of bishoprics’ centers was created under the influence of traditions of the Teutonic Order fortification building.

2. In Livonia and the subordinate Prussians’ lands, the planning of bishoprics’ centers in the 13th and 14th centuries was influenced by buildings provided Bishop’s and the Canonical Chapter’s needs, as well as individuality of relief and natural
conditions. Complexes were built on the highest place of relief, as well as on flat relief. Different solutions for protection were chosen for each case. Initially, the building complex of the bishopric’s center was formed by a fortified courtyard involved structures in the perimeter building. Later, two urban structures were developed: one for Bishop and the other for the Canonical Chapter. Separate dwellings were built by Bishop and the Canonical Chapter, and each of the urban structures had a different function. In Riga after the devastating fire of 1215, which destroyed the first Riga Bishop’s St. Mary Cathedral, Bishop of Riga chose a building site on flat relief for the second Bishop’s yard near domestic settlement. The sacral building complex consisted of two urban structures – the second Bishop’s yard of the L-shaped layout and the cathedral complex with monastery. In Dorpat, the building complex of two urban structures was created at the top of the hill: a freestanding cathedral was built closely Bishop’s yard of the irregularly layout.

3. In the bishopric’s center of Haapsalu, the compact double-block fortress was made up of two parallel volumes – each of them was designed for their own function, but one urban structure developed. Sometimes two ends of parallel volumes were joined by a protective wall to create a closed yard. In one of the volumes a cathedral was built, or used for another purpose. In such fortified, closed building volume a tower building for protection was incorporated, so it was not necessary to place the fortress in a difficult of access place. Another time in the perimeter building two volumes were included one after the other, or the bishop’s residence was perpendicular to the cathedral to create the building volume of the L-shaped layout.

4. A double-block fortress complemented by a third volume created a three-block fortress: placing two volumes perpendicular to each other got the fortress of L-shaped layout, but supplementing with the third body placed parallel to one of volumes, a compact U-shaped triple-block building volume was created. A freestanding sacral building was built nearby. Transforming (opening) a compact triple-block fortress of the U-shaped layout and placing next a cult building as a continuation of the perimeter building the fortress got the L-shaped layout.

5. In the 13th century, bishoprics were established on the Baltic Sea southern coast at subjugated lands inhabited by the Cours and the Prussians. The local inhabitants fought back, therefore, each of the bishopric’s urban structures intended to Bishop and the Canonical Chapter was placed separately – each in their own village. In the perimeter building of Christianity centers on Livonia, a church building-type developed, but in the perimeter building of bishoprics's centers on Prussians’ lands a cathedral building-type developed.

References
1. Atskauņa hronika (1998) Rīga: Zinātne, 389 lpp.
2. Bākule, I. (1990) Pilsētas izpēte dabā 1989. – 1990.gadā. Aizputes pilsētas reģenerācijas priekšlikums. 2. sējums. Rīga: Restaurācijas institūts.
3. Bākule, I. (1990) Reģenerācijas priekšlikums. Aizputes pilsētas reģenerācijas priekšlikums. 3. sējums. Rīga: Restaurācijas institūts.
4. Benninghofens, F. (2011) Pilsētā kā galvenie atbalsta punkti vēlā viduslaiku aizsardzības sistēmā Vācijā. In: Caune, A. (2000) Latvijas mākslas vēsture. Rigas vēstures institūts apgāds, 9. – 51 lpp.
5. Birzniece, M. (2004) Aizpute. Rīga: AIB, 208 lpp. ISBN 9984-663-60-4.
6. Birzniece, M. (1996) Aizpute. Cēlvedis pa pilsētu un tās apkārtinā. Aizpute: Harro von Hirschheydt, 76 lpp.
7. Braun, G., Hogenberg, F. (2008) Cities of the World. Hong Kong, Köln, London, Los Angeles, Madrid, Paris, Tokyo: TASCHE.
8. Bremša, L., Braslia, A., Bruģis, D., Peše, S., Pujāte, I. (2004) Latvijas mākslas vēsture. Rīga: Pētergailis, 543 lpp.
9. Caune, A. (2000) Biskapa Alberto laika Rīgas plānojuma rekonstrukciju meklējumi. In: Senā Rīga. Pētījumi par Rīgas vēsturē. Rīga: Latvijas vēstures institūts apgāds, 233. – 269 lpp.
10. Caune, A. (1999) Bīskapa laika Rīgas arheologijas izpēte. In: Latvijas viduslaiku pilis, I. Pētījumi par Rīgas arhibīskapijas pilīm. Rīga: Latvijas vēstures institūts apgāds, 196. – 240 lpp.
11. Caune, A., Ose, I. (2010) Latvijas viduslaiku māra baznicas. 12. gs. beigas – 16. gs. sākums. Enciklopēdia. Rīga: Latvijas vēstures institūts apgāds, 511 lpp.
12. Caune, A., Ose, I. (2004) Latvijas viduslaiku pilis, IV. Latvijas 12. gadsimta beigu – 17. gadsimta vācu pilu leksikon. Rīga: Latvijas vēstures institūts apgāds, 591 lpp.
13. Čerņeva-Umera, T., Omiļanova, M., Majevsks, J. (2012) Poljija. Rīga: Zvaigzne ABC, 384 lpp.
14. Graudonis, J. (1999) Turaidas māra pils arheologiskā izpēte. In: Latvijas viduslaiku pilis, I. Pētījumi par Rīgas arhibīskapijas pilīm. Rīga: Latvijas vēstures institūts apgāds, 59. – 111 lpp.
15. Guerquin, B. (1984) Zamki w Polsce. Warszawa: Arkady, 348 lpp.
16. Heinrici Chromicon. (1993) Rīga: Zinātne, 453 lpp. ISBN 5-7966-0326-4.
17. Herrmann, C. (2007) Mittelalterliche Architektur im Preussenland: Untersuchungen zur Frage der Kunstlandschaft und -geographie. Petersberg: Michael Imhof Verlag, 816 S.
18. Jansons, G. (2004) Ikšķiles viduslaiku baznīca un pilis. Rīga: Latvijas vēstures institūts apgāds, 115 lpp.
Lidz 1215. gada vasarā cilvēki uzcēla sv. Jāņa baznīci. Bīskapijā vienu apbūves kompleksa radīja bīskapam. Otrās pusē būvēja klosteri.

1215. gada septembrī juridiski nodibināja Kursas bīskapiju. Bīskapijā vienu apbūves kompleksu radīja bīskapam. Otrās pusē būvēja klosteri.
apdzīvotā pakalna dienvidrietumu malā ap 1290. gadu uzcela Sv. Jāņa Evanģēlista baznīca un Kursas Domkapitula mātne. Radija L-veida plānojuma apbūvi. Straupē pie Braslas upes bīskapa vasalji uzcela ūdensšķēršļu apņemtu Lielstraupes (Gross-Roopp) pili (pirms 1310), kurai dienviddaugstumos pieeju aizkārsoja diķu sistēma — Braslas pieteik uzstādāmās, kam pāri gāja Rigas—Tērbatas ceļš. Mūra ietvertam ārējam pagalmam uz rietumiem no pils pieklāvas pilšētu (stat to Rope). Iekšspalvu rietumu un ziemeļu malā ietvāra korpuši, bet dienvidu un austrumu malā — mātne. Četrstūra plānojuma četros rūpam tomēr pievājā daļu gandrīz perpendikulārus korpusus (15. gs. (?)) un radija L-veida plānojumu: rietumkorpusā bija dzīvojamās telpas, bet ziemeļkorpusā izbūvēja pulk kārlas galvenos vārtus un galā uzcela kopā ātriznitestejamā (1264 uzcelu Straupes baznīci (15. gs. ())), kurā izmantoja pilšētu draudze.

Prūsijas zemēs Olivas klosteros māks Kristians (Christian von Lekno; ap 1180—1245) 1222. gadā dibināja Kulnas bīskapiju (Kulmerland, vācu: Bistum Kulm; 1245—1566/1777) un kļuva par bīskapu. Pamediešu celtā Kwedis cietokšņa (11. gs.) vietā ordenburšu pie Livas (Liva) ietekas Vistulas labā krasta pietekām Nogatā mūra cietoksnu. Kulnas akmeņa kājā izveidoja apmērti mācijas atsevišķu ēdienu vienu. 1233. gadā uzcela mācijas un būvēja Sv. Marijas vārdā nosauktu baznīci (vācu: Marienwerder, poļu: Kwidzyn; pilšētas tiesības 1233). Bāznicas rietumpusē uzcela olu mūra cietoksni (1242—1250) bīskapa rezidenci (1243—1252). Dibināja Pomezāņu bīskapiju no Sv. Marijas vārdā nosauktu baznīci (vācu: Bistum Pomesanien, poļu: Diecezja pomezańska; faktiski no 1249 (1259—1527), un galvaspilšētu Marienwerderā baznīcas vietā cieši klāt noceinātā bīskapa rezidenci pievājāja jau nu dievnamu (1264—1284), iesaistītu celtniecībai kompleksā, kas rezidenci un priekspilī nošķirās no pilšētas apbūvēm. Dibināja Domkapitulu (1285), un pilšētnieku draudzes pirmā baznīca 1285. gadā ieguva katedrāles statusu. Bīskapam un pilšētnieku draudzei ap 1325. gadu sākā stāvājā kalnā no kājēm būvēt pieejamā zāles tipa Sv. Jāņa Evanģēlista katedrāli (poļu: katedra św. Jana Evangelisty; 1284—14. gs. II puse), kuras rietumgalu pievājāva quadrātveida plānojuma cietoksni (1322—1347), lai stiprinātu Domkapitulā mātes aizsardzības funkcijas. Tornas katedrāle (poļu: Bazylika katedralna Świętych Jana Chrzciciela i Jana Ewangelisty w Toruniu; 1326—15. gs. (gs.)) sākā būvēt 14. gs. pirmajās desmitgadēs, bet 1351. gadā baznīca dalījās izmantojā uzgumsgrāks. Cēltne atjaunoja: paplašināja vienu laidumu, rietumpusē rietumpusē uzcela baznīci un torni, kas sakartāja. Tā vietā 1480. gadā gados uzcela masīvi torni, bet ziemeļpurvē pievājā ēdienās apbīvē. Palielinājušā būvējās veikušās pirmās saistības funkcijas. Tornas katedrāle (poļu: Bazylika katedralna Świętych Jana Chrzciciela i Jana Ewangelisty w Toruniu; 1326—15. gs. (gs.)) sākā būvēt 14. gs. pirmajās desmitgadēs, bet 1351. gadā baznīca dalījās izmantojā uzgumsgrāks. Cēltne atjaunoja: paplašināja vienu laidumu, rietumpusē rietumpusē uzcela baznīci un torni, kas sakartāja. Tā vietā 1480. gadā gados uzcela masīvi torni, bet ziemeļpurvē pievājā ēdienās apbīvē. Palielinājušā būvējās veikušās pirmās saistības funkcijas. Tornas katedrāle (poļu: Bazylika katedralna Świętych Jana Chrzciciela i Jana Ewangelisty w Toruniu; 1326—15. gs. (gs.)) sākā būvēt 14. gs. pirmajās desmitgadēs, bet 1351. gadā baznīca dalījās izmantojā uzgumsgrāks. Cēltne atjaunoja: paplašināja vienu laidumu, rietumpusē rietumpusē uzcela baznīci un torni, kas sakartāja. Tā vietā 1480. gadā gados uzcela masīvi torni, bet ziemeļpurvē pievājā ēdienās apbīvē. Palielinājušā būvējās veikušās pirmās saistības funkcijas. Tornas katedrāle (poļu: Bazylika katedralna Świętych Jana Chrzciciela i Jana Ewangelisty w Toruniu; 1326—15. gs. (gs.)) sākā būvēt 14. gs. pirmajās desmitgadēs, bet 1351. gadā baznīca dalījās izmantojā uzgumsgrāks. Cēltne atjaunoja: paplašināja vienu laidumu, rietumpusē rietumpusē uzcela baznīci un torni, kas sakartāja. Tā vietā 1480. gadā gados uzcela masīvi torni, bet ziemeļpurvē pievājā ēdienās apbīvē. Palielinājušā būvējās veikušās pirmās saistības funkcijas. Tornas katedrāle (poļu: Bazylika katedralna Świętych Jana Chrzciciela i Jana Ewangelisty w Toruniu; 1326—15. gs. (gs.)) sākā būvēt 14. gs. pirmajās desmitgadēs, bet 1351. gadā baznīca dalījās izmantojā uzgumsgrāks. Cēltne atjaunoja: paplašināja vienu laidumu, rietumpusē rietumpusē uzcela baznīci un torni, kas sakartāja. Tā vietā 1480. gadā gados uzcela masīvi torni, bet ziemeļpurvē pievājā ēdienās apbīvē. Palielinājušā būvējās veikušās pirmās saistības funkcijas. Tornas katedrāle (poļu: Bazylika katedralna Świętych Jana Chrzciciela i Jana Ewangelisty w Toruniu; 1326—15. gs. (gs.)) sākā būvēt 14. gs. pirmajās desmitgadēs, bet 1351. gadā baznīca dalījās izmantojā uzgumsgrāks. Cēltne atjaunoja: paplašināja vienu laidumu, rietumpusē rietumpusē uzcela baznīci un torni, kas sakartāja. Tā vietā 1480. gadā gados uzcela masīvi torni, bet ziemeļpurvē pievājā ēdienās apbīvē. Palielinājušā būvējās veikušās pirmās saistības funkcijas.