



CASTELLA MARIS BALTICI 6

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Front cover: Castle of Trakai

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Back cover: Royal palace in an Upper castle.

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On September 18–22, 2001 the Symposium Castella Maris Baltici VI was held in Lithuania. This is already the 6th symposium for the researchers of the medieval castles. The first symposium was held in Turku, Finland in 1991, the second – in Nyköping, Sweden in 1993, the third - in Malbork, Poland in 1995, the fourth - in Estonia in 1997, and the fifth – in Denmark in 1999.

The topic of the conference held in Lithuania was “Contacts and Genetically Dwellings in the Castle Buildings”. Over 40 scientists participated in the conference from Denmark, Belarus, Finland, Sweden, Switzerland, Germany, Russia, Great Britain, Poland, Latvia, Estonia, and Lithuania. In the conference there were not only reports presented but also the most famous castles of Lithuania visited in Vilnius, Trakai, Kernavė, Kaunas and Klaipėda.

The time of this conference coincided with the European Heritage Days “Defensive Fortifications in Lithuania”.

This conference was organised by the Public Institution Academy of Cultural Heritage established by Vilnius University, Vilnius Academy of Arts, Vilnius Gediminas Technical University, Ministry of Culture of the Republic of Lithuania and Department of Cultural Heritage Protection. The Symposium Castella Maris Baltici VI was sponsored by the Department of Cultural Heritage Protection.

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Especial thanks deserve my colleagues who organised this event Rita Mosiejienė, dr. Justina Poškienė and dr. Gintautas Zabiela.

Dr. Albinas Kuncevičius

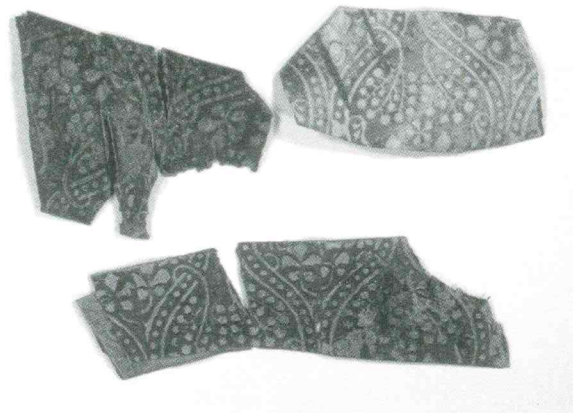


Fig. 13. Ornated birch bark from Stege castle

defence of the island consisted of an earth rampart and a wooden palisade. It is impossible to determine whether the brick-buildings were houses or towers and whether they date back to 1314 or if they are much younger.

It is possible that the Stege castle which was built in 1314 was a genuine wooden castle. On the other hand the fact that the under-water constructions are made of wood must not lead to overreaching interpretations. The well-defined piles of bricks in the moat do as mentioned above indicate an earth rampart. But a ringwall of bricks is not definitively out of the question.

Artefacts

Artefacts are found in the moat close to the bridge and in the wells. Down-at heel leather shoes and

small, manufactured, wooden sticks, presumably parts of furniture, bone material and potsherds are the most common artefacts in Stege Borg. But there are also parts of cross bows, dice, pieces, handles of knives, a seal, a sword pommel etc. The most remarkable finds are the ornamented pieces of birch bark (Fig. 13), which have never been seen in Denmark before. Similar pieces are excavated in Kernavė in Lithuania along with a stamp used to strike the ornaments on to the birch bark. The ornamented birch bark and the stamp from Kernavė are on view in the Kernavė museum of archaeology and history (Vitkūnas, Luchtanas, Grigonienė 1999). Ornamented birch bark and other artefacts from Stege castle are on view in Møns Museum in Stege, Denmark. Possibly these pieces of ornament have been used to decorate baskets, boxes, quivers etc.

Future excavations of Stege Castle

Only one quarter of the 1314 castle has been excavated. The two quarters of the castle to the south are occupied by modern harbour-activities and have been exposed to many building-activities during time. Probably little is left of the castle in that area. But the area to the east, which is today undeveloped, apparently has never been demolished to the same degree as the now excavated area. If the future building-activities cause archaeological excavation in this area, perhaps foundations of buildings and the layout of this part of the castle-island will be brought to light.

Anders Reisnert

SOME SCANIAN AND SCANDINAVIAN CASTLES AND THEIR RELATIONS TO THE LIVONIAN ORDER

Einige skanische und skandinavische Burgen und ihr Verhältnis zum Livischen Orden

Schonen ist heute das südliche Provinz Schwedens, aber war vor 1658 ein bedeutendes Landesteil von Dänemark. Das frühe Teil des 16. Jahrhundert war eine unruhige Zeit mit sozialen Spannungen in Dänemark sowie in Deutschland. Das Kampf zwischen verschiedenen sozialen Klassen wurde ganz deutlich, und zwei grosse Aufstände, erstens das Versuch Sören Norby den Macht in Schonen zu übernehmen 1525 und zweitens die sogenannte Grafenstreit (Grevefejden) 1534, veranlassten schweren Schaden an die privaten Burgenanlagen in Schonen. Als die Streiten sich legte, und den Adel als Sieger dar stand, begann eine febrile Bauverksamkeit um die Herrensitze zu wiederherstellen. Der Adel hatte sich eine vorgeschobene wirtschaftliche und politische Position erungen, und könnte den Bauernstand tiefer exploatieren. Die Voraussetzungen waren gut für einen Wiederaufbau von den rasierten Herrenhäuser, und man hatten gleichzeitig interesse seine neue Machtstellung durch die Architektur zu manifestieren. Es ist gegen diesen Hintergrund dass man eine gruppe von Burgenanlagen, die alle zwischen 1530 und 1550 errichtet wurde, und die alle diagonalgestellten Kanonentürme haben, verstehen soll. Diesen Burgenanlagen haben grosse ähnlichkeiten mit gesprächende anlagen in den Gebieten die vom Schwertritterorden kontrolliert wurden. Die ähnlichkeiten sind so gross dass man eine direkte Kontakt annehmen musste. Leider gibt es keinen schriftlichen Beleg für sowas, aber die Ordensburge wurden moderni-

sierunter die führung von Wolter von Plettenberg, und zähligen Burgenanlagen wurden dann mit diagonalgestellten Kanonentürme verstärkt. Das Schwertritterorden wurde successiv abgewickelt in den Jahren zwischen 1520-1540, und eine grössere menge von Baumeistern, und Bauarbeitern wurden arbeitslos. Baumaterial und Baumeistern wurden vorher von Gotland geholt, und man muss annehmen dass diese sich Menschen sich neue Arbeitsmärkte suchten nach dem Zusammenbruch des Ordens. Die Nachfrafrage auf Leute mit gutem Baukompetenz steig gleichsetig in Schonen. Die Idee mit diagonalgestellten Kanonentürmer kam also von Livland nach Schonen. Die Idee wurde dann, durch die enge adeligen Vervandtschaften, von Schonen aus verbreitet zu den übrigen Teilen Dänemarks, und auch zum Schweden. Eine Ausnahme in diese Kette von Indizien findet man in Steinviksholm in Norwegen. Hier haben aber Norwegische Forschern haben aber hier die Möglichkeit von einer direkte Kontakt zwischen den Bauherr, Erzbischof Olav Engelbrektsen und die Bautätigkeiten des Papstes in Rom vorgehoben. Ein Anzahl von Pläne verschiedenen Festungstypen waren für den Papst gerade bei Leonardo da Vinci verfertigt, als Olav Rom besuchte in 1523. Man kann sich gut vorstellen dass der Bischof von Nidaros gerne nahmen teil von den letzten Innovationen in der Befestigungskunst als er die Burgenanlage von Steinviksholm planierte, die ausserhalb von Trondheim aufgeführt wurde in 1524.

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Background

Scania is today the southern most province of Sweden but up to 1658 Scania was an important part of Denmark. Particularly when we are dealing with medieval and the renaissance period in this part of Sweden we actually are looking at Danish conditions.

It was common among the members of the high nobility in Scania to own estates both in Denmark and in Sweden. A few also owned property in Norway and Finland.

That was one of the results of the political union between the countries during the period 1397 to 1523, the so-called Kalmar federation. One of the results of the Kalmar federation was that ideas concerning art, politics, religion, warfare and architecture easily moved over the borders in-between the different countries of the federation. The national borderlines were no limitation for the thoughts of the privileged people.

Instead the ideas, for instance concerning architecture and fortification, seem to follow family relations more than the national borders. This phenomenon makes it possible for building-types and plane-solutions within the buildings to move over considerable distances without any traces in between.

This phenomenon should not be overestimated however. There are regional differences in building techniques between Denmark and Sweden even if the both countries belongs to a architectural world, at least concerning stone-building techniques, that they shared with the rest of northern Europe.

Military conflicts in Scania during early renaissance

In the beginning of the 16th century two large-scale rebellions took place in Scania. The development of this conflicts followed the same patterns as the contemporary rebellions among the peasants in Germany.

The first rebellion took place in 1525 and many of the private castles and manors were destroyed or heavily damaged in the struggle between Fredrik I and the rebellious forces led by Sören Norby. Artillery was the new weapon used effectively by both sides.

Eleven years later a new rebellion took place and only few of the fortifications owned by the nobility survived.

In both of the civil wars the social tensions between peasants and the inhabitants of towns on the one side and the local nobility on the other side, became evident. In the end the nobility stood as victor with new privileges, political power and enlarged economical resources to their disposal.

After the rebellions the nobility had several reasons to increase their building capacity. First of all many of them have lost their castles and manors in the struggles against the rebellious forces. The need for good and modern private protection against rioting bands had become evident for the nobility during the fighting but they also wanted to dress their victory in new and mighty castles.

The development of castle building tradition in Denmark east of the sound after the rebellion 1534–1536

In between the rebellions and the first decades after the last insurgent armies was forced to surrender a comprehensive building activity occur among the members of the Scanian nobility. This building period is characterised by a experimentation with different types of castles and fortifications (Fig. 1). One clearly can identify a group with diagonal placed artillery towers was crystallise.

Four castles in Scania belong to the main group and they are all built in brick in a combined early renaissance and late gothic architectural style. They all have four wings built together which gives a small squared courtyard like the castles build by the Teutonic- or the Livonian orders. The castles are placed in lakes, natural ore artificial; or are surrounded by broad moats. The defence-system is similar in all four castles with diagonal placed corner towers that could give flanking fire by cannons. The wings were also protected by a shooting gallery just under the roof. The loopholes was furnished with recoil beams. Between the loopholes are in most cases a sort of machicolations, especially close to the corners and over the entrances.

The oldest of the castles with diagonal towers in Scania is **Vegeholm** built soon after 1530 by the knight and member of the kings council, Tyge Krabbe (Richardt & Ljunggren 1853, 1 Vegeholm; Whålin 1903: 273; Olsson 1922: 237; Kjellberg 1966 III: 350). He was a well reputed warrior who had been one of the kings commanders on most battlefields on Scanian soil during the beginning of the 16th century. The castle that he built in the bend of the Vege river is the only Scanian example with squared to-

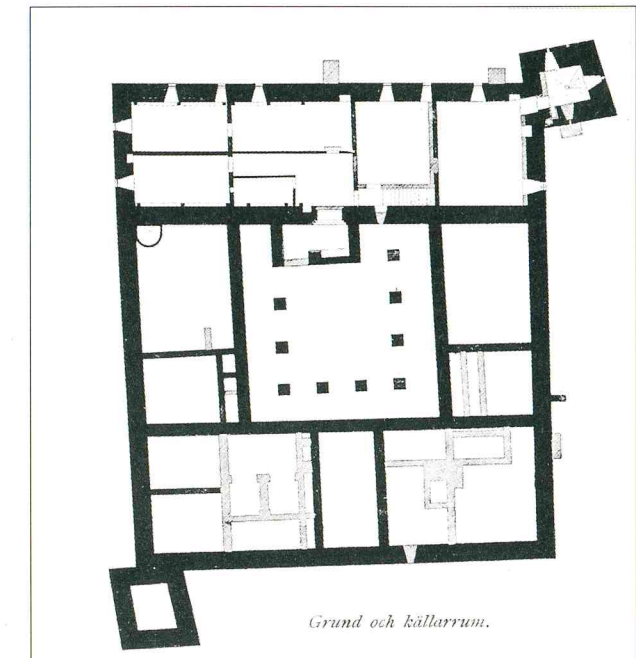


Fig 2. Vegeholm. After Geijer1920.

wers. When Tyge Krabbe ordered Vegeholm to be built he used one older building, the southern wing to which he added three other wings and the two squared towers on the corners. From the towers flanking fire could be given along the outer side of the wings (Fig. 2).

According to a sign over the entrance, Tage Ottesen Tott begins to build the castle **Eriksholm** 1538. The castle was named after Tages younger brother Erik and commemorated his death at the age of 19 (Richardt & Ljunggren 1854 2 Trolleholm; Olsson 1922: 231; Kjellberg 1966 I: 276) Later the name of the castle was changed to Trolleholm. Tage Tott was landlord of Bohus an later Landskrona. The castle of Landskrona was built under his supervision in 1549 (Norn 1949: 92). In the Scanian wars, between Sweden and Denmark 1675 to 1678, the castle Eriksholm was destroyed. When it was rebuilt again the towers were changed and the buildings lost their renaissance look in favour for the baroque style. However the castles original appearance are well known from written descriptions and contemporary drawings. Considerable parts of the eastern wing has also been preserved to our days (Fig. 3).

Torup is the only Scanian castle of this type that has been dated by dendro-chronology and it was begun in 1537 and it was completed 1542 (Bartolin 1975: 12). The foundations of this castle where, according to a now lost sign, laid by Lady Görvell Sparre (Richardt & Ljunggren 1854 1 Torup). Torup is the best-preserved castle of its kind in Scania but some changes in the exterior were been made in the years 1631–32 (Kjellberg 1966 II: 343). After a strike of lightning one of the corner towers was rebuilt from

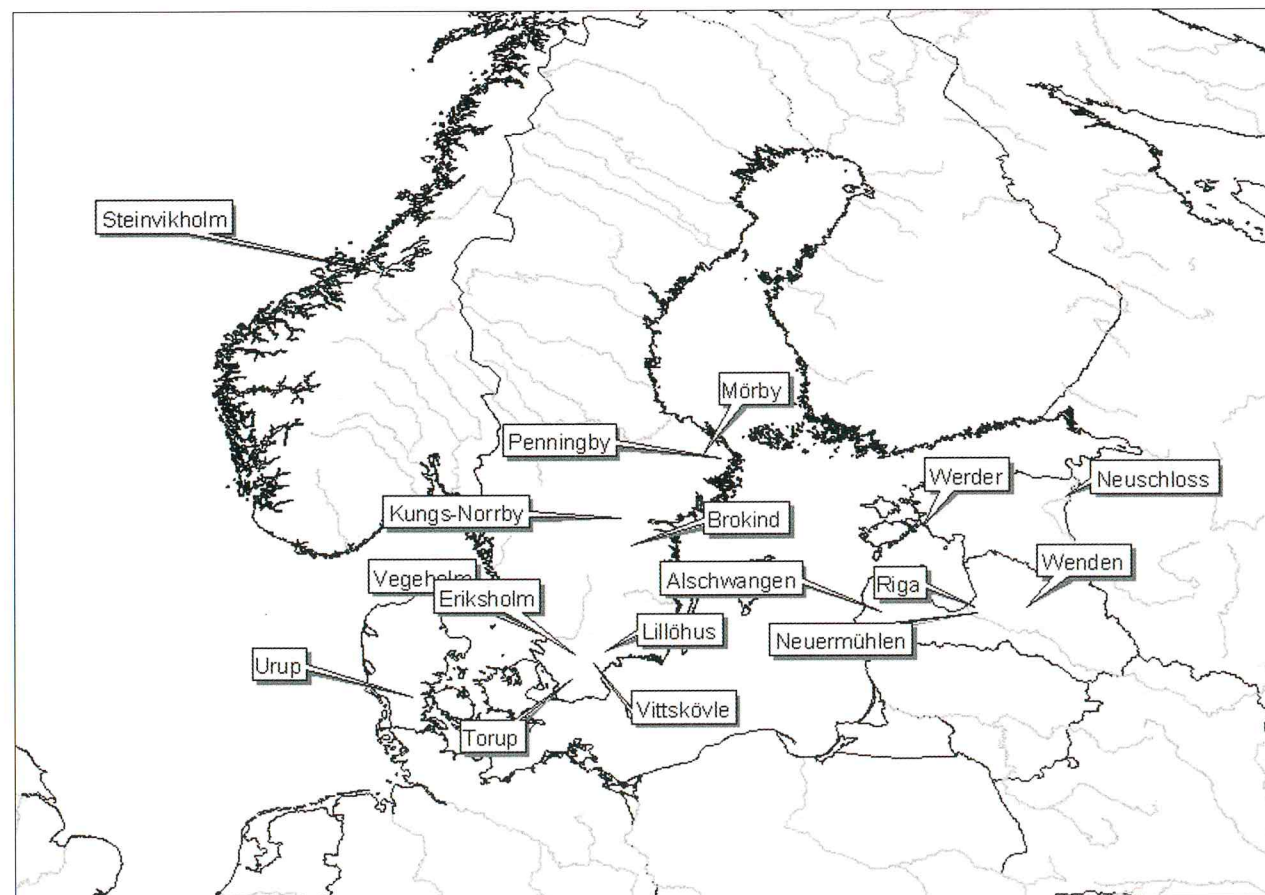


Fig 1. Map showing the locations of the different castles mentioned in the text

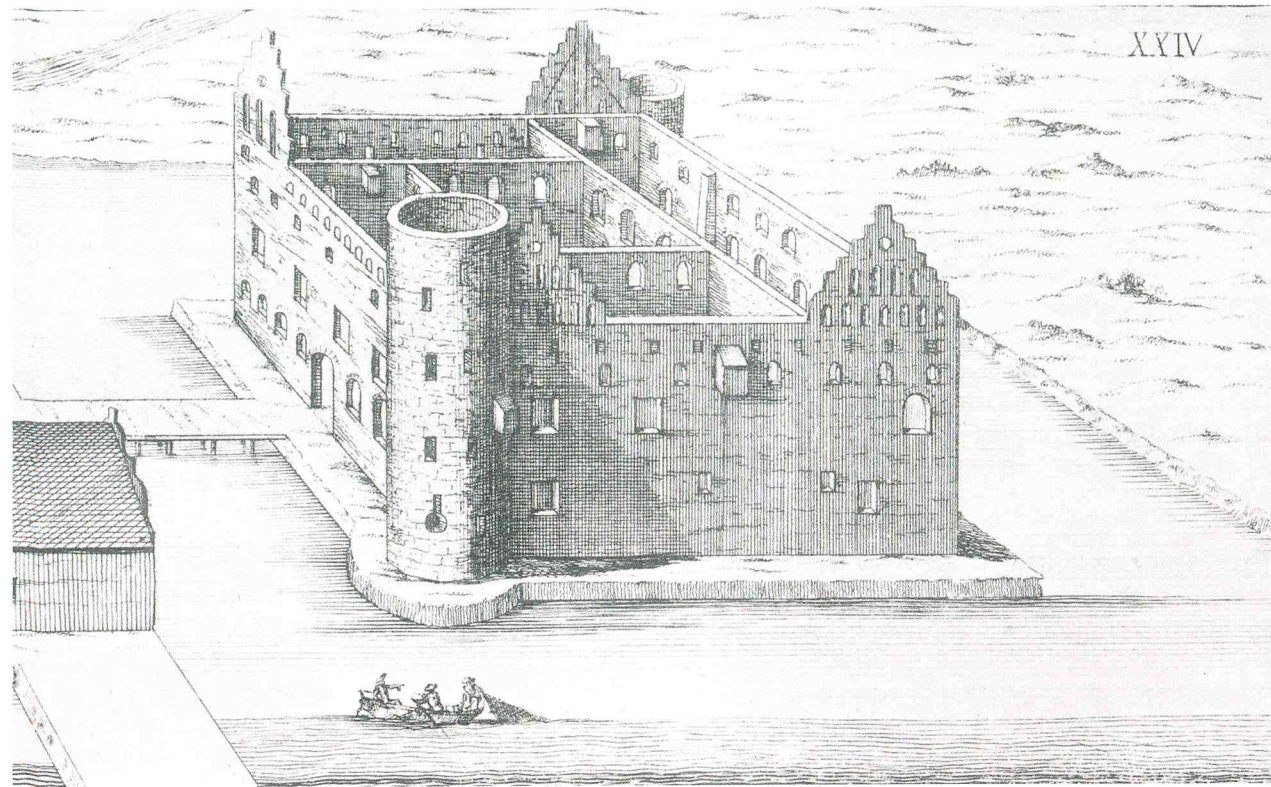


Fig 3. Eriksholm. After Burman – Fischer 1756

the first floor and the other tower was lowered one floor. Several inventories from the later part of the 17th century give us a good opportunity to reconstruct its original appearance (Lundberg 1933; Reisnert 2002: 229). The similarities between Eriksholm and Torup are evident (Olsson 1922: 79, 109; Reisnert 2000:138). Both castles are of about the same size and the different wings had been connected to each

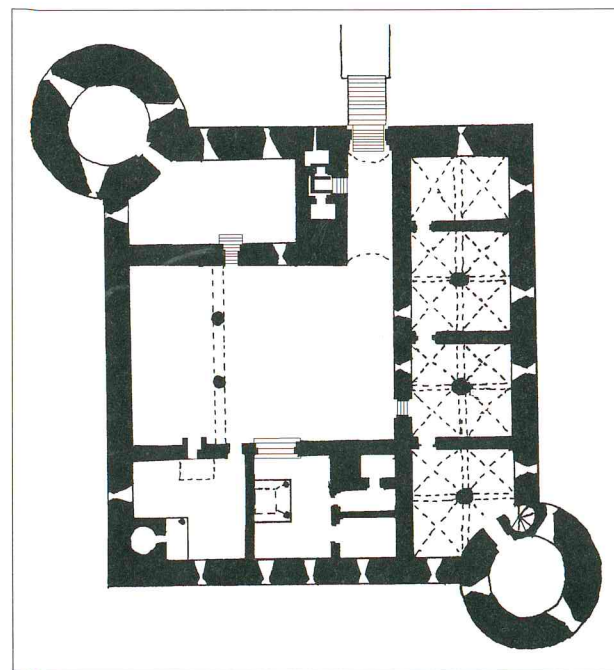


Fig 4. Torup. After Reisnert 2002

other in the same way. Decorative elements of the architecture as well as defence installations are also related to each other (Fig. 4).

Jens Brahe built the castle **Vittskövle**. It was, and still is, the largest castle of the type in Scania. Wee do not know when the castle was founded but it was ready in 1553 (Richardt & Ljungberg 1857 4 Widtsköfle; Kjellberg 1966 III: 365). It has been re-

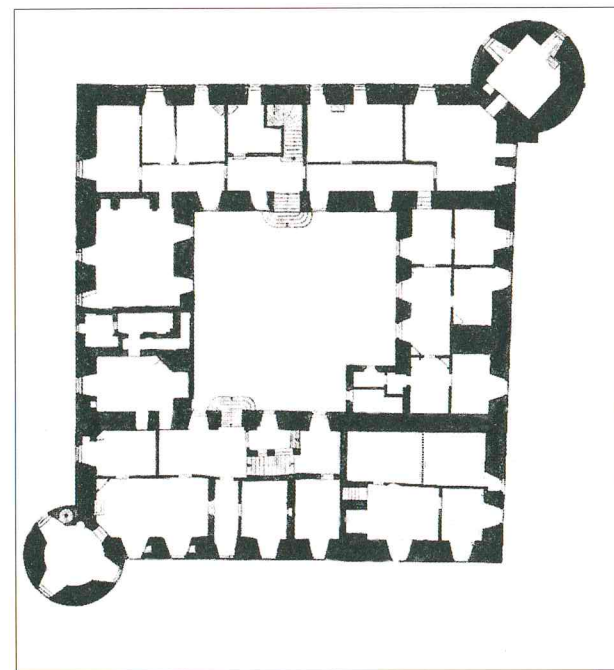


Fig 5: Vittskövle. After Upmark 1909

built several times but the exterior is relatively well preserved.

From older descriptions, drawings and pictures a fairly good reconstruction of the castles original appearance can be made (Fig. 5).

Lillöhus has a complicated building history and new investigations, carried out by Anders Ödman, have considerably changed its older history (Ödman 2001: 58). On the foundations after a high medieval castle, the member of the king's council Ivar Axelsen Thott built around 1460, a large fortified house. Ivars brother was Erik Axelsen who founded the border castle Olofsborg in Finland. Olofsborg was one of the first in Scandinavia that originally was designed for artillery warfare.

Ivar Axelsens castle Lillöhus was destroyed 1525 in the Sören Norby rebellion and was rebuilt with diagonal artillery towers some years later. There is no exact dating when this building-project was made but it was either in the beginning of 1530ths or around 1546 by Jacob or his brother Börge Trolle (Andersson 1948: 54). Two drawings from the 17th century made by the Swedish fortification expert Eric

Dahlberg shows a strong castle (Olsson 1922: 193) (Fig. 6).

In 1548 the king Christian the III ordered a building-master with the name Olof, who by this time was in service of Anna Ugerup. She was half sister of Jacob Trolle and after his death 1546 she came in the position of Lillöhus (Lundberg E.B. 1941: 78) Olof should immediately leave his service in Annas household and travel **Lyckå** to build a new border-castle there (Lundberg E.B. 1941: 73) (Fig. 7).

The castle Lyckå has many parallels and similarities with Lillöhus. From the kings letter it is obvious that the Building-master Olof may have been engaged in the modernisation of Lillöhus (Andersson 1948: 38). King Christian had no intention to create a strong border castle at Lyckå but to “build a residence and a haven of refuge in times of war” (Lundberg 1941: 76). This means that we are not dealing with one of the heavier fortifications that defended Denmark. As a comparison can the around ten years older Malmöhus be used. This castle, which defended a part of the eastern shores of the sound and the kings interests against rebellious citizens of the town (Reisnert 2000a: 164; Reisnert 2002b: 232), was a full equipped fortress in the same style as the border

castles created after the order the emperor Charles V between his territories and the kingdom of France (Roosens 1998: 193).

The development in Denmark west of the sound after 1536

In Denmark west of the sound only one example of a castle with diagonal defence towers is known but several others were built after the diagonal towers had lost their character of defence installations (My special thanks to Heidie Maria Møller Nielsen who turned my attention towards the Danish material). Wee will later return to the more civil type of castles with diagonal towers in Denmark in this article.

The only known castle of the type that uses diagonal towers as military defence purposes is **Urup** in Jutland. This small castle was erected on the families old estate by the knight, admiral and member of the kings council Pe-

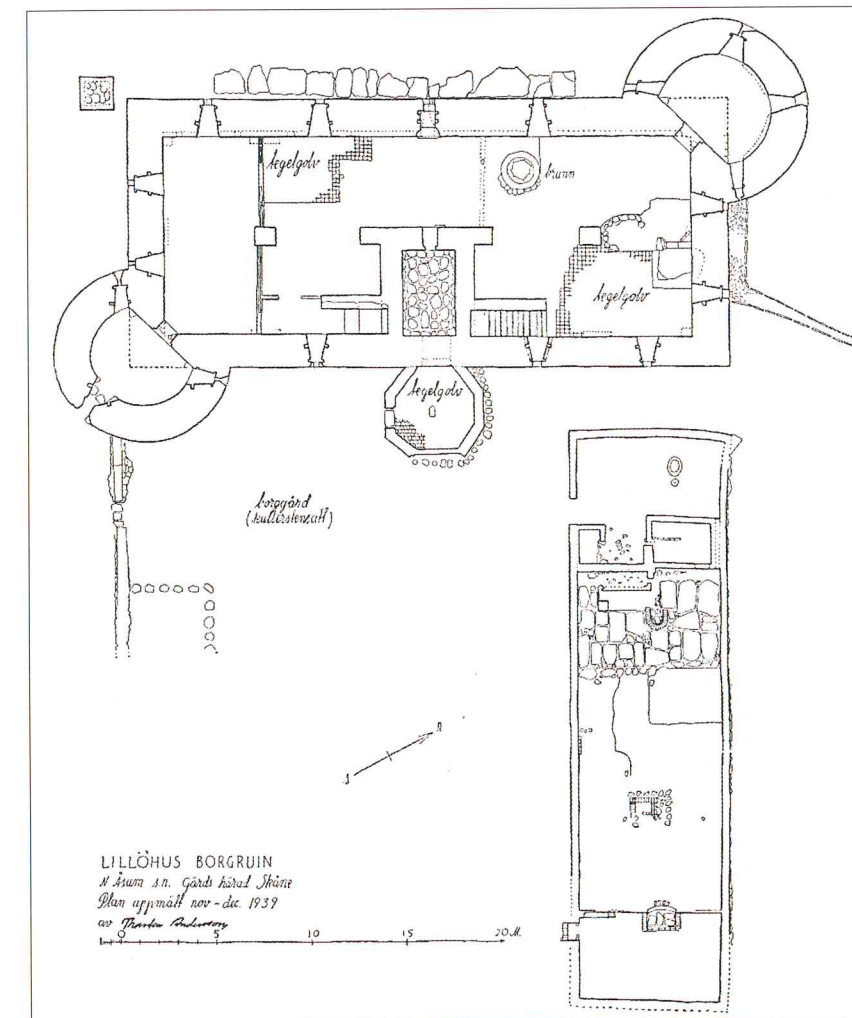


Fig 6. Lillöhus. After Andersson 1948

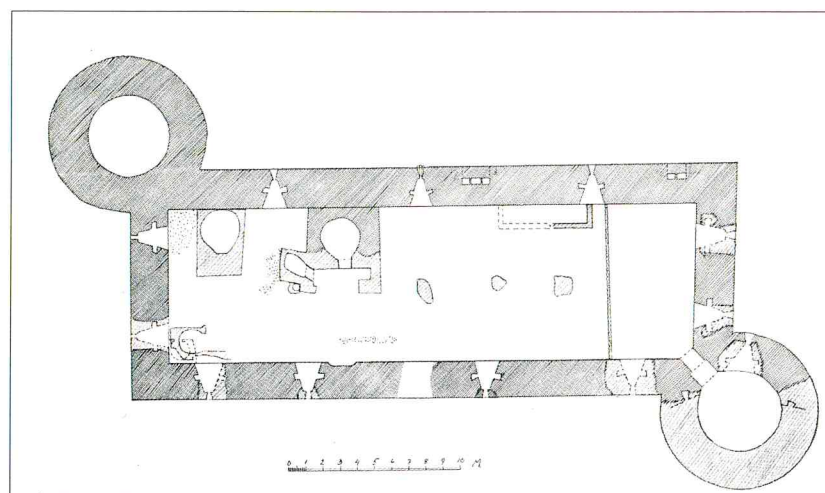


Fig 7. Lyckå. After Lundberg 1941

this type of castle are three towers erected. Two in the opposite corners of the most vulnerable side of the house and on the side against the courtyard is one tower, often incorporating the defendable entrance of the manor and a staircase. From this tower could the otherwise undefended corners of the manor be defended with a considerable fire power. This type of castles is however not the approach of this article.

Sweden

der Skramm in 1543–44 (Norn 1953: 122). Peder Skramms half aunt was Anna Ugerup who had handed over her building master Oluf to Christian III in order to built the border castle Lyckå (Norn 1953: 124). Later the castle Urup was modernised and most parts of Peder Skramms buildings were destroyed (Fig. 8).

Archaeological investigations made by Otto Norn has given evidence that the castle Urup was more or less a copy of Lyckå in Blekinge and Lillöhus in Scania (Norn 1953: 116). probably the same building-master, Oluf, has been in charge when the three castles was erected.

In Denmark west for the sound a particular type of manor that has solved the defence question with a defendable house with three towers, developed. They occur in Funen and in Jutland and follows another line of defensive thought in fortification than the diagonal towers. A beautiful example is Hesselager gaard on Funen. The kings chancellor Johan Friis begun to build the castle in 1538 but we do not know for sure when it got the shape that we see today (Riis 1981: 83). To obtain full flanking fire of the walls in

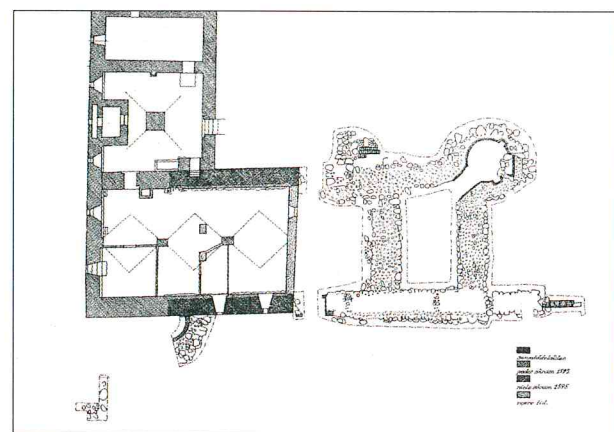


Fig 8. Urup. After Norn 1953

Four castles from this period in Sweden are known to have diagonal artillery towers. Two of these were built in the central part of Sweden.

Penningby in Uppland was originally a double house. It was the nobleman Lars Turesson Tre Rosor who soon after 1543 added the diagonal towers to an already existing house (Hahr 1917: 109; Söderberg 1967: 32). Lars Turesson was married to Kristina Eriksdotter Gyllenstjärna and through relation by marriage related with Börge Trolle to Lillöhus in Scania (Fig.9).

Related with Lyckå and Lillöhus in plan was **Brokind** in Östergötland. A large house with one quadrangular and one round tower as we know it from a 17th century picture. All datings are pure specula-

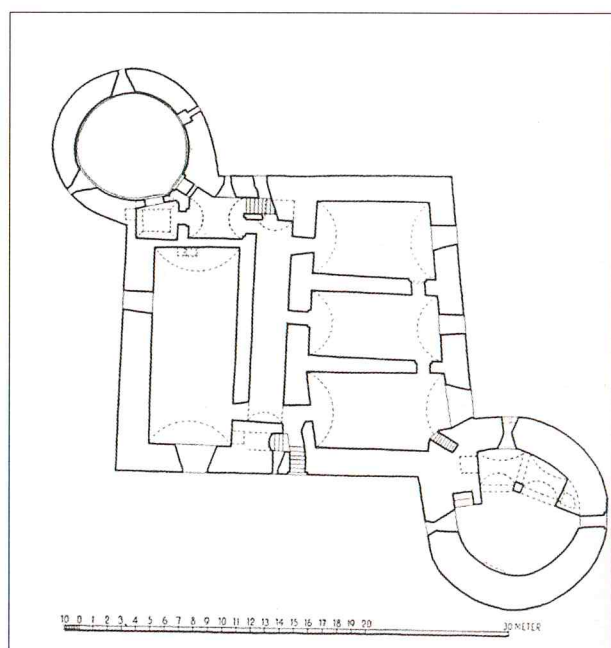


Fig 9. Penningby. After Söderberg 1967

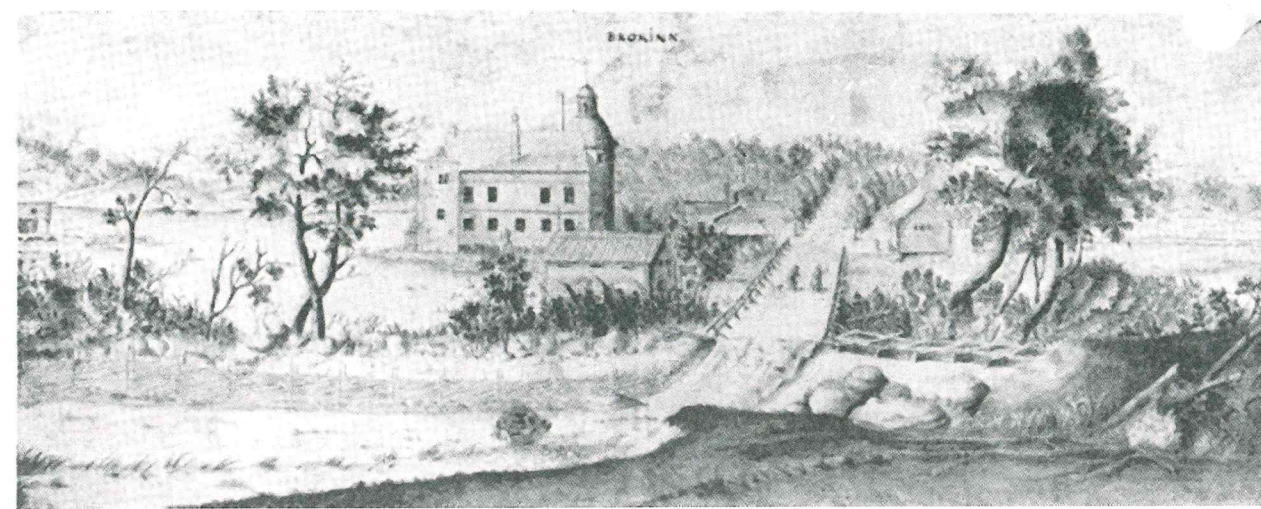


Fig 10: Brokind. Eric Dahlberg. After Hahr 1917

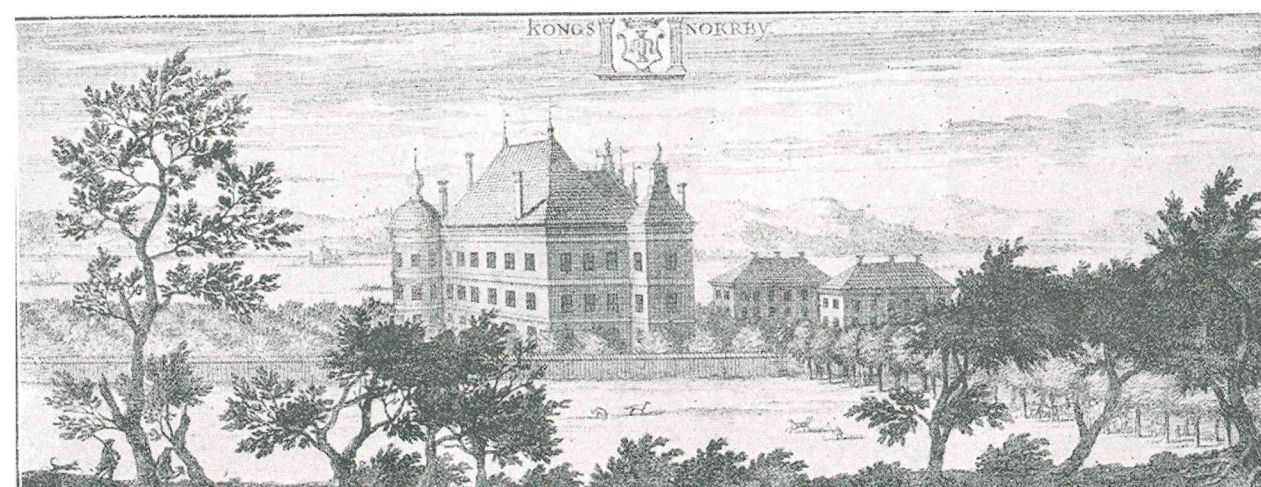


Fig 11. Kungs-Norrby. Eric Dahlberg. After Hahr 1917

tion (Lovén 1996: 485) but it seems reasonable that A Hahr is correct when he says that the towers were added in the middle of the 16th century (Hahr 1917: 140) (Fig. 10).

King Gustav Vasa built a small castle called **Kungs – Norrby** with a rectangular house in 1556. We do not know if the diagonal towers, one quadrangular and one round in plan, was original or later additions. Archaeological investigations have given evidence for building-activities in the second half of the 16th century (Lovén 1996: 483) (Fig. 11).

A private castle called **Mörby**, built by Gabriel Oxenstjärna and his wife Beata Eriksdatter Trolle in 1569. The castle has one round and one squared tower added to a older four-winged castle (Tuulse 1952b: 33) (Fig. 12).

Gabriel Oxenstjärna was Swedish governor in Tallinn that year and he had a special task to modernise military buildings in Estonia. Beata Eriksdatter Trolle had close family relations with the Danish Brahe family who built Vittskövle. The Trolle family had got benefits from the Kalmar federation and owned large properties and estates in both Sweden and Denmark

(Scania). With the marriage with Beate Trolle Gabriel Oxenstjärna came in connection with Vittskövle

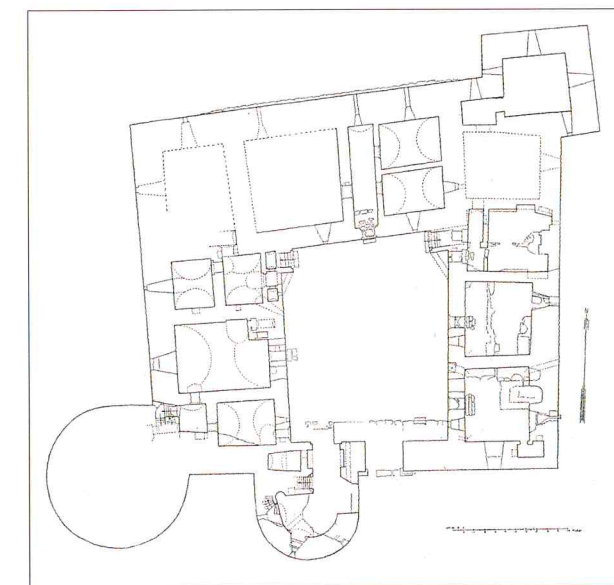


Fig 12: Mörby. After Tuulse 1952

but as a governor of Estonia he had several opportunities to become familiar with diagonal towers as defence idea.

Norway

In Norway **Steinvikholm** built by the Archbishop Olav Engelbrektsen just outside Trondheim is an interesting example of the type. Modern studies has recently been made and published by Saebjörg Walaker Nordeide. One of her results is that the archbishop probably got the idea of the castle-type from another source than the Scanian nobility. The archbishop was in Rome to get his Pallium 1523 and directly when he got back to Norway he began to build Steinvikholm. According to Noreides interpretation Olof has been in contact with Leonardo da Vincis castle plans (da Vinci was in the Popes service 1513–1516) and especially one that was made during this period where the great inventor had made a drawing over a fortified castle with diagonal placed towers (Nordeide 2001: 127) (Fig. 13).

The Baltic connection

In the area controlled by the Livonian order we find several castles with diagonally placed artillery towers that are just a bit older than the Scandinavian examples.

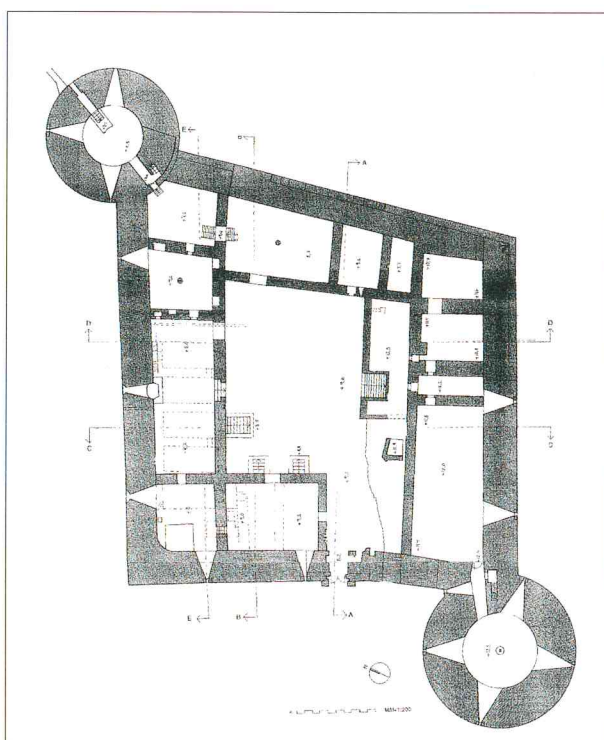


Fig 13. Steinvikholm. After Walaker Nordeide 2000

Tuulse pointed out the similarities between Scandinavia and the Baltic countries concerning this matter already in his dissertation "Die burgen in Estland und Lettland" (Tuulse 1942: 392). Ieva Ose had recently published an interesting article concerning the artillery towers in Livonian castles within the borders of Latvia (Ose 2000)

Estonia

Neuschloss (Vasknarva) on the borderline, created by the Narva river, against Russia. The castle was first built by the Livonian order in 1349, destroyed in 1427 and modernised with artillery towers around 1500. On Tuulses drawing of the castle there is only one tower but (Tuulse 1942: 314) later investigations has shown that castle during its last modernisation was rebuilt with diagonal placed artillery towers (Altoa 1997: 233, 272) (Fig. 14).

Werder, (Virtsu) on the Estonian mainland just opposite the island Saaremaa (Õsel) was built 1465 as a vasall castle by Konrad Uxküll. It was destroyed 1533–34 and was never rebuilt (Tuulse 1942: 317). We do not know when the artillery towers was added, but they are probably not as early as 1465. The castle was investigated in 1977 by K. Aluve who made an excellent reconstruction of the castles original appearance (Aluve 1978: 73) (Fig. 15).

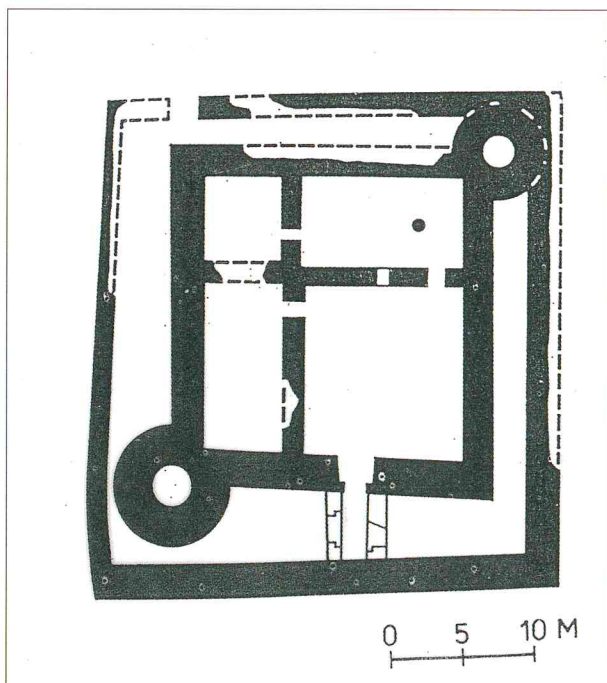


Fig 14: Neuschloss. After Altoa 1997

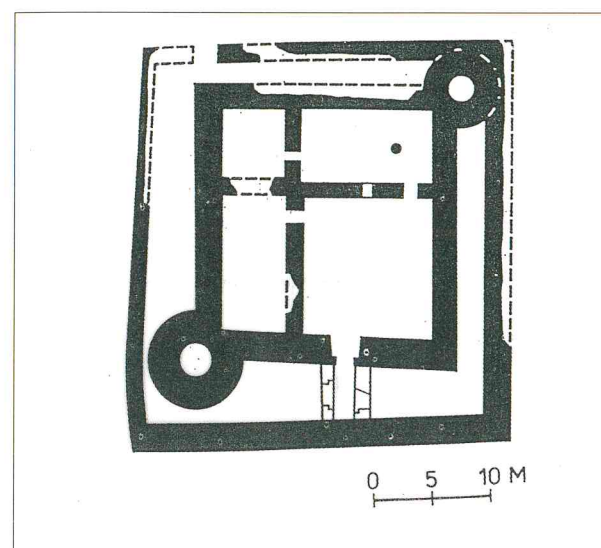


Fig 15: Werder. After Tuulse 1942

Latvia

Wenden (Cesis) was built in the beginning of the 13th century and was the main-castle of the Livonian order and earlier by the sword knights. Wolter von Plettenberg built new artillery towers here in the end of the last years of the 15th century (Tuulse 1942: 46; Ose 2000: 222) (Fig. 16).

Neuermühlen (Adaži) was originally built in the end of the 13th century by the Livonian order. It was modernised with diagonal artillery towers by Wolter von Plettenberg around 1500 (Tuulse 1942: 133; Ose 2000: 225) (Fig. 17).

Alschwangen (Alsunga) existed in 1341 and it was an administrative strong-point under the Komturei Goldingen. It was built as a large quadrangular castle with 60–65 m sides. Around 1500 new artillery was added to the complex (Tuulse 1942: 233; Ose 2000: 223) (Fig. 18).

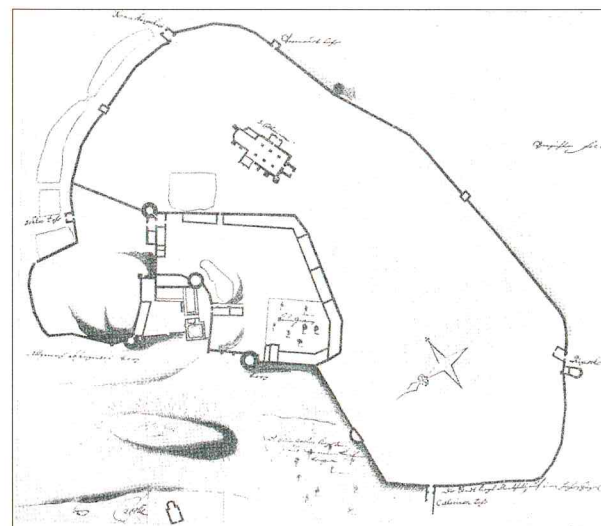


Fig 16: Wenden. After Ose 2000

One of the most splendid castles where the idea of the diagonal placed artillery towers was fulfilled is the castle in **Riga**. It was, like the other examples of Livonian castles in Latvia mentioned in this article, modernised by the Master of the Livonian order Wolter von Plettenberg. Wolter von Pletteberg was master of the Livonian order between 1494–1535. The works on Riga castle begins in the last years of the 15th century. The building-master Meister Nygels or Nickels from Tallinn work here from the first years of the 1500 to 1515 when castle was ready (Tuulse 1942: 322–323). It is probably he who erected the large diagonal placed artillery towers (Fig. 19).

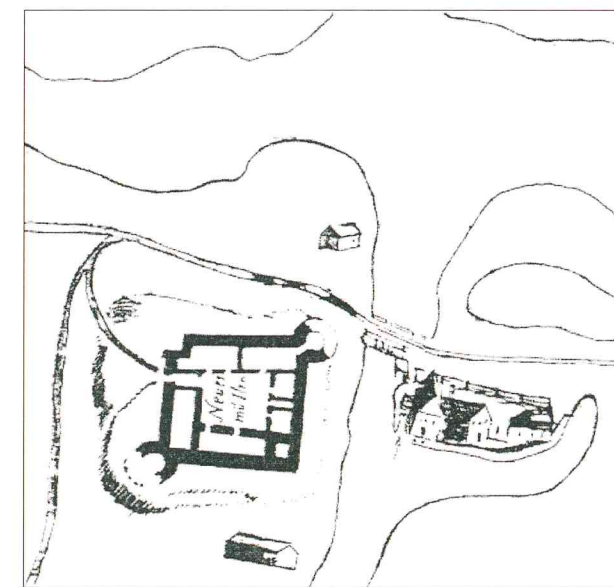


Fig 17. Nuermühlen. After Tuulse 1942

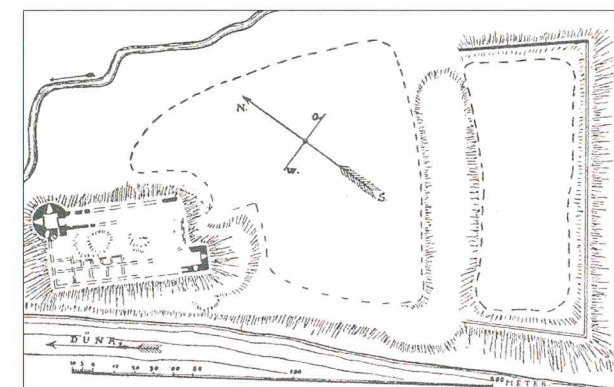


Fig 18. Alchwangen. After Tuulse 1942

From fortification to architectural element

It is typical for several building elements that originally have had defence purposes being transformed to architectural elements when their original purpose is of no use any more. One of the most classical example is the moat. When the moat was filled with water it became an obstacle of significance for the enemy. It made surprise attacks impossible and a considerable problem for the enemy during a siege. When the artillery developed in a way that made private effective fortifications incredibly expensive, together with a more secure and stable situation in the society, the moat became a beautiful water mirror where the manors splendid but defenceless architecture could reflect. Even long after the towers no longer were of any military use the nobility still built them in order to show up their status. Also the diagonal towers were used in a more friendly way in the end of the 16th and beginning of the 17th century's. Here is some examples in both Denmark and Latvia.

Kerklingen in Latvia was built in 1575 (Pirang 1926 I: 69) have diagonal towers. In this case the towers were not built for fortification purposes. Instead they are housing the manors staircases (Pirang 1926 I: 34).

In Scania we have **Marsvinsholm** built 1644 by Otto Marsvin (Kjellberg 1966 II: 193) with beautiful diagonal towers that gives the building a graceful appearance.

In Denmark **Katholm** on Jutland was built with diagonal towers in the in the last years of the 16th century in a distinctive Dutch influenced renaissance style (Kock 2000: 86). Also **Österholm** on island Als

was rebuild to an exclusive hunting lodge by the duke Hans probably in 1592. Today the place is a ruin but archaeological research have give evidence that the construction was supplied with diagonal towers (Norn 1956:103).

Discussion

The datings of the different additions to the castles in Livonia are not exact but it seems reasonable that the idea with diagonal placed artillery towers first occurred in the area that is now known as Latvia. I would like to suggest that the very first castle of the type is Wenden (Cesis), the main castle of the Livonian order. When Wenden was modernised the brilliant military strategic thought of the diagonal towers was evident. The same flanking effect could be obtained by two diagonal placed towers as with four corner-towers. A real barging for Wolter von Plettenberg. The threat against the order from Russia was constant and to modernise the castles of the territory was an urgent demand. If the fortification have the correct plan this could then be made to half the amount of money and even more important, in half the time.

As we have seen their is several similarities in between the area controlled by the Livonian order and Scandinavia in castle planning.

The question where the link is between the Livonian order and Scandinavia is hard to answer however. The written sources are to scares to give a clear overview over the problem.

As far as I have found out there are no direct written evidences for a connection at all. Instead of working with hard facts we have to look on a possible solution of the origin of the contacts.

We know, fore instance, that there already in the early 13th century have been contacts between Gotland and the region that now are known as the Baltic states as with other parts around the Baltic sea. Not only limestone and timber for building purposes were exported from Gotland but also craftsmen, like stone-workers and masons, came to the Baltic region from the island to build churches and carve details of stone (Markus 1999). Kaur Altoa has pointed out that one of the pilgrim routes to Old Livonia led trough Sweden to Gotland over Saaremaa (Ösel) to the Estonian mainland (Altoa 1997: 13). In her dissertation Kersti Markus has pointed out that the close connection in building tradition between Saaremaa, Jerwen and Sweden. Gotland. One of the links in the 13th century was Cistercian monastery in Roma (Markus 1999: 219). It seems like the stoneworkers and other craftsmen from Gotland connected with the building activity continued to work in the Baltic region up to the end of the medieval pe-

riod. After the death of Wolter von Plettenberg the building activity of the Livonian order collapsed and the craftsmen from Gotland had turned home or found new markets. On the home island there were probably few opportunities to get any work in the building-industry on the island since the later part of the 15th century had turned into long period of business depression. If the craftsmen still wanted to work with large scale buildings they had to look for new markets.

One such market was Scania where both capital resources and a demand for new buildings occurred after the wars in the first decades of the 16th century (Tuulse 1942: 393). In Scania a lot of building-material such as stone and timber was bought or otherwise obtained in Gotland and moved to the castle Glimmingehus (Berggren 1999: 61). The similarities between Glimmingehus in Scania and Ahrensburg (Kuresaare) in Ösel, at least the stone-carvings, could be explained by the mobility among the craftsmen from Gotland. The nobleman that ordered Glimmingehus to be built (the admiral Jens Holgersen Ulfstand) was the governor over Gotland for at least 22 years from 1487–1509 (Wallin 1979: 39; Skansjö 1999: 21). Gotland was then since 1361 under Danish supervision.

When a new market for building-masters and craftsmen connected to building activity occur in Scania after 1530, their was already a well established net of contacts between the local nobility and the building organisation in Gotland.

The "dark horse" among the Scandinavian castles with diagonal placed artillery towers is Steinvikholm outside Trondheim in Norway. The dating, 1524, is a bit to early too fit with the argumentation above. There is, at a first glance, obvious relations between Steinvikholm and the castle of Riga, as Tuulse pointed out in 1942 (Tuulse 1942: 393). There is however no known rational link in between the Norwegian castle and the Livonian order. Nordeides suggestion that the archbishop obtained this special fortification idea from Italy, indirectly from Leonardo da Vinci is most likely. But there could still be a connection to the Livonian order and Wolter von Plettenbergs rebuilding of the castle in Riga. Even if Leonardo was one of the renaissance periods important inventors he could still have got the inspirations to this type of fortifications from Livonia. During the last years of the order we can assume that several diplomats have had their way in both direction between the Pope and the grandmaster of the Livonian order. Some of them can actually have seen the new fortifications in Riga and even brought drawings or at least sketches to Rome.

A couple of decades after that the diagonally placed artillery towers has been exceeded by other fortification ideas in Scandinavia and in the Baltic, some of the nobility still provided their manors and castles with the same types of towers, but now it was to display and strengthen the buildings architectural appearance.

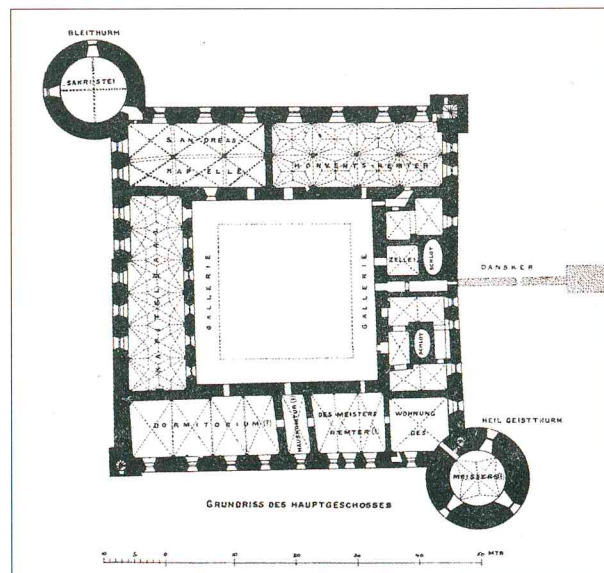


Fig 19. Riga. After Tuulse 1942