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Something Distinct, or Business as Usual? Interpreting the Plan of the Late Medieval Bridgettine Monastery in Naantali, Finland

Visa Immonen *  and Janne Harjula

Department of Archaeology, University of Turku, 20014 Turku, Finland; janhar@utu.fi

* Correspondence: vialim@utu.fi

Abstract: This article analyses modern interpretations of the medieval plan of the Bridgettine Monastery of Naantali, Finland. Instead of seeing the distinct spatial organisation as deviation from the Bridgettine norm, we consider it as an expression of a medieval process, by which monastic principles were re-conceptualised in order to be realised in material form. This perspective builds on the shift in thinking that has taken place in the study of medieval urban planning. Instead of being ‘organic’, meaning disorganised, medieval urban development has come to be considered as intentional, guided by general principles, although not in a manner that is always obvious to the modern mind. We concur that models such as St Bridget’s visions and the plan of Vadstena Abbey are important tools for reconstructing medieval monastic plans. Meanwhile, we propose that such models can also add latent and counterproductive baggage to this field of study by encouraging modern expectations of regularity within monastic architecture. If the designs of monasteries do not follow such models perfectly, discrepancies are often erroneously misconceived as indications of the builders’ insufficient skills and knowledge.

Keywords: architecture; bridgettine order; Finland; monastic archaeology; Naantali; plan; spatial organisation



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1. Introduction

As a degree of uniformity in attitudes and practices existed in monastic orders across medieval Europe, it is common for scholars interpreting the archaeological remains of monastic sites to assume that these followed a uniform scheme. Such assumed commonalities have influenced reconstructions of individual monastic sites and local practices, especially in countries such as Finland, where the written and archaeological record of monastic institutions is fragmented and scarce. Although such presumptions are an important aid to archaeological interpretation, they can also lead it astray, leading to local features being overlooked or cast as particularities, explained by marginality and thus by lower levels of knowledge and skill. In this study, we will lay the foundations for an alternative approach, in which differences in monastic architecture are considered as intentional, even as conforming to the medieval tradition of accommodating principles within actual practices. Material evidence of this (e.g., archaeological remains) would therefore provide evidence of a premodern rationale. This approach follows a shift that has taken place in the study of medieval urban planning in the last two decades. Instead of being ‘organic’ or disorganised, this considers urban development as an intentional process, guided by general principles, although not in a sense that is always obvious to the modern mind.

The present case study explores this hypothesis by analysing modern interpretations of the plan of the Bridgettine Monastery of Naantali (Nådendal in Swedish, Vallis Gratiae in Latin). It considers whether this plan should be considered as a significant deviation from the Bridgettine norm, or as just another expression of the medieval relationship between

monastic principles and their realisations in material form. This norm is understood as being defined not only by St Bridget's rather ambiguous architectural visions, but also, to some extent, by the actual plan of the motherhouse of the Bridgettine Order, Vadstena Abbey in Sweden, which scholars consider to be an architectural paragon for other Bridgettine monasteries.

Naantali Monastery is the only actual monastery—a building in which monks and/or nuns live and worship in an enclosed community without leaving the premises—in Finland (Figure 1). During the Middle Ages, the Diocese of Turku covered the land area of the present country of Finland, then constituting the eastern province of the Kingdom of Sweden. Within this diocese, one Bridgettine monastery and five mendicant convents were founded in the 13th to 15th centuries (Immonen 2019). Archaeological fieldwork has been conducted at the sites of these since the mid-19th century, but none have been fully excavated, and the available documentation remains problematic. This situation emphasises the importance of the hypotheses upon which the interpretations of such sites are based. A particularly pertinent example of this is provided by the Bridgettine monastery at Naantali. Historian and archivist Reinhold Hausen (1850–1942) conducted excavations there in 1872–1873 and produced a reconstruction of the monastery's plan, which has since remained largely unchallenged.



Figure 1. Naantali Church on the right, and the hill with the ruins of the monastic buildings on the left. The town of Naantali in front. Photo by J. Reinberg, 1880–1889/Finnish Heritage Agency.

In this article, we will first present the existing research into the Bridgettine Monastery in Naantali, starting from Hausen's predecessor Sven Gabriel Elmgren, continuing with Hausen's reconstruction and its later revisions, and then proceeding to note the insights provided by more recent excavations. After this analysis, we consider the study of medieval town planning in general, and how a shift has taken place from a view that urban settlements developed naturally to one that considers their development to have been intentionally planned and controlled. This paradigm change makes it possible to re-evaluate the plan of Naantali Monastery. By assessing how justified the assumptions of homogeneity are within the study of monasticism in Finland, we argue that such assumptions can be fruitful when the dynamics between monastic principles and their architectural realisation are not defined by a mindset that is exclusively modern.

2. Hausen's Work on Naantali Monastery

Unlike the Dominican and Franciscan convents in Finland, the founding of the Naantali Monastery is rather well documented in written sources. The decision to establish the monastery was made in 1438, and the first location selected for the complex was at Stenbergä in Masku, where construction works began in 1439–1440/1441 (Leinberg 1890, pp. 191–95). The soil at the site, however, was deemed unsuitable to sup-

port permanent occupation. The Council of the Realm decided to move the monastery to another place, eventually settling on its location at Naantali (Leinberg 1890, pp. 191–96; Hiekkänen 1993, pp. 143–46). The King of Sweden confirmed the transfer in 1442, and the monastery was inaugurated in 1462 (Salomies 1944; Hiekkänen 2007, pp. 106–7). The adjacent town of Naantali was founded in parallel with the monastery, with the earliest known land purchases taking place in the 1450s (Hiekkänen 1988). The monastery became a wealthy landowner and an important monastic institution in Finland, yet it met its downfall at the time of the Reformation. As a consequence of the Västerås Recess in 1527, by which the Church and its possessions were subjugated to secular authorities, Naantali monastery was taken over, first, by the local nobility, and then, in 1556, by the Royal Bailiff (Suvanto 1976; Klockars 1979; Knuutila 2009). The last Abbess died in 1577, after which the King decided to have the monastery's church remodelled into a parish church.

Except for the church, which is still standing, the history of the monastic buildings at Naantali is poorly understood since their remains mostly remain buried in the hill surrounding the church. The first written description of the ruins is a brief record from the 1650s, which remarks that several walls and other features were still visible (Gyllenius 1962; see also Ahl-Waris 2010, p. 61). Over the following centuries, the visibility of the ruins was reduced as they became covered with soil and vegetation (Scarín 1744–1745; Elmgren 1863, pp. 4–5). Eventually the remains of the monastery buildings were recognisable only as a series of protrusions and pits on the hill around the church. In 1863, librarian Sven Gabriel Elmgren (1817–1897) published the first map of the ruins (Hiekkänen 1988, pp. 50–51). He did not carry out any excavations, but tried to reconstruct the location, size and function of the buildings and their division of space based on topographical features (Elmgren 1863; see also Koskinen 1864). Despite these restrictions, Elmgren managed to identify a circuit wall on the north and west side of the monastic complex. As in Vadstena, the monk's choir and altar were located at the western end of the building. The monastery was divided into two separate groups of buildings, which comprised of the monks' quarters to the west and the nuns' quarters to the east, both with their own yards or garths (Elmgren 1863, pp. 37–61; see also the 1871 plan of the area; Ahl-Waris 2010, pp. 114–17).

While Elmgren made some relevant observations, it was with Hausen that a study of the ruins began in earnest. He was the first to conduct archaeological excavations at the site, providing a material basis for its reconstruction (e.g., Nordman and Cleve 1972, pp. 11–12; Hiekkänen 1993, p. 146). The fieldwork in 1872–1873 was hampered by limited funding and the restrictions imposed by the local administration, which was concerned about potential damage to trees and plants on the hill (Hausen 1922, p. 6; Lilius 2000, pp. 58–59). Moreover, there were no means to consolidate and preserve the remains of any structures exposed by the works. Consequently, Hausen's efforts were confined to tracing the outlines of walled structures, excavating around these, documenting what he saw and then filling in the pits (Hausen 1922, pp. 5–7). Later excavations have revealed that Hausen's excavations probably extended only as far as the upper parts of the walls, leaving layers below undisturbed, at least in some places (Uotila 2011c, p. 22).

Hausen wrote and filed a report of his excavations, but this was subsequently lost and only an excavation plan from 1872 remains (Lilius 2000, p. 56). However, Hausen published a slim volume on the monastery and its church in 1922, where he describes the findings, or rather the reconstruction of the plan he made based on his fieldwork (Figure 2). According to Hausen, the monastery's walls were made of masoned granite blocks, but bricks were used in places, especially in doorways. The walls had mostly been plastered both inside and outside. No roof tiles were found at the site, and Hausen assumes that while the church roof was covered with shingles, other buildings were roofed with birch bark and staves (Hausen 1922, pp. 49–50).

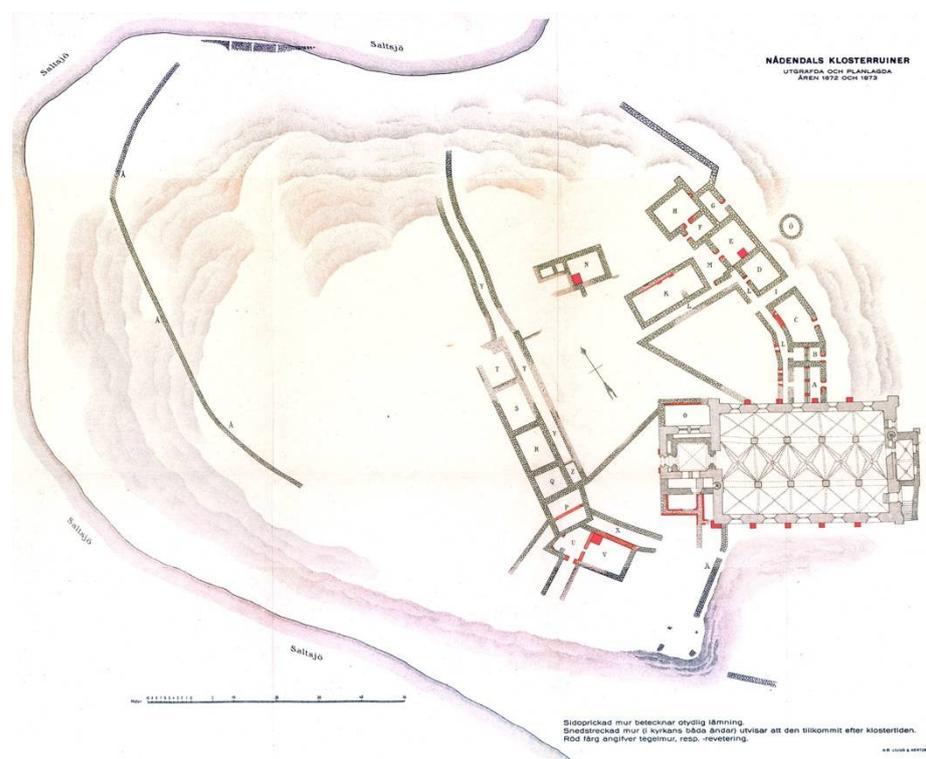


Figure 2. Plan of Naantali Monastery by Hausen (1922).

In his interpretation of the church's medieval history, Hausen refers to St Bridget's visions, or *Revelationes coelestes*, and archaeologist Hans Hildebrand's analysis of their architectural significance in *Sveriges medeltid III* (1898–1903) (Hausen 1922, pp. 21, 29 note 2; Lilius 2000, p. 59). Importantly, Hausen's reconstruction of the monastery's plan also draws on Bailiff Christoffer Blom's inventory of 1577–1581. Blom gives an account of recent renovations and itemises a number of buildings, including the church, as well as the living quarters of the monks and nuns (Rinne 1921; Hausen 1922, pp. 46–48). His list of buildings includes only those that were still in active use and had been repaired with masonry or covered with new roofs made of birch bark and staves. The account seems to describe a circular tour starting at the south end of the church, turning west, and then turning to continue north through the monks' quarters (buildings P–Z on Figure 2). The route then shifts to the nuns' quarters (buildings A–N on Figure 2) and continues along a row of buildings to the north of the church. Hausen's reconstruction, based on Blom's account and his own excavations, remains influential, since more recent archaeological excavations have focused on the church, or the areas outside the monastery.

3. Research after Hausen

In his publications on the Bridgettine monasteries at Naantali and elsewhere, art historian Bertil Berthelson (1901–1985) explicitly compares Naantali with Vadstena Abbey (Berthelson 1940, 1947). He mostly confirms Hausen's observations, but also comments that Hausen was unable to establish a direct architectural connection between Naantali Monastery and the motherhouse of the Bridgettine Order. It should be noted that the latter had not been excavated when Hausen published his work, making any direct comparison difficult. Berthelson also makes some minor revisions to Hausen's plan, based on the results of new fieldwork that he had undertaken.

In 1963–1964, architectural historian Henrik Lilius made extensive archaeological excavations and architectural investigations in Naantali Church, publishing the results in 1969. Although the fieldwork was highly deficient in terms of its processing of finds (Alén 2001), the most important outcome was the discovery of the foundations of a wooden

church inside the present stone church (Lilius 1969, pp. 15, 18–28). Lilius dates the wooden church to the period before the stone church was consecrated, which was believed to have taken place in 1462. Discussing the monastery's living quarters, its buildings and their functions, Lilius mostly refers to Hausen's and Berthelson's studies and agrees with their interpretations (Lilius 1969, pp. 15–18; 1990, pp. 154–57).

In his doctoral dissertation, art historian and archaeologist Markus Hiekkänen revises the dating of stone churches in Finland (Hiekkänen 1994, pp. 222–23). Based on Hiekkänen's conclusions, the dating of churches in Naantali should also be revised. Hiekkänen (2019, 2020, pp. 150–51) later suggested that Naantali's wooden church was actually built in 1444 and was only replaced by the present stone church in around 1490.

In 1996–1999, archaeologist Uotila (2003a, 2003b) carried out archaeological excavations inside the church and within its immediate surroundings, in which parts of the medieval monks' sacristy, and the dividing wall between the sacristy and monks' corridor had been unearthed. He discovered a large niche in the eastern wall of the monks' corridor and two similar niches in the northern wall of the sacristy. At Vadstena, such niches have been interpreted as book cabinets. If at Naantali, as at Vadstena, this row of cabinets extended from the sacristy to the corridor, this would suggest the presence of a large book collection (Uotila 2003b, pp. 17–18; Harjula 2011, p. 241). The area therefore served as the monastery's library. Furthermore, based on his discovery of the upper part of a doorway between the north wall of the church and an adjacent room, Uotila points out the remains of what may have been a confessional room, suggesting that the confessional niches themselves were located much deeper under layers of landfill (Uotila 2003b, p. 20). He also conducted excavations outside the church's south wall, in front of a bricked-up medieval door that may have served as an entrance for priests celebrating mass (Hiekkänen 2020, p. 152). There, Uotila (2003b, pp. 18–20) found remains of a vaulted medieval building, suggesting that it might have served as the main gate to the monks' quarters. He also discovered a number of unidentified medieval buildings to the south of the church.

In 2005–2007, Uotila conducted archaeological excavations around the north-eastern perimeter of the nuns' quarters (A–H) (Uotila 2011a, p. 183). He discovered remains of several medieval wooden structures of which the most important was a portion of a building containing a latrine or midden. The building was located on the seashore near the monastery's circuit wall. The building was constructed using stones and bricks in the mid-15th century and might thus be one of the oldest buildings at the site (Uotila 2011a, pp. 188–90, Figure 75). Among the finds from these excavations were abundant quantities of animal bones (Mannermaa 2011; Tourunen 2011) and coins (Kivistö 2011). Besides, objects related to textile crafts, such as spindle whorls, needles, thimbles, crochet hooks, and other artefacts connected with clothing were discovered (Väisänen 2011; Väisänen and Uotila 2011). Moreover, while the writing implements and book components found during the excavations are indications of a literary culture (Harjula 2011), fragments of rare glass vessels are indicators of the monastery's significant wealth (Haggrén 2011).

4. The Reconstruction of the Monks' Quarters

Hausen's plan and his identification of different spaces within Naantali Monastery have formed the basis for all subsequent reconstructions. Scholars after Hausen have made only minor revisions to his interpretations, although they also point out problems resulting from his primary reliance on major wall lines, identified using shallow survey pits, rather than on a more complete excavation of the site. Since Hausen documented only the upper parts of the brick and stone walls that he could detect above ground, it is likely that he missed all of the traces of less prominent wooden structures. Moreover, Hausen's plan has been criticised for not taking into account any estimations of the age of the different structures at the site, and thus ultimately reflects the monastery's final, 16th-century construction phase before it fell into ruins (Uotila et al. 2011, p. 302). Nevertheless, Uotila (2003a, 2003b) excavations have revealed that the site's structures are positioned with a high degree of accuracy in Hausen's plan.

Similar to Elmgren, Hausen places the nuns' quarters on the north side of the church and the monks' quarters on its western side (Figure 3). In identifying the site of the monks' quarters, Hausen relies on Blom's inventory (Rinne 1921). Moving west from the area south of the church (Ä), and then turning north (P–T), he lists a sacristy (*sacker stiigett*), monk's choir (*muncke choren*), chapel (*cappellett*), church porch (*kyrckie wäkenhusett*), library (*liberij hwset*), chapterhouse (*cappitels huset*), stone shed or food store (*een steenbodh*), long corridor to the refectory (*länge gången till conuentz stugun*), refectory (*conuentz stugan*), and other rooms (*någre kambrar*). According to Hausen (1922, pp. 29–30), the monk's choir was situated at the western end of the church (its outline is still visible in the brickwork of the church's wall, supplemented by later stone additions), and was connected to the sacristy and church porch. In his excavations, Hausen also exposed parts of the sacristy's walls and a corridor (area Ä) leading to the monks' quarters on the south side of the monk's choir. Berthelson (1940, p. 193) points out that the sacristy and the corridor bear similarity to the spatial organisation in Vadstena, where such a corridor linked the nave of the church to another corridor, which extended along the southwestern row of buildings (corresponding to Naantali's corridor X). In contrast to these structures, identified in or near the church, Hausen argues that the identification of the 'chapel' mentioned in Blom's inventory is difficult, because it is not apparent what kind of space is actually described.

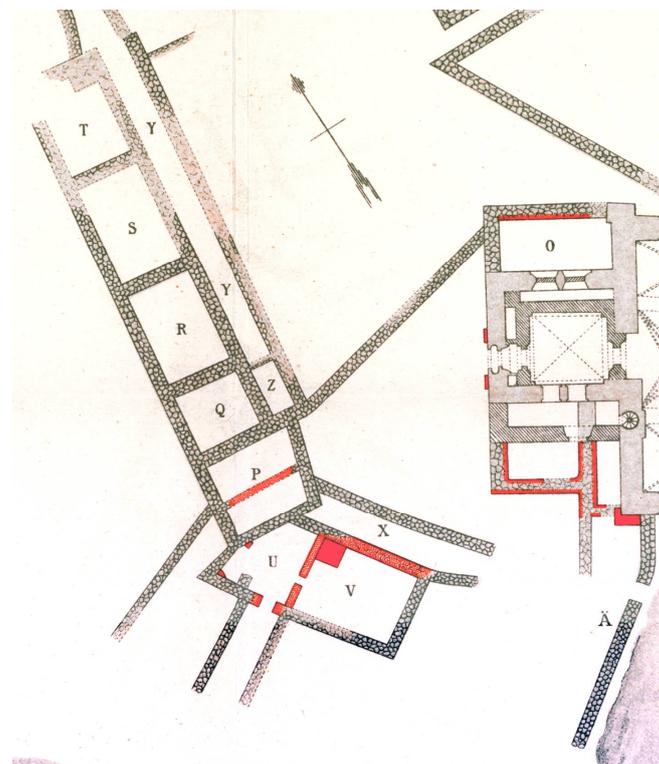


Figure 3. Plan of the monks' quarters in Naantali Monastery by Hausen (1922).

In Blom's list, the church porch is mentioned directly before the library. Hausen (1922, p. 48) did not identify its location, but the structures on the south side of the church remained somewhat unclear to him. Uotila, however, discovered the library later. Next on Blom's list are the chapterhouse and stone shed, both of which remain unidentified. The chapterhouse was probably one of the larger spaces in the monks' quarters, but there are no distinct features that would facilitate its identification. Berthelson argues that since space P was divided by a brick wall, it might have functioned as the main gate to the monks' quarters, but Uotila (2003b, pp. 18–20) suggests that this main gate was in fact located south of the western end of the church. Therefore, we suggest that space P originally served as the chapterhouse and was only divided into two spaces with a brick wall later, in the

16th-century. In addition to the chapterhouse, the stone shed remains a mysterious feature of the site, but the manner in which Blom described it ('a stone shed') suggests that it was a freestanding structure, perhaps undiscovered by Hausen.

In the area adjacent to the south-west corner of the church (area \ddot{A}), Hausen found a corridor (X) and a building divided into two parts (U and V). Space V contained the remains of a fireplace, leading Hausen to suggest that it had served as a kitchen. Berthelson (1940, pp. 191–94; 1947, pp. 359–61), moreover, argues that, since the two spaces are connected to the outside world through a doorway in space U, spaces U and V might have served as guest houses for pilgrims.

To the north of space P and the western end of the church is located a uniform block, composed of multiple structures and oriented north–south (Q–Y). Along its western edge, this includes a series of rooms (Q–T), to the east of which runs a parallel corridor (Z–Y–Y), which continues as a passage leading down towards the bay of Nunnalahti. A wall connected the south-eastern corner of this block to the north-west corner of the church. Moreover, Berthelson identifies corridor Y–Y–Y as the long corridor to the monks' refectory recorded in Blom's inventory, but the location of the refectory itself remains elusive. Space T has a large fireplace in its north-east corner, possibly indicating a kitchen, and therefore space S next to it might have functioned as a refectory. Hausen argues that the monks' quarters had two storeys, although he provides no concrete evidence to support this. If this was the case, the monks' cells were probably located on the upper floor.

Except for wall \ddot{A} running south-west from the south-west corner of the church, Hausen found no structures south of the church. He was uncertain whether wall \ddot{A} was medieval and what its function was, although according to oral tradition, a medieval belfry had stood on the site of the present belfry, which dates from 1794–1797 (cf. Hiekkänen 1988, p. 46). Apart from digging a few trial pits, which did not result in any significant observations, Hausen did not undertake excavations on the south side of the church. Uotila excavated this area and uncovered the possible remains of the main gate leading to the monks' quarters (Uotila 2003b, pp. 18–20), an identification supported by records from the mid-18th century, which indicate that the remains of a possible forecourt were still visible in this area at that time (Scarin 1744–1745).

The large area to the west and north-west of the monks' quarters was surrounded by the monastery's circuit wall (\ddot{A} – \ddot{A} – \ddot{A}), which ran down to the same bay as corridor Y–Y–Y. At the bay, Hausen noticed a group of wooden poles, which in 2006 were dated using dendrochronology to the winter of 1783–1784 and are therefore post-medieval (Zetterberg 2006; Uotila 2011b, Figure 30).

5. The Reconstruction of the Nuns' Quarters

According to Hausen, the nuns' quarters were also comprised of a succession of buildings. With an assumed order of north to south, the first of these listed on Blom's inventory is a refectory (*conuentz stuffun*) (Figure 4). Blom exceptionally specifies that it is eight *fampnar*, or 14.24 m, in length, perhaps indicating that it was a particularly large building. After the refectory, the list continues with a brewery (*bryggehuse*), kitchen (*kiökett*), nuns' sacristy (*nunnornas sakerstij*), and a room for communion and confession (*theres schriffre och berättevess*). The largest individual building, K, which was divided into two by an interior wall, is identified in Hausen's reconstruction as the refectory, with building N, which contained a fireplace, serving as the brewery.

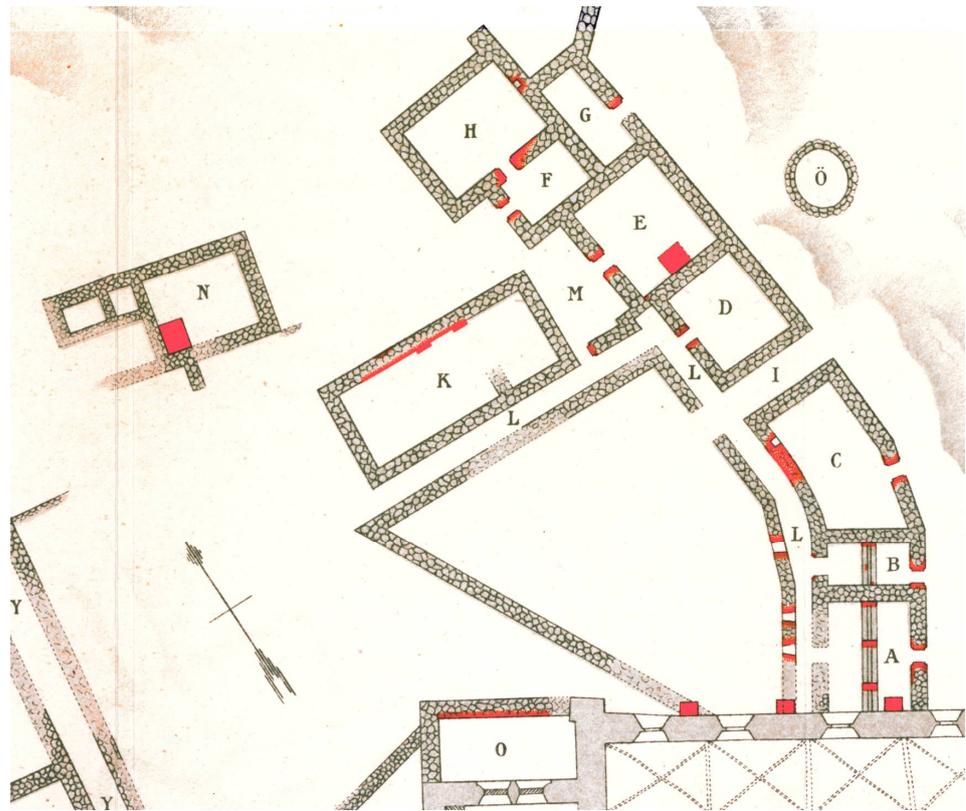


Figure 4. Plan of the nuns' quarters in Naantali Monastery by Hausen (1922).

The Abbess's House is not mentioned in Blom's inventory, and neither Hausen nor Berthelson have identified it in their reconstructed plans of the monastery. Nonetheless, the monastery must have had one (Uotila 2011b, p. 66). At the Bridgettine Monastery of Pirita in Tallinn, the Abbess's House is located in the middle of the nuns' garth, at a slightly different angle to the other buildings (Raam and Tamm 2006, pp. 26–27). The building was part of that monastery's earlier construction phase but was left untouched by the subsequent building phases (Tamm 2010). In Naantali Monastery, building N also occupies a distinct position, and its fireplace might have been used to heat a high-status residence such as the Abbess's House.

The main part of the nuns' quarters consisted of a series of built spaces (A–H). This reached two storeys in height (except maybe at its northern end) and extended to meet the church at the centre of its north wall. This part of the nuns' quarters had two main sections, connected by space C: the first with a north–south orientation (D–H) and the second with a north–east–south–west orientation (A–B). The change in orientation follows the local topography (i.e., the steep slopes of the monastery's eastern perimeter). To the east of rooms A–D, a wall separated this row of buildings from the monastery's garth, to create a passage (L–L–L). In this wall were found the remains of three vaulted window openings, indicating that this passage was in fact a cloistered ambulatory (Hausen 1922, p. 43).

Spaces D, E (including a fireplace), F, G, and H probably served household functions (Berthelson 1940, pp. 189–91; 1947, pp. 356–58). The monastery's brewery could have been located among these. Such an interpretation would make the order of Blom's inventory more spatially consistent, since its mention of the refectory (K) would then be followed by that of the brewery and kitchen (E, F, G), and then by descriptions of the buildings next to the church. Berthelson points out that space D had a doorway leading to the cloister walk, and thus it probably served as the chapterhouse or 'working space'.

This series of household spaces was interrupted by a gate (I), probably vaulted, leading to the nuns' garth. Hausen interpreted space C as a foyer, as its only doorway faced away from the monastery (Hausen 1922, pp. 43–46). Hausen discovered remains of a wood

and brick structure between spaces A and B, and together they could be the remains of a parlatory, providing the nuns with a connection to the outside world.

Berthelson points out that Hausen had been uncertain and only faintly sketched out the extremities of the southern wall enclosing the nuns' courtyard, where this met the north wall of the church. Berthelson argued, contrary to Hausen's plan, but in accordance with that of Vadstena Abbey, that a wall may have existed at this location, running parallel to the north wall of the church. This would have provided a connection between the western end of the church's north aisle, where the nuns were traditionally consecrated and received communion, to the main section of the nuns' quarters (Berthelson 1947, pp. 310, 356). Although Berthelson's argument appears plausible, Hausen's plan of the south side of the church has been found to be highly accurate, and therefore, there is no reason to think that his plan of the church's north side would be incorrect.

According to Hausen (1922, p. 46), space O was probably the confessional room. He locates the medieval nuns' sacristy within the present sacristy at the east end of the church. However, Berthelson (1940, pp. 191, 193; 1947, p. 359) suggests that instead of serving as a confessional room, space O might also have functioned as a parlatory for the monks and nuns. The space was accessed from the choir and possibly also from outside, next to the wall connecting the church's north-west corner and the main section of buildings in the monks' quarters.

The circular stone well (Ö), which still survives today, would have been located to the east of the nuns' quarters. Uotila (2011b, p. 66) suggests that instead of a source of freshwater, it was used as a cesspool. Moreover, the medieval cemetery was located on the east side of the church, approximately in the same place as the present parish cemetery. In 2005–2007, Uotila (2011b) found remains of several medieval wooden buildings in the area adjacent to the seashore, which he argued may have served for the production of textiles and literary texts. Lastly, it is known that the monastery had one or two gardens, but their location remains unidentified (Alanko and Uotila 2020).

6. Explaining the Distinct Layout

Since the plan of Naantali Monastery differs markedly from that of Vadstena Abbey, some scholars have sought to explain its distinct character. Hausen was concise in his descriptions, but Berthelson (1940, pp. 188–89) explicitly compares the two monasteries. He points out that according to the double monastery principle of the Bridgettine Order, nuns and monks had to be kept separate from one another, while still being able to communicate. This set certain criteria for the location and appearance of monastic buildings. According to St Bridget, the nuns' quarters were to be situated on the northern, and the monks' quarters on the southern side of the church, as in Vadstena (Berthelson 1928). Furthermore, the church's chancel also had to face the water—sea or lake—to the west.

In Naantali, in contrast to St Bridget's visions and to Vadstena Abbey, the plan does not consist of two enclosed quadrangles with a church between them. Berthelson (1947, p. 361) admits, however, that although the plans are not geometrically alike, the spatial organisation has clear similarities in how it separates the nuns' quarters from those of the monks on opposite sides of the church, and in the sequence of monastic spaces. The two main reasons for these similarities and dissimilarities are, according to Berthelson, firstly, the smaller size of Naantali's community of monks and nuns compared to that of Vadstena, and secondly, the site's difficult topography. As a result of the latter, there was space only for one row of buildings in the nuns' quarters on the eastern side of the triangular garth, and no space for the monks' quarters to be placed directly to the south of the church. In addition, Berthelson concludes that, 'a certain architectural primitiveness has become noticeable in the practical realisation of the plan, whereby the result has been more irregular in character than the first two reasons together could have caused'.

While focusing on the church, Lilius (1969, pp. 15–18; 1990, pp. 154–57) also touches upon Naantali's other monastic buildings. He argues that the Bridgettine principle of placing the church's west end to face the sea posed challenges for the architecture, and the

main reason for Naantali Monastery's departure from this principle was the sloping topography of its site. Significant differences in elevation are indeed visible in the monastery's church. The difference in elevation between the west and east ends of the church is 4–5 m, while in the nuns' quarters the difference was as much as 3 m. In the monks' quarters, the differences in elevation were smaller, while to the south of the church, the ground slopes so steeply that building the monks' quarters there was impossible.

The design of Naantali Monastery with its triangular garth is not unique: located only 15 km to the east, the Dominican Convent of St Olaf in Turku provides a parallel to this within the nearby area. The convent was located on the southern edge of the medieval town between a steep-sloped hill and a major river. The monastic complex was built in brick during the latter part of the 14th century or in around 1400 (Immonen et al. 2021), and its layout does not conform to a typical Dominican design. Similar to the nuns' quarters at Naantali Monastery, the Dominican Convent has an almost triangular garth and cloister walks, and the overall design appears elongated (Immonen et al. 2014). The church was positioned in the northeast corner of the complex, with a vaulted chapterhouse standing between the cloister and the church. Here also, scholars have explained the unusual plan as a necessity dictated by the difficult terrain.

A slightly different example of a monastic site with an unusual architecture is the Franciscan Convent on the Island of Kökar, within the Åland archipelago. The earliest indications of the presence of friars at the site date from the 14th century, but the Convent itself was not established until the mid-15th century (Gustavsson 1993). The location is unusual for Franciscans, who operated in urban areas, and the monastic community on Kökar remained very small. In addition to a church, only a kitchen, refectory, and cellar have been identified archaeologically at the site, along with the foundations of a few medieval houses. Archaeologist Gustavsson (1993) argues that the Franciscans chose this place because of the intensive seasonal fishing practiced in the archipelago. This brought in a lot of people and gave opportunities for preaching and collecting income.

The final example of architectural features deviating from the medieval norm are wooden high altars. According to the Canon Law, the top (*mensa*) of any altar was to be made of stone, and high altars were structures built of stone and brick. Although high altars in Finnish churches were mainly made of stone during the Middle Ages, in some cases they were constructed out of wood (Hiekkanen 2003a, p. 89). Hiekkanen (2003c) suggests that these are found in the churches where construction was halted by the Reformation, with temporary altars of wood becoming permanent thereafter. Both the wooden altars and Kökar Convent seem to break with established norms due to exceptional circumstances, although this is not due to topography.

A pattern thus emerges for explaining unusual monastic layouts in Finland: it is considered that builders attempted to follow the established principles but had to resort to amending layouts due to difficult topographical or other circumstances. Although other scholars do not explore this further, Berthelson goes on to explicitly argue that the execution of such plans bear signs of backwardness, perhaps stemming from Finland's marginal position in terms of European geography and low population density. However, the problems within this argument become apparent when the recent developments in scholarship on medieval urban planning are considered. Although topography has undoubtedly represented a significant factor in the architectural design both in Turku and Naantali, it does not necessarily imply a departure from medieval design principles or lower planning standards.

7. From Urban Planning to Monastic Architecture

Over the past two decades, a major shift in thinking concerning the planning of medieval towns in northern Europe has taken place. In 2001, Klaus Humpert and Martin Schenk (Humpert and Schenk 2001) argued that town centres in Germany were intentionally planned during the 11th- to 14th-century and did not develop by themselves organically over time (see also Lilley 2001; Boerefijn 2010). In other words, the position-

ing of squares, the curving of streets, the arrangement of gates, and the construction of structures related to water management were not haphazard, although their organisation may seem irregular compared to the layouts of post-medieval urban centres. Instead, these features were all part of an original urban plan that was created for the town's foundation. A similar change has also taken place in the interpretation of Nordic towns, as evident from analyses of the foundations of Linköping (Tagesson 2002) and Turku (Hiekkänen 2002, 2003b).

The new conceptualisation of Turku's foundation also explains why the Dominican Convent was erected in such a difficult location. According to Hiekkänen, Turku was designed and founded around 1300, and followed a tripartite layout. In the northern part of the urban area lay Turku Cathedral. The Market Square was placed in the middle of the town, while the Dominican Convent at the town's southern edge formed a kind of counterpoint to the cathedral. Later archaeological excavations in Turku have supported Hiekkänen's proposed scheme, revealing that just before 1300, the area consisted only of agrarian fields and a farmhouse (e.g., Saloranta 2019).

Modern advances in the study of medieval urban layouts have demonstrated that an apparently organic design does not necessarily indicate historically cumulative or random planning. Instead, these may express different conceptions of regularity to that guiding post-medieval, grid-based layouts, even though both adopt principles of urban design that had been defined in Antiquity (Andrén 1998). In fact, Mumford (1961, p. 302) argues that 'those who dismiss organic plans as unworthy of the name plan confuse mere formalism and regularity with purposefulness, and irregularity with intellectual confusion or technical incompetence'. This shift in conceptualising medieval urban layouts is a reminder that seemingly irregular designs did not necessarily deviate from the basic design principles as understood in the Middle Ages. This concept is also pivotal to the understanding of medieval monastic architecture. While St Bridget instituted the framework for her monasteries, following these principles did not necessarily require their design to replicate this formally. Instead, an ideal or functional similarity, as at Naantali Monastery, was sufficient. As a result, geometric divergences from an ideal plan or prototype cannot be taken as definite indicators of inferior architecture or a reflection of a site's distance from major European centres.

8. The Plan of Naantali Monastery as an Interpretative Challenge

The research on the architectural remains of Naantali Monastery exemplifies the development of Finnish medieval archaeology on a number of levels. Firstly, the site's research history is extensive, with the most important fieldwork undertaken in 1872–1872, when Hausen excavated at the site. Secondly, this early interest in Naantali Monastery left behind a problematic legacy of terse and inadequate documentation, with which subsequent scholars have been struggling ever since. Hausen focused his excavations on unearthing architectural features, therefore resulting in only a few finds of other materials. Meanwhile, Uotila's more recent excavations have shown how much additional information concerning the uses and functions of monastic spaces can be obtained from artefacts and ecofacts. Thirdly, the site's challenging research history has led scholars to overemphasise, perhaps inadvertently, the significance of generalisations and ideals, in order to make up for the difficulties posed by the original fieldwork data.

The main problem with the spatial reconstruction of Naantali Monastery is the scant available evidence (Lilius 1990, p. 151). It is not known how many alterations were made to the buildings during the monastic period, nor how many wooden structures stood on the site. In fact, before the stone buildings were erected, the whole monastery was probably constructed of wood, similar to the first monastic church. Another important issue is the absence of systematic comparisons between Naantali, Vadstena, and other Bridgettine monasteries in North Europe. Hausen referred to such comparisons, yet without setting anything out in writing. Later, Berthelson made more explicit comparisons between

Naantali and Vadstena, but his conclusions did not differ markedly from those of Hausen. As a result, a systematic comparison with other Bridgettine monasteries is still lacking.

In revisiting the plan of Naantali Monastery, we have mostly followed the observations of Hausen and other scholars but have taken a different approach in our reading of Christoffer Blom's inventory. We consider it not as a random list of selected spaces, but as possessing a spatial logic of its own. Reading Blom's inventory in this manner has made it possible to provisionally argue that building N might have been the Abbess's House, and that the brewery was located among other economic buildings within the nuns' quarters. We have also suggested that building P in the monks' quarters might have been the chapterhouse.

Scholars have referred to several factors to explain the distinctiveness of Naantali Monastery's plan. One of them has been the small number of inhabitants in Naantali in comparison to other Bridgettine monasteries. However, such reasoning assumes that only a small number of monks and nuns were anticipated, or already settled, when the construction of the monastery began. However, it is known from written sources that Naantali Monastery housed 54 nuns, 8 monks, 2 lay brothers, and 8 priest monks in 1487 (Klockars 1979). This would challenge the idea that Naantali Monastery represented merely a modest community of monks and nuns.

Another major factor pointed out by scholars as affecting the monastic plan is the challenging topography of the site. Some of the decisions made in planning Naantali Monastery seem indeed to stem from the conditions defined by the landscape. Nevertheless, the terrain does not explain why the builders did not use the considerably-sized and rather even space west of the church, but instead positioned the main block of the monks' quarters along a north–south orientation. The site's topography, along with any assumed backwardness of its architecture, does not therefore fully explain the plan of Naantali Monastery. As a result, the actual factors affecting its design deserve further analysis in future.

We concur that the existing models, which in the case of Naantali Monastery are St Bridget's visions and the plan of Vadstena Abbey, are important tools for reconstructing medieval monastic plans. Meanwhile, we propose that these can bring in latent and counterproductive baggage stemming from modern concepts of regularity. If local findings do not match these models, the discrepancy can easily be misconceived as evidence that the principles guiding monastic foundations have not been sufficiently understood or applied. However, one must acknowledge that medieval conceptions of ideals and their material articulations differed from those of the modern era, and do not support broader conclusions based on the perceived quality of their design. In fact, following from this argument, might it be possible instead to consider the use of triangular garths in Naantali and Turku as evidence of a regional style, rather than as mere anomalies? In terms of its function, if not its geometry, the plan of Naantali Monastery appears to conform well with the principles of the Bridgettine Order.

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