

## KESKUSTELUA – DISCUSSION

### Finland's medieval stone churches and their dating – a topical problem

In taking up the problems of dating and classifying Finland's medieval churches, Dr. Henrik Lilius moves in an area where experts rarely enter into discussion.<sup>1</sup> In the following I present my own comments to his views concerning my doctoral dissertation on medieval stone churches in Finland.

Because the classification of the churches is the basis for the results of my thesis, I shall proceed from it. Lilius claims that I did not, upon engaging in my research, ask myself whether the classificatory elements which I chose constituted style or were timeless. He mentions as examples single-contoured and non-contoured openings, recesses, attic stairways and the motifs of the gable ornaments.

In actual fact, I discuss this point at length, particularly in the first section of Chapter 3 (Synthesis) and in the overviews of material and results in the analysis section.<sup>2</sup> The result here was that individual features can only be put to limited use, and there is no universal formula. However, positive results are obtained by applying several features simultaneously in an analysis of all the churches and their components. Among other features, the ornamental contours of the doorways point to a hierarchy among the churches, thus providing elements for the ultimate goal of my research: to identify, via a systematic and detailed analysis, the master-builders who designed the churches. The analysis of the wall recesses, in turn, provided opportunities to group building components with regard to the locations of recesses relative to each other.<sup>3</sup> The attic stairways proved to be one of the best bases for classing the naves.<sup>4</sup>

On the other hand, I am not satisfied with the analysis of the number of the gable ornaments and I must question, in Lilius's words, whether it qualifies 'as a typological criterion'. In dealing with this aspect I was presumably too bound to traditional studies of stone churches.

Nevertheless, the analysis of the gable ornaments provided some results, one of these being the significance of round niches in forming classes A and B in the typology. Though not a consistent feature (not all gables are decorated), it is none the less an indication. Furthermore, my analysis of all the gables (and not only the ones with niche ornament) permitted an interpretation of the motives of the builders

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<sup>1</sup> Henrik Lilius, The problem of dating our medieval churches. *Suomen Museo* 1996, pp. 179–181. Same review in Finnish in *Historiallinen Aikakauskirja* 1996, pp. 224–227. Markus Hiekkänen, Keskiajan kirkot ja niiden dateeraus – ajankohtaistunut ongelma. *Historiallinen Aikakauskirja* 1997, pp. 64–68.

<sup>2</sup> Markus Hiekkänen, *The Stone Churches of the Medieval Diocese of Turku. A Systematic classification and Chronology*. Suomen Muinaismuistoyhdistyksen Aikakauskirja – Finska Fornminnesföreningens Tidskrift 101 (Helsinki 1994), pp. 47–48, 77–81, 88–90, 114–117, 163–166.

<sup>3</sup> Hiekkänen 1994, pp. 77–80.

<sup>4</sup> Hiekkänen 1994, pp. 88–90, 217–220, 227–236.

and the financing parties involved. At any rate, my general evaluation was the relatively unreliable typological cum stylistic nature of gable ornament. As a visible feature, and originally intended as such, it has attracted the attention of researchers too much. The experts have not taken into account the possibility that an individual master-builder could well have designed and built both decorated and undecorated churches in accordance with the requirements and opportunities of the commissioning and financing party.

In this connection, Lilius asks why I chose the round niches as a classificatory criterion and not, for example, the vaulting plan. My primary reason was because the round niches classed the buildings into two groups. Secondly, the vaulting plans did not – to my surprise – provide a convincing classification. Here, the analysis pointed on the one hand to the 'master-specificity' of the vaults (the 16, 28, 32 and 40-celled stellar vaults), and on the other hand to their very general nature (cross vaults, 12-celled stellar vaults). No classification was thus obtained. On the other hand, one consistent means of classification associated with the vaulting emerged, viz. the division of the space into aisles. Most of the churches of class A were designed to have three aisles, while those of class B had one or two aisles.

In my research for the dissertation I failed to notice a possible reason why the vaulting plan did not permit classification. Only later did I come to consider the lack and distortion of the available source material. All the churches of class A were completed according to plan, i.e. they were also fitted with brick vaulting. On the other hand, most of the churches of class B remained incomplete in various respects, generally with regard to vaulting. Therefore, we do not know what kind of vaulting plans would have been available to scholars had the Catholic era and its economic opportunities continued and the late medieval churches of class B been completed.

#### *The problem of three classes*

Lilius suggests that the problem of my classification is that even an exhaustive analysis will not sufficiently structure the material into three classes. I was well aware during the research that no comprehensive ideal system can ever be established. The churches are works of man and the sources are often missing (ruined, altered and unfinished churches). In spite of this, they fall unequivocally into three classes which prove to be significant. With selected criteria, both close and more diffuse groups emerge among them. Some of these could be proven to be the works of anonymous master-builders. The classes and groups were also significant in the dating subject to a critical review of the available chronological methods.

I agree with Lilius that the classification 'violates' existing reality and simplifies the real structure of the material. But that is true of all classifications. I would claim that the present analysis encompassing as it does all the components of all the stone churches with reference to a large number of features (ca. 40 in the material collection and analysis stage) has a more solid basis and greater explanatory power than the hitherto employed Kronqvist classification of the 1930s, which was based on randomly selected and incomplete material.

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<sup>5</sup> Hiekkänen 1994, p. 213.

### *Dating methods*

Lilius notes that in my critique of present chronological methods<sup>5</sup> I refer to his arguments only with reference to brick material. I stand corrected and admit having overlooked an important exchange of opinions in this case.<sup>6</sup>

With reference to dating methods in general, Lilius claims that as a rule I reject the validity of literary sources. This is not true; I only applied more meticulous source criticism than has been customary. A review of the cases in which medieval written sources have been used to give a date to the beginning of construction or repairs of a stone church or a part thereof showed that most of the sources had to be rejected for the simple reason that far more had been read into them than they actually contain. For example, the mention of 'a helping hand' to a parish church in an indulgence document has readily been interpreted as a project for building a stone church, although the actual source mentions nothing of such work. The results can be fatal, as in the case of Närpiö Church. The congregation was given the indulgence in 1398 and the related document was the main reason for dating the stone church to the beginning of the 15th century. In fact, the stone church of Närpiö was built after the preceding wooden church was destroyed in a fire in the early 1550s. The new stone church was consecrated by Bishop Mikael Agricola on August 11, 1555.<sup>7</sup>

There is no doubt that medieval and post-medieval documents can be used for chronological purposes, but only when the source itself provides a reliable link to the building or component in question. Therefore I do not feel that I 'violated' the sources referring to the Bridgettine church of Naantali, with reference to which Lilius dates the construction of the church to the period 1443–62 in his monograph. According to him, these dates are based on sources giving the dates when construction began and ended. Lilius goes on to note that the dates do not 'fit' my scheme, as I interpret the year 1462 as marking the inauguration of the convent.

In dealing with this problem, I followed the principle mentioned above: the written sources must indicate what building is specifically meant. This is not the case at Naantali, for the sources can refer to a church of either wood or stone. In his excavations, Lilius discovered the foundations of a wooden church within the stone church. The former was no doubt built soon after August 1443. The only problem is that we do not know the period when this church was in use. Lilius maintains that the stone church was consecrated in 1462, but this is not mentioned in the source. It is completely possible that the consecration concerned the mostly wooden convent and its wooden church. The masonry work on the main choir could already have begun through donations, including funds from Bishop Magnus. With its features of class A, this component differs markedly from the stone nave and the nuns' sacristy, characterized by features of class B.

### *The radiocarbon dating of lime mortar as a chronological method*

Lilius feels that e.g. Åsa Ringbom and Högne Jungner have proven that my negative attitude to the radiocarbon or <sup>14</sup>C dating of lime mortar for establishing the age of

<sup>6</sup> This exchange of views was in fact so important that Lilius's and Dr. Knut Drake's discussion was added, upon my request, to the list of required reading for the master's degree in Archaeology at the University of Turku.

<sup>7</sup> Lars Pettersson, *Kyrkor och klockstaplar i svenska Österbotten. Svenska Österbottens historia V* (Vasa 1985), pp. 53–57.

masonry buildings 'is not necessarily quite correct'. It is true that I rejected this method in my dissertation on the basis of information available to me at the time. I noted that the invention of the method in the 1960s was followed by a great deal of enthusiasm in Central Europe and the United States, which abated in the following decade as the dates obtained varied greatly without any available explanation. Several possible reasons were suggested, and I even listed them in my published dissertation. In that connection I also presented a number of highly varying dates obtained for churches in Åland from mortar samples taken on different occasions in the 1990s.<sup>8</sup>

Now, three years later, the unreliability of the method has become even more obvious. A good example is the choir structure of Hammarland Church, from which series of <sup>14</sup>C samples of lime mortar were taken on four occasions between 1992 and 1995. The results, as given in the literature, are as follows:

- 12th–13th centuries (»well before 1300«)<sup>9</sup>
- 1460s<sup>10</sup>
- 14th century<sup>11</sup>
- first decades of the 15th century.<sup>12</sup>

Dr. Åsa Ringbom has presented each of these dates in due course in scholarly publications as final and correct results, each time having to revise the preceding date with new results. The results necessarily beg the question of why the last date (first decades of the 15th century) should be reliable. What will happen if and when new series of samples are taken from the choir (or other components) of Hammarland Church? Can those who vouch for the reliability of the method assure us that the results will not again change?

I would add here that the choir of Hammarland Church is not an individual example; the same problem is present in all cases where more than one series of lime mortar have been taken. The moment a new series of samples is collected, the results change. The problem ultimately lies in the fact that Ringbom and Jungner who apply the method and their assistants have not begun to correct the problems entailed in it through scientific argument. Although attempts have been made to correct mistakes, Ringbom has largely sought to assure others and to criticize those who have pointed to the failings of the method.

This cannot be regarded as satisfactory and the <sup>14</sup>C dating of lime mortar will remain unreliable at least until the method itself has undergone thorough correlation testing in order to pin-point and eliminate sources of error. For these purposes, I have proposed that the method should be systematically tested against the reliable results

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<sup>8</sup> Hiekkänen 1994, pp. 215–216. With reference to new material I presented criticism also in later stages of the discussion. See Markus Hiekkänen, Ålands medeltida kyrkor – en smal eller bred infallsvinkel. *Historisk Tidskrift för Finland* 1995, pp. 113–117. Ringbom ended the exchange of views with a reply that can only be described as unfortunately condescending in tone, to quote her own words in translation. Åsa Ringbom, Ålands kyrkor – svar till Markus Hiekkänen. *Historisk Tidskrift för Finland* 1995, pp. 263–266.

<sup>9</sup> Åsa Ringbom, Early Christianization of the Åland Islands? *A Conference on Medieval Archaeology in Europe 1992 at the University of York, Pre-printed Papers 6* (York 1992), pp. 147, 150.

<sup>10</sup> Åsa Ringbom, Naturvetenskapliga dateringsmetoder och Ålands kyrkor. *Taidehistoriallisia tutkimuksia, Konsthistoriska studier 14* (Helsinki 1993), pp. 30–31.

<sup>11</sup> Åsa Ringbom, Dateringen av Ålands kyrkor. *Historisk Tidskrift för Finland* 1994, p. 467.

<sup>12</sup> Åsa Ringbom & Christina Remmer, Hammarland och Eckerö. *Ålands kyrkor I* (Mariehamn 1995), pp. 66, 84, 92.

of dendrochronology. Thus a related system to a calibration system that has been applied for decades in correcting the  $^{14}\text{C}$  dates of all materials would hopefully be developed.<sup>13</sup> There are no shortcuts.

### *A uniform or multi-stage building*

Lilius feels that I 'really simplify reality' by rejecting the multi-stage construction of churches on what he claims to be unnecessarily categorical grounds. I beg to differ on this point, for my analysis, encompassing all of Finland's medieval churches and their components, unequivocally revealed the uniform, single-stage, planning and design of the churches. The analysis points to stylistic and technical uniformity within the buildings themselves, from the sacristy via the nave to the porch, and from the lower sections of the walls via the vaulting to the peaks of the gables. The only possible conclusion is that the construction of the various components could not have been separated by periods as long as hitherto claimed by experts.

Generally speaking, we may say that the masonry work of a church was carried out in a single, efficient process. At its shortest, this could have been only a single building season, as shown by the example of Renko Church, which was rebuilt in 1783 through a completely medieval organization of labour and with medieval methods, though not with the economic resources available to the church in the Middle Ages. Renko is no doubt an extreme case, but, together with a number of other examples from the 17th and 18th centuries, it gives much food for thought.

Moreover, we have some information on the pace and speed of construction work in the Middle Ages and Early Modern Times. Dendrochronological analyses show that Sipoo Church was built so that work began on the sacristy and nave in the late 1440s and by 1453 the porch was built to adjoin the completed nave. Historical sources tell that the massive Round Tower of Viipuri and the adjacent connecting walls were erected in approximately four years.

With reference to the above, also Lilius accepts in some cases the suggestion of a fast building process. He has pointed out that already in its initial stages the Bridgettine community of Naantali was able to build a temporary wooden church, a church in stone, and convent buildings of stone, within a period of nineteen years (1443–62). In volume, the latter church was second only to Turku Cathedral among Finland's stone churches.

### *Stone churches and castles*

Knut Drake has recently presented interesting comments on the contradiction that seems to exist between my suggested building chronology for churches on the Finnish mainland and the construction of castles for the purposes of the realm.<sup>14</sup> Lilius addresses the same point in the form of a question. I would respond by noting that the

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<sup>13</sup> Hiekkänen 1994A, p. 216. Ibid., *Stenkyrkorna i Åbo stift under medeltiden. Historisk Tidskrift för Finland* 1994, p. 442 (= Hiekkänen 1994B). Hiekkänen 1995, p. 117. – Ringbom misleadingly claims that I have implied that C14 samples of lime mortar cannot be calibrated in the same way as radiocarbon samples of organic materials. Ringbom & Remmer 1995, p. 14. Cf. notes above.

<sup>14</sup> Knut Drake, *Finlands inträde i medeltidens europeiska kulturgemenskap. Tieteesä tapahtuu* 5/1996, pp. 14–16.

building of castles is a different matter than erecting parish churches. The castles were built to serve defence and the administrative needs of the crown, which meant that their functioning required material suited to defensive use. On the other hand, the material of which a church is built has little bearing on its religious function, and economic opportunities played a major role in the choice of material. This implies activity at completely different levels, for the castles were built with the funds and labour of the whole population of a province or larger administrative district, while the means of only a single parish would be applied to building a local church.

### *Questions and answers*

Lilius presents a few other general questions regarding my results, to which I respond as follows. He asks how it is possible for a massive and purposeful period of church building to have come under way in 15th-century Finland without any remaining written sources attesting to it. In my opinion the well-known fragmentary nature of Finnish medieval sources is explanation enough. Moreover, even earlier studies of medieval churches posit a massive period of construction in Finland's parishes in the late 15th and early 16th century (vaulting, gable ornamentation, new churches). Here, too, the same question can be asked – and will not lead anywhere.

An example may clarify my point. Earlier researchers, and I too, maintain that the seventeen stone churches of Tavastia (Häme) were built or came under construction around the turn of the 15th and 16th centuries. I may be mistaken, and should that be so I kindly ask historians to correct me, but the construction of these churches is not attested in even uncertain written sources.

Lilius goes on to inquire from where would the funds, master-builders and labourers have come. The master-builders and their assistants could well have been commissioned from abroad by letter and personal contacts. The funds in turn were obtained in the form of tax revenue and donations, and the work in the form of labour due to the church. Nor need we expect any kind of rush, for the fifteenth century and the beginning of the sixteenth form a period of over 100 years. The master-builders could well have designed and built churches in consecutive order. A good example of such work was a master-builder active in the East Uusimaa (Nylandia) region, whose works appear to have included the following church projects: Pernaja ca. 1435–45, Sipoo and Porvoo in and around the year 1450, followed the churches of Pyhtää and Helsinki Parish in and around the year 1460.

Lilius also asks what was ecclesiastical life like prior to the period of stone churches. The answer is that the cult took place in wooden churches, for the mass and the various tasks of spiritual care do not call for specific building materials for the sacristy any more than for the nave. The historical context of Finnish church architecture is to such a degree marked or, more correctly, distorted by the stone churches that the role of wooden church buildings is easily overlooked. The latter most probably outnumbered the stone churches in the whole medieval period in Finland, from the thirteenth to the sixteenth century, but knowledge of their architecture is based on only a few small fragments.

### *Concluding remarks*

Lilius ends his article by mentioning 'confusion' in the field as to 'who should one believe and who not'. He calls for Finland's experts in the medieval period to con-

tinue discussion with some kind of synthesis as their goal. Discussion will no doubt continue at its own pace, and new results have already appeared. For example, recent year-ring dates have confirmed the age which I suggested for the churches of Pernaja and Pyhtää in my dissertation.<sup>15</sup> An analysis of the original vaulting plan of Nousiainen Church by the Estonian scholar Kaur Altoa convincingly demonstrates that the church could not have been built in the late 13th century as suggested in earlier studies. The earliest possible date is in the latter half of the 14th century<sup>16</sup>, and was most probably in the first decades of the 15th. I, too, am prepared to assume that the church was not built between 1440 and 1480 as I have earlier stated but more likely in the 1420s or '30s. I also have mistakenly suggested dates several decades too young for the tower of Finström Church, and few years too young for Karkku Church. There are a few other cases, too.

Results change and develop in this manner, but I still find it difficult to believe that Kronqvist's classification and mine will merge into some kind of synthesis, if this is what Lilius really intends. This is precluded by the source material itself, the medieval stone churches of Finland.

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<sup>15</sup> Marja Terttu Knapas, Kirkon vaiheet vuoden 1893 paloon asti. *Vantaan Pyhän Laurin kirkko – Helsingin kyrka St Lars 500* (Sulkava 1994), p. 44. See also Markus Hiekkänen, Helsingin pitäjän kirkko keskiajalla. *Helsingin pitäjä Helsingin 1995* (Vantaa 1994), pp. 6–24.

<sup>16</sup> Kaur Altoa, On the original plan of Nousiainen Church. *Fennoscandia archaeologica* XIII, 1996, pp. 83–91. See also Markus Hiekkänen, Uutta Nousiaisten kirkosta. *Arkeologia nyt! Arkeologi nu!* 1/97 (Turku 1997), pp. 1–3.