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## THE DATING OF THE NAVE OF THE CHURCH OF LEMPÄÄLÄ AND THE MEDIEVAL CHURCHES OF THE PROVINCE OF SATAKUNTA

### *Abstract*

The article discusses the datings and overall significance of dendrochronological samples from the medieval church of Lempäälä which were collected during excavations carried out in the church in 1983. The results show that the church was built to the height of the present eaves in the summer of 1504 or a year or two later. This confirms earlier datings obtained through comparisons of architectural features as well as written and archaeological sources. The results also lend support to the dating of the origin of the so-called Bothnian "block pillar" churches.

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The results of archaeological and architectural-historical studies conducted by the National Board of Antiquities in the church of Lempäälä in the spring of 1983 were published by the present author in volume III of *Fennoscandia archaeologica* (Hiekkanen 1986, 91–101). In the above connection dendrochronological samples were also taken by the author (Hiekkanen 1983) and a number of these have now been dated with funding from the National Board of Antiquities of Finland\*. The aim of the present communication is to link the dating to available results of studies concerning the medieval churches of Satakunta.

The samples were taken from the wall plate timbers of the church and their locations indicate four groups (I–IV). (I) The outside of the south wall of the east wing, (II) the inside of the south wall of the east wing, (III) the south wall of the west wing and (IV) the north wall of the east wing. According to Zetterberg (1988 Table 1) the decisive year in question appears to have been 1503. In three of the above samples it was

the last period of growth and this is not in contradiction with the dates indicated by the other samples. The timber from the last-mentioned location (IV) clearly appears to have been a replacement used in repairs. Accordingly, we may reach the conclusion that the timber used in the wall-plate section of the church of Lempäälä was felled in the winter of 1503–1504. In no case can they be part of any later repairs, as they were laid into the wall-plate section so that their ends extended through the lower part of the gable and were visible outside the church (Hiekkanen 1983, photographs).

The problem of the dating of the church would thus appear to have been solved and it would appear to have been built to the height of the eaves in the summer of 1504. There are, however, certain details that must be taken into account, such as the period necessary for drying the timber before use. It could probably have been used as early as the following summer, but a drying period of one to two years is also possible. A short drying period leads to the timber moving within the structures concerned, but a longer period of drying, on the other hand, hardens the timber and makes it difficult to carve. A long drying period makes it easier to know the properties of the timber used.

\* In the same connection 23 samples from the roof supports, floors and belfry of the church were collected under the direction of the author. So far it has not been possible to arrange funds for their dating.

A further detail is the schedule according to which the church was built. It can be assumed that the planning of the construction of the walls required that the necessary timber was felled in the winter of 1503–1504, in order for it dry by the next or subsequent summer before the masonry work in the wall had reached the height of the eaves. On the other hand, we may also assume that the construction of the church ceased temporarily or slowed down and the timbers could thus have remained in storage for a number of years. It is also possible that the level of the eaves was reached by the end of the summer of 1503 when decisions were made concerning timber to be acquired the following winter. The chronological relationship of the gables and roof structures is by no means unequivocal and the brick ornaments of the church – the main basis for the architectural-stylistic dating – may form an element chronologically separate from the stone gable. It may also be noted that the sacristy is older while the porch is younger than the nave.

The above possibilities – others may also be mentioned – suffice to show that the precise dating of the wall-plate timbers is not unequivocal in its conclusions. The main fact remains, however, that it has been possible to establish a fixed and precise chronological horizon – in itself somewhat rare in the history of medieval architecture in Finland.

The church of Lempäälä belongs to the so-called Satakunta group of churches as according to Juhani Rinne's grouping of Finland's medieval churches by province (Rinne 1910, 70–71; Nordman 1922, 139). In an earlier connection Rinne suggested a dating to 1418 or 1419 for the church of Lempäälä on the basis of historical data and to a lesser degree stylistic comparisons (Rinne 1907, 32). The church was thus a kind of forerunner in the province of Satakunta, as Rinne dated the church of Ulvila to 1429 (Rinne 1907, 26–27). For the following 25 years this dating was generally accepted (see e.g. Lindberg 1921, XXII–XXIII; Wennervirta 1926, 145–146) and was quoted even later (Lindberg 1934, 145).

The datings based on Rinne's studies were revised in two different ways by Iikka Kronqvist, although he did not dispute the grouping by province. Kronqvist disputed the position of Lempäälä as the oldest church in Satakunta, or mother church, and suggested a considerably younger date for the whole group. He also demonstrated that the starting-point for the whole group of churches can be found in the extensive renovation of the church of Ulvila. This was

dated to the last two decades of the 15th century mainly on the basis of comparisons of vault forms and details with corresponding Swedish material and to a lesser degree on the basis of the size of bricks used in the gables and the furnishings of the church (Kronqvist 1932, 37–39).

Kronqvist then goes on to discuss the churches of Huittinen and Tyrvää and finally the "important" church of Lempäälä. He takes as his starting-point certain historically documented events which are combined with information from oral folk tradition suggesting the conclusion that the stone church was not completed in 1418–1419 as assumed previously, but was built only after the year 1461. A more precise dating to post-1461 is found by Kronqvist in a comparison of architectural details and according to him the church "is a uniform building from its foundation to its gables" as opposed to the other above-mentioned churches. A major detail separating the church from the Satakunta group is the use of large corner-stones, typical of the churches of the Häme province. With reference to the dating of the latter and the step-like motif of the west gable which was apparently borrowed from Ulvila as well as a preserved early 16th century crucifix and paintings from the same period found by Nervander in the chancel, Kronqvist arrived at an absolute dating to the early 16th century for the church (Kronqvist 1932, 41–43).

Kronqvist's summary of the chronology of the medieval churches and sacristies of the province of Satakunta is as follows. Generally speaking, the gables (and vaults) came about in the period from "last quarter of the 15th century to the beginning of the 16th century". The oldest church in question is that of Ulvila (1480–1500), followed by Huittinen (1490s). Lempäälä is dated to between Ulvila and Tyrvää (later than 1480–1500, but prior to 1515). The sacristy at Messukylä was built after the church of Lempäälä and the same also applies to Kronqvist's interpretation of the sacristy at Akaa. The church of the Franciscan convent at Rauma, the church of the Holy Trinity at Rauma and the chapel of Nokia are not given any precise dating by Kronqvist, with the exception of the above-mentioned broad guidelines. Except for details Kronqvist did not see any need to change these datings in later connections (Kronqvist 1948a, 73; Kronqvist 1948b, 108; Kronqvist 1948c, 118). His chronological outline was to such a degree simple and convincing that it was generally accepted by experts in the field (Gardberg 1978, 22–23; Lilius 1962, 183; Okkonen 1945, 235; Pettersson 1955, 628–632; Pettersson 1959, 96;

Sinisalo 1987, 90–91; Suvanto 1973 405–406; Tapio 1966, 57–62).

The dendrochronological studies of the wall-plate timbers confirm the previously presented views regarding the relative and absolute chronology of the churches of the Satakunta group. Thus, scientific and "humanistic" datings find common ground in a way that is still quite rare in the study of medieval architecture in Finland. It must also be mentioned that archaeological material also has a significant role in the dating of the church (viz. coins found in the 1983 excavations). On the other hand the numismatic datings as a method find support from dendrochronological datings (Hiekkänen 1986, 92–94; Hiekkänen 1987, 41–44; Hiekkänen 1988, 24–25).

The dating of the eaves-level stage of the construction of the nave also entails other conclusions. A major result of this dating is the fact that it provides convincing support for Lars Pettersson's studies concerning the origin and dating of the Bothnian block-pillar church. This also applies to his arguments concerning a more precise dating to the 1480s (cf. Kronqvist 1932, 39) for the last medieval construction phase of the church of Ulvila. Absolute chronology has been one of the main problems in this respect. (Pettersson 1985, 40; Pettersson 1986, 59, 77–91; Pettersson 1987, 405–458). It must also be noted that the dendrochronological dating of the nave of the church of Lempäälä has certain effects regarding the churches of Häme (Pettersson 1955, 564–644; Drake 1976, 125; Drake 1985, 262–273; Riska 1985, 123–124, 133–135, 142–148) and Finland-Proper (Riska 1964; Tapio 1968).

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