

Interaction between ground plans of medieval houses and churches

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*Ground plans; wooden churches; stone churches;
7th/11th century; Noord-Brabant (Netherlands)*

In the Netherlands, as well as in other western European countries, wooden churches are rare in the archaeological record. Moreover, the interpretation and dating of post holes, excavated underneath later medieval stone or brick churches, is not always unambiguous. The recently published, revised edition of Ahrens' catalogue of European wooden churches is an impressive *status quaestionis* of this matter (Ahrens 2001).

Critical review of earlier church excavations may lead to revised conclusions. The dating and the interpretation of the building as a church or as a secular building are the key issues.

In this paper some churches will be discussed, which were subject to reconsideration, regarding their date, function and chronology. The focus is mainly on the province of Noord-Brabant in the south of the Netherlands.

In 1990, Waterbolk, Lanting and Boersma dedicated a study to the excavation near St. Walburg in Groningen, which was originally published by Van Giffen in 1973 (Waterbolk 1990). A new analysis of C 14 dating, historical evidence and the ground plan led to the conclusion that the three-aisled building (11.70 x 10.60 m) with ridge supports in the centre of the western and eastern walls was not a church, as Van Giffen stated, but a residential building of the bishop of Groningen, built in the late 11th century. Janssen proposed the identification as a church for a wooden building, excavated at the castle site of Gemert (fig. 1) (province of Noord-Brabant) (Janssen 2001). The shape, date, dimensions (11.5 x 12 m) and orientation of this building are similar to the above-mentioned residential structure in Groningen. Janssen is certainly right in his observation that there are no parallels in castle architecture for this wooden structure. However,

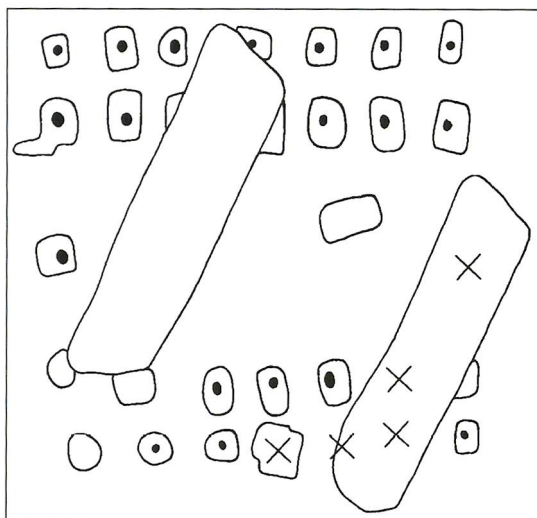
there is no evidence for any religious use of the site, nor have any burials been found, which is often an indication for the presence of a religious building. For this reason, and regarding Waterbolk's conclusions about St. Walburg, Gemert should also be considered as a building with a secular, residential purpose.

Two excavations by Glazema, both carried out in 1950, became subject of critical review as well. Stoepker had already rejected the interpretation of a succession of three wooden churches in Gemonde (province of Noord-Brabant) and replaced it by a sequence of two periods. (Stoepker 1990, 204–205). In a recent article, written in co-operation with Verwers, it is now concluded that Glazema has misinterpreted the chronological sequence of the post holes (Stoepker/Verwers 2002). Glazema's Gemonde 3 is the oldest period, probably dating from the 9th/10th century, consisting of a two-aisled ground plan (6 x 3 posts) of 8 x 5 m. The combined ground plan Glazema 1 and 2 has a four-aisled nave of 11 x 8 m (two side-aisles and the central aisle divided by three ridge bearing supports) and a chancel of 4,5 x 4 m. A date in the 11th century is assumed, since it precedes a tuff hall-church with round apse, for which a 12th century date is the most probable.

With regard to the ground plan of the oldest, two-aisled building the question must be asked, if this structure is not a house or barn instead of a church. Although there is coherence in the orientation of the wooden buildings and the apsidal tuff church, which suggests continuity in religious building activity, the layout with three rows of post holes seems inappropriate for a gathering of a community with religious purposes.

The chapel in Baarle Nassau was never thoroughly published. The complicated pattern of

Fig. 1: Residential building; Gemert (Noord-Brabant, NL) (Janssen 2001).



post holes underneath a brick one-aisled nave (the polygonal choir was not excavated) was divided by Glazema into three building periods: a cell of 7.5 x 5.2 m; a rectangular hall of 17 x 4 m; a three-aisled nave (8.5 x 6.75 m) with narrower rectangular chancel (4.75 x 3.75 m). The ground plan of the 3rd period was considered to be an 11th century church, and on the assumption that wooden buildings could be in use for 100 – 150 years, a 10th century date was given to the second phase, and an 8th century

date to the small cell. The last hypothesis fitted with the assumption that the *patrocinium* of Salvator should be characteristic of the missionary period in the southern Netherlands, when St. Willibrord dedicated a church in Utrecht and a monastery in Susteren to Salvator.

However, a dedication to Salvator is not a solid indication for an early medieval date, since there are examples of later medieval churches bearing this *patrocinium*. Taken into account that there are no historic records connecting Baarle Nassau to Willibrord, Utrecht or Echternach, nor any mentioning of the place before the 13th century, one should be very careful in presuming early medieval roots of the chapel, which appears for the first time in 1400 in the records of the diocese of Liege. The brick nave was already pulled down in 1807, but the brick chancel had survived until 1926. From a description, also stating the measurements of the bricks, it could be concluded that the brick church was constructed around 1500.

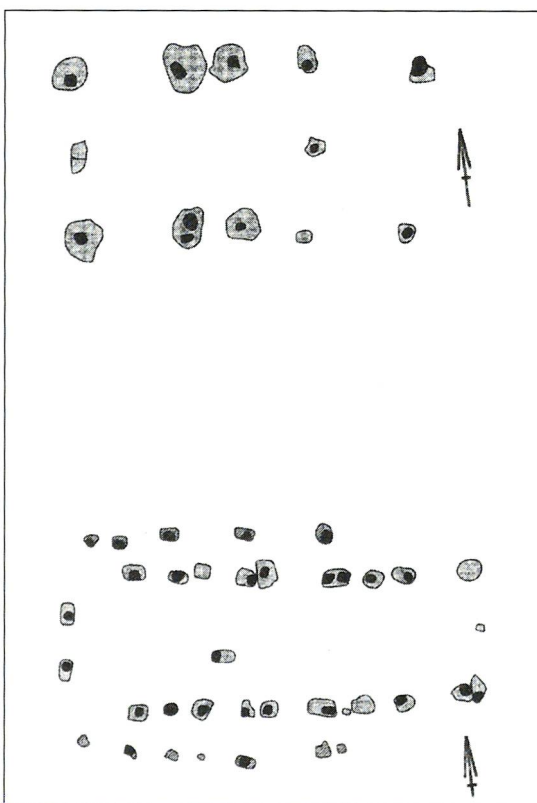
A new study of the field drawings led to the opinion that there had been two phases of timber building previous to the brick church (fig. 2). Baarle Nassau 1 was an east-west orientated, rectangular building made of 5 pairs of heavy posts with one ridge support at the west end and one at two-thirds of the east-west axis. The dimensions are 10.5 x 5 m. This structure corresponds fairly well with Glazema's Baarle Nassau 1.

Baarle Nassau 2 had the same orientation and was made of more, but lighter posts. It had a three-aisled nave (8 x 6.5 m) with a narrower rectangular chancel (4.5 x 4 m). The reconstruction combines Glazema's Baarle Nassau 2 and 3.

The post holes of the churches were surrounded by circa 88 west-east orientated graves, all without grave goods, and furthermore by pits and holes belonging to an abandoned settlement which was not further investigated. Some burials were intersected by post holes of the first church. It was concluded, that the first church was built amidst a settlement which had recently been founded. Shortly after the founding of the settlement the first funerals took place. The interments continued during the two phases of the wooden church, a possible brick predecessor and the brick church. The settlement was abandoned after some time.

Regrettably, no finds of the excavations are preserved. The record mentions only specifically

Fig. 2: Churches: Baarle Nassau 1, Baarle Nassau 2 (Noord-Brabant, NL) (Stoepker/Verwers 2002).



some Pingsdorf pottery, which means that the settlement may have existed in the 10th, 11th or 12th century. The layout and orientation of wooden and brick churches is so similar, that there is no indication of discontinuity in the sequence of the churches. The chapel mentioned in 1400 may have been a brick predecessor, or a wooden building without dug-in posts but founded on cobbles or stone pads which left no marks in the soil. This was a common foundation method after 1300.

This leads to a 13th century date for Baarle Nassau 2 and a possible 12th century date, but not earlier, for Baarle Nassau 1. A contemporary, wooden equivalent to Baarle Nassau 2 has been excavated in Luyksgestel, also in Noord-Brabant (Theuws 1989, 104).

In spite of its younger date the ground plan of Baarle Nassau 1 has a resemblance with one-aisled, Merovingian and Carolingian buildings excavated in Dommelen, Escharen, Goirle, Someren en Veghel, all in the province of Noord-Brabant (fig. 3) (Verwers 1998, fig. 45: 6, fig. 56: 3, fig. 60: 2, fig. 57: 3, fig. 89: 1). Characteristic of these buildings are the ridge bearing supports in the short western and eastern wall.

The system with one or two ridge bearing supports can also be seen in buildings with a three-aisled layout. Secular buildings of this type from the Merovingian and Carolingian period have been found in Beers-Gassel, Escharen and Wijk bij Duurstede (fig. 4) (Verwers 1998, fig. 45: 5; Van Es 1994, 233, afb. 195.)

Early medieval examples in religious architecture, with slight variations, are churches in Aschheim, Breberen and Brenz in Germany (Ahrens 2001, 10, 18, 20). The 10th century church at Striep (province of Friesland, NL) is the exception to the rule.

The three-aisled system with ridge supports is continued in secular architecture in the farmsteads of the northern type Gasselte B (11th–12th century) and the above-mentioned residential buildings in Groningen (late 11th century) and Gemert (11th/12th century). These houses have a characteristic rectangular shape, while in agricultural buildings a growing tendency towards boat shaped ground plans can be recognised from the 9th century onwards (Heidinga 1987, 47, 48; Theuws/Verhoeven/van Regteren Altena 1988).

Regarding Beers-Gassel, Heidinga and Vreene-goor suggest a connection between three-aisled

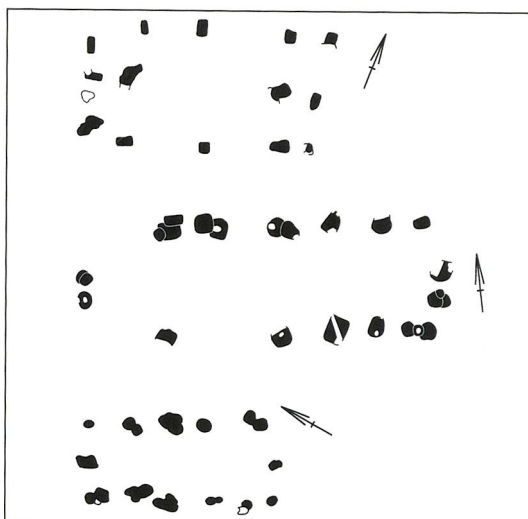


Fig 3: Carolingian house plans:
a: Goirle, b: Someren,
c: Veghel (Noord-
Brabant, NL) (Verwers
1998, 60,2; 57,3;
89,1).

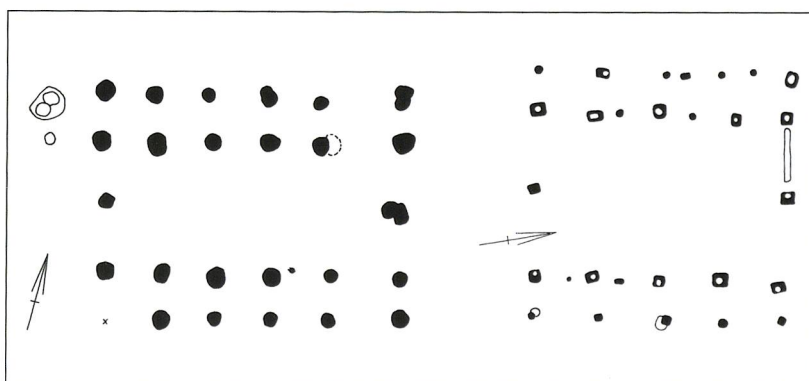
ground plans with the Late Merovingian/Carolingian elite (Heidinga/Vreenegoor 1990). If this is true, it is a remarkable resemblance with the 11th century, since also Gemert and Groningen are considered as residential buildings for the elite.

In religious architecture the above-mentioned churches of Gemonde 2 (11th century) and Baarle Nassau 2 (13th century) are examples of three-aisled buildings with ridge supports at the short ends. The difference is that they are provided with chancels to the east end.

A three-aisled building with ridge bearing supports placed in the short walls is obviously a result of the wish to construct high buildings with much interior space, a necessity for both churches and status residential buildings. Secular buildings of this type do not need a separate chancel. In the case of churches, the chancel is added to the east end.

Baarle Nassau 2 has an outline which is the usual one for small stone churches in the Netherlands in the 11th, 12th and 13th century: a hall-church with a rectangular and narrow chancel.

Fig. 4: Merovingian house plans:
a: Escharen (Noord-
Brabant, NL) (Verwers
1998, 45,5); b: Wijk
bij Duurstede – de
Geer (van Es 1994).



Most of these stone churches were made of tuff from the Rhineland. These stone churches do not have a three-aisled ground plan like Baarle Nassau 2. Inner support was not needed for these relatively small buildings with stone walls. There are no earlier examples known in the Netherlands of a wooden church with a three-aisled nave and a rectangular choir. The church of Norg (province of Drenthe), dating from around the year 1000, is the oldest one with a rectangular choir and an aisle-less nave. Early medieval hall churches with a rectangular choir, made of stone, are very rare in the Netherlands (Tiel, Elst, province of Gelderland, 8th/9th century) (Oswald/Schaefer/Sennhauser 1966–1971, 333–335; Stoepker 1990, 214).

In neighbouring countries on the Continent and in England, hall-churches with narrower, rectangular chancels occur before 1000, made of wood as well as stone. Sometimes they are preceded by a wooden church with a similar ground plan, as is the case in Oberwil (Kanton Bern, Switzerland) (Eggenberger 1997, 118–120) and Pier (Kr. Düren, Germany) (Ahrens 2001, 68). In Oberwil an 8th/9th century date is given to the wooden hall-church and a 9th/10th century date to the stone church. In Pier a three-aisled nave is assumed for the 8th century wooden church and an aisle-less nave for the 10th–11th century stone church. According to Fehring the hall-church with rectangular chancel is a translation from the late antique apsidal hall, first into timber and then into stone (Fehring 1991, 83). This is a logical explanation, although in the archaeological record the type appears more or less simultaneously in wood (Staubing and Barbing-Kreuzhof in Germany) (Ahrens 2001, Katalogband, 11, 80) and in stone (Nijvel – St. Gertrudis,

Nijvel – St. Paul, Belgium) (Jacobsen/Schaefer/Sennhauser 1991, 309–311) in the 7th century.

In the 13th century the direction of influence is turned around. Wooden churches disappear from the archaeological record in the Netherlands. Baarle Nassau 2 is one of the latest examples. Form and dimensions seem to be borrowed from stone churches in the neighbourhood.

Conclusion

In the Middle Ages there is an interaction between religious and profane wooden architecture, and between stone and wooden religious architecture. One-aisled Merovingian and Carolingian secular ground plans may live on in 12th century churches, as is the case with Baarle Nassau 1. Three-aisled ground plans with ridge bearing supports in the short walls, occur in secular and religious buildings since the Merovingian period and continue up to the 12th/13th century in churches and elite residential buildings.

In order to meet the religious need of a separate altar room an extension can be added to the east side. Stone and wooden hall-churches with a rectangular chancel occur since the 8th century and the basic form remains unchanged until the 13th century.

In secular wooden buildings after the 10th and 11th century more variety can be seen, for instance in boat shaped houses. Contemporary wooden church architecture, like Baarle Nassau 2, sticks to rectangular forms. This is probably the result of influence by stone churches with their straight walls.

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