Summaries

South door, north door, and the gender separated church interior

By Martin Wangsgaard Jürgensen

Almost every Romanesque church built in medieval Denmark was constructed with two doorways, one on the north side of the nave and one on the southern side. These doors have traditionally been interpreted as being used by men and women respectively. The men would have used the southern door while the north door was reserved to the women. This explanation has more or less been accepted in most of the Danish literature on the medieval churches, but a closer scrutiny of the evidence for this interpretation reveals it as highly unlikely. Instead of the old gender related explanation this article aims at interpreting the doorways of the Romanesque churches in the light of the liturgical movements of the 10th and 11th centuries. It is proposed here that only one of the church doors was used as a regular entryway while the other one was used in connection with the rituals of public penance, excommunication, the churching of women and burial rites.

On the other hand the article argues that gender separation was widely used *inside* of the churches through the early and high middle ages. This practice waned during the 15th century but was taken up again by the Protestant reformers and reintroduced in the parish churches.

The main point is that gender separation and the two doorways of the church had nothing to do with each other. The oldest written sources explaining the doorways as male and female entryways are from the later part of the 19th century and are very much rooted in a romantic or nostalgic understanding of the medieval church.

A new dating of the Cathedral of Børglum – and what it means

By Hans Krongaard Kristensen

The dating of the building phases in the cathedral of Børglum have until now been wrongly interpreted and dated. The eastern part with the transept, prespyterium, apse and the transept chapels have because of false understanding of a letter been dated to the period after 120 and therefore seen as an old-fashioned building. Today we can se that this part of the cathedral have been an example for a group of small brickbuilded churches in the surrounding among which one (namely Bindslev) has been dendrodated to 1190. The building of the cathedral was probably started in the 1170'ies.

The basilican nave has former been interpreted as constructed in two separated phases: in the late 13th century and around 1500. This article demonstrates that there have been only one building phase about

the middle of the 15th century, perhaps with a short stop. The form of the special vaults in the nave can be found in many of the parish churches in Vendsyssel, among which one vault in the church of Jetsmark can be dated to 1474. Therefore the vaulting in Børglum surely must be older.

The new investigations in Børglum and the new dating have clearly shown the cathedral as model for the surrounding churches and not as an isolated monument as former believed.

The Black Death as reflected in Scandinavian Art and Architecture

By Ebbe Nyborg

There is a saying among architectural historians that a cathedral that had not been completed by the middle of the 14th century was at risk of never being finished at all. As it is well known this was the case in Cologne. The same almost total stop of building activities between ca. 1350 and the late 19th century is seen at Trondheim Cathedral in Norway (fig. 1-2). And in Denmark the works at Odense Cathedral and the nearby Cistercian church in Holme (fig. 3-4) came to a standstill ca. 1350 and were not resumed until well into the 15th century. Furthermore the buildings were only finished according to substantially reduced plans. The plague would have been at least partially responsible for this.

Much would indicate that the plague especially affected Norway, where the whole stone-building tradition dwindled until the 16th century, and in Jutland (Western Denmark) where quite a number of deserted churches can be mapped (fig. 5). In the countryside only the rich Swedish island of Gotland had substantial building activity during the 14th century. But many of the works obviously came to a standstill without ever being resumed (fig. 6-7). Dendrochronology may link some of these standstills to the plague, whereas others would surely have had other (immediate) courses.

In Scandinavia the macabre pictorial culture is widely represented by hundreds of crucifixes of pain (*crucifixi dolorosi*) (fig. 8) of which, however, a large number seems to antedate the plague. Classical *memento mori* scenes, such as the Dance of Death, the Wheel of Fortune (fig. 9), Frau Welt and the apocalyptic horsemen (fig. 10) can mostly be seen in the wealthier parts of Southern Scandinavia where a tradition of wall-paintings persisted. So-called transi-graves with a life-size representation of the dead person lying as a worm-eaten body are not known until the 16th century (fig. 11) testifying to the long-reaching impact of the macabre culture.

The stonemasons organisation in medieval Östergötland

By Gunilla Gardelin

In a study of stonecutting techniques, the author has shown that these can be used as historical source material, for investigation of how masons were organised during different periods in medieval times.

From the study it appears that masons, during the first half of the 12th century, were contracted by the social elite to build the first stone churches in Östergötland. Masons were therefore travelling be-

tween building projects. These masons worked the stone with an axe or a chisel.

During the period 1140 to 1250, the building of stone churches increased immensely, which meant that several quarries could have provided the building sites with stone. During this period more people from the aristocracy had the possibility to invest in the building of churches, providing them with dressed stone in portals, window frames and bases. This can probably be explained by the fact that the large early manors could have been divided among more people. The building of the monastery at Alvastra, during the 1140s, probably had a great influence on the building of parish churches. Through their work on the monastery, the masons mastered the technique of using a broad chisel to dress the stone with regularly placed marks over the surface.

During the 13th century it was above all the institutions, such as the cathedral in Linköping and the monasteries, that contracted masons for projects, but also the bishops invested in dressed stone in churches and secular buildings. The technique used during the 13th and 14th centuries, working the stone with a claw, is to be found in the eastern parts of the area around Linköping. A great many facts indicate that the large scale workshop in Linköping was the centre of stonecutting.

During the 15th century two large building projects were taking place in Östergötland, the building of Vadstena Abbey started during the 1390s, and the building of a new chancel at the cathedral in Linköping started in 1408. No buildings outside these towns were provided with dressed stone during the 14th and 15th centuries.

The early deanery churches in Uppland – arguments in a royal battle for prestige

By Christian Lovén

A charter from 1164-67 mentions a dean (prepositus) in each of the three earliest towns in the province of Uppland, Sigtuna, Enköping and Östra Aros (present day Uppsala). Further sources show that each of the three old »folk lands« of Uppland was one deanery (fig. 1). In the middle of the 13th century, the deans were absorbed by the newly established secular chapter at Uppsala cathedral, 5 km from Östra Aros. At the end of the century, new rural deans were established, but their districts were much smaller.

The Sigtuna dean had Saint Peter's church, now a ruin (fig. 2). It must have been begun much earlier but was finished during this period. In Enköping, the deanery church was Saint Mary's, now the town church (fig. 3). Its oldest parts are late Romanesque, and it seems to have been erected during the deanery period. The architecture of the deanery church in Östra Aros, Saint Mary's, is not known.

Two features differed the deanery churches from the ordinary parish churches. They had a special income, from 1244 two pennies every year from each yeoman in the folk land. The original fee was probably one penny. That they needed this is explained by their second special feature: the deanery churches lacked a parish. This means that they did not have the normal income of a church. After the disappearence of the deaneries, in the second half of the 13th century, parishes were created for the three churches.

A »dean's penny« is also known from two districts in the neighbouring Strängnäs diocese, and since

these districts lay across the water from Uppland the fee was probably influenced from there. The dean's penny is not known from the rest of Scandinavia, and parallells in the rest of Europe seem hard to find. The lack of a parish has parallells among cathedrals.

Churches for large territories were hardly erected through local initiative, and the introduction of a new tax also points to a central authority. Furthermore, at least one of the deanery churches lay on land owned by the Crown. The reason that this highly organised system was created was probably political. In 1153, a papal delegate was sent to Sweden to create a new achbishopric. According to the Danish chronicler Saxo (circa 1200) the Swedes could not decide where to place it. However, in 1164 Uppsala was elevated to an archbishop's see. The reason for the 1153 failure was probably that there were two kings who ruled jointly, Sverker (circa 1131-1156) and Erik (circa 1151-1160). Sverker was based in the province Östergötland and must have supported the candidacy of Linköping. Erik was martyrized in Östra Aros and was, according to his 14th century saint's legend, responsible for the erection of Uppsala cathedral. There are also indications that he founded a regular chapter there. The deanery organisation can be explained as a part of Erik's campaign to have the archbishopric placed in Uppsala.

About Dating the Medieval Churches of Gotland

By Heikki Ranta, Joakim Hansson, Alf Lindroos, Åsa Ringbom, Jan Heinemeier, Fiona Brock & Gregory Hodgins

In 2006 the project »*Mortar dating of the Gotland churches*« was initiated, with the aim to test how mortar dating would work in a geological area so dominated by Silurian limestone, and how the results of this method could affect the prevailing chronology of the churches.

Initial testing was done on three different churches, the church of Bro in the northern part of the island, and with Hamra and Vamlingbo in the south. The result is that mortar based on Silurian limestone behaves much the same way as mortar including Åland Ordovician limestone. Thus, based on mortar dating a chronology of the church of Bro can be seen as follows: A Romanesque nave from ca AD 1040-1160, with an almost contemporary tower in the west, with an additional chancel in the east from the 13th century. In the church of Hamra, the lower part of the west tower, and possibly also the earlier part of a cruciform plan, dates from 1165-1220. Later, in 1260-80, the tower was heightened. The chancel in the east is an addition from the 14th century.

In Vamlingbo, the focus was on a secondary support construction of disputed age, built against a south portal. This time the mortar was contaminated by unburned limestone, and the result of mortar dating remains inconclusive. However, fragments of wood and charcoal, incapsuled in the mortar, suggest a *terminus post quem* some time in the 14th century. It is most likely that the supporting wall is a medieval construction.

At this initial stage it seems that the results of mortar dating in turn support earlier prevailing views on the chronology. The results also coincide with occasional dendrochronological dates and with contemporary inscriptions in the churches. It seems that mortar dating can be a helpful tool in forming an objective base for a chronology of the Gotland churches.

Romanesque round church towers – a Skandinavian perspective

By Jes Wienberg

The aim of the article is to discuss the interpretation of the Romanesque round church towers seen from a Scandinavian perspective. After a research history and a geographical outlook, which passes Ireland, England and Holstein, the article focusses on the 15-19 churches with round towers in medieval Denmark, Sweden and Norway, with the main part in Southern Schleswig and Scania; none are known from Finland. The chronology and social context, building material, function and meaning of the church towers are discussed. The Romanesque round church towers are also discussed in relation to the 33 known Romanesque round churches in the same area. Finally a catalogue of the round church towers in Scandinavia is presented.

The theses of the article is, that the building material was not decisive for the choice of the round architecture, at least not in Scandinavia. The round church towers were unfortified burial memorials and bell towers, where the architecture, as was the case for the round churches, copied central church buildings in the West. In a period, where most churches were without a tower or had square towers, the round church towers were examples of a »conspicuous symbolism«. The initiative to build the round church towers must have been taken by an aristocracy, who participated or were inspired by the contemporary crusades at the Baltic Sea, and who used the towers in their mutual competition on status.

Limestone consoles in the sacristy of the Turku Cathedral

By Knut Drake

Six limestone consoles, used as decorative elements in the vaults of the present day sacristy of the Turku (Swedish Åbo) Cathedral, originally belonged to the earlier sacristy. The remains of the 7th console are still *in situ* on the west wall of the sacristy. The 8th console was found detached in the 1920's. In the earlier sacristy there were four rib vaults supported by a column in the middle of the room. The consoles carried the transverse ribs between the column and the walls. The earlier sacristy formed a part of the grey stone basilica of which construction work began in the end of the 14th century. After the walls of the stone sacristy and choir were finished, building project was interrupted. The rest of the church was built according to a new building plan, turning it into a brick hall church. The sacristy was vaulted using the limestone consoles, but the ribs and the column in the middle were made of moulded bricks.

The Åland Churches and Mortar Dating – State of Research from the Development of a Method.

By Åsa Ringbom, Jan Heinemeier, Alf Lindroos & Àrny Sveinbjörnsdottir.

Why mortar dating? The project *the Åland Churches* was initiated with the aim to finally reach a reliable chronology for a group of stone churches upon which there had been deep disagreement. Since there are no contemporary sources to shed light on the matter, and since coins and artefacts cannot date buildings,

there was an obvious need for objective scientific methods on a larger scale. The method of dendrochronology was widely applied on wooden structures in the churches in 1991-1992. Even if dendrochronology could not date the first building stages of the churches, due to repairs and fires, this method was very important in providing firm dates for secondary structures, and for comparative research. Mortar is not an organic material. Yet, absorbing CO_2 from the atmosphere during the hardening process, makes mortar an ideal material for ^{14}C dating. Compared to all other datable materials, mortar has the advantage of being found in the original in large quantities, from all the different building stages.

Thus, the project focused on developing the method of mortar dating. Since 1994, reliable results have been reached, thanks to the introduction ^{14}C AMS (Accelerator Mass Spectrometry) analysis. To begin with the analysis took place in the ^{14}C AMS Dating Centre at Aarhus University, Denmark. The project turned international in 1997 when the method was tested in classical archaeology, upon mortars from the margins of the Roman Empire, and on hydraulic pozzolana mortars from Rome itself. Since 2005 the collaboration for the analysis includes the Oxford Radiocarbon Accelerator Unit, and the NSF-Arizona AMS Laboratory, in Tucson.

Our conclusion today is that non hydraulic lime mortars, whether medieval or classical, are well suited for mortar dating. From Åland, 96% of all the mortars with age control, have yielded convincing results (for further information see www.kyrkor.ax). It is hardly surprising that hydraulic pozzolana concrete, with an entirely different chemistry, is more difficult. But even so, several important structures in Rome have yielded an age well known from historical sources and brick stamps. From our vast experience we have been able to identify different criteria of reliability for interpreting results where mortar dating is the only method available.

En middelalderlig købmandskirke i Gásir, Nordisland

Af Orri Vésteinsson

I 2004 og 2006 udgravedes en kirke på handelspladsen Gásir i Nordisland. Der blev fundet tre faser af kirkefundamenter, der menes at repræsentere mindst 200 år, fra midten eller anden halvdel af 12. århundrede til det sene 14. eller tidlige 15. århundrede. Alle var bikamerale stavkirker med et mindre kor ved østenden, men den yngste kirke var langt den største, med en betydelig udvidelse af skibet mod vest. Den tidligste kirkes fundamenter var store stenfyldte gruber, der skulle understøtte store hjørnestolper, selv om det formodede kor kan have haft jordgravede hjørnestolper. I anden fase havde kirken lignende dimensioner, men i stedet for de stenfyldte gruber stod skibets hjørnestolper på store, flade stenheller. Beviserne for koret i denne fase er endnu dårligere, end i den første. Henimod slutningen af anden fase blev der på skråningen omkring kirken skabt en kunstig platform, omgivet af en cirkulær tørvemur med en indgang på østsiden, der vendte over mod købmændenes lejr. Byggeriet af platformen og indhegningen fandt sted i anden halvdel af 13. århundrede, og blev hurtigt fulgt af byggeriet af den tredje og sidste kirke på stedet. Denne større kirke havde ingen

særlige arrangementer til hjørnestolperne; væggene stod i stedet på rækker af sten i fundamentsgrøfter, og nord- og sydvæggene havde støttestolper. Denne kirke blev blæst af sine fundamenter i 1359, og det vides ikke om den blev genopført derefter. Der var ingen grave på kirkegården, og der blev ikke fundet genstande, der kunne associeres med kirkens religiøse funktion. Der var imidlertid en betydelig mængde beviser for håndværk og andre sekulære aktiviteter på kirkegården, hvilket antyder, at den til tider blev brugt som en udvidelse af købmændenes lejr. Kirken menes at have været ejet og vedligeholdt af de norske købmænd på Gásir, og blev sikkert kun brugt nogle få dage hvert år.