CHAPTER 3

The Round Church of Tønsberg and the Octagon of Nidaros

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Introduction

In the centre of modern Tønsberg lies the ruin of 'The Round Church', one of the most intriguing medieval churches in Norway. The church fell into ruin after the Reformation, and a quarter of the nave was removed by building work in 1877–78. In connection with this work the ruin was excavated by the architect Håkon Thorsen. In 1911, the Swedish author Hugo Frölén included the church in his work on Scandinavian round churches which he believed were built for defensive purposes (Frölén 1910–11). For this work, Frölén borrowed Thorsen's drawings and diaries, which afterwards unfortunately seem to be lost.

In 1964–70, the ruin was again excavated, and the remaining walls were restored (Wienberg 1991: 40; Lunde 1993; Lunde in this volume). Across the street, remnants of the adjacent monastic buildings have been excavated and are preserved inside the new Public Library. This is all that is left of the once so wealthy Premonstratensian Abbey of St Olav, dedicated to Norway's patron saint and *rex perpetuus Norvegiae* – the eternal king of Norway.

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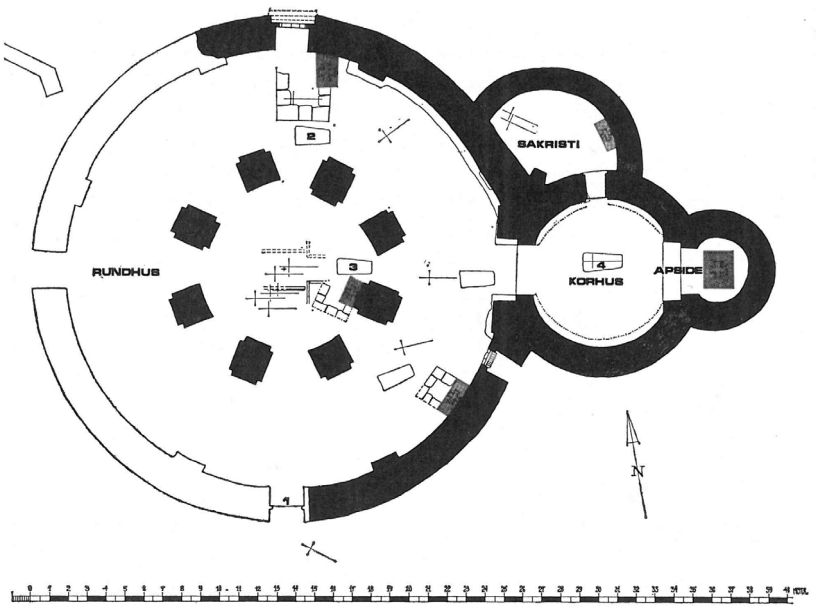

Figure 1. Ground plan of St Olav's Church in Tønsberg after the excavation. The outlined western part of the nave was removed in the 1870s. Illustration: Ø. Lunde.

The Premonstratensians in Tønsberg are first mentioned in 1191, when a group of Danish crusaders visited the town. In a book describing these crusaders and their activities, known as *Historia de Profectione Danorum in Hierosolymam* (the History of the Danes travelling to Jerusalem), a somewhat uncommon arrangement is mentioned, namely that the canons lived in the town but their livelihood came from St Michael's Church on Slottsfjellet ('Castle Hill'), located inside the royal castle. (On this literary work, see Skovgaard-Petersen in this volume.).

A monastic institution in Tønsberg called *muncalif* ('*munkeliv*', or 'dwelling of monks') is mentioned in the Saga of King Sverre relating to 1190, when the king's brother Earl Eirik died there (*Sverris saga* 2007, ch. 115). This was probably St Olav's Abbey (see also the discussions in Lunde and Bandlien in this volume). The church of St Olav was first explicitly mentioned in 1207 when Erling Steinvegg ('Stonewall'), one of the many Norwegian kings during the civil war period 1130–1240, was buried in the church. However, there is every reason to believe that the

church already existed by 1191. No information survives concerning who built it or why it was built, but it is usually dated between 1170 and 1190. It could, however, be even older (Wienberg 1991: 44).

At the time of its construction, the church was located just outside the south-eastern end of the small town, near the end of Tønsberg's main street which ran parallel to the harbour. The remains of the abbey buildings are clearly of a secondary nature, and it seems obvious that the church was built as a free-standing structure which was later given to the monks who added monastic buildings on the south side of the church. The church and the monastic buildings are also differently oriented (Lunde 1993: 20). A round church is not well suited for a monastic community unless it is placed in the centre of the complex, and the physical connection between the church and the monastic buildings was awkward, to say the least. No other monastic community in Scandinavia had a round church.

The round church in Tønsberg is one of only two known in medieval Norway, together with the small round church at Orphir in the Orkney Islands which belonged to the Norwegian kingdom during the Middle Ages. In all, at least 34 round churches are known in medieval Scandinavia as a whole (Wienberg 2017: 7). The Tønsberg round church is, however, by far the largest of all the Scandinavian round churches. The external diameter of the nave is c. 25m and the internal diameter is c. 22m, which is twice the size of most of the other round churches in Scandinavia. The nave originally had three portals facing the north, the west and the south. A fourth portal was later opened in the southeast part of the nave in the monastic period, probably giving direct access to the cloister. The nave had a central room supported by eight heavy piers, probably terminating in a tower-like structure with a pointed roof rising above the ambulatory roof.

The ambulatory walls are constructed of rough stones of the hard local red granite and would have been plastered and whitewashed inside and outside. The eight piers are constructed from well-cut ashlars of the same red granite and have moulded bases, alternating between a chamfered edge and a moulding. The latter piers correspond with responds in the outer walls, showing that the ambulatory was vaulted with a barrel

vault interrupted by transverse arches. The nave probably had an upper floor, or at least a gallery above the ambulatory. The gallery probably had openings towards the central room, and if the ambulatory walls were tall enough, there might have been small windows giving light to the gallery. Towards the central room, all eight piers have responds which show that the central room was covered by a circular rib vault, probably situated above clerestory windows which gave light to the central room (Frölén 1911: 11–15; Wienberg 1991: 40).

The choir is also round, internally measuring 7m across. Towards the east, it terminates with a small horseshoe-shaped apse with an internal diameter of c. 3.5m where the foundation of an altar was excavated. Externally, the choir has remains of a wall base decorated with the Attic base moulding. On the north side of the chancel a doorway leads to a segment-shaped room interpreted as a vestry. The entire building thus consists of four circular or partly circular elements. This makes the Tønsberg church a unique example among all round churches, and in every sense an unusual building. The building's architecture, its dedication to St Olav and its possible royal connection give only a few clues, but very important ones, to the context in which the church was originally erected.

Two reconstruction drawings were made of the church in 1927 and 1932 respectively. The first, made by Johan Meyer, was clearly inspired by the Round Church in Cambridge, but with a small tower or turret added over the choir. The second, made by Harald Sund in 1932, was based on Frölén's theory that all the round churches were also built as defence churches. Sund's reconstruction shows not just the nave and the choir with crenellated passages covered by roofs, but the apse as well (Wienberg 1991: figs. 27 & 28; Wienberg fig. 2 in this volume). The round churches have an interesting parallel in Norwegian wooden medieval architecture. Some Norwegian stave churches, e.g., Borgund Church, have an eastern apse covered by a small round tower or turret, a feature which seems to be inspired by centralized stone churches like the Tønsberg church. Frölén's theory about the defensive nature of the round churches has been refuted (Wienberg 2017: 14–15). The only possible exceptions in Scandinavia – that is, round churches with a defensive function – are perhaps the round churches on the island of Bornholm in the Baltic Sea.

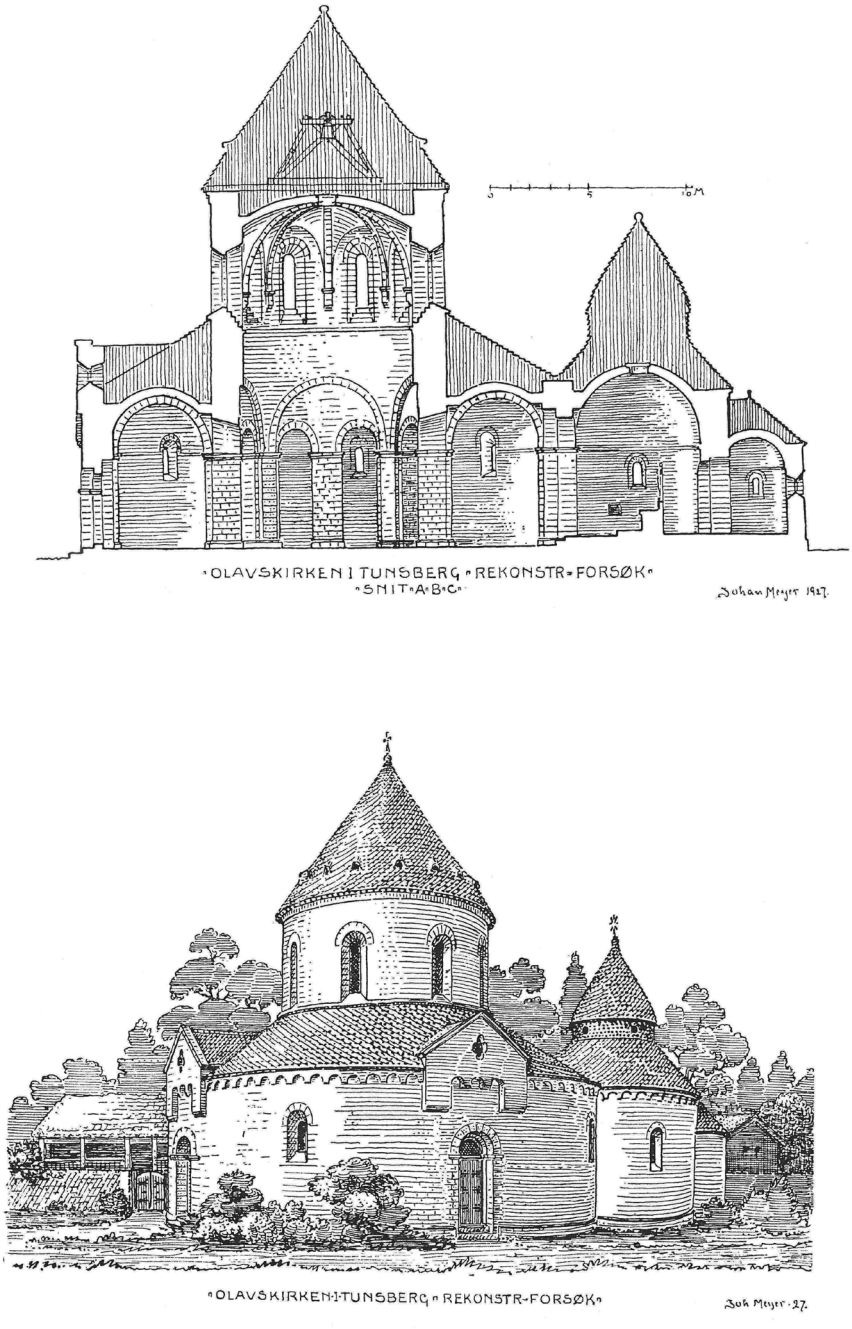

Figure 2. Reconstructed section and perspective of St Olav's Church. Illustration: Architect Johan Meyer, 1927.

History of centralised churches

In 313 AD, the Emperor Constantine the Great recognised Christianity as a legal and official religion in the Roman Empire. Christians could now publicly erect buildings – called churches from Greek *kyriakos* – for their cult and gatherings. The favoured design was the rectangular, aisled basilica, which could hold many people, but churches with a centralised plan, both round and polygonal were also built, especially when centred around the graves and shrines of martyrs. This design was inspired by the mausoleums of the Roman emperors during the third and fourth centuries, for example Diocletian's mausoleum from c. 305 AD in Split (Johnson 2009: 57ff), and it demonstrates a conscious effort to establish the cult of the greatest Christian martyrs and saints in imitation of the cults of the divine emperors.

Constantine erected several centralised churches, for example the 'Golden Octagon' in Antioch, but the most important of these, and the only one which partly survives today, was the rotunda of the Holy Sepulchre Church in Jerusalem. It constituted a part of a large building complex consisting of a basilica, a large atrium and the rotunda, as well as many adjacent buildings for the clergy and pilgrims. In the centre of the rotunda, the rock-cut Tomb of Christ was encased in a round or octagonal structure which was surrounded by an arcade supporting a cupola and a lower ambulatory with a gallery and three protruding apsidal chapels (Biddle 1999: 21–28). The rotunda was much restored after the Crusader conquest of Jerusalem in 1099, and this work was probably completed by 1149 (Pringle 2007: 21). The cupola was replaced by a tall, cone-shaped roof with an oculus, and the raised central room with its pointed roof became a distinguishing feature of the round churches which were built in northern Europe (Pringle 2007: 41).

Most of the round or octagonal churches in northern Europe were built during the twelfth and thirteenth centuries, and there is little doubt that the Holy Sepulchre Church was the ultimate if indirect inspiration behind their design. Few if any round churches were built after the thirteenth century when the crusades stopped. Some of these churches were also dedicated to the Holy Sepulchre, for example. the so-called Round Church in Cambridge in England. Many of the smaller Danish

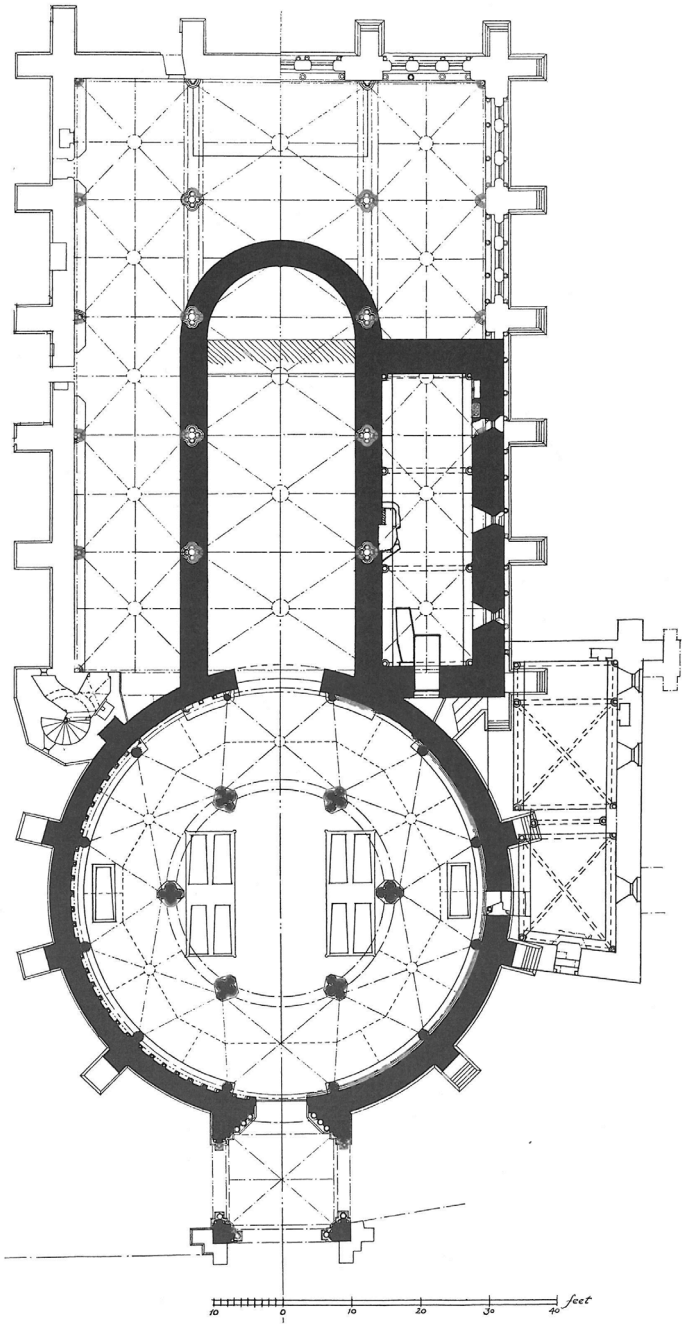

Figure 3. Ground plan of the Temple Church in London, with its original choir (demolished) in black and later additions outlined. Illustration: W. H. Godfrey, *Archaeology 95* (1953), pl. XLVI; adapted by Jeffrey J. Dean.

Figure 4. The interior of the round nave of the Temple Church with arcade, gallery and clerestorey. Photo: Øystein Ekroll.

and Swedish round churches were also erected by people who had participated in crusades, or who intended to do so, or who had crusader connections, one example being the churches built by the Danish magnates known as the Hvide family. Many were built as private chapels on manors and later became parish churches. These churches can thus be viewed as a cultural expression by royals or magnates of 'conspicuous architecture', intended to demonstrate their social prestige (Wienberg 2017: 23).

Round churches were also built by the knightly monastic orders that originated in Jerusalem, the Knights Templars and the Knights Hospitallers (the Order of St John). Both orders were founded shortly after the conquest of Jerusalem, and they rapidly established houses in many countries in western Europe, especially in France and England. A minority of these houses had round churches, for example in Paris and London – the round church in London is still preserved and is known as the Temple Church (Jansen 2010: 55). It is worth noticing, however, that the houses in major towns and cities did seem to favour round churches. These complexes were usually situated on the outskirts of, or just outside, the towns and cities, not unlike the situation in Tønsberg.

The Holy Sepulchre Church in Jerusalem

No single church played a greater role in the medieval Christian mind than the Holy Sepulchre Church in Jerusalem, which in its centre contained the rock-cut tomb of Christ. From the reign of Emperor Constantine the Great, when the tomb and the rock of Golgotha were miraculously rediscovered under thick layers of backfilled debris, until today, this remains the most important site of pilgrimage in Christendom. During the period from 1099 to 1187, when Jerusalem was in the hands of Western Christians, countless numbers of pilgrims set out to visit this site, and many perished on the road. Those who returned to their homeplace gave friends and family first-hand reports on the wonders they had seen. All brought back some souvenirs, ranging from the costly relics of biblical persons or pieces of the True Cross obtained by kings to some humble dust or rocks from the holy sites brought home by the poorest.

The Holy Sepulchre Church was not just an allegorical or symbolic inspiration for the new churches, but some of its features were also transferred directly to the West. In his seminal paper from 1942, Richard Krautheimer explored the medieval concept of 'copy' (Krautheimer 1942). He demonstrated that, in the Middle Ages, buildings that were claimed to be copies of the Holy Sepulchre Church looked nothing like a modern person's understanding or definition of a copy. To a modern person, two buildings must be virtually indistinguishable for it to be claimed that one is a copy of the other. In the Middle Ages, however, a single common feature sufficed to accept that one building was a copy of another, for example a measurement, a decorative feature or a common ground plan (Krautheimer 1942).

Scholars in the Middle Ages were endlessly fascinated by numbers and geometry, and God was often depicted as a geometer constructing the world by help of a compass. The biblical design of the Heavenly Jerusalem, as described in the visions of the prophet Ezekiel, was studiously analysed, not least during the twelfth century in the Augustinian Abbey of St Victor in Paris, the most important house of the order during the twelfth century (Delano-Smith 2012, 41–77). The third and fourth archbishops of Nidaros, Eirik (1188–1205) and Tore (1206–14), were educated at St Victor and were thus Augustinians, as was probably the second, and most important, archbishop of Nidaros, Øystein Erlendsson (1157–88). When writing in Latin, he used the name Augustin, demonstrating that he identified with the Church Father.[1] As archbishop of Nidaros, Øystein founded two or three Augustinian houses, and the remaining three or four Norwegian houses of this order were also founded during his reign by kings and magnates (Ekroll 2015).

Interestingly, all the most important Christian sites in Crusader Jerusalem were in the hands of canons belonging to the Order of the Augustinians, including the Holy Sepulchre Church (Ekroll 2017; Pringle 2007: 12). This Augustinian connection created a direct link between Jerusalem and the West through which knowledge about buildings and measurements could

1 Augustin is no translation of Øystein (Old Norse: Eysteinn), but rather an *onomatopoeia*, i.e., it sounds almost identical when spoken with stress on the first syllable.

be transmitted through writing or through the rotation of canons between abbeys, even as far north as Nidaros. The abbey of St Victor in Paris was the obvious centre of gravity in this Augustinian network.

After 1149, the ambulatory of the Holy Sepulchre rotunda was gradually divided by new partition walls into several sections and thus lost its original function. The ambulatory diameter of 34.5m was also far too large to be employed in new churches. The single large space that remained open was the central room of the Rotunda, surrounded by the large arcade and containing in its centre the Tomb of Christ. The easiest measurement to take, and far easier to utilize than the ambulatory diameter, was the diameter across the central room arcade, which is c. 22.5m internally (the inside of the pier bases) and c. 24.5m externally (the outside of the pier bases). These measurements could be taken with a rope, a metal chain, a rod, or simply by pacing the distance. In fact, the diameter of the arcade was about the only measurement possible to take in the cluttered maze of buildings and partition walls which constituted the Holy Sepulchre Church.

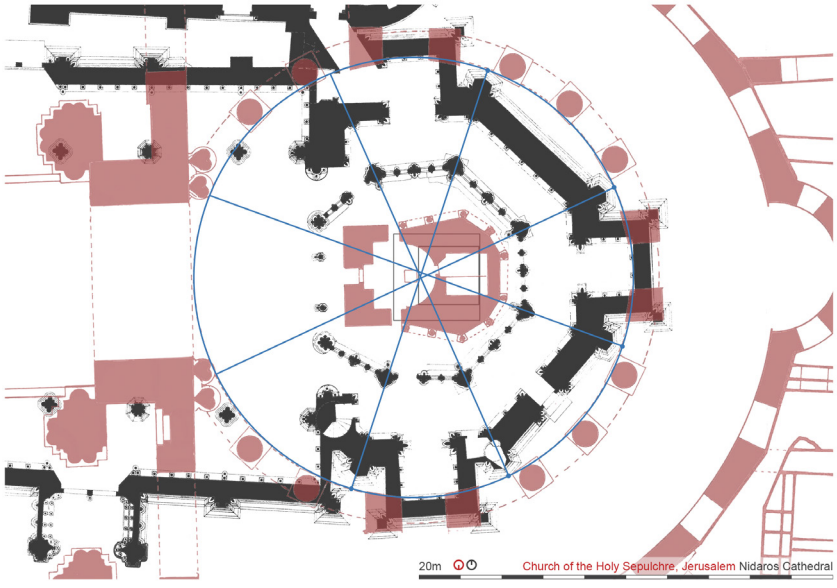

Figure 5. The ground plan of the Nidaros Cathedral octagon (black) interpolated on the ground plan of the Holy Sepulcher Church. Notice that the external diameter of the octagon and the Jerusalem arcade are virtually identical at ground level. Graphics: Samuel B. Feragen.

The internal or external diameter of the arcade bases were clearly measurements which were well known in some circles, especially among the Augustinians. When comparing the plans of the Holy Sepulchre Church with some other churches, such as the Nidaros octagon, the plans clearly converge (Ekroll 2015: 356). When measuring the diameter across the external corners of the octagon, it fits exactly inside the Jerusalem arcade, and the external diameter of the arcade fits with the diameter of the octagon measured across the external walls of the protruding chapels.

Even more importantly, when interpolating the ground plans, the position of the Tomb of Christ and the grave site of St Olav under the main altar of the octagon also converge almost exactly. Both are situated not in the centre of the building but a little off-centre. The external diameter of the octagon corners at ground level also matches very well with the external diameter of the Temple Church in London, which was clearly designed employing the same measurements.

The Nidaros Cathedral octagon

From the time of his canonisation in 1031, St Olav was regarded as a *martyr* who had given his life for Christ, and his martyrdom and Christ-like persona became the central aspect of his cult. When the new metropolitan cathedral of Nidaros was nearing its completion towards the end of the twelfth century, it was decided to literally crown the church with a highly unusual, but most appropriate building around the grave of the saint: an octagon designed to resemble a Late Classical *martyrion*.

For a long time, the Nidaros Cathedral octagon was regarded as the first stage in the major rebuilding of the cathedral in the Gothic style (Fischer 1965: 127–134). New research, however, has shown that the octagon was rather the completion of the Romanesque cathedral and that it was added to the eleventh-century nave which now became the choir of the enlarged cathedral (Ekroll 2015: 113). When completed in c. 1210–1215, the octagon would thus have been visually far more dominant than today, when it is dwarfed by the Gothic choir and the tall central tower. According to

a tradition written down c. 1230 in Snorri Sturluson's *Heimskringla*, the octagon's altar stands over the grave site of St Olav, and the shrine containing the saint's incorrupt body stood on the altar, directly above the grave (Ekroll 2015: 110; Ekroll 2006: 9–11). It is doubtful whether St Olav was buried on this spot, which is the highest point of the Nidarnes peninsula. The most probable location of the king's original grave is the riverbank south of the cathedral, which consists of sandbanks. Here, near the Elgeseter Bridge, lies a natural water source known since the nineteenth century as 'St Olav's Source'.

The Nidaros octagon consists of a central room containing the high altar, surrounded by a narrow ambulatory with three small rooms or chapels protruding to the north, east and south respectively. There is a narrow portal in the southeast ambulatory wall, and formerly a passage led from the west through a vaulted corridor into the north chapel. The ambulatory begins and ends in the central nave of the choir, and unlike other pilgrimage churches it is not connected to the choir aisles. This would have created a continuous ambulatory providing seamless transfer of people around the saint's shrine. Instead, even today everyone must enter and leave the ambulatory from the central nave of the choir, creating endless practical problems. This proves that the octagon was conceived and built as an addition to the single-nave eleventh-century Christchurch of King Olav the Peaceful (*r.* 1066–93), not the later Gothic choir, the aisles of which end blindly towards the east.

The external N-S diameter of the octagon at ground level, when measured across the north and south chapels, is 24.7m, and the external diameter of the ambulatory is 19.6m across. The internal diameter of the ambulatory is 14.8m and the central vault reaches a height of 19m above floor level. The start of the building work was traditionally dated to the period after Archbishop Øystein returned from his English exile in 1183. Recent research has suggested that the building work started somewhat later, perhaps around 1200, but this question is still not solved (Ekroll 2015: 31).

There is little doubt that the design of the octagon was inspired by the rotunda of the Holy Sepulchre Church in Jerusalem. When comparing the ground plans, the external diameter of the Nidaros ambulatory turns

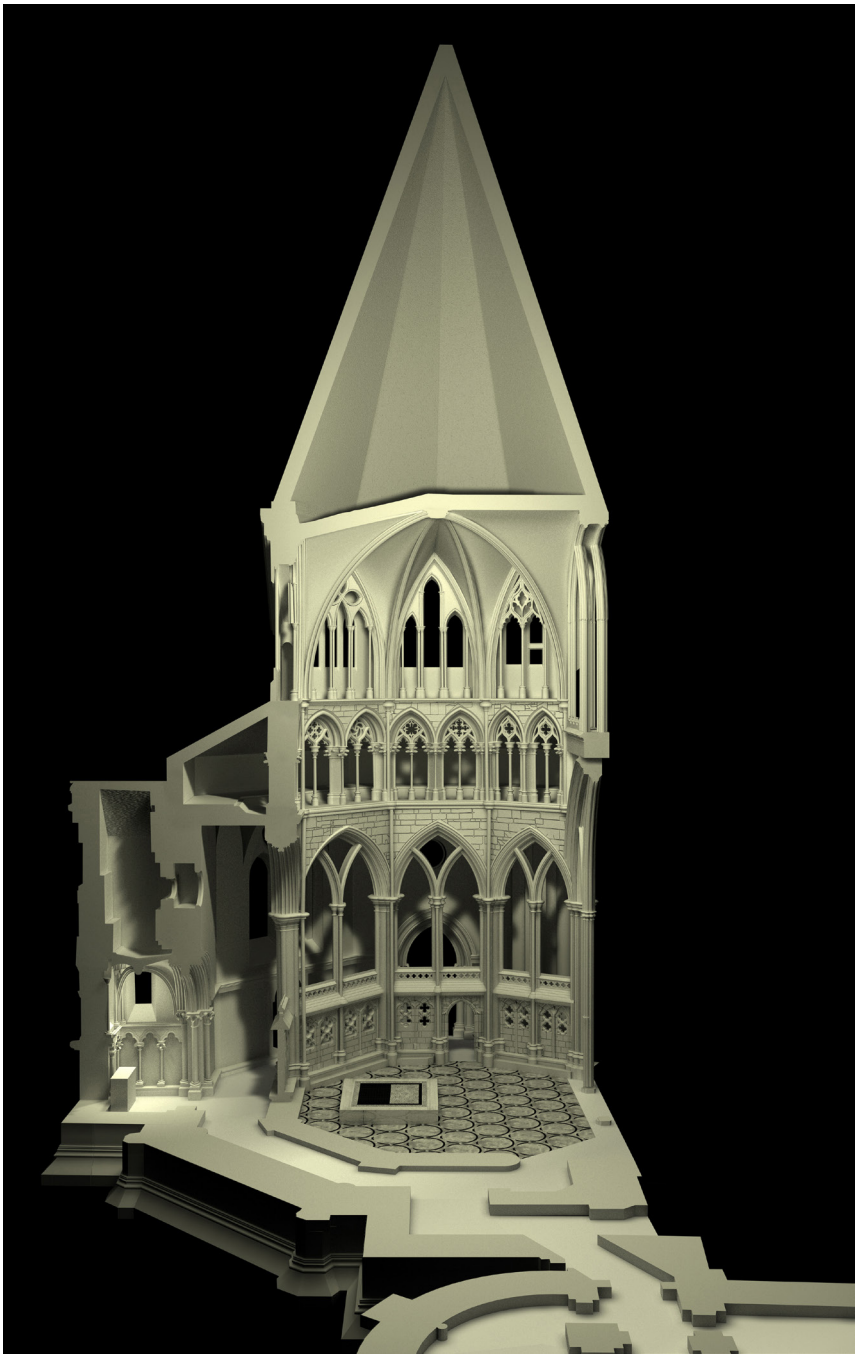

Figure 6. 3D model with section of the Nidaros Cathedral octagon, showing the central room, the ambulatory and the protruding east chapel. Graphics: Nidaros Cathedral Restoration Workshop.

out to be identical with the internal diameter of the central arcade in the Holy Sepulchre Church (Ekroll 2015: 355; Ekroll 2021: 292–96). Also, the position of the altar above the purported grave of St Olav is identical with that of the Tomb of Christ. But why was an octagon and not a rotunda built in Nidaros? One possible answer is that in the twelfth century, the word 'rotunda' was used for all centralised churches, be they round, heptagonal, octagonal or decagonal (Ekroll 2015: 353; Wienberg 2017: 4). The design of the Nidaros octagon must also be influenced by the tradition of building octagonal churches in western Europe, beginning with Charlemagne's palatine chapel in Aachen from c. 800.

Another important connection is that both are *martyrions*, built to visually express to the world that they contained the tombs or graves of martyrs who had given their lives for their faith. A third part of the explanation is another very important building in Jerusalem: The Dome of the Rock (Qubbat as-Sahkra). This Islamic building was built c. 695 and is the most perfect octagon ever built, but the first crusaders believed it was the Temple of Solomon. They converted it into an Augustinian abbey dedicated to St Mary (Pringle 2007: 401). It enjoyed a status on par with the Holy Sepulchre, and the Nidaros octagon appears to be a blend of the measurements and designs from these two most important buildings in Jerusalem in the twelfth century.

No other stone building in Norway, nor, probably, anywhere in Scandinavia, is as richly decorated with stone carvings as the Nidaros octagon. And no other part of the octagon is richer than the ambulatory walls, thanks to the soft but compact steatite (soapstone) used as building material. While the exterior abounds with sculpture, the interior is almost bereft of sculpture during this phase. The rich floral and decorative elements include laurel leaves, acanthus, palmettos, astragals, kymathions and other features borrowed from Late Classical funerary architecture. In comparison, the granite walls of the Round Church in Tønsberg appear stark and austere with their simple wall base mouldings. The lost upper parts of the church may of course have been more richly decorated, but twelfth-century stone architecture in south-eastern Norway generally contains little stone sculpture. Portals and capitals are, on the other hand, often richly moulded.

Other Scandinavian octagons

The Nidaros octagon is the only certain Nordic martyrion church. The shrines of the two other Nordic royal martyred saints, King Erik of Sweden and King Knud of Denmark, were kept in churches with more traditional designs in Uppsala and Odense respectively. These churches were built close to, but not on the sites of their martyrdom. On these sites, small churches or chapels of traditional design were built.

At Stiklestad, a church was built over the death site of St Olav, with its altar incorporating the bloodied rock on which the dying king leaned. Likewise, an apsed church was erected at Haraldsted Forest where St Knud Lavard was murdered in 1131, and a small chapel was built on the site of Finderup Barn in which King Erik Klipping was murdered in 1286. The relics of all other Scandinavian martyr saints were also moved from their burial place to churches when they were enshrined.

Only two other churches with octagonal naves are known in Scandinavia, Store Heddinge on Zeeland and the Holy Spirit Church in Visby on Gotland. The design of both churches is closely related, but their connection is still unexplained. Store Heddinge Church was probably a royal foundation and was built c. 1200, but little is known about its function and history. It is dedicated to St Catherine.[2] The rectangular choir has two storeys, and in the corners behind the internal apse lie small chambers on two levels. The nave measures externally 21.6m and internally 17.1m across, and it had an ambulatory surrounding a raised, octagonal central room supported by eight piers. The central room had a clerestory with windows and a tall, pointed roof. After a fire in the 1670s, the central room was demolished and the whole nave was covered by a single conical roof.

The early history of the Visby church is even less known. Its dedication to the Holy Spirit is probably secondary, when it became the church of a hospital, but its original dedication and purpose is uncertain even though St Jacob/James is a possibility (Bohrn & Svahnström 1981: 95). It was probably founded c. 1200 and completed by c. 1250 (Bohrn & Svahnström 1981: 61–63). Like Store Heddinge, the rectangular choir has small corner

2 *Danmarks Kirker* VI: *Præstø amt*. Available online: http://danmarkskirker.natmus.dk/praestoe/store-heddinge-kirke/.

chambers behind the internal apse. The nave measures externally 17.9m and internally 14.1m across, and it has two storeys each supported by four sturdy piers with an octagonal oculus in the floor between the upper and lower storey, thus connecting them visually and aurally. The nave wall had eight gables, and possibly a small central turret with a pointed roof, which would create a visual similarity with the Nidaros octagon. During the Late Middle Ages, the tower and the upper parts of the gables were removed and the whole nave was covered by a conical roof (Bohrn & Svahnström 1981: 32–48).

While these two octagons certainly have some kind of connection with the Nidaros octagon, the Round Church of Tønsberg seems to be more closely connected with the other round churches built in western Europe after the conquest of Jerusalem in 1099. There is little doubt that it predates the Nidaros octagon and the two other octagons. Like some of these churches, its dimensions point towards an ultimate but indirect inspiration from Jerusalem.

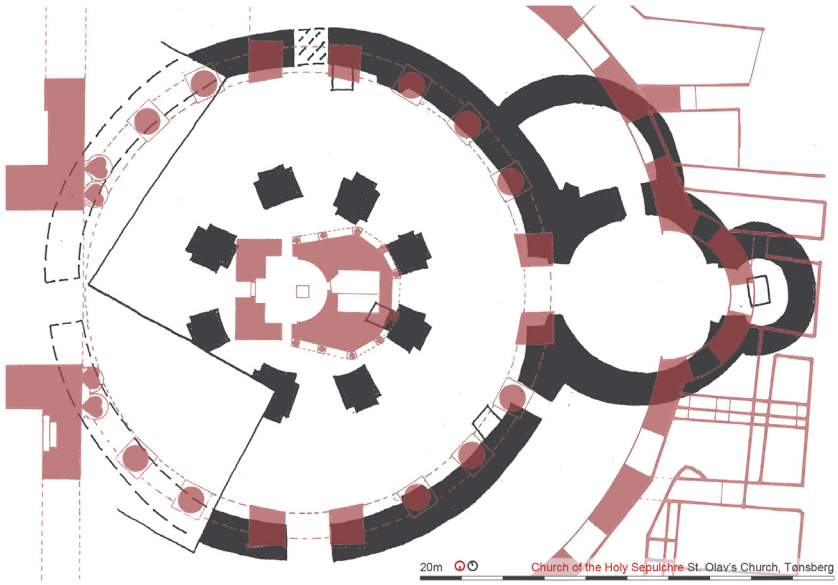

Figure 7. The ground plan of St Olav's Church in Tønsberg (black) interpolated on the ground plan of the Holy Sepulcher Church (red). Notice that the diameter of the Tønsberg nave and the Jerusalem arcade are almost identical, and that the Tønsberg choir fits into the apse of the Jerusalem ambulatory. The Tomb of Christ would fit exactly into the central room of the nave. Graphics: Samuel B. Feragen.

This brings us into uncharted territory. Several older authors have suggested that Earl Erling Skakke was the man behind the construction of the Tønsberg church, but, while this is possible, there is no substantial evidence to support this hypothesis (Bugge 1932; Bugge 1933: 222–223). Erling led a fleet of Norse and Orcadian crusaders, including a bishop, to the Holy Land in 1152–55, visiting Jerusalem and bathing in the River Jordan, so he and his followers gained first-hand knowledge about the monuments in Jerusalem (Svenungsen 2021: 95–131).

King Valdemar the Great of Denmark (1131–1182) laid claim to the part of Norway – Viken – which is situated on each side of the Oslo Fjord (Svandal 2010). In 1170, Earl Erling Skakke accepted King Valdemar as the lord of Viken, became his earl and received the area as a fief (Helle 2000). Earl Erling and King Valdemar are also closely connected with the foundation of the abbey and hospital of the Knights Hospitaller at Værne (ON Varna) in Østfold on the east side of the Oslo Fjord in the 1170s.

Could a similar foundation be envisaged on the west side of the Oslo Fjord? If the Tønsberg church was built after 1170, then, as rulers of the region, Earl Erling and King Valdemar would surely have been involved in this project. Round churches are connected to both Knights Hospitallers and Knights Templars, not least in England (Jansen 2010: 55). King Valdemar was closely connected to the powerful Hvide family whose member Sune Ebbesen built the round church at Bjernede on Zeeland, which was completed before his death in 1176 (Frölén 1911: 128–129). Much restored, it now appears as a rotunda with a conical roof with a small turret.

Sune Ebbesen was the first cousin of Archbishop Absalon of Lund and of Esbern Snare, and in c. 1220 Esbern's daughter Ingeborg and her husband Peter Strangesen built the magnificent Kalundborg Church on Zeeland with a ground plan like a Greek cross surmounted by five octagonal towers.[3] This family was closely connected with the crusades, albeit in the Baltic Sea region and not in the Holy Land.

3 Kalundborg Vor Frues kirke. In *Danmarks Kirker* IV: *Holbæk amt* (p. 3099). Available online: http://danmarkskirker.natmus.dk/holbaek/vor-frue-kirke/ Jørgensen & Johannsen 1979–2001. Online edition visited 25.11.2017.

It is difficult not to see the proliferation of round and octagonal churches in South Scandinavia in the late twelfth century as a mental expression of the crusading idea which during this period was popular with the monarchy and the magnate class. Several authors have suggested that St Olav's Church in Tønsberg was inspired by the Holy Sepulchre Church, e.g., Gerhard Fischer in 1928, or by the churches of the Knight Templars (Wienberg 1991: 42; Lidén 1981: 30–32).

When reading the short description of Tønsberg in 1191 in *Historia de Profectio Danorum in Hierosolymam*, the arrangement with the Premonstratensians living in the town while being supported by the income of St Michael's Church on the Castle Hill looks spurious. These two churches are situated at opposite ends of the town, separated by a distance of c. 700m as the crow flies. If the canons served both churches, it meant crossing the town very often and ascending and descending the steep hill. The castle and its church belonged to the king, so royal permission for this arrangement is evident. This could have happened during the reign of King Magnus Erlingsson (1161–84), son of Earl Erling, both of whom had close relations to Archbishop Øystein of Nidaros. In 1533, the bishop of Oslo claimed that the abbey – not necessarily the *church* – was founded by his ancestors, i.e., the bishops of Oslo (DN X: 667). This could have been the little-known Bishop Helge (1170–90) or the infamous Bishop Nikolas Arnesson (1190–1225).

Most authors have taken it for granted that in 1191 the canons had received the Church of St Olav as their abode, and there is no reason to question this conclusion. On the other hand, it was highly impractical to situate the monastic community permanently next to St Michael's Church inside the royal castle on the Castle Hill, hence this strange arrangement. No trace of monastic buildings has been found attached to St Michael's Church, but its choir was extended in the thirteenth or fourteenth century with a vestry on the north side.

It means, however, that the Church of St Olav was some kind of 'white elephant', which seemingly did not yet own enough land to support a community of canons -- instead, they had to rely on the income of St Michael's Church for their sustenance. In the Late Middle Ages, the abbey became very wealthy, and by 1399 it owned 209 farms (Lange

1856: 451), so when was it endowed with so much land and by whom? Were the original foundation donations for both churches combined into one? But who gave these two churches to the canons and had the authority to do so? We must clearly look to the highest authorities, either the Church or the monarchy. At least five of the six Augustinian houses in medieval Norway were founded by Archbishop Øystein and Earl Erling Skakke in the period 1160–90. Earl Erling was the *de facto* ruler of Norway 1161–79 through his young son King Magnus, and the archbishop and he enjoyed a cosy relationship with mutual benefits. Tønsberg lacked a monastery, and with the foundation of St Olav's Abbey the town clergy at least doubled in size. The archbishop provided the clerics, and the earl donated royal property for the foundation of the abbey.

But why was St Olav's Church built at all, situated outside the built-up area of the town, without a solid economic foundation and seemingly also without a clear purpose? What was its intended function? In my view, it seems highly improbable that this church was specially built for the Premonstratensians, but that they were given a church which had lost the purpose for which it was originally conceived, perhaps before it was even completed.

St Olav's Church in Tønsberg is the largest of all the Scandinavian round churches. Its nave is even wider than the Knight Templars churches in London and Paris (Ekroll 2015: figs. 168 & 169) and equal in size to the nave of the Knights Hospitallers church at Clerkenwell in London. These churches had, however, rectangular choirs providing space for the knights/monks (Jansen 2010: fig. 4). They were much larger than the round Tønsberg choir, which is very small for a monastic church, even when including its tiny apse. There was hardly room for stalls for the canons in the cramped choir, and these were probably placed in the central room of the nave which gave a direct view to the main altar.

Another interesting question is why the choir was not extended or rebuilt during the monastic period? The abbey became wealthy and could surely have afforded a new square or rectangular choir with ample room for the canons and their stalls. During the second half of the thirteenth century or later, all the other Romanesque churches in Tønsberg (St Peter's, St Lawrence's, and St Michael's) were extended with

larger Gothic choirs (Wienberg 1991: 21, 25, 29, 31). So why was the choir of St Olav's Church not extended? Was perhaps the number of canons so small that the old choir in St Olav's Church sufficed? Or was the old arrangement of choir stalls deemed sufficient?

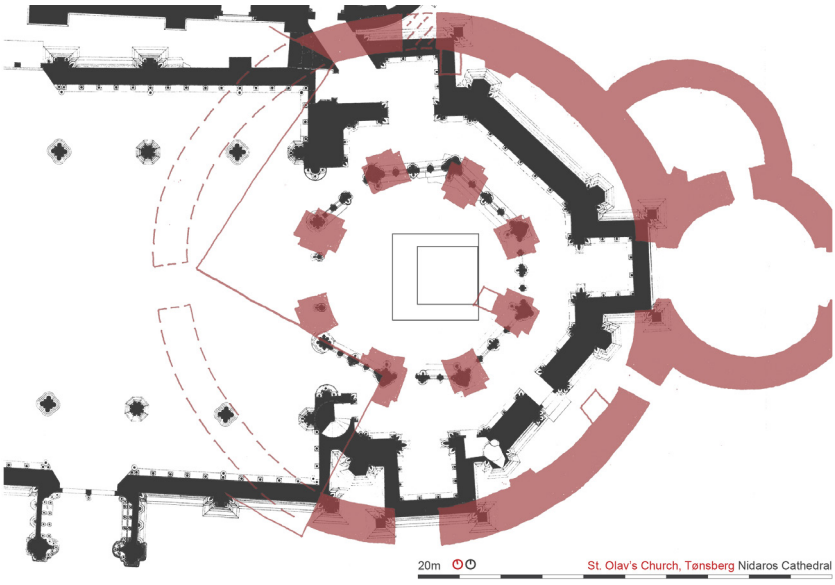

Figure 8. The ground plan of the Nidaros Cathedral octagon (black) interpolated on the ground plan of St Olav's Church in Tønsberg (red). Notice that the external diameters of the two buildings at ground level is virtually identical. Graphics: Samuel B. Feragen.

Summing up

There remain many unanswered questions in connection with the Round Church in Tønsberg. It is the largest round church in Scandinavia and its nave is equal in size to the largest round churches in England and France. It dates to before 1207 and was probably in existence by 1191. Its dedication to the royal martyr St Olav suggests a parallel to the octagon surrounding the grave and shrine of St Olav in Nidaros, but the Round Church is probably older. It constitutes a part of a group of round and octagonal churches built in Scandinavia during the second half of the twelfth and the first decades of the thirteenth century. The ultimate inspiration for these churches were the Holy Sepulchre Church in Jerusalem

and its imitations in the West. During the Crusader period, the interest in the Holy Land was strong in Scandinavia, and the Nidaros Cathedral Octagon is the best example of this interest. The historical circumstances behind and around the construction of the Round Church are still blurred, but a connection with the Knights Hospitaller at Varna, King Valdemar of Denmark, and Earl Erling Skakke is suggested. The use of the church as a royal burial church in 1207 also attests to a special bond between the monarchy and this church.

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