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In the course of human history, in Europe and Russia, wooden architecture occupied a special place. The extensive areas in northern Norway and the Russian North and those places in the Czech Republic, Poland and England where masterpieces of timber construction still survive are today regarded as unique architectural reserves. Some wooden churches, such as the Urnes Stave Church and the Church of the Transfiguration at Kizhi, are included in the UNESCO list of World Heritage Sites. 

For a long time, however, against the background of a magnificent panorama of masonry architectural monuments, the role of wooden buildings was not rated very highly and their significance was not properly appreciated. A large extent this bias was due to a deep-rooted perception going back to Antiquity of timber construction as an indicator of the low level of material and spiritual development of barbarian societies. Back in the first century AD, Tacitus, describing the world of the Germanic tribes that lay beyond the northern borders of Roman territory, observed that: ‘They are uncomplicated with the use of mortar and lime, and for every purpose employ rude unshapen timber. Each lined with so much to prevent the eyes from beholding, the decline of masonry construction that followed the decline of the Western Roman Empire in the year 476 increased the significance of wood as a building material in the subsequent history of construction in Europe.

Against this background a certain symbiosis was born to the mention of the earliest recorded wooden church in the Roman outpost of Quintana (present-day Künzing) on the Danube. The early Christian Life of St. Severinus reports: ‘The inhabitants of this place had built outside the walls a wooden church which overhung the water, and was supported by posts driven into the riverbed and by forked props. In place of a flooring it had a slippery platform of boards, which were covered by the overflowing water whenever it rose above the banks.’ This place was to become the heart of the town forming the border, the church in Quintana connected in a way the Roman and German worlds, just as the period in which it is recorded - the time connected departing Antiquity with the coming Middle Ages - when until the medieval muile it was the riverbed that is the most important factor in planning medieval construction as almost entire wooden, although today that is hard to believe in view of the almost complete lack of structures made from that relatively short-lived material. A host of mentions of extensive construction in wood have come down to us from the Middle Ages. The collected data from various sources inform us of the existence across Europe and Russia of several hundred wooden churches created at various times - and that is far from a complete picture.
Wooden Elements in the Stone Architecture of Medieval Norway

By I. O. Andriany

Wooden elements were often used in the stone architecture of medieval Norway. Unfortunately, the majority of these have been lost, and so our understanding of them has yet to be studied. As a result, we can only imagine what the different wooden elements could have been, as there are no descriptions or written analyses of them present.

This chapter is devoted to the wooden elements of pre-Monial Norwegian architectural monuments (and elements of such monuments). Wooden parts of inner staves have been found in known buildings (Fig. 1). Wood is used not only inside the walls but also outside the walls and pillars, in the construction of roofs and windows, in the framing of doors and windows, and in the construction of altar screens and ciboria, for the lintels of openings and railings of those galleries, as well as for temporary builders' structures (scaffolding, centerings and supports for centerings). The continuous use of wood in the lower parts of the foundations is consistent with the idea that Norwegian builders used wooden elements that were not used for the construction of the stave church as a whole.

Two inside the walls and between the walls and the pillars

We find sets of wooden ties inside the walls and between walls and pillars in all works of early Monial Norwegian architecture (Fig. 1). Usually an interlocking band of single rows or square beam was inserted at the middle of the mastery of the wall. The beams were connected together with joints. As L. L. Lappalainen stated, those bands of wooden ties had functions. Initially their role was to prevent the wooden frame from breaking due to the weight of the wall. Then, after the mortar had set, the wooden beams functioned as beams connecting diagonal ties. Also, if the pillars of the church were pulled, the ties could help to reduce movement in those elements. It is obvious that the beams would not be stable and sometimes, door openings were deliberately made to correspond to the tiers of ties so that the builders could see the parts of the beams in the openings to attach it to the wall frame.

In works of early Monial architecture lower tier of ties is connected with the tier of ties above it. Among Norwegian buildings of the pre-Monial period we can find this feature only in Clement’s Church in the Brunei Islands (Fig. 2). Other churches did not have it. The lowest tier of St. Clement’s is also unusual in that the beams and ties were not connected by wooden braces, but solid ties were used in the construction of the braces. The solid ties of the beams are connected directly to the exterior surface of the wall, so it is possible that they were used by the masons as a guide for facing the stones above.

The next ties of ties were usually made in the windows where the arches were cut into the masonry. The appearance of the windows in the masonry was supported by the upper gables and in the abutments of the wall frame. Those ties of ties were not only placed inside the walls but also connected by ties with the pillars on this contact of the pillar to the wall. Also, we can often see ties in the hole of the beam, and in the abutment of the beam (Fig. 3). Some materials with a bark edge have not been found in any church, but the dating of original wood without bark edges is consistent with the dating of the ties of ties, such that it is possible to justify dating the church in the ties. However, it seems that a number of churches in the church’s north wall may only include surviving stave churches and the handful of denuded stave churches known in modern literature. The discussion has been based on demonstrable archaeological building conditions. How much weight do historians have that are based on, conservatively speaking, these 2% of the material mainly derived from the-stone foundations and walls in northern Norway and from a limited period of the Middle Ages?

This is a group of denuded stave churches where the nave has a number of free-standing internal staves or posts that support the upper floor (Fig. 4). The best-known examples are Bjørgvin and Tuns. Some of these stave churches have all of the free-standing inner staves standing at full height from the nave’s ground beams as close as the stave church’s longitudinal axis that stands on a cross beam supported on an arch. It is simplicity itself to call them group A. Tuns, which is a church in group A, has been dated to the oldest of the stone churches. The presumed development of stave church architecture, while those which we can call group B have been seen as younger and more developed. Group A is characterized by the fact that the free-standing inner staves have one or two horizontal beams, string beams that lack the staves’ sideways. Between the string beams and the staves there are cross beams, so-called. It is precisely this interaction between disciplines that has proven so fruitful at Urnes.

For more than 100 years, typology has provided the foundation of beliefs about the stave churches architectural development, tracing stave church architecture by specific constructive characteristics. In a sense, the typology of stave church architecture is still the key to our knowledge of the history of the style. The use of typology during the nineteenth and the presumed development of stave church architecture. The results of the typological efforts are published in the Society for the Preservation of Ancient Norwegian Monuments’ yearbook in 2010. The purpose of the investigation was to look for a relationship that could cast light on the history of style. The results must be reconsidered in light of other source material, archaeology and building archaeology. The results were published in the Society for the Preservation of Ancient Norwegian Monuments’ yearbook in 2010 (Fig. 6).

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