# INTRODUCTION

Wood in the Architecture of Europe and Russia: National Specifics and International Research / Evgeny Khodakovsky

## 1. HISTORIC WOODEN ARCHITECTURE IN EUROPE AND RUSSIA:

### ARCHAEOLOGICAL EVIDENCE AND STUDY

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Wooden Churches in Viking and Medieval Norway: Two Geometric and Static Strategies</td>
<td>Jørgen H. Jensenius</td>
</tr>
<tr>
<td>28</td>
<td>Timber Churches in Medieval England: A Preliminary Study</td>
<td>Mark Gardiner</td>
</tr>
</tbody>
</table>

## 2. WRITTEN EVIDENCE ON MEDIEVAL WOODEN ARCHITECTURE

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>58</td>
<td>Viking and Medieval Wooden Churches in Norway as Described in Contemporary Texts</td>
<td>Jørgen H. Jensenius</td>
</tr>
<tr>
<td>68</td>
<td>Written Sources for English Medieval Timber Architecture</td>
<td>Mark Gardiner</td>
</tr>
<tr>
<td>78</td>
<td>Archives and Historical Documents in Contemporary Research of the Wooden Architecture of the Russian North</td>
<td>Evgeny Khodakovsky, Arina Noskova</td>
</tr>
</tbody>
</table>

## 3. THE ARCHITECTURAL OBJECT AS PRIMARY HISTORICAL EVIDENCE

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>94</td>
<td>Stave Church Research and the Norwegian Stave Church Programme: New Findings - New Questions</td>
<td>Leif Anker</td>
</tr>
<tr>
<td>110</td>
<td>Traditional Structures in Russian Wooden Architecture: Technical Aspects</td>
<td>Andrei Bode</td>
</tr>
<tr>
<td>122</td>
<td>Wooden Elements in the Stone Architecture of Medieval Novgorod</td>
<td>Ilya V. Antipov</td>
</tr>
<tr>
<td>134</td>
<td>Aspects of Bohemian and Swedish Wooden Bell Towers</td>
<td>Karel Kuča</td>
</tr>
</tbody>
</table>
4. EMPIRICAL STUDY FOR PRESERVATION AND RESTORATION:

EXPERIENCE AND PERSPECTIVES

146  The Restoration of Wooden Architectural Monuments in Russia. Contemporary Methods and Approaches / Andrei Bode

156  The Church of the Transfiguration at Kizhi Pogost – Some Reflections on the Building and its Restoration / Arnt M. Haugen

168  CONCLUSION

Historic Wooden Architecture in Europe and Russia: Different Approaches to New Knowledge / Siri S. Lexau

178  AUTHOR INFORMATION

182  APPENDIX / IMPRINT
Introduction

WOOD IN THE ARCHITECTURE OF EUROPE AND RUSSIA:
NATIONAL SPECIFICS AND INTERNATIONAL RESEARCH /
Evgeny Khodakovsky
INTRODUCTION

WOOD IN THE ARCHITECTURE OF EUROPE AND RUSSIA: NATIONAL SPECIFICS AND INTERNATIONAL RESEARCH

Evgeny Khodakovsky

In the centuries-long history of art in Europe and Russia, wooden architecture occupies a special place. The extensive areas in southern 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. To 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 boundaries of Roman territory, observed that: ‘They are unacquainted with the use of mortar and tiles; and for every purpose employ rude unshapen timber, fashioned with no regard to pleasing the eye.’

Nevertheless, the decline of masonry construction that followed the demise 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 symbolism would seem to attach to the mention of the earliest recorded wooden church in the Roman outpost of Quintanis (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.’ By its very location on the banks of the river forming the border, the church in Quintanis connected in a way the Roman and Germanic worlds, just as the period in which it is recorded – the 470s – connected departing Antiquity with the coming Middle Ages, when amid the marble ruins the role of wood in architecture grew considerably.

After the previous dominance of the ‘Mediterranean vector’ in the development of culture ceased to be unconditional, the forests of central Europe and the character of their usage became an important ‘factor in architecture’ because in the Middle Ages ‘relations between humans and the forest changed’. We would be to a large extent correct in picturing medieval construction as almost
entirely wooden, although today that is hard to believe in view of the almost complete loss 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.
Gradually, though, wooden structures were rebuilt in masonry, which – in an era of constant wars, raids, fires and destruction – was valued above all for its durability. Stone and brick edifices, orientated on some authoritative prototype, performed representational functions and then, as constructional methods and techniques advanced, they acquired ever greater aesthetic value. This process can already be observed in the Carolingian period. Adam of Bremen, for example, mentions that Bishop Willerich, who lived in the first third of the ninth century, ‘erected churches in appropriate places; three, indeed, in Bremen, the first of which, that is to say the Cathedral of Saint Peter, he made over from wood into stone’. The British Isles, which in the ninth and tenth centuries experienced incessant, devastating blows from the Scandinavians, also displayed a strong upsurge in masonry construction in this period, which despite its very plain forms proved more in demand and more financially practical than inexpensive, but highly flammable wooden churches. Two Irish edifices can serve as examples – St. Columba’s House at Kells (circa 800) and ‘St. Kevin’s Kitchen’ at Glendalough (mid-ninth century).

Nevertheless, the seemingly irreversible process that saw the gradual replacement of dilapidated wooden churches by masonry buildings proceeded at slow pace in some parts of Europe and Russia: a number of regions in Scandinavia, the British Isles, the Novgorodian Republic, Bohemia and Silesia. The specific character of the development of these historical areas has determined the geographical boundaries of the questions addressed in this monograph, reflecting specialist research into the wooden architecture of Norway, England, Russia and the Czech Republic.

The great attention devoted in the book to Norwegian wooden architecture in particular is entirely explicable. Norwegian stave churches of the twelfth to fourteenth centuries are a group of very early wooden buildings that have survived down to the present. The exceptional nature of this phenomenon can be attributed to a wide range of factors. While the rest of the barbarian world (Gaul, Germany, Britain) had long ago been drawn into the sphere of influence of the Roman Empire and then the Church of Rome, Scandinavia – due to its geographical remoteness and peculiarities of social development – right up to the late eighth century took no active part in the formation of the cultural and political landscape of the early Middle Ages. It is only natural that in Norway – situated on the periphery of Europe and separated from the main territories of the continent by the North Sea and Skagerrak – art from the outset assumed a special local ‘endemic’ character. Isolation from the Roman legacy and the developed infrastructures of towns and roads associated with it, the complete absence of masonry construction with its elaborate techniques – the use of concrete, arches and vaults – also determined the distinctive character of the development of Norwegian architecture, which, drawing mainly on its own internal creative resources, preserved its uniqueness for centuries. This was also favoured by the natural conditions of northern Europe, where the abundance of forests preordained the use of timber as the main (and at times only) building material.
The preservation of wooden church architecture of the twelfth to fifteenth centuries in southern and central Norway, where the largest number of examples are located, is also due to the fact that until very recently Norway remained a country with a patriarchal agricultural way of life practically untouched by urbanisation and industrialisation. Norwegian geography – huge areas intersected by mountains, numerous fjords and passes that are closed in winter – favoured the conservation of many aspects of cultural life, the formation of local cultural traditions in different regions and the development of dialects of the language.

Another important circumstance is that as early as the late fourteenth century Norway lost its sovereignty and became dependent politically on Denmark and economically on the Hanseatic League. In the 1500s and 1600s, neighbouring Sweden became a wealthy state with imperial ambitions and financial capabilities that allowed it to embark on large-scale masonry construction, not only in the capital and the larger towns, but even in the countryside. As a rule, the construction of a new masonry church in place of an old wooden predecessor was the consequence of the parish acquiring sufficient funds, which testifies to the financial prosperity of the society. Ageing tumble-down wooden churches in Sweden and Denmark were gradually replaced with masonry ones, which were more reliable and functional, but with every passing generation possessed fewer and fewer of the features that characterised earlier stages in the evolution of medieval architecture. In
Norway, for centuries the situation was completely the opposite. The land remained as before on the periphery of the political and economic development of the realms in the Kalmar Union and had no such capabilities. But it was precisely this fact that facilitated the long retention of old churches, the majority of which remained wooden. As a result even today the overwhelming majority of timber dwellings, service and church buildings are in the provinces, while the appearance of the artistically most interesting cities in Norway – Bergen and Trondheim – is primarily formed by large-scale wooden construction.

Works of wooden architecture, which easily catch fire and are more susceptible to atmospheric influences, are in a more vulnerable position compared with durable masonry structures. Despite active measures to preserve wooden churches in Norway, they now number some two and a half dozen objects, a mere three per cent of the total quantity of Norwegian churches in the Middle Ages.

The task of present-day researchers lies in devoting maximum attention to the surviving buildings as hands-on empirical material. It is essential to continue the research of them to expand the knowledge of this persisting building technology of the past, during which the current predominance of extant masonry edifices was not at all evident. The wooden architecture of Norway to some extent compensates for the lacunae created by the loss of so many timber buildings and substantially expands the history of construction in Europe in the twelfth to fourteenth centuries, its technologies and typological variety.
The flourishing of wooden architecture in Norway would be the logical result not only of the long and varied use of wood in structures of material and spiritual culture in pagan Scandinavia. It is inseparable from the history of the development of timber construction in the British Isles – a region that played an extremely significant role in the Christianisation of Norway. For that reason buildings in Britain are allotted a special place in the monograph. They are examined both in the chapter devoted to methods of archaeologically reading wooden constructions, alongside an interpretation of Norwegian and Novgorodian material, as well as in the section on written sources as one of the most important research tools. Within the extensive archaeological array revealed in the course of excavations in the British Isles, particular value is attached to objects that lend themselves to at least minimal reconstruction. Of especially great worth, though, against that background is St. Andrew’s Church in Greensted, Essex (not far from London).

St. Andrew’s was constructed in the eleventh century and is today the oldest surviving wooden church in the world. Thus, through a multifaceted approach to the study of archaeological evidence, written sources and a surviving object, albeit the only one, that is in itself a precious source and evidence, the monograph reveals and examines the strong and long-lived tradition of wooden church construction in Britain.

The section on the traditional wooden architecture of the Czech lands, examined in the context of a possible link with the bell towers of Sweden, is not only innovative, but also deeply symbolic as the Czech Republic, situated in the heart of Europe, provides a more than merely visual geographical link between the main regions featured in the book – Britain in the west, Norway in the north and Russia in the east. A detailed study of the processes that took place in the architectural history of central Europe after the Reformation points to a possible interaction, albeit limited, between the Scandinavian and Slavic traditions. While in the architecture of church buildings such a consonance would seem impossible on the grounds of confessional differences and the need to express ethnic and cultural identity, in a more practical functional sphere, where the ideological aspect is reduced to a minimum, it is possible to find points of