

## I

## Introduction

*Wooden architecture in Europe: the scope of this study*

Eastern Europe is today the principal refuge of styles and techniques of 'solid' timber or log building which were once far more widespread. The same building methods were formerly well known in central Europe and they still survive in the Alps. At varying and uncertain periods, however, the increasing scarcity of forest resources prompted the development of timber-framing or half-timbering as a more economical alternative. That system, beautiful and successful in its own right, was itself to penetrate eastwards in the wake of Germanic expansion, besides influencing the construction of roofs and towers over wide areas of eastern Europe. Some timber-framed churches therefore find a place in Chapter 7; otherwise the book is devoted to churches built basically in solid timber – though with many refinements and embellishments.

It was Josef Strzygowski (whose revolutionary theories on wooden architecture are mentioned at the end of this chapter) who popularised the term *Blockbau* and its English rendering *blockwork* for what I shall describe as log construction. In such buildings the wall timbers lie horizontally in close contact with each other. A system of construction based on *upright* timbers in close contact (Strzygowski's *Stabbau*) also existed in Scandinavia and in Britain – witness the Saxon timbers incorporated in the church at Greenstead near Ongar, Essex. Such buildings, however, seem to have left few descendants (unless Norway's stave churches are to be so regarded) and we shall not meet them again.

In this survey I limit myself to those parts of eastern Europe where blockwork – log construction on the horizontal principle – has long been (sometimes still is) a normal method of construction and where churches built on that principle still survive. I refer only marginally to the Alpine region – an 'island' of block-

work already well documented, from which however nearly all the wooden churches have disappeared. Nor have I attempted to include other parts of central Europe where place names like Holzkirchen (in Bavaria) reveal their former existence. The survival of wooden churches into the present century has been the basic criterion for their inclusion here. In general, it may be said that eastern Europe alone qualifies, the well forested regions being naturally the richest in wooden buildings of every description.

Scandinavia remains, nevertheless, a problem. I must exclude the marvellous and enigmatic Norwegian stave churches which are in no sense east European nor built in blockwork. But the whole of Scandinavia, especially the far north of Norway, Sweden and Finland, forms an extension of the typically east European zone of blockwork building; there are even a few examples in the outlying Faroe Islands. It was indeed from Scandinavia that the early American log cabins – perfect examples of elementary blockwork – were apparently derived, and the lineal descendants of their European prototypes are still to be found both in northern Finland and the adjoining territory of Soviet Karelia (see Appendix 1). Another complication is introduced by the Finnish timber-built Lutheran churches of the seventeenth and eighteenth centuries, which are scarcely to be distinguished from those of northern Sweden – not unnaturally, since at the time they were evolved these countries formed but a single, uniformly Protestant State. I have therefore been obliged to draw an arbitrary line of demarcation: only Finland is included here, though Sweden must often be mentioned for purposes of comparison, or sometimes as a source of inspiration for Finnish wooden churches.

As in the case just cited, political boundaries are often irrelevant to the subject. After the upheavals of two world wars their impermanence is of course familiar to all, and it is frequently illustrated in this

2 *The wooden churches of Eastern Europe*

study. It is noteworthy, for instance, that no fewer than six of the eight countries with which we are mainly concerned had belonged, wholly or partly, to the old Austro-Hungarian empire until the great dismemberment of 1918. As an earlier example of the fluidity of frontiers one may quote those of the Ukraine, whose wooden churches figure prominently in this book. In the course of history the Ukrainians were ruthlessly and variously partitioned between Russia, Austria and Poland; the Poles themselves (as ruthlessly and variously) between Russia, Austria and Prussia. Many smaller areas have changed hands more than once even in modern times. Thus Sub-Carpathian Ruthenia (Podkarpatska Rus'), with its surprising variety of peoples and architectural styles, passed from Austria-Hungary to the new Czechoslovakia in 1918, and from Czechoslovakia to the Soviet Union in 1944. I generally refer to the area as Soviet Trans-Carpathia.

It is clear, therefore, that the accident of citizenship can have little to do with the various styles of timber building to be described in the following chapters. The all-important factor is religious affiliation, which may or may not coincide with citizenship (though it usually coincides with language). For this reason the subject matter is here divided up primarily according to religion, and many of the broad areas dealt with are intersected by the more or less arbitrary frontiers of existing States.

Orthodoxy in its various branches is the prevailing faith of eastern Europe and more than half the book is concerned mainly with the Orthodox churches of countless villages extending from northern Russia to the Ukraine and westwards through Rumania to Serbia. I say 'mainly' since some of these churches belonged, and a few still belong, to the Uniates or Greek Catholics – Catholics of the eastern rite. These Churches formerly claimed many adherents in eastern Europe, more especially in the Ukraine, but they have all suffered persecution at various periods and they were banned by several east European Governments after the Second World War. Apart from large expatriate communities I believe the only Uniates now able to practise their faith are those living in the Ukrainian enclaves of eastern Slovakia, and they too have had their troubles. Architecturally, their churches do not demand separate treatment since they are indistinguishable, except for some internal fittings, from those of the Orthodox communities.

Chapter 6 deals with the churches of Catholic Poland, whose distinctive wooden architecture extends thence into Czechoslovakia. Only in this sector of eastern Europe is the Church of Rome supreme in

numbers and influence. In chapter 7 we pass to some interesting styles of Protestant church-building which, in the seventeenth and eighteenth centuries, the Lutherans made their own, while there is some reference to Calvin's Reformed Church, as represented in Hungary, in Chapter 5. Another religious community powerfully represented in eastern Europe until fate overtook them in the Second World War were the Jews. Many of their synagogues, in old Lithuania, eastern Poland and the Ukraine, were magnificent examples of timber architecture. The tragedy is that not a single one survived the war, but I shall include a brief description of these remarkable places of worship in Appendix II.

Surprisingly, few general works on the architecture of these various countries include anything more than a passing allusion to wooden buildings. Some earlier writers were apparently unaware of their existence. Others relegated them to the inferior status of folk art, or even, it seems, dismissed them altogether as unworthy of study. If so, these writers erred in their judgment. There are timber-built churches in many parts of eastern Europe whose building involved skills comparable to those of the stonemason, whose planning shows genius and whose impact on the spectator is an architectural experience. In recent years, however, vernacular art including wooden architecture has earned greater respect as a subject of study. This is particularly true in eastern Europe where many scholars have taken up the theme. Some of their writings, as detailed in the bibliography, have been of enormous value to me in compiling this survey, though too often their treatment stops short at the existing political frontier, ignoring buildings of the same group and style that lie just beyond.

Throughout eastern Europe the comparatively new trend has found expression also in the establishment of open-air museums (often called *skansens* after the pioneer venture of Skansen outside Stockholm). In these museums peasants' houses and their outbuildings, wind and watermills, farm buildings, towers and wooden churches, have been brought in from outlying areas and re-erected, thus ensuring their survival and conferring upon them the seal of respectability and official approval. Although the art lover or scholar, enamoured of traditional village life, naturally prefers to see such buildings in their native place (which he can readily do in many parts of eastern Europe, given time and patience), the *skansen* is a welcome development. In some countries it offers the only hope for the survival, albeit in artificial conditions, of an ancient culture and of some outstanding monuments of rural art and architecture.

*The wooden world of eastern Europe, from prehistoric to modern times*

A book devoted to wooden churches alone must give an unbalanced picture, stressing a single element in a setting where every building and almost every man-made object was also wooden. My aim here is to redress the balance by briefly reviewing the range of wooden structures which enabled man to make the most of his rural habitat in the forest belts of eastern Europe. I must first give some idea of the range in time of these wooden technologies, for there is now ample evidence of their great antiquity, and of their stability through the ages. Two east European examples, one prehistoric and one medieval, will serve to show that blockwork has been the normal building method in forested regions all through history. It is known in fact to be as old as man's earliest efforts to build in timber, in the later Stone Age.

At Lake Biskupin (north-east of Poznań in Poland) one may visit a remarkable site, excavated in the years 1934–9, which was the fortified island-village of a pre-Slav tribe in the early Iron Age (700–400 B.C.). The sodden ground has here preserved the foundations of timber ramparts and of no less than thirteen parallel rows or 'terraces', each of three to ten family houses. These were all built to the same plan (incorporating living room and entrance lobby) measuring overall about 9 × 8 m; and all faced south-east. Indeed the regularity of the layout in this very congested village is astonishing. So well preserved were these foundations that it was found possible to reconstruct some houses and parts of the rubble-filled ramparts, while the roads, consisting of logs lying transversely in contact with each other, needed no reconstruction. The jointing techniques employed are still familiar: for the ramparts, round logs intersecting at the corners; for the houses, round logs tapered at their ends and fitted into grooved uprights (usually three lengths to each wall, for the available logs were short). Both these methods are illustrated in the next section (35 A, F).

For the Middle Ages we possess an extraordinary archaeological record from old Novgorod or Novgorod 'the Great', that ancient city which lies to the south of the upstart metropolis, now Leningrad. Novgorod grew up as a major settlement on the early trade route pioneered by the Norsemen between the Baltic and the Black Sea. Long the headquarters of an independent democratic State, it became a dependency of Kiev in the tenth century. And the excavations in question have produced a continuous record of the city's life and fortunes from that century until the

middle of the fifteenth – a period of five hundred years. They threw much new light on the social conditions of the population, on their agriculture and crafts, on the city's administration and trade and historical role at various periods. The excavators even recovered some written messages exchanged by the citizens – they were scratched on the inner surface of birch bark.

The picture that emerged was, it must be said, of a somewhat insalubrious city – it seems to have resembled one great waterlogged and ever growing dung-heap. These conditions, however, proved a blessing at least to posterity, resulting as they did in the almost perfect preservation of wooden objects including the lowest courses of more than a thousand wooden buildings, half of them dwelling houses, nearly all of them datable. For the chronology, linked to known dates of construction of several masonry churches and refined by tree-ring dating, enabled the excavators to date every successive street-level (of which no less than twenty-eight were identified) not merely to the decade, but to the exact calendar year. These streets had a decking of split logs laid transversely, flat surface uppermost, and were intended for sledge traffic – no sign of wheeled vehicles was found.

One notable fact about the wooden buildings of medieval Novgorod is simply that 98% of them – all except a few sheds and stores – were of log construction. This was also true at the Iron Age site of Biskupin, it was the same at Staraya Ladoga in the seventh century A.D., and the same perennial characteristic forms the common denominator of nearly all the buildings described in this book. These old Novgorod houses opened into private yards, separated from the street by a fence of upright stakes. They measured something between 8 × 10 m and 10 × 14 m (rather larger than at Biskupin) and some are thought to have been two-storeyed. They possessed, in addition to a living room and entrance lobby, a second (unheated) room which could have been inhabited in summer. They had ceilings on which a layer of soil was spread for insulation and boarded floors with a space below as protection against damp, and a stove in one corner. These features can all be paralleled in modern peasant dwellings, which however show one positive advance: they have chimneys, while old Novgorod had none.

The great majority of Novgorod houses were built of untrimmed pine logs – always favoured for their straightness, despite the drawback that they are highly inflammable. These logs were jointed at the corners according to the simplest of the systems illustrated later (35 A). It is interesting to note that the notches at

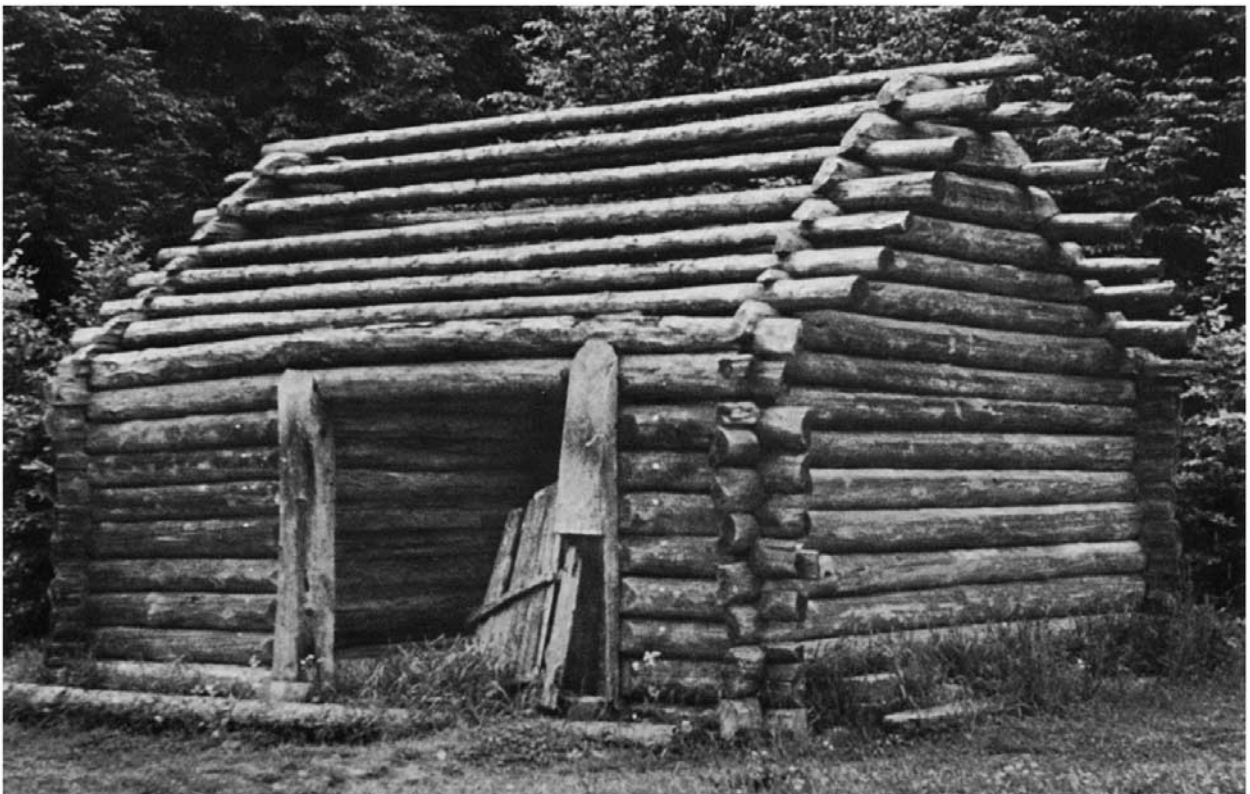


4 *The wooden churches of Eastern Europe*



1 Field barn, district of Vöyri, near Vaasa, Finland.

2 Farm building from Volhynia, nineteenth century. Now in the Museum of Folk Architecture and Life, Kiev.



the points of intersection were cut from the *upper* side of each log. This is the easier system for non-experts since the notch can be hacked out with the log already positioned on the wall, and it is likely that most Novgorod citizens built their own homes. It was not, however, the ideal method since any water penetrating the hollow could lie there and initiate rot. Both systems survived, even into modern times, but from the seventeenth century onwards, in Russia at least, it became usual to cut these notches on the *under* surface of the logs.

Unfortunately, these excavations produced no conclusive evidence of the techniques of roof construction in use in the medieval city. Raftered roofs were of course already known and may have been used for the more prestigious private dwellings as well as for churches, whether their walls were of wood or masonry. It seems almost certain, however, that ordinary householders, or the carpenters they

employed, having no tool but the axe, would have followed the path of least resistance and finished off their houses on the horizontal principle. This would have meant completing the two gables simply as extensions of the end walls, each successive log being cut slightly shorter than the one below. At the same time horizontal timbers (purlins) would have been laid lengthwise between the notched timbers of the gable-ends to form the foundation of the roof. This could be completed in various alternative ways, receiving a weather-proof finish of thatch or shingles.

Small buildings possessing the primitive and logical roof construction just described still exist today, though seldom in use as human habitations. I found them in plenty, in the form of small barns and stores (usually with their walls slightly inclined outwards), scattered among the fields in northern Finland, and they exist too in the adjoining territory of Soviet Karelia (I). No doubt similar structures were once

3 Modern farm building in Vöyri district, Finland, showing cantilevered support of overhanging roof.





6 *The wooden churches of Eastern Europe*



4 Summer cowshed from northern Finland, now in the open-air museum at Turkansaari near Oulu.

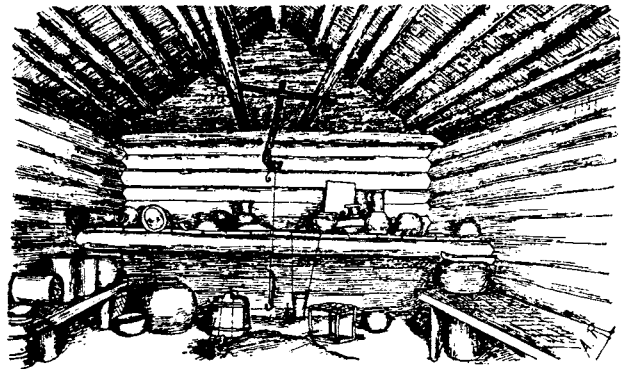
5 Summer cowshed: internal view to show construction of the pyramidal roof.



common throughout the forested areas of eastern and central Europe. An example from Volhynia – the still largely wooded north-western sector of the Ukraine – has been re-erected in the open-air museum of Kiev (2). In the eastern Alps granaries and barns possessing the identical roof form (known as the *Ansdach*) still exist, and examples have been transferred to the Austrian Village Museum at Stübing. In northern Finland some bigger farm buildings exhibit a similar type of roof (but with widely spaced purlins) combined with overhanging eaves on consoles, as described later on in churches (3). In the same area an interesting variant can be seen: a shed with pyramidal roof, supported on a pyramidal framework of horizontal logs, and culminating at the mid-point in a ventilation shaft (4, 5). In these special cowsheds the cattle can take refuge for some part of the twenty-four hours during the constant daylight of the northern summer, when mosquitoes never cease to be active.

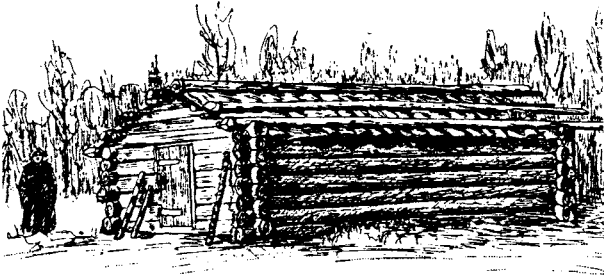
A fascinating study of the primitive habitations of the Finno-Ugrian tribes in northern Russia and western Siberia was published in 1907–8 by Sirelius. These habitations included huts and temporary shelters built in various different techniques by the Zyrians (or Komi), the Ostyaks, the Votyaks and the Cheremis- ses. The majority were blockwork huts with elemen-

tary corner-jointing as in old Novgorod and roofs of the aboriginal type just described (6, 7). Most of them were single-roomed and absolutely basic with earth floor, open hearth and scarcely any furniture. Only in more substantial dwellings, especially those intended for year-round occupation, were the logs channelled below to make a tighter fit and the interstices packed with moss or tow, while the amenity of a ceiling might be added, also proper windows, and sometimes a boarded floor with cellar space beneath (8). So these very simple buildings, many of them identical to the

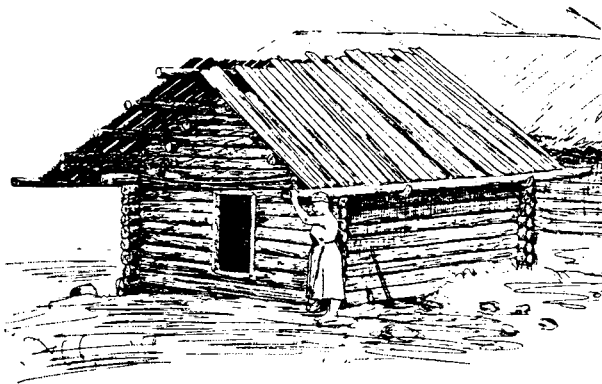
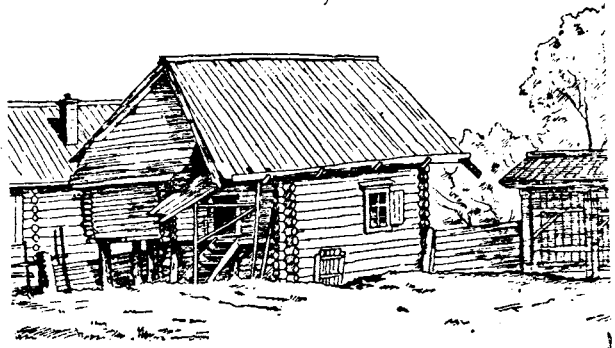


7 Inside of Cheremiss summer hut (*kuda*).

6 Summer dwellings of Finno-Ugrian tribes in north-eastern Russia, early twentieth century. A. Ostyak hut. B. Votyak hut.



8 Permanent dwellings of Finno-Ugrian tribes in the early twentieth century. A. Cheremiss house. B. Votyak house.





8 *The wooden churches of Eastern Europe*

9 The stockaded wooden settlement of Tsaritsyn (Stalingrad, Volgograd) on the Volga, recorded by Olearius, c. 1635. Floated timber is stacked on the shore.

surviving field barns of northern Finland, were still in use for human habitation in the early years of the century – and probably still are in remoter areas. They have the signal advantages of being easy to build, extremely solid, and well insulated against heat or cold. From such primitive but excellent buildings the ‘log cabin’ of America originated, introduced by Finn-Swedish immigrants in the eighteenth century. No wonder they enjoyed such a spectacular success among the pioneers. I revert to the subject in Appendix 1.

From such ancient and lowly origins, represented today by Finnish barns and the log cabins cherished in North America as museum pieces, all the varied splendours of timber architecture were to develop. It is true that the crowning achievements of each style or trend must be sought among churches, and these will be described in detail in later chapters. But I cannot pass over in forgetful silence the wide variety of domestic and farm buildings which contributed so

much to the setting and background of the churches themselves. Inevitably, whole wooden cities such as old Novgorod are a thing of the past, though some were recorded in the drawings of seventeenth- and eighteenth-century travellers like Olearius (9). Thousands of villages, on the other hand, retained their traditional wooden character, which made them a natural outgrowth of the landscape itself, well into this century, and many retain it still. Interested travellers can prove it for themselves, most easily perhaps in Rumania or in the mountain valleys of Slovakia (especially the upper reaches of the Orava and the Poprad). The very different village illustrated here is however a Russian one, where I was made welcome with my sister and parents in 1927 (10). A village scene of 1839 from Demidoff is not dissimilar, but shows a somewhat different design of peasant’s house (*izba*) (11).

Throughout eastern Europe old-style peasants’ houses still exist in great variety though it is often





10 Village of Sokolishchi, Nizhny Novgorod (now Gorky) district, 1927.

11 'Village of Gumnist between Kostroma and Yaroslav', from Demidoff, 1839.





10 *The wooden churches of Eastern Europe*



12 Hutsul peasant house from Soviet Trans-Carpathia, now in Uzhgorod open-air museum.

13 Hutsul house in the Uzhgorod open-air museum, late eighteenth century.

