PER GJÆRDER:

## Norwegian Outhouses and Preservation Problems

The efforts made by the preservationists to protect traditional architecture have to a large extend followed the guidelines of the art historians. The buildings have been protected by law primarely on account of their artistic values, handicraft, their importance as historical monument and national symbol.

However, the ideology of preservation has evolved rapidly and many more qualities have been added to those mentioned as criteria for inclusion in the preservation list. Both the laymen and the professionals have taken larger interest in preserving old industrial architecture, schools, the cottages of the workers and tenant farmers and other categories of buildings reflecting special social structures. In the two last decades the preservationists have become more aware of the cultural values represented by different kinds of outhouses built for different branches of industry and trade. This applies especially to buildings used in connection with shipping, fishing, seatrade or to activities in the mountains, forests and the outlying fields.

These outhouses are important elements in the overall picture of the Norwegian architecture, and thus they express different facets of Norwegian life. Although very few of them can be dated further back than about two hundred years, they represent the most constant structural shapes in our traditional culture.

Because the primitive outhouses have been built for a single practical purpose or served one specific need, they probably have not been subject to structural changes.

The primitive outhouses represent an architecture without architects. They are built by carpenters or peasants as simply as possible in the local material available. In this architecture fundamental issues in buildings are made more clearly apparent. The constructions and the techniques are visible and therefore we can easily read the building procedure, and the tectonic principles, and distinguish between the supporting elements from those supported.

The outhouses have always met the need: «fitness for purpose», a demand set forth by the functionalism of the thirties. Utility comes first, but so simple and undecorated as boathouses, warehouses, lumber chalets and mountain cottages are, they still convey aestetic experiences to those who share the opinion that houses are built merely out of consideration of expediency, may have their own, special form of beauty. The beautiful of this architecture has often been regarded as picturesque and accidental, but it follows, resulting naturally from the constructive element and the texture of the materials.

It is reasonable to assume that the outhouses represent early stages in the development of house-types. They reveal constructions and techniques which probably go back to prehistoric times and therefore may serve as starting points for the description of the architecture in Norway. The study may also throw light on significant stages in the architectural history of Europe.

The ancient wooden architecture of Norway shows mainly two building methods. The one is the constructing by the aid of corner joints, by which the horizontal logs of two adjoining walls are intelocked. The other is the construction of upright timber with a framework of sills, beams and roof supporting posts. The use of corner timbering is predominent in the regions of coniferous woods, whereas the stave-constructions are mostly used in the areas of deciduous woods. On the whole the first method occurs most frequently in Eastern Europe, the second method mainly in Western Europe.

The so-called *slepverk*, where horizontal planks are inserted into vertical posts are commonly used in Denmark and Sweden. It plays a minor role in Norway. Here it is mainly used in cow-sheds and barns.

The wooden architecture of Norway occupies an exceptional position by lying in the characteristic meeting area of the log-timber constructions and the stave-constructions. In Western and Northern Norway the building constructions with upright timber have been predominant in outhouses, barns, boathouses, and still are in many districts, whereas in Eastern Norway the same kind of houses have bondtimber walls.

However, in many parts of the country there are housetypes which are partly log-timbered and partly stave-built and both the log-construction and the stave-construction may be combined in different ways with stone-constructions.

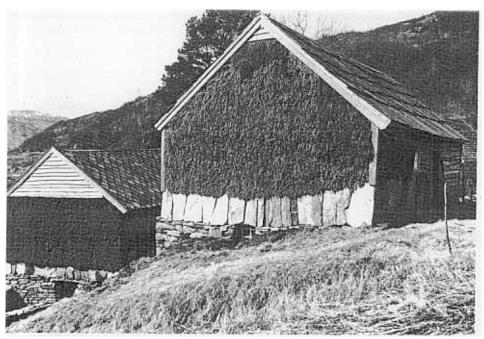
I will now give a short survey of the outhouses which are extremely primitive. They are among the buildings which are most threatended by demolition and cause the most difficult problems of preservation.

There are different systems of stave-constructions and the occurance of them are limited to certain regions. Thus the so-called *grindverk* is to be found only in Western Norway. It is charaterized by a number of transversal trusses connected by a pair of longitudinal beams which carry the rafters. An old characteristic of the larger stave-barns is two inner rows of roof-supporting poles dividing the house into three sections, – a division which corresponds to that of the stave churches with their middle aisle between narrower side aisles.

The walls of the outhouses most commonly consists of vertical or horizontal planks which are fastened to posts sills and beams with wooden nails or pegs. Also the constructive members of these buildings are nailed together. The idea to nail constructive parts together is fundamental. Written information from merovingian time tells of both profane and sacred building where the walls were constructed by the helps of wooden nails.

In Northern Norway stave.built outhouses show very oldfashioned details. The wall-planks are made of endlong divided trunks with the round side turned outwards. The post-ends have defts that gripe over the sills and the wall plate.

In some outlying barns the walls consist of planks roughly split with an axe and held together at the top with long rods and withies. In the county of Hordaland the walls in



Havråtunet, Haus. Barn covered with plaited juniper twigs. Grange couverte de genévrier.

the barns consist of plaited twigs, mostly juniper twigs, alternately put outside and inside thin poles or sticks. This technique which must be regarded as a relic phenomena is similar to that of the wattled walls in barns on the British Isles (fig. 1).

In some districts of Western Norway are to be found outlying barns where the walls consist of twigs and prigs filled between two tows of poles. In some valleys of the county of Møre and Romsdal existed until recently outbarns where one or more walls consisted of long twigs and boughs drawn alternately inside and outside stakes stuck into the ground in a row. The twigs were used with the leaves on. In Voss we have found outlying barns with roofs made of thin rods fastened together with withies and bands of splitted boughs and twigs. The roof was surmounted by layers of ferns or brakes.

In the most northern parts of Norway houses in stave construction with turf roofs and exterior walls of turf and stone were in common use up to the present century. In some of these houses were used bowed tongs which combined the function of the supporting posts in the wall with that of the rafter. A noteworthy and interesting parallel is to be found in the English cruck-constructions, which constitutes such a unique feature of English rural building art and certainly go back to prehistoric times.

The most primitive houses in corner-timbering techniques are to be found among the lumber shanties. The fit up of the interior is also very simple. It consist mainly of a raised, wooden platform at the upper end of the room or of two platforms placed opposite each

other longitudially in the room. In the middle of the earth floor is an open fireplace built of rubble. The platforms serve as seats and beds combined. The lumberjacks and loggers used to lie across the platforms side by side with their feet pointing to the fire and their heads to the wall.

In Norway and Sweden there are among the store-houses built on poles, a group which are especially characteristic of the Lappish culture. They are placed in the wilds and the forest pastures and serve as depots when the Lapps are moving from one pasture to another. The houses are built on one, two or four poles to prevent gnawing animals or gluttons and other larger animals to get in and destroy the provision. The door is made accessible with a solid trunk where steps are hewn out with an axe.

The corner-timbering is in principle a simple construction, but it requires high technical skill to make it an independent wall-structure without auxiliary constructions. In out-houses where the treatment of the corner-joints are more carelessly done, the walls are supported in different ways, for instance by the use of vertical studs. Otherwise the walls may be made more rigid by the use of splints which are driven through splits in the ends of tie beams or by the use of knees. Knees with a long leg stretching from the bottom to the top of a log-timbered wall, is an architectural feature which is hardly to be seen outside Western Norway.

In the woodless regions along the Norwegian coast stone superceded wood as buildings material. As a rule the wallstones were used without having been dressed and often they were river stones or boulders. The walls consisted of dry stones which were piled up with neither mortar nor cement. In many of the stone houses boulders of enormous size have been used which add to their monumental appearance.

The dwelling houses were even in the woodless districts commonly built of wood, but in some coastal areas they have an outer raw stone-wall on one, two or more sides.

Farmhouses situated in mountainous terrain with dangers of slips, slides and avalanches are often protected by rough stone walls. In small farms where the owner could not afford to buy wooden material, also the dwelling house and the stables had walls entirely built of stone. These houses have double skin walls where for the sake of isolation, -the gap between the inner and the outer layer is filled with earth or turf.

After the 19th century the stones in the raw walls have mostly been blasted out with dynamite and afterwards trimmed with hammers.

Along the coast of Norway there are landscapes which are marked by circular stone cellars covered with turf. Looked at from a distance they may be mistaken for natural mounds. They have been given the form of domical vaults, built of rubble in corbelling techniques, that is the walls and roof consisting of horizontally placed blocks of stone, arranged so that each course projects a little further than those beneath it. The cellar which are mostly used for storing potatoes and in some places as malt-houses, may be divided into a barrel-vault type and a domical type. The domed roof type have close parallels in Sweden, Iceland and on the British Isles. They are closely linked to prehistoic housestypes and it is a common theory that they have migrated from mediterranean regions.

The roof constructions are to a large extent common to the log-timbered and the



Nusfjord, Moskenes. Characteristics sea-side settlement, Wharf-houses along the beach dwelling-houses behind.

Agglomération côtiére typique.

stave-built houses. In the west, however, the use only of simple rafters is mainly confined to the stave-built houses in Western Norway.

In the larger houses the pairs of rafters are connected by a collar. Sometimes the pair of rafters in the gable ends is shored up by a post supported by a pair of braces. The roofconstruction with closely spaced purlins interlinked with lo-timbered gable tops genuinely belongs to the log-timbered houses in Eastern Norway. In the middle areas of Norway we find different cominations of rafters and purlins. In some outhouses the purlins are carried by posts standing on the beams. In Western Norway and Møre some of the outhouses have queen-psot roofs with a pair of posts rising from the tie beam to a juction with the side-purlins and the collar.

Common roof construction, mainly used in the outhouses of the norther and eastern parts of the country, consists of pair of rafters that support a central and two or more lateral purlins. The rafters intersect each other at the ridge to form a cleft in which the central puling rests.

The most simple roof constructions are to be found in the outhouses with raw stonewalls. One or three purlins are resting directly on the top of the gable walls. It will be noticed that the roof is strengthened by the use of upright supporting posts often with a natural cleft. The roof is covered with slates or birchbark and turf.

The character of architecture are determined by many factors, but the variation of use

and house-types are largely dependent on natural conditions. In Norway there are settlements which are peculiar to the islands and the fjord landscapes. Along the coast we find in bays and inlets with good harbour conditions house-types with special connection to fishing, shipping and navigation. A characteristic feature of the seaside settlements are long rows of boat-houses with gables looking to the sea. In front of each boat-house a boat-landing is worked out in the tidal ground. A number of logs are laid across at intervalls to from a bedding on which the boats are drawn. The logs are prevented from floating up by the weight of stones. On either side of the boat-landing are a row of stones also for stepping on when going on board or ashore.

On the outer islands are situated the fishing centers which were inhabited only during the short and intense fishing seasons. Also the peasants from the inland participated in the open sea fisheries and built their own shieldings and wharf-houses.

The landscape of the fjords creates special condition and topographical and geographical circumstances for the placements of houses. The word fjord has been adopted in foreign languages as a special geographical term. The mountainous terrain along the fjords has enforced more concentrated settlements on the suitable areas. It is common to see the farm-houses clustered together, and they often give us the impression of an overturned box of toys. All the same the siting of the houses is never planless. A common principle is to arrange the dwelling houses along a narrow street with the dwelling houses in the upper row and the outhouses in the lower.

A characteristic feature of the fjord landscape was a row of boat-houses along the sea-shore and a line of huts or shieldings behind. The shieldings were used temporarily by the peasants living high up in the valleys when they were preparing a journey or a fishing tour. They were also used for storing goods and for changing clothes before and after churchgoing. Some researchers are of the opinion that settlements like these have been the first stage of development of seaside towns. Unfortunately this type of settlements has alsmost disappeared.

Characteristic of the larger seaside settlements along the fjords are boat-houses and wharf-houses in a row along the beach and behind this row a cluster of small cottages and outhouses belonging to craftsmen and crofters (fig. 2).

Up to our days outfarming has been of great importance to our agriculture. The outfarm houses seem to reflect building customs and house-types which in ancient times were in use in the valleys. Lying in line up slopes and mountain sides on high foundation walls they make a silhouette of good architectural effect and of high aestetic value. Such placement is certainly a result of a long evolution.

The outhouses belong to the part of our architecture that are most threatened by the irreversable changes in industry, trade and mode of living. In the coastal districts thousands of houses are decaying and out of use. If some of the most characteristic house-types connected to the fisheries shall be saved, they must be converted to an other use. It seems, however, that the coastal districts increasingly gain importance as tourist—and summer vacation places. This should make it possible to preserve as lodgings some of the houses that are abandoned.

The outfarms have long been of great importance as summer resorts. In these days



Bødalseter, Stryn. Outfarm settlement. Alpage.

dairy-farm.houses are being increasingly bought up by town-dwellers who want a foot-hold in the country. Many of them are brought up to modern living standards without sufficient thought for environmental integrity. Still it is possible to find outfarm settlements that are preserved in their original state, but their remote situation will make it difficult to give them the necessary care and inspection.

The preservation of these outfarms will in many cases depend upon the good-will of the owners and the ability of the professionals to convince the owners of the architectonic and environmental values represented by the outfarms in question (fig. 3).

Still more difficult will it be to preserve the most primitive types of outbarns and lumber-shanties on their original sites. They are often to be found singly and widely separated high up in the mountains and far away in the forests. These houses which were erected of strict necessity for a single, special need as rapidly and cheaply as possible, are easily destroyed by the weight of the snow-masses and rough weather. In some years very few of them will exist.

Some types of outbarns and lumber shanties show manners of buildings which are not to be found elsewhere in Norwegian architecture. They probably are the last substantial proofs that certain constructions and techniques have been in use from prehistoric times up to our days. It should therefore be a matter of importance to preserve some of them first of all as documents and relic phenomena. A selection of the most rare types should be moved to open-air museums there they also can gain importance as structures of aestetic and historic interest and as nostalgic survivals.

Although the scope of the preservationist has been extended considerably in the last decades, many of the structures in our vernacular architecture unfortunately have been overlooked. Now the future of the primitive house-types I have spoken of, should be a matter of concern to all who are interested in the early agricultural and maritime buildings of Norway. Although more or less in decay, many of them are still structurally unbroken and entire, and could be restored at comparatively little cost. Some of them have no other future than as a preserved building, for conversion to any other use must necessarily destroy or conceal their particular qualities.

Efforts made for preserving a representative selection of primitive outhouses may be regarded as rescuing acts in the last hour. The success of such operations is largely dependent on support from the public opinion. To gain the public over to this cause, we have to intensify the information about the cultural values of the old traditional outhouses.

## Résumé

Le problème de la conservation des bâtiments vernaculaires ayant perdu leur fonction Le choix des monuments protégés a pendant longtemps été dicté par la sélection en fonction de leurs qualités artistiques ou de leur importance historique.

Le champs d'activité du Service des Monuments HIstoriques s'est élargi après la dernière guerre: les gens du métier aussi bien que le public ont porté interêt à d'anciennes usines, aux habitations ouvrières, aux habitations de journaliers et autres bâtiments qui appartiennent à une autre couche sociale moins privilégiée. Ces dernières décennies l'interêt s'est également tourné vers différents bâtiments de ferme appartenant à une société révolue. Il s'agit surtout de bâtiments qui ont servi aux pêcheurs sur la côte, aux paysans en montagne et à la campagne, aux bûcherons dans les forêts.

Ces bâtiments font partie intégrante de notre culture architecturale. Bien que peu d'entre eux soient plus anciens que 2 siècles ils sont d'un type archaique qui remonte à un passé lointain et ils représentent ce que nous avons de plus statique dans notre folklore. Ayant répondu à des fonctions bien définies, ils n'ont subi aucune transformation et sont le reflet d'une culture ancestrale qui remonte jusqu'à la préhistoire. L'analyse de ces bâtiments peut même aider aux reconstructions archéologiques, d'autant plus que les fouilles donnent peu d'indication sur la construction des toitures. L'étude de ces constructions posent de grands problèmes en Norvège comme dans le reste de l'Europe. Nous avons ici des assemblages qui ont leurs équivalents en Europe de l'Est et du Sud, tandis que les structures en pan-de-bois trouvent leurs parallèles dans l'Europe de l'Ouest.

L'architecture anonyme en bois est un reflet des conditions naturelles. Il y a concordance entre ces constructions et le paysage lui-même. Il y a des structures spécifiques à certaines régions, surtout le long de la côte. Le mot fjord est passé sans problèmes dans le vocabulaire international et est devenu une conception géographique.

Un trait caractéristique du paysage de fjord, autrefois, était les rangs serrés de hangars à bateaux au premier plan, et de cabanes ou remises à l'arrière. Certains ont même vu dans ces agglomérations l'embryon de village de pêcheurs.

En pleine mer, sur les iles, se trouvent les habitations saisonnières des pêcheurs et des paysans qui participaient à la courte saison des grandes pêches.

L'alpage a jusqu'à nos jours tenu un röle important dans l'économie agraire. Ces agglomérations de petites maisons en pleine montagne sont encore des traits dominants dans le paysage et représentent probablement un type d'habitat permanent qui a disparu.

Les constructions les plus exposées, aussi bien sur la côte que dans le reste du pays sont celles qui ne sont plus utilisées. Le long de la côte se trouvent des milliers de hangars abandonnés, et si l'on veut avoir quelque chance de les sauver, il faut leur trouver une destination. Le tourisme peut être une solution.

Les alpages peuvent également trouver de nouvelles fonctions, mais ils sont en général déjà tellement modernisés qu'ils ont perdu toute authenticité. Ceux qui ne le sont pas se trouvent en général dans des coins si perdus qu'il est difficile d'en assurer l'entretien.

Les bâtiments saisonniers (fenils et cabanes) sont encore plus difficile à entretenir: Ne devant servir que quelques mois de l'année ils sont de construction très primitive. Le poids de la neige et le vent ont vite fait de les détruire. Dans peu de temps il n'en restera aucun specimen. Ainsi, le danger étant imminent, il faut mobiliser toutes les forces possibles si l'on veut en sauver quelques rares exemples, en particulier il nous faut l'appui de l'opinion publique. Pour l'obtenir, nous devons, nous gens du métier, faire un effort d'information pour expliquer la perte culturelle que représente la disparition de ces constructions.