## Vernacular architecture between environment and culture: the case of the "stock-stove" houses in Shetland

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This conference has a rather diverse content but the various papers are tied together by two sets of interrelationship: The one between Scots and Danes, and the other between environment and culture. In my lecture I intend to deal with both sets of interrelations. With the slight reservation, however, that in the first set Danes are replaced by Norwegians, in so far as I take my topic from Shetland, an area where Scots and Norwegians met and mixed five hundred years ago.

The problem I am going to discuss is the interplay between environment and culture in that particular field of human habitation which is usually called vernacular architecture. *Vernacular architecture* is a concept used by the classically educated British for what we in Denmark designate with a more "home-spun" national term: *folkelig byggeskik*.

Both terms refer to houses that in pre-industrial societies were built and used by common people in the countryside. Such usually rather simple houses were on the one hand seen as the result of an adaptation to a local environment, on the other as representations of a supposed age-old ethnic or national culture. This Romantic idea of building customs as expressions of "folk character" has very often been combined with a conception of a slow and gradual evolution through which the ethnically specific house form was developed from a simple "prototype" to more complex forms.

This is a model of interpretation that may still be come across in popular literature on vernacular architecture but which is of course totally out of step with modern research on houses. Vernacular architecture, however, must still be interpreted as an interplay between environment and culture.

For a modern study, the house must be perceived not only as some-

thing providing shelter from rain or wind and protection against cold or heat, but as an institution with a broad spectrum of economic and social functions, which vary geographically and over time. The dwelling house can be perceived as an important medium by which people communicate their cultural affiliation to others, while at the same time being a day-to-day means of affirming the identity of the inhabitants themselves. Through the arrangement of the dwelling and the rules governing its use, a cultural pattern is passed on to the next generation (Rapoport 1969; Stoklund 1980).

It is, however, important to stress that changes in such a cultural pattern are not the result of a gradual evolution – a development so-to-say in an empty space - but of a historical process in which periods of breaks and rapid change may alternate with more static periods. It is important to keep this in mind, not least when we are dealing with the Atlantic area, whose cultural history has often been conceived as one characterized by a high degree of continuity and a very slow development, resulting in the conservation of a great many archaic cultural features. Although a high degree of continuity can be found, especially in the field of technology, the general history of the Atlantic area in the millennium that has now come to an end has been one of radical political, economic and social changes. And if we want to understand the history of vernacular architecture in the Atlantic Islands, it must be considered not only as the result of an adaptation to local ecological conditions but also of cultural responses to shifting economic and social situations (Stoklund 1992).

After these more general remarks, let us turn to the case of the Shetland "stock-stove", which will be the topic of this lecture. As our point of departure, we can choose a Danish-Scottish scholarly encounter more than half a century ago. In 1931 the Danish architect and archaeologist Aage Roussell travelled in the Western and Northern Isles of Scotland in order to look for traces of Scandinavian building traditions (Stummann Hansen 1998). His Scottish colleagues, however, were sceptical with regard to the possibility of his finding what he was looking for, because they had the opinion – and I quote Roussell – that "the Norsemen always used wood as building material, and as every relic in Scotland is of stone and earth, it cannot be of Norse origin". According to Roussell, this idea was a mistake, for "whenever Norsemen penetrated into woodless regions they used the material that was at hand", in this case earth and stone (Roussell 1934, 8)

In accordance with this view, he interpreted the primitive houses

which he came upon during his expedition to the Scottish Isles as prehistoric relics or examples of an unbroken Scandinavian tradition: In the Hebridean so-called "black houses" he saw close relatives to the Iron-Age farms, recently excavated by archaeologists in South-West Norway. And he considered the vernacular architecture of the Northern Isles as a further development of a Scandinavian building tradition, with the Shetland houses as a kind of intermediary stage in the evolution of the more complex Orcadian farmhouses (Roussell 1934).

For half a century Roussell's view was accepted by most historians and archaeologists. Recent archaeological and historical research, however, has modified the picture, and interestingly enough the idea that the Norse immigrants built their houses of wood has experienced a kind of rehabilitation. We can now discern the outlines of a nearly forgotten use of wooden buildings, mainly thanks to an oral tradition about the socalled "stockstoves". The information from oral tradition and from a scanty historical source material was in 1980 collected and published by Brian Smith, the archivist at the Shetland Archives. The following is based on his article (B. Smith 1980) and on material that he has subsequently come across and kindly put at my disposal.

The tradition, which is restricted to the three northernmost islands of Shetland, Unst, Yell and Fetlar, informs us that in former days the wealthier among the farmers lived in wooden houses or rooms which were called "stock-stoves" and were said to have been imported "readymade" from Norway. Obviously a few remnants of such houses still existed in the 19th century, but none of them has survived until today. Not a piece of their wooden construction has been saved, nor do we have any detailed description of it.

Since we do not have the object itself, then let us choose the concept as a starting point. The compound "stock-stove" consists of two Old Norse words: *stokkr*, a log of wood, and *stofa*, the main room in the dwelling-house. The word is known in Faroese in the form *stokkastova*, and when in the 1890's the philologist Jakob Jakobsen, himself a Faroeman, collected what was left of the old Shetland language, the so-called *Norn*, he was familiar with the word and its literal meaning: a house or room made of logs, a log-timbered house, what the Danes and the Germans call *blokhus /Blockhaus* and the Norwegians *laftehus* (fig. 1).

Jakob Jakobsen, however, also learned from his informants in Unst and Yell that this word could be used in another sense or rather in two other ways. I quote from his Etymological Dictionary: "Also (meaning) a) a house (room) with a timber framework, (and) b) framework of a

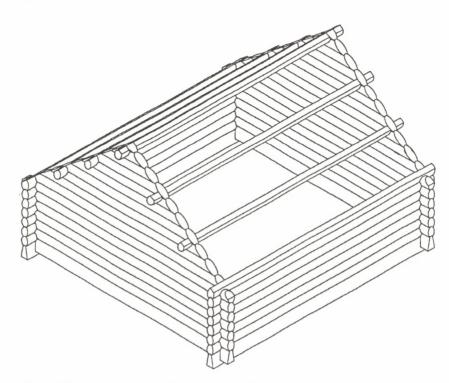


Fig. 1. The construction of a house in log-timbering.

house, esp. logs laid horizontally, forming ground-sill and tie-beam; these logs connect the corner-posts and are provided with grooves into which the wall-boards fit' (Jakobsen 1928-32, 900).

This last piece of information in Jakobsen's dictionary is interesting because it indicates that there have been houses or rooms in Shetland built according to the principle that we usually call *stave construction*, and which in the Faroe Islands was used for house building as late as the second half of the 19th century. To discover what is concealed behind the word "stock-stove", we consequently have to turn our attention to the traditional houses in that neighbouring island group.

In its exterior a Faroese house gives the impression of a building well adapted to the local environment, dominated as it is by stone and turf (fig. 2). But if you enter the house, you are met by a totally different view, one dominated by a lot of unpainted wood (fig. 3). A Faroese house, as a matter of fact, is a wooden construction surrounded by thick protection walls of stone and earth. And the inner wooden house has



Fig. 2. Farmhouse in Skálabotnur in Eysturoy, Faroe Islands. Photo from 1899 by Johs. Klein.

walls consisting of vertical boards, set in grooves in sill and beams, exactly as in the description given by Jakobsen of the Shetland "stockstove" (fig 4).

Until recently, this wooden interior was considered to be a rather late addition to a house that originally only had naked walls of stone and earth. But that is a typically evolutionistic way of thinking – what we are dealing with is in fact the last surviving representative of the secular counterpart of the famous Norwegian stave churches. It is a method of construction that goes back at least to the Middle Ages.

The main construction in the Faroese house consists of two frames of horizontal beams, an upper and a lower, called respectively *yvir*and *undirgrind*. These two frames are connected by four solid cornerposts or uprights and maybe with some smaller, secondary posts in between. In some of the oldest houses the corner-posts have crossformed notches in both ends, and in these notches the sill and head beams are placed (fig. 4). This detail of the construction reappears in some early Norwegian buildings and has an interesting similarity with the corner-timbering of the log-houses. This has made me suggest that the fully developed stave house acquired its characteristic frame con-



Fig. 3. The *roykstova* in the house from Múli, now in the Open Air Museum at Sorgenfri near Copenhagen. Photo by Niels Elswing 1966.

struction under the influence of the log-timbering technique (Stoklund 1996, 1999).

If, with that in mind, we return for a moment to Jakobsen's dictionary, he continues the quoted description of the frame construction in the "stock-stove" with the following addition: "As these logs are partly called "pieces o' stokkstovs", and the framework or the logs partly "part o' a stokkstov", it may be concluded that stokkstov prop. has denoted a room built entirely of such logs". To this my comment would be, that the constructive relationship mentioned above should be sufficient to explain these expressions. This is supported by a verb, to *stokkstov*, recorded by Jakobsen in Unst and Yell, with the meaning: "To build up the framework, to place the (topmost and nethermost) beams into which

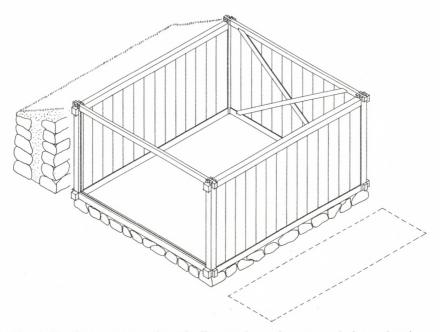


Fig. 4. The frame construction of a Faroese house in stave technique, showing the old form of corner joints.

the wall-boards are to be scarfed" (Jakobsen 1928-32, 900-901). To me, there is no doubt that the transference of the name "stock-stove" from a log-timbered to a stave-constructed building has to do with the old form of frame construction, shown on the drawing.

Before we leave the vernacular architecture of the Faroe Islands, we shall take a quick look at the layout of a typical house, represented by the one that in 1961 was transferred to the Open Air Museum in Copenhagen (fig. 5). There are two main elements, which may be interpreted as representatives of two stages in the cultural history of habitation. To the right is the so-called *roykstova* (literally smoke-room) with outer walls of stone and earth on both sides, and with a louvre in the ridge as the only source of light, originally also serving as an outlet for the smoke from the open fireplace.

While this room in its main features represents a medieval tradition, the so-called *glasstova* is an innovation that was introduced to West Norway after about 1600, reached the Faroes in the middle of the 17th century and was fully integrated there in the following century. The room has got its name from one of its novelties, glass windows in the

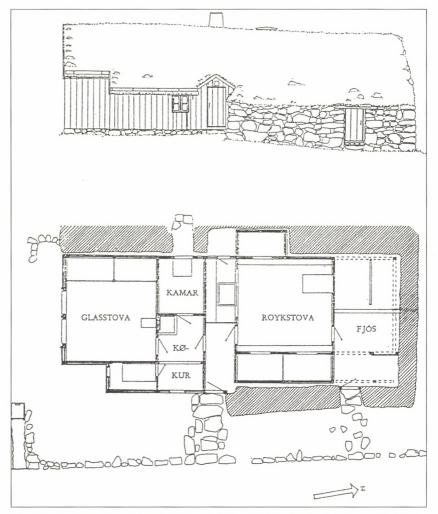


Fig. 5. Plan and elevation of the house from Múli, now in the Open Air Museum at Sorgenfri.

outer walls, where vertical boards have now replaced the old walls of earth and stone. The new windows made it possible to put in a horizontal ceiling, and a third innovation was the iron stove, stoked from a fireplace in a small kitchen. The *glasstova* was the Faroese best-room, while the *roykstova* was workplace as well as main dwelling-room. It got its name *roykstova*, when the *glasstova* was introduced. Before that it was named *sétstova* or just stova (Stoklund 1996). In the discussion above we have tried to illuminate the constructive details that are hiding behind the first part of the compound "stock-stove". We will now turn to the second part, the concept of stova that we have so far met in the Faroe Islands and in Shetland.

The word *stova* denotes a phenomenon that all Danes will be familiar with, for people in Denmark have – like people in other parts of Central and Northern Europe – for centuries been living in a cosy, well heated and well insulated dwelling-room, carrying this name: in Denmark *stue*, in Sweden *stuga*, in Germany *Stube*. This stue or stova, however, never reached the British Isles – except for Shetland, as we have seen.

Most of the scholars who have been occupied by the early history of *Stube/stova* have subscribed to the view that the principal characteristic of this room was the stove, and that in the beginning it must have been a bath-room, used for taking steam baths. This bathroom then later developed into a dwelling-room, heated by a stove. In accordance with this, the etymology of the word was generally derived from words having to do with *tufus*, steam.

Later research, however, has shown that the opinion that the primary meaning of the word should be bathroom does not hold. And a re-examination of its etymology leads to the conclusion that it has nothing to do with the method of heating, but with the construction of the room, the fundamental meaning being something like "a closed room in logconstruction" (Hähnel 1975).

As a matter of fact, it is only in the central parts of Europe that the stova is heated by a stove or an oven, while to the east and the north we find alternative ways of heating, with other kinds of fireplaces. In these areas, however, a correlation can be established between the new type of dwelling-room and the log-timbering technique. Walls of well-fitted horizontal logs are the best way to obtain the desired well-insulated dwelling-room. The technique, however, is restricted to geographical areas where the necessary straight logs of pine are available.

These geographical restrictions, however, can be overcome because a log-timbered house is easily dismantled and rebuilt, and therefore fit for exportation in "knocked down" form to outside the pinewood areas. Such log-timbered elements might be fitted into houses with another main construction, be it half-timbered or stone houses. This is a solution that is known in Central Europe as well as in Scandinavia. The same is the case with another alternative solution, used especially where oak instead of pine was available as building material: to transfer the log-timbered stova into another technique, e.g. with walls made of horizontal or vertical boards (Stoklund 1993).

In the Faroe Islands we meet both solutions. There have been, and still are, a few log-timbered houses, the so-called *stokkastovur*. These houses must have been imported from Norway, but the majority of the traditional Faroese houses are – as we have seen – built in stave technique because this technique does not demand the same high quality of building materials, and such houses were made by local craftsmen. The necessary insulation of a stave-built stova was obtained by the use of substantial protecting walls of stone and turf.

The diffusion of the wooden stova in Norway and further out into the Atlantic settlements must be dated to the 12th and 13th centuries. It is one of the numerous political, social and cultural innovations in this period of "Europeanization", as I have suggested calling it (Stoklund 1992). The concept of the stova may be even older, but from the 13th century there are quite a few log-timbered stovas preserved in Norway (Berg 1989-95; Christensen 1995). From the same century is the oldest Faroese house, the famous *stokkastova* at the former bishop's seat of Kirkjubøur. The earliest traces of a stova in Shetland can be dated to the same period: the ducal *stofa* at Papa Stour, mentioned in the oldest document from Shetland 1299, and recently discovered by Barbara Crawford through her archaeological excavations (Crawford 1996, 1999). There is hardly any doubt that what has been found is the site of a wooden stova; whether it was log-timbered or stave-constructed is, however, an open question.

In the High Middle Ages the wooden stova must have been a precious and prestigeous innovation. It is not a mere coincidence, therefore, that the earliest stovas in the Faroes and in Shetland are found at the highest level of society. In the following centuries the new phenomenon spread gradually to the wealthier group of so-called *udallers* (Norwegian *odelsbønder*), the owner-occupiers among the farmers. This is especially revealed by documents from the 16th and 17th centuries referring to "stoves" or "stoik-stoves", but it is also supported by place-names containing the word stova (Stewart 1987). The source material confirms what the oral tradition revealed about houses fetched from Norway. In 1673 John Smith writes that as late as 1633 the people of Unst were sending a boat to Norway for "timber for houses, ready framed" (Fenton 1978, 111).

During the 17th century, however, the use of these wooden houses seems to have been abandoned. Some of the old buildings, of course, might survive for another century or two, although with a reduced status. We have an interesting lawsuit from 1776 about a tenant in the township of Copister in South Yell who has demolished an old stock-stove in order to build a new house on the site. This very detailed case, by the way, confirms the interpretation given of the stock-stove as a stave-built construction (cf. Stoklund 1998, 87).

The medieval and early modern use of such wooden stovas in two island groups without the natural resources for the maintenance of a wood-based architecture can be considered an example where culture overcomes the physical restrictions. From the sparce source material, quoted above, one can discern the outlines of a cultural situation in Shetland when it was a must for every reasonably wealthy *udaller* to acquire a wooden room from Norway and to live in such a highly appreciated "stova". The use of the stock-stove in Shetland is clearly associated with the class of *udallers*, and it is characteristic that the 19thcentury stock-stove tradition was recorded exactly where the *udallers* kept their position longest: in Unst, Yell and Fetlar. It is interesting, too, to note that the disappearance of the spoken Norn language and the abandonment of the stock-stove are parallel phenomena in time (cf. B. Smith 1996).

In the 17th century the inhabitants of the Faroe Islands – as we have seen – received a new wave of innovations in the field of dwelling: the *glasstova* with its windows in the wall and its iron stove. This wave never reached Shetland; at that time the udallers were "a dying breed", to quote Brian Smith (B. Smith 1980, 24). In the "laird-and-crofter" society that took shape in the following centuries Scottish cultural influence had definitively replaced that from Norway. At the same time the rural houses with their stone walls and minimal use of timber became better adapted to the local environment. It is in this context and against that background we should interpret the vernacular architecture of Shetland which to Aage Roussell represented an unbroken Scandinavian tradition.

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