

Last year we started to publish articles from the workshop "The reconstruction of wooden buildings from the prehistoric and early historic period" in Århus in 1987. Here we bring you two more articles which, we believe, are still relevant to the present.

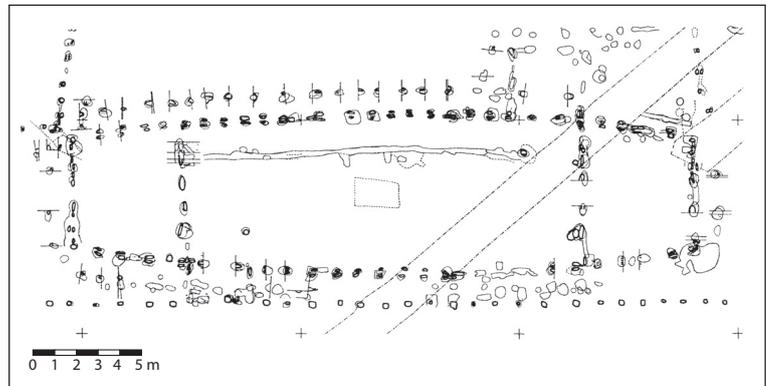
Standards for presentation of field data

This article points out the importance in the standardisation of presentation of archaeological data for further research and especially comparative studies.

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Some general standards for the presentation of archaeological field data in North West Europe concerning buildings would be a great help to students and scholars who are interested in comparative studies.

The great work on the old churches in Denmark, Danmarks Kirker, has in every volume a glossary and a list of the conventions and scales used



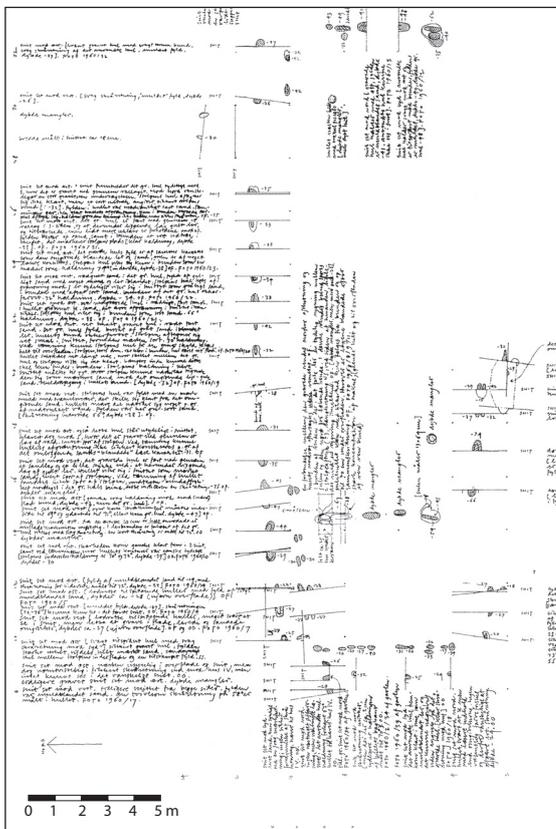
■ Fig. 2 Plan of the same Fyrkat house with all measured markings of post-holes.

for the drawings (mainly plans). The primary aim of the convention is, in this case, to separate the original Romanesque parts preserved in the churches from the parts added in the gothic, renaissance or even later periods. The architect who may be working at the restoration of a church, as well as the scholar who is comparing a group of churches, will thus immediately be able to read this information, especially as the same convention and scale is used throughout the volumes published over a period of more than fifty years.

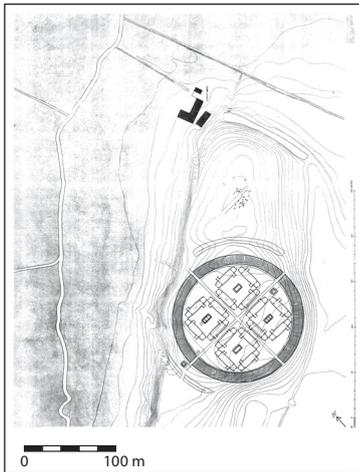
When dealing with the field data from excavations of early North West European buildings, it is, however, not possible - perhaps not even desirable - to impose similar strict convention on the drawings, considering the extreme variety of subjects, comprising big as well as small buildings of different use, and various conditions of preservation. Moreover, some excavations must be classified as extensive and others as intensive, and for that reason too, the drawings should be worked out differently. Also it may be practical to distinguish between drawings which include all information for private study and interpretation only, and drawings of a more general character, where some features

have been emphasized while others have been omitted.

On many sites the timbers of the houses have completely disappeared and are represented only by holes in the subsoil, where originally the posts were erected. In more structurally advanced buildings these post shadows would furthermore also will be absent, as the posts were set on sill beams, which means that all traces of the timber-construction might well be completely gone, and only the floor-horizons and the objects found may indicate that for a certain period of time there was a house in that particular area. The geology and the ecology of a site will also be significant in the preservation of an early house. In a marshland site the archaeologist may for instance have the luck to find well-preserved parts of the structural timbers, while on a stony soil he will most probably find very little left of the wooden frames. Certainly all experienced archaeologists are aware of these factors, and it is obvious that the standards used for the drawings of excavated sites must be adapted, as well as possible, to the needs of the specific topic and not the other way round. Personal opinions on how the drawings should be made must, of course, be respected to a certain point.



■ Fig. 1 Study-plan of a Fyrkat house with all the descriptive notes written beside the posthole markings. (Unpublished.)



■ **Fig. 4** The Fyrkat fortress, partly reconstructed plan.

However, some standard convention may well be of value to the field archaeologist, when the measured-drawings of a house are made, as these drawings are the basis for the drawings later to be published. For the architect or student of traditional building-structures, who are working on reconstruction of a certain house-type such standards would also be of great importance. In any case, the convention and standards which have been used must be explained in the archaeologist's publication. It could be recommended, as is more or less the case in Denmark now, that some convention would become generally used. The indication of the excavated area should be made by a line broken into separate dots alternating with short lines. Reconstructed parts of a structure should be shown by a dotted line - and there might even be a more open dotted line to show more uncertain reconstructions. Tempting as it may be, it is not - as a general rule - a good idea to use conventions of different colours in a publication, because later on the same illustration may be needed for another book without colour illustrations.

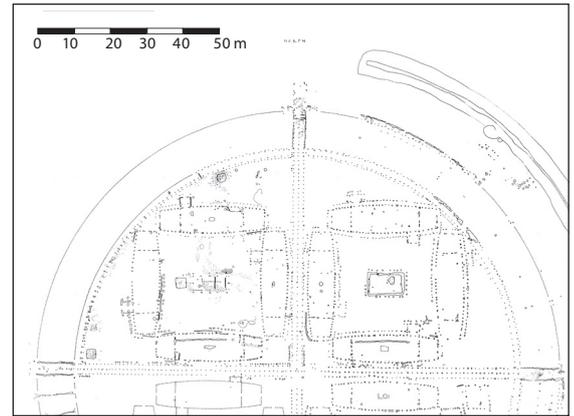
The archaeologist as well as the architect should be persuaded always to use the commonly accepted scales 1:1, 1:2, 1:5, 1:10, 1:20, 1:50, 1:100, 1:200, 1:500, 1:1000, 1:2000 and so on, also when the drawings are being reduced for the publication. Personally I find it convenient for excavated buildings to use the scales 1:10 and 1:20 for the field work (i.e. the measured-drawings), and the

scale 1:100 for the general plan of the house. And I would wish that everyone, like myself, would use the scale 1:200 when publishing the plans, so that we should all be able to compare houses immediately. (The restricted space of this journal is the reason for not using the principle in this case.)

Finally it should be stressed that the drawings are normally only part of the description. There should always be a very close correspondence between the text, the photographic record and the drawings, when aiming at a complete presentation of all relevant field data.

When preparing the publication of the 10th-century fortress of Fyrkat more than fifteen years ago I made use of the field data by working out plans at the scale 1:100 for houses, streets, rampart and so on with all the descriptive notes written beside the post-hole markings for the purpose of my personal studies (fig. 1). As the postholes in some of the houses were archaeologically located in as many as four different strata, the same number of plans was made with notes for these houses. Some of the houses had been excavated by making vertical sections through most of the postholes, a technique which made the plans look somewhat different to those first mentioned. General conventions for postholes, preserved timber, and stones were used on the plans.

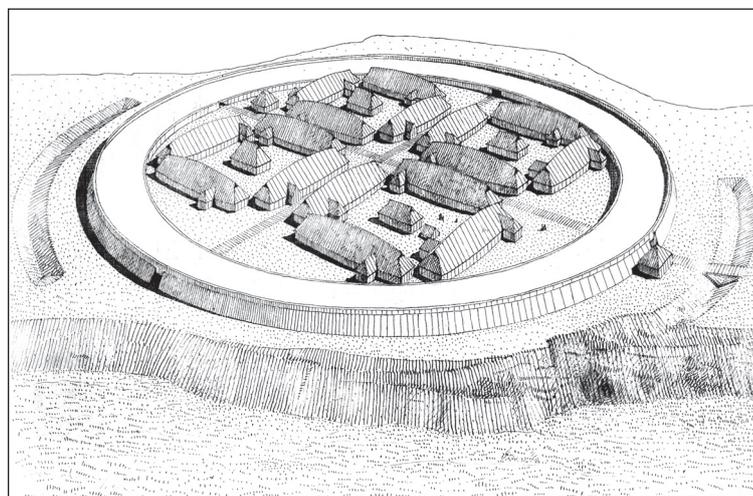
On the basis of these study-plans I worked out the descriptions and the plans with all the recorded ob-



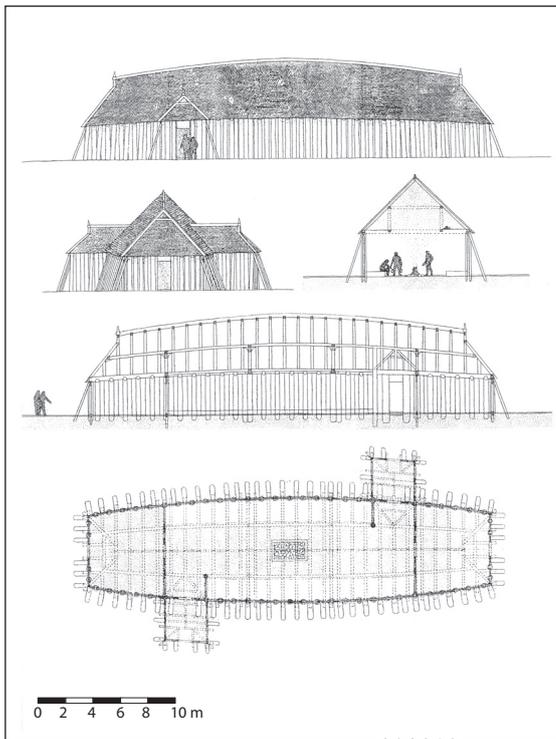
■ **Fig. 3** Part of the general plan of Fyrkat.

servations. These plans of the individual houses etc. were published at scale 1:200 (fig. 2). The aim was to put the description and the plan of each house on a uniform basis, so that it would be immediately possible to compare the individual houses in spite of the different excavation methods and conditions.

These rather complicated plans again formed the basis of more general plans placed in the general text of the book (fig. 3, 4). From the partly reconstructed general plans to the more tentative reconstructions of the fortress and the houses, worked out for the benefit of the reader as well as for myself, there was only one step further up the ladder towards academic speculation (fig. 5). It is, however, worth noticing that all reconstructions inevitably contain a certain amount of pure guesswork. For this reason it should always be clearly stated that such drawings only represent



■ **Fig. 5** The Fyrkat fortress, sketch reconstruction.



■ **Fig. 6** Building project for the full-scale reconstructed house-model at Fyrkat.



■ **Fig. 7** The house-model at Fyrkat during building.

the author's idea of what the structure might have looked like.

Later on I was asked to make a regular building project for the full-scale reconstructed house-model, which was built near the fortress in 1982-85 (fig. 6 and 7). This model was primarily meant to visualize the idea of the strange structure of the Viking-age house to the visitors, but it might also be regarded as the ultimate publication of the interpretation of

the archaeological data. The same intentions were put forward, when the architect C. G. Schultz in 1942 built the famous Trelleborg house. By a strange coincidence I was asked to make a project for the restoration of the decaying Trelleborg house at the same time as the project for the reconstructed Fyrkat house was being worked out. All the lower ends of the solid oak timbers, stuck into the ground, had by then completely rotted away, and the building was in need of a proper foundation. The house also needed a new roof of oak-shingles. Reports on the two projects were published in Nationalmuseets Arbejdsmark in 1981 and 1985.

The report from 1985 also listed the experience we gained while practicing the building of a „Viking-age“ house. We were not allowed nor did we wish, to erect the building on the very site where the houses had been excavated. It was built in a spectacular place close to the fortress, so that it is possible both to separate the two monuments, and see them together. We were asked by the local building-authorities to make static calculations for the structure. In some respects it may therefore be argued that our experiment at Fyrkat was much closer to modern house-building than to traditional early medieval vernacular house-building. When the project had been made and funds raised, a practical leader of the building-project, a carpenter-foreman, was put in charge, and for that reason the house may also be regarded as an expression of his skill and knowledge. For instance he and the other carpenters insisted on using adzes to dress the timbers instead of small axes. Also they insisted on putting the wall plates in position, before the wall posts and the buttresses were put up, in order that they might serve as templates for the curved walls. To separate the more certain parts of the reconstruction from the more uncertain, the lower part of the structure, i.e. the walls and the buttresses, have been constructed from more or less naturally curved, split and dressed timber, while the roof-timbers are straight, as they represent only an academic theory. Anyway it is safe to say that on the whole the house should scientifically be regarded only as a full-scale model of an interpretation of the archaeological field data.

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Summary

Standards für die Veröffentlichung von Untersuchungsdaten

Bestimmte generelle Standards für die Veröffentlichung von archäologischen Daten zu Gebäuden wären eine große Hilfe bei vergleichenden Studien. Es sollten Angaben zur ausgegrabenen Fläche existieren und die als Teile der Gebäudestruktur interpretierten Befunde sollten mit gepunkteten Linien erkennbar sein. Der Archäologe wie auch der Architekt sollten immer allgemein übliche Maßangaben verwenden. Schließlich sollte darauf hingewiesen werden, dass Zeichnungen immer nur einen Teil der Beschreibung darstellen. Zwischen dem Text, der photographischen Dokumentation und den Zeichnungen sollte immer eine sehr enge Beziehung bestehen, die dem Ziel dient, die relevanten Daten möglichst komplett zu publizieren. In jedem Fall ist hervorzuheben, dass jede Rekonstruktionszeichnung lediglich die Vorstellung des Autors über das mögliche Aussehen der Struktur visualisiert.

Présenter d'une manière standarde les données archéologiques

Il serait utile aux études comparées des bâtiments qu'un standard générale soit imposé à la présentation des données archéologiques. Dans le plan, il faudrait qu'on indique la superficie du terrain fouillé et relève les parties reconstituées des bâtiments au pointillé. A l'instar des architectes, les archéologues devraient utiliser les mesures généralement respectées. Enfin, il convient d'accentuer que les plans ne font qu'une seule partie de la description. Afin de dresser une présentation complète impliquant toutes les données importantes, les textes, photos et plans devraient communiquer. De même, il faudrait mettre en évidence que les dessins de reconstitution ne représentent en fait que l'idée de l'auteur, aspect plausible du bâtiment original.