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An overview of Bell Beaker house plans in the Netherlands

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In the Netherlands, the Late Neolithic Bell Beaker phenomenon (c. 2400–1900 BC) is well-known for its burial monuments which feature prominently in debates concerning pottery typochronology, continuity with the preceding Corded Ware Phenomenon (c. 2800–2400 BC) and funerary landscape developments. Regarding settlements, the picture is far sketchier and based on a problematic dataset. Previously, and among others, Lanting and Van der Waals (1976), Van der Waals (1984) and Drenth and Hogestijn (2001) have tried to summarise the evidence for Bell Beaker habitation. Several more recent studies (eg, Fokkens et al. 2016; Drenth et al. 2014; Kleijne in press) also contribute to this particular topic and Hogestijn and Drenth (2000; 2001) have summarised the Middle and Late Neolithic house plans from the Netherlands. Since these papers, further possible structural evidence has been found at Epse and Heiloo (see below) adding to the corpus. All authorities agree, however, that the dataset is meagre, consisting mainly of single features, clusters of features, various kinds of cultural layers and finds from the fills of natural gullies. From these features only a very small number of structures including house plans can positively be identified (Fig. 16.1). This contribution outlines and examines these supposed house plans from the Netherlands and the difficulties of interpretation that surround them.

Bell Beaker house plans – the problems

As mentioned above, over the past few decades, various authors have discussed the evidence for Bell Beaker habitation, presented Late Neolithic house plans, and started discussions concerning the validity of certain postulated structures. Some 18 years ago Hogestijn and Drenth (2000) had already scrutinised assertions made regarding Middle and Late Neolithic house plans from the Netherlands. More recently, this subject has been revisited (Drenth et al. 2014) and after a critical examination using similar criteria to the studies mentioned above, only those structures that are likely house plans are presented here but even these have been questioned by other authors. In that review article only one probable house plan is accepted for the Bell Beaker period and this is a discovery that was made long ago at Vlaardingen (Zuid-Holland) though even this site is not without its critics.
Both of these studies make it clear that there are three main difficulties in identifying Late Neolithic houses. The first problem is that of the reliability or validity of the postulated structure. A second hurdle is the dating of the structure and finally there is the question of a structure’s function: as a house, a shed or another kind of (roofed or open) structure. Any assumed function may also have been seasonal in nature.

With regard to the first problem, discussions are often based on a wide variety of either clearly or more loosely applied arguments. Arguments for positive identification usually include the regularity of post alignments, closely associated artefacts and/or radiocarbon dates, the presence of central roof-bearing posts or outer wall posts at equal distances, the presence of hearth structures or other internal features, the recognition of the house plan during excavation and the uniformity in depth, shape and filling of the features that make up the house plan. Exemplary is the work of Arnoldussen (2008, 167–74) on the possible Late Neolithic and Early Bronze Age house plans from the Dutch central river area. He critically examines settlements in terms of their dating evidence, associations and structural remains and in so doing he rejects, for example, the claim that the excavations at Meteren-De Bogen (Gelderland) have yielded Late Neolithic house plans citing ‘… unclear stratigraphical contemporaneity, high feature-density of uniform features, absence of datable material, lack of corroborating parallels elsewhere…’ as the reasons for rejection (Arnoldussen 2008, Appendix, 63–75). While this holds true for the particular site of De Bogen, there are several other Late Neolithic settlements, such as at Barendrecht-Carnisselande (see below), where features are uniform and clear-cut (even wood is sometimes preserved), where parallels can be found in the methods of construction, where dating evidence is present and where stratigraphy seems less complicated. Other studies, for example Fokkens et al. (2016, 293–4), dismiss many of the proposed Late Neolithic and Early Bronze Age house plans as being ‘too unstructured’. In their view, these proposed house plans contrast with house plans that have regular central posts and wall posts such as the
typical three-aisled longhouses of the Middle Bronze Age.

In this respect, the supposed Bell Beaker ‘house plan’ of Barendrecht-Carnisselande site 3 should be mentioned here (Fig. 16.2) (Moree et al. 2010, 48–71). The settlement consists of several cultural layers built up on the top of a levee of a freshwater gully. The earliest occupation dates to the Vlaardingen group, whereas the later phases date to the Bell Beaker and Middle Bronze Age periods. Features from the Bell Beaker phase are associated with a substantial quantity of material culture, Bell Beaker, Potbeaker and Common Ware pottery as well as a small droplet of copper of probable British or Irish origin. Radiocarbon dates place this settlement well into the later phase of the 3rd millennium BC.

The house plan has been reconstructed from a general spread of post-holes some of which still preserved timber uprights and at least two possible reconstructions have been proposed, both of which are very irregular but appear to represent two-aisled buildings differing mainly in their straight or rounded ends (Fig. 16.2). The first reconstruction suggests a house plan with straight ends measuring 9.2 × 4.9 m. The second reconstruction suggests a house plan of 15.3 × 5 m. No internal structural elements were observed. The irregularity of the ground-plans and the widely-spaced yet well-preserved posts has led some to regard the reconstructions as unreliable (Fokkens 2016, 202–4; Drenth et al. 2014, 64).

Problems with dating are also significant largely due to the problems of horizontal stratigraphy and the certain association of dated features or material culture with the structures. The Bell Beaker houses excavated by Louwe Kooijmans have now been claimed as Bronze Age by the same authority (Louwe Kooijmans 1993, 88) and the stratigraphy of Meteren-De Bogen has also been disputed (Bourgeois & Fontijn 2008, 51–4; Lanting & Van der Plicht 2002, 198–201; Lohof 2003; Meijlink 2001). At Ottoland-Kromme Elleboog the range of material culture includes Bell Beaker to Hilversum pottery with no direct association of any ceramic style with the structure (Wassink 1981).

Regarding function, the wide-spaced posts at Vlaardingen-Arij Koplaan have been variously interpreted as a house, wind breaks or palisades (Van der Waals 1984, 10; Van Beek 1990, 171–2; Lanting & Van der Plicht 2000, 82) and a funerary function has been suggested for Meteren-De Bogen (Meijlink 2001, 415, 417). For this reason, in many cases and as in Britain and Ireland (Gibson this volume) the word ‘structure’ may be preferable to ‘house’.

These problems must be borne in mind when considering the corpus of possible Bell Beaker house plans and related structures in the Netherlands. Several old sites, and some recent excavations, have produced tentative structural evidence that have been previously ignored or discarded. The former sites have already been discussed (Hogestijn & Drenth 2000), but for the sake of transparency and clarity, they will be re-examined in this overview. Additionally, several house plans dating to the Late Neolithic/Early Bronze Age transition period, the closing centuries of the 3rd millennium BC and first centuries of the 2nd millennium BC, will also be described.

**Critical overview of Bell Beaker structural plans**

**Vlaardingen-Arij Koplaan (Zuid-Holland), trench 15** (Fig. 16.3)

This settlement is usually known simply as Vlaardingen and the structure was first depicted
in the PhD thesis of Van Beek (1990, fig. 98). A concentration of 17 post-holes was found on the top of the bank of a Late Neolithic creek and comprised three irregular rows of wooden posts orientated NE–SW. The structure measures at least 6 × 2.8 m and has a two-aisled plan, with possibly one rounded end and may have extended beyond the boundaries of the excavation trench. It has been alternatively interpreted as wind-breaks or palisades (Van Beek 1990, 171–72). The plan is attributed to the Bell Beaker period, but absolute dating evidence to support this claim is lacking and whilst a cultural layer containing Bell Beaker and Common Ware pottery, flint and burnt bone was observed in the same, north-eastern part of the trench, there are no radiocarbon dates for this layer and its relationship with the structure could not be firmly established.

Vlaardingen excavation trench 9 also provided Bell Beaker material associated with early radiocarbon dates of 386 ±110 BP (GrN-2481), 3910±30 BP (GrN-2158), 3850±50 BP (GrN-3097) and 3910±100 BP (GrN-2419). Bayesian modelling of these dates (together with a single stratigraphically separated Vlaardingen date) puts the Bell Beaker occupation between 2470–2140 cal BC (95.2% probability; Kleijne in press). This has been extrapolated to also assume an early date for the structure in trench 15 (Hogestijn and Drenth 2000, 62–3).

The interpretation of the Vlaardingen house is not without its critics, however and Lanting and van der Plicht question the interpretation of the post-hole arrangements due to their irregularity (Lanting and Van der Plicht 2000, 82).

**Graafstroom-Molenaarsgraaf (Zuid-Holland) (Fig. 16.4)**

This settlement, usually known as Molenaarsgraaf, was published as part of the PhD thesis of Louwe Kooijmans (1974, 169–339). It originally identified two outline house plans, house 1 and house 2, and several additional rows and concentrations of posts in both the eastern and western excavation trenches. Next to the structures, four graves were discovered (one cenotaph, one ox burial and two Bell Beaker crouched inhumations). Bell Beaker, Barbed Wire and Common Ware pottery and associated material was found in the cultural layer that covered the features, a peaty natural gully fill (to the east of the domestic activity) and from several pits on the settlement itself.

House 1 consists of an oval-shaped structure, orientated almost exactly E–W. The house is completely preserved and measures 20.5 × 6.2 m. The plan of this house is regular, with central posts more or less regularly spaced between 3.2–4.6 m apart, and with opposing wall posts, creating a two-aisled structure. In the west end of the house, a possible hearth was present and several pits along the northern long axis may be associated.

House 2 consists of a more convex-shaped structure, orientated WNW–ESE. The house is less well preserved at the southeast end but measures at least 18.8 × 6.8 m. The plan of this house is also fairly regular, with central posts between 2–5.4 m apart, and opposing wall posts once again creating two aisles. It differs from house 1 in having extra structural elements parallel with the central posts, creating some form of four-aisled rectangular partition.

Relative chronology is provided by the
stratigraphic position of house 2, with several wall posts disturbing the ox burial and the pits that are associated with house 1. Reliable absolute dates are only available from several other pits and graves on the settlement and are not directly associated with these structures. Louwe Kooijmans proposed that the occupation history of the site comprised Phase 1 which included most of the pits, house 1 and the start of the cultural layer development. Phase 2 saw the development of the cemetery with its two Bell Beaker burials and Phase 3 consists of house 2 and the top of the gully deposits.

Based on this phasing, a Bayesian model was constructed (Fig. 16.5). Phase 1 started between 2490 cal BC and 2025 cal BC (95.4% probability) and lasted until between 2130–1980 cal BC (95.4% probability). A hiatus between the first occupation and the cemetery phase of 0–105 years (95.4% probability) was modelled then Phase 2, the cemetery, started between 2080–1940 cal BC (92.3% probability) and lasted until 2040–1880 cal BC (93.0% probability). Phase 2 and the second occupation phase were separated by an interval of between 0–175 years (95.4% probability). There are no dates
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Figure 16.6: Heiloo-Craenenbroeck house plans 1 and 2 and house plan 1/2 combined. A hearth (marked by an H), a water pit (grey) and possible entrances are indicated (after De Koning & Drenth 2018).

from phase 3, but it probably started between 2040–1750 cal BC (93.3% probability) and ended between 2040–1650 cal BC (94.3% probability). A fourth phase was represented by limited Middle Bronze Age activity, before the settlement was sealed by a layer of peat.

The reconstruction of the Molenaarsgraaf structures has not been universally accepted and Van der Waals (1984) seriously questioned their validity seeing them as a ‘drawing table exercise in joining dots’ (van der Waals pers comm to Alex M. Gibson). Furthermore, though maintaining his original structural hypothesis, the excavator himself has since questioned the site sequence and particularly the position of the structures within that sequence (Louwe Kooijmans 1993, 88). In this article, Louwe Kooijmans preferred to see the houses as being very late in the sequence and fully Bronze Age in date associated with plain pottery characteristic of this period. Although the radiocarbon dates for phase 1 and the presence of Bell Beaker sherds on site suggest at least an origin for this settlement in the Beaker period, only new radiocarbon dates, associated with the house plans themselves, can further elucidate the phasing and nature of occupation at Molenaarsgraaf.

Heiloo-Craenenbroeck (Noord-Holland) (Fig. 16.6)

The settlement of Heiloo-Craenenbroeck has been recently excavated and published (De Koning 2016; De Koning & Drenth 2018). It consists of a large concentration of post-holes and pits and (at least partially younger) ard marks set in a coastal dune environment. Strangely enough, the only material remains from this settlement are three fragments of pottery, 11 flint artefacts, two worked stones and a small quantity of bones from domesticated animals. The concentration of post-holes lack horizontal stratigraphy in terms of intercutting features and is interpreted as either the remains of two possible house plans or a single house plan with a more complex internal structure.

House plan 1 is irregular in its structure, with only a low number of central posts present, two central rectangular four-post elements, and with clearly defined wall posts and possible entrances along the long axis. The house plan measures 16.6 × 4.9 m (max).

House plan 2 also has an irregular structure but is more oval in shape. Several central posts are present, but again mainly consists of wall posts and two central four-post elements. The house plan measures only 11.5 × 3.75 m.

The possible house plans overlie, but do not intersect, one-another and both consist of an oval to rectangular structure with an NW–SE orientation. Also there is only a single hearth in the NW part of both structures which might suggest a single-phased structure with an internal arrangement comparable to Molenaarsgraaf house 2 and Noordwijk-Bronsgeest (see below). A double row of wall posts and possible indications of internal phasing suggest possible repairs of a type that have been noted in Bronze Age house plans in the coastal dune area of the Western Netherlands (eg, house 1 at Velsen Westlaan 1 (Noord-Holland) Kleijne 2015, 44).

The house plans have been radiocarbon dated by several charcoal dates from a post-hole and the hearth, a single charcoal date from the arable field which covers the features, and an organic date from peat sealing the whole occupation level. A three-phase Bayesian analysis of this occupation
(Fig. 16.7) places the start of occupation phase between 2070–1900 cal BC (95.4% probability) and the end of the occupation phase between 2010–1880 cal BC (93.2% probability). A phase postdating the use of the house(s) is dated by a wooden object from a waterhole suspected as being later than the post-holes. The start of this second phase can be dated between 1970–1820 cal BC and ending between 1930–1790 cal BC (95.4% probability). The moment at which the coastal dune starts drowning because of the rising groundwater, is dated by the bottom of a peat sequence. This phase starts between 1910–1770 cal BC (95.4% probability).

Noordwijk-Bronsgeest (Zuid-Holland) (Fig. 16.9)
The settlement of Noordwijk-Bronsgeest was published by Van Heeringen et al. (1998 and Van Heeringen & Van der Velde 1999) and revised by Van der Velde (2008). Many features such as post-holes and pits were uncovered in this dune landscape, along with traces of agricultural activities (ard marks) and a water pit. The settlement was later covered
by peat and dune sand. The house plan is two-aisled, with additional central structural elements, and possible entrances at both the short and long ends. The plan is oriented towards the NW–SE and measures 15 × 6 m. Associated pottery consists of Barbed Wire and nail/cord impressed Bronze Age pottery (Early Hilversum), the former suggesting that it may have its origins at the end of the Beaker period in the Netherlands whilst the six radiocarbon determinations firmly date this structure to the Early Bronze Age.

A Bayesian model (Fig. 16.9) was constructed based on the radiocarbon dates (Van Heeringen et al. 1998, 38) and dividing the settlement into three phases. Phase 1 consists of the house plan and primary occupation (Bronsgeest I and Bronsgeest II), phase 2 consists of the layer on top of the house (Bronsgeest VI), and phase 3 consists of a single peaty depression and the subsequent peat formed by rising ground water levels and sealing the settlement after occupation (Bronsgeest III, Bronsgeest IV and Bronsgeest V).

Phase 1 starts between 2140–1770 cal BC (95.4% probability) and ends between 1960–1740 cal BC (95.4% probability). Phase 2 starts between 1920–1690 cal BC (95.4% probability) and ends between 1870–1620 cal BC (95.4% probability).
probability). Phase 3 starts between 1810–1540 cal BC (95.4% probability) and ends between 990–360 cal BC (95.1% probability). These dates suggest that this is in fact a Hilversum-dated structure perhaps built on an earlier Barbed Wire Beaker site.

**Ottoland-Kromme Elleboog (Zuid-Holland) (Fig. 16.10)**

The settlement of Ottoland-Kromme Elleboog was excavated by Louwe Kooijmans and is only described in detail in a Masters thesis by Wassink (1981). The settlement consists of two possible house plans surrounded by a number of pits on the levee of a breakthrough channel, geologically similar to Molenaarsgraaf and Ottoland-Oosteind (see below). Both houses are two-aisled with straight ends and orientated NW–SE. Neither of the house plans have any indications of internal structure. Bell Beaker and Barbed
Wire pottery was found mainly in the (refuse?) pits in close proximity to the houses, but no radiocarbon dates are available. While house plan 1 is quite substantial and convincing, the configuration of house plan 2 remains obscure due to the low number of post-holes present and the limits of the excavation trench. House plan 1 measures 7.3 × 4.5 m (max). The possible house plan 2 cannot properly be measured due to the limited nature of the reconstruction.

Ottoland-Oosteind (Zuid-Holland) (Fig. 16.11)
The settlement of Ottoland-Oosteind was excavated by Louwe Kooijmans, and results have only been reported in a Masters thesis by Deunhouwer (1986). At this settlement, in plane 4 of the excavation, a straight line of substantial post-holes was uncovered, possibly the remains of the central post row of a house plan. Other features related to this house plan have not been found and its reconstruction as a two-aisled plan therefore must therefore remain highly speculative. The length of this row of central posts is 25.9 m, with the posts c. 5.5 m apart. A grave was discovered next to the line of posts containing the remains of a 2-year old domestic pig. Bell Beaker and Barbed Wire pottery suggests that this possible structure belongs to the second half of the 3rd millennium and the beginning of the 2nd millennium BC but no absolute dates are available.

Deventer-Eps Noord house 23 (Overijssel) (Fig. 16.12)
A recently published structure was excavated by the municipality of Deventer (Hermsen & Van der Wal 2016, 124–5). The reconstruction delineates a two-aisled structure measuring c. 7 × 3.7–4 m and oriented NE–SW. The central posts and the wall posts are irregularly placed but do seem to be linked to one-another. Unfortunately, no material culture could be associated with the features of the structure and no radiocarbon dates were obtained and therefore its Bell Beaker date can only be assumed. The two-aisled, partly irregular lay-out finds parallel with the structure from Ottoland-Kromme Elleboog (see above). Similar arrangements of posts have come to light at the Middle and Late Neolithic settlements of Wateringen 4 (Zuid-Holland) (Raemaekers et al. 1997) and Haamstede-Brabers (Zeeland) (Verhart 1992).

Finally, there are several tentatively identified ‘house plans’ that should be mentioned, but that are not included in our overview because they all suffer from insufficient detail so that they are unconvincing or improbable (following Arnoldussen 2008, 171–4). The house plans of Tiel-Medel (Gelderland) (Ufkes 2005) and Rhenen-Riemerden (Utrecht) (Jongste 2001) have no uniform features and no radiocarbon dates associated with them. The house plan of Vasse (Overijssel) (Verlinde 1984) has no Late Neolithic material culture, no radiocarbon dates and no known parallels. The Zwolle-Windesheim and Regteren (Overijssel) (Van Beek & Wevers 1995) house plans have no associated material culture, no radiocarbon dates and are more similar to Middle Bronze Age B house plans. The Zwolle-Ittersummerbroek (Overijssel) (Waterbolk 1995) and Zutphen-Loorënk (Gelderland) (Bouwmeester 2008, 69–70) also have no associated material culture, no radiocarbon dates and no uniform features (regarding depth and fill).

Developments through time
This overview of the structures tentatively identified and associated with the Bell Beaker phenomenon in the Netherlands, has demonstrated the paucity of reliable data suggesting that despite the numerous and well-known Beaker burials in the Netherlands,
An overview of Bell Beaker house plans in the Netherlands

Structural evidence is even more rare and ambiguous than in nearby Britain and Ireland (Gibson this volume). Nevertheless, we can optimistically start to compare the different plans by looking at common features and differences and tentatively trace diachronic developments from the preceding Late Neolithic Vlaardingen/Stein group and local Funnel Beaker and Single Grave/Corded Ware phenomena.

One of the most remarkable features of several house plans discussed here is the two-aisled configuration, which in several cases has been expanded with an internal central post-setting either in the short ends of the building (Heiloo-Craenenbroeck, Noordwijk-Bronsgeest) or possibly continuous throughout the whole building (Molenaarsgraaf house 2). Houses that do not have this post-setting have been found at Vlaardingen, Barendrecht Carnisselande 3, Ottoland Kromme Elleboog and Molenaarsgraaf house 1. Interestingly, these internal post settings are also found in the large Stein house plans of Veldhoven-Habraken (Noord Brabant) (Van Kampen & Van den Brink 2013) and Oerle (Noord-Brabant) (Hissel 2012). Interestingly, Van der Velde (2008, 171) remarked that the Early Bronze Age plan of Noordwijk, with its internal structure, could well represent the transition from traditional two-aisled houses to well-known three-aisled houses of the Middle Bronze Age. A similar (if not identical) case was made by Louise Kooijmans who suggested on the basis of his Bronze Age reinterpretation of the Molenaarsgraaf structures, that ‘this very restricted evidence for housing in Late Beaker/Early Bronze Age times suggests that the Late Neolithic small-house tradition continued and that longhouses, implying cattle stalling, came into use not earlier than the end of this phase’ (Louwe Kooijmans 1993, 88).

Could then these internal central post-settings be related to the activities carried out in the specific sandy landscapes of coastal dunes and the southern Netherlands’ cover sand area, perhaps related to differences in how farming practices such as cattle stalling and manuring (sandy soils are naturally nutrient-poor) were undertaken? Or could the extra structural rigidity have been required because of the lower longevity of wooden posts in this area? Another interesting structural development is the disappearance of house plans defined by bedding trenches, which were relatively common in the Stein house plans of Veldhoven (Van Kampen & Van den Brink 2013), Funnel Beaker house plans such as the one from Flöglern (Lower Saxony) (Zimmermann 2008) or more recently Dalfsen (Overijssel) (Van den Beld and Van der Velde 2017) and even the recent Vlaardingen site of Den Haag-Wateringse Binnentuinen (Zuid-Holland) (Stokkel & Bulten 2017). None of the Single Grave or Bell Beaker house plans exhibit this characteristic.

Secondly, an interesting observation relates to finds assemblages in relation to Bell Beaker house plans. On some settlements, a wealth of material culture has been found (such as on Molenaarsgraaf, Barendrecht and the Noord-Holland Corded Ware settlements) whereas on other settlements, especially in the sandy Pleistocene or coastal dune areas (such as at Heiloo-Craenenbroeck, Veldhoven-Habraken and Oerle), material culture is notably lacking. Is this purely a preservation issue, with the Neolithic level absent on these settlements, or is there also a cultural reasoning behind this remarkable difference? When we delve deeper into the finds themselves, the research by Kleijne (in prep) shows a decrease in the quantity of Bell Beaker pottery throughout the second half of the 3rd millennium BC, and an increase in Barbed Wire pottery on Bell Beaker settlements. Alongside this, there is a small presence of Potbeakers but the majority of the pottery comprises thick-walled, undecorated Common Ware. Flint and stone artefacts are mostly made from local coastal, riverine and till sources and were used to conduct basic craft activities. An interesting find is the copper droplet from Barendrecht 3, signalling the earliest evidence for local copper working in the Netherlands. Isotopic analysis shows that the copper fragment itself came from a British or Irish ore. Ireland, of course, is well known as a region of origin for Bell Beaker copper in the British Isles (O’Brien 2012) and can now also be seen as possibly the source of (at least some) Bell Beaker copper in the Low Countries. This contrasts with the chemical signature from copper daggers which seem to be of Central European origin (Butler & Van der Waals 1966).

Thirdly, this overview makes clear that there exists a wide variety of opinions and arguments on what a house is and how it
should be defined as well as the inherent problems of dating. Whereas some authors strictly define houses based on structured elements and regularity, other scholars favour a more lenient approach taking internal structures, hearths and finds distributions into closer consideration – domestic structures rather than houses. This matter can also be approached functionally, relating house regularity to its function within a subsistence economy, and seasonal habitation in the Late Neolithic. Similarly, the lack of houses in Early Bronze Age Britain has been related to the development of a particular practice of residential mobility (Brück 1999) which can now also be associated with a rise in pastoralism at the expense of crop-based agriculture (Stevens & Fuller 2015). Much more research into the interdisciplinary subject of subsistence economy and residential mobility is needed before more definitive answers can be proposed for the Netherlands.

Most important is the observation already noted by Drenth et al. (2014, 63). It remains to be seen whether a regular lay-out is the indispensable criterion for the identification of a house plan. The Middle and Late Neolithic site of Hunte 1 (Lower Saxony) (Fig. 16.13) clearly illustrates this point. This site contains traces of habitation from the Funnel Beaker Culture and the Single Grave/Corded Ware and Bell Beaker phenomena (Kossian 2007). Here, next to a wide variety of bone, ceramic and stone artefacts, the vestiges of several structures within an irregular post setting were excavated in the 1930s/1940s. Interestingly, remains of worked construction wood and in several instances hearths and clay floors formed integral elements, indicating solid, roofed and habitable structures. A study by Nobles (2013) on the Single Grave Culture settlement of Mienakker (Noord-Holland) also questions the ‘rule’ of a regular post setting. In this case, the find distribution has been used convincingly to substantiate the claim for a house plan, despite the irregular arrangement of its constituent elements. An optimistic interpretation of most of these structures as house plans therefore acceptable within the acknowledged limits of the data. It is hoped that further studies, both on new excavations and revisiting old excavation archives, combining features and finds distributions, will further elucidate the thorny problem of Dutch Bell Beaker settlement.

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