

BRONZE AGE METAL AND AMBER IN THE NETHERLANDS (III: I)
CATALOGUE OF THE WINGED AXES

J. J. BUTLER & HANNIE STEEGSTRA

Groningen Institute of Archaeology, Groningen, Netherlands

ABSTRACT: This paper is a catalogue of the bronze winged axes of the Middle and Late Bronze Age in the Netherlands, ordered by types. They occur in limited number, practically exclusively in the southeastern part of the country, chiefly in Limburg. They apparently represent imports from the East French area over a wide period, from the 13th or 12th to the 9th or 8th centuries BC.

KEYWORDS: Netherlands, Bronze Age (Middle and Late), winged axes, imports, distributions.

1. INTRODUCTION

This is Part III:I of a series on the Bronze Age metalwork and amber in the Netherlands; previous parts have appeared in *Palaeohistoria* 32, 37/38 and 39/40.

In view of the extensive (and intensive!) treatment of winged axes by Kibbert (1984: pp. 30-118, Taf. 1-42; also his Tabelle 7, p. 108, and chronological table Taf. 102) it suffices here to refer to that work for the generalities concerning winged axes in northwestern Europe. We can therefore confine ourselves here to the presentation of a catalogue of the winged axe finds in the Netherlands, plus such discussion of their typology, chronology and distribution as is necessary in connection therewith.

It will be immediately apparent from our maps (4-6) that winged axes occur in limited number in the Netherlands. The total is only 36 examples (compared to around 550 in Kibbert's Middle West Germany!); and the 36 includes five examples without provenance, and several examples with provenance of uncertain reliability. Numerically, this contrasts sharply with the c. 250 palstaves and 350 socketed axes in the Netherlands. It is also evident that within the Netherlands winged axes occur (with only two, possibly unreliable exceptions) only in the southeast; most of the find-spots being along or not far from the River Maas. The province Limburg has well over half of the provenanced examples; but in this province the winged axes are outnumbered by socketed axes (which were in use for a much shorter period of time) by roughly 3.5 to 1. In Gelderland there are only six winged axes (mostly in the Nijmegen area); the other provinces have few or none (see graph: fig. 1).

Curiously, though winged axes are very common in the German Middle Rhine area and farther southward and eastward, the German North Rhine area adjacent to the Netherlands has astonishingly few winged axe finds to show (cf. Kibbert's maps, his Taf. 78 and 84-87), while socketed axe finds are not infrequent in the same area (compare his Taf. 79). In

fact, only one Grigny axe comes from the German North Rhine area between Maas and Rhine: Kibbert's No. 94, from Wankum, Kr. Geldern, assigned to the *Variant* Altrip. The adjacent Belgian Maas area has only a few finds of winged axes (one of which is the Maaseik hoard, with four specimens); the main Belgian concentrations being at some distance, in the River Schelde area in the west and the Ardennes region in the east (here Map 4). Although in individual cases doubt can arise over the reliability of the find-spot attribution, the broad consistency of the pattern creates confidence in the picture presented.

The winged axes in the Netherlands are not, typologically or chronologically, a homogeneous group. The earliest example (if it is not a modern import) is an isolated example (Cat.No. 441) of a Central European transitional palstave/winged axe type belonging to the period of the Central European Tumulus Bronze Age. To the Central European *frühe* and *ältere Urnenfelder* periods belong the several varieties of midwinged axes of Type Grigny (see 2.2.1-2.2.3). Our Group II, the midwinged axes with 'head and shoulders', must, on the evidence of North and East French hoard finds, overlap in time with the Grigny axes but belong mostly to the Central European *mittlere* and *jüngere Urnenfelderzeit*. But the

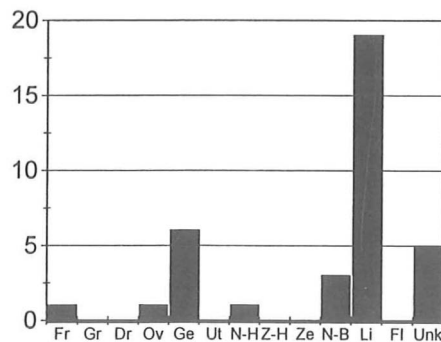


Fig. 1. Distributions of winged axes (all types and varieties) in the Netherlands, by province.

looped winged axes of Type Homburg, our Group III, should all belong to the Central European *späte Urnenfelderzeit* (*Stufe Wallstadt*). Thus the winged axes in the Netherlands are in no way products of a limited export horizon. They must be spread out over a period that may be as much as half a millenium: on current views from the 13th to the 9th century BC. (Admittedly, very few examples are actually datable in the Netherlands; the two examples of Group II from the Berg en Terblijt hoard (Cat.Nos 447-448) being the only exceptions; otherwise we are dependent for the datings on the associated finds in the neighbouring regions, as evaluated, especially, by Kibbert (1984) and Blanchet (1984).

The following ABC will explain the code as it is here employed. In Part II:1 and II:2 we have already used AXF for flat axe, AXI for low-flanged axe, AXR for high-flanged axe, AXS for stopridge axe, AXP for palstave. AXW signifies a winged axe; AXMW = midwinged axe; AXHW = highwinged axe; L = looped. Further descriptive features or subdivisions are indicated by letters or punctuation characters added on the right: H&S = head & shoulders; Hi = hips; < = small; /\ = trapeze shaped; \ / = conical shaped; [] = rectangular.

Geographical expressions here abbreviated with lower-case letters with reference to winged axe types are as follows: gb = *Form Geseke/Biblis*; grig = Type Grigny; hom = Type Homburg; it = Italian; swl = *Var. Swalmen*; tm = *Terremare*.

Abbreviations for organizations a.o.: R.M.O. = Rijksmuseum van Oudheden; R.O.B. = Rijksdienst voor het Oudheidkundig Bodemonderzoek.

References to literature frequently include the term *Verslag* or *Jaarverslag*. This refers to the Annual Report of the museum concerned. Other literature citations are located in section 7 below.

2. GROUP I. MIDWINGED AXES (AXMW:....)

2.1. Transitional palstave/winged axe (Type Caka/*Typ Gmunden?*) (AXP/AXW) (fig. 2)

CAT.NO. 441. DIDAM (NEAR), *GEMEENTE DIDAM, GELDERLAND*.

L. 13.9; w. 4.4; th. 2.9 cm. Butt with broad shallow notch. Short trapeze-shaped head, no shoulders. Wing part together with the uppermost of the blade part form an inverted trapeze. The lower end of the blade part is a resharpening facet, expanding abruptly, and has evidently been greatly reduced in length by resharpening. Cutting edge sharp. 'Pouches' on sides. Patina: dark bronze, with greeny patches. Some encrustation inside wings. Museum: Nijmegen (Museum Het Valkhof), Inv.No. GAS 161. 'Purchased in Nijmegen'. (DB 21)

Map reference: Sheet 40E, c. 207/439

Parallels and dating: Kibbert, 1984: No. 50 'Rheinland' without exact provenance; Mayer, 1977: pp. 127 ff, *Typ Gmunden* and related types; Pásztor & Mayer, 1998: No. 476, assigned to *Typ Gmunden*, occurring especially in Austria and Slovakia in the Middle to Late *Hügelgräber* period.

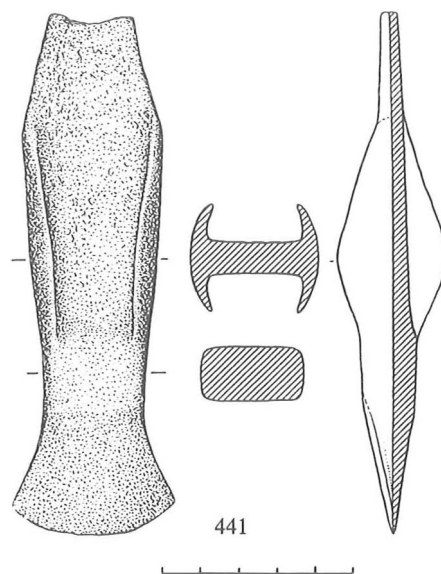


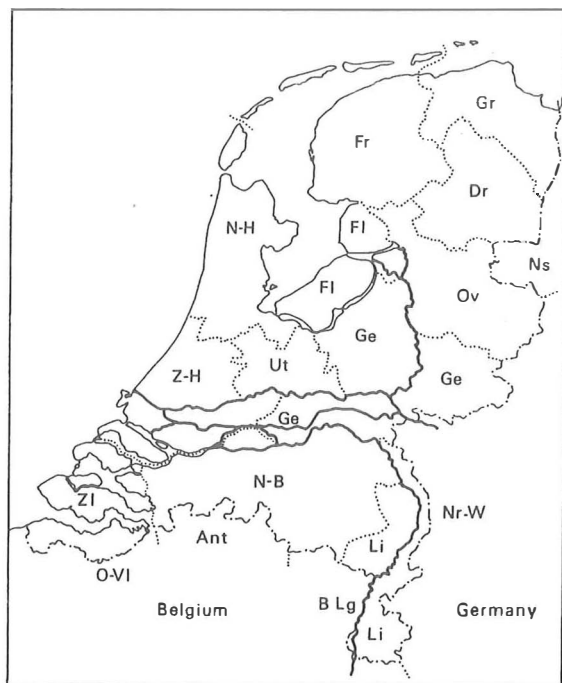
Fig. 2. (AXP/AXW) 'Typ Gmunden'? Transitional winged axe/palstave. Middle Bronze Age: near Didam, Ge.

2.2. Mid-winged axes of Type Grigny (AXMW:grig) (figs 3a-3f)

Grigny axes are defined by Kibbert (1984: p. 47). He distinguishes several variants, plus two *kleine Nebenvariante*, plus related and generally-similar pieces. The Grigny axes have a rather slab-like body, in outline close to rectangular, sometimes slightly convex, concave or ogival. The butt is usually rounded, most often with a U-shaped or crescentic notch. The blade part is usually slightly expanded, and may be slightly convex or concave. The characteristic in-curving wings are comparatively short, and stand out rather prominently.

Kibbert further divides the Grigny axes into a *Variant Swalmen* (named by him after the Swalmen-Hillenraad finds in Netherlands Limburg), with axes the sides of which are a continuous curve (his Nos 76-84, plus *nahestehend* Nos 85-86); a *Variant Altrip* (his Nos 92-99), and its *kleine Nebenvariant* (his Nos 100-101), with axes having on the sides a slight shoulder at the level of the base of the wings; and further (but without relevance for the Netherlands) a *Variant Nauheim* and some others.

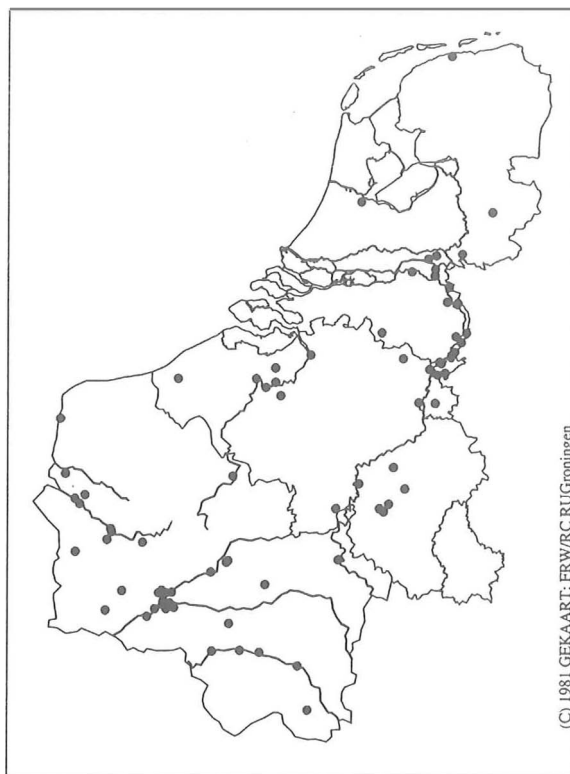
Millotte et al. (1968), in a classic paper accompanying a corpus of the French midwinged axes, have shown that there was a core area of midwinged axes in western Switzerland and eastern France; from which there was a radial spread, *inter alia*, to the Seine area, the Marne, and the Moselle. In his analysis of the winged axes of the central part of western Germany, Kibbert (1984: pp. 47-56) has carried the story farther. He has shown that his midwinged axes of 'Type Grigny' are indeed far less common in wes-



Map 1. Provinces of the Netherlands and neighbouring areas. Provinces of the Netherlands: Fr. Friesland; Gr. Groningen; Dr. Drenthe; Ov. Overijssel; Ge. Gelderland; Ut. Utrecht; N-H. Noord-Holland; Z-H. Zuid-Holland; N-B. Noord-Brabant; Li. (Netherlands) Limburg; Fl. Flevoland; Zl. Zeeland. Belgian provinces: O-Vl. Oost-Vlaanderen; Ant. Antwerpen; B Lg. (Belgian) Limburg. German Länder: Ns. Niedersachsen; Nr-W. Nordrhein-Westfalen. Dot-dash lines: national boundaries; dotted lines: provincial and Länder boundaries.

tern Germany than in eastern France. In the area of his study they are really only fairly numerous in the Middle Rhine region. Their almost total absence in the North Rhine-Westphalian area is really most striking; so that it is no longer possible to imagine that the Rhine route played a role in their dissemination northwards.

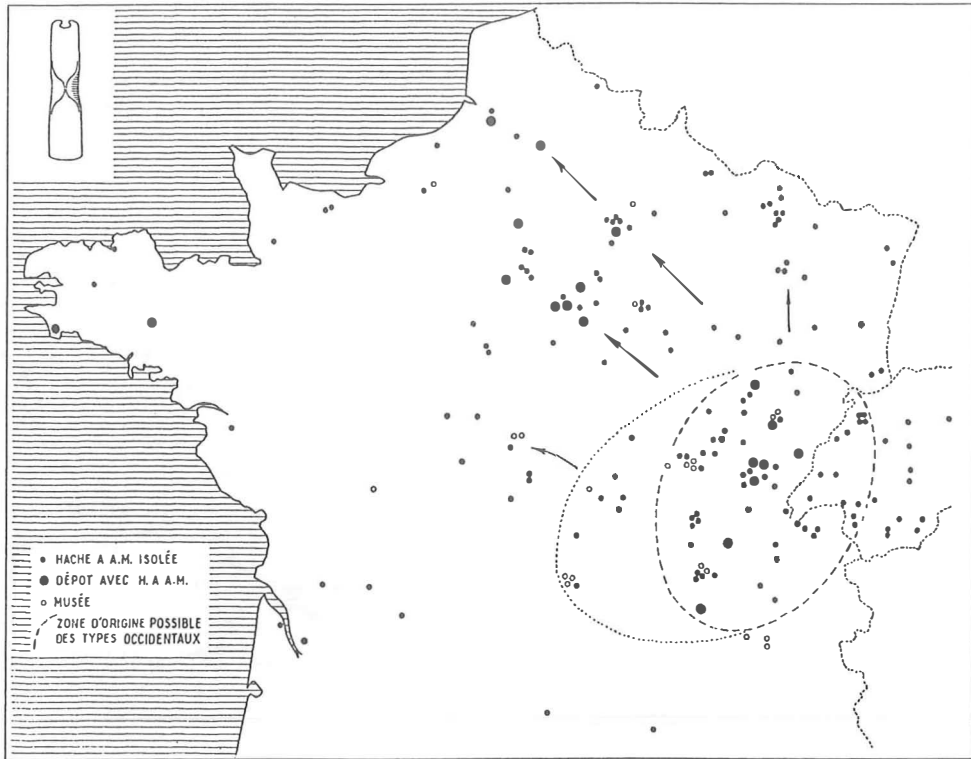
There is, however, a thin but clear chain of finds of Grigny axes going northward from the French areas of concentration via the Maas. The chain begins with three finds from the French département Meuse, illustrated by Millotte et al., 1968 (their Nos 103-105, from Inor, Pouilly-sur-Meuse, and Verdun respectively) through the Belgian Meuse valley (prov. Namur: Matagne-la-Petite; prov. Liège: Flémalle-Haute; Belgian Limburg: Maaseik hoard); NL Limburg: the two hoards from Swalmen; Heijen; finally Elst (Cat. No. 442) in the Betuwe. The German find from Wanikum, Kr. Geldern (Kibbert, 1984: No. 94) is, though on the German side of the border, not far from the Maas, and evidently is to be associated with our Maas chain. The geographically-stray Grigny axe dredged up between Amsterdam and Diemen along the IJsselmeer coast (Cat.No. 450) may well be a secondary location (Map 4).



Map 2. Winged axes (various types and varieties) in the Netherlands, Belgium, and the northern part of France (Dép. Nord, Pas-de-Calais, Somme, Oise, Aisne, Marne).

Some of the Grigny axes apparently imported along the Maas route are quite large and impressive specimens; this and the fact that they occur in two seemingly ritual hoards (those in the tumuli at Swalmen-Hillenraad), plus the Belgian hoard of Maaseik, which consisted of four large Grigny axes, suggests that these axes were not unimportant artefacts, perhaps primarily weapons possessing prestige value. In addition, there is a looped midwinged axe from 'South Limburg' (exact find-spot unrecorded) which must also be an import from France; its best parallels are from the Somme area, such as one from the Caix hoard (Blanchet, 1984: pp. 244-247, fig. 133), though Kibbert has associated it with some earlier looped winged axes in the Middle Weser area (1984: Nos 240-243, are of our 'head and shoulders' form). The dating of Grigny axes, according to Kibbert, is primarily the earlier part of the Urnfield period (*frühe* and *ältere* Urnenfelderzeit), with some examples occurring in hoards of later deposition.

In the Netherlands, nine Grigny axes are known, plus one blade fragment Cat.No. 451 (from Maasbree, Limburg) probably also of this type. Most, with lengths varying from 17.8 to 20.9 cm, belong to the basic (large) form of the *Variant Swalmen*, but two (Cat.No. 442 from Elst, 13.5 cm, and Cat.No. 443 from Venlo, 15.5 cm) are of the 'small sub-variant'.



Map 3. Midwinged axes in France and western Switzerland. After Millotte et al., 1968: pp. 10-11, fig. 12. Here their catalogue numbers have been omitted.



Map 4. Midwinged axes, Type Grigny in the Netherlands, Belgium and the northern part of France.

One large specimen (Cat.No. 449, from Swalmen-Hillenraad) has very slight shoulders, and is thus considered by Kibbert to be transitional between the variants Swalmen and Altrip. Finally, there is one specimen (Cat.No. 452, allegedly from 'South Limburg') of the same size and form as our 'small sub-variant' specimens, but which (very exceptionally on a Grigny axe) has a side loop.

2.2.1. *Type Grigny, Variant Swalmen, short sub-variant (Kibbert, 1984: pp. 47-56) (AXMW: grig<)*

CAT.NO. 442. *GEMEENTE ELST, GELDERLAND.*

L. 13.5; w. 4.3; th. 3.6 cm. Round butt with U-notch. Short wings, nearly meeting. Patina: variable green (partly removed); loamy encrustation. Surface rough. Museum: Arnhem, BH 123. (DB 13)

Reference: Butler, 1987: pp. 25-26, fig. 14:5.

CAT.NO. 443. *GEMEENTE VENLO, LIMBURG.*

L. 15.5; w. 5.5; th. 3.9 cm. Round butt with U-notch. Short wings, not meeting. Short trapeze-shaped blade part. Casting seams present. Patina: yellowish brown. Museum: Venlo, Inv.No. 2652. Ex coll. L.D. Keus (active in Venlo and area before World War II). (DB 1142)

Map reference: Sheet 52H, c. 212/376.

Reference: Wielockx, 1986: Cat.No. VI.27 (with drawing).

Note: the sub-standard length of the blade part may suggest that this axe was originally longer; but there is no re-sharpening facet on the blade part, and no pouches on the sides, to confirm

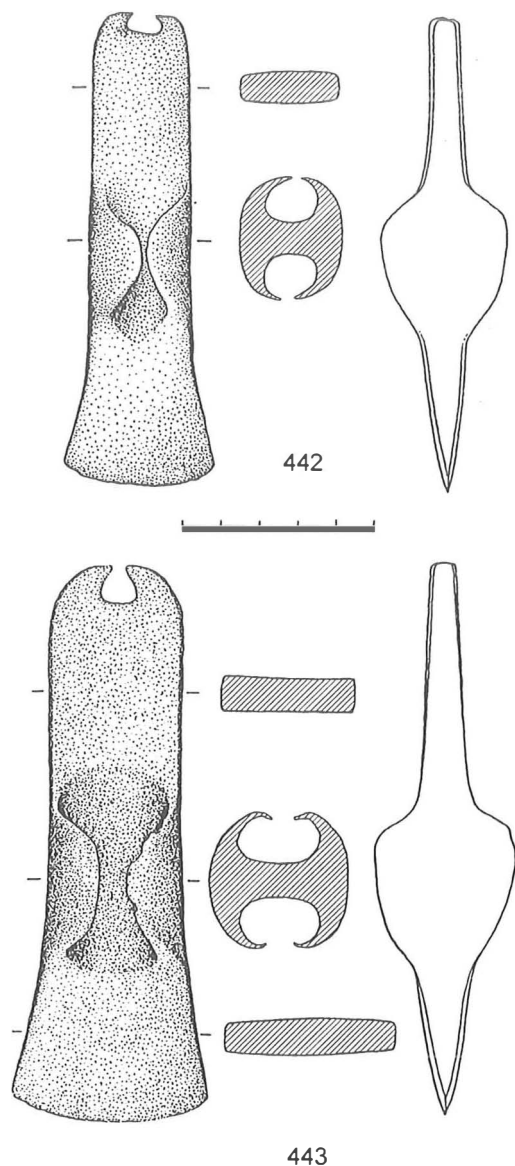


Fig. 3a. (AXMW:grig/swl.<) Type Grigny/Swalmen, short. 442: Gem. Elst, Ge.; 443: Gem. Venlo, Li.

this. The present blade width (5.5 cm) is the widest among our Grigny-Swalmen axes.

Parallels for Cat.Nos 442 and 443, with similarly short blade part: Germany: Kibbert, 1984: p. 49, No. 77, Taf. 6 (Alzey, Kr. Alzey-Worms, Rheinland-Pfalz). France: Mareuil-le-Port (Port à Binson) (dép. Marne) in Museum Eprenay (Millotte et al., 1968: No. 120); 1 ex. without provenance in Museum Amiens.

2.2.2. Type Grigny, Variant Swalmen, long (Kibbert, 1984: pp. 49-50) (AXMW:grig/swl)

We include also in this listing a few specimens which have slight 'hips' (Cat.No. 449 from Swalmen-Hil-

lenraad, Cat.No. 450 from Diemen), which according to Kibbert's criteria are transitional to his *Variant Altrip*. The difference between these and the pure Grigny-Swalmen axes is minimal; and further, the 'transitional' specimens occur together in hoards with the pure Grigny-Swalmen axes (Hillenraad, Maaseik, Anzin). There is no reason to suppose a separate origin.

Parallels in NW France: Blanchet, 1984: hoard Anzin (1 ex): p. 231, fig. 122:5; hoard Erondelle: p. 245, fig. 133:6-11,12 (looped midwinged); hoard Caix: p. 246, fig. 133:5 (looped midwinged). England: shipwreck hoard Dover, Kent (O'Connor, 1980: fig. 34:1-3).

CAT.NO. 444. HEIJEN, GEMEENTE GENNEP, LIMBURG. De Schaaf.

L. 19.9; w. 4.7; th. 4.2 cm. Rounded butt with crescentic notch; upper part of rectangular cross-section; small wings, hammered over so as to overlap on one side (on the other partly broken off); blade of rectangular section with slightly curved faces. Cutting edge battered. Patina: originally glossy mottled green; pitted. Most of surface has been 'cleaned' with a file; light brown sandy encrustation in 'socket'. Found in De Schaaf by a farmer, while digging a pit c. 3 m deep in previously disturbed sand (*Gevonden in De Schaaf door een boer, bij het graven van een put ongeveer 3 m diep in al vroeger omgegraven zandgrond*). Collection: B.A.I., Inv.No. 1963.X. (DB 1090)

Documentation: see letter drs. E. Waardenburg (but not now present in B.A.I.).

Map reference: Sheet 46D, c. 198/409.

Reference: Butler, 1987: p. 25, fig. 14:7; p. 33, note 8.

Parallel: France, 1 ex. from Paris, River Seine, in British Museum London.

CAT.NO. 445. SUSTEREN, GEMEENTE SUSTEREN, LIMBURG. German boundary.

L. 17.8; w. 4.45; butt 3.4; th. wings: 3.9 cm. Weight: 506 gr. Butt with claws enclosing broad indentation. Upper part with rectangular section. Centre with slight thinning; D-wings meet. No distinct shoulder. Blade with parallel sides, with slightly expanding tips. Blade sharp (in part recently resharpened). Patina: mostly scrubbed off; dull light green, with light brown loamy encrustation in 'thinning' part. Museum Maastricht, Inv.No. 3093A; in white ink on face: 672; in black ink on neck part: 3039A. Paper tag: 3093 5.7.18. Found at the German boundary in 1927 according to dr. P. Doppler, who in 1927 bought it for the price of 5 guilders. (DB 1664)

Map reference: Sheet 60A, c. 188.5/340.

Parallel: France: 1 ex. from Port à Binson (dép. Marne), in Museum Eprenay; Germany: Kibbert, 1984: p. 49, No. 76, Taf. 6 (Kuhardt, Kr. Germersheim, Rheinland-Pfalz).

CAT.NO. 446. PROVENANCE UNKNOWN.

L. 17.9; w. 3.8; th. 3.6 cm (secondary flattening). Round butt with circular notch. Wings have been secondarily flattened by hammering. Nearly straight parallel sides. Short wings, meeting. Cutting edge sharp. Patina: mottled green; part brownish. Museum: Asselt, Inv.No. 101; presented 1965 by J. Vogels, Buggenum. (DB 1162)

References: Wielockx, 1986: Cat.No. VI.3 (states Buggenum as findspot. According to Wielockx the axe was dredged up, but

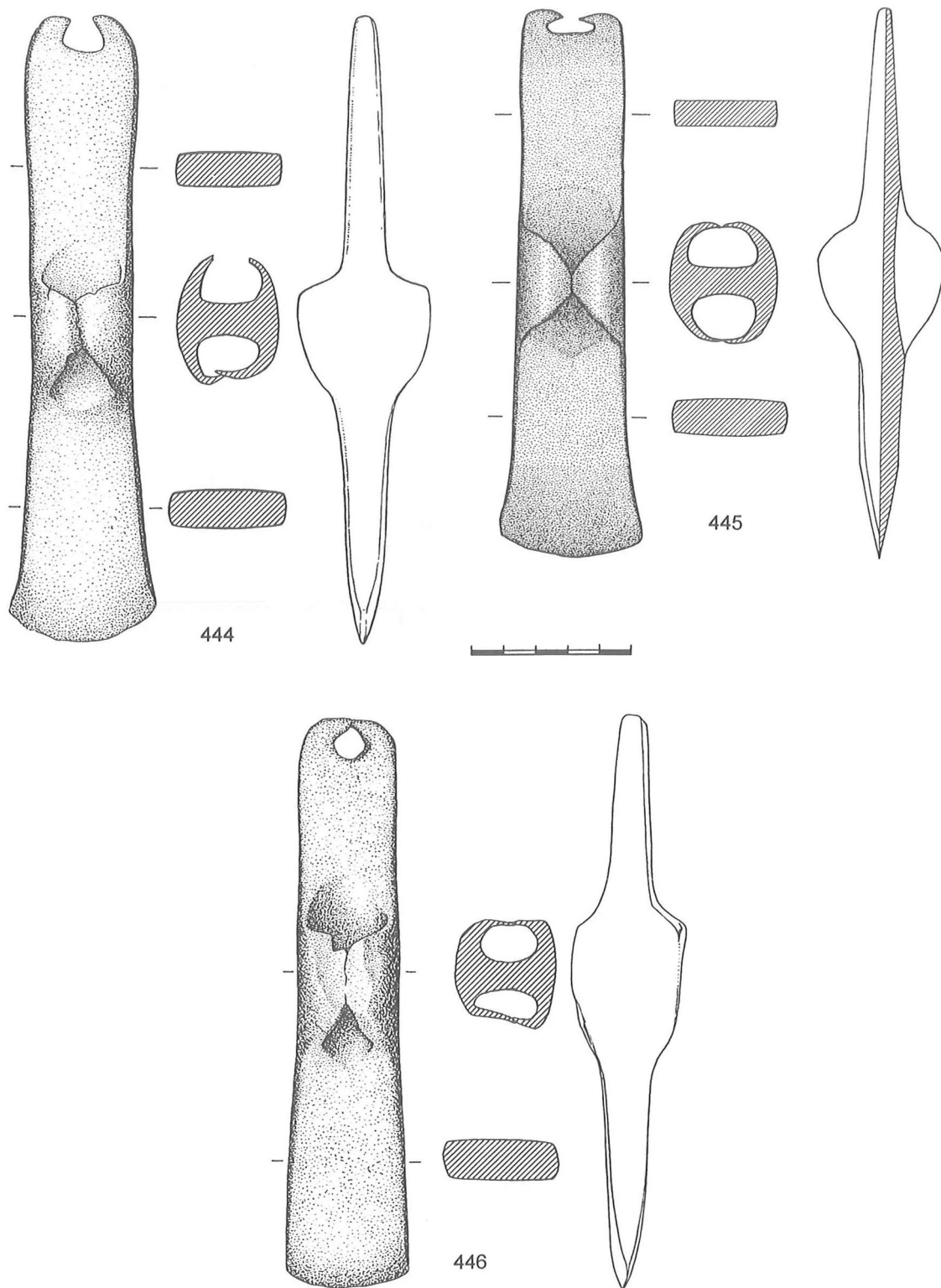


Fig. 3b. (AXMW:grig/swl) Type Grigny/Swalmen, long. 444: Heijen, Li.; 445: Susteren, Li; 446: provenance unknown.

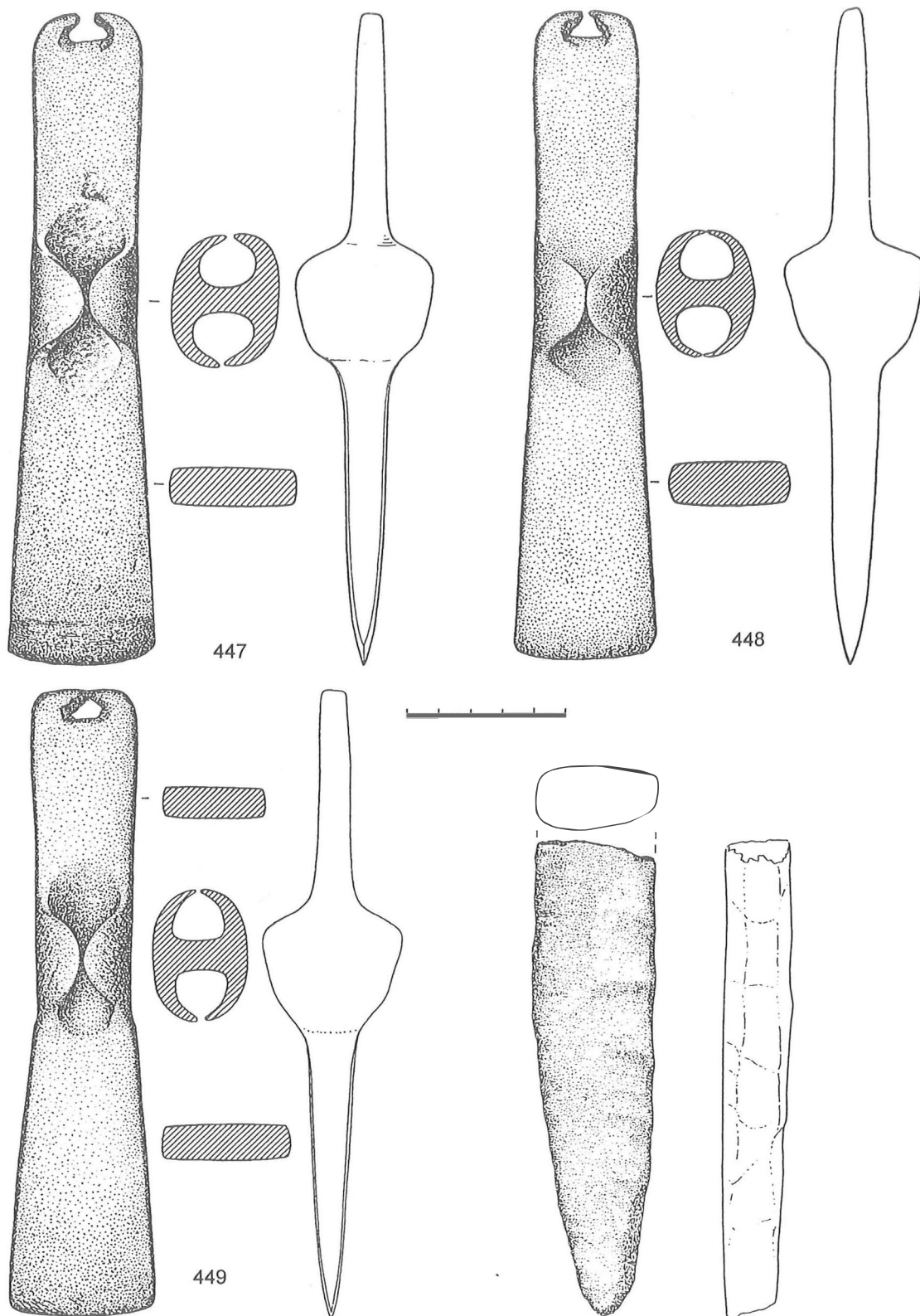


Fig. 3c. (AXMW:grig/swl). Type Grigny/Swalmen, long. 447: Hillenraad-Swalmen, Tum.II; 448: Hillenraad-Swalmen, Tum. I (with wetstone); 449: Hillenraad-Swalmen, Tum. II (with 447). All in prov. Limburg.

we could find no evidence for findspot or find circumstances); Butler, 1987: p. 25, fig. 14:6.

Parallel: France, 1 ex. from hoard Erondelle (dép. Somme) in Museum Amiens (Blanchet, 1984: pp. 244-245, fig. 132).

CAT.NO. 447. HILLENRAAD, *GEMEENTE* SWALMEN, LIMBURG. TUMULUS II.

L. 20.7; w. 4.7; th. 4.4 cm. Found in Tumulus II, together with Cat.No. 449. Excavated 1937 by F.C. Bursch for R.M.O. Private possession. (DB 1777)

Map reference: Sheet 58G, 201.25/359.40.

References: Butler, 1973: p. 328, afb. 7-3; Lanting & Van der Waals, 1974: pp. 69-72; De Laet, 1982: p. 494; Wielockx, 1986: Cat.No. VI.26; Butler, 1987: p. 24, fig. 14:3; p. 33, note 8.

CAT.NO. 448. HILLENRAAD, *GEMEENTE* SWALMEN, LIMBURG. TUMULUS I.

L. 20.9; w. 4.6; th. 4.4 cm. Notched butt, rectangular-sectioned haft and blade. Blade sharp. Patina: mottled green/black. Excavated 1937 by F.C. Bursch for R.M.O. Found together with R.M.O. 1.1937/8.48 (half of large wetstone, fig. 3c). Museum: Leiden (R.M.O.), Inv.No. 1.1937/8.47. (DB 469)

Map reference: Sheet 58G, 201.25/359.50

References: *Jaarverslag* 1936; Butler, 1973: p. 328, afb. 7-1; Lanting & Van der Waals, 1974: figs 31, 47; De Laet, 1982: p. 494; Wielockx, 1986: Cat.No. VI.24; Butler, 1987: p. 24, fig. 14:1; p. 33, note 8.

2.2.2.1. Transitional Var. *Swalmen/var. Altrip* (with slight 'hips') (AXMW:grig/swl.Hi)

CAT.NO. 449. HILLENRAAD, *GEMEENTE* SWALMEN, LIMBURG. TUMULUS II.

L. 19.9; w. 4.55; th. 4.4 cm. Part of hoard, with Cat.No. 447. Notched butt, small wings. Patina: mottled; mostly black, fairly glossy; patches of dark green; loamy encrustation. Pitted in places. Excavated 1937 by F.C. Bursch. Museum: Maastricht: Inv.No. 247. (DB 226)

Map reference: Sheet 58G, 201.25/359.40

References: Butler, 1973: p. 328, afb. 7:2; Lanting & Van der Waals, 1974: fig. 37, BM. 247; De Laet, 1982: p. 494; Wielockx, 1986: Cat.No. VI.25; Butler, 1987: p. 24, fig. 14:2; p. 33, note 8.

Parallels: Belgium: two examples from hoard Maaseik (Warmenbol, 1989: fig. 1:2, 2:1), in museums Liège and Brussels. France: 1 ex. from Damery (dép. Marne) in Museum Epemay; 1 ex. from hoard Anzin (dép. Nord) in Museum Bavay (Blanchet, 1984: p. 228, fig. 122).

Note: The French examples are c. 4 cm longer.

CAT.NO. 450. BETWEEN AMSTERDAM AND DIEMEN, IJSSELMEER, NOORD-HOLLAND. c. 100 m from the shore.

L. 15.5; w. 4.1; th. 2.5 cm. Found August 1966 by J. Buyk (Giesenburg). (Slight chance that the find came into the dredge at 'het Sloe' at Vlissingen, where the dredge had worked previously.) Butt irregular. The profile of the wing part is very slightly indented, and has very slight 'hips' separating it from the slightly trapeze-shaped blade part. Cutting edge irregular (damaged). Severely corroded and abraded. Patina: part dark bronze, part black; some reddish patches. Museum: R.M.O. Leiden, Inv.No. g.1966.12.1, purchased from finder. (DB 2005)

Map reference: Sheet 25E, c. 127/486.

References: *Jaarverslag* R.M.O., 1966: (241)7; Louwe Kooijmans, 1974: p. 355, No. 75; Butler, 1987: p. 26.

Parallel: Belgium: 1 ex. from Matagne-la-Petite (Namur), Museum Brussels (Warmenbol, 1989: p. 294, No. 22, with earlier

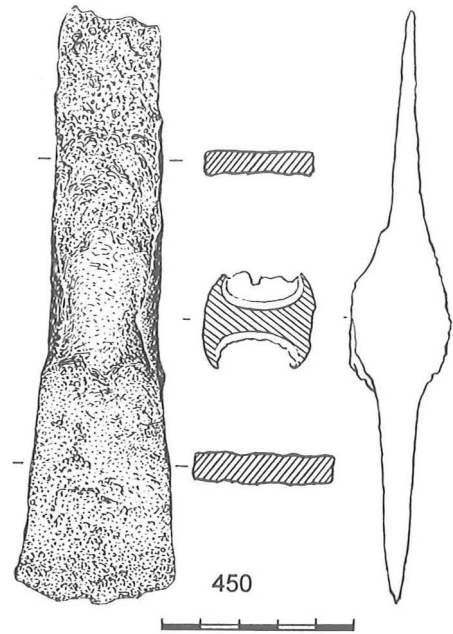


Fig. 3d. (AXMW:grig/swl). Type Grigny/Swalmen, Var. Altrip. 450: betw. Amsterdam and Diemen (N-H). 451:

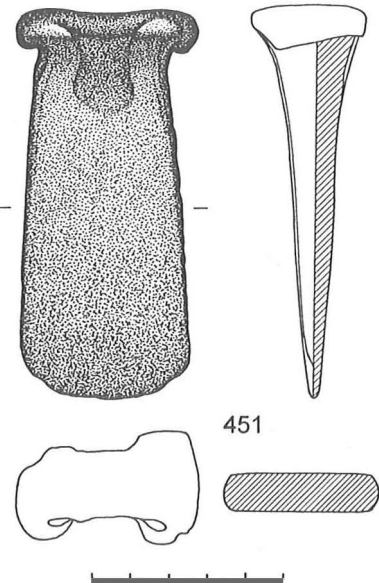


Fig. 3e. (probably Grigny/Swalmen, long): Baarlo, Li.

references; also p. 283, fig. 3).

Note: neither of the two possible find-spots of this axe is in an area in which bronzes occur. It may be that neither is an original find-spot; one could perhaps think, for example, of dumped gravel ballast.

Fragment probably of Grigny-Swalmen axe:

CAT.NO. 451. BAARLO, *GEMEENTE* MAASBREE, LIMBURG.

L. (10.2); w. 4.4 cm. (fragment; the blade half is preserved). Seemingly broken in antiquity, and re-used as wedge, hammer, or anvil;

the post-break butt has been very heavily hammered, and is pitted. Part of the hollowing under the (missing) wings is preserved. The blade part has a slightly convex outline, with flattish faces and rounded sides. The cutting edge is blunted, and is also pitted. Patina mostly black, part mottled green. Found near Baarlo, between the Nachtegaalstraat and the Napoleonsbaan, by a farmer, from whom it was acquired by Father Cornelis Thijs (head of the monastery), whose collection passed early in the '70s to the *Stichting Historische Werkgroep de Borch*, Baarlo. (DB 2461)

Map reference: Sheet 58E, c. 204/371.

Associated finds of Grigny-Swalmen axes:

Of special interest are the Grigny axes excavated by F.C. Bursch in 1937 from two adjacent tumuli (of a group of four or five mounds) at Hillenraad, Swalmen (published, after small test re-excavations, by Lanting & Van der Waals, 1974; above, Cat.Nos 447-449). These are the specimens which have lent their name to Kibbert's *Variant Swalmen*. In Tumulus I, axe Cat.No. 448 was found deposited together with a whetstone at the north-east edge. Two other axes, our Cat.Nos 447 and 449 were found together at the north-east edge of Tumulus II. Unfortunately, neither the excavation of Bursch nor the re-examination of Lanting and Van der Waals yielded further useful information; neither central nor peripheral graves were found; there was no useful structural detail.

2.2.3. Type Grigny, Var: Swalmen, subvariant 'small', but looped (AXMWL:grig/swl<)

CAT.NO. 452. 'SOUTH LIMBURG' (dealer's attribution)
L. 14.2; w. (cutting edge) 3.6; th. (wings) 3.7, (body) 1.95 cm. Loop 2.5×0.45 cm. Weight 412.8 gr. Nearly straight, blunt butt; straight, parallel sides. Hafting part rectangular; body section rectangular. D-shaped medial wings, under which the body is slightly depressed; curved semi-stop. Patina: mottled; mostly brownish, with light green blisters; orange ochreous patches. According to antique dealer Berden, Roermond, found in S. Limburg. Museum: Venlo (Limburgs Museum); Inv.No. 11382 (loan). (DB 1783)

Reference: Butler, 1987: pp. 25-26, fig. 14:8.

Parallels: France: 2 ex. from Caix hoard (Blanchet, 1984: pp. 244-247, fig. 133); 1 ex. from hoard Erondelle (Blanchet, 1984: pp. 244-245, fig. 132); all from dép. Somme and in Museum Amiens.

Function Grigny axes: although the larger specimens may have been primarily weapons and prestige objects, most of the medium-sized and smaller specimens were undoubtedly used as tools, as is suggested by the evidence of resharpening present on many of the specimens.

Origin of the Grigny axes: There is no reason to suppose that these Grigny axes were locally produced; their small number and limited distribution in our area suggest that they are imported. Nor are they likely to have been made in any of the neighbouring areas, where they occur rarely. In all probability they are, as we have suggested previously (Butler, 1987:

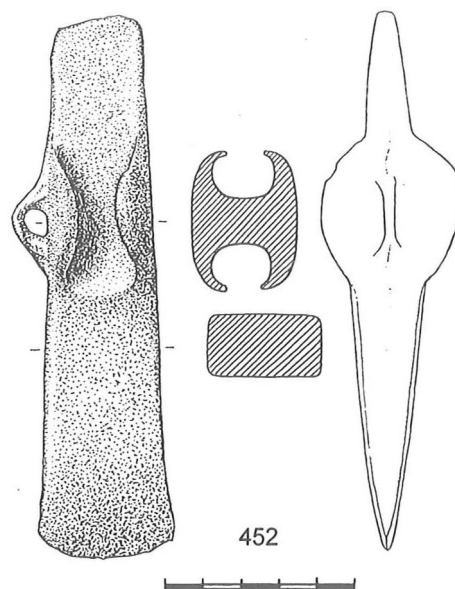


Fig. 3f. (AXMWL:grig/swl<) Type Grigny/Swalmen, small, looped. 452: 'South Limburg'.

pp. 23-26, 30, 32 under No. 8), imports from the East French area (cf. Map 3) via the River Maas route, despite their surprising scarcity in Belgium, apart from the Maaseik hoard, found on the Belgian side of the Maas. The arrival of the Grigny axes in the Maas area must in some way be connected with the occurrence in the Maas area of a small number of swords and dirks of the West French Rosnoën type (Butler, 1987: pp. 19-20, figs 12:13, p. 32, note 7) and some at least of the flame-shaped spearheads also found in the same area (Butler, 1987: pp. 13-17, figs 5:8), suggesting some sort of incursion from north-east France.

Dating of the Grigny axes: Kibbert (1984: pp. 52-54) taking account of the evidence of Millotte et al. (1968) and from other areas, dates the Grigny axes to the German *frühe* and *ältere Urnenfelder* times (in France *Bronze final I and II*), with allowance for some examples occurring in hoards of later deposition.

2.3. Midwinged axes, Italian ('Terremare') Type (AXMW:it.tm) (fig. 4)

CAT.NO. 453. PROVENANCE UNKNOWN.

L. 16.5; w. (butt) 4.9, (shoulder) 2.7; th. (waist) 2.2, (blade) 3.9 cm. Weight 169 gr. Long, narrow, thin winged axe. Rounded butt with wide shallow notch. Trapeze-shaped neck (widest toward butt); middle part with thin leaf-shaped wings between flat faces, far apart at the centre. At their base on the side a slight ridge; slight stopridge on face. Blade part of oval section, fanning out gracefully to a straight, sharp cutting edge. Patina: fine glossy dark greenish-blue; fine blue-green glossy 'Edelpatina'. A small part has been filled off, showing blackish. For 90% very well preserved. Museum: Nijmegen (Museum Het Valkhof), Inv.No. xxx.d.30; ex coll. Kam. (DB 1536)

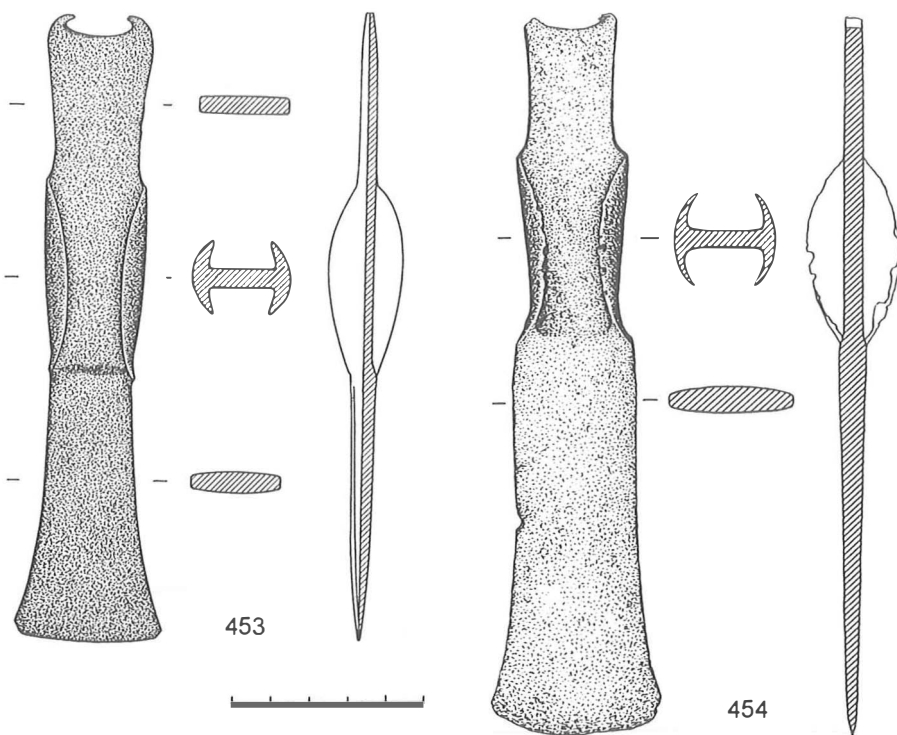


Fig. 4. (AXMW:it.tn). Type 'Terremare'. 453: provenance unknown; 454: ?Bornwird, Fr.

Comment: neither the form nor the patina are frequently met with in the Netherlands. Presumably, therefore, modern import.

CAT.NO. 454. (?) BORNWIRD, *GEMEENTE WESTDONGERADEEL*, FRIESLAND. Allegedly from the 'terp'.

L. 19.2; w. 4.5; th. (wings) 2.5, (blade) 0.7 cm. Long, slender, thin model. Saddle-shaped butt. Head with slightly concave sides, separated from fairly short wing part (the wings do not meet in the centre) by a shoulder; the wing part separated by a slight hip from a long blade part with slightly concave outline. Patina: dark bronze (partly cleaned mechanically); inside wings, grey-green on one side; on other deposits of ferruginous sand. Museum: Leiden (R.M.O.), a.1924/1.1. Purchased from A. Verleur of Nijkerk. (DB 534)

Map reference: Sheet 6B, c. 192/594.

Parallels and dating: Related axes are classified by Mayer (1977: pp. 147-148, Nos 633-640, esp. Nos 635-636) under the heading *Lappenbeile mit doppelgetrepptem Umriss*. He cites parallels especially in Italy, but extending over a wider area in southern and southeastern Europe, in Central European Late Bronze Age times.

Comment: Late Bronze Age bronzes, native or exotic, are practically unknown from the north Netherlands coastal terp area, and the authenticity of the claimed find-spot may be subject to some skepticism.

3. GROUP II. MIDWINGED AXES, UNLOOPED, WITH 'HEAD AND SHOULDERS', OGIVAL OUTLINE (AXMW:H&S) (figs 5a-5d)

Here we group together a number of unlooped winged axes that are tripartite. They have a 'head' part, separated by a distinct shoulder from the wing part; which passes over into the blade part with little or no 'hip'. Hereby several of Kibbert's types are encompassed. The nine examples in the Netherlands are predominantly from Limburg (five examples; two of these are in the Berg en Terblijt hoard); two are from North Brabant, and one from Gelderland; plus one unprovenanced piece. In length they range from 14.0 to 17.3 cm, but most are on the smaller side, in general slightly smaller than the axes of the Grigny group. In width they vary from 3.2 to 4.9 cm, most being in the 3.9 to 4.9 range.

CAT.NO. 455. VILT, *GEMEENTE BERG EN TERBLIJT* (NOW *GEMEENTE VALKENBURG A.D. GEUL*), LIMBURG. Hoard. L. 16.4; w. 4.4; th. 4.5 cm. Butt rounded, with diminutive, eccentrically placed notch. Short, trapeze-shaped head, separated by shoulder from long wing part; the wings meet in the centre. Body with ogival outline. Cutting edge sharpened, but one blade tip is broken away. Patina: glossy dark green. Loamy encrustation. Museum: Maastricht, Inv.No. 217 (Berg en Terblijt 1010.XII). (DB 1437)

Map reference: Sheet 62A, c. 184/318.

References: De Loë, 1931: pp. 103-104; Mariën, 1952: p. 224, No. 208; Butler, 1973: p. 337,afb. 14-15; Desittere, 1974: p. 118,

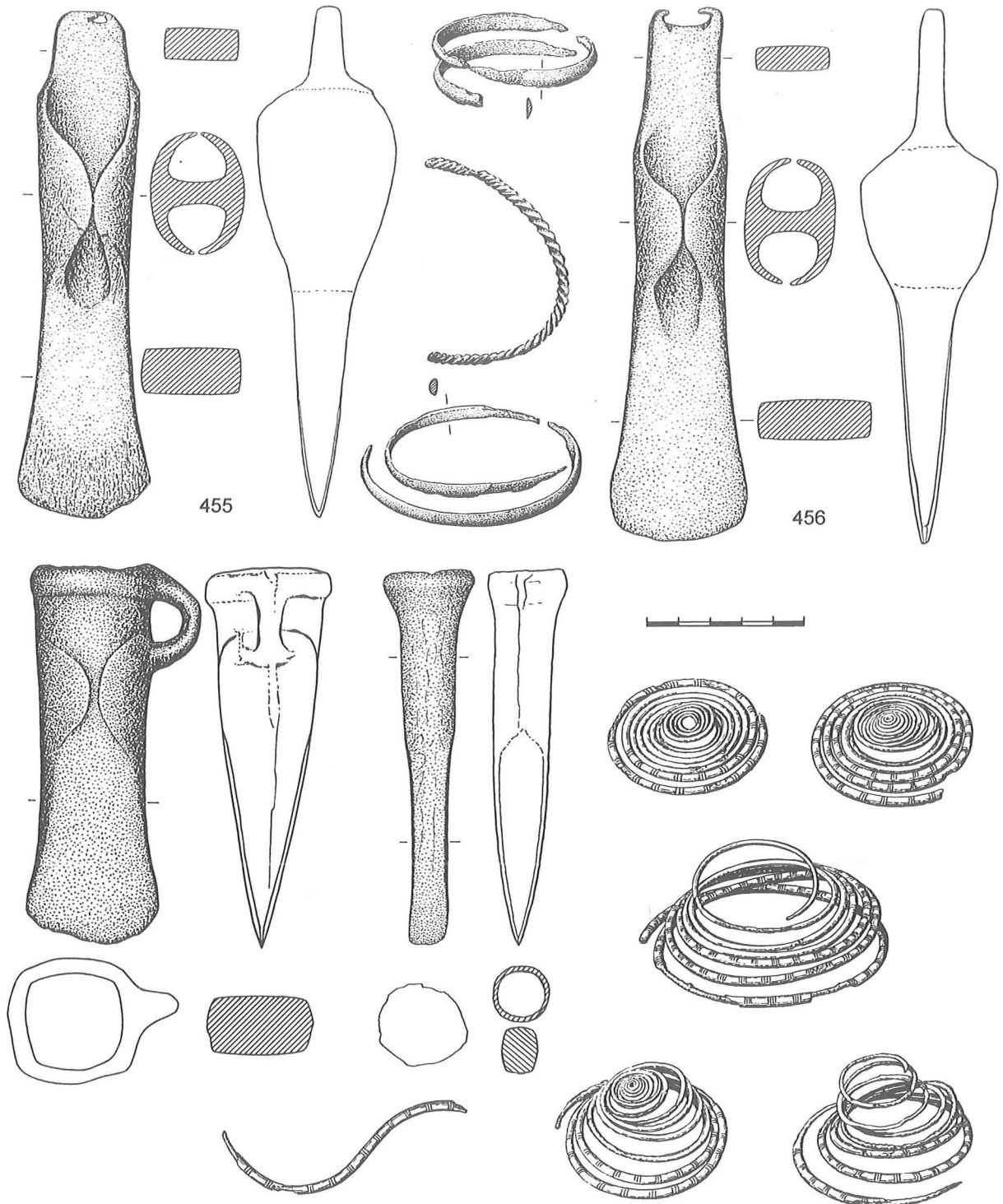


Fig. 5a. (AXMW:H&S). Type 'head and shoulders'. 455-456: part of Berg en Terblijt hoard, Li. (cf. fig. 4b)

liste 3, No. 11; De Laet, 1982: p. 496; Wielockx, 1986: Cat.No. VI.1.

Associations: similar winged axe, Cat.No. 456 below. From large hoard, also containing a socketed axe with imitation wings, socketed spearheads, knobbed sickles, socketed spearheads, a

socketed chisel, spirally wound wire ornaments, etc. (Butler, 1973: pp. 336-337, fig. 14a-b); Kibbert, 1984: pp. 65-69, 148 ff.; Wielockx, 1986: II, No. VI.1, VI.2, Hu4; III, pp. 449-450.

Parallels: Kibbert, 1984: pp. 60, 65, No. 146 ('Rheinessen', no exact provenance), assigned by him to his *Type ayk*; Belgium:

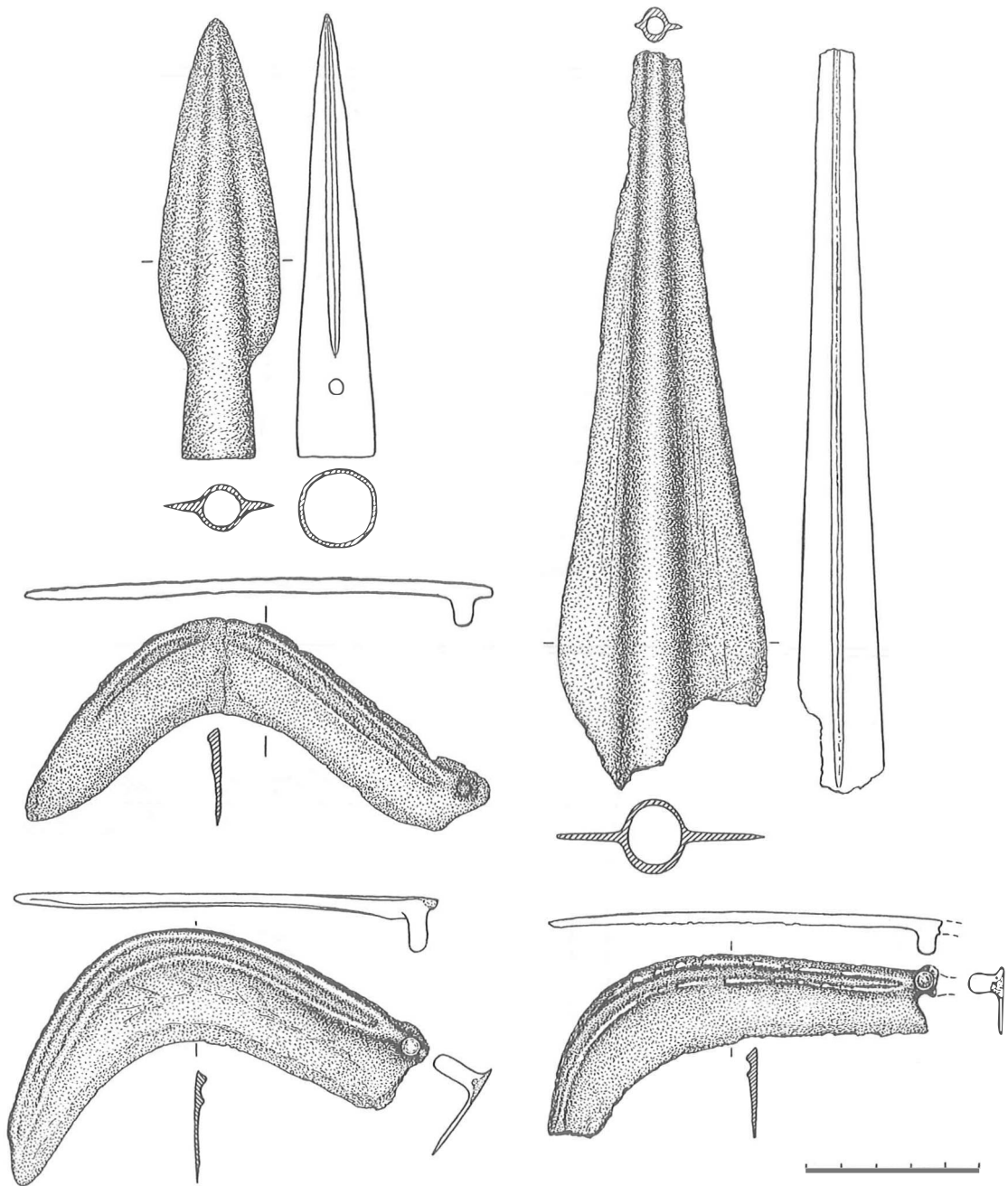


Fig. 5b. Part of Berg en Terblijt hoard. (cf. fig. 4a)

several more or less similar examples from cave Han-sur-Lesse, in Museum Han-sur-Lesse (Warmenbol, 1989; Wielockx, 1986: II, No.VI.6, VI.8).

CAT.NO. 456. VILT, GEMEENTE BERG EN TERBLIJT (NOW GEMEENTE VALKENBURG A.D. GEUL), LIMBURG. From hoard.

L. 17.3; w. 4.5; th. 4.5 cm. Butt with broad shallow notch, the tips of which are hammered inward. Long narrow head, separated by shoulder by wing part; the long wings meeting in the centre. Long, ogival blade part. Cutting edge sharpened, but battered. Patina: dark glossy green to blackish. Finely preserved, apart from slightly

damaged cutting edge. Loamy encrustation. Found 1866 in ploughed field ("Trouvé le 15 Nov. 1866, dans la terre de labour"). Museum: Maastricht, Inv.No. 218.

Associations: similar winged axe (Cat.No. 455). (DB 1438)

Map reference: Sheet 62A, c. 184/318.

References: De Loë, 1931: pp. 103-104; Mariën, 1952: p. 226; Butler, 1973: p. 337, afb. 14-14; Desittere, 1974: p. 118, liste 3, No. 11; De Laet, 1982: p. 496; Wielockx, 1986: Cat.No. VI.2.

Associations: see under Cat.No. 455.

Parallels: Among Kibbert's Nos 189-196, assigned by him (pp. 64 ff.) to his *Typ Buchau*.

Dating: Kibbert (1984: p. 68) dates the Berg en Terblijt hoard

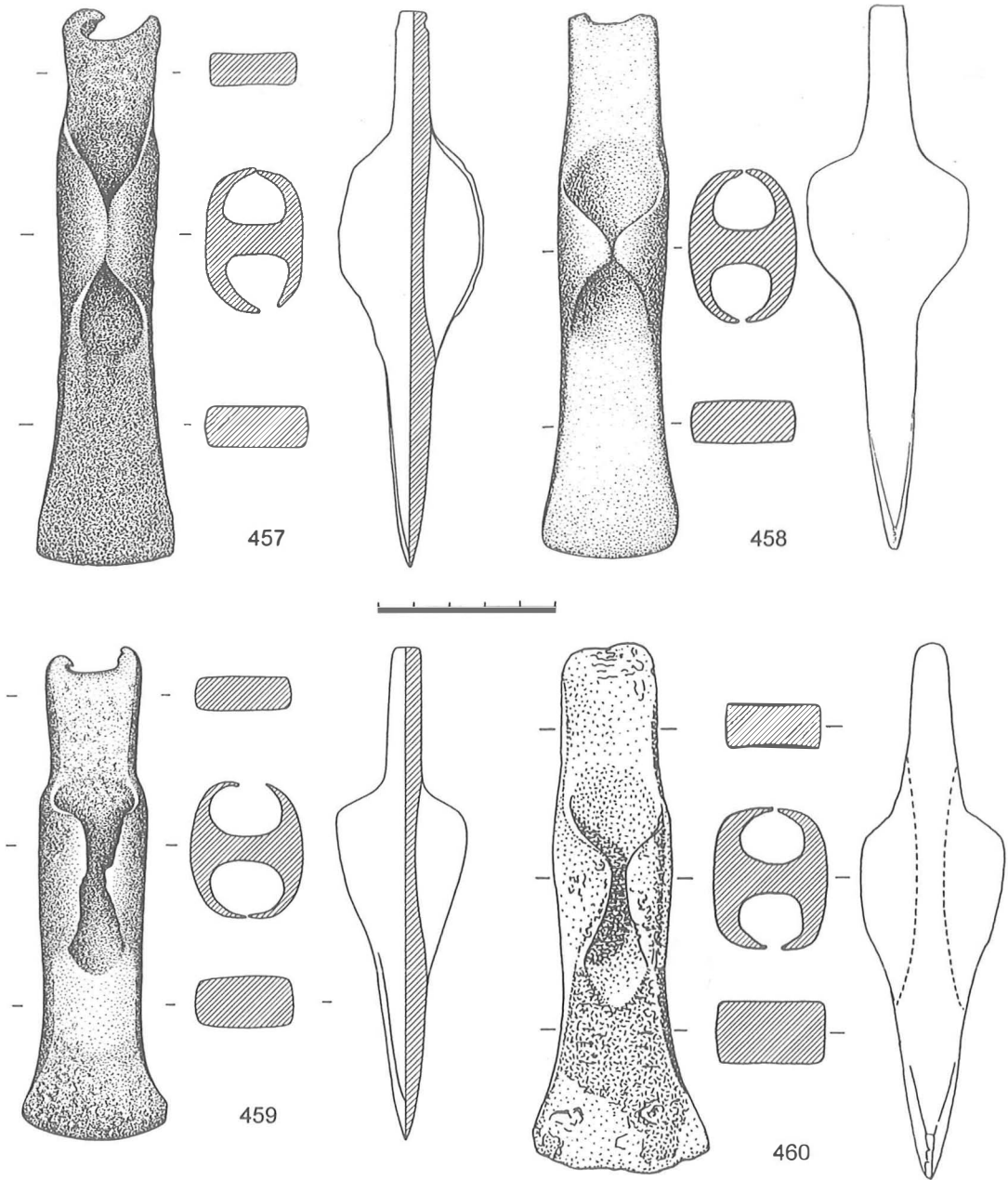


Fig. 5c. (AXMW:H&S). Type 'head and shoulders'. 457: provenance unknown; 458: Hemmen, Ge; 459: Vierlingsbeek, N-B; 460: Belfeld, Li.

to his *Stufe Oberneck* (=HaBI), parallel with earlier Period V in the North European chronology.

Note: The Berg en Terblijt hoard will be described and discussed in Butler & Steegstra, Part IV of this series, in preparation.

CAT.NO. 457. PROVENANCE UNKNOWN.

L. 15.8; w. 3.9; th. 4.1 cm. Weight 420 gr. Butt with wide, asymmetrical indentation. Short inverted-trapeze-shaped neck with ogival outline; separated by shoulder from long wings meeting in centre; trapeze-shaped, slightly ogival blade part with [] section. Cut-

ting edge sharp. Patina: mottled powdery green to blackish. Museum: Nijmegen, Inv.No.xxx.d.12, ex coll. Kam. (DB 1531)

Parallels: Germany: Kibbert, 1984: No. 141 ('Rheinessen', Rheinland-Pfalz); No. 163, Taf. 12 (Bad Honnef, Rhein-Sieg-Kreis, Nordrhein-Westfalen), No. 171, Taf. 12 ('Münsterland?').

CAT.NO. 458. HEMMEN, GEMEENTE VALBURG, GELDERLAND.

L. 15.5; w. 3.9; th. 4.6 cm. Butt with flattened U-shaped notch. Head parallel sided, separated by slight shoulder from short wings, meeting in centre. Blade part with ogival outline. Cutting edge sharp. Patina: dark green. Loamy encrustation. Museum: R.M.O. Leiden, e.1921/12.5. Ex coll. Verleur. (DB 398)

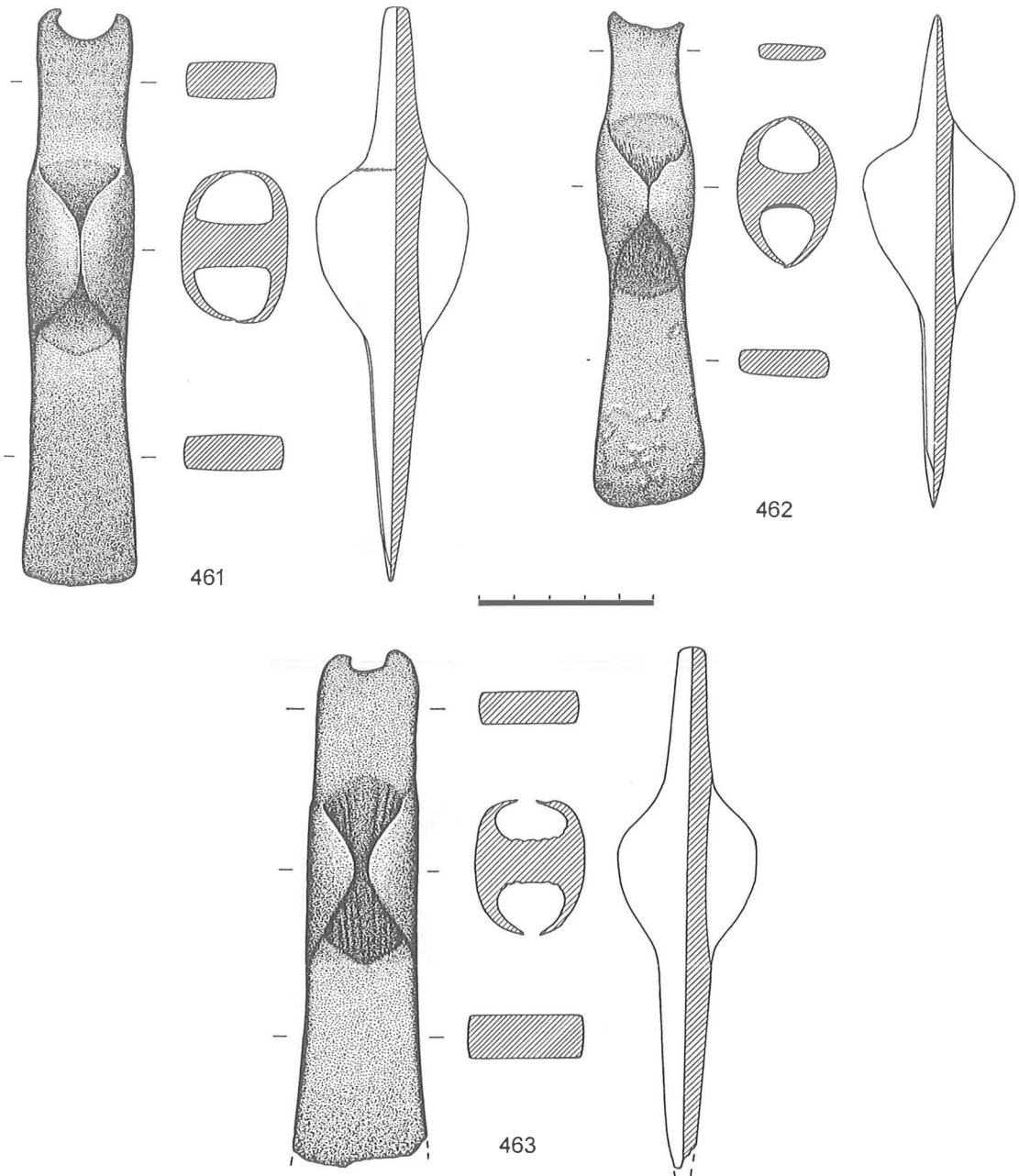


Fig. 5d. (AXMW:H&S). Type 'head and shoulders'. 461: Wessem or Stevensweert, Li; 462: Bergen, Li; 463: betw. Hapert and Hoogeloon, N-B.

Map reference: Sheet 39F, c. 176/438.

References: Holwerda, 1925: p. 69, afb. 25; Heemskerck Düker & Felix, 1942: Pl. 96.

Parallel: Germany: Kibbert, 1984: p. 61, No. 149, Taf. 11 (Bingen, Kr. Mainz-Bingen, Rheinland-Pfalz).

CAT.NO. 459. VIERLINGSBEEK, *GEMEENTE* VIERLINGSBEEK, NOORD-BRABANT (dealer's provenance).

L. 14; w. 4.3; th. 3.9 cm. Butt with flattend-U-shaped indentation; inverted-trapeze-shaped head, separated by shoulder from wings, nearly meeting in centre (one wing has ragged edge). Blade part is

parallel-sided, but has flaring cutting edge tips. U-shaped sharpening facet. Cutting edge sharpened. Patina: mostly dark bronze (mechanically 'cleaned', but light green in numerous small pits. Museum: Leiden (R.M.O.), Inv.No. k.1896/9.9 (old No. I.576). Purchased from (dealer) J. Grandjean (Nijmegen). (DB 360)

Documentation: R.M.O., letters received 1896/159; 1896/188, 219, 222.

Map reference: Sheet 46D, c. 206/369.

Parallel: France: 1 example from hoard Erondelle (dép.) Somme, in Museum Amiens (Blanchet, 1984: pp. 244-245, fig. 132).

CAT.NO. 460. BELFELD, *GEMEENTE* BELFELD, LIMBURG. L. 15.1; w. 4.9; th. 4.0 cm. Edge battered. Patina: black, with green blisters; ochreous sand encrustation. Museum: Liège, number unknown. 'Don de Mme Henri Schuermans-Sleegers'; paper label: Schuermans 55. (DB 648)

Map reference: Sheet 58E, c. 206/369.

Reference: Servais & Hawal-Nandrin, 1929: p. 61, E; Tag: R.4, p. 220, 3-7-1924.

Parallel: Germany: Kibbert, 1984: p. 61, No. 159, Taf. 11 (Trechtingshausen, Kr. Mainz-Bingen, Rheinland-Pfalz). Belgium: 1 ex. probably from Daknam, in Museum Antwerp.

CAT.NO. 461. WESSEM OR STEVENSWEERT, LIMBURG. River Maas.

L. 16.2; w. blade 3.3; th. 4.4 cm. Butt with large U-shaped indentation; head with ogival outline; separated by slight shoulder from part with D-shaped wings, meeting in centre, with slightly convex outline. Blade part nearly rectangular, faintly ogival outline. Cutting edge sharp. Patina dark brown, ochreous encrustation under and adjacent to wings. Surface slightly rough; otherwise very well preserved. Dredge find, 1990. Private possession; purchased from dredger by present owner. (DB 2427)

Parallel: Belgium: 1 ex. from Han-sur-Lesse, in Museum Han-sur-Lesse.

CAT.NO. 462. BERGEN, *GEMEENTE* BERGEN, LIMBURG. In the forelands.

L. 14.2; w. 3.2; th. 4.3 cm. Butt with wide shallow concavity, slightly irregular. Head part with concave sides, separated by shoulder from wings with markedly convex outline, meeting in centre. Blade part with ogival outline, narrow trapeze shape. Cutting edge sharp, asymmetrical. Patina: mostly bronze colour; some green, with traces of wood on septum. Found in dredging gravel. Private possession. (DB 2174)

Map reference: Sheet 46D, c. 199.2/400.5.

CAT.NO. 463. BETWEEN HAPERT AND HOOGELOON, *GEMEENTE* BLADEL, NOORD-BRABANT.

L. 14.8 (was slightly longer); w. 3.8; th. 3.9 cm. Weight: c. 420 gr (on kitchen scale). Round butt with U notch. Head with parallel sides, separated by very slight shoulder from short wings not quite meeting on the face. The hollow under the wings is roughened with vertical ribbing. Blade part almost parallel-sided. Cutting

edge broken away. Patina: smooth, dark green with black patches. Some pitting; some scratches; on the side not drawn, deep scratch from butt to top of the wings. Found in the 1990's with metal detector, in maize field near the farm Landorp, on the Hoogeloonseweg between Hoogeloon and Hapert. Private possession. (DB 2483)

Map reference: Sheet 51C, 146.7/376.3.

Note: the vertical ribbing under wings is paralleled on some specimens in France; cf. Frouard (Moselle); without provenance (Millotte et al., 1968: No. 120, Museum Clermont-Ferrand).

3.1. Decapitated winged axes, probably related to midwinged axes with 'head and shoulders' (AXMW:decap) (fig. 6)

Traditionally such axes as these are classified as 'end-winged'. In the case of the two specimens listed here, it seems most probable that a head part has been battered off, and that they therefore were originally cast as 'head and shoulders' axes. In any case they would have been unlooped.

CAT.NO. 464. BOONENBROEK, ST. JOOST, *GEMEENTE* ECHT, LIMBURG.

L. 10; w. 3.7; th. 3.65 cm. Outline ogival. Short specimen. No head, which was apparently roughly broken off. Wings do not meet. Very short blade section (with a length of only 3.8 cm), but there is no resharping facet. Cutting edge battered. Patina: dark mottled green/brown. Museum: R.M.O. Leiden, I.1938/6.54. Ex coll. L.D. Keus (Venlo). (DB 472)

Map reference: Sheet 60B, c. 191.6/347.

Parallels: Cf. Cat.No. 465 (unprovenanced). A similar piece, with head and shoulders intact, would be Kibbert No. 164 (1984: pp. 59-62, from Oppenheim, Kr. Mainz-Bingen, Rheinland-Pfalz) which he classifies as *Typ ayk* and transitional to *Typ Lindenstruth-Obernbeck*, and which he (p. 65) compares to the axes from the Berg en Terblijt hoard (our Cat.Nos 453-454). Similar, but with a longer blade part, is the winged axe from the Jutland (Denmark) hoard of Ørum-Basland; which, however, Kibbert (1984: pp. 71-74) assigns to his *Form Hillesheim, Var. Linz/Ørum* (his Nos 227-231).

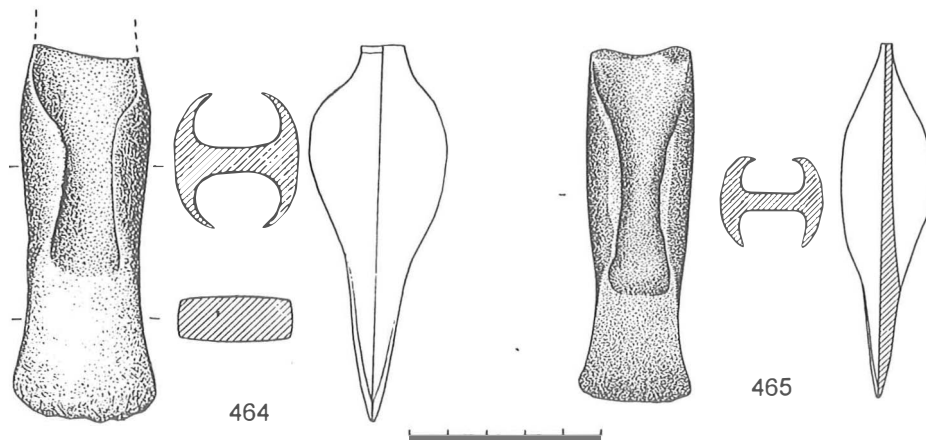


Fig. 6. (AXMW:decap). Type probably 'head and shoulders', but decapitated. 464: Boonenbroek, Li; 465: provenance unknown.

CAT.NO. 465. PROVENANCE UNKNOWN.

L. 9.4; w. 3.0; th. 2.4 cm (slightly reduced by secondary hammering on wings on one face). Weight: 145.2 gr. Butt with saddle (recent hammering on tips). Outline ogival. Wings not meeting, over depression with straightish lower edge. Blade part is only 2.8 cm long. Cutting edge somewhat blunted (recently?), almost straight. Patina: mildly glossy, blackish, with greeny tinge. Light brown loamy encrustation. Museum: Nijmegen (Museum Het Valkhof), Inv.No. 6.6.30. (DB 1564)

Parallel: Cf. Cat.No. 455. Kibbert, 1984: No. 56 (Frankfurt-Preungesheim, Hessen) and 58 ('Mainz'), both with head but no shoulders, assigned by Kibbert to *Typ Caka*.

Origins and dating of Group II axes: The corpus of Millotte et al. (1968) does not have many axes of this category; whether they are scarce in the French area, or have been omitted as irrelevant to their discussion of midwinged axes, is not clear. At least two hoards in Picardy (Erondelle, Somme: Blanchet, 1984: fig. 132) and Caix, Somme (Blanchet, 1984: fig. 133), both assigned to Bronze final II, contain Grigny axes and 'head and shoulders' axes, suggesting a common origin and some overlap in the time of use of axes of these two groups.

In the German North Rhine area, between Maas and Rhine, Kibbert has only three examples which we would include in the 'head and shoulders' cate-

gory: two, possibly found together, from Straelen, Kr. Geldern (his Nos 199-200), which he classifies as *Oberständige Lappenbeile der Form Bingen-Straelen* and one from Titz (secondary findspot, sugar factory), his No. 12, with blade much shortened by re-sharpening. Kibbert (1984) includes axes which we list in the 'head and shoulders' group in half a dozen different types and varieties, occurring from the German period *mittlere Urnenfelder* (Hanau II) (= earlier Montelius IV) to *jüngere Urnenfelder* (*Stufe Obernbeck*) (=earlier Montelius V).

It may be noted that the Berg en Terblijt assemblage includes a socketed axe with imitation wings, of one of our Maas types. This, together with the Ørum-Basland hoard in Denmark (Thrane, 1965: *Inventaria Arch* DK 5; cf. Kibbert, 1984: pp. 71-73, 141), where a socketed axe with imitation wings is also associated with an unlooped winged axe, are evidence for a contemporaneity of these two types in a period regarded by Kibbert as corresponding to his *Stufe Obernbeck* and an early phase of Montelius V.

4. GROUP III. HIGHWINGED TO ENDWINGED AXES WITH LOOP (AXHWL:...) (figs 7a-7b)

These axes belong in general to the winged axes of Type Homburg (Kibbert, 1984: pp. 90-97, Nos 288-547), an extremely numerous and widespread group with numerous variants.

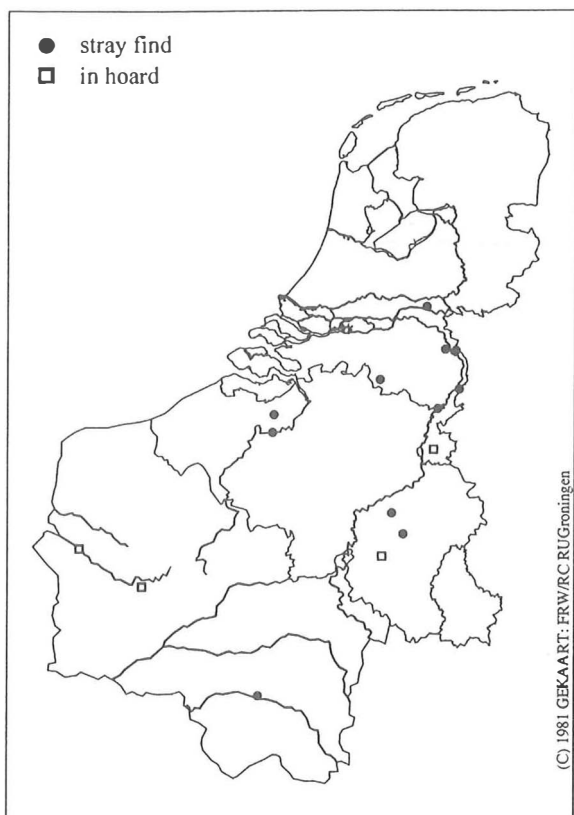
In the Netherlands Homburg axes occur in nine examples: four in Limburg, one in North Brabant, two in Gelderland, one in Overijssel, one unprovenanced. In length they vary from 11.5 to 15.5 cm, in width from 3.4 to 4.5 cm, most being in the range from 3.4 to 3.9 cm. They are thus generally smaller than the Grigny and 'head and shoulders' axes. Most of our examples have a small 'head' part, which can be trapeze-shaped, inverted-trapeze-shaped, squarish, or rudimentary. Butt notches are no longer typical, but occur on two examples. Most have a rather slender waist and a more or less strongly expanded blade part (exception: Cat.No. 474 from Nijmegen, with no waist contraction and almost parallel-sided blade part). The D-shaped loop springs from the top of the wing part; it is of a size comparable with the size of the loop occurring on socketed axes of Plainseau and related types.

4.1. Type Homburg (AXHWL:hom)

CAT.NO. 466. MEGEN, *GEMEENTE MEGEN*, NOORD-BRABANT. River Maas.

L. 13.2; w. 3.9; th. 3.6 cm. Loop: 2.4×0.55 cm. Straight butt with shallow indentation in centre. Rather short head with / \ outline. The body has almost straight sides, but flaring at the blade tips (J outline). Museum: 's-Hertogenbosch, Inv.No. 8703. (DB 271)

Find-spot has been attributed to Appelteren in Gelderland, but



Map 5. Midwinged axes with 'head and shoulders' in the Netherlands, Belgium and the northern part of France.

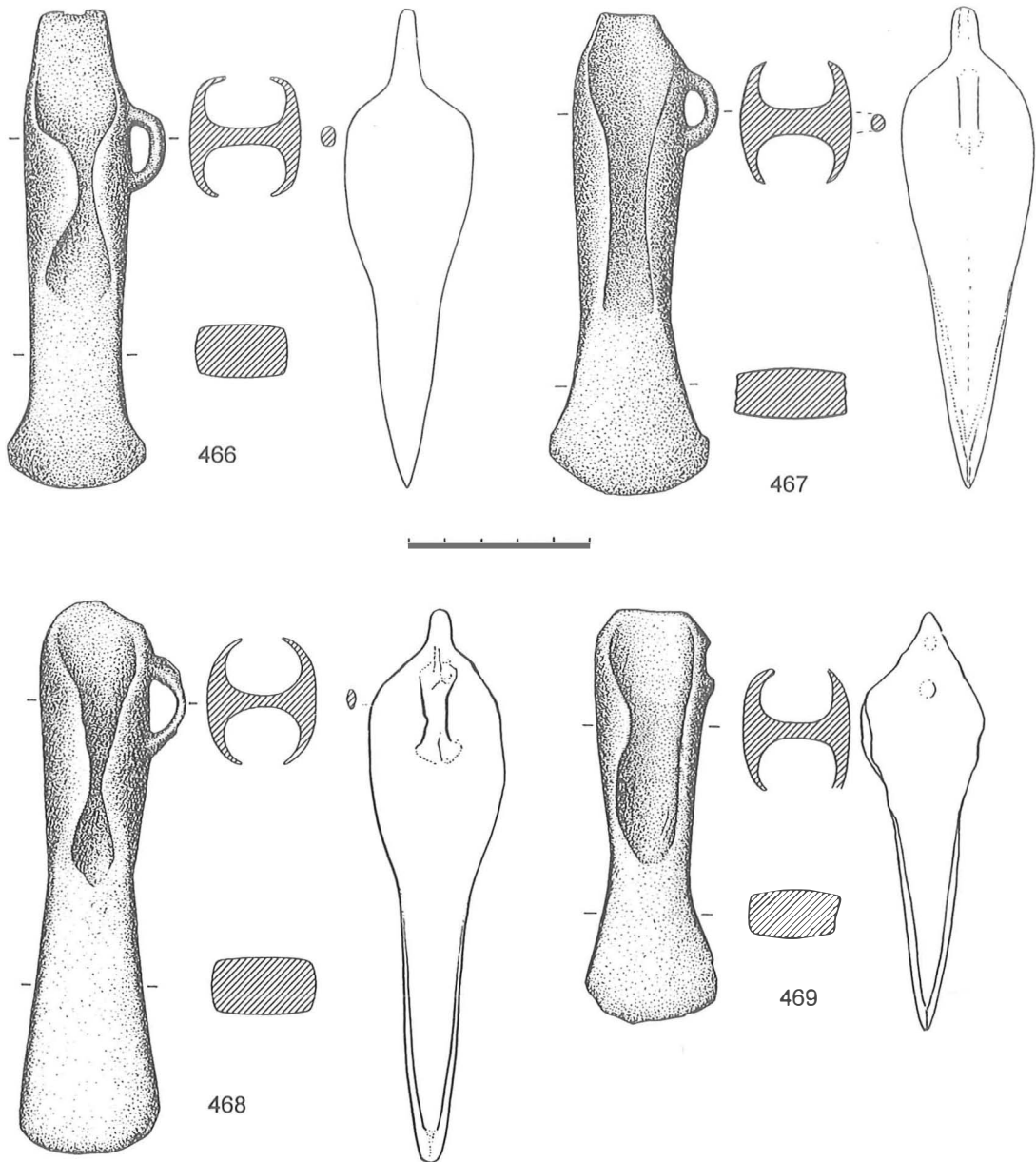


Fig. 7a. (AXHWL:hom). Looped: Type Homburg. 466: Megen, N-B; 467: Nederasselt, Ge; 468: Susteren, Li; 469: Roermond, Li.

according to C. de Mooy (Museum 's-Hertogenbosch) the axe was recovered on the North Brabant side of the Maas.

Map reference: Sheet 39G, c. 167/426.5.

Parallels: The J blade tips seem to be extremely rare on Homburg winged axes, at least in Kibbert; but cf. Kibbert, 1984: No. 246, Wesel, Kr. Rees (Rhine-Lippe confluence), Nordrhein-Westfalen, assigned by Kibbert to his Form Geseke-Biblis; No. 390, Kaiserslautern hoard, assigned by Kibbert to his *Kerntyp*. Belgium: 1 ex. from Gent, in Museum Gent. France: examples from Plainseau hoard (dép. Somme), in Museum Amiens (Blanchet, 1984: p. 283, fig. 156, Nos 41-42, 45-46); 2 ex. without notches from Frouard hoard (dép. Moselle) in Museum Nancy.

CAT.NO. 467. NEDERASSELT, *GEMEENTE HEUMEN*, GELDERLAND.

L. 13.5; w. 4.5; th. 3.65 cm. Straight butt. Short head with / \ shape, body with ogival outline. Immediately below head, long wings, not meeting in centre. D loop: 2.3x0.5 cm. springs from base of the head. Patina: bright glossy green; blackish under the wings. Well preserved. Museum: R.M.O. Leiden, e.1931.2.93. Legacy Gildemeester. (DB 442)

Map reference: Sheet 45F, c. 179/421.

Reference: Heemskerk Düker & Felix, 1942: Pl. 110 (middle).

Parallels: Germany: Kibbert, 1984: No. 387 (hoard I Wallerfangen, Kr. Saarlouis, Saarland); No. 422 (hoard Bad Homburg, Hochtaunuskreis, Hessen). France: 1 ex. from Paris (River Seine), in British Museum London.

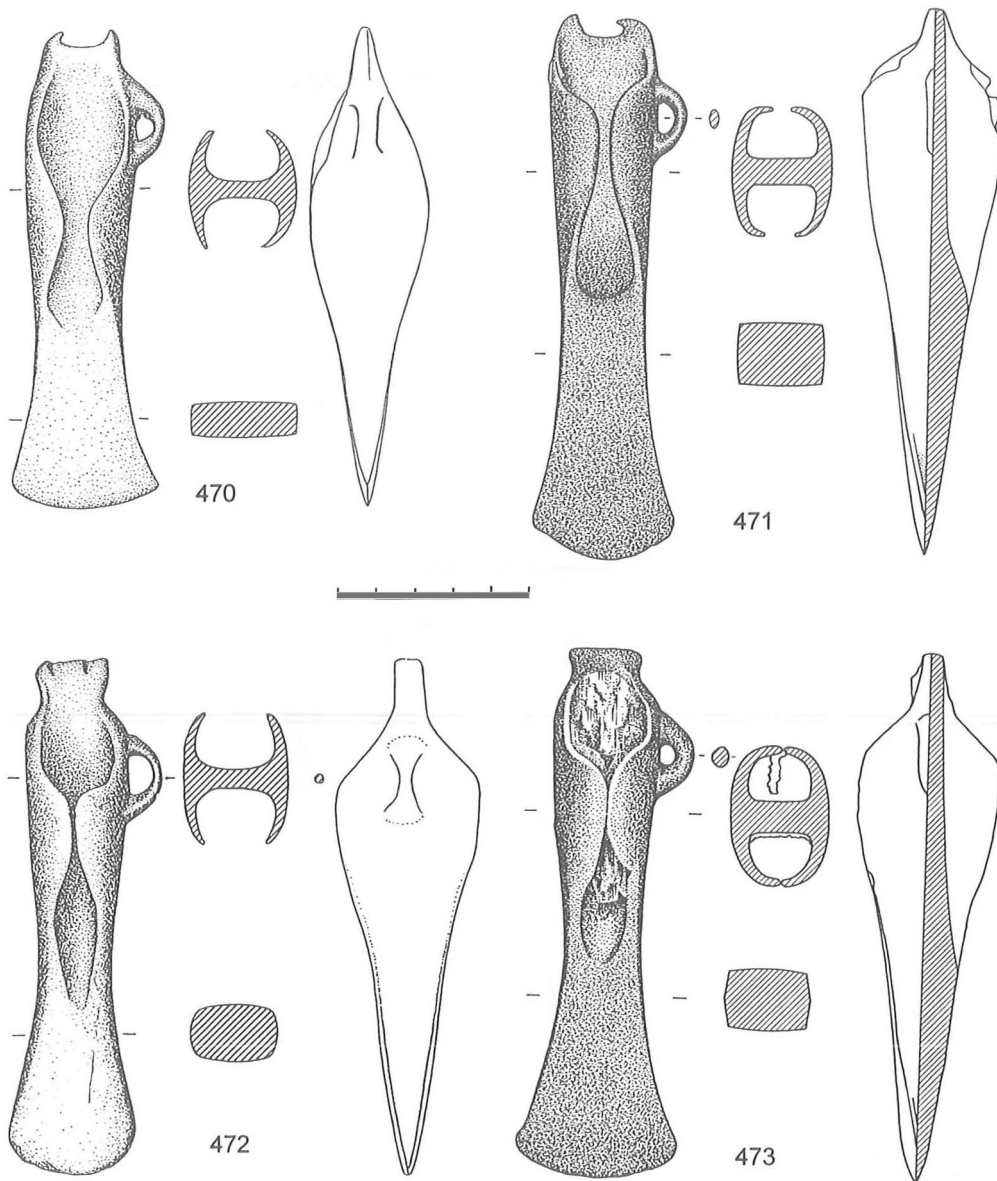


Fig. 7b. (AXHWL:hom). Looped: Type Homburg. 470: Vriezenberg, Ov; 471: Maasbracht, Li; 472: Peij, Li; 473: provenance unknown.

CAT.NO. 468. SUSTEREN (BROEK), GEMEENTE SUSTEREN, LIMBURG.

L. 15.5; w. 3.9; th. 3.75 cm. Loop 2.9×0.6/1.0 (hourglass outline). Butt round (butt damaged); wings begin directly thereunder, nearly meeting in centre. Blade outline narrow trapeze. Cutting edge blunt. Patina: dull blackish; partly bright green. Museum Asselt, Inv.No. 234 (paper label AS 311). Ex coll. Philips; acq. Jan. 1929 with coll. Orta. (DB 55)

Map reference: Sheet 60B, c. 190/343.

Documentation: Handwritten manuscript *Inventaire Philips*, No. 234; R.O.B. photo KB 2345-22.

References: Desittere, 1974: p. 118, liste 3, No. 8; Wielockx, 1986: Cat.No. VI.23.

CAT.NO. 469. ROERMOND (BIJ DE MAAS), GEMEENTE ROERMOND, LIMBURG.

L. 11.5; w. 3.7; th. 3.5 cm. Small model. Butt nearly straight; wings begin directly thereunder. Part of one wing absent. No head. Loop broken off, wingflanges partly broken away. Blade part with / \ shape. Cutting edge abraded. Heavily corroded. Patina: mottled; partly dark brown, partly dark green. Museum: Asselt, Inv.No. 89; ex coll. Philips. "Acquis pour 20 francs avec le no. 86 à Mr. Emile v. Doren de MaeseycK". (DB 53)

Map reference: Sheet 58D, c. 196/357.

Documentation: Handwritten catalogue *Inventaire Philips*, No. 89; R.O.B. photo KB 2346-22;

References: Desittere, 1974: p. 118, liste 3, No. 5; Wielockx, 1986: Cat.No. VI.22.

Parallels Cat.Nos 468-469: Kibbert, 1984: p. 95, No. 393, Taf. 31 (Ockstadt, Wetteraukreis, Hessen); p. 96, No. 420, Taf. 33 (Bad Homburg, Hochtaunuskreis, Hessen). France: Paris, R. Seine (F. 2190), *Typ Homburg, Var. Odendorf-Gössenheim* (Kibbert, 1984: pp. 87-89, Nos 288-319).

CAT.NO. 470. VRIEZENBERG, *GEMEENTE* MARKELO, OVERIJSEL.

L. 12.5; w. 3.9; th. 3.1 cm. Butt with broad U-notch, one prong vertical, the other bent inward. Body with ogival outline. Long wings, not meeting in centre. D loop (2.7×0.6 cm). Cutting edge sharp. Patina: dark bronze, mottled with black. Found May 1923 at the foot of the Vriezenberg. Museum: Enschede, Inv.No. 405 (old No. 0.363). Presented by M.G. van Heel of Rijssen. (DB 1044)

Map reference: Sheet 28D, 321/476.

Documentation: Notes by Mr. G.J. ter Kuile in his copy of Pleyte, *Nederlandsche Oudheden: Overijssel*, 1985: p. 40 (property Oudheidkamer Twente, Enschede).

CAT.NO. 471. MAASBRACHT, *GEMEENTE* MAASBRACHT, LIMBURG.

L. 14.4; w. 3.75; th. 3.5 cm. Loop: 2.2×0.5 cm. Round butt with asymmetrical notch. Wings almost meeting in centre. Body with ogival outline. Cutting edge sharp (but partly damaged). Blade part has rectangular section. Patina: dark green; more or less like Cat.No. 474, but with encrustation of pebbles under the wings. Wings damaged on one side. Museum: Stein, Inv.No. IIb6. (DB 1329)

Map reference: Sheet 58D, c. 190/350.

Parallels Cat.Nos 470-471: Germany: Kibbert, 1984: p. 87, No. 294, Taf. 23 (Hochstadt, Main-Kinzig-Kreis, Hessen). From Luxembourg: 1 ex. with no notches, in Museum Luik.

CAT.NO. 472. PEIJ, *GEMEENTE* ECHT, LIMBURG.

L. 13.6; w. 3.4; th. 3.7 cm. Loop 2.2×0.25/0.8 cm (hourglass outline). Small, slender model with ogival outline. V shaped part of casting runners still attached. Directly below, wings that nearly meet in the centre. Blade part with curved / \ outline. Cutting edge sharpened but battered. Patina: glossy black, partly peeled away (there mottled dark green). Found 1927. Museum: Asselt, Inv.No. 236; ex coll. Philips. (DB 57)

Map reference: Sheet 60B, 192.70/344.20.

Documentation: handwritten catalogue *Inventaire Philips*, No. 236, with drawing; photo R.O.B.: KB-2346/22.

References: Desittere, 1974: p. 118, liste 3 (probably No. 7); Wielockx, 1986: Cat.No. VI.21.

Parallels: Kibbert, 1984: Nos 303, 305 (hoard Bad-Homburg, Bleibeskopf, Hochtaunuskreis, Hessen); No. 315, (Rockenberg, Wetteraukreis, Hessen), assigned by Kibbert, 1984: pp. 89-98 to *Typ Homburg Var. Odendorf-Gössenheim* (his Nos 288-319).

CAT.NO. 473. PROVENANCE UNKNOWN.

L. 13.8; w. 4.3; th. 3.8 cm. Weight 366 gr. Loop: 2.3×0.55 cm. Straight butt; short head, under which wings, meeting in centre. Long and narrow model, with ogival outline, the blade part flaring. Thick body, with stump of casting jet at top. Cutting edge sharpened. Fragment of wood in shaft-hollows. Patina: mottled green. Museum: Nijmegen (Museum Het Valkhof), Inv.No. xxx.d.31; ex coll. Kam. (DB 1537)

Parallels: 2 ex. in Germany: Kibbert, 1984: No. 290 (Gegend



Map 6. Highwinged axes with loop in the Netherlands, Belgium and the northern part of France.

von Wiesbaden, Hessen); No. 312 (Werges, Vogelbergkreis, Hessen). France: 1 ex. from hoard Frouard, (dép. Moselle), in Museum Nancy.

Origin of the Homburg axes: all the Netherlands examples have parallels in Belgium and France, and are most probably imports from that region via the Maas route. Their remarkable scarcity in the German North Rhine-Westphalian area would seem to rule out their coming to the Netherlands' Maas area via western Germany.

Associations: In the Netherlands there are no associated finds with Homburg axes. On the Belgian side of the Maas, however, there is the (presumed) hoard of Pietersheim, *gemeente* Lanaken, in which a Homburg winged axe is believed to be associated with five socketed axes (Heymans, 1984: pp. 132, 135; Wielockx, 1986: I, p. 88; II, No. VI. 13, Hu 85-88; III, pp. 486-9). Four of the socketed axes are of the Plainseau and related types; the fifth a socketed axe with imitation wings.

Dating: the Homburg axes are dated by Kibbert (pp. 104-105 and the discussion following) on the basis of a considerable number of associated finds, to the *späte Urnenfelderzeit* (hoard-phase Wallstadt), of which it constitutes an important type-fossil. The Pietersheim-Lanaken find(s) would, if a genuine association, be entirely consistent with this dating.

4.2. Type Geseke-Biblis (AXHWL:gb) (fig. 8)

CAT.NO. 474. NIJMEGEN, *GEMEENTE NIJMEGEN*, GELDERLAND.

L. 14.1; w. 3.5; th. 3.5 cm. Butt irregular. Squarish head, separated by slight shoulder from wings, nearly meeting. The wing edges have been hammered down so as to give the wing part a rectangular cross-section. Scoop with straight top, U base, with numerous hammer marks in the scoop. Blade part long, nearly parallel-sided, of rectangular section; widening very gently toward sharp cutting edge. D loop, 2.2×0.6 cm. Cutting edge sharp. Patina: dark green; mostly glossy, but the smooth surface is in places peeled off, showing dull rough green or blackish. Museum: Stein, I1b7. (DB 1330)

Map reference: Sheet 40C, c. 186/427.

Reference: Beckers & Beckers, 1940: p. 174, afb. 59, No. 7, p. 176.

Parallels: especially among Kibbert's *Lappenbeile der Form Geseke-Biblis* (1984: pp. 80-83); 1 ex. from Han-sur-Lesse, Belgium, in Museum Han-sur-Lesse. Kibbert (p. 83) cites some further parallels (cf. also his pp. 108-114).

Dating: Central European *späte Urnenfelderzeit* (*Stufe Wallstadt*) (Kibbert, 1984: pp. 80-83).

Fragment (fig. 9):

CAT.NO. 475. NIJMEGEN-LENT, *GEMEENTE NIJMEGEN*, GELDERLAND.

L. (2.4); w. 2.3 cm. Fragm. winged axe (head piece). Butt straight. Upper part rectangular section; onset of wings on flanges. Looks like deliberately broken (*Bruchez* fragment). Patina: dark brown. Light loamy encrustation. Found during archaeological excavation in the Laauwikstraat (*put 3, vondstnummer 60, objectnummer La 2*). Museum: section Archeology *Gemeente Nijmegen*. (DB 2420)

Map reference: Sheet 40C, c. 188/430.

4.3. Winged axe, type unknown

CAT.NO. 476. *GEMEENTE NUENEN*, NOORD-BRABANT. Museum: 's-Hertogenbosch, but unknown in the museum. (DB 945)

Reference: Beex, 1969: pp. 51-51.

5. SUMMARY AND CONCLUSIONS

In our presentation of the palstaves in the Netherlands (Butler & Steegstra, 1997/98) it could be shown that, alongside limited numbers of palstaves imported from northern, Central and western Europe, by far the larger number of specimens were of types native to this region, with considerable differentiation between northeast and southeast within the country. Much the same is true of socketed axes (*corpus* in preparation). In the case of the winged axes, however, there is no appearance of distinct native variants in the Netherlands. The typology and distribution suggest that all our winged axes, in their several varieties, are imports from the East French area, via the Maas route.

Apart from one transitional winged axe-palstave, a Middle Bronze Age import from Central Europe, the earliest winged axes in the Netherlands are the

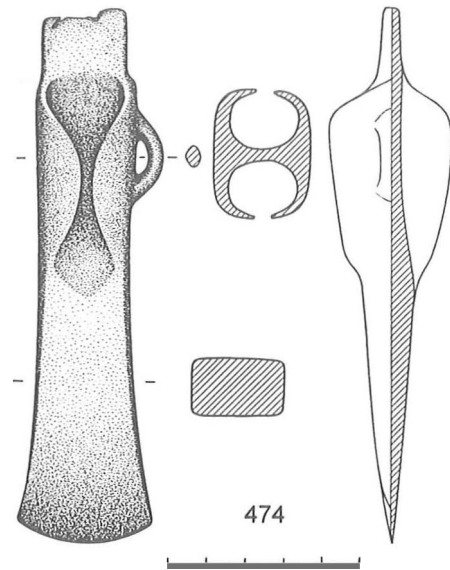


Fig. 8. (AXHWL:g/b). Looped. Type Geseke/Biblis. 474: Nijmegen, Ge.

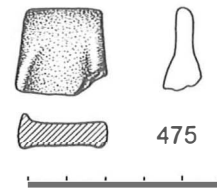


Fig. 9. (AXW). Type unknown (fragment). 475: Nijmegen-Lent, Ge.

less than a dozen examples of the Type Grigny, in four variants. None are locally datable; in Germany they are dated to the *frühe* and *ältere Urnenfelder* periods, in France to *Bronze final* I and II (corresponding to Bz B and Ha A). Noteworthy finds are the two small hoards, one of two large Grigny-Swalmen axes, the other of one similar axe with a whetstone, from two adjacent tumuli at Swalmen-Hillenraad, Limburg, as well as the Belgian hoard of Maaseik, with four large Grigny-Swalmen axes. These large Grigny axes may well have been weapons/prestige axes. They may have arrived as imports along with the Rosnoën swords which occur, though in small number, in the Maas area and with some of the spearheads with flame-shaped blade (Butler, 1987).

Overlapping at least partly in time with the Grigny axes, but apparently of similar origin, are the unlooped, medium to small-sized axes which we group together as 'head and shoulders' winged axes, with nine examples known in the Netherlands. Like the smaller Grigny axes, they are apparently tools. Two are in the Berg en Terbijt hoard, in south Limburg, assigned by Kibbert to the German *Stufe Oberbeck* (HaB1/early Montelius V).

Another group, with eight known examples in the Netherlands, consists of the looped winged axes of the Type Homburg. To these may be joined one specimen of the Type Geseke-Biblis. Though not found in hoards in the Netherlands, these types occur frequently in the hoards of the German *späte Urnenfelderzeit* (*Stufe Wallstadt*) and in the *Bronze final IIIb* in France and Belgium, where their context is defined by the Plainseau complex.

6. ACKNOWLEDGEMENTS

Herewith we express our heartfelt thanks to all – colleagues, museum directors and curators, private owners of objects, helpers in various ways in the Netherlands and outside – who have contributed to this and related parts of the present study. They are far too numerous to name individually, so we hope they will accept this collective thank you.

Our special indebtedness to Kurt Kibbert will be evident from the frequency of our citations of his monumental work on the axes of the *mittlere Westdeutschland* in the *Prähistorische Bronzefunde* series.

A special note of thanks is also due to Angela van Kleef (the Hague), whose willingness to take a deep plunge into the esoteric world of axe typology has been a great help.

We must also record our gratitude to the past and present draughtsmen of the Biologisch-Archaeologisch Instituut, now absorbed into the Groninger Instituut voor Archeologie, and very especially to the present practitioners Jan Smit and Miriam Weijns, for their invariably cheerful and competent work on the illustrations, and for their guidance of the drawing activity of one of the co-authors (H.S.).

The distribution maps, by H.S., are on the basis of the automatic mapping facility provided by J. Kraak and J.T. Ubbink of the University of Groningen Computer Centre.

For a contribution to travel costs we are grateful to the Foundation Netherlands Museum for Anthropology and Prehistory. See also the acknowledgments in our Part II:2 (*Palaeohistoria* 39/40, 1997/98: p. 272).

7. REFERENCES

- BECKERS, H.J. (Sr) & G.A.J. BECKERS (Jr), 1940. *Voorgeschiedenis van Zuid-Limburg, twintig jaren archaeologisch onderzoek*. Veldeke, Maastricht.
- BEEB, G., 1969. Archeologisch overzicht van de gemeente Nuenen. *Brabants Heem* 21, pp. 50-53.
- BLANCHET, J.-C., 1984. *Les premiers métallurgistes en Picardie et dans le Nord de la France* (= Mémoires de la Société Préhistorique Française 17). Société Préhistorique Française, Paris.
- BUTLER, J.J., 1973. Einheimische Bronzebeilproduktion im Niederrhein-Maasgebiet. *Palaeohistoria* 15, pp. 319-343.
- BUTLER, J.J., 1987. Bronze Age connections: France and the Netherlands. *Palaeohistoria* 29, pp. 9-34.
- DE LAET, S.J., 1982. *La Belgique d'avant les Romains*. Wetteren.
- DESITTERE, M., 1974. Quelques considérations sur l'âge du bronze final et le premier âge du fer en Belgique et dans le Sud des Pays-Bas. *Helinium* 14, pp. 105-134.
- FELIX, P., 1945. Das Zweite Jahrtausend vor der Zeitrechnung in den Niederlanden: Studien zur niederländischen Bronzezeit. Unpublished dissertation. Rostock. (Typescript copies in R.M.O., Leiden en B.A.I., Groningen)
- HEEMSKERCK DÜKER, W.F. VAN & P. FELIX, 1942 (3rd ed.). *Wat aarde bewaarde. Vondsten uit onze vroegste geschiedenis*. Hamer, Den Haag.
- HEYMANS, H., 1985. A la recherche des cinq haches en bronze de Pietersheim. *Helinium* 25, pp. 131-136.
- HOLWERDA, J.H., 1925. *Nederlands vroegste geschiedenis*. 2e druk. Van Looy, Amsterdam.
- KIBBERT, K., 1984. *Die Äxte und Beile im mittleren Westdeutschland II* (= Prähistorische Bronzefunde IX:13). C.H. Beck, München.
- LANTING, J.N. & J.D. VAN DER WAALS, 1974. Oudheidkundig onderzoek bij Swalmen, I. Praehistorie. *Oudheidkundige Mededelingen Rijksmuseum van Oudheden te Leiden* 55, pp. 1-111.
- LOË, A., DE, 1928-31. *La Belgique Ancienne. Catalogue descriptif et raisonné: I, Les âges de la Pierre, 1928; II, les âges des Métaux, 1931*. Vromant, Bruxelles.
- LOUWE KOOIJMANS, L.P., 1974. The Rhine/Meuse Delta, four studies on its prehistoric occupation and Holocene geology, *Analecta Praehistorica Leidensia* 7 (also as: *Oudheidkundige Mededelingen uit het Rijksmuseum van Oudheden te Leiden* 53-54, 1973-74, and as a doctorate thesis, Leiden, 3 April 1974).
- MARIËN, M.E., 1952. *Oud-België. Van de eerste landbouwers tot de komst van Caesar*. De Sikkel, Antwerpen.
- MAYER, E.F., 1977. *Die Äxte und Beile in Österreich* (= Prähistorische Bronzefunde IX:9). C.H. Beck, München.
- MILLOTTE, J.-P., G. CORDIER & P. ABAUZIT, 1968. Essai de typologie protohistorique: les haches à ailerons médians. *Revue Archéologique de l'Est et du Centre-Est* 19, pp. 7-68.
- O'CONNOR, B., 1980. *Cross-Channel relations in the later Bronze Age. Relations between Britain, North-Western France and the Low Countries during the Later Bronze Age and the Early Iron Age, with particular reference to the metalwork* (= BAR Intern. Ser. 91). BAR, Oxford.
- PÁSZTHORY, K. & E.F. MAYER, 1998. *Die Äxte und Beile in Bayern* (= Prähistorische Bronzefunde IX:20). Franz Steiner Verlag, Stuttgart.
- SERVAIS, J. & J. HAWAL-NANDRIN, 1929. *Catalogue Sommaire Musée Archéologique Liégeois. Section Préhistorique*. Museum Liège, Liège.
- THRANE, H., 1965. *Inventaria Archaeologica* (DK). Habelt, Bonn.
- WARMENBOL, E., 1989. Le dépôt de haches à ailerons de Maaseik (Limburg). Les débuts du Bronze final en Belgique et dans le Sud des Pays-Bas. *Jahrbuch des römisch-germanischen Zentralmuseums Mainz* 36 (1992), pp. 277-299.
- WIELOCKX, A., 1986. Bronzen bijlen uit de Brons- en Vroege IJzertijd in de Maasvallei. Verhandeling tot het verkrijgen van de graad van Licentiaat in de Oudheidkunde en de Kunstgeschiedenis aan de Katholieke Universiteit Leuven. Unpublished thesis, Leuven.