



Universiteit
Leiden

The Netherlands

Analecta Praehistorica Leidensia 33/34 / Sacrificial Landscapes : cultural biographies of persons, objects and 'natural' places in the Bronze Age of the Southern Netherlands, c. 2300-600 BC

Fontijn, David R.; Fokkens, Harry; Bakels, Corrie

Citation

Fontijn, D. R. (2002). Analecta Praehistorica Leidensia 33/34 / Sacrificial Landscapes : cultural biographies of persons, objects and 'natural' places in the Bronze Age of the Southern Netherlands, c. 2300-600 BC, 392. Retrieved from <https://hdl.handle.net/1887/33737>

Version: Not Applicable (or Unknown)
License: [Leiden University Non-exclusive license](#)
Downloaded from: <https://hdl.handle.net/1887/33737>

Note: To cite this publication please use the final published version (if applicable).

ANALECTA PRAEHISTORICA LEIDENSIA

33/34

PUBLICATION OF THE FACULTY OF ARCHAEOLOGY
UNIVERSITY OF LEIDEN

DAVID R. FONTIJN

SACRIFICIAL LANDSCAPES

CULTURAL BIOGRAPHIES OF PERSONS, OBJECTS AND 'NATURAL' PLACES
IN THE BRONZE AGE OF THE SOUTHERN NETHERLANDS, C. 2300-600 BC



UNIVERSITY OF LEIDEN 2002

Editors: Harry Fokkens / Corrie Bakels

Copy editors of this volume: David Fontijn / Harry Fokkens

Copyright 2002 by the Faculty of Archaeology, Leiden

ISSN 0169-7447

ISBN 90-73368-19-7

Also appeared as doctorate thesis, Leiden, March 27, 2003.

Subscriptions to the series *Analecta Praehistorica Leidensia*
and single volumes can be ordered exclusively at:

Faculty of Archaeology
P.O. Box 9515
NL-2300 RA Leiden
the Netherlands

*Non multo post in Cantabriae lacum fulmen decidit repertaeque sunt duodecim
securae, haud ambiguum summae imperii signum.*

(Suetonius, book VII: Galba, Otho, Vitellius)

*Und dast Sterben, dieses Nichtmehrfassen
Jenes Grunds, auf dem wir täglich stehn,
Seinem ängstlichen Sich-Niederlassen -:*

*In die Wasser, die ihn sanft empfangen
Und die sich, wie glücklich und vergangen,
Unter ihm zurückziehn, Flut um Flut*

(R.M. Rilke 'der Schwan')

contents

Preface xvii

PART I PROBLEM, APPROACH, SOURCE CRITISM 1

1 Introduction: the problem of bronze deposition and the aim of this study 3

1.1 Introduction 3

1.2 The social significance of metalwork among European Bronze Age societies 3

1.3 The phenomenon of bronze deposits and its interpretation as ‘ritual consumption’ 5

1.4 Problems in the current interpretation of bronze deposits: ‘selective deposition’ 5

1.5 The southern Netherlands as a promising region for studying ‘selective deposition’ 6

1.6 Research questions and spatial and chronological framework 6

1.7 How the problem will be approached 9

2 How archaeology has made sense of object depositions: the distinction between ‘ritual’ and ‘profane’ deposits 13

2.1 Introduction 13

2.2 Seeing bronze deposits primarily in profane terms: *Verwahrkunde* and *Versteckfunde* 13

2.3 Accepting bronze finds as permanent deposits and interpreting them as ‘ritual’ 15

2.3.1 The distinction between ‘ritual’ and ‘profane’ depositions 15

2.3.2 Levy’s theory: is the Bronze Age ritual-profane distinction supported by ethnographic parallels? 17

2.4 *Explaining* ritual deposition: economic and competitive consumption 18

2.5 How ‘ritual’ is reconciled to assumptions on the universality of rationality 19

2.6 Problems we face when using the ‘ritual/ profane’ distinction for the interpretation of deposits 20

2.6.1 Problems raised by the empirical evidence 20

2.6.2 Epistemological problems 20

2.7 How can we get round the problems of the ‘ritual/profane’ distinction? 21

2.8 Final remarks 21

3 Theoretical framework for the study of selective deposition 23

3.1 Introduction 23

3.2 The concept of ‘meaning’ 23

3.3 Objects as ‘things’ and objects that are ‘like persons’ 25

3.4 How meaning comes about: the cultural biography of things 26

3.5 Kinds of biographies: valuables associated with communal versus personal identities 26

3.6 The start of a biography: production 27

3.6.1 The crucial position of the smith as a creator of potential valuables 27

3.6.2 Material and techniques 28

3.6.3 Concept of form and style 28

3.6.4 Functional possibilities 30

3.7 The life of an object 30

3.7.1 Metalwork circulation as an exchange of gifts *and* commodities; long-term and short-term exchange 31

3.7.2 Transformation of commodities into gifts or valuables and the archaeological indications that they took place 31

3.7.3 The archaeological correlates for circulation 32

3.7.4 The archaeological correlates for ‘use’ 32

3.7.5 The deposited objects as a skewed representation of the objects in circulation 33

3.8 Deposition 33

3.8.1 The practice of deposition as constituted by relations between object, people and location 33

3.8.2 Deposition as performance 35

3.8.3 What deposition brings about 35

3.9 Concluding remarks 35

4 Source criticism: limitations and possibilities of the available evidence 37

4.1 Introduction 37

4.2 How to recognize permanent depositions 37

4.3 How the data were collected and evaluated 38

4.3.1 Assessing the reliability of data 39

4.3.2 Retrieving information on find context 41

- 4.4 Explaining presence and absence of finds: post-depositional processes 42
- 4.4.1 Natural processes 43
- 4.4.2 Anthropogenetic processes 43

4.5 Explaining presence and absence of finds: research factors 45

4.6 Conclusion: which set of data is informative on selective deposition? 45

PART II SELECTIVE DEPOSITION THROUGHOUT THE BRONZE AGE 53

5 Late Neolithic B and Early Bronze Age 55

5.1 Introduction 56

5.2 Late Neolithic and Early Bronze Age societies in the southern Netherlands 57

5.3 Discussion of the available evidence 60

5.4 Late Neolithic metalwork 60

5.4.1 Local production and the 'Dutch Bell Beaker metal' 61

5.4.2 Flat axes 63

5.4.3 The double axe from Escharen 65

5.4.4 Gold ornaments 66

5.4.5 Daggers 67

5.4.6 Conclusion: selective deposition in the Late Neolithic B? 68

5.5 Early Bronze Age metalwork 68

5.5.1 Low-flanged axes 68

5.5.2 Halberds 71

5.5.3 The Wageningen hoard 72

5.5.4 Metalwork from burials and settlements 73

5.5.5 Conclusion: selective deposition in the Early Bronze Age? 74

5.6 From stone to bronze 75

5.6.1 How metal replaced stone in daily life 75

5.6.2 The cultural attitude towards metals and stones 75

5.6.3 The life of metals and new elements in the cultural biography of things 76

5.7 Patterns in the biographies of metalwork: production and circulation 77

5.7.1 Circulation: the importance of being imported 77

5.7.2 Open systems: the interplay between imported objects and local products 78

5.8 Deposition: the incorporation of metalwork in Neolithic offering traditions and their subsequent transformation 78

5.8.1 Continuity and change 78

5.8.2 Fluctuations in the rate of deposition 79

5.8.3 Conclusion 79

5.9 Deposition: graves and wet places as contrasting depositional contexts 79

5.9.1 The Beaker burial ritual and the significance of objects as valuables of personhood 80

5.9.2 The deposition of axes in wet places 82

5.10 Conclusions 83

6 Middle Bronze Age A 85

6.1 Introduction 86

6.2 The transition from Early to Middle Bronze Age: developments in society and landscape 86

6.3 Discussion of the available evidence 87

6.4 High-flanged and stopridge axes 88

6.4.1 Oldendorf axes 88

6.4.2 Nick-flanged or *geknickte* axes 91

6.4.3 Atlantic imports? Arreton axes and axes with high-placed short-flanges 93

6.4.4 Two ‘unique’ axes 93

6.4.5 Stopridge axes 96

6.4.6 Conclusion 97

6.5 Spears 97

6.6 ‘Swords’ and daggers 100

6.6.1 Dirks, rapiers and daggers of the Sögel, Wohlde, Weizen and Gamprin types 100

6.6.2 The Overloon weapon hoard: the deposition of personal warrior sets 103

6.6.3 Tréboul-St. Brandan swords 103

6.6.4 The ceremonial dirk from Jutphaas 104

6.6.5 Other finds: two daggers of British type 105

6.6.6 Sword biographies 105

6.7 Developments in the structure of the metalwork repertoire 106

6.7.1 The category of specialized weapons and what it implies: the significance of martiality 106

6.7.2 Transformations in existing material culture categories 107

6.8 Metalwork circulation 107

6.8.1 The restructuring of spheres of exchange? 107

6.8.2 The southern Netherlands in the north-west European world 109

6.8.3 Bronze circulation and the problem of the ‘Hilversum culture’ 109

6.9 Patterns in metalwork deposition 110

6.9.1 Fluctuations in the rate of deposition 110

6.9.2 Axe deposition 110

6.9.3 Weapon deposition as the surrender of the paraphernalia of personhood 111

6.9.4 Conclusion 112

6.10 Conclusions 112

7 Middle Bronze Age B 115

7.1 Introduction 116

7.2 Landscape and society during the Middle Bronze Age B 116

7.3 Discussion of the available evidence 116

7.4	Palstaves and mid-winged axes	119
7.4.1	Imported palstaves	119
7.4.2	Regional palstaves	121
7.4.3	Mid-winged axes	125
7.4.4	The Goirle axe: the remarkable life-path of an old, much-travelled axe	127
7.4.5	Conclusion: axe biographies	129
7.5	Spearheads	129
7.6	Swords and daggers	131
7.6.1	Rosnoën swords	132
7.6.2	Other <i>Griffplatten</i> - and <i>Griffangelschwerter</i>	133
7.6.3	Reworked sword blades	133
7.6.4	Conclusions: life-cycles of swords	133
7.7	Ornaments	134
7.8	Sickles and other tools	137
7.9	Moulds	137
7.9.1	The bronze mould from Buggenum	138
7.9.2	The clay mould from Cuijk	138
7.9.3	The clay mould from Oss-Horzak	138
7.9.4	Conclusions	141
7.10	Metalwork and contemporary material culture	141
7.11	Regional bronze production	142
7.12	Metalwork circulation	143
7.12.1	General developments: reorientation of exchange networks	143
7.12.2	Patterns of procurement	143
7.13	Deposition	144
7.13.1	Deposition in and around houses	144
7.13.2	Axe and weapon deposits: depositional zones as places of historical significance	147
7.13.3	Deposition of objects in burials	147
7.13.4	Deposition of objects in burial monuments	148
7.14	Conclusions	148
8	Late Bronze Age	151
8.1	Introduction	152
8.2	Society and landscape during the Late Bronze Age	152
8.2.1	North-western Europe	152
8.2.2	Southern Netherlands	154
8.3	Discussion of the available evidence	154

8.4	Socketed and end-winged axes	157
8.4.1	Regional socketed axes	157
8.4.2	Imported socketed axes	161
8.4.3	End-winged axes	164
8.4.4	Iron axes	164
8.4.5	Conclusions	165
8.5	Weapons: spears, swords, chapes and daggers	166
8.5.1	Early <i>Griffzungenschwerter</i>	166
8.5.2	The <i>Vielwulstschwert</i> from Buggenum	166
8.5.3	The weapon hoard from Pulle	169
8.5.4	<i>Griffzungen</i> - and <i>Vollgriffschwerter</i> from the Ha B2/3 phase	170
8.5.5	Gündlingen swords	171
8.5.6	Mindelheim swords	172
8.5.7	Conclusion: sword biographies	172
8.6	Ornaments and dress fittings	172
8.6.1	Deposition in major rivers	175
8.6.2	Deposition of ceremonial ornaments: the giant <i>Bombenkopfnadel</i> of type Ockstadt	175
8.6.3	Ornaments in multiple-object hoards	178
8.6.4	Conclusion: selective deposition of ornaments	182
8.7	Other tools	182
8.8	The place of metalwork among contemporary material culture	184
8.9	Regional bronze production	186
8.10	Metalwork circulation	186
8.11	Deposition	187
8.11.1	Axe and tool deposition	187
8.11.2	Weapon and ornament deposition: evidence for a structured sacrificial landscape?	188
8.11.3	New places for deposition?	191
8.11.4	Change and tradition in the practice of deposition	192
8.12	Conclusions	193
9	Late Bronze Age and Early Iron Age: metalwork from burials	197
9.1	Introduction	197
9.2	Discussion of the available evidence	197
9.3	The urnfield burial ritual and the provision of artefacts	197
9.4	Ornaments and toilet articles in urnfield graves	198
9.5	Deposition of weaponry	201
9.6	Stages in the burial ritual and the inclusion of artefacts	203

9.7	The decorated dead	204
9.8	Local and supra-local personal identities	206
9.9	Conclusions	207
PART III UNDERSTANDING SELECTIVE DEPOSITION 209		
10	Selective deposition: its characteristics, development and structure	211
10.1	Introduction	211
10.2	Some general characteristics of metalwork deposition	211
10.3	The long-term patterns of selective deposition	215
10.4	Selective deposition as an indication that different objects had different meanings	215
10.5	How objects became meaningful: the significance of their cultural biography	217
10.6	Depositions in burials versus depositions in natural places	217
10.7	Long-term history of selective deposition	218
10.8	Development of the argument in the next chapters	219
11	Weapons, the armed body and martial identities	221
11.1	Introduction	221
11.2	The distinction between multifunctional tools and weapons before the Middle Bronze Age	221
11.3	Weapons of the Middle and Late Bronze Age	221
11.4	The nature of Bronze Age conflicts and warfare	224
11.5	Warfare as ideology	226
11.6	Warrior identities	226
11.6.1	Sword fighting and becoming a person	227
11.6.2	The evidence of warriors' graves	227
11.6.3	Warrior identities and 'imagined communities'	229
11.7	Weapon deposits as graveless grave goods?	229
11.8	Warriorhood as an ambiguous, temporary identity	231
11.9	The shift from rivers to graves	232
11.9.1	Ha C chieftains' graves as reflecting a different kind of elite?	232
11.9.2	How did a shift to burial deposition become socially acceptable?	233
11.9.3	Conclusion: the continuing ambiguity of warrior statuses	236
11.10	Conclusions	236

12 Ornament deposition: the construction and deconstruction of personhood 239

12.1 Introduction 239

12.2 Ornament deposition in natural places versus deposition in burials 239

12.3 Selective deposition of ornaments and dress fittings during the Middle Bronze Age 239

12.4 The significance of supra-regional ornament styles: the implications of the Oss mould 240

12.5 Selective deposition of ornaments and dress fittings during the Late Bronze Age 241

12.5.1 Ornaments and the construction of local identities in urnfield graves 241

12.5.2 Placing ornaments and pins in rivers and sources 241

12.5.3 Deposition of special ornament types in hoards: the Lutlommel hoard 242

12.6 Conclusion: the contrast between local and non-local identities 244

13 The cultural biographies of axes 247

13.1 Introduction 247

13.2 The significance of imported adzes and axes for non- or semi-agrarian communities 247

13.3 The deposition of single, used bronze axes: the generalized biography of an axe 248

13.4 There is more to axes than just the tool 250

13.5 Late Bronze Age axe hoards 252

13.6 Axe hoards as representing deliberate permanent deposits 252

13.7 Linking 'ritual' deposition to the flow of metal 253

13.7.1 How gift and commodity exchange are linked 254

13.7.2 Object deposition as a way to transform items from commodities into gifts 255

13.8 What happened at the transition from the Late Bronze Age to Iron Age? 255

13.8.1 Understanding lavish hoards in relation to a collapsing bronze circulation 256

13.8.2 Changes within the depositional practices themselves 256

13.9 Conclusions 257

14 The landscape of deposition 259

14.1 Introduction 259

14.2 Deposition in a historical landscape 259

14.2.1 The system of selective deposition as reflecting structured perceptions of the land 259

14.2.2 Multiple-deposition zones and the landscape of memory 260

14.2.3 What does the difference between adjacent multiple deposition zones imply? 263

14.3	Deposition and the landscape of daily life	264
14.3.1	Depositional zones as remote and peripheral areas	264
14.3.2	Depositional zones as natural, unaltered places	264
14.4	Depositional zones in a social landscape	265
14.5	Depositional zones in a cosmological landscape	266
14.5.1	Wet zones as cosmological boundaries	266
14.5.2	Deposition in watery places: gifts to gods?	267
14.6	Deposition and cultural attitudes towards the land	268
14.6.1	Exploitative and communalist attitudes	268
14.6.2	Depositions and notions on reciprocal relations with the land	269
14.6.3	Depositions and the logic of taking and giving	269
14.7	Depositional practices and the construction of communities	270
14.8	Conclusions	271

15 Final reflections: what is selective deposition and what does it bring about? 273

15.1	Introduction	273
15.2	Circulation of foreign materials and social realities	273
15.3	Bronzes and the significance of non-local identities	274
15.4	Accepting <i>their</i> logic: a sacrificial economy	274
15.5	Deposition as a practice	275
15.6	Deposition as ritual	276
15.7	What does selective deposition bring about?	277

epilogue 281

references 285

appendices 305

1	List of all hoards from the study region	305
2.1	Flat axes	310
2.2	Low-flanged axes	311
2.3	Oldendorf axes	312
2.4	Other MBA A axes	314
2.5	Imported palstaves and other axes	315
2.6	Regional palstaves, midribbed	317
2.7	Regional palstaves, plain sinuous-shaped and those with trapeze outline	318
2.8	Unclassified palstaves	320

2.9	Mid-winged axes	321
2.10	Socketed axes of the Niedermaas type	322
2.11	Socketed axes of the Helmeroth type	324
2.12	Socketed axes of the Geistingen type	325
2.13	Socketed axes of the Plainseau type	326
2.14	Socketed axes of type Wesseling	328
2.15	Other socketed axes, Early Iron Age axes, iron axes	329
2.16	End-winged axes	332
3	Sickles, knives, chisels, gouges from the Middle and Late Bronze Age	333
4.1	Ornaments mainly from the MBA B	335
4.2	Ornaments from the LBA/EIA from other contexts than graves	336
5.1	Swords and daggers from the MBA A	338
5.2	Swords and daggers from the MBA B	339
5.3	Swords from the Ha A2 (A1) until Ha B1 phases	341
5.4	Swords from the Ha B2/3 phase	342
5.5	Swords from the Early Iron Age (made of bronze and iron)	343
5.6	MBA swords from the Netherlands and Belgium: deposition in graves versus deposition in watery places	345
6.1	Spearheads from the MBA A	348
6.2	Spearheads from the MBA B	349
6.3	Spearheads without precise dating (plain pegged spearheads) and arrowheads	350
7.1	Daggers, knives, halberds and ornaments from the LN B/EBA, mainly from burials	356
7.2	Burial gifts from the MBA and deposits in barrows (metalwork and other materials)	358
7.3	Metalwork from urnfield graves in the Dutch part of the research region	361
7.4	Metalwork from urnfield graves in the Belgian part of the research region	370
8	Indications for metalworking (Middle and Late Bronze Age)	373
9	Metalwork finds from settlements	374
10.1	Metal types distinguished by Butler and Van der Waals	376
10.2	Metal analyses of flat and low-flanged axes	376
10.3	Metal analyses of tanged daggers and awls from burials	377
10.4	Metal analyses of halberds, riveted knives and an awl	377
10.5	Metal analyses of objects from the Wageningen hoard	378

samenvatting (Dutch summary) 379

acknowledgements for the figures 389

acknowledgements 391

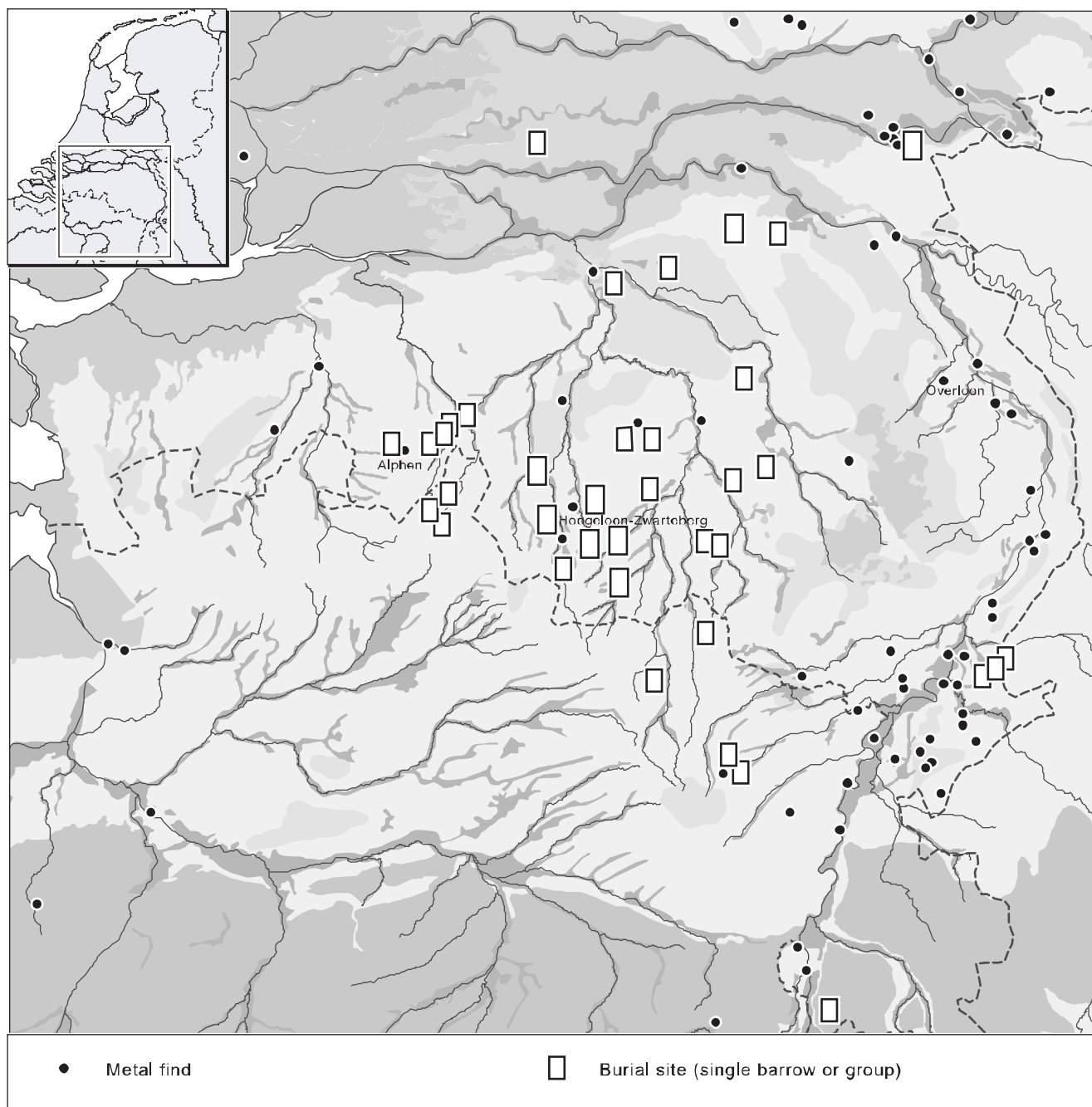


Figure 6.1 The distribution of metalwork finds of the MBA A in relation to the distribution of burial sites.

6.1 INTRODUCTION

From the period indicated in the Dutch chronology as the Middle Bronze Age A (1800-1500 BC) a considerably higher number of metalwork finds is known than from the preceding periods. It is also a period in which we see the first occurrence of a new set of objects, swords and spears, that would play a fundamental role in selective deposition for the centuries to come.

The dating ranges of the objects show that the occurrence of a number of objects (high-flanged axes) more or less coincides with phases within the Middle Bronze Age A, although some objects have dating ranges that bridge the transition from Middle Bronze Age A to B (fig. 6.2). Therefore, metalwork with datings extending into the 15th century is included in the discussion. First, the general developments that took place in the southern Netherlands during the Middle Bronze Age A will be described. Then, following a brief characterization of the nature of the available metalwork evidence, the several metalwork categories are discussed and investigated for evidence on their biography. Next, the patterns found in the life-cycles of objects are compared and analysed to see in what way they inform us of the history of metalwork production, circulation and deposition in the southern Netherlands during this period. It will be argued that the existing practice of metalwork deposition underwent a significant transformation during this period. The concluding section seeks to investigate how this transformation came about, and how it relates to other developments that took place in the societies inhabiting the southern Netherlands.

6.2 THE TRANSITION FROM EARLY TO MIDDLE BRONZE AGE; DEVELOPMENTS IN SOCIETY AND LANDSCAPE

North-west Europe

During the centuries that we now classify under the heading Middle Bronze Age A, some significant changes took place in the nature, use and circulation of metalwork in north-west Europe as a whole. Since some are relevant for the developments that took place in the southern Netherlands, they will be briefly described. For most regions a steady increase in the number of bronze objects can be witnessed in the course of the Middle Bronze Age A. For this reason, and because of the fact that these objects are 'real' bronze, (a relatively stable alloying of tin around 8-10% was achieved; Kristiansen 1987, 31), these centuries are often seen as the start of the 'real' Bronze Age (Champion *et al.* 1984, 198). In some regions, local production thrived alongside steady importation of other objects. These include Denmark, north-west France, southern England and an area covering northern Germany to the north-eastern Netherlands. Since the north-European regions mentioned are far removed from the natural sources of copper and tin, the increase in metalwork deposition shows that the available quantity of metalwork in

circulation must have increased even more, suggesting that exchange relations with the metalliferous regions became more intensive and regular. In northern Europe, during the 16th century BC, a specific type of grave comes into being; the so-called Sögel-Wohlde warrior grave (Vandkilde 1996, 152-6). Sögel and Wohlde refer to two distinct types of warrior burial equipment in which the presence of a bronze dirk or rapier is the most important conspicuous element. In the Netherlands, such graves have been found north of the Rhine (Butler 1990). The Sögel grave from Drouwen (province of Drenthe) is actually the richest grave of this type found in the entire north European region. Such graves are generally seen as elite graves, for an emerging 'warrior aristocracy', evidence for an emerging social hierarchy, related to the control of the increasing metalwork supply (Kristiansen 1987, 42; Vandkilde 1996, 288). In other regions, like Hessen in Germany, we find comparable warrior graves (Jockenhövel 1990: Abb. 108: A-B).

Southern Netherlands

One of the most important developments to take place in the southern Netherlands at this stage is the genesis of the characteristic three-aisled Middle Bronze Age longhouse with byre. The majority of these houses are only generally dated to the 'Middle Bronze Age' (Theunissen 1999, chapter 4), the better dated sites cluster in the Middle Bronze Age B (particularly the 14th century BC, Fokkens 2001, 252-6). Evidence that such houses existed in the Middle Bronze Age A is scarce, and seems so far to be restricted to the central river area (Fokkens 2001, 252). It is clear though, that the transformation from the two-aisled Early Bronze Age house without byre section into the longer three-aisled longhouse with byre took place during the Middle Bronze Age A. This is generally seen as indicating the emergence of a fully agrarian mixed-farming subsistence strategy with a marked emphasis on cattle breeding and hence pastoralism (Louwe Koijmans 1998).

Another significant development is the increase in the construction of monumental barrows. From many places in the region barrows groups are known that originated in the Middle Bronze Age A (see for their distribution fig. 6.1; cf. Theunissen 1999). Clearly, considerably more barrows were constructed in this phase than before. There also is a marked tendency to re-use existing barrows for burial, at shorter intervals than in the preceding period (Theunissen 1999, 72; Fontijn/Cuijpers in press), and to locate new barrows next to older ones. The best example is the barrow group from Toterfout-Halve Mijl (Glasbergen 1954a and b; Theunissen 1993). The barrows erected are commonly marked with an outer ring-ditch. Clearly, the social relevance of marking stretches of the land with barrows has increased. A rare, new type of barrow are those with an outer bank and

ring-ditch, the so-called *ringwalheuvels*, some of them of monumental character (for example Hoogeloon with an outer diameter of 44 m). In view of their conspicuous and deviating character Theunissen (2001) has interpreted such mounds as founders' graves.

We are not only dealing with an increase in barrow construction; many of these barrows were erected in areas where no earlier settlement and grave traces are known. It is still an open question whether this indicates that the Middle Bronze Age A was a period of demographical expansion and reclamation. The pollen evidence and the fact that barrows were from now on made from heather sods at least indicates that considerable deforestation took place, and that the land became more open in those regions where we find barrows (Van Beurden 2002). A final development that seems important for the present discussion concerns overall changes in local material culture. The tradition of making (lavishly) decorated beakers gradually disappears to make way for pottery types that are generally indistinctive and undecorated coarse ware. The decorations on the earliest Middle Bronze Age pottery, labelled 'Hilversum', has affinities with southern British and North French pottery style. It was seen as characteristic of the so-called Middle Bronze Age Hilversum culture (HVS; Theunissen 1999). Formerly it was interpreted as the result of immigrations. The *ringwalheuvels*,

comparable to the British disc barrows, were another argument for this. This idea is no longer valid, although the HVS pottery and *ringwalheuvels* are still seen as characteristic for the local groups living in the south of the Low Countries (Theunissen 1999).

6.3 DISCUSSION OF THE AVAILABLE EVIDENCE

In the following, the different categories of metalwork will be described and discussed. At least 86 objects are known, including those with a dating range into the younger period (see fig. 6.2 and table 6.1). Axes are by far the most important category. Evidence for objects from other material that figured in deposition is non-existent. Hardly anything is known on flint, stone or amber objects dated to this period, apart from a number of flint and bone finds from graves. Metal analysis has not been carried out on any of the objects described here, so it is not possible to say anything on the metal alloy and metalwork circulation zones. Absolute datings are lacking. All arguments for dating are based on cross-dating with comparable objects from better known regions. Considerably more finds than before come from rivers (28 %) of all finds). They are mostly dredge finds. Many finds come from the micro-regions where other evidence of Middle Bronze Age A activities is also known (barrows, settlements), like the Kempen and the Nijmegen

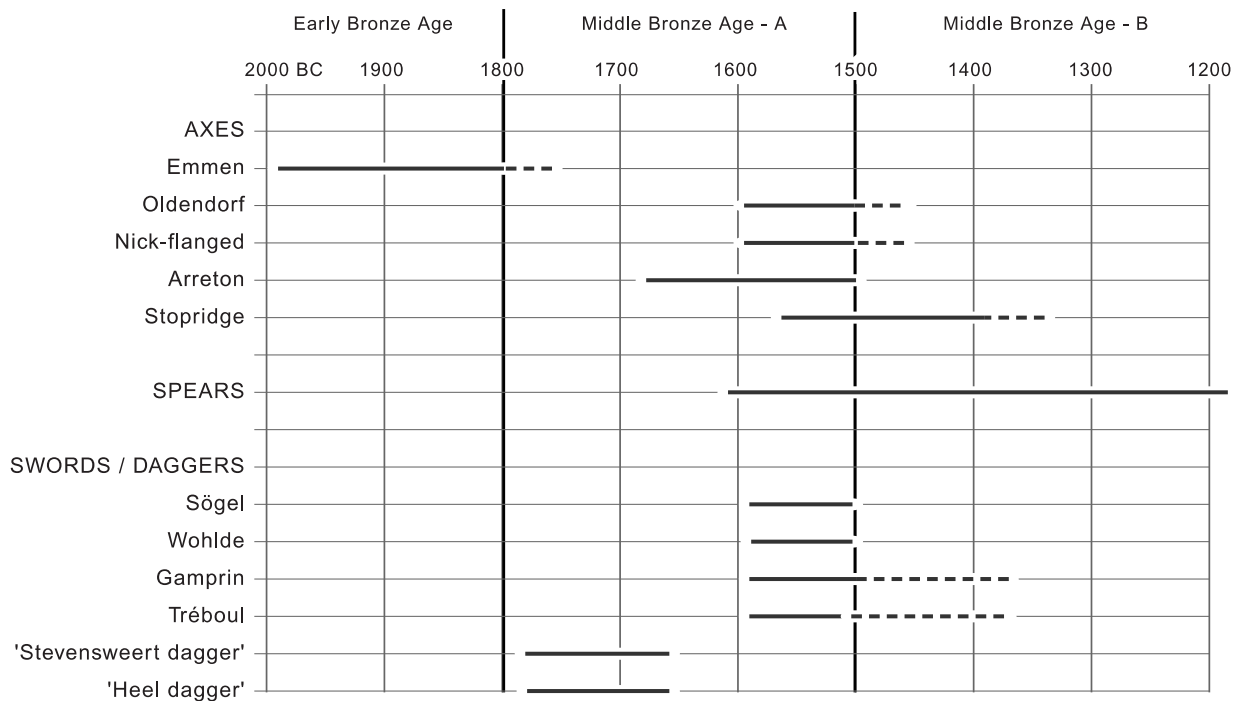


Figure 6.2 Dating ranges of the most important object types discussed in the text.

Type Object type	Context									Totals
	Major river	Stream valley	Marsh	Wet	Wet* hoard	Dry	Burial	Settl.	Unknown	
<i>Swords</i>										
Sögel	2	-	-	-	-	-	-	-	1	3
Wohlde	3	-	-	-	2	-	-	-	1	6
Gamprin	-	-	-	-	-	-	-	-	1	1
Weizen	1	-	-	-	-	-	-	-	-	1
Tréboul-										
St.Brandan	2	-	-	-	-	-	-	-	1	3
Plougrescant	-	-	1	-	-	-	-	-	-	1
<i>Spears</i>										
Tréboul	3	-	-	-	-	-	1	-	2	6
Other	-	-	1	-	2	-	-	-	1	4
<i>Daggers</i>										
British types	1	-	-	-	-	-	-	-	1	2
Sögel	1	1	1	-	-	-	-	-	1	4
Wohlde	-	-	-	-	-	-	-	1	-	1
<i>Ornament</i>										
Bargloy pin	-	-	-	-	1	-	-	-	-	1
<i>High-flanged axes</i>										
Oldendorf	5	5	7	1	-	2	-	-	16	36
Nick-flanged	3	-	-	-	1	-	-	-	1	5
Arreton	-	-	-	-	-	-	-	-	4	4
Short-flanges	-	1	-	-	-	-	-	-	1	2
‘unique types’	-	-	-	-	-	-	2	-	-	2
<i>Stopridge axe</i>										
Vlagtwedde	2	-	-	-	-	-	-	-	-	2
Plaisir	1	-	-	-	-	-	-	-	-	1
Bannockburn	-	-	-	-	-	-	-	-	1	1
Totals	24	7	10	1	6	2	3	1	32	86

Table 6.1 Metalwork from the Middle Bronze Age A. * From the Overloon hoard.

area (fig. 6.1). In some metalwork-rich regions, however, barrows are completely lacking (De Roerstreek), a situation that seems to reflect a prehistoric reality (Theunissen 1999, 52). Apart from one multiple-object hoard, Overloon, we are dealing with single finds, although for the river finds possible object associations cannot be traced anymore.

6.4 HIGH-FLANGED AND STOPRIDGE AXES

6.4.1 *Oldendorf axes*

Axes of the Oldendorf type are the most current item among the metalwork of the Middle Bronze Age A. They are the earliest metal implements to have been found in considerable numbers, in a variety of localities in both the southern and the northern Netherlands. 36 have been found in the research area (fig. 6.3; appendix 2.3). The majority represent reliable finds by laymen and amateurs with sometimes quite detailed information about the find context. Unfortunately, the only

Oldendorf axe found during an archaeological excavation, the one from Nijmegen-Claes Norduynstraat, was not recorded in situ, but found on the spoil heap of the excavation.

The designation ‘Oldendorf’ is a type-name originally defined by Kibbert (1980, 37-8). It is employed in a slightly modified version by Butler to denote a group of axes with the following characteristics (Butler 1995/1996, 204): axes with relatively high (1.5 to 2.0 cm) side-flanges, which are parallel-sided in their upper half (fig. 6.4). They can be distinguished from other parallel-sided axes by their shorter and thicker body, in combination with a somewhat expanded blade. In contrast to Kibbert’s definition, Butler does not regard a transverse septal ridge (‘incipient stopridge’) as typical for the Oldendorf type, since in the Netherlands about half of the otherwise comparable axes lack such a ridge. Fig 6.4 shows a characteristic Oldendorf axe. Butler divides his

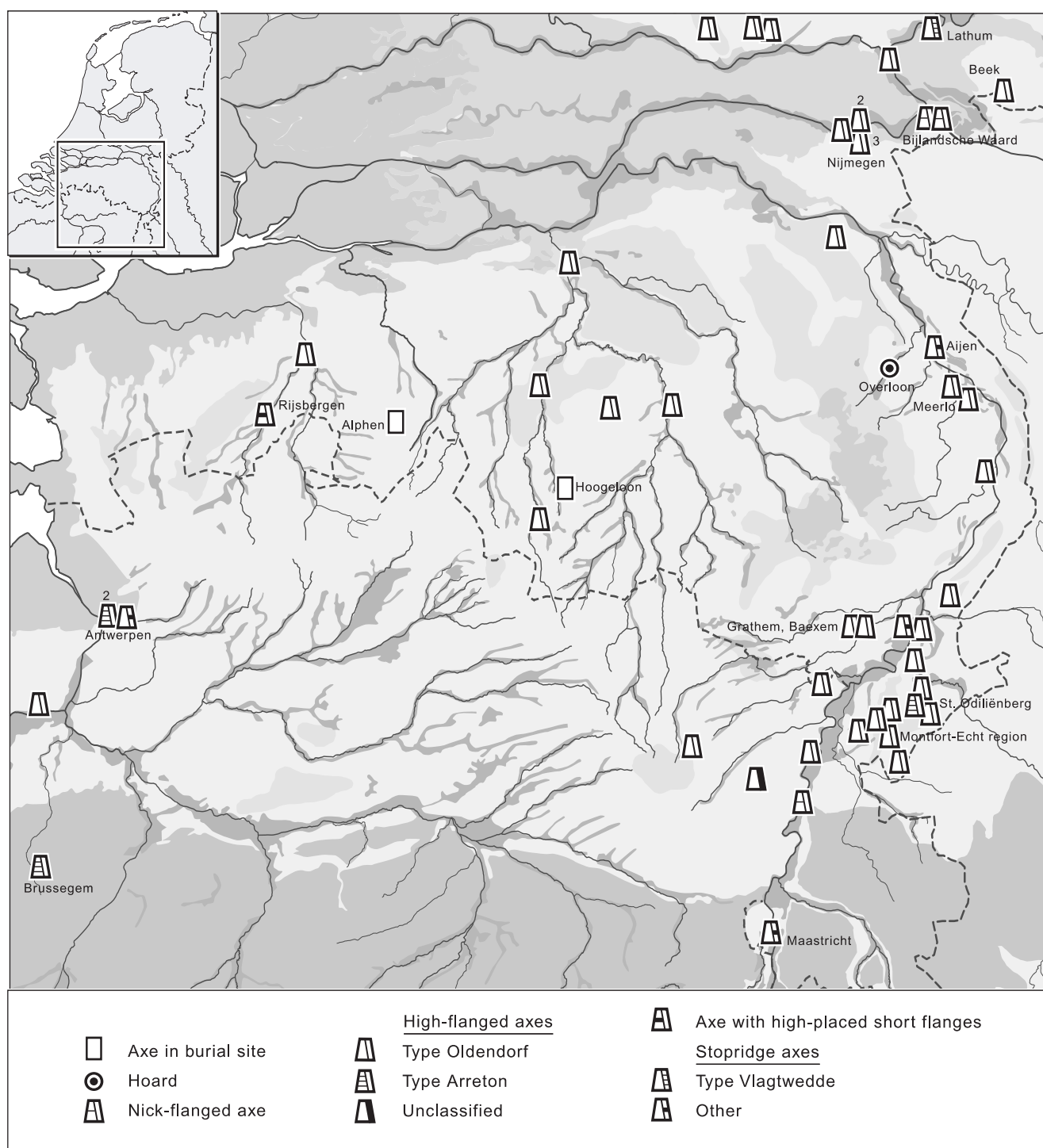


Figure 6.3 The distribution of high-flanged and stopridge axes.



Figure 6.4 Oldendorf axe with septal ridge from Nijmegen-Margiet-paviljoen (l. 8.0 cm).

Oldendorf axes into four varieties. Two of them are of relevance for the axes found in the research region: those without a transverse septal ridge (variety 1), and those having such a ridge (var. 2). The high flanges, the thick body and the transverse ridge must all have served to secure hafting thereby allowing the axe to be used for heavy duties such as the cutting down of large trees. Their bodies are undecorated, and it is hard to see evidence that the element of pure display was significant in their design. Only Butler's so-called 'Ekehaar' (variety 3) has a small decoration of three incised lines at the septum. Such axes, however, hardly occur among the finds of the study region, with the exception of a find from Nijmegen (table).

Reviewing the axes found in the study region that were designated as type 'Oldendorf' by Butler (1995/1996, 204-18), and comparing those to the other high-flanged axes (to be described below), the type indeed seems to cover a number of similar axes, different from other high-flanged axes.

Dating

There are no finds of Oldendorf axes in the Netherlands and Belgium that can be dated by ¹⁴C-analysis or object associations. Their occurrence in a number of hoards in Germany confirms that they were contemporary with nick-flanged axes, stopridge axes of type Plaisir, Sögel dirks, Bagterp spearheads and other objects that are also known from the research region and which will be described below (Butler 1995/1996, 219; Vandkilde 1996, 121). Butler

(1995/1996, 219-20) as well as Vandkilde (1996, 159) argue that Oldendorf axes are typical for the north German Sögel-Wohld phase, Montelius IB, and the south German Early Tumulus phase. Following Vandkilde, this comprises a phase that dates at least between 1600 and 1500 BC cal. (Vandkilde 1996, chapter 7; especially fig. 134 and 163). Lanting and Van der Plicht (in press) have recently argued that a dating from 1575 to 1500 BC would be more realistic.

Production, circulation and use-life

The fact that a German type-name has been used for describing an artefact type found in the Low Countries presupposes that the German, Dutch and Belgian axes designated as type Oldendorf are related. Reviewing Kibbert's publication of Oldendorf axes, many finds from the adjacent part of Germany are indeed highly similar, if not almost identical, to the ones from the Netherlands and Belgium (Kibbert 1980, 137-50; Tafel 16-19).¹ Recently, Vandkilde (1996, 117-121) has shown that very similar axes are also known from Denmark, where it is the most frequent axe type (113 specimens known), and the oldest metal implement to have been found in such large quantities, just as in the Netherlands. In fact, Oldendorf axes are frequent finds all over northern Europe, and it is therefore not, as previously thought, just a *Norddeutsche Typus* (Butler 1995/1996, 219). It has been argued that Oldendorf axes were locally produced in north European regions (cf. Vandkilde 1996, 119).² Consequently they represent an international type of axe that was used in a number of regions that were different in other respects. This recalls the widely shared use of the Emmen axes of the Early Bronze Age (Chapter 5)

Local communities living in the southern Netherlands probably obtained Oldendorf axes by means of exchange. The places of production from which they originated may have been situated in the adjacent part of north-west Germany. The Ekehaar variety is probably an example of a local Oldendorf axe, produced in the northern Netherlands (Butler 1995/1996, 217). Therefore, the Ekehaar axe from Nijmegen possibly represents an object coming from this region. At any rate, there is no indication that Oldendorf axes were independently produced in the southern Netherlands. What is quite clear about the axes that have come down to us, is that they did not only circulate, but were used as well. For the majority of the finds, the objects allowed the observation of traces of use or their absence. Without exception, these all indicate that they had been used. Almost all Oldendorf axes that have been found show traces of sharpening. Many have clearly been ground several times, with wear and resharpening sometimes resulting in asymmetrical blades. 'Pouches', on the side of the cutting edge (a hollow formed by hammering, enclosed by slight

flanges), are another indication of the re-working of the blade for further use. Some axes have even been drastically resharpened, with the lower end of the flanges becoming part of the blade. A striking case of re-use is offered by an axe fragment found near Montfort (Butler 1995/1996, no. 136; fig. 28). The opposite end of this axe fragment has obviously been hammered. Apparently an axe that had already been resharpened several times, was re-used as a chisel or wedge.

On the basis of the available data on their use life, two conclusions can be drawn:

- 1 The considerable re-sharpening, grinding and hammering observed on most axes indicates that the axes were used in activities in which their wear and tear rate was relatively high. This implies that these axes were used for heavy duties like cutting down trees or wood-working. As already indicated, they actually seem to have been designed for such a use.
- 2 The fact that some axes have seen drastic resharpening in the way outlined above (in some 8 cases), and that in one case even an axe fragment was re-used, indicates that these axes were not only used for heavy duties, but that they also had a relatively long life of use and circulation before they were deposited.

Deposition

For 20 axes the find spot is known. Although most of them were found in places that are now dry land, it can be deduced that in 18 cases these were probably wet locations in the landscape at the time the axe entered the ground (appendix 2.3). Of those without exact provenance, six out of eight axes with preserved patina have a 'wet-context patina'. This mirrors the predominance of wet context finds that became clear in case of the finds with known find spot. Therefore, at least 18, but probably 24,

Oldendorf axes came from wet locations. Two, but probably six are from a dry location (at least one, however, situated in the immediate vicinity of a wet location). Consequently, the association between these axes and a wet location thus cannot be a coincidence; they must have been deliberately deposited there.

The term 'wet location' conceals a variety of different locations. Near Nijmegen, some Oldendorf axes must have been deposited in a predecessor of the river Waal or its backswamps. Other axes, like the ones from Grathem, Hapert and Bergh, were deposited in the (marshy) valleys of small streams or into the streams themselves. The two axes from Echt come from a larger marsh surrounding a number of small streams. Two other Oldendorf axes (Meerlo-Wansum) were deposited in a swamp, where in the immediate surroundings, on higher grounds, a Late Neolithic barrow stood (Verwers 1964). Less is known about the finds from dry context, but the few evidence there is suggest that these

do not represent settlement refuse or casual losses. The axe from Nijmegen-Claes Norduynstraat came from a high plateau on the ice-pushed ridge of Nijmegen, not far from the steep ridge that marks the transition to the river valley of the Waal. Apart from the axe, no other prehistoric traces were found during the excavation that could be dated to the Middle Bronze Age. Such traces were found a few hundred metres away (settlement remains and a group of barrows at the Hunerberg). Here, however, not a single piece of bronze, let alone an axe, was found. The axe must therefore have been put into the ground in an isolated location, away from settlements and graves.

Although most axes seem to have been single finds, some must have been deposited in each other's vicinity. This must have been the case for Meerlo-Wansum and the Echt marsh finds, and probably also for the finds from the river Waal near Nijmegen. Particularly in the case of the Echt marsh, but possibly also in the case of Nijmegen, Oldendorf axes were deposited in locations where in the same period other objects were deposited as well. We may be dealing here with small areas in the landscape that were revisited several times for the deposition of objects. It is not until the Middle Bronze Age B, however, that we can speak of 'multiple-deposition zones' as a general phenomenon in the landscape.

It is hard to see whether the axes received any special treatment before they were placed in such a marsh or river. It is for example unknown whether the axe was deposited in a hafted or unhafted condition. A remarkable observation is that some of the axes still have quite sharp edges. Blunt edges are hardly recorded. It seems as if these axes underwent a final resharpening before they were placed or thrown into the marsh or river.

6.4.2 Nick-flanged or geknickte axes

Another typical product of the north European Sögel-Wolhde complex are the so-called 'nick-flanged axes' (German: *geknickte*). They are listed in appendix 2.4. These axes have a very characteristic form: an angle in the curve of the sides. They also have flanges on both the upper and the lower half of the blade (fig. 6.5: no. 5). In Kibbert's typology, they are known as *Typ Fritzlar* (Kibbert 1980, 126-9). Although the nick may indeed have been helpful in providing a good hafting, as Kibbert suggests (1980, 123), it must certainly have been more than just a functional addition. After all, the majority of axes lack such a nick, whereas it is fairly certain that they had been successfully employed in heavy-duty tasks (see the observations made on the Oldendorf axes!). Rather, the nick seems to have been a display element that indicates the special character of such axes when compared to the more regular Oldendorf axes. In the area where they were presumably produced (northern Germany, possibly Schleswig according to Vandkilde 1996, 131),

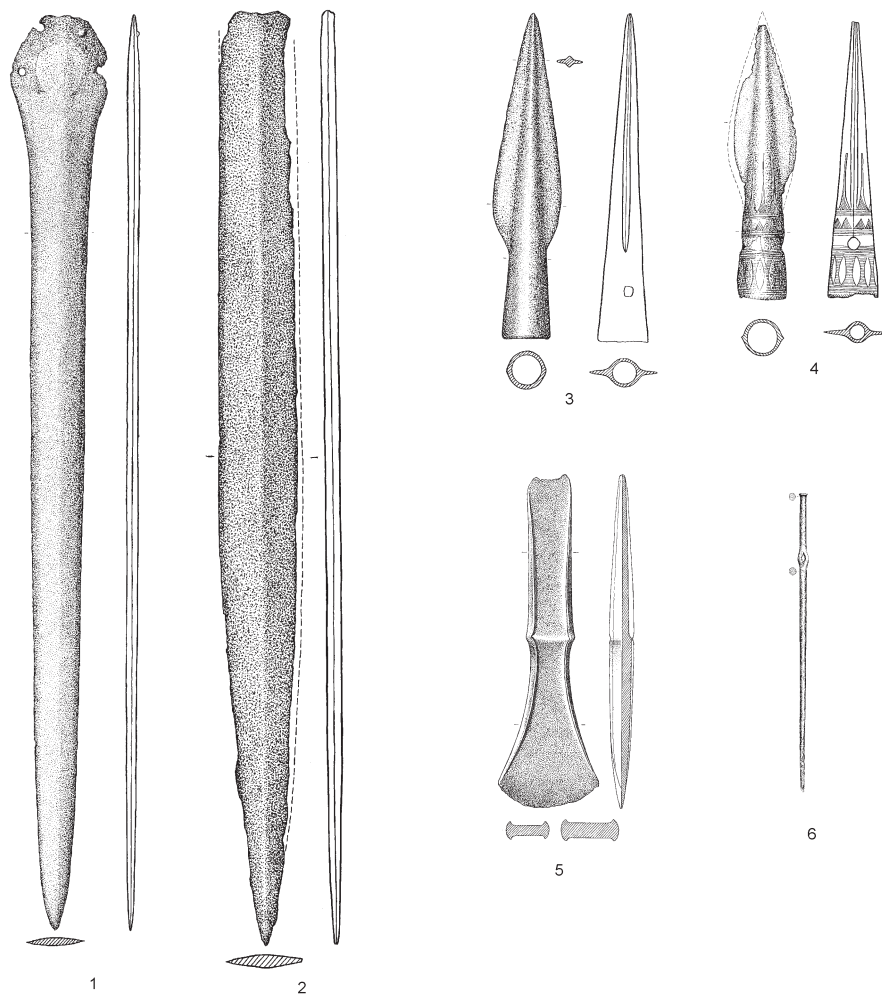


Figure 6.5 Contents of the Overloon hoard: Wohlde rapiers (1 -2), spearheads of type Torsted (3) and Bagterp (4), nick-flanged axe (5) and Bargloy pin/needle (scale 1:4, after Butler 1990, fig. 15).

nick-flanged axes are a recurrent element of the Sögel-Wohlde weapon grave set. In view of the stereotyped association between such axes and weapons, it can be argued that nick-flanged axes were meant to be battle axes in the first place, whereas other axes- and the most current Oldendorf axes in particular- primarily served as work axes. The relatively small degree of resharpening and damage observed by Vandkilde on the Danish nick-flanged axes may be in keeping with this (1996, 131).

In the research area, five nick-flanged axes are claimed to have been found (appendix). Two axes, possibly from the Bijlandsche Waard, are from a collection of dredge finds, that were purchased through the agency of an antique dealer. Although the axes themselves are no fakes, and in view of their preservation certainly finds from river contexts, it is not

certain whether the Bijlandsche Waard is the correct find spot. There is no reason to doubt the reliability of the other finds: the axe from the Overloon hoard, and a dredge find from Negenoord. A fifth object from Nijmegen is somewhat different in form. As it lacks a find context, we shall leave it out of consideration.

These nick-flanged axes must have reached the southern Netherlands through exchange, ultimately probably coming from the same region as the Oldendorf axes. A lack of data on traces of use, or the absence thereof, prevents us from assessing whether these axes had a significantly lower degree of resharpening and damage than contemporary axes, as observed on the Danish finds. At any rate, at least one of them was straight-ground and sharpened before deposition (appendix 2.4; one of the Rijnwaarden finds).

Three of them are finds from the major rivers or their backswamps, and one (Overloon) comes from a weapon hoard, containing two Wohlde rapiers, two spearheads, and one Bargloy needle (fig. 6.5). All of them, therefore, seem to represent intentional depositions. There is some evidence that the deposition of these axes should be contrasted with that of the contemporary Oldendorf axes. The hoard find will be discussed in more detail later on, but it should already be emphasized that this hoard represents a very special and rare type of deposition. If the Bijlandsche Waard is indeed the find-spot for the two other axes, then this must also indicate a special situation: two rare, but similar objects, that were deposited in each other's vicinity. And this may have taken place at a location that in itself has a special character, being not far from the place where the Rhine splits up, and where a high steep hill (Hoch-Elten in Germany) commands a wide view of the river valley.

6.4.3 *Atlantic imports? Arreton axes and axes with high-placed short flanges*

Among the other high-flanged axes there is a small number of axes that were probably made in Britain, or, in some cases, made elsewhere but modelled after British examples (appendix 2.4; fig. 6.3). These are the Arreton axes and the axes with high-placed short flanges, abbreviated as AXRR and AXRSH in Butler's typology (Butler 1995/1996, 192-4).

Type Arreton

There are four Arreton, or Arreton-related, axes from the region. Arreton axes, as defined by Schmidt and Burgess (1981, 72), have a long, rather parallel-sided body, a highly-rounded butt and an expanded crescentic cutting edge. The last two characteristics make them stand out from the Oldendorf axes. Only the axes from Brussegem and Sint-Odiliënberg are very comparable to the British axes, and therefore probably imported pieces. The two axes from Antwerpen-Oosterweel are somewhat divergent, one for example having a slight stopridge. It is unclear whether these were made in the region itself, or elsewhere in the Atlantic realm. There are indications that Arreton axes are contemporary to nick-flanged axes (Schmidt/Burgess 1981, 74). It is not inconceivable, however, that Arreton axes already existed and were exchanged shortly before the Sögel-Wohlde phase (see the discussion in Butler 1995/1996, 193). However, the stopridge of the Antwerpen find, which is a much later feature, shows that at least this axe dates from a considerably later time period (possibly in the fifteenth or fourteenth century BC). The Brussegem and Antwerpen finds are both from old collections. The recent find from St.-Odiliënberg, however, ensures that the presence of this type in the study region is also attested by more reliable sources. Hardly anything is known on their life and

deposition history. As mentioned above, some must have circulated across a wide region, before entering the southern Netherlands. The damage and resharpening observed on the edges of two of them shows that these have been used. Only the patina, observed on two finds, suggest something on the character of the place where these axes were deposited. In both cases, these should have been wet locations.

Axes with high-placed short flanges

The second axe type, the one with high-placed short flanges, is represented by two finds. These axes, by their short high flanges (only on their upper half) quite different from the other high-flanged axes found in the study region, are very similar to a category of British axes described by Schmidt and Burgess (1981, 73-4). Butler therefore argues that they were probably imported from eastern Britain during the Acton Park phase, probably in the same phase as the importation of the British palstaves that ended up in the Voorhout hoard in the coastal area of the western Netherlands (Butler 1995/1996, 194). This means that they would approximately date from the fifteenth century BC (Butler 1990, 78-84; table 1). There is evidence that at least one of them (Rijsbergen) has been hammered and worked. This axe was found in a peat layer of the stream valley of a small river. Of the other axe, we only know that it was found somewhere in the Dutch province of Limburg. Its patina indicates that it also comes from a wet location.

Summarizing we may say that, although a small and poorly recorded category, some of the axes described above surely represent imports from Britain. The meagre evidence there is suggests that they were used, and finally deposited in wet locations. In this way, they do not seem to depart from the life course followed by most of the Oldendorf axes.

6.4.4 *Two 'unique' axes*

Among the finds of the high-flanged axes in the study region, there are two specimens that stand out. Both are 'unique' examples for which there is no parallel in the southern Netherlands, and neither – and this is more surprising – in the adjacent regions. Still, there can be no doubt that both axes are reliable finds. What is more, both are among the few examples of metalwork that were found in barrow graves, and both are from the primary interment in a monumental barrow with ditch and bank (*ringwalheuvel*).

The axe from Alphen

The Alphen axe was found during the excavation of the barrow with ditch and bank (*ringwalheuvel*), among the cremation remains of the primary grave (Theunissen 2001). The axe was placed there unhafed (fig. 6.6).

The axe was severely corroded, and only the lower half was recoverable. It is trapeze-shaped, with a scarcely



Figure 6.6 The flanged axe from the Alphen burial (l. 10.8 cm).

expanded blade. On the sides there is a decoration of horizontal incised lines. Although this may have been a secondary feature, carved in the object when in the possession of a local community living near Alphen, such a decoration is actually unknown from any other high-flanged axe from the region. There is no good parallel for this axe, although it is not of a design totally alien to this region and its surroundings, as in the case of the Goirle axe, another burial find which will be discussed in the next chapter. On the basis of both form and decoration, it is likely that this axe was produced somewhere in the north German plain, during the Sögel-Wohlde phase (Butler 1995/1996, 222), but even then it is certainly not a form that is so typical for this area, like the Oldendorf or nick-flanged axes.

The Hoogeloon axe/chisel

The Hoogeloon axe/chisel was found in the largest *ringwal-heuvel* known in the southern Netherlands (fig. 6.8). It even is the largest grave monument erected during the Bronze Age in the southern Netherlands that is known to us. On an old heath surface, a sod-built mound of 19 m in diameter was built on an old heath surface. It was surrounded by a berm, bank and ditch, measuring 40 m in diameter in total. The

barrow was excavated in 1950 (Theunissen 1999, 59-60). A post circle was placed in the ditch after some silting had taken place. In a later phase, three secondary cremation graves were dug into the mound, as well as an inhumation grave (all without grave goods). In 1846, the amateur archaeologist Panken dug a pit in the centre of the tumulus. At ground level, he found a bronze axe/chisel (fig. 6.8). Although no further observations were recorded, this must be the location where the central grave might be expected. It is therefore likely that this object, like the Alphen axe, came from the primary grave.

This object is very different from all the other axes described in this chapter. It has a very narrow, not expanding cutting edge, and is therefore properly speaking a chisel rather than an axe. The hafting part has a shelf stopridge, much like that of the palstave axes that became current in this region after 1500 BC (see next chapter). There is a clear *nick* in the outline, comparable to those seen on the nick-flanged axes. The sides are partly ornamented with incised transverse parallel lines. This is another feature often observed on nick-flanged axes (although not on those found in the study region; cf. Vandkilde 1996, 131). Glasbergen (1954b, 168) dated the chisel as contemporary to Scandinavian period II/III. However, Butler and Steegstra (1997/1998, 202) have recently argued that close parallels for the Hoogeloon chisel can be found among the chisels attributed to Period IB and the Sögel/Wohlde phase (based primarily on those published by Willroth 1985 as *Form 7* and *10*). To my mind, the more recent publication of Danish finds by Vandkilde (1996, 130-8) corroborates Butler's and Steegstra's arguments. Vandkilde emphasizes the close formal, functional and contextual relationship between nick-flanged axes and nick-flanged chisels like this one. Both are decorated, and their nick-flanged outline, so typical and visually different from the form of other axes, seems to emphasize a commitment to a common significance and function, as opposed to other axes. Indeed, both are known from weapon graves (with dirk and spearheads), not only in northern Europe, but in mid-west Germany (Hessen) as well. Judging from the inventory of such weapon graves, nick-flanged axes and chisels seem to be exchangeable, fulfilling similar roles. Although our term chisel evokes associations with a tool for wood-working first, it is therefore likely that the Hoogeloon chisel was seen as a weapon in the first place. At any rate, its rarity both in design and occurrence in the region suggests that it was imported from elsewhere. Since there is now a wealth of evidence that shows the presence of such objects in the north European realm, including parts of Germany adjacent to the study region, it is quite likely that it came from those regions. They are, however, also known from more southern regions, like the region of Hessen in Germany. Ultimately, the concept of such nick-flanged



Figure 6.7 The stream valley in which the Overloon hoard was found, and a reconstruction of the original overlapping position of the objects. The historical situation from c. 1837-1844 is shown (based on the historical map 1:25,000, published in *Grote Historische Provincie Atlas Limburg*, Wolters Noordhoff).

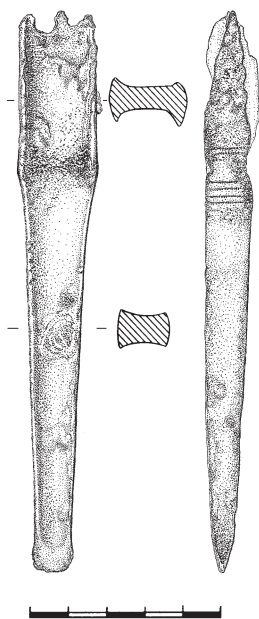


Figure 6.8 The palstave-chisel from Hoogeloon-Zwarteberg (scale 1:2, after Butler/Steegstra 1997/1998, fig. 64).

axes must have come from central European regions, from where the oldest specimens are known. Although its exact region of origin is unknown, this axe thus must have travelled across vast distances, and it is likely that it was seen by the local Hoogeloon community as having accumulated an impressive exchange history.

Conclusion

In both Hoogeloon and Alphen we are dealing with axes beyond the normative, that were deposited in burials that are beyond the normative as well. As axe deposition is furthermore unknown from burials, the biography of the Hoogeloon and Alphen axes must be considered an example of a specific rather than a generalized cultural biography (cf. chapter 3).

6.4.5 Stopridge axes

Among the high-flanged axes, there is a small number of tools that have a distinct stopridge between the side-flanges (appendix 2.4). Following Butler (1995/1996, 224), a stopridge is defined here as more prominent than merely a ridge defined by the meeting of two planes (as in the Oldendorf variety 2), and it 'is distinguished from palstaves in that the septum below the stopridge is not distinctively thicker than the septum above it' (fig. 6.9). A stopridge generally improves the hafting of an axe, particularly in the case of axes that are used for delivering heavy blows. In general, they are a relatively late type among the high-flanged axes, typologically marking the transition from flanged axes to palstaves. In the study region, a small number of stopridge axes has been found.

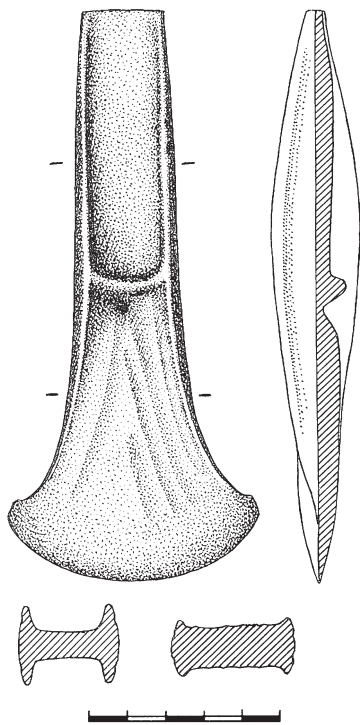


Figure 6.9 Stopridge axe of type Plaisir from Maastricht (scale 1:2, after Butler 1995/1996, fig. 36b: 157).

Stopridge axes of British and French types

A stopridge axe found in Aijen is very similar to axes found in Britain, classified there as type Bannockburn. It is probably an imported piece from the British Isles, but in view of a number of finds of comparable axes from Belgium and France, it cannot be ruled out that it was made in these regions, modelled after British imports. It probably dates from the last century of the Middle Bronze Age A

(Butler 1995/1996, 226). At any rate, it is unlikely that it was made in the southern Netherlands itself. The axe has a crescent-ground, sharp cutting edge. Traces of wear or resharpening could not be recognized, and the axe therefore does not give the impression of being used. Given the sharp edge, it must have been ground and sharpened shortly before it entered the ground. There are no records on the place where it was found, but the patina suggests that it was a wet location. Since Aijen is a small place on the river Meuse, it is likely that the axe was found during dredging activities, and thus can be interpreted as a river deposit.

The other stopridge axe that was clearly imported is an axe dredged up from the river Meuse near Maastricht, attributed to Butler's type Plaisir (fig. 6.9; Butler 1987). Butler argues that such axes must have been made in north-west France, something which is, amongst other things, supported by the find of a bronze mould there. They should be dated to the Sögel-Wohlde phase (Butler 1995/1996, 228-230). The axe is remarkable for its decorated blade. Such display elements are extremely rare among the high-flanged axes found in the research region. Although the edge of the blade has obviously been hammered, it is unclear whether it was intensively used. What is clear is that it ended its life by being thrown in the river Meuse (not only was it found among river sediment; its condition and patina indicate a long stay in a wet milieu). The exact find-spot is unknown, but the Meuse near Maastricht-Borgharen is also the place where a special, decorated Sögel-dirk had been deposited in the same period.³

Vlagtwedde axes

Three finds from the study area are of the Vlagtwedde type. These stopridge axes can be distinguished from others, particularly by their well-developed ledge stopridge high enough at least to match the height of the flanges, and often in side-view even projecting beyond the line of the sides. (Butler 1995/1996, 230-2). Not much is known about their dating range. The presence of one such axe in the Epe hoard (north of the research area) suggests that Vlagtwedde axes were in use as late as the fourteenth century (Butler 1990, 91-2, table 1; 1995/1996, 236). It has been suggested that these characteristic axes were a local product of the IJssel area, north of the research region (Hulst 1989). In view of the absence of such stopridge axes in the adjacent areas (and particularly among the German finds published by Kibbert (1980), this is likely. At any rate, there is no evidence to suggest that they were imports from regions much farther away, like the axes mentioned above. The Lathum the one from the Rhine therefore probably circulated over relative short distances only. If the Antwerpen specimen really is a Vlagtwedde axe (no drawing has been published yet), the distance over which this one was exchanged must have been considerably longer.

The high stopridge of Vlagtwedde axes is likely to have been designed for improving the hafting of the blade, allowing the axe to be used for heavy duties. The asymmetrical blade of the Latham find indicates resharpener, which may be related to such use. Unfortunately, for the other two finds, no such data is observable. Two of them represent river deposits.

6.4.6 Conclusion

The small number of axes with early datings

In sum, 49 high-flanged axes have been recorded. The overwhelming majority (at least 43) are attributed to the Sögel-Wohlde phase. In the southern Netherlands there is hardly any axe type that can be dated to the earlier phase, c. 1800-1700 BC (fig. 6.2). Axes that could chronologically bridge that gap, like Lanquaidt axes (Vandkilde 1996, 103-6), are unknown. Only the Arretton axes may date from somewhat earlier, but as already established, for the study region the evidence on their dating range is diffuse, suggesting a long period of use. Theoretically, it is possible that some axes now attributed to the Early Bronze Age, like those of the type Gross-Gerau or Emmen-related axes, were still current in the 18th or 17th century BC, thus filling this gap. Alternatively, the dating of Oldendorf and nick-flanged axes could be earlier. There are currently no indications for both scenarios. What we might be dealing here with is not communities living in the southern Netherlands in the 18th century that did not have axes (which seems impossible to believe since we must be dealing here with fully agrarian societies), but rather with a remarkable increase in the deposition rate of axes since the Sögel-Wohlde phase. But since there does not seem to have been a real bronze industry that was based on recycling metal here, we might wonder where all the earlier axes have gone. We saw a similar problem in the case of the Late Neolithic B flat axes (chapter 5). This problem cannot be solved here, but notwithstanding the evidence for a true increase in object deposition (see below, section 6.9.1), this remarkable gap may just as well point to inadequacies in the typochronological dating method.

Circulation

There are no arguments for the local production of high-flanged axes. The axes that were deposited in such locations must all have reached the area through exchange. In some cases the chain must have been relatively short (the Oldendorf-Ekehaar variety and Vlagtwedde axes, 6 %), in others very long (The Hoogeloon axe). The majority of the axes from this period must have come from the north-west German region, being typical products of the Sögel-Wohlde complex (the Oldendorf and nick-flanged axes, 73 % of all high-flanged axes). North French (8 %), and British, or

related, products (4 % of all high-flanged axes) are much rarer. This is not as might be expected in view of the supposed relations between southern Britain and the southern Netherlands. What's more, in one of the barrows with ring and bank (Alphen), thought to be one of the clearest examples of these relationships, an axe was found of an unknown but clearly non-British nor west European type.

Selective deposition of axes

The contextual evidence gathered here indicates that the majority of axes does not represent lost finds, or unretrieved stores, but intentional depositions, meant to stay in the ground forever. 49 % of all axes probably comes from a wet location, whereas 8 % comes from a dry one (table 6.1).

Oldendorf, Atlantic imports and most stopridge axes seem to share the following elements in their life-path: they were imported from beyond the region (although the distances may vary considerably), they were put to use in the domestic sphere, and they were finally deposited in watery places in the landscape. The Oldendorf axes in particular show traces of long and intensive use-lives, this is less clear in the case of the Bannockburn or Plaisir axes.

As a rule, axes appear not to have been deposited in barrow graves, nor were they deposited in settlements. The relative large number of excavated barrows from this period confirms that absence of axes from such contexts represents evidence of absence. The same applies to settlements, most of which are situated in the waterlogged river area and have been excavated with the systematic use of metal-detectors (In particular Meteren-De Bogen: Meijlink 2001; Butler/Hielkema 2002).

Divergent biographies were recognized for the nick-flanged axes and those from the *ringwalheuvels*. These axes all clearly deviate visually from their contemporaries. They can be divided into what probably was a specialized battle axe (nick-flanged type) and two non-normative *Fremdkörper* (Alphen and Hoogeloon). The nick-flanged axes were deposited in rivers, two of them perhaps together (Bijlandsche Waard), and accompanied by an entire weapon set (the Overloon hoard). The *ringwalheuvel* axes were placed in the primary graves of monumental barrows of a special type, possibly founders' graves. They are the conspicuous exceptions to a general tradition of keeping axes apart from barrow graves.

6.5 SPEARS

A new object to enter the existing material culture repertoire is the socketed bronze pegged spearhead (appendix 6.1; fig. 6.5: 3-4; 6.10; 6.11). The objects headed under this designation are generally too large and heavy to be used as a javelin. Functionally, they are more suited for thrusting. Small examples could also have been thrown at a small distance.

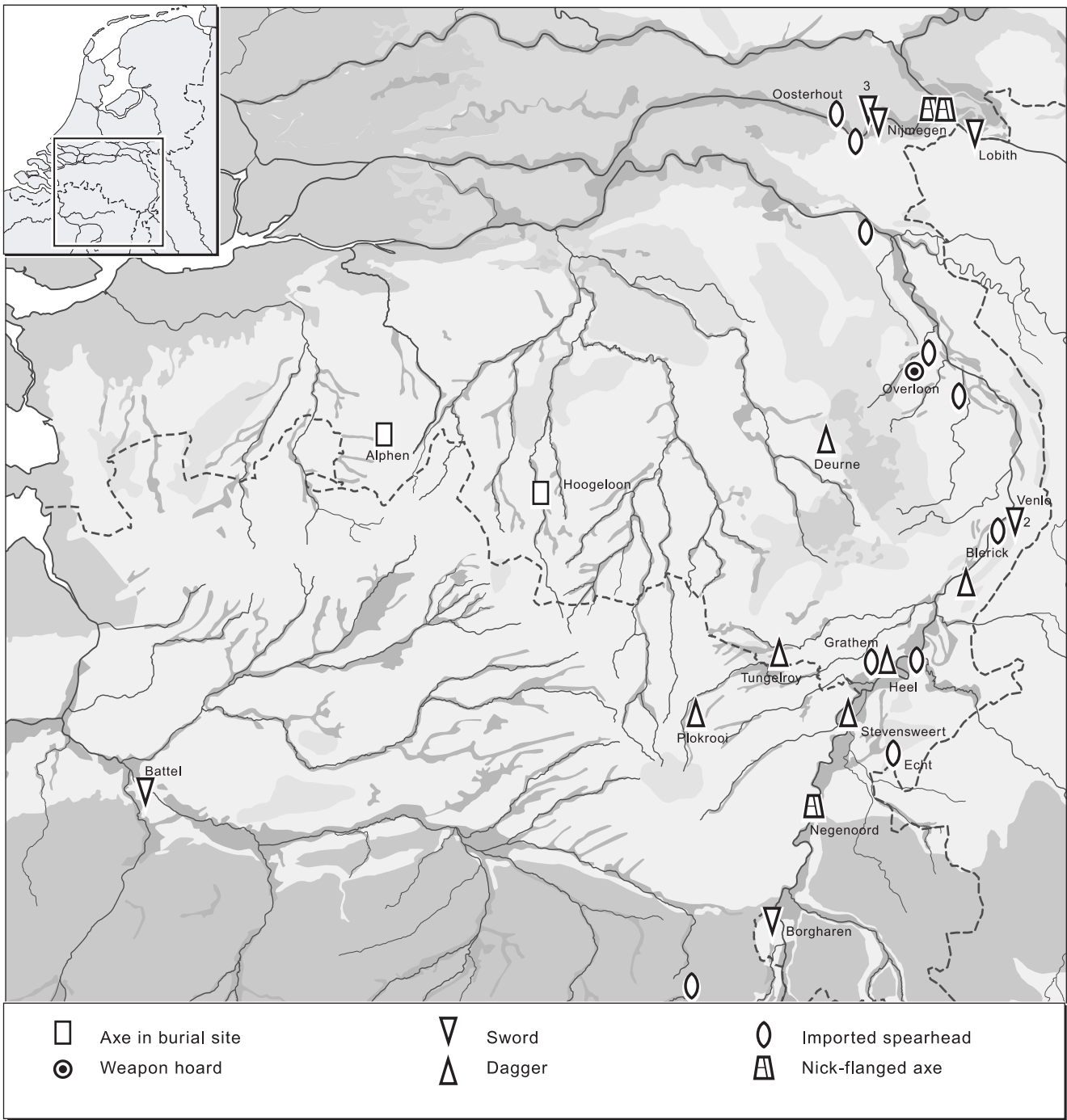


Figure 6.10 Swords, spears, possible weapon axes and ‘unique’ axe types from the MBA A.

Theoretically, spears can be both weapons and hunting equipment. In Europe, there is firm evidence that spears were used predominantly in battle (Osgood *et al.* 2000, especially fig. 2.7; Harding 2000, 281-3). In the Low Countries the adoption of spears occurs at a stage when fully agrarian economies existed, in which hunting only played a peripheral role that cannot be reconciled with the large number of spear finds. Nevertheless, we should not rule out that spears were used in specialized hunts of wild boars. It is likely, however, that these were special, perhaps prestigious, events.

Spears that for typo-chronological reasons can be dated to the earlier half of the Middle Bronze Age are relatively rare. They include the Scandinavian Torsted and Bagterp types and a possible central European spearhead (the Echt find). The Tréboul spearheads are transitory to the Middle Bronze Age B. These types, however, can only be dated here by virtue of a specific type of decoration. This brings us to the following problem that we will have to tackle not only in this, but also in the next chapters: a large number of plain and quite simple spearheads has been found in the research region, that can be dated no more precisely than Middle or Late Bronze Age. Attempts to trace typo-chronological developments prove to be difficult (Verlaeck 1996, 16-9; Bourgeois *et al.* 1996, 72). ¹⁴C-datings of the wooden shafts of spearheads from the Belgian Scheldt valley west of the research area show that plain spearheads date from at least 3200 BP to 2580 BP, defying existing typo-chronological theories (Bourgeois *et al.* 1996, 72). Although it is clear that since the Middle Bronze Age bronze spearheads are known, the consequences of their long dating range are that nothing can be said about the frequency in which they figured in depositions in the course of time. Theoretically, other plain spearheads may be added to the decorated or otherwise deviating earliest spearheads (appendix 6.3). The ten spearheads now attributed to the Middle Bronze Age A and the transition to the Middle Bronze Age B are therefore not likely to give a representative picture of the intensity of spear deposition.

Scandinavian and central European spearheads?

Three spearheads have been interpreted as imports from the Scandinavian region. These are the two spearheads from the Overloon weapon hoard (to be described in detail below), and a find from Blerick (appendix 6.1). The complex incised decoration on one of the two spearheads from Overloon is indeed typical for finds from Nordic regions, the so-called Bagterp type, and uncommon on central European, or Atlantic ones (fig. 6.5: 4). The other spearhead, however, interpreted as of the Torsted type by Jacob-Friesen (1967, chapter 1), is less convincing. This spear lacks decoration and has no formal characteristics that make it any different from spears that were current in Atlantic or central European

regions. The same goes for another undecorated spearhead found in Blerick, interpreted as type Bagterp (appendix 6.1; Jacob-Friesen 1967, 380 no. 1741). By its presence in the hoard, the undecorated 'Torsted' spearhead in the Overloon hoard illustrates that undecorated spearheads occurred as early as the Sögel-Wohlde phase. To my mind, the 'Bagterp' spearhead from Blerick does not allow anything to be said about its original place of production, and a more precise dating range than Middle or Late Bronze Age can actually not be given. A decorated spearhead found in Echt has a remarkable incised decoration of two rows of hatched triangles, separated from each other by a cross-hatched band. At the base there is a row of x's above which there are three horizontal lines. The rows of hatched triangles are known from spearheads found in a number of places. According to O'Connor (1980, 66) and Jacob-Friesen (1967, 113) such decorations are believed to be typical for types made in central Europe, although comparable decorations are also known from finds from Nordic areas (see for examples Jacob-Friesen 1967, taf. 16: nos 1, 2). An early date, in the Reinecke A2 or B phase seems likely (Jacob-Friesen 1967, 113). This would place it in the last part of the Middle Bronze Age A period.

Concluding, we may say that the decorated spearhead from Overloon is the only likely Middle Bronze Age A import from Scandinavian regions. The Echt spearhead might be one from the central European realm. Both objects from Overloon show evidence of sharpening or re-sharpening. The Echt find, although well-preserved, lacks sharpening facets, indicating that it was not, or only scarcely, used. To judge by its patina, the Echt find comes from a marshy context, possibly the same marsh where the deposited Oldendorf axes have been found.

Tréboul spearheads

Six spearheads have been interpreted as of the Tréboul type (appendix 6.1; Butler 1987, 9; O'Connor 1980, 63). Characteristic for such spearheads is a leaf-shaped blade, a socket that is sometimes ornamented with ribbing, incised lines, hatched triangles, or pointillé, and two smaller ribs alongside the mid-rib (fig. 6.11). They are believed to have been produced in France during the Tréboul phase (c. 1575-1450/25 BC, see fig. 1.4). The specimens from the research area mostly do not have incised decoration (see Butler 1987, fig. 1). Some have clearly been ground several times (especially the one from Oosterhout, see fig. 6.11), or have a resharpener facet. In one case (Cuijk/Alem) no facet could be observed, however, and it is unclear whether this specimen was used at all. Of the provenanced finds, most are from watery places, just like the Scandinavian and central European spears and most axe finds. They must represent deliberately deposited objects. One example (Grathem),



Figure 6.11 Decorated spearhead from Oosterhout-Verburgtskolk (l. 13.3 cm).

however, is said to have been found in a barrow. This would be a remarkable find, in view of the general scarcity of bronze finds in graves. Unfortunately, nothing more is known of this 'barrow',

Conclusion

It is without doubt that spears were introduced during the Middle Bronze Age A, but the long dating-ranges of plain spearheads prevent any discussion on the frequency with which they were deposited at this stage. Circumstantial and direct evidence (association with swords in the Overloon hoard) suggests that spears were first and foremost meant to serve as weapons. Some of the lavishly decorated pieces must have been acquired through long-distance exchange networks, with the Scandinavian Bagterp spear from the Overloon hoard as the

best example. The distinguished appearance of some decorated spears implies that they were display items in the first place. For the Tréboul spears in particular there is recurrent evidence for resharpened blades, suggesting that these had a lengthy use-history in battle. Most spears discussed here ended their life by being deposited in a variety of watery places.

6.6 'SWORDS' AND DAGGERS

Another object without precedents in extant material culture that makes its appearance during the Middle Bronze Age A is the sword (appendix 5.1). Being the result of a progressive trend of lengthening dagger blades, it is nevertheless an object that functionally departs from daggers. The lengthened dagger, a dirk or a rapier, is an object that could be used for thrusting, not stabbing or cutting (Harding 2000, 275-7). As such, it is not very practical for hunting. It can actually only be used as a weapon for close-range fighting. There is considerable confusion on the definition of a real sword, a rapier, and a dirk (Burgess/Gerloff 1981, 4-5). Schauer, for example, sees all blades over 25 cm as 'swords' (Schauer 1971, 1); Gordon (1953), on the other hand, sees all blades smaller than 35 cm as daggers. Harding labels all blades longer than 30 cm as 'swords' (2000, 277). Others, however, see a true sword primarily as a versatile object that can be used for both cutting and thrusting, enabling the warrior to deliver blows from all kinds of angles. In order to achieve such a functional combination, a firm blade-hilt connection is needed, and the blade should be leaf-shaped, and thickened towards the centre (Harding 2000, 277-8). This cut-and-thrust sword is only known from the Late Bronze Age. The Middle Bronze Age swords are primarily thrusting weapons. A distinction between dirks and rapiers seems useful. In this book, a dirk is considered a broad-bladed short thrusting sword. Following Gordon (1953) and Pleiner (1993, 5-7) thrusting swords with much smaller blades – rapiers that is – should be distinguished from dirks, since these were – unlike dirks – suitable for some sort of fencing, a fighting technique that demanded special training (Osgood *et al.* 2000, 23). Following Gordon (1953, 71), thrusting blades with a width less than 2.5 cm are here classified as rapiers. The term 'swords' will be used as an umbrella term for all varieties: dirks, rapiers and cut-and-thrust swords.

Although clearly used for different purposes, daggers will also be discussed here. The reason for this is that daggers have formal similarities to contemporary swords (the hilt) that suggest that both were related. Moreover, broken swords were often transformed into daggers (Bridgford 1997, fig. 1).

6.6.1 *Daggers, dirks and rapiers of the Sögel, Wohlde, Weizen and Gamprin types*

Sögel and Wohlde dirks/rapiers have long been considered to represent an older versus a younger type. It is now generally

agreed that this does not hold true and that they are contemporary, yet part of different kinds of warrior equipment sets (Vandkilde 1996, 156, 159). Vandkilde has recently argued that both date from the 16th century BC. A longer dating range, as was suggested by Butler (1990, table 1), seems less likely in the face of the new evidence. The Gamprin sword, which is close to the Wohlde type, is somewhat younger (Locham to Göggenhofen-Stufe; Schauer 1971, 38-41). The rapier dredged from the Rhine near Lobith is remarkable for its rounded trapeze-shaped hilt with notches (reworked torn rivet holes? It can tentatively be interpreted as similar to another central European form: type Weizen (cf. Schauer 1971, 56-7; nos. 154-155).

There are currently three dirks and four daggers of the Sögel type known from the research area. It is remarkable that two of the dirks are from the same place (Nijmegen). One of these, however, has an antique dealer's provenance, whereas of the other only part of the blade has been preserved (Nijmegen-Hunerberg). The dirk from Borgharen does not have the round hilt-plate that is characteristic for real Sögel dirks (fig. 6.12). Two of the dirks carry the typical incised decoration on their blades, the other dirks and all daggers are plain.

More numerous are the dirks and rapiers of the Wohlde and Gamprin variety (7). Such swords are as a rule not decorated, and are characterized by their trapezoidal hilt-form only (fig. 6.5: 1-2). They are generally longer than Sögel dirks (Vandkilde 1996, 156). In fact, this hilt-form is identical for dirks found over vast areas, both in north and in central Europe. This hilt-form also occurs on one heavily worn dagger found on a settlement site (Eigenblok; Hielkema 2002).

Swords as composite artefacts

It can be argued that the swords are composite artefacts, consisting of a blade, an organic handle, and a scabbard, of which our sample has only preserved information on the bronze blade. With regard to the discussion on their cultural biography, we should take this to mean that handle, scabbard and blade may have had different biographies, and perhaps even specific meanings. When preserved, handles often turn out to be beautifully shaped objects (Schauer 1972, fig. Abb. 2). In the course of time, such handles may have been replaced, however. This may have been particularly acute in case of a dirk that circulated for a long period. The meagre evidence there is on Middle Bronze Age scabbards indicate that these are simple, undecorated objects (see Parker Pearson 1999, fig.4.4 for an example). Since the Sögel dirks themselves are often decorated, the implication is that the blade was the part of the artefact that was meant to be seen. In this way, there is a difference in commitment to display between Sögel and Wohlde swords. Vandkilde (1996, 156)

has therefore argued that the two types had different social meanings, something which is also apparent from the difference in equipment between Sögel and Wohlde dirk graves.

Swords as items of exchange

The process of casting swords demands considerable skills. In view of the complete lack of evidence for local casting, there is no reason to suppose that such objects were produced in the region itself. It is unclear whether the same holds true for the production of small daggers like the one from Deurne. We saw that similar small, simple daggers were produced locally during the Late Neolithic B. The swords, however, are generally considered to have arrived in the region through long-distance exchange. Of old, Sögel and Wohlde swords were seen as north European imports. In the face of the overwhelming evidence of the production of comparable types in central Europe (Butler 1990, 74 and references cited there), it seems more likely that Sögel and Wohlde swords were produced in both central European and north European regions. As a matter of fact, the Nijmegen sword with two side-notches and two rivet holes is typical for the central European Gamprin type as defined by Schauer (1971, 38-41). Because of its rounded trapeze-shaped hilt-plate, the Borgharen 'Sögel' dirk is also likely to have derived from this part of Europe rather than from the north.

Functionality and use-life

In general, the functionality of most objects in battle should not be overestimated. The Sögel dirk from Nijmegen-Waal is only very short and it has a casting imperfection in its blade. The longer Wohlde rapiers from the Overloon hoard, however, are more suitable as thrusting weapons since their length allows the distance between the warriors to be somewhat greater than in the case of the short dirks. A number of swords show traces of grinding and resharpener (appendix 5.1), but impact marks have not been recorded so far (cf. Bridgford 1997). This can be explained by the very nature of such dirks/rapiers: they are simply not very suitable for the slashing and fencing action that causes such damage. Some objects never seems to have been used at all, like the Gamprin dirk, which has a blunt, unsharpened edge, or the Sögel dirk from Nijmegen. On the other hand, the Wohlde dagger from Eigenblok has edges that must have been resharpener to such an extent that practically only the midrib survived. It is very worn, and probably already very old when it finally came to rest in the ground. As such, it is in marked contrast with the evidence of the dirks and rapiers. This may explain the discrepancy between the typo-chronology of the dagger type and the date of the settlement site where it was deposited (c. 14th century BC; Jongste 2002; Hielkema 2002).

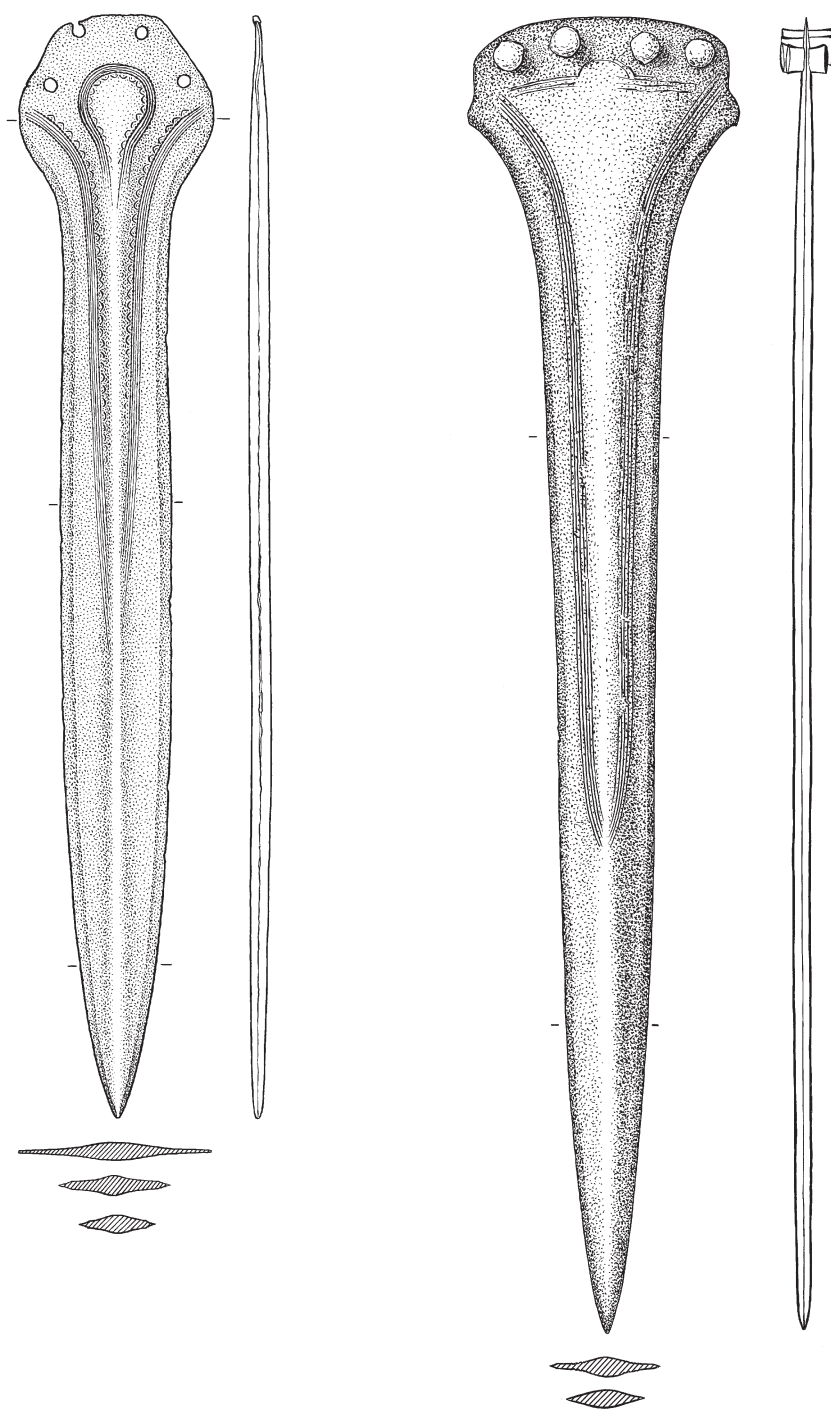


Figure 6.12 Decorated Sögel dirk from Borgharen-Maas (left) and Tréboul-St. Brandan dirk from the river Waal, (scale 2:5, drawing: GIA (Groningen Institute of Archaeology, formerly known as BAI).

Deposition

The majority of the swords come from the major rivers, where they must have been deposited (table 6.1). There is a remarkable concentration of deposits around the Nijmegen area (fig. 6.10). The daggers come from a variety of wet places situated in the region's interior parts. As mentioned above, one dagger (Eigenblok) was found among settlement debris of a Middle Bronze Age B settlement (it will be discussed in association with other house depositions in chapter 7). The other special context is represented by the weapon hoard of Overloon. Although some river finds have an antique dealer's provenance, similar but more reliable sword finds from the same area suggest that the presence of swords in major rivers as a whole is not the result of faked find circumstances. In a few cases it is clear from the patina discoloration that the objects were deposited together with their original wooden haft (this was probably removed when they were found by the dredgers). It is impossible to know whether the objects were originally deposited with or without a scabbard. A blade fragment from Nijmegen-Hunerberg is the only one that can be attributed to a dry context: a plateau near the steep ridge of the hills of Nijmegen. The large-scale excavations carried out at this spot have made it clear that at least one small cemetery with Middle Bronze Age barrows was situated here (Louwe Kooijmans 1973). None of these, however, has yielded a bronze grave gift.

6.6.2 *The Overloon hoard: the deposition of personal warrior sets*

Overloon is a hoard consisting of two rapiers, two spearheads, one pin or needle and one flanged axe, placed in a remarkable position on top of each other (fig. 6.5). They were found in a small natural hillock, bordering the marshy valley of a number of streams (fig. 6.7). In the vicinity, no other Bronze Age finds are known. The object set in the hoard copies those of warrior graves typical of the Sögel-Wohlde region (Vandkilde 1996), and those found more southerly, in Hessen, Germany (Jockenhövel 1990). The needle and nick-flanged axe are also typical elements in this type of graves. In such graves, the needle probably served to fasten garment (a cloak?). Consequently, the objects deposited here seem to have been the paraphernalia of a particular personal status, that of warriorhood with clear references to non-local ways of bodily adornment. Yet, the object set itself is probably not a grave as has often been thought. It is not only its location in the landscape that makes this unlikely: the find spot is a small isolated hillock in or at the fringes of the marshes of several streams (fig. 6.13). It is also the combination of objects that is uncommon for such graves, as well as their ordering in the hoard. Here clearly two personal object sets have been

placed (two rapiers and two spearheads), but only one nick-flanged axe and one needle (if the find indeed represents the original contents of the hoard). As a rule, warrior graves from this periods have one dirk or rapier and one spearhead (Vandkilde 1996, 303). Rare occasions are the combination of a rapier and a dagger, but not of two rapiers/dirks and two spearheads (Pleiner 1993, note 6). On top of that, from the patina of the finds, the original placement of the objects in the ground can be reconstructed (fig. 6.7), which deviates from the way weaponry is normally placed in graves. Therefore, the Overloon hoard must represent the deposition of at least two personal sets of Wohlde warrior equipment in a marshy environment.

6.6.3 *Tréboul-St.Brandan swords*

Another type of dirk found in the region are those of the Tréboul-St.Brandan type (fig. 6.12). There are only two of such dirks known from the region (Battel and one found somewhere in the river Waal), a third has an unknown provenance ('Halle-Zoersel'). They have a broad butt with often six rivet-holes, usually flanked by two notches. The blade has a midrib which is flanked by multiple grooves. Down the blade, the grooves converge and the midrib narrows down (O'Connor 1980, 66). They are dated to the French Tréboul phase, Reinecke B and Montelius Period I (O'Connor 1980, 66-7 and Schauer 1972). There are arguments that they were contemporary with Wohlde rapiers (Schauer 1972, 23). All this implies that they date from the sixteenth century, or somewhat earlier. It is less clear for how long they remained in use. Schauer argues that they were no longer current around the end of the Göggenhofen-Stufe, whereas Butler allows for a longer dating range (Butler/Sarfati 1970-71, 309). Although it is likely that the Dutch finds date approximately from the sixteenth to fifteenth century, a later date cannot be excluded (fig. 6.2).

Like the Sögel dirks, Tréboul dirks have a decorated blade. When the wooden handle has been preserved, this appeared to be decorated as well (Schauer 1972, Abb. 2). Like the Sögel and Wohlde dirks/rapiers, it is a composite artefact, and we may assume that scabbard, handle and bronze blade followed different life-paths. Schauer (1972, 21) argues that the different hilt-form allows a better grip on the dirk than in the case of other dirks (like Sögel and Wohlde dirks). It is primarily a weapon used for stabbing/thrusting, mostly not very long, and not allowing repetitive slashing-and-fencing action. The decoration of the blade indicates that this part was clearly meant to be seen. The decoration is rather stereotyped, although the butt end (as to the number of notches and the exact form of the hilt) can vary considerably. This may imply that the smiths who made such dirks deliberately attempted to produce an object that looked like existing ones, just as was suggested in case of the Sögel dirks.

Such dirks are numerous in north-western France, and probably the Dutch finds were imported from that region. Both dirks must have been deposited in rivers or their backswamps, like most contemporary swords discussed here. Both swords were sharpened before deposition, but they do not bear traces of an intensive use-life.

6.6.4 *The ceremonial dirk from Jutphaas*

A remarkable object among the metalwork discussed so far is the dirk from Jutphaas, found just north of the research area (fig. 6.13; Butler/Sarfati 1970/1971). In form, this dirk is related to the dirks of the Tréboul-St. Brandan type. Like them, the Jutphaas dirk has a broad midrib that takes the shape of an ogival ornament. From its point a single thin rib descends to the tip of the dirk. It is noteworthy that the casting is nowhere thicker than c. 8 mm, and of a perfect symmetry. Traces of casting seams or a casting jet could not be detected, although the object was in a perfect state of preservation. This is highly remarkable, for the edges of the dirk are neither sharpened nor blunted. We would at least expect minimal traces of seams to have survived here, but this is clearly not the case (Butler/Sarfati 1970-71, 305-6). Particularly if a two-piece mould was used for casting (which must have been the case here), this requires great skill on the part of the smith. This, together with the remarkable symmetry and thinness of the casting, shows that this object is the product of excellent workmanship (Butler/Sarfati 1970-71, 306; Fontijn 2001, 269). Perhaps the most remarkable observation concerns the hilt-plate. Although carefully finished, it had no notches or rivet holes whatsoever. This implies that it was never held in the same way as one holds a regular dirk. Making an effective slashing or stabbing movement with it must have been quite difficult as well in view of its remarkable thinness. Its unsharpened edges and lack of rivet holes show that this dirk was never used as such. The unpractical design (its thinness) implies that this was never intended even. On the other hand, pains were taken to produce a highly symmetrical object. The element of display seems to have been primary in the design. The dirk has therefore been interpreted as a ceremonial object (Butler/Sarfati 1970-71)

The Jutphaas dirk was found during dredging operations. The find-spot lies a few hundred metres north of a fossil river course that was already dry land in the Middle Bronze Age. It is some thirteen kilometres away from the Middle Bronze Age settlements of Zijderveld and a few hundred metres north of a fossil river course on which contemporary human occupation could have been possible. The dirk itself, however, must have been lying in a boggy basin (Butler/Sarfati 1970-71, 304).



Figure 6.13 The ceremonial dirk from Jutphaas, 42.3 cm. Photograph ROB.

The excellent preservation shows that it must have been deposited there, and that it was not originally a dry location that became a marsh only later.

Special characteristics of ceremonial dirks of the Plougrescant-Ommerschans type

The characteristics of the Jutphaas dirk mentioned so far make it an outstanding object among current metalwork. But there is more to it than just that. The Jutphaas dirk is one of a group of very similar dirks. In all, five such dirks are known (Fontijn 2001). Two have been found in France (Beaunne, eastern France and Plougrescant (Britanny), one in southern Britain (Oxborough), and two in the Netherlands (the one from Jutphaas and one from Ommerschans in the northern Netherlands). They have been labelled ceremonial dirks of the Plougrescant-Ommerschans type (Butler/Bakker 1961; Needham 1990), and are dated *c.* 1500-1350 BC.⁴ The Jutphaas dirk is the only one of normal dirk size. All the others are much larger, and can safely be described as absurdly over-sized for a dirk (Butler/Bakker 1961). For example, the one from Ommerschans is 68.3 cm long and 18.6 cm wide across the hilt-plate. None of them has notches or rivet-holes or sharpened edges and all are very thin. For the large ones, their non-utilitarian design is even clearer than for the one from Jutphaas. These objects were meant to be seen. Particularly the large ones could not even be held in the way one holds a dirk. They are not dirks in a proper sense, but magnifications of the visual impression of a dirk (Fontijn 2001, 267).

In all their details the dirks are very similar. Those from Ommerschans and Plougrescant are even similar to such an extent that they must have been made in the same mould (Butler 1990, 87). The example from Oxborough has slightly different dimensions and therefore must have been made in another mould (Needham 1990, 239-41). This, however, makes the visual similarities between this one and those from Ommerschans and Plougrescant all the more striking. The smith who made the Oxborough dirk must have had an intimate knowledge of those from Ommerschans/Plougrescant. Only the blade part of the Beaunne dirk is left, but again it shows great similarity to the other ones. Jutphaas is the only specimen of regular dirk size. Even this object, however, is a copy of the other dirks in all their details. Butler has argued that Jutphaas is actually a reduced version of the Ommerschans dirk (Butler/Sarfati 1970-71, 308). The resemblances between the objects are so striking that they must be deliberate. The smith seems to have made an object that not only had some similarity to an existing Plougrescant-Ommerschans dirk: the aim seems to have been to make an object that was an almost identical copy of such a dirk in every respect. This implies that the smith worked with a well-defined visual concept of a specific type of dirk

in his mind. (Fontijn 2001, 268-9). The Jutphaas dirk, being the only one of deviating size, is a case in point. Although smaller, the typical form of the ogival ornament, the minute details of the midrib, and the shape of the hilt-plate all add to the visual impression that this is one of them'. Such a high-level of similarity is unprecedented among the objects described so far, and it suggests that these similarities were deliberate and apparently mattered to the community on whose behalf the objects were produced. It also suggests that they were all made by the same smith or workgroup (Butler 1990, 87).

These observations become particularly interesting in view of the observation made above that these objects are all the product of excellent workmanship, outstanding among contemporary metalwork (Butler/Bakker 1961, 199), and in view of the fact that some – particularly the Dutch objects – of them must have travelled over a vast area. Butler (1990, 91) has suggested that the dirks were made in northern France, or in southern England. Consequently, the Jutphaas dirk must have been exchanged over hundreds of kilometres.

6.6.5 Other finds: two daggers of British type

Finally, some words need to be said on the find of two daggers that typologically and chronologically do not fit within existing sword and dagger types. These are the daggers from Heel and Stevensweert, both erroneously interpreted as halberds (appendix 5.1; Stoepker 1990, 241). The Stevensweert dagger (fig. 6.14) can be interpreted as a grooved ogival dagger dating to the Wessex 2/South German A2 phase (Gerloff 1975). This phase precedes the Sögel-Wohlde phase (fig. 1.4). The dagger from Heel is comparable to British daggers of Gerloff's Ridgeway group (Gerloff 1975; spec. no. 94 and 95). This type is also dated to the late Wessex phase. Both daggers seem to be earlier than the other swords and daggers discussed here. Since both daggers have three instead of four rivets, they are likely to have been British imports rather than central European (Swiss) ones. Later on, we shall see that these daggers are actually among the few examples of object deposits dating from the earliest part of the Middle Bronze Age A. The find-spots of both daggers are in the Meuse valley not far removed from each other. The Stevensweert dagger is a dredge find and probably represents a river deposit. The Heel dagger was found on dry land with a metal-detector. It might come from a former river channel, however, since the edges carry a brown patina. Since the precise find spot is unknown to me, this cannot be verified.

6.6.6 Sword biographies

Reviewing the evidence on swords and daggers, a number of conclusions can be drawn. Contrary to axes, a number of deposited swords has never been used. In general, they were skilfully made, and the element of display seems to have



Figure 6.14 Dagger from Stevensweert-Maas (not to scale; after Stoepker 1990, fig. 38).

been more important than for contemporary metalwork (Sögel, Tréboul St. Brandan, Jutphaas). By their very design, some swords were also quite impractical specimens. Both aspects are present in the extreme in the Jutphaas dirk, which is an outstanding piece of metalworking, that was never was intended to be used, however. The implication is that swords more than other objects had ceremonial rather than practical functions. The rather stereotyped decoration on some types indicates that swords were deliberately made to look like other swords; again this comes best to the fore in the case of the Jutphaas dirk, which belongs to a well-defined, highly similar group of ceremonial dirks. It is this find, too, that exemplifies another element vital to all swords known to us: they must all have circulated over vast areas. They were probably part of a more encompassing warrior outfit that was for some reason laid down by the warrior, as is suggested by the well-preserved Overloon hoard. Resharpened blades remind us of the fact that some swords may also have accumulated meaning by actually having been used in battle. Although the number of finds is not so high, the majority seems to have been deposited in major rivers, sometimes in the same place (several sword deposits are known from the Nijmegen area and probably also from Venlo). In the emphasis on rivers, they contrast with inland deposits of axes, spears and daggers. The latter category may include objects with some formal similarity to swords, but their deposition seems to have been in a greater variety of watery places than in the case of sword deposition. It might

therefore be ventured that they probably did not have the same special meaning as swords.

6.7 DEVELOPMENTS IN THE STRUCTURE OF THE METALWORK REPERTOIRE

Having discussed the metalwork finds of the Middle Bronze Age A and having gained some insight into the biographies of different types of objects, it is now necessary to bring the different pieces of evidence together and consider general patterns in the life-cycles of things. Before we focus on these, it seems wise to pay some attention first to the introduction of new objects among the metalwork repertoire: swords and spears. Since these new object types were specialized weapons, the very fact that they were adopted and came to play a role in depositional practices suggests that the significance of warfare and martiality was on the increase.

6.7.1 *The category of specialized weaponry and what it implies: the social significance of martiality*

In the last chapter, I concluded that since the Late Neolithic metalwork objects were increasingly used in practices of permanent object deposition, gradually replacing those made of other materials. Tentatively, a division could be made between metal objects used for bodily adornment and axes. The idea was put forward that body ornaments and dagger may have been related to the construction of a specific kind of personhood in a burial context, and that martiality was one of the values being emphasized in such a context. This martial element seems to have become more pronounced during the Middle Bronze Age A.

Above, it has been argued that both swords and spears were new objects in the Low Countries, for which no real predecessor existed. Both are specialized tools designed for battle. There is a gradual difference between spears and lances on the one hand, and dirks and rapiers on the other. In practical terms, spears could still be used for hunting as well, but dirks and rapiers are not much use for other practices than fighting. I want to emphasize that spears may to a certain extent allow low-risk fighting (throwing spears at the enemy from some distance), whereas dirks and rapiers are only useful in high-risk fighting practices where warriors agree to come face-to-face. Therefore, dirks and rapiers are certainly not a technical improvement in warfare techniques; rather they indicate a commitment to a specific way of fighting, a way that is highly personal (warriors coming face-to-face), more risky, and based on common codes (if one of the warriors chooses to shoot his opponent with bow and arrow from a safe distance, the idea of dirk fighting is pointless from the outset). Moreover, the characteristics of the dirks and rapiers studied here make it clear that they are certainly not superior, forceful weapons. Slashing an

approaching enemy with an axe was probably much more effective. Apart from that, dirks and rapiers are also more difficult to produce than such axes. In this period, almost everywhere in north-west Europe dirks and rapiers appeared and became an inextricable element of material culture from then on (Harding 2000, chapter 8). The very fact that dirks and rapiers were made shows a distinctive commitment to a peculiar way of fighting, which is not more effective, but more personal and based on specific behavioural codes. The evidence from northern Europe, including the northern Netherlands, shows that dirks tend to occur in large barrows and rich graves. It may therefore be argued that this way of fighting was not just different, but also distinctive for the martial life-style of a small group, an elite. The fact that a ceremonial object now takes the shape of a sword seems to exemplify the special meaning of swords and sword-fighting.

If we now go back to the division between tools and objects of body adornment, seen as typical for the period before the Middle Bronze Age, a dirk or rapier may be a new element in the latter category. Many of the early dirk graves from northern Europe can be seen as still having many elements of the Beaker grave. One characteristic is, for example, the presence of a set of flint arrowheads, just as in Beaker graves. The copper dagger that is so often found in Beaker graves, however, seems to have been replaced by a (Sögel) dirk. The potential multi-functionality of the weapons from a Beaker grave (dagger/knife and archery equipment) was now being replaced by a more clearly specialized weapon set.

6.7.2 *Transformations in existing categories of material culture*

There are a number of basic contrast between the new objects on the one hand, dirks/rapiers and spears, and the already existing bronze axes on the other. They are summarized in table 6.2. The weapons that were deposited are not only specialized tools, they also have visual characteristics that are absent from most axes. The blades of dirks/rapiers

and some spears are decorated in a stereotyped way, implying that such objects were more rigidly defined as a group. Also, many dirks and rapiers that figured in deposition do not give the impression of actually having been used, in marked contrast to the heavily worn Oldendorf axes. The increase of specialized weapons suggests that axes lost the dual roles they had had before, being both tool and weapon. A diversification among axe forms in northern Europe suggests that this was indeed the case. This development is relevant here, since these objects reached the southern Netherlands as well. The visual contrast between the regular Oldendorf axes and the rare nick-flanged axes have already been emphasized. Actually, Oldendorf axes and nick-flanged axes – their contemporaries – differ in a way that reminds us of the way in which the new weapons differ from axes. Table 6.3 summarizes these contrasts. It has already been argued that the visually deviating nick-flanged axes were specialized objects, weapons, because of their associations with swords and spears. They may have been designed as weapons, but this does not mean that they were also used for it in regions to which they were imported. In the southern Netherlands, however, there are arguments that the nick-flanged axes were indeed deposited in a way different from Oldendorf axes. One of those contexts, the weapon hoard of Overloon, is clearly of martial character, whereas another, the chisel from Overloon, must have come from the central grave of the largest Bronze Age barrow in the region, reminding us of the elite-associated character of most of the weapon graves.

6.8 METALWORK CIRCULATION

6.8.1 *The restructuring of spheres of exchange?*

The incorporation of weapons in the already existing phenomenon of deposition of metal objects not only seems to coincide with a significant increase of the rate in which it was practised; it also seems to have led to new objects being treated and valued differently, and to a restructuring of the until then rather undifferentiated practice of axe production, circulation and deposition. On the basis of their frequency of

	Axes	Dirks/rapiers and spears
Occurrence	regular	rare
Display elements	sometimes	often (stereotyped)
Function	multi-functional	specialized (battle)
Production	relatively simple	complex (dirks/rapiers)
Type of object	existing	new
Use life	for a variety of tasks	often not used at all
Deposition	in many types of wet locations	major rivers, weapon hoard, unknown

Table 6.2 Contrasts between MBA A metalwork objects.

	Oldendorf axes	Nick-flanged axes/chisels
Occurrence	regular (> 30)	rare (< 10)
Display elements	lacking	emphasized
Function	multi-functional	specialized? (battle axe?)
Production	relatively simple	more complex
Type of object	existing	new, visually deviating form
Use life	used for a variety of (heavy duty) tasks	unknown
Deposition	in many types of wet locations	major rivers, possibly associated; weapon hoard; burial in monumental barrow

Table 6.3 Contrasts between axe types from the Sögel-Wohldde phase.

occurrence, specialization, presence of display elements, decoration, functionality (and signs of actual use), the Middle Bronze Age A metalwork can be classified in the way outlined in fig. 6.15. At the top, there are the extremely rare, a-functional, highly elaborate and excellently made objects of a ceremonial nature. At the bottom, there are the plain, simple and regular work axes. The suggestion can be made that these different form classes of objects were also treated differently by people, and had different biographies. Since most objects must have reached the region through exchange, it is conceivable that this differentiation echoes ranked spheres of exchange. As set out in chapter 3, every non-monetary exchange system would have different spheres of exchange, with most objects that are a society's most valuable and inalienable possessions at the top, and the more current and alienable ones in the lower spheres. Although archaeology does not allow us the study of circulation in such detail, it is an interesting question whether dirks, for example, had a different life from Oldendorf axes. As said above, there are indications pointing in this direction. What can be investigated, however, is the way these different objects were treated in depositional practices. Before that subject is dealt with, some final words need to be said on

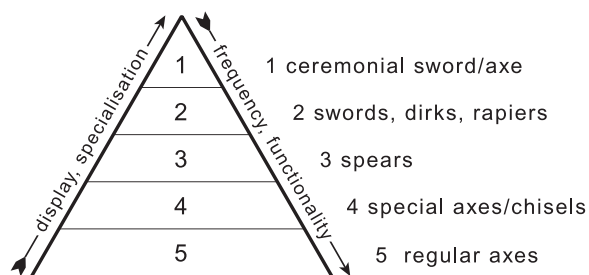


Figure 6.15 Structure of the metalwork repertoire.

the issue of exchange. For many objects, particularly dirks/rapiers and their ceremonial versions, it is likely that they circulated in a system of exchange of valuables.

Godelier (1999, 161 ff.) has argued that valuables in such systems usually have the following characteristics:

- Although they look like tools or weapons, they are never of practical use.
- There is a certain abstraction. ‘This seems to be the prerequisite for their being able to embody social relationships and thought systems and then to represent them’ (Godelier 1999, 162).
- They are ‘beautiful’ to valorise the object’s owner and serve as a source of emotions

He goes on to argue that consequently the most valuable things are unique. If we now return to the classification presented in fig. 6.15, then it appears that the top-most objects (dirks/rapiers and ceremonial dirks) all have these characteristics. The distinction between real dirks and a ceremonial dirk like the one from Jutphaas becomes also more marked.

- Such objects certainly evoke the image of a particular weapon (a dirk, a high-flanged axe), but they could never have functioned thus.
- There is obviously an element of abstraction in the manner in which Plougrescant-Ommerschans objects represent dirks. The same is true for ceremonial axes, like we know them from adjacent regions.⁵ As a rule, both are magnifications of the original objects, there are their remarkable thinness, the unsharpened edges and the absence of rivet-holes and notches (in the case of the dirk)
- Although ‘beautiful’ is a subjective concept, all these objects are the products of excellent workmanship, not seen on more regular dirks and axes.

If we add to this the fact that these ceremonial versions are extremely rare, and – in the case of the Plougrescant-Ommerschans dirks – part of a small, rigidly similar group

probably made by the same smith, then it becomes likely that these objects most have belonged to the highest ranking objects. They must have been designed as a singular, outstanding class of objects. Following Godelier's re-formulation of Mauss' original thesis on gift exchange, these objects may have served as the ultimate inalienable possessions, embodying a society's most crucial possessions. The fact that such a ceremonial object is an abstraction of a dirk is informative on the significance attached to such martial objects by the French or British community on whose behalf it was produced. However, the fact that such an object was exchanged over long distances and was apparently capable of transcending cultural barriers to be finally deposited in a marsh in the southern Netherlands, say a good deal about the appreciation and valorisation of martial ideologies in those regions as well.

6.8.2 *Metalwork circulation: the southern Netherlands in the north-west European world*

So far, I have discussed the nature of the objects that were imported into the region, as well as the way in which this metalwork exchange was structured. This leaves us with the question of the more precise constellation of the contact networks that linked the southern Netherlands to the wider European world. That the southern Netherlands were part of such a network is evident: there is actually no evidence for metalwork being locally produced in this region. If a local production existed, it may have applied to the most regularly found objects, the Oldendorf axes. Another possibility is that the production of the later Vlagtwedde stopridge axes took partly place in the southern Netherlands (as argued in section 6.4.5, it has been suggested that such axes were produced in the northerly Dutch IJssel region). This remains entirely hypothetical, although it is a possibility. At any rate, if Oldendorf axe were produced in the eastern parts of the region (the Meuse valley and/or the adjacent German region), then the fact still remains that no trouble was taken to give them a regional character (as was done in the case of the Ekehaar variety that was probably locally produced in the northern Netherlands). Actually, an Oldendorf axe found in the Netherlands cannot be visually told apart from one found in Denmark. If such axes were locally produced, then the attempt to make them look like those from other regions must have been deliberate (e.g. by means of making clay moulds of imported ones). In this way a regional identity would not have been emphasized in the character of the objects, rather the contrary. We saw a similar phenomenon in the case of the Early Bronze Age Emmen axes.

Summarizing we may say that the tools that were so significant in the existence and life of local groups in the research region were probably all imported, and, if locally produced, strongly affiliated to an international style. As will

be further argued below, the marked increase in deposition of such bronze objects, axes in particular, in most parts of the southern Netherlands indicates that the practice of deposition became wide-spread and took place more often. Consequently its social significance must have grown considerably. Since this practice could only exist by virtue of a regular supply of bronze objects from outside the region, it can be inferred that the southern Netherlands (but the northern Netherlands as well) was to the regions whence these objects came as a periphery to a core. After all, socially relevant practices like axe deposition depended entirely on the importation of foreign objects. In view of the total lack of evidence on axes made of other material than bronze, the dependency relations must have been even more fundamental than just the supply of objects that were relevant to specific ritual practices like deposition. It would, however, go too far to state that a real core-periphery relation existed between, say, the north German region and the southern Netherlands during the 16th century. For such a relation to exist, we would expect a local elite to have based their power on exclusive access to external prestige-goods networks. Although there is evidence for the exchange of rare valuables (see last section), these valuables are too few in number to suggest that an entire system of social reproduction was based on the control of such prestige-goods networks. The Dutch evidence is in no relation to the situation in Denmark during this phase, where the presence of an elite, portrayed in graves with a recurrent set of central European imports, is clearly discernible (Kristiansen 1987). In essence, however, it can be argued that the southern Netherlands too, was linked, much more than before, to a wider, regular system of long-distance exchange. It must have been through these channels that the new objects like dirks and rapiers, and the ensuing concepts about martiality, flowed.

6.8.3 *Bronze circulation and the problem of the 'Hilversum culture'*

But were there regional developments as well? In the introduction to this chapter, it was argued that the Middle Bronze Age A saw transformations in existing material culture, the formation of the 'Hilversum culture' being the most significant one. The new, so-called British, elements on ceramics, as well as a remarkable new type of barrow, the *ringwalheuvel*, were arguments in favour. In a recent study, Theunissen (1999, 208-11) has argued that the occurrence of Hilversum ceramics in the Middle Bronze Age A develops parallel to a regionalisation in ceramic traditions in the Netherlands, Belgium, northern France, and southern Britain. In the preceding period there was a marked similarity in ceramic style (Beaker pottery) in most of these regions. The Hilversum type of ceramics, however, is still clearly related to pottery styles current in northern France,

western Belgium and southern Britain (Theunissen 1999, 210-11). *Ringwalheuvelds* occur in these regions as well (idem, 207).

Hilversum pottery may be restricted to a very early phase within the Middle Bronze Age A before the 16th century⁶, a phase for which we hardly know any bronzes. *Ringwalheuvelds*, however, extend later in time, as suggested by the bronze finds and ¹⁴C-datings (Theunissen 2001). The bronze imports from the later part of the Middle Bronze Age A, however, show considerably less evidence of Atlantic connections. The most frequent items of this period are the continental Oldendorf axes, and most sword types are continental as well (appendix 5.1). The networks of contact and influence that linked the southern Netherlands to the adjacent European regions during the Middle Bronze Age A, are more heterogeneous than once thought (cf. Theunissen 1999, 207-8). A case in point are the *ringwalheuvelds*, traditionally thought to be one of the clear-cut examples of those British, or at least Atlantic, connections: the bronze objects found in them are not Atlantic, but north or central European in origin.

Summing up, we see that the evidence of metalwork shows the significance of continental relations instead of the predominance of Atlantic ones that we would expect on basis of the prevailing pottery style and the *ringwalheuvelds*. Consequently, a major part of the bronze circulation took place through different contact networks than those by which the Atlantic pottery traditions and barrow types became dispersed.

6.9 PATTERNS IN METALWORK DEPOSITION

In section 6.4 to 6.6, the following patterns in deposition have been recognized.

- Deposition of used axes in a variety of watery places all over the region
 - Deposition of nick-flanged axes in a deviating manner (together in a river or as part of a weapon set)
 - Deposition of spears in a variety of watery places, or as part of a weapon set
 - Deposition of swords, often unused, including a ceremonial version, predominantly placed in rivers
 - Non-deposition of metalwork in burials and settlements.
- The exceptions are non-normative objects in non-normative barrows.

(The deposition of daggers is more difficult to understand. It seems to overlap the kind of locations into which axes or spears were placed.)

What can be deduced from these patterns? In the following, it will be argued that essentially the patterns follow the fundamental division between deposition of valuables related to personhood, and other valuables. First, however, we should tackle the discussion on possible fluctuations in the rate at which deposition was practised.

6.9.1 *Fluctuations in the rate of deposition*

Looking at the dating ranges of the objects under investigation (fig. 6.2), a major differentiation exists between objects dating from the first half of the Middle Bronze Age A (only a handful) and those from the later phase (parallel to the Sögel-Wohlde-phase). If we trust these datings, we can only conclude that metalwork deposition was significantly lower in the earlier part of the Middle Bronze Age A. As we have seen, it was different in character as well, involving new objects like swords and spears. On the other hand, we should be careful in drawing such conclusions. Axe types that would chronologically fill the gap in the earlier part, like Langquaidt axes, are indeed unknown from the Netherlands and Belgium. The dating range of Early Bronze Axes of the Emmen type, however, is much less well known. Theoretically, it could extend to the beginning of the Early Bronze Age. Our find hiatus may therefore partly, but not entirely, be the result of dating problems. After all, the evidence for axes with clear later, and not earlier, datings cannot be ignored. Among them are the items that we find most frequently in Middle Bronze Age A deposits: the Oldendorf axes, the nick-flanged axes, most axe types listed in appendix 2.4 and the Wohlde swords.

6.9.2 *Axe deposition*

The overwhelming evidence of depositions is for offerings of axes in all kinds of watery places. Apart from a possible hiatus, or at least decrease in deposition rates in the first part of the Middle Bronze Age A, it is fundamentally a continuation of the widespread practice that we saw in the Early Bronze Age. In section 6.4 it was argued that the life-paths of Oldendorf axes, Atlantic imports and stopridge axes all shared common elements: an axe was imported from far, it circulated, was put to use and finally deposited in a watery place. The traces of a use-life are the most pronounced in the case of the most-current axe type, the Oldendorf axe. Use traces on such axes show that they were used for heavy duty tasks like cutting down trees and heavy wood working. In all probability, we can assume that these were tools with which the land was reclaimed and the houses built. Some examples must have circulated for a long time, like the Oldendorf axe fragment from Montfort that was re-used as a wedge. We may be inclined to see it as evidence of a rigid economical way of dealing with material. However, this makes no sense in the light of the observation that most of these economically used axes were deposited in a way that result in their loss: they were thrown into rivers or streams, impossible to retrieve any longer, and as shown in section 6.4, this cannot be the result of casual loss, but it was a deliberate removal of this object from further use. Moreover, it was observed that many axe were re-sharpened, and the sharp patinated cutting edges indicate that this happened not long before their final

deposition. They were thus deposited *as if for use*. The conclusion that can therefore be drawn that this use-life that was so visible on the axe, was not the result of economical use of scarce material; *this use life mattered for the selection of the axe for deposition*.

The preference for placing such axes in watery places, and not in graves, was something that we have already seen for the Late Neolithic B and Early Bronze Age. With the rise in archaeologically visible burials, it becomes even more apparent than in the case of the earlier periods that axes did not have a place in the construction of personal identity of a deceased individual in a barrow grave. The possible entanglement of axes and communal histories (reclamation, house-building) and the subsequent meaning of axes in the communal domain that was suggested for the Late Neolithic B and Early Bronze Age thus seem to continue in the Middle Bronze Age A, as does their notable absence in association with the construction of personhood in graves.

Although essentially we saw the same for the Early Bronze Age, the paradox involved in the selection of the offering location now becomes more apparent. If this involvement of the axe in local histories of house building and settling or resettling was really so important, it then comes as a surprise that such axes were almost as a rule finally deposited in locations that seem to have nothing to do with settlement, reclamation or house locations. Rather the contrary. For example, the Oldendorf axes found in the marsh near Echt are from an entire valley that must have been a remote, uninhabitable swamp. The axes from Meerlo-Wanssum were found near higher grounds with at least one barrow. The axes, however, come from an old Meuse channel, below the high grounds. The same goes for the axes deposited in the predecessor of the river Waal near Nijmegen. People lived on the high ice-pushed ridge bordering the river valley, but not in the valley itself, the place where these axes must have been deposited (see 6.4.1 for other examples). Summarizing the paradox comes down to this: after a long life of use in cultivating the land, the axe ended up in uncultivated, 'natural' places in the landscape, some of which must have been remote and peripheral to the areas of settlement and graves.

6.9.3 *Weapon deposition as the surrender of the paraphernalia of personhood*

Above, it was argued that swords, spears, nick-flanged axes and possibly daggers served primarily as weapons. These new, specialized weapons (swords) soon came to play an important role in existing offering practices. This indicates a growing, and more explicit, concern with martial values in the practice of object deposition. As we saw in the last chapter, this emphasis on martiality was not new; it was an element in the Bell Beaker burial set as well. What

constitutes the difference, however, is that the Middle Bronze Age A weapons, swords in particular, are no longer multifunctional tools, but specialized weapons designed for close-range fighting. By their very nature, swords are related to an individualized type of fighting, and therefore prone to be used in personal rather than communal display. We might therefore expect that the most likely place where such objects were deposited would be in a grave, placed on or near the body of the deceased, as in the case of the Bell Beaker graves. In Sögel-Wohlde burials, however, the emphasis on martiality seems much more outspoken.

Indeed, in large parts of Europe the earliest Sögel and Wohlde swords tend to be found in graves, often containing a rather stereotyped set of accompanying grave goods (a.o. a nick-flanged axe or chisels, objects of body adornment like arm-rings, and objects for working the body, most notably razors (Lohof 1991, 246-7)). This again may remind us of the earlier Beaker graves (chapter 5). The conclusion therefore forces itself upon us that we are dealing with the paraphernalia of a specific kind of chiefly personhood, constructed by highly specific valuables. The entire imagery seems deliberate to evoke associations with non-local communities. As in a Beaker grave, the deceased is dressed in a way that suggests membership among far-flung, *non-local* communities. This certainly applies to the Netherlands as well, where Sögel and Wohlde graves have also been found (appendix 5.6). The richest Sögel grave of the entire *Sögeler Kreis* even comes from the northern Netherlands (Drouwen).

In the southern Netherlands itself, Wohlde and Sögel swords have also been found in comparable numbers as we have seen (section 6.6.). None of them, however, comes from a grave⁷, but they all come from watery places. The same goes for spears and nick-flanged axes. It should probably not be seen as an entirely deviant way of recontextualising these non-local objects. The Overloon hoard clearly contains the equipment of two Wohlde warriors, including the needle, that is so characteristic for graves north of the Rhine. Here, however, individuals seems to have surrender their paraphernalia in a specific manner and in an isolated marshy area cross-cut by small streams.

The weapon finds are all located in the eastern part of the research region (the Meuse valley and the eastern river area), and it is possible that dirks or rapiers did not circulate in the more western parts, thus explaining the absence of those objects in the many barrows excavated there. Still, in at least one case Middle Bronze Age A graves could be studied that were situated in the vicinity of sword deposition zones: in Nijmegen at the ice-pushed ridge bordering the valley (Fontijn/Cuijpers in press; Louwe Kooijmans 1973). Here, however, not even the tiniest piece of bronze was found in the graves. Apparently swords, spears, and axes were preferably kept away from graves and deposited elsewhere.

On the whole, it can be concluded that weapons were deposited in a different way than in the regions north of the river Rhine and in other north European regions. Although obviously participating in intra-regional weapon exchange networks like the adjacent regions did, we may here be witnessing a different way of recontextualising weaponry. Weapons were apparently not meant to be placed near deceased individuals in barrow graves; rather they should be sunk down to the bottom of major rivers or their boggy backswamps, or be deposited on the fringes of a large bog and several streams, as we saw in Overloon. And this hoard is a case in point for the argument developed here, for in spite of its odd, peripheral natural location, its contents clearly echo the regular weapon sets that were commonly deposited in graves in more northerly regions. The needle may even indicate the deposition of warrior-associated garments. So the ideas about the typical appearance and adornment of Sögel-Wohldde warrior graves were vivid in the southern Netherlands as well, but recontextualised in a different way.

6.9.4 Conclusion

If we now return to the patterns mentioned in the introduction to this section, I think it is feasible to bring together the patterns recognized for individual object types. Spears, swords and nick-flanged axes all seem to represent the deposition of weaponry. Objects now arbitrarily kept apart should probably be seen in conjunction, as the Overloon find implies. They were all part of martial equipment that was for some reason laid down by people. A distinction can be made between high-status weaponry (swords, some spears, nicked-flanged axes and a needle type) and more regular spears (found everywhere across the region, just like axes). I argued that such weapons should primarily be seen as personal valuables. The meaning of axes, which had life-cycles of exchange, an intensive use-life and deposition, is more likely to represent values in the communal realm. This might also be the reason why axes are so conspicuously absent from individual barrow graves. Thus, essentially, the Middle Bronze Age A depositional patterns echo the basic distinction between deposition of valuables that was first recognized for the Late Neolithic B, with two points of difference. The first is that now there seems to be a more outspoken emphasis on personal valuables relating to martial values. The second is that selective deposition no longer takes the form of a distinction between deposition in burials and in watery places. Possibly in conjunction with the higher accessibility of the barrow burial ritual (more people than before were buried in it, and barrows can be seen as collective graves in their own right), burials were no longer seen as the repository for the deposition of personal valuables; these were now increasingly placed in watery places. In essence, this transformation must already have taken place during

the Early Bronze Age (last chapter). Selective deposition is now more than before a practice entailing that different kind of valuables were deposited in different places in the landscape. The most notable phenomenon is the marked increase in the use of major rivers for offering practices of – in particular – high-status weaponry.

6.10 CONCLUSIONS

Some conclusions can now be drawn with regard to the generalized biographies of metalwork that came into being during the Middle Bronze Age A.

1 *Metalwork and material culture classifications*

The most notable development that takes place during this period is the incorporation of new objects, all specialized weapons, in the corpus of metalwork in circulation and deposition. They exemplify a stronger concern with martiality and warfare in society. On top of that, a new structure in classification of valuables has been recognized. Whereas in the preceding period ceremonial objects were *Fremdkörper* in existing material culture (halberds, double axes), we are now dealing with a ceremonial object – the Jutphaas dirk- that directly refers to more regular, functional objects in circulation. It fits neatly in Godelier's recent theory on gift exchange, in which a distinction is made between valuables that circulate, and very special sacred versions thereof, that range among a community's most inalienable possessions.

2 *The production and exchange system as an open rather than closed system*

It is a moot point whether axes, spears etc. were locally produced in the southern Netherlands. A general observation, however, is that the metalwork in circulation in this region copies that of adjacent ones, particularly German regions. If a local production of axes came into being (Oldendorf or Vlagtwedde?) then there seems to have been no interest at all in giving these a distinct regional identity, as was done in the northern Netherlands (the Ekehaar variety). As such, it seems a direct continuation of the situation in the Early Bronze Age.

3 *Increase in the volume of metalwork in circulation*

The majority of the find material can be dated to the later part of the Middle Bronze Age A and the transition to the later half of the Middle Bronze Age (16th-15th century). It is clear that far more objects are known from this period than before. Taking into account that these only represent deposited tools, the quantity of metalwork has increased sharply when compared to the Early Bronze Age. Again, the Atlantic is less prominently represented than might be expected from other cultural phenomena (ceramics, *ring-walheuvels*). As before, the majority represents contacts with north-west and middle German regions, although not necessarily a specific one.

4 *The emergence of a system of selective deposition centred around different types of wet places*

Much more than before, watery places take on a new significance as offering locations. A distinction can be made between the deposition of weaponry, interpreted as related to personal display, and deposition of intensively used axes. In essence, this mirrors the contrast between the valuables of personhood and other valuables recognized for the Late Neolithic B. Swords in particular seem to have been preferably deposited in major rivers. The general impression is that with the adoption of weaponry, rivers gain in significance as depositional places. As we shall see in the following chapters, the system of selective deposition as it emerged during the Middle Bronze Age A would remain fundamentally similar in the periods to come.

5 *Axe paradox: a life of cultivation that ends up in natural places*

The most widespread depositional practice is that of axe deposition. There is not only a sharp increase in the deposition of axes in wet places; also the axes show more than before evidence of an intensive use-life in reclamation, house-building and so on. If in the Early Bronze Age some axes were still deposited for reasons other than their life as tools, then this aspect decreases significantly in the Middle Bronze Age A. Deposited axes almost invariably show all the traces of a use-life. With regard to their depositional context, we are dealing with a paradox that now becomes more conspicuous than before: the tool of cultivation *par excellence* was preferably deposited in non-cultivated, watery places.

6 *Was the rise in depositional practices linked to a phase of expansion and reclamation?*

Finally, we have to look at the remarkable rise in axe deposition during the later part of the Middle Bronze Age A. Although a general intensification and regularization of metalwork circulation is a *sine qua non* for allowing an increase in metalwork deposition, it does not explain the increase itself, nor the particular form it took in the southern Netherlands. Axe deposition as the culmination of a generalized biography exists by virtue of decisions made by the local group involved in it, steered by arguments put forward by their beliefs, their local social and political circumstances, and not by reference to the fact that it was widely practiced in north-west Europe as a whole. Comparing it with other developments in the landscape, the increase in barrow construction comes to the fore. Theunissen (2001) sees some burials as founders'

graves, implying that a phase of expansion and reclamation was going on. Constructing conspicuous barrows in the landscape can be seen as a way of claiming and socializing the land (Fontijn 1996). It is not inconceivable that the rise in axe deposition has something to do with such historical developments (it is after all the tool with which it was effected). The more pronounced ritual emphasis on the tools of warfare and the concept of martiality may also be related, since martiality is linked up with ideas about self-defence, power of one's own group, and the ability to force one's will onto others in situations of social tension that may concur with periods of expansion.

notes

1 This does not apply to all the axes published by Kibbert as type Oldendorf, since he uses a slightly different definition of this type from Butler. See for this discussion Butler 1995/1996, 203-4 and 219.

2 There is also evidence of axes of comparable –but somewhat divergent– design that were current in north-west France. The find of a sandstone mould of such an axe indicates that they were locally produced there (Butler 1995/1996, 219).

3 The Arreton axe from Antwerpen also has a slight stopridge.

4 The precise dating of these dirks is debatable. Needham (1990, 245-6) argues that the emergence of these dirks must have taken place during the Acton Park phase (Lochham to Göggenhofen in continental terms). This is approximately the period from 1575 to 1400 BC (fig. 1.4; Lanting/van der Plicht in press). Butler (1990, 91) prefers a somewhat later date within the Middle Bronze Age. The supposed derivation of such dirks from those of Tréboul-St.Brandan dirks, however, would place the Plougrescant-Ommerschans dirks in the Tréboul phase or somewhat later (Schauer 1972; Butler 1990, 91). At any rate, the argument that Plougrescant-Ommerschans dirks are a ceremonial version of Tréboul St.Brandan and/or Kimberley-type dirks, implies that both existed at the same time, or at least that the chronological gap between both is not too wide. This would be in line with the dating range argued for by Needham. In view of the possibility of this earlier dating and for practical reasons, the Jutphaas dirk is described here and not in the next chapter. It should, however, be borne in mind that a date in the Middle Bronze Age B is still a possibility.

5 For an example from the Netherlands see Butler 1995/1996, 198-200: no. 71 and 224-5: no. 140).

6 Personal comment Z. van der Beek.

7 The only possible exception could be the Tréboul spear from Grathem.