



**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: *Verwahrfunde* 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
<b>3</b>	<b>Theoretical framework for the study of selective deposition</b>	<b>23</b>
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 <i>and</i> 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
<b>4</b>	<b>Source criticism: limitations and possibilities of the available evidence</b>	<b>37</b>
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

<b>6</b>	<b>Middle Bronze Age A</b>	<b>85</b>
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 <i>geknickte</i> 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
<b>7</b>	<b>Middle Bronze Age B</b>	<b>115</b>
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
<b>8</b>	<b>Late Bronze Age</b>	<b>151</b>
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
<b>9</b>	<b>Late Bronze Age and Early Iron Age: metalwork from burials</b>	<b>197</b>
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		
<b>10</b>	<b>Selective deposition: its characteristics, development and structure</b>	<b>211</b>
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
<b>11</b>	<b>Weapons, the armed body and martial identities</b>	<b>221</b>
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

<b>12</b>	<b>Ornament deposition: the construction and deconstruction of personhood</b>	<b>239</b>
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
<b>13</b>	<b>The cultural biographies of axes</b>	<b>247</b>
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
<b>14</b>	<b>The landscape of deposition</b>	<b>259</b>
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
<b>15</b>	<b>Final reflections: what is selective deposition and what does it bring about?</b>	<b>273</b>
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
	<b>epilogue</b>	<b>281</b>
	<b>references</b>	<b>285</b>
	<b>appendices</b>	<b>305</b>
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

**PART II**

**SELECTIVE DEPOSITION THROUGHOUT THE BRONZE AGE**



## Late Neolithic B and Early Bronze Age

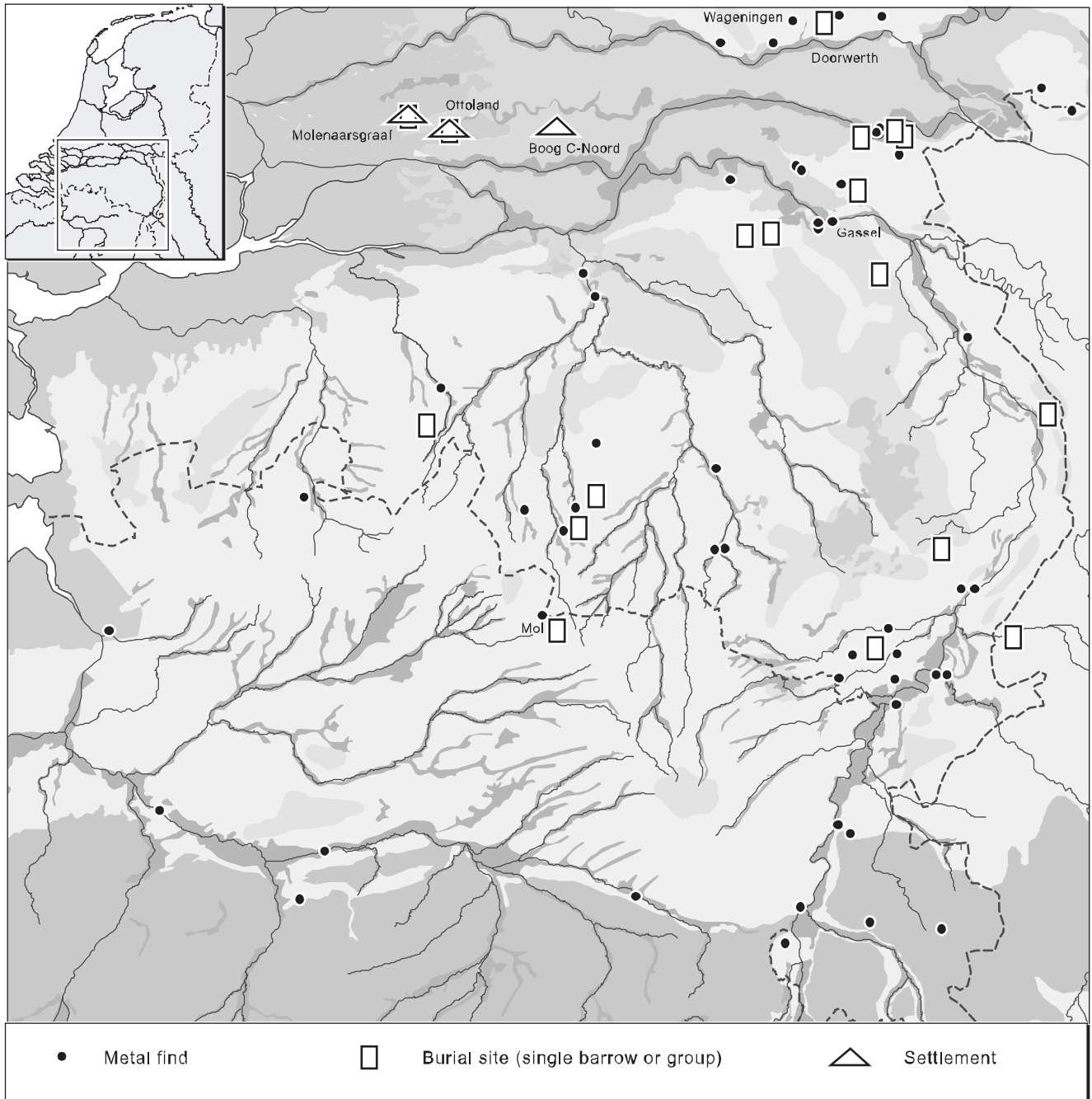


Figure 5.1 The distribution of metalwork finds from the Late Neolithic and Early Bronze Age in relation to the distribution of burial sites and (excavated) settlements. For the legend of this and all following find maps, see Figure 1.3

5.1 INTRODUCTION

In the Low Countries, the adoption of metalwork took place during the Late Neolithic B (2500-2000 BC). More in particular, it seems to have happened during the last part of this period (c. 2300-2000 BC), the phase of which Bell Beakers of the Veluwe-type and the so-called local derivatives of maritime beakers are characteristic artefacts (Butler/Van der Waals 1966, 54). During the Late Neolithic B, the tradition of metalwork deposition was shaped that flourished in the subsequent Bronze Age. For the research questions involved here it seems a crucial period. On the one hand, the new material copper/bronze was incorporated into age-old Neolithic depositional traditions. On the other, these traditions were gradually transformed during the Late Neolithic and the Early Bronze Age. As time wore on, the significance of metalwork objects in depositional practices increased, to culminate in the Middle Bronze Age when bronze had ousted all other materials. Transformations had not taken place not only in the practice of deposition;

changes must also have occurred in the general perception of the cultural biographies of things. If we want to make sense of the depositions of the Bronze Age, it therefore seems vital to understand the period in which the transition from stone to bronze took place. This may explain why this chapter is longer than justified by the discussion of the artefacts alone, which are, admittedly, not high in number.

The metalwork types of the Late Neolithic and subsequent Early Bronze Age (2000-1800 BC) are often difficult to distinguish (fig. 5.2), and for that reason I treat both in the same chapter. This is also in line with other cultural continuities between the Late Neolithic B and Early Bronze Age, that are so conspicuous that Fokkens (2001) has recently argued that the 'Early Bronze Age' had better be termed 'Late Neolithic C'.

After an introduction to the general socio-cultural developments that took place (section 5.2) and a discussion of the quality of the data themselves (5.3), the different object categories will be discussed for evidence on their

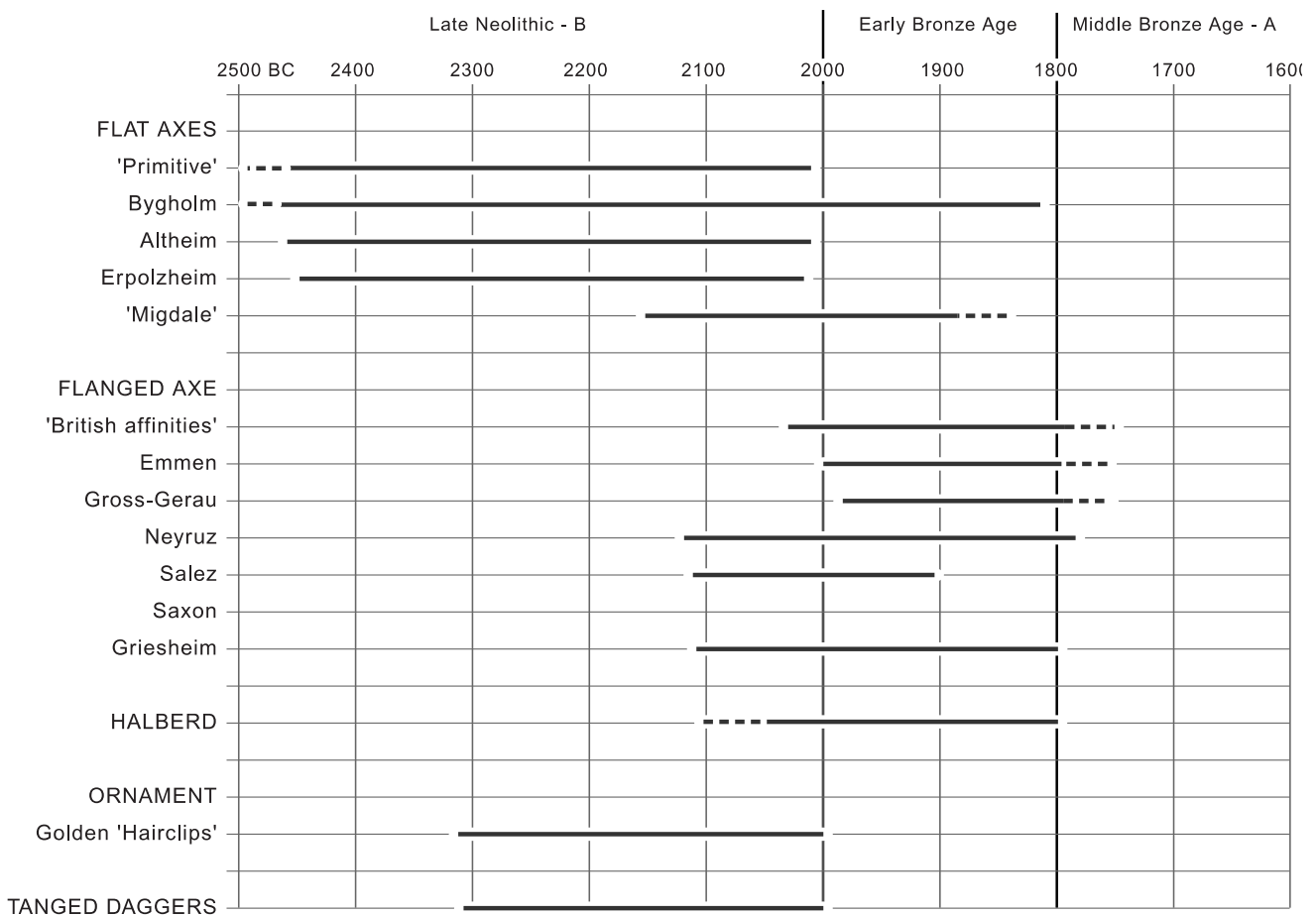


Figure 5.2 Dating ranges of the most important object types discussed in the text.

cultural biographies (5.4 to 5.5). Next, the transition from stone to bronze will be discussed in more general terms, paying attention to the how and why of the changes, and the (dis-)continuities involved (5.6). This is followed by a summarizing account on the biographies of the different object types: production and circulation in section 5.7, and deposition in sections 5.8 and 5.9.

## 5.2 LATE NEOLITHIC AND EARLY BRONZE AGE SOCIETIES IN THE SOUTHERN NETHERLANDS

During the Late Neolithic, a number of crucial transformations must have taken place in the subsistence, culture, the attitude towards landscape and the ideology of personhood. Unfortunately, the period remains elusive for large parts of the southern Netherlands, particularly the dry sandy parts of the research area. I shall deal only briefly with the developments that took place in this period, as they are at the heart of a thesis that is currently being prepared by Zita van der Beek, and I shall restrict myself to those issues that are important for the present discussion.

### *Changes in subsistence*

Characteristic for the Late Neolithic (from *c.* 2900 BC) of the entire Lower Rhine Basin at this stage is a way of life in which hunting, fishing and gathering were a vital aspect of the subsistence, together with agriculture and animal husbandry. Basically, it must have been an extended broad-spectrum economy that still had much in common with the way of life of the Mesolithic forebears (Louwe Kooijmans 1993a). It is only in the last phase of the Neolithic, in our region largely coinciding with the Late Neolithic B, that profound changes in subsistence took place. The positive appraisal of the natural richness changed to make way for a 'truly' Neolithic subsistence economy that can be characterized as mixed farming, involving an agricultural system with large-scale ploughing and extensive cattle breeding, and a negative appreciation of natural sources (Louwe Kooijmans 1993a, 139-40). Although the plough had been introduced as early as the Middle Neolithic, plough agriculture gained momentum during the later part of the Late Neolithic, indicating that an intensification of land-use was underway (Sherratt 1981; Fokkens 1986).

The exact transformation remains hard to follow in the archaeological record, but the outcome is clearly visible in the evidence of the Middle Bronze Age of our region, when all the evidence indicates that the original Neolithic extended broad-spectrum economy was replaced by mixed farming economies in which the use of natural sources was no longer of economic significance (Louwe Kooijmans 1993a, 140). The Early Bronze Age settlement site Boog C-Noord provides arguments that a true mixed-farming way of life, comparable to that of the Middle Bronze Age, was practised as early as 1950 BC (Schoneveld 2001).

### *Changes in material culture*

Culturally, the Late Neolithic A is characterized by different regional groups, the material culture of which is indicated as that of the later Wartberg-Stein-Vlaardingens complex (Louwe Kooijmans 1983). From *c.* 2500 BC onwards, however, Beaker ceramics become dominant in both graves and settlements. This development is not unique to the Netherlands, but occurs in adjacent regions as well. Van der Waals (1984) speaks of a unification process taking place at an almost Pan-European scale. This unification, however, becomes primarily apparent in the burials containing the characteristic decorated beaker and a stereotyped grave set (Harrison 1980). In our region, late Single Grave Culture Beakers are known (All-Over-Ornamented Beakers) and Bell Beakers of the early maritime type and of the mature Veluwe type (fig. 5.3; Lanting/Van der Waals 1976; Van der Beek in prep.). North of the Rhine, Beaker ceramics are prominent as early as *c.* 2900 BC. The reason for the delayed reception of the Beaker material culture in our region is unclear. The Beaker pottery is best known as a deposit in the individual burials, often underneath barrows, with their characteristically associated set of wrist-guards, knives or daggers, flint arrowheads or amber buttons (this chapter, section 5.9).

Important for the present study is the fact that it was during the Late Neolithic B that another change in material culture took place: the adoption of copper (daggers, awls, axes) and gold objects (ornaments). For a few Beaker graves of the later phase in the Veluwe region (north of the Rhine), stone hammers and anvils are among the grave gifts (fig. 5.3). Butler and Van der Waals (1966) have argued that these were used for metalworking. The only find in the research region that has been interpreted as a 'smith's grave' is the one from Beers-Gassel (fig. 5.10; Verwers 1990). This interpretation is questionable, however, and we shall not take it into consideration.<sup>1</sup>

The tradition of making decorated Beakers continues into the Early Bronze Age (Barbed Wire Beakers: Lanting 1973). These, however, are no longer found in burials. As a matter of fact, deposition of artefacts now seems generally to decrease.

### *Attitude towards the landscape*

Although difficult to reconstruct by archaeological means, profound changes must also have taken place in the way people dealt with the landscape. Louwe Kooijmans (1993a, 140) remarks that the transition to a fully agrarian subsistence system also implied a different attitude towards nature, in sharp contrast to the preceding Mesolithic. Fokkens (1986) has argued how the adoption of the plough and the ensuing greater commitment to land might have caused land-tenure to become differently organized and larger corporate groups to fall apart into smaller units. A striking development is the man-made

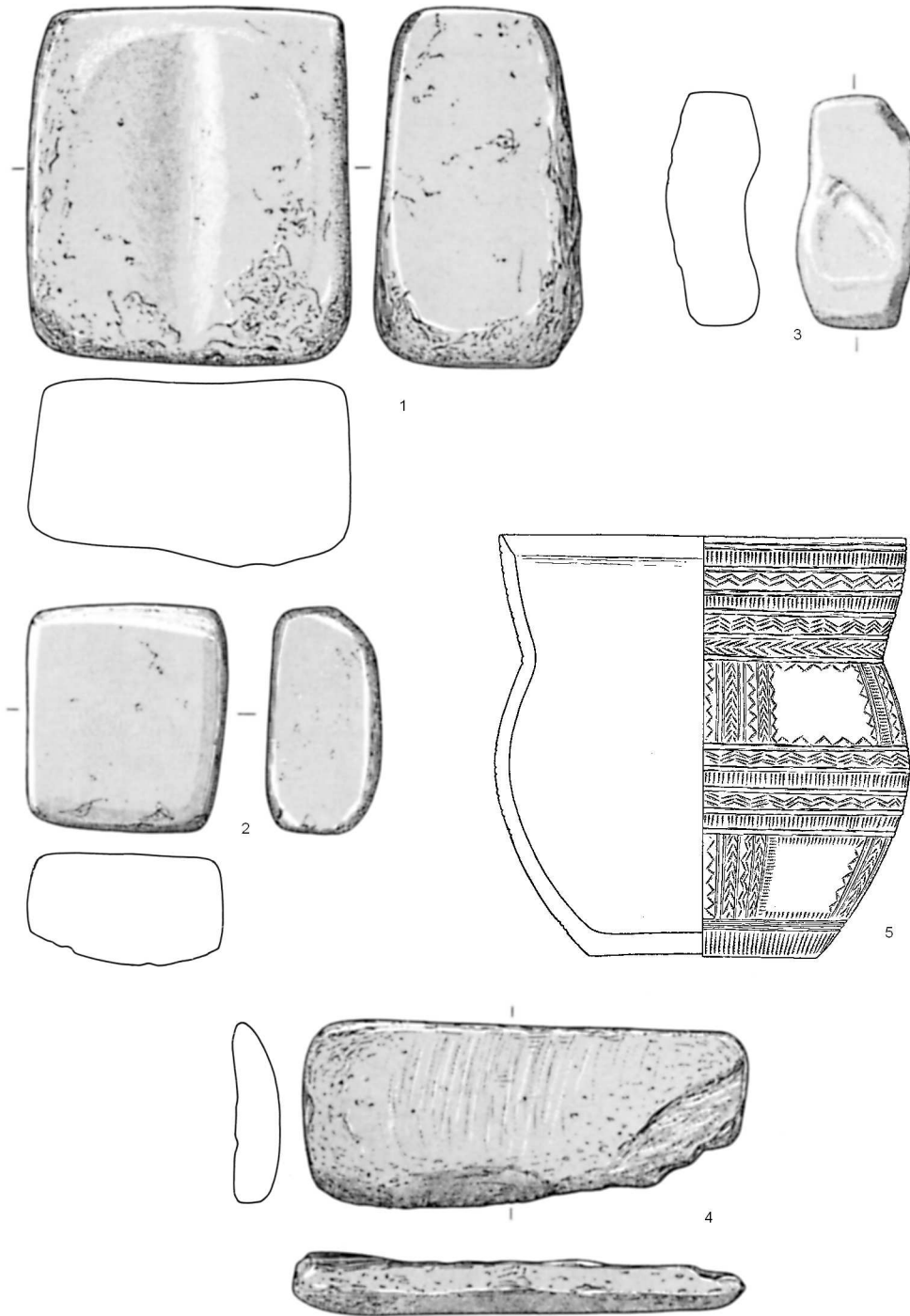


Figure 5.3 Lunteren. Metalworker's tools (1-4) and one of the two Bell Beakers of Veluwe type from the grave (scale 1:3, after Butler/ Van der Waals 1966, fig. 13a).



structuring of the land with barrows, which in our region begins with the Late Neolithic B. Neolithic barrows represent the beginning of the long-term process in which we see the gradual development of a landscape that became increasingly structured with visible ancestral monuments (Fontijn/Cuijpers in press; Gerritsen 2001, 250).

#### *Neolithic offering traditions*

Since the Early Neolithic we find evidence that particular objects were intentionally deposited in watery locations. This tradition is best documented for Denmark, but also, closer to home, for the northeastern Netherlands (Koch 1998; Louwe Kooijmans/Nokkert 2001, 112-5; Van der Sanden 1997; Prummel/Van der Sanden 1995). A great variety of objects was deposited, ranging from complete pots and simple tools to animal remains (red-deer antlers, horn sheaths of cattle). For the southern Netherlands, evidence for such deposits is patchy, but the oldest example of intentional pot deposits comes from this area (Hardinxveld-Giessendam De Bruin: 4905-4621 cal BC; Louwe Kooijmans/Nokkert 2001, 91-6). It is hard to find an umbrella term for such deposits, since it seems as if almost any kind of object was seen as suitable for deposition (Ebbesen 1993; Louwe Kooijmans/Nokkert 2001, 114). At the risk of simplifying things, I would argue that first and foremost, *local, ordinary tools and things of daily life were deposited, among them living matter* (animal remains, food in pots?). In the anthropological theory of Hubert and Mauss (1964; Belier 1995, 73-9), the sacrifice of living (including vegetable) matter is accorded a quality of its own as it is animate material which passes into the religious domain (see also Bradley 1990, 37).

Such deposits can be contrasted with another type, which only comes into being later on in the Neolithic: the deposition of objects that are often *non-local axes, adzes or chisels* (Ter Wal 1995/1996). In the terminology of the present research, these are objects that led a life of circulation before being deposited. Moreover, very often such objects do not seem to have been used, and even straightforward ceremonial versions figure in deposition. Another factor which sets axe deposits apart from that of pots, animal remains and ordinary tools, seems to be that here we see a clear element of selection: the emphasis is on one type of tool, the axe, to the restriction of others. Such objects are only rarely found undamaged in settlements. In northern Europe, we generally find examples of multiple-object hoards consisting of many axes. Examples are also known from the northern and the southern Netherlands (Ter Wal 1995/1996; Bakker in press). The phenomenon of axe deposition recalls what was defined as 'selective deposition' in chapters 3 and 4.

Deposition of single imported stone axes of the *Breitkeil* type in watery places might have been practised by hunter-gatherer communities in our region since the Early Neolithic

(Louwe Kooijmans/Nokkert 2001, 112). With the growing significance of agriculture during the Middle Neolithic, axe deposition seems to have become more important (Ter Wal 1995/1996). For the Late Neolithic A in our region, polished flint axes of the Buren type (fig. 5.4) and the so-called 'Cigar Chisels' are the prevailing axe/chisel form. Many such axes also seem to have ended their life as a deposit in a watery context (Bakker in press; Van der Beek in prep).<sup>2</sup>

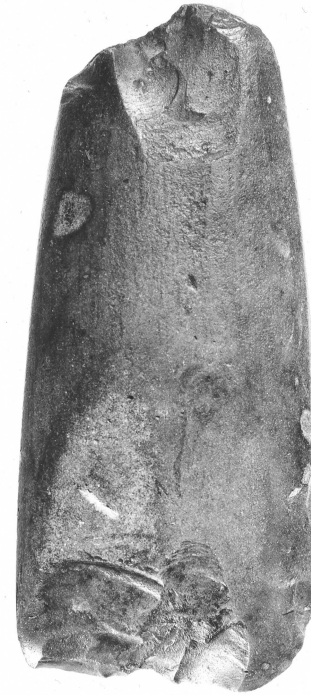


Figure 5.4 Flint axe of type Buren, found in Babyloniënbroek, prov. Noord-Brabant. Scale 2:3.

#### *Changes in the ideology of personhood*

A new element in many north-west European regions where Beaker graves were introduced, is a characteristic type of burial of a single individual with a stereotyped equipment having counterparts over vast areas. A part of this equipment consists of non-local items, that must have travelled enormous distances before being placed in such a grave. Among these are metalwork items. This particular burial ritual seems to herald a new ideology of personhood, aimed at personal rather than collective display. In many regions, including the northern Netherlands, these individual burials replace collective burials in megaliths. As Treherne (1995, 107) phrases it, the transition to the Late Neolithic was essentially a transformation of an ideology of place and community to one of individual display, involving the adoption of a deliberately ostentatious life-style. The emphasis was on gender (they are predominantly the graves of males) and on



display and consumption of prestigious objects that were acquired through long-distance exchange (Shennan 1986a and b). Later on in this chapter I shall deal more extensively with this idea, since these graves were one context into which selective deposition of metalwork took place.

### 5.3 DISCUSSION OF THE AVAILABLE EVIDENCE

Only 80 objects from the southern Netherlands and the adjacent part of the central Netherlands can be dated to the Late Neolithic B and Early Bronze Age (see table 5.1 and 5.2). As fig. 5.1 shows, the majority of the finds are from the central river area, but hardly any came from the central and western parts of the study region, although the presence of barrows indicate that people did live there. Late Neolithic burials from the central river area have many affinities to those just north of the Rhine (Van der Beek in prep.), and for that reason it seems unwise to ignore some metalwork finds just north of the actual research area. These include the rich

Wageningen hoard, one possible hoard ('Veluwe'), and a number of burials with tanged daggers and gold. For that reason, this chapter will be the only one to include the northern 'Veluwe' region in the discussion.

With regard to the find provenance, there is one striking feature to all this material: finds from major rivers are much fewer than in any other period of the Bronze Age (9 % of all finds versus 28 % in the Middle Bronze Age A). Since the majority of the Late Neolithic and Early Bronze Age material seems to consist of (large) axes, just as in any of the subsequent periods, the relative absence of river finds must reflect a prehistoric reality. Apparently, rivers were less frequently chosen as depositional places than later on.

Another point of interest is that the period under discussion is the only one for which metal analyses are available. Appendix 10.1 lists the types of metal alloys distinguished here. As will be set out in the following sections, they provide some information on metalwork circulation patterns.

Type Object type	Context								Totals
	Major river	Stream valley	Marsh	Wet	Dry	Burial	Settlem.	Unknown	
Dagger	-	-	-	-	-	9	-	-	9
Riveted knife	-	-	-	-	-	1	-	1	2
Awl	-	-	-	-	-	1	-	-	1
Gold ornament	-	-	-	-	-	4	-	-	4
<i>Flat axes</i>									
Altheim	-	1	-	-	-	-	-	-	1
Bygholm***	-	-	-	2*	-	-	-	2	4
Erpolzheim	-	1	-	-	-	-	-	-	1
Migdale***	-	1	1	1	2**	-	-	-	5
Primitive	-	1	-	-	-	-	-	-	1
Double axe	-	-	-	-	1	-	-	-	1
<b>Totals</b>	-	4	1	3	3	15	-	3	29

Table 5.1 Late Neolithic B metalwork from the southern Netherlands and the central Netherlands (Veluwe and surroundings). \* From possible 'Veluwe' hoard; \*\* one from the Wageningen hoard; \*\*\* may date from the Early Bronze Age as well, see text.

### 5.4 LATE NEOLITHIC METALWORK

The earliest metal objects known in the Netherlands and Belgium date from the Late Neolithic (fig. 5.2; fig. 5.5). So far there is no evidence to suggest that coppers circulated earlier on, during the Middle Neolithic, as in the case of TRB Denmark (Bradley 1990, 57-64). It is particularly the metal analyses carried out on most of the Dutch finds which support this view: all objects analysed appear to have been made out of multi-impurity copper (appendix 10). This seems to be true for the Netherlands as a whole. The find of two copper spirals in a Middle Neolithic megalith in the northern Netherlands is probably no exception. With regard to their typology, such

spirals would not be out of place in a Middle Neolithic TRB-context. Analysis of their metal content seems to indicate a dating in the Late Neolithic or Early Bronze Age, however (Butler/Van der Waals 1966, 76). At the moment, it is not possible to explain this discrepancy.

One of the surprising discoveries about the earliest metalwork from the Low Countries is that we are not just dealing with the introduction of the new materials copper and gold, but with the contemporary introduction of metalworking techniques as well. Before discussing the life-cycles of the different object categories, we should try to find out what this local metalworking actually involved.

Type Object type	Context					Totals				
	Major river	Stream valley	Marsh	Wet	Dry		*Dry hoard	Burial	Settlem.	?
Dagger	-	-	-	-	-	1	-	-	-	1
Riveted knife	-	-	-	-	-	-	-	-	-	-
Awl	-	-	-	-	-	1	-	1	-	2
Ornament	-	-	-	-	-	-	2	-	-	2
<i>Flat axes</i>										
Migdale	-	1	1	1	1	1	-	-	-	5
<i>Low-flanged axe</i>										
British affinities	-	1	-	-	1	-	-	-	1	3
British decorated	-	-	-	1	-	-	-	-	-	1
Emmen	-	-	-	1	-	-	-	-	5	6
Gross-Gerau	4	-	-	-	-	-	-	-	-	4
Neyruz	-	-	-	-	-	-	-	-	2	2
Unknown	1	1	2	1	1	-	-	-	5	11
Salez	-	1	1	-	-	-	-	-	-	2
Saxon	1	-	-	-	-	-	-	-	2	3
<b>Other</b>										
Penannular ring	-	-	-	-	-	2	-	-	-	2
Rings	-	-	-	-	-	2	-	-	-	2
Ingot bar	-	-	-	-	-	1	-	-	-	1
Halberd	1	-	-	-	-	1	-	-	-	2
Halberd rivet	-	-	-	-	-	2	-	-	-	2
Rough bar	-	-	-	-	-	1	-	-	-	1
Sheet metal	-	-	-	-	-	4	-	-	-	4
<b>Totals</b>	<b>7</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>16</b>	<b>2</b>	<b>1</b>	<b>15</b>	<b>56</b>

Table 5.2 Early Bronze Age metalwork from the southern Netherlands. The Migdale axes, halberds and the Wageningen hoard may date from the Late Neolithic B as well. The Migdale axes are also listed in table 5.1. \* From the Wageningen hoard.

#### 5.4.1 *Local production and the 'Dutch Bell Beaker metal'*

The evidence for early local metalworking is based on the finds of stone hammers and anvils in a number of Bell Beaker graves on the Veluwe mostly just north of the research region (fig. 5.3). Butler and Van der Waals (1966, 75) argued that the most likely interpretation of such stone tools is as tools used in the hammering of copper or gold. To support this interpretation, they present a number of ethnographic parallels. Writing more than thirty years later, there is still not much reason to doubt this interpretation (also: Needham forthcoming). Today the Dutch metalworking tools can be ranged with finds of moulds and casting debris in north-west Europe (Needham forthcoming). Combining information of both the metallurgical analyses of metalwork and the nature of the metalworking implements found, it is likely that imported, rough blankets of copper were locally worked into daggers and/or awls. Gold working is another possibility. Also, such tools may have been used for reworking the cutting edges of daggers or axes. For the more complicated task of copper casting, however, there is so far

no convincing evidence that it was at this stage already part of local metalworking skills (Butler 1995/1996, 159).

Another important conclusion of Butler's and Van der Waals' research was the recognition of a distinctive type of copper-alloy, dubbed 'Dutch Bell Beaker metal' (1966, 96), containing high arsenic and nickel impurities (appendix 10.1). The medium to high nickel level is diagnostic in conjunction with the much lower silver (Needham, forthcoming). Since Butler's and Van der Waals' pioneering study, this 'Dutch' Bell Beaker metal has been found in many more regions in north-west Europe. For this reason, Needham (forthcoming) has recently suggested to drop the adjective 'Dutch' and to call it 'Bell Beaker metal' from now on. Needham makes a case for distinguishing between two varieties having rather different nickel levels. Butler and Van der Waals (1966, 96-7) could not identify the sources of this peculiar metal, but suggested links with Brittany. More than 35 years later, it is still difficult to make out where this peculiar metal came from, but I side with Needham (forthcoming) who suggests that 'sources both in northern Spain and further north along the Atlantic façade played a part in creating this distinctive metal'.

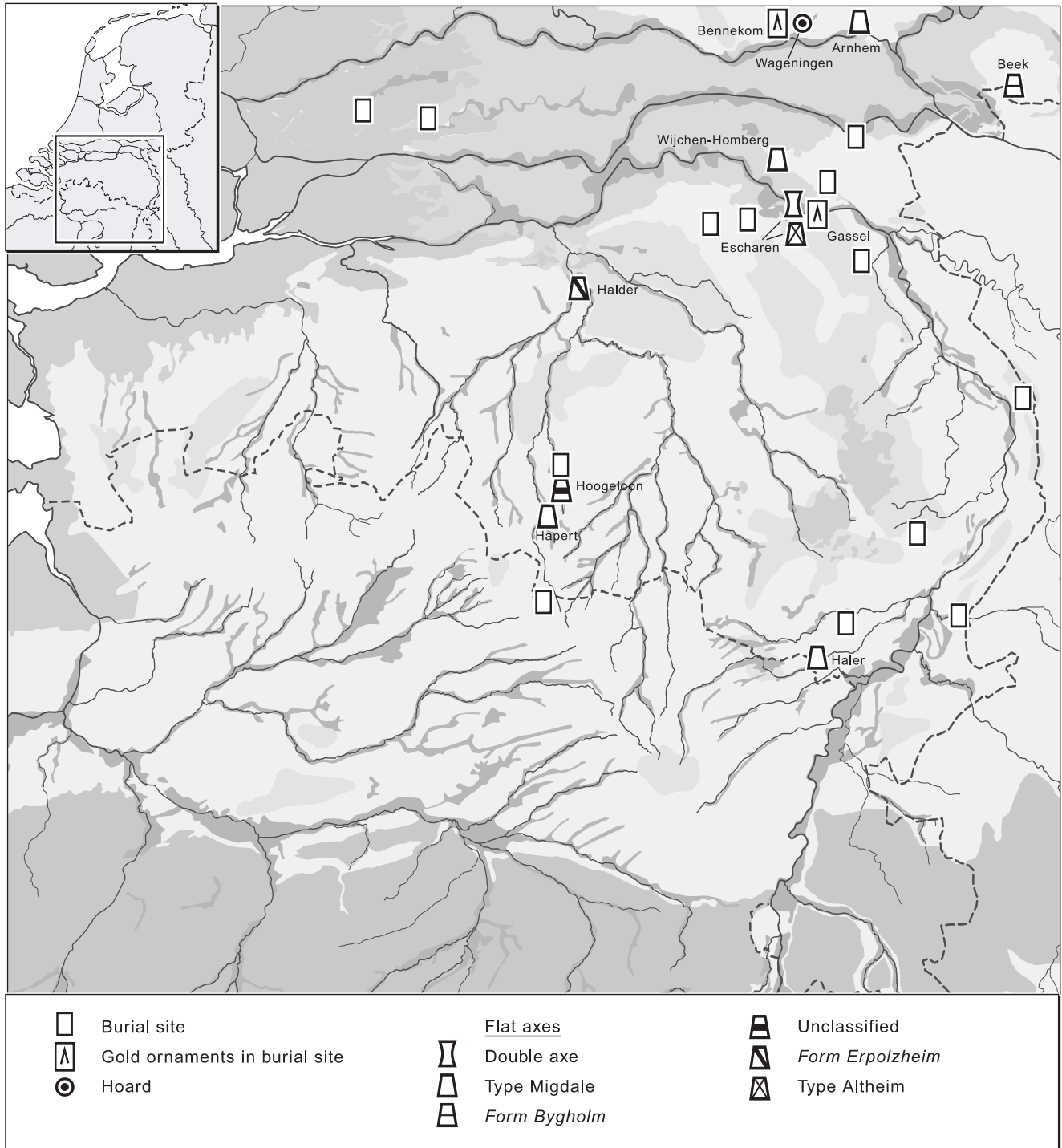


Figure 5.5 The distribution of copper flat axes and gold ornaments. Also shown are Late Neolithic burial sites.

#### 5.4.2 Flat axes

In the Netherlands, the majority of copper flat axes are from the southern part and the region just north of it (the two ‘Veluwe’ finds) (table 5.1; appendix 2.1). Their distribution is complemented by finds from the adjacent German region (Kibbert 1980, Tafel 61 A and the Belgian region (Warmenbol 1994).<sup>3</sup>

All except one are single finds. Two axes found somewhere on the Veluwe (north of the Rhine) were probably deposited together in a hoard in view of their identical patination. Preservation and patina indicate that this was in a watery place. It is also striking that these axes are very similar in shape and size (fig. 5.7).

Although the flat axes under discussion have been classified as different types, a quick glance at their forms shows that it is their similarity rather than difference that is conspicuous (fig. 5.6 and 5.7). In spite of typological designations, hardly any formal standardization seems to have existed (cf. Warmenbol 1992, 75). Leaving the thinner, round-butted axes with Migdale-affinities aside, most are thick-butted and have a trapeze-shaped body with variation only in size (narrow to large; Butler 1995/1996, 162-7).

The flat axes under discussion have recently been classified by Butler (1995/1996) as representing the following types: ‘primitive aeneolithic axe’ (fig. 5.6), Form Bygholm (fig. 5.7),

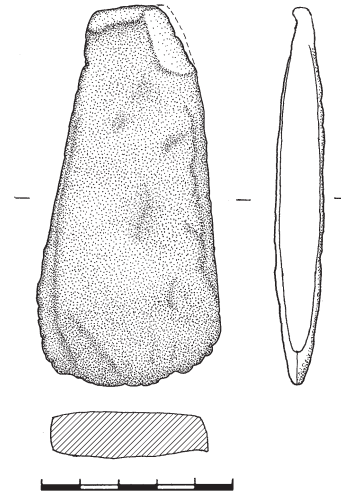


Figure 5.6 ‘Primitive’ flat axe from Hoogeloon (scale 1:2).

Altheim, Erpolzheim, and the Migdale type (fig. 5.8). With the exception of the latter type, most of these axe types seem to have been used for a long period of time (fig. 5.2). If available, the metal analyses of these axes do not support a dating before the Late Neolithic B, however. This applies

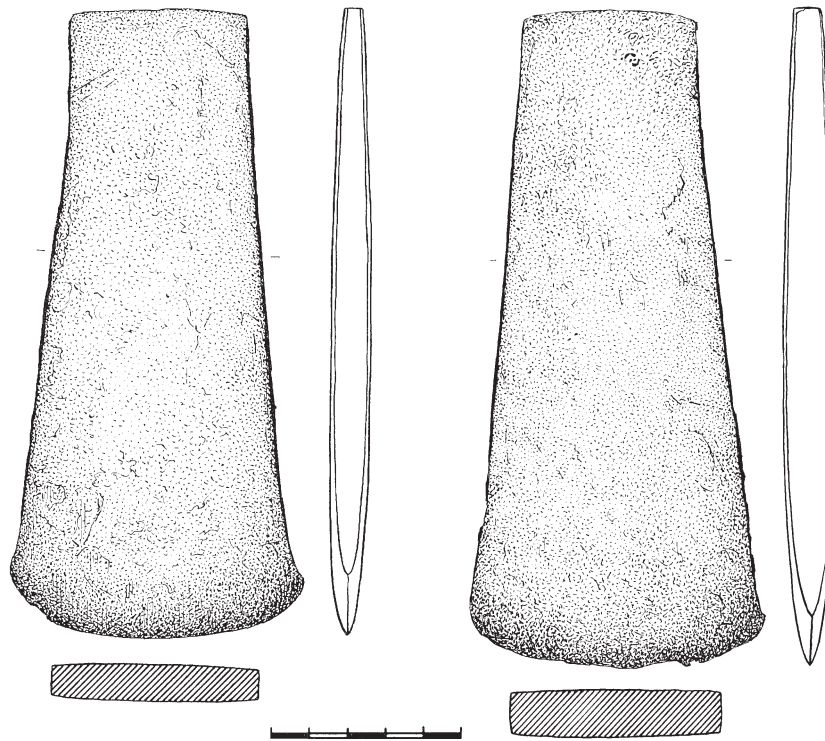


Figure 5.7 Bygholm axes, possibly from one hoard on the Veluwe (scale 1:2, after Butler/Van der Waals 1966, fig. 19).



Figure 5.8 The 'Migdale' flat axe from the Wageningen hoard (l. 11.5 cm).

particularly to two of the Bygholm axes ('Limburg' and one from the possible 'Veluwe' hoard) which are of the 'Dutch Bell Beaker metal' (appendix 10.2). The Bygholm axe from Beek, however, indicates that flat axes are not unique to the Late Neolithic B. With its high Sb and moderate Ag and As it is remarkably similar to a specific metal type from the Salzburg-Tyrol area, dating to – in our terms – the Early Bronze Age rather than the Late Neolithic (Butler 1995/1996, 166; graph 1)

*How did the new axes fit within indigenous conceptual classifications?*

Where were these axes made? There is no convincing answer to this question, only the suggestion that it is not very likely that they were already produced in the Netherlands itself at this stage. We shall see below that there are good indications that many of them actually came from very far. At some point in time they were in our region, however, and since we are dealing with objects made from an entirely new material, we may wonder how they were perceived. How were such axes incorporated in existing indigenous material-culture classifications? Apart from being made of a different material, in what way did they contrast with the usual stone or flint axes?

Leaving the different material aside, the form of the earliest metal axes is actually not so much different from those of current flint axes. This applies particularly to the 'primitive' aeneolithic flat axes which have an oval cross section, just like flint axes (Butler 1995/1996, fig. 2). It is only in the case of the larger Bygholm axes that the axe has

been given a shape that is more appropriate to the new possibilities of tool production that are distinctive to metal (these are much thinner than any flint axe could be and consequentially have much sharper cutting edges; fig. 5.7). Some flat axes are large, but so are many flint axes of the preceding Late Neolithic A. An important visual difference might be its colouring: where flint axes are polished and distinctively coloured, the copper axes are relatively simple and lack standardization and decoration. In the case of flint axes, the distinctive colouring distinguishes axes from different sources (Bakker in press). It is precisely this aspect that is lacking in the case of metal axes. The lack of visual references to production places is not countered with by distinctive forms or decorations either. To take this one step further: in the case of early metal axes we are not dealing with objects that were explicitly designed with visual traits which identified a particular place of origin.

The relative uniformity of flat axes can of course easily be explained by technical constraints. We are probably dealing with objects that could only be formed in one-piece stone moulds; the more effective clay moulds are a later development (Coghlan 1975, 51-3). But if we have a look at early metal axes from other regions, like Ireland, it is interesting to see that we find a lot of axes there that are lavishly decorated (Harbison 1969). Decorating the surface of a metal axe surely will not have been a difficult task, but apparently it was not practised in the case of the Dutch or Belgian axes. Technological constraints alone cannot explain either why two Bygholm axes that were probably part of the same hoard ('Veluwe'), and that are almost identical in shape



and form, still have a very different metal content (fig. 5.7; appendix 10.2). One was made from ‘Dutch Bell Beaker metal’, the other one from metal which has more in common with the south German Singen-metal (Butler 1995/1996, 163, 166). There is even an example of a straightforward discrepancy between typology and metal content. This is the case with the only Migdale axe of which the metal was analysed, the one from the Wageningen hoard (fig. 5.8; appendix 10.2; 10.5). Although its form is reminiscent of that of British Migdale axes, its metal appears to be of a type unknown in Ireland or Britain; it fits within the continental Singen-metal alloys, however. British specimens are of bronze and do not contain high percentages of nickel (Butler 1990, 70).

Summing up the argument, we see that the earliest copper axes visually had much in common with the existing flint and stone ones, but seemed to differ in at least one aspect. Their indistinctive form and lack of any decoration gave no clue at all about the place and source they came from. The evidence of metal content even implies that exactly the same axe types were made in different places. This is very different in the case of polished flint axes, where the specific colouring achieved by extensive polishing makes it easy to distinguish between axes from different production places. In section 5.6 I shall come back to this, and argue that in the biography of copper axes, in contrast to those of flint axes, axes were no longer valued as ‘pieces of places’ but considered imbued with different qualities.

#### *Circulation and use-life*

A conclusion that can be derived from the metal analyses is that flat axes must have circulated over large distances before they ended up in the ground of the southern Netherlands. The different types of metal alloys detected for axes suggest that (roughly finished?) axes came from many different sources, all of which must have been very far removed from the Netherlands: southern Germany, Salzburg-Tirol, or from places along the Atlantic façade (Bell Beaker metal). Exchange therefore must have been an important element in their cultural biography. A second element must have been the use people made of these axes. It is clear that most of the axes seem to have been used, as the resharpening of their cutting edge show (fig. 5.8). It is quite a different question whether they were equivalent to flint or stone axes in effectiveness. Experimentation should provide the answer. It is generally assumed that they are not, however (Sherratt 1976, 557). At any rate, there is no reason to suppose that they were merely display items, as has been suggested for the earliest metal axes of other regions (Kristiansen 1987).

#### *Deposition*

Not one of the flat axes is known to have been found in a Late Neolithic or Early Bronze Age burial (table 5.1). This

applies both to those of the southern Netherlands (Van der Beek in prep.), to the barrow-rich Veluwe area as well as to the northern Netherlands (Lanting/Van der Waals 1976; Lanting 1973). It is inconceivable that such large objects were systematically missed from barrow excavations, and we therefore have to assume that their absence represents a prehistoric reality. One could pursue the same line of reasoning for the absence of axes from Late Neolithic and Early Bronze Age settlement sites, but since only a few of such sites have seen systematic excavation, this argument is not as convincing. Table 5.1 indicates that most axes must have come from stream valleys. If we include the unprovenanced finds with wet-context patina (appendix 2.1), this becomes all the more marked. It is therefore likely that most finds are from wet locations.

#### *5.4.3 The double axe from Escharen*

The recently found copper double axe from Escharen is a curious addition to the ‘aeneolithic’ finds known from the research region (fig. 5.9). According to Butler (1995/1996, 167-70) it is an axe of the *Zabitz, variant Westregeln* type. A number of such axes are known from central Germany, where this axe is also presumed to have been produced, but even there they are rare. The Escharen axe is far removed from the main distribution of such axes (Butler 1995/1996, fig. 6).

Because of its rareness, it is difficult to date the find. Butler – following Kibbert (1980) – attributes this axe to the Bell Beaker phase, although he makes it clear that an earlier date cannot be excluded. It is a large, X-shaped, double axe, with a perforation much too small to have served hafting (Butler 1995/1996, 168). Therefore, in spite of its form, it could not have been practically used as an axe. This makes one think that it was primarily valued in the non-utilitarian sphere. As such, it is an exceptional object amongst the other early metalwork in the research region. This applies not only to its non-functional character, but especially to its form. Whereas most early copper axes may differ in details from stone axes, there is a basic continuity in the form of an axe and in the way it was hafted. The concept of a double axe, however, is quite unconventional. It is more or less common among early copper forms from south-east and Mediterranean Europe. In central Europe and more to the north, double axes do occur, but not in large quantities. Early specimens, designated double hammer-axes, are known from the middle Rhine area, where one hammer-axe was even found as far west as Weeze (Germany), just east of the Meuse valley. These axes are thought to date from the period of the Single Grave Culture, and their form is assumed to relate to the stone ‘battle’ axes that characterize the burial equipment of this period (Kibbert 1980, 23). According to Kibbert, these hammer-axes must have been ritual items (Kibbert 1980, 27-8).

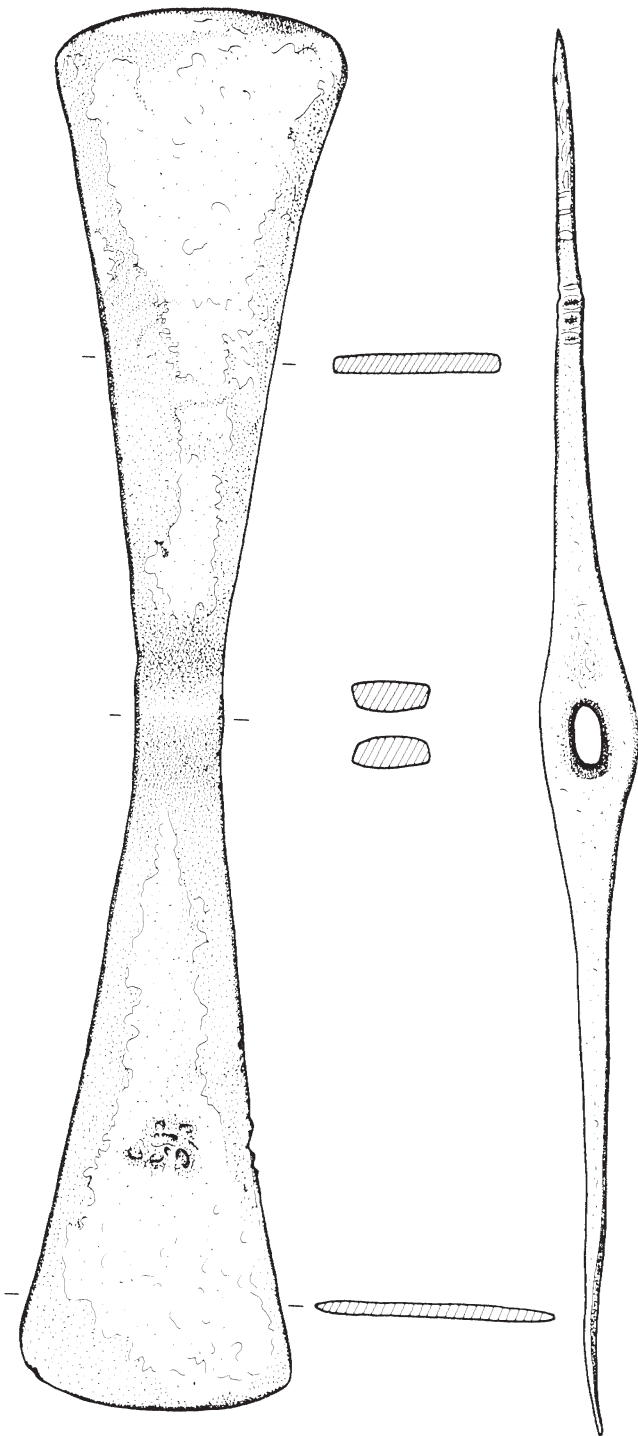


Figure 5.9 The double axe from Escharen (scale 1:2, after Butler 1995/1996, fig. 5).

At any rate, the double-axe concept does not seem to fit in with the general axe concept current in local material culture. Among the dozens of stone axes known, there is only one axe so far that can be considered a double axe. This one was found at Wijchen, and was mentioned by Butler (1995/1996, 169) when discussing parallels for the Escharen find. The Wijchen axe could have been a copy of a copper double axe of the *Cochem* type, related to the *Zabitz* type, but the relations between stone and copper axes could also have been reversed. Anyway, finds such as the Wijchen axe show that there was a relationship in form between stone and copper axes, but rather as an exception than the rule. At any rate, these formal relations were not lasting. The concept of a double axe, be it in stone or copper, does not occur in later forms of material culture.

The double axe from Escharen must have been some sort of *Fremdkörper*, probably obtained via long-distance gift exchange from somewhere within the central German area. There is no indication that the axe was actually used for cutting or stabbing: the edges are still fairly sharp. Since it was also difficult to haft it, perhaps it was just the copper blade itself that was exchanged and perhaps displayed in ceremonies. The object was finally deposited in dry ground. It was dug in on a prominent hillock, on the transition to a stream valley.

#### 5.4.4 Gold ornaments

The only gold objects known from the southern Netherlands dating from this period fall into quite another category. In Beers-Gassel, two were found that have been interpreted as hair clips (fig. 5.10; Verwers 1990, 30-1; Verhart 2000, fig. 3.25). Just north of the Rhine, two oar-shaped ornaments were found that may have been a neck-ring (Bennekom; appendix 7.1). The other contemporary Dutch gold finds are two sheet-gold ornaments from a burial in Exloo in the north of the Netherlands (appendix 7.1). The Bennekom find was probably part of the burial equipment of a Bell Beaker burial underneath a barrow, and an amber bead seems to have been attached to the ornament (Glasbergen/Butler 1956, 53-6).

In Beers-Gassel, the two hair clips were accompanied by a Beaker of the Veluwe type, an extraordinary amber ornament, a cushion stone and a whetstone and two pieces of unworked flint (fig. 5.10). The set of objects suggests that they belonged to a grave, but unfortunately this cannot be verified anymore, since it was not excavated in a professional manner. The gold ornaments show a strong similarity to the expanded oar-shaped ends of the Bennekom ornament. In both cases we are dealing with 'clips' which are the oar-shaped ends of a strand of wire. Decoration, too, is very similar on both examples. In form and decoration, both finds are comparable to the golden basket-earrings from the British Isles (Butler/Van der Waals 1966, 62). However, the



Figure 5.10 Part of the contents of the Beers-Gassel find. Depicted are a large hammer stone or polishing stone, a decorated amber pendant (?), two flint flakes and two gold 'hair clips' (after Verwers 1990, fig. 16).

Bennekom ornament seems to have been a neck-ring. Glasbergen and Butler (1956, 56) proved that the individual wires were broken parts from one and the same ornament, which had a circular shape. Realizing this, they concluded that it must have been used as a large ring, probably adorning the neck. The Beers ornaments must have been used differently, as the wires were – secondarily – folded up. This makes an interpretation as hair clips feasible (Verwers 1990, 62).

It is not just the similarity between the Beers and Bennekom find which is interesting, but also that between these Dutch finds and the golden basket-earrings from the British Isles. The gold used for the Dutch ornaments probably comes from western Europe (Butler/Van der Waals 1966, 98). Whether the objects themselves were imported is not clear. It is a good possibility that gold was worked locally since hammering and punching gold is not that difficult. As a matter of fact, it are precisely these techniques that one would expect to be carried out with the stone hammers and anvils of the smiths' graves. If this was really the case, the similarities between the Dutch gold objects and those from abroad (British Isles, Brittany?) are all the more striking. Other contemporary gold objects known across Europe, like *lumulae* (Eogan 1994), are also

very similar in form and decoration, suggesting that we could almost speak of an 'international' style.

#### 5.4.5 Daggers

Just a few kilometres beyond the northern boundary of the research area, in the municipality of Ede, three Late Neolithic burials are known which had copper tanged daggers among the burial gifts. More to the north, six more daggers have been found in burials (appendix 7.1). Although no such find has occurred in the research region proper, it seems useful to include these nine finds from the Veluwe and surroundings in this discussion. They are the first metal daggers to appear in the Lower Rhine Basin, and the Bell Beaker burials of the Veluwe have close cultural affinities to those of the northern part of the research region (Van der Beek in prep). In addition, one more dagger was found in a Bell Beaker grave in Exloo, in the northern Netherlands (appendix 7.1; 10.3). Of all the finds in question, a dagger from Drie is riveted, the rest are tanged.

Just like the flat axes, the daggers show a great variety in shape and especially in size. Some large examples (the dagger from Stroeërzand) must have been rather crude and clumsy if used as a dagger. Others are remarkably small (those from Lunterse Heide en Ginkelse Heide) and may therefore have been designed as a real stabbing device. Piggott (1963) argued that there is a strong similarity between these Dutch daggers and those from the British Isles. Butler and Van der Waals (1966, 59), however, made it clear that it is actually difficult to pin down exclusive typological relationships. Copper daggers of comparable form occur in various regions, as far as Portugal, Sardinia and the Czech Republic (Butler/Van der Waals 1966, 59).

Seven of the ten Dutch objects have been spectographically analysed (appendix 10.3). Five of these appeared to be made of the Dutch Bell Beaker metal. The others are of a different composition, which is more difficult to match. At any rate, it is again clear that general similarities in form by no means imply homogeneous origins. Metallurgical analysis of a few tanged daggers indicates that these were made by annealing and, in a few cases, cold-working (Butler/Van der Waals 1966, 59). These are precisely the metallurgical techniques for which we have indications that they were practised in the Netherlands. For that reason, it is probable that rough blankets of copper were exchanged, and locally worked into daggers. In addition to gold ornaments, copper daggers are therefore the second category of objects for which it can be suggested that they were local products. Interestingly, in this case there is no hint of any intention on part of the smith to give them a locally specific identity either.

Almost all daggers are burial gifts, stemming from the richer graves. For the few unprovenanced finds, their patina does not indicate that they were deposited in a wet location.<sup>4</sup>



#### 5.4.6 *Conclusion: selective deposition in the Late Neolithic B?*

Low as the evidence is in numbers, the deposition of the Late Neolithic B metalwork shows all the characteristics of selective deposition (table 5.1). The metalwork categories involved are daggers, ornaments and axes. The first two categories must have served primarily in the field of personal display. It is probable that both were produced locally. Axes, however, all seem to have been imported, often from distant regions. Daggers and golden ornaments were deposited in graves, a context from which copper axes, including ceremonial versions like the double axe, are notably missing. These axes seem to have been preferably deposited in stream valleys as single deposits.

#### 5.5 EARLY BRONZE AGE METALWORK

Early Bronze Age metalwork is known in larger numbers than that from the Late Neolithic (fig. 5.11 and table 5.2). A look at fig. 5.2 elucidates that the dating ranges of some types bridge the Late Neolithic-Bronze Age transition, raising the question of what is understood by 'Early Bronze Age metalwork'. This applies particularly to the Wageningen hoard and the Migdale flat axes. For practical reasons, the latter were already described in the flat-axe section above (5.4.2), whilst discussion of the Wageningen hoard has so far been postponed. There are now some arguments that this hoard might date from the last centuries of the Late Neolithic B, rather than to the Early Bronze Age to which it is traditionally dated (Needham forthcoming; Vandkilde 1996, 197; summarized here in section 5.5.2). Since the arguments for the older dating are not entirely conclusive and do not have serious consequences for my own analysis, I shall let traditional wisdom prevail and discuss this hoard once again under the Early Bronze Age heading.

##### 5.5.1 *Low-flanged axes*

Characteristic for the Early Bronze Age is the low-flanged axe. These are defined by Butler as 'axes with faint side-flanges, rising only a millimetre or thereabouts above the face of the axe' (Butler 1995/1996, 170). Butler divided all the axes from the Netherlands into fifteen types, mentioned here in table 5.2 and individually described in appendix 2.2. A few types are illustrated in fig. 5.12 and 5.13.

When compared with Late Neolithic copper axes, most flanged axes have forms that differ considerably from those of stone axes. The flat thin body of the axe in combination with flanges is a case in point, as is the decorated body of the axe from Haren. Another example are the widely expanding cutting edges of the Saxon axes (fig. 5.12). As in the case of the flat axes, the typological differences are often not very convincing, but some axes do have a quite idiosyncratic form. See for an example fig. 5.13.

Again, the question forces itself upon us how these axes reached the southern Netherlands. For the Early Bronze Age, there is no longer any evidence for metalworking tools as known from the preceding period, but, given the low number of excavated settlement and burial sites, this cannot be taken as an argument that metallurgical skills had disappeared. For the north-eastern Netherlands, it has been argued that by this time a modest local bronze industry had emerged, producing the axes of the Emmen type (Butler 1995/1996, 184-91). There is so far no evidence that the same happened in our region. Rather, typology and metal analyses indicate that all our axes are foreign products, made in production places far away. Most axes are continental types with different regions in Germany as the most probable place of production (Butler 1995/1996). Atlantic types and metals are rarer. Interestingly, most objects considered to be Atlantic (British-Irish) types are actually made of continental metal alloys. Most conspicuous is the case of the objects from the Wageningen hoard, once thought to represent the belongings of an Irish bronze smith (Butler 1963a). The metal analyses of all the bronzes in the hoard point towards a Singen-related type of metal instead of a British-Irish one, and hence to southern Germany rather than the British Isles (appendix 10.5; Butler 1990, 68-71). On top of that, of the five axes thought to be of the British-Irish type, only the decorated axe from Haren with its high-tin bronze metal with moderate As really fits in the British metal alloys (appendix 10.2; Harbison 1968; Butler 1995/1996, 178-9).<sup>5</sup> The undecorated 'British-Irish' axe from Nuenen/Gemert, for example, was made of a high-tin bronze with impurities that are characteristic for Únětice rather than British-Irish coppers (appendix 10.2; Butler 1995/1996, 177-8).

We are therefore dealing here with objects that must have reached the area through long-distance exchange. But does this apply to all axes? The few Emmen axes (fig. 5.12) found in the southern Netherlands might well be an exception: even though such axes might also have been imports (from the north-eastern Netherlands), the distance across which such objects circulated is of an entirely different nature than for example the British-Irish axe from Haren. The problem with this view is, however, that we can no longer take the north-Dutch origin of Emmen axes for granted. An important argument that led to Butler's interpretation of such axes as north-Dutch products was their exclusive distribution in the north. In the last decades, however, Emmen axes have been identified in other European regions as well: middle Germany (Kibbert 1980, 101-3) and Denmark (Vandkilde 1996, 69-70). Vandkilde wants to see Emmen axes as 'part of a common western European flanged axes tradition' (Vandkilde 1996, 69). For this reason, the origin of Emmen axes in the southern Netherlands has become much harder to pin down.

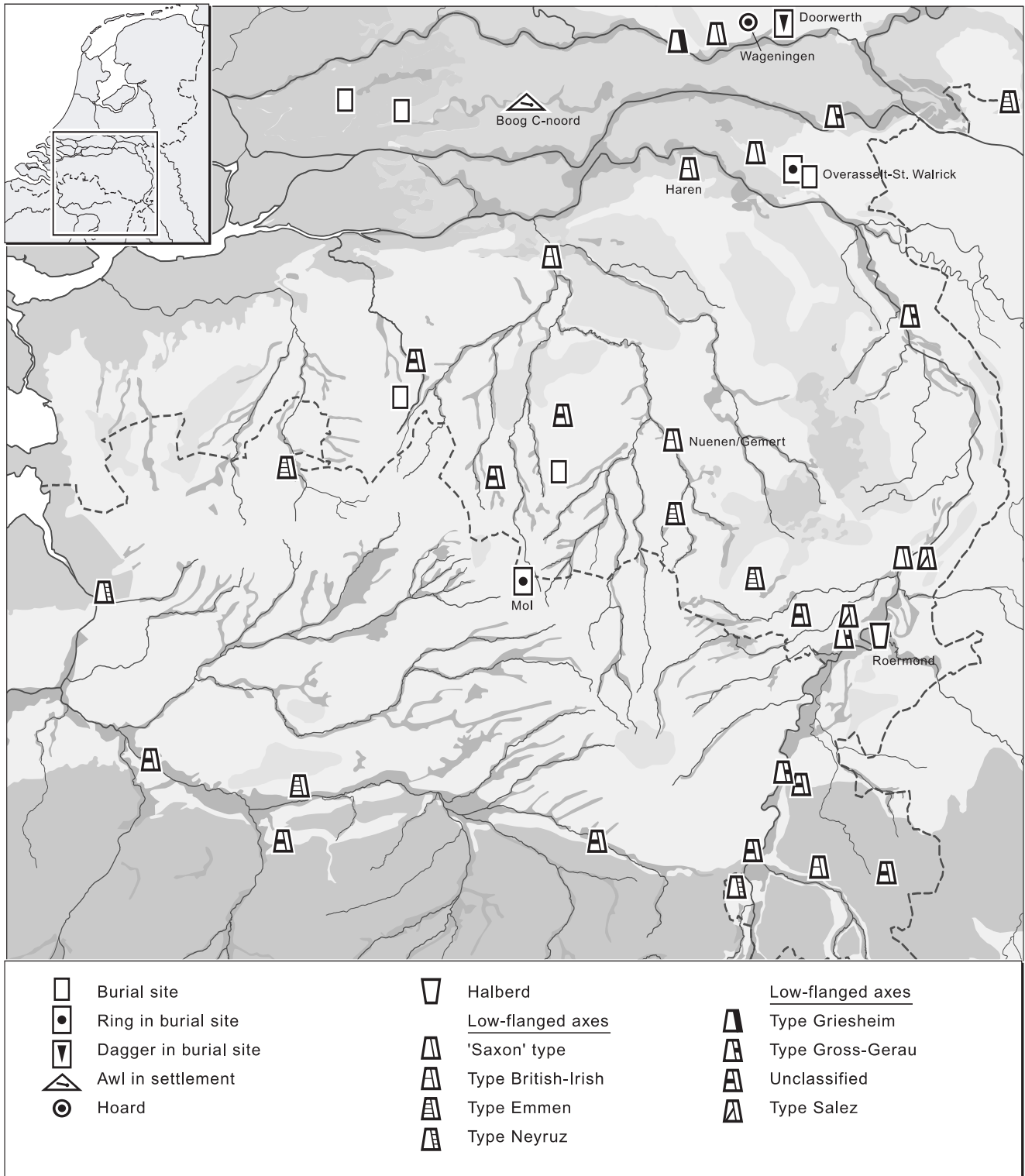


Figure 5.11 The distribution of Early Bronze Age metalwork and halberds. For Migdale axes, see fig. 5.5.

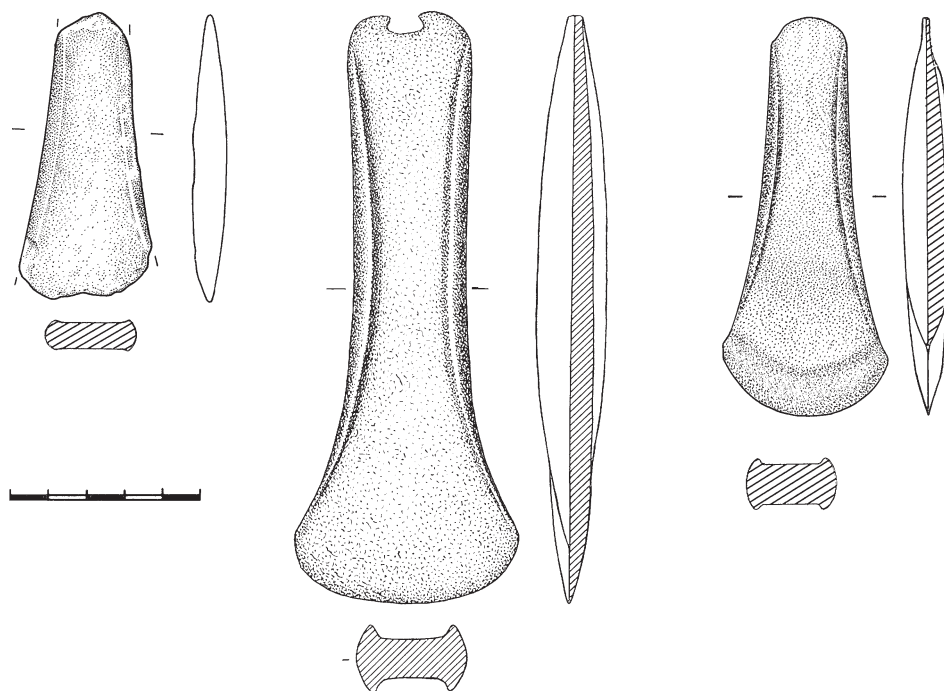


Figure 5.12 Low-flanged axes. Left: Emmen axe from Weert-Kampershoek; centre: 'Saxon' type from Wageningen; right: Gross-Gerau axe from Heel (scale 1:2; after Butler 1995/1996, fig. 14c: 55, fig. 9: 21, 12: 39).

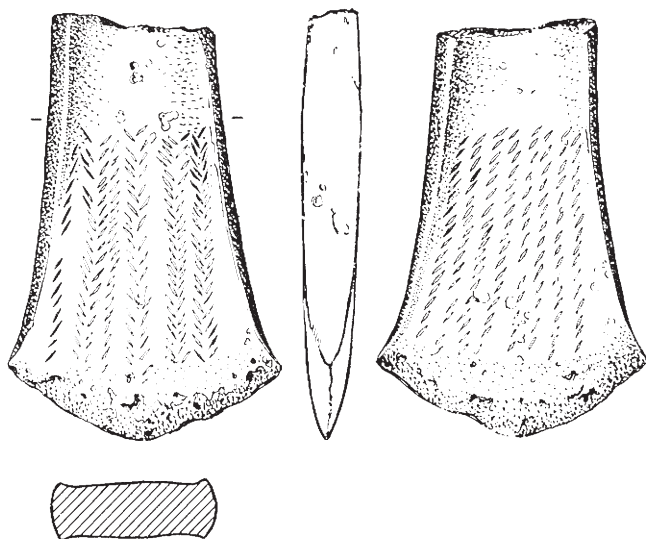


Figure 5.13 Decorated axe of British affinities from Haren (scale 3:4, after Butler 1995/1996, fig. 10b: 28)

Axes did not only travel formidable distances; many were put to use as well. On many traces of use were detected (worn edges and/or traces of resharpening; appendix 2.2). It is clear that such axes were more than imported display items.

Research on the context of the finds made it clear that most provenanced axes are from wet locations, stream valleys in particular, and hardly from other locations. We must be dealing with objects that were deliberately deposited in wet places. The number of excavated Early Bronze Age sites is low, but axes are not among the finds of the relatively well-preserved settlement sites like Molenaarsgraaf (Louwe Kooijmans 1974) and Boog C-Noord (Schoneveld/Gehasse 2001) and Meteren-'De Bogen'.<sup>6</sup> Particularly in the case of the latter two sites, the absence of axes cannot have been due to a research bias: metal detectors were systematically used there, and tiny bronze objects were found. The number of Early Bronze Age barrows is small, but some do contain bronze/copper items (Mol; Overasselt-St. Walrick; appendix 7.1). These are not axes, however (see below). From the encompassing survey of Early Bronze Age barrows in the Netherlands by Lanting (1973), we can deduce that metal axes are in general not among the grave gifts of this period.

### 5.5.2 Halberds

There are only two halberds known from the research area (Roermond and Wageningen; appendix 7.1; 10.4), yet they have evoked far more discussion than any other contemporary metalwork find (Butler 1963a, 11-26; Harbison 1968, 175-8; O Ríordáin 1937; Vandkilde 1996, 193). The Wageningen and Roermond halberds are both variants of the 'straight-midribbed international' halberds (Harbison 1968, 175-8). The Roermond specimen seems to be of a more advanced – and hence somewhat later? – form than the one from the Wageningen hoard. The latter has notches instead of rivet-holes (fig. 5.14).

Halberds are quite extraordinary objects. Depictions on rocks in Denmark and Spain (Bradley 1997, 203) and completely preserved halberds (i.e. including the wooden shaft: see the find from Carn, County Mayo, Ireland (Harbison 1988, fig. 70) make it clear that they were hafted on a wooden stick under a 90 degree angle. Thus, they may have been stabbing devices, yet they do not seem to be very practical. Mostly they are interpreted as weapons (Osgood *et al.* 2001), but it is hard to see what practical advantage such an object must have given the warrior in close combat. I tend to side with Butler (1963a, 11), who characterizes them as clumsy and inefficient weapons. For that reason, they must have been instruments of display in the first place. Traces of damage from slashing or stabbing have not been observed on the Dutch finds, and as far as I know, neither on those from adjacent regions. To this, Butler's observation should be added that in the Wageningen hoard rivets were found that must have belonged to the halberd. One of these was unfinished. The implication of this might be that the halberd was never hafted before deposition (Butler 1990, 70), but further inspection of possible micro-wear traces on the halberd's notches is needed to substantiate this conclusion.

Traditionally, the Dutch halberds are considered to be typical products for the Early Bronze Age of the Low Countries (Butler 1990, 70). Vandkilde (1996, 197) and Needham (forthcoming) have recently questioned this on basis of its typological traits and its metal content, and argued that the Wageningen halberd in particular must be older and date to the Late Neolithic B. Needham opts for a dating around 2150-2000 BC. The possibility of an earlier dating of the Wageningen halberd and – consequently – the entire Wageningen hoard has no consequences for the present study, and for that reason I shall let this discussion rest.

In form, way of hafting and 'use', halberds are new and unprecedented objects in material culture. They do not seem to replace existing forms, nor are there clear derivatives for them in the later periods. They certainly are 'international' objects, fitting in a general 'European' style. On the basis of the metal content (arsenical copper) and typo-chronological considerations, both Dutch halberds are likely to have been



Figure 5.14 Halberd from the Wageningen hoard (scale 1:1).



Type	Metal							
	BB-metal	Singen	Arsen.copper	British/Irish	Osenring	A-deviant	Unětice-like	Ars. bronze
<b>Late Neolithic B</b>								
Tanged dagger	4	-	1	-	-	1	-	-
Awl	1	1	-	-	-	-	-	-
Bygholm axe	2	1	-	-	1	-	-	-
Migdale axe	-	1	-	-	-	-	-	-
<b>Early Bronze Age</b>								
Gross-Gerau axe	-	1	-	-	-	-	-	-
Salez axe	-	1	-	-	-	-	-	-
Emmen axe	-	-	-	-	-	-	-	1
British aff. axe	-	1	-	-	-	-	1	-
British dec.axe	-	-	-	1	-	-	-	-
Halberd	-	-	2	-	-	-	-	-
Halberd rivets	-	2	-	-	-	-	-	-
Riveted knife	-	-	2	-	-	-	-	-
Knife rivet	-	-	-	-	-	-	-	1
Total	7	8	2	1	1	1	1	2

Table 5.3 The objects and their metal types from the southern Netherlands and the central Netherlands (Veluwe and surroundings), based on Butler 1990; Butler 1995/1996 and Butler/Van der Waals 1966. SEM-analyses are not included. 'Singen?'; 'Singen a-typical' and 'Singen modest tin' are all classified as 'Singen'.

imported from south-German regions (appendix 10.4; Butler/Van der Waals 1966, 84). The metal content makes it clear that they are certainly no British-Irish imports, as had long been thought (Butler 1963a, 11-25). As mentioned above, the copper alloys of both halberds are very similar, and it is likely that this indicates a common origin. Their metal content has also much in common with that of the dagger in the Wageningen hoard (table 5.3; appendix 10.4 and 10.5). A halberd find from a place not far to the west of our region, in Wichelen (Belgium), was probably a French import (Verlaeckaert 1996, 14). In sum, we are dealing here with remarkable display objects that were exchanged over large distances. All halberds ended up in special contexts: one in a unique hoard (Wageningen, see below), the other in an old Meuse channel. Because of the relative absence of contemporary metals from rivers, the river must have been an exceptional depositional location at that time (section 5.3). Halberds from other regions, like the specimen from Wichelen, are also known to have ended up in rivers or their backswamps (Verlaeckaert 1996, no. 239). It is remarkable that also in other north-west European regions halberds seem to have been deposited in quite peculiar ways. This is markedly illustrated by Needham's study of the British Isles (1989, table 2). Although some 45 are known, there are no specimens that can convincingly be interpreted as a grave gift. They occur as single finds, often in wet contexts or in (halberd-only) hoards. In Denmark, where twenty halberds are known, all are from wet locations, and all seem to have

been single deposits (Vandkilde 1996, 193). Halberds not only seem to be a remarkable object category among contemporary metalwork, with ceremonial rather than practical functions, they also seem to have been treated differently in depositions.

### 5.5.3 *The Wageningen hoard*

Several times the Wageningen hoard has been mentioned. It is the only multiple-object hoard known from the period under discussion, and therefore a special case of deposition when compared with the single deposits of axes and halberds discussed above.

The hoard is unique in an European context for its remarkable contents: it consists of usable items that are generally kept apart in deposition (an axe (fig. 5.8), a dagger (fig. 5.15) and a halberd (fig. 5.14)), in combination with body ornaments (bracelets), an awl, scrap metal and unfinished objects (rivets) displaying a clear link with metal-working (appendix 1; Butler 1990, 68-71). The presence of the awl may also be in line with this: although we tend to see awls as implements for leather-working (Butler/Tulp 2001), one is known from a smith's grave (appendix I B: Lunteren-De Valk). Awls may have been implements for punching gold as well!

The hoard thus falls neither under the definition of a scrap hoard nor under that of a trade hoard (chapter 2). In view of the clear link with metal-working, it has often been thought that the hoard consists of the belongings of a smith. This was



Figure 5.15 Dagger from the Wageningen hoard (scale 1:1).

once thought to be an Irish smith, but the metal analyses of all objects univocally point to metal from south-German sources (Singen and related; appendix 10.5). The metal of the dagger and halberd, for example, is identical, which suggests that they are derived from a common source, and perhaps even from the same workshop. On the other hand it should be noted that the halberd and its rivets are made of metal from different sources. As such, the entire collection of objects would perhaps better fit what Kristiansen (1998, 80) has termed a 'distribution hoard': a pool of collected metal, awaiting further distribution.

By its contents, the hoard is exceptional with regard to the patterns of deposition recognized so far. It even seems to break the 'rules' of deposition, since it consists of objects that are normally rigidly kept apart in north-west Europe (like daggers, axes and halberds; see the above section and Needham 1989). As an unparalleled event, the deposition of all this material is very hard to explain in other than anecdotal terms (see chapter 4). Are we indeed dealing here with a temporary store of objects that was for some reason never recovered, or does it represent a very lavish intentional deposit? Unfortunately, the find context itself is not really informative. The objects were deposited together, in a dry context, on a gentle slope at the south-eastern edge of the Veluwe, overlooking the Gelderse valley, about two kilometres north of the river Rhine (Butler 1990, 68). Its exact find location can no longer be reconstructed. It is only known that it was found in a heath field (now a forest), about 60 cm under the surface while people were trenching to plant trees in 1840. The find spot was situated 'half an hour' north-east of Wageningen. Butler argues that the find-spot therefore must have been around 176-177/443.4-444.5 in modern coordinates. This is an area where a number of Late-Neolithic-B barrow groups are known. It is about one km south from the area of Bennekom-Oostereng, where the barrow is situated in which the gold ornament was found (Glasbergen/Butler 1956), and about two kilometres north of the barrow from Wageningen-Nassau Oord (Lanting/Van der Waals 1976, cat. no. 32). At any rate, the metal was not

deposited in a pristine landscape, but rather in an area that already was to some extent structured with barrows.

As a deposit, the Wageningen hoard is clearly beyond the normative, and for that reason it may remind us of scrap hoards consisting of objects that lost their original meaning or still had to acquire such a meaning (chapter 3). Viewing the hoard as temporary hidden stock would therefore still be a plausible explanation, although it is hard to accept that in a time when metal was still so scarce, and metal deposition only occurred at low rates, so many valuable resources were treated so carelessly. For that reason, there is also scope for seeing the Wageningen hoard as an exceptionally lavish 'community deposit' (Needham 1989, 59), possibly taking place in an area that already had some sacred meaning (a barrow landscape).

#### 5.5.4 *Metalwork from burials and settlements*

In view of the low number of graves and settlements known, it should hardly be surprising that not much is known about possible metalwork deposition in these contexts. The examples can be counted on the fingers of one hand (appendix 7.1; 10.4).

#### *Burial finds*

Although the number of Early Bronze Age burials is considerably lower than from the previous period, in contrast to that period, there is now some evidence that metal was deposited with the dead. The examples are Mol (Belgium), and Overasselt-St. Walrick.

In Mol, a small (width 0.75 cm; length 2.2 cm) and very thin piece of copper/bronze was found, together with two beads, one amber and one fluorite (grave 2: Beex/Roosens 1963, 17; fig. 14). Although the copper/bronze has suffered much from corrosion, the association with these beads might suggest that it was some kind of pendant. They were found together in the north-eastern part of a rectangular feature (2.35 by 1.20 m; orientation NE-SW) that was interpreted as the remains of an inhumation grave (Beex/Roosens 1963, 17; fig. 13). This grave was dug into the mound of an existing

Bell Beaker barrow. This re-use of an existing mound also entailed the enlargement of the original barrow (period II), of which this grave must have been the centre. It had an oval shape with 14.5 m as the smallest diameter. This grave was partly destroyed by another one, that must have been dug in after a long time (Beex/Roosens 1963, 19). The stratigraphical position of this grave makes a dating in the Early Bronze Age most likely, although a dating range extending into the Middle Bronze Age A cannot be excluded.

The other burial find is from the Netherlands: Overasselt-St. Walrick, tumulus I: phase 2 (Groenman-Van Waateringe 1961; Lanting/Van der Plicht 1999/2000, 40, 88-90). As in the case of Mol, the bronze was found in a soil feature that can be interpreted as the remains of an inhumation grave. Here, the corpse silhouette of a contracted body was observed, with the head facing south-east. Enamel of the teeth confirms the interpretation of this soil feature as a corpse silhouette. Directly underneath the place where the chin was located, a pin was found. The pin is semi-circular (fig. 5.16), with its upper surviving part wound with wire (Groenman-Van Waateringe 1961, 73-4; fig. 41). Butler has argued that this object must be an Únětice-ornament, probably a *Schleifennadel* (Butler/Van der Waals 1966, 87; fig. 25; Butler 1990, 71). Pins with similar wire windings are known from the Singen and other Early Bronze Age cultures in southern Germany (Butler 1990, 71). This grave was dug into an existing mound from the Veluwe Beaker period. According to the pollen analysis, it was constructed at not too great an interval after this Beaker grave. Charcoal from this grave and from a later one has been <sup>14</sup>C-dated. On the basis of the results, Butler argues that this grave should be dated in rounded-off absolute terms to the period around 2000 BC cal (Butler 1990, 71). The recent re-analysis of this grave by Lanting and Van der Plicht (1999/2000, 40) does not provide a deviating view. They emphasize the problem caused by the lack of more precisely datable artefacts. They prefer

a dating to the last phase of the Bell Beaker period, but allow the possibility of a somewhat later dating.

The exact interpretation of the pin remains obscure, but it is clear that it was an ornament for the body or garments. The metal of the pin has not been analysed, but in view of its peculiar form, it is likely that it was an import from central Europe, or a local imitation of such an object.

#### *Settlement find*

So far, there is only one documented find of a copper/bronze object from a settlement: the find from the Boog C-Noord site in the central river area (Schoneveld/Gehasse 2001; Butler/Tulp 2001). It is a three-sided awl, though rectangular in the centre (length 3.9 cm; width 0.4 cm). It was found among a humous find-layer with many shards and other objects, and some soil features that can be interpreted as the remains of a settlement site, dating around 1950 BC. SEM-analysis showed that it is a tin-bronze (Butler/Tulp 2001, 137-8). It is clearly a simple tool, showing the traces of use. Such awls are likely to have been used for making small holes in leather or fur. It was found among the settlement debris; there is no evidence that it was placed in a particular place within the settlement, or that it was a specially prepared deposition. As it is only a tiny object, prone to be lost once fallen in the muddy ground of the farmyard, it might just as well represent a lost object.

#### 5.5.5 *Conclusions: selective deposition in the Early Bronze Age?*

Let us now briefly bring together the evidence on the life-cycles of the different object-types, and compare these to what we now know of the Late Neolithic. What we are dealing with is in the first place an intensification, albeit a modest one. The higher numbers of Early Bronze Age metalwork finds indicate that deposition of metalwork in watery places became more widely practised than it was in the Late Neolithic B. Particularly the rise of axe deposition is conspicuous. Next, there are new objects, the halberds, which must have served ceremonial roles. These deviant objects also seem to have been deposited in different locations. With the demise of burials as depositional locations, it therefore seems as if we are facing a differentiation in the use of watery places, where different objects ended up in different natural places. Of course the Early Bronze Age finds are much too few in number to make this a solid argument, but with the knowledge that such a form of selective deposition can be recognized with more confidence for the following period (the Middle Bronze Age A, next chapter), we may take the findings of this section to imply that it was emerging in the Early Bronze Age.

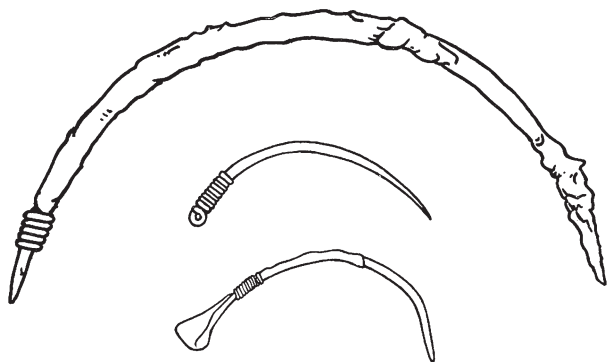


Figure 5.16 Schleifennadel from Overasselt-St. Walrick and two possibilities of its original form (scale 1:1, after Butler/Van der Waals 1966, fig. 25).

## 5.6 FROM STONE TO BRONZE

So far, we have charted the evidence on the biographies of metalwork items in the Late Neolithic and Early Bronze Age. The conclusions at which we arrived now need some elaboration. After all, it was in the Late Neolithic and Early Bronze Age that the entire tradition of metalwork deposition that is central to this book came into being, parallel to what is often considered to be one of the most vital transitions in prehistoric material culture: the transition from stone to bronze. It therefore seems necessary to pay some more attention to this transition. In what way did copper/bronze replace stone objects in the southern Netherlands? Which stone objects were replaced, and how vital was metal in daily life? Did the new material lead to new categories in material culture, or to a general continuation of existing material categories? Was the cultural attitude towards bronze different from the attitude towards stone? In this section, I shall deal with these questions, to finally discuss the way in which the biographies of copper/bronze objects differ from those of other materials. This seems a prerequisite for a more detailed discussion further on in this chapter which focuses on the biographies of metalwork alone.

### 5.6.1 *How metal replaced stone in daily life*

The first question to deal with is what kinds of objects were entirely replaced by metal ones. Excavations of Early Bronze Age settlements give some information on the range of tools of daily life (Molenaarsgraaf: Louwe Kooijmans 1974 and Boog C-Noord: Schoneveld/Gehasse 2001).

With regard to the tools of daily life, it is clear that with the introduction of metal hardly anything changes. Scrapers, knives, arrowheads continue to be made of flint. The copper daggers or knives (like the one from the Wageningen hoard) certainly did not oust existing flint knives in daily life. Tanged daggers seem to have been rare items. They are probably successors of prestigious knives formerly made from stone, like the *Grand-Pressigny* flint knives from earlier graves (associated with All-Over-Ornamented pottery; Lanting/Van der Waals 1976, 13-5). On the other hand, afunctional metal objects like the double axe or halberds do not have predecessors in existing material culture. They seem to have been regarded as new ceremonial objects in their own right. So, the replacement of stone by metal must have been merely superficial, with the exception of one tool: the axe. In the southern Netherlands, many polished flint axes and chisels are known from the Late Neolithic A. In the most recent synthesis of these objects, Bakker (in press) makes it quite clear that there is little evidence for finds of such flint or stone axes from the Late Neolithic B. Cigar Chisels are among the latest products. They seem to be contemporary to Beakers of the All-Over-Ornamented type (2600-2500 BC). Occasional finds of flint/stone axes from Bell Beaker

settlements and graves can be mentioned (Louwe Kooijmans 1974, 235), but are in no proportion to the number of finds from the Late Neolithic B. On the other hand, the number of flat axes is so low as well that it is hard to conceive that by the Late Neolithic B copper axes had already replaced stone or flint ones in daily life. To explain this discrepancy, two arguments can be made. The first is that Late Neolithic B settlements have less often been excavated than those of the previous phase. The second is that we actually know very little about the typo-chronological development of the latest flint/stone axes. The examples known from graves are small, inconspicuous ones, lacking characteristic forms as in the case of Buren axes or Cigar Chisels (Bakker in press). What stone axes may have lost in the first phase of metal adoption, is clear attempts to give them a distinctive outlook.<sup>7</sup> Although we cannot trace the precise process by which copper/bronze axes replaced flint/stone ones, the fact that no flint or stone axes are known for the Middle Bronze Age at all, whilst hundreds of metal axes are, shows that it was completed at that time. All the evidence so far indicates that it started in the Late Neolithic B.

As remarked in 5.4, it is clear that even the earliest flat copper axes show traces of use. It is questionable whether they were more effective than stone ones. Experiments with *flanged* axes by Coles (1979, 168), however, illustrate that such an axe is twice as effective as a stone one in felling trees. The combination of a thin body with a sharp edge allows the flanged axe to bite more deeply into the tree, detaching large chips. Other experiments confirm Coles' conclusion, and Vandkilde (1996, 272) therefore states that flanged metal axes were more effective tools than their flint counterparts. The scarcity of flint or stone axes and the effectiveness of flanged bronze axes thus make it acceptable to assume that metal axes largely replaced flint or stone ones in the Early Bronze Age.

Concluding we may say that metal only superficially replaced stone tools in daily life, and that in practice it seems to have been restricted to axes. The other metalwork categories are either metal forms of display items formerly made from other materials (daggers, ornaments) or new additions to existing material culture (double axes, halberds). Daggers, ornaments and halberds must all have had a function in the field of personal display (daggers, ornaments) and the ceremonial (halberds, double axe). This recalls an observation made by Sherratt (1994, 341) that bronze objects were in the first place bronze 'machines for the self, rather than vital elements of infrastructure'.

### 5.6.2 *The cultural attitude towards metals and stones*

The above brings us to the question whether metalwork was held in higher esteem than other materials. There are two arguments to suppose that this was indeed the case.



The first argument can only be made on the basis of the evidence for larger areas than just the southern Netherlands. Whereas the first flat axes are in form reminiscent of stone ones, they soon developed a form more appropriate to metal. There are a few indications that these metal forms then became normative. The famous example is of the Early Bronze Age flint daggers of Scandinavian type, some of which have also been found in the southern Netherlands (Bloemers 1968). Such daggers imitate bronze daggers to such an extent that sometimes even the casting seam was copied in flint. Mariën (1952, fig. 168) gives the example of a flint axe from Maisières (southern Belgium) with widely expanding cutting edges, characteristic for metal axes and quite inappropriate for flint ones.

The second argument is related to the evidence of object deposition. For the Late Neolithic A, there is evidence that flint axes of the Buren type and Cigar Chisels were deliberately deposited in wet locations in the landscape. In the burial ritual of the Late Neolithic, imported non-metal ornaments like wrist-guards were not uncommon to the burial set and this did not change once metalwork was introduced. From the Early Bronze Age on, however, there is no longer any indication for the ritual deposition of flint or stone axes in either watery places or graves. This field of practice seems now to have become dominated entirely by metal implements, not just axes, but new ceremonial items that were made of metal as well (double axes, halberds).

As an argument to the contrary, one could refer to the presumed examples of axe hoards consisting of both metal and stone axes. The existence of such hoards would imply that metal and stone axes ranked equally in deposition. Outside the research area, there are two Belgian flat-axe finds for which such an association may have existed: Jemappes (with a jadeite axe; De Laet 1974, 290) and Harelbeke (with 'stone' axes; Verlaeck 1996, 142). The flanged axes from Nuenen/Gemert is also said to have been found with two flint axes, but this association is questionable.<sup>8</sup> All are badly documented finds and the associations are generally considered unreliable. The hoard from Wageningen is probably a better example: in addition to all the metalwork, this hoard allegedly contains one stone axe (Butler 1990, fig. 10: 9). As mentioned above, this hoard is in all respects an exceptional find that cannot be taken to support views on general cultural appreciation of metal versus stone.

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

On the stone-bronze transition, there is in many ways continuity rather than a break in the cultural biographies of things. Copper axes were deposited in watery places, just like flint or stone ones before them. In both cases, this

deposition was the termination of a life of circulation. We should not forget that stone and flint are in most parts of the southern Netherlands not locally available, just like copper and tin. Apart from the material of which they are made, copper daggers and gold ornaments are no new elements in the Late Neolithic burial set either. Flint knives and daggers already prevailed much earlier, and so did body ornaments made from non-local materials. Still, I think that the copper/bronze and gold objects have limitations and possibilities for the cultural biographies of things that are unknown in the case of those of other materials. In the long-term, these will make themselves felt, and make the biographies of metal objects different from those of earlier objects. They are as follows.

#### *The possibility of recycling*

First, metal can be recycled by re-melting. This is impossible for stone implements. Theoretically a broken stone axe can be repaired and transformed into a smaller one. It will never be possible, however, to reconstruct the axe entirely. This is possible, however, in the case of a copper/bronze one. But this possibility of recycling has implications. A broken stone axe considered unfit for further use is likely to have been discarded. When this happened with a bronze tool, however, it was likely to be remelted or re-used. After all, a metal object potentially represents raw material and tool at the same time. This implies that the decision to deliberately deposit a bronze axe comes down to *not* recycling. In other words: it was no longer a valuable and prestigious tool of foreign material one gave up. Deposition implied the sacrifice of both a usable tool *and* a piece of raw material. Moreover, it implies that the distinction between deposition as discard and deliberate, permanent deposition (see the discussion in chapter 4) disappeared. An object that was formerly discarded was now most likely re-used (and hence never entered the ground). With the adoption of metal, deliberate deposition thus potentially became a more marked phenomenon in the absence of alternative types of deposition (discard).

#### *Flint and stone as 'pieces of places'*

Secondly, copper and bronze may have different evocations than flint and stone axes. A conspicuous feature of Middle and Late Neolithic axes is that they are polished. Especially flint axes with extensively polished surfaces may show a distinctive colour characteristic for the production area (in our case this applies for example to Buren axes). There are reasons to suppose that this was also the intention of the process of extensive polishing. A study of British polished stone and flint axes recently showed that the patterns with which such axes were distributed are sometimes enigmatic by standards of practicality (Bradley/Edmonds 1993;

Bradley 2000, chapter 6). Production sites are sometimes located in dangerous, inaccessible places, whereas safer alternatives were available. Also, regions with flint sources of their own still have imported axes from abroad. Bradley (2000) argues that the character of the place of origin was itself important. Axes, he states, are ‘pieces of places’. The fact that they originated in remote, dangerous places (for example underground mining sites) may add to their value. Bradley goes on to argue that the extensive polishing of an axe may be related to this, as polishing helps to display distinctive colours identifying the source. The Dutch material has not been studied from such a point of view, but I consider it likely that similar themes may have mattered in the biographies of flint axes. They are also often polished in ways that go beyond what is needed in functional terms. Moreover, the colours of flint axes are generally distinctive for a particular extraction site (Bakker in press).

It may therefore be supposed that flint axes, especially the polished specimens showing a distinctive colour pattern, were indicative to people of specific places of origin. Axes of the Buren type or Cigar Chisels might be regarded as ‘pieces of places’. Real or claimed knowledge of the place from which such axes originated may have given them prime value for people who were on the receiving end of the exchange chain. On the basis of ethnographic examples Helms (1993) has shown that in many non-modern societies real or mythical knowledge of far-away places can often be an authoritative resource (see also chapter 3). It is precisely this aspect that is missing on copper, bronze or gold objects. There are by definition no visual characteristics that allow a piece of copper from an Irish source to be distinguished from one from a central European one. Metal simply does not provide that possibility. It is only possible to give copper the character of a ‘piece of place’ by human intervention (conspicuous local or workshop-specific forms or decoration). As amply illustrated above, this was not done in the case of the metal which circulated in the southern Netherlands. On the contrary: the startling thing is that, for the period under discussion here, there were hardly any stylistic traits that made an axe from Britain visually distinguishable from one from Germany.

#### 5.7 PATTERNS IN THE BIOGRAPHIES OF METALWORK: PRODUCTION AND CIRCULATION

Above, I have discussed the transition of stone to bronze, changes in the attitude towards materials and their repercussions for existing views on object biographies. This enables us to focus once again on metalwork biographies alone. This section will deal with the first part of its biography: production and circulation.

##### 5.7.1 *Circulation: the importance of being imported*

A first conclusion to be drawn for the greater majority of objects is that we must be dealing with imports from regions that are very far away. As we have seen, for most objects typological and metallurgical observations strongly suggest that most objects were imported from regions as far away as southern Germany. Consequently, the conclusion seems unavoidable that the exchange history of metal objects must have contributed significantly to its accumulation of value. The use to which an object was put must have been another factor (worn axes, ornaments in burials). I want to focus on the history of exchange first. Archaeology is not in a position to allow a reconstruction of what precisely took place during such long-distance exchanges, but for the present case there are at least two remarks to be made.

##### *The heterogeneity of the imported valuables*

First of all: for both the Late Neolithic and the Early Bronze Age the imported copper/bronze objects came from a variety of ore sources (table 5.3). This must reflect an exchange system that was probabilistic and flexible, rather than rigid and defined by positive exchange rules (cf. Rowlands 1980, 16-21). For both the flat and the low-flanged axes, we have seen that the metal composition is heterogeneous, suggesting that it came from different sources. This is in contrast with other non-metalliferous regions, Denmark in particular. Here, much more thick-butted flat axes are known (the most recent inventory counts 31 examples; Vandkilde 1996, 44), but their metal content is more homogeneous than in the case of the Dutch axes. Most are of the so-called BYGMET metal, (Liversage/Liversage 1989; Vandkilde 1996, 47).

##### *Shifts in the main exchange networks of valuables*

Second, the exchange links were also far from stable through the centuries. In the Late Neolithic and Early Bronze Age, several shifts in the main exchange networks must have taken place. In the southern Netherlands, metalwork was surely not the first imported object type. The largest part of the region is devoid of sources of flint and stone, and long before the Late Neolithic importation of flint/stone axes had already taken place at some scale. The transition to bronze did, however, bring about profound changes in the constitution of existing exchange relations.

During the Late Neolithic A (Wartberg-Stein-Vlaardingen groups), the majority of the Buren-axes seems to come from the Rijckholt-Spiennes zone and some from the Valkenburg and Lousberg sources. All the production sites are located in Dutch southern Limburg or in the adjacent Belgian areas (Bakker in press), implying that objects travelled some 200 km at the most. Some flint daggers (Grand Pressigny), however, come from much further away, and so did the rare Jadeite axes. Then, during the Late Neolithic B, the circulation of

Buren-axes and other flint/stone axes decreased significantly, whilst copper flat axes were introduced. As a matter of fact, only few flint or stone axes can be dated to the Late Neolithic B. In section 5.6.1, it was already argued that somewhere in the late Neolithic B-Early Bronze Age time-span, metal axes replaced flint and stone ones. At the time of their introduction, copper axes do not seem to have been regarded as equivalent to the flint Buren axes or Cigar Chisels they were replacing. Copper axes travelled over much larger distances than the Buren axes ever did: most coppers are imports from southern Germany or the Atlantic façade. The circulation of copper axes is better compared to that of Jadeite axes or Grand-Pressigny knives. In the Early Bronze Age, metal axes continue to be imported via such long-distance exchanges, but now in increasing quantities. In general, it can therefore be concluded that with the transition from stone to copper/bronze, exchange networks not only shifted from exchange chains crossing the Dutch-Belgian region to those linking the southern Netherlands up with southern Germany and the Atlantic façade. The net result is also that the exchange chains widened. For the Early Bronze Age, most axes deposited were acquired via exchange networks covering larger distances than those of their flint/stone predecessors.

A further change in the exchange networks took place on the transition from the Late Neolithic to the Early Bronze Age. This time it is related solely to a shift within metalwork circulation. We have seen that in the Late Neolithic Atlantic metals were important: the 'Dutch Bell Beaker metal'. For the Early Bronze Age, there is not one indication that this type of metal was used any longer, and as observed in section 5.5, Atlantic metalwork was not as frequent as it was before.

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

One of the interesting aspects of the adoption of metalwork in the Netherlands is that it apparently brought the adoption of metallurgical skills in its train. Whether it was gold ornaments or copper daggers or both that were produced in the Late Neolithic, the interesting thing is that the local working and perhaps even complete production of such objects did not lead to products with a distinctive local style. Quite the contrary: both the gold and copper products are entirely comparable to those of other regions (Butler/Van der Waals 1966, 58-9; 61-63 for parallels and arguments). Apparently, it was important that objects looked like international ones that came down via exchange. This finding may be in line with the following observation. Both for the metalwork from the Late Neolithic and from the Early Bronze Age, there is no clear relation between the form of an object and the region it came from. Objects were apparently

not made as indicators of production place, or a regional or local identity. Rather, they seem to have been made to *resemble other objects in circulation*. This points to the existence of a relatively 'open' system, in which valuables were easily convertible and could cross cultural boundaries.

#### 5.8 DEPOSITION: THE INCORPORATION OF METALWORK IN NEOLITHIC OFFERING TRADITIONS AND THEIR SUBSEQUENT TRANSFORMATION

Impressive as the life-paths of many an exchanged copper may have been, most that came down to us ended their life by being put in a watery place or burial. Depositions were by no means an invention of the Late Neolithic B, but a phenomenon which at that time already had a formidable age. The question to be answered then, is: how was metalwork incorporated in these age-old traditions, and are there any indications that its incorporation led to a transformation of depositional practices themselves?

##### 5.8.1 *Continuity and change*

In section 5.2, a brief outline of offering traditions of Neolithic societies in the southern Netherlands was given. A distinction was made between deposition of all kinds of ordinary objects and animal remains in watery places, and the deposition of flint and stone axes. Even the oldest depositions already seem to have focussed on watery places (Louwe Kooijmans 2001) The later deposition of axes seems to have been much more selective, and a recurrent element is that we are here dealing with objects that as a rule already had a history of exchange before being placed in the marshes or bogs. More than the pots, tools, or animal remains, they seem to have been valuables. They were incorporated into an existing sacrificial system in which the focus on watery locations was already essential.

For the Late Neolithic A, we have not much evidence that deposition of animal remains, pots and so on continued in our region, but the finds of Buren axes and Cigar Chisels in streams and bogs suggest that deposition of flint axes was practised (Van der Beek in prep.) The fact that the first copper axes were found in similar contexts does not come as a surprise therefore. It seems a neat continuation of existing forms of axe deposition, although at a much lower level and with a possible hiatus in the first part of the Late Neolithic B (see below).

A new tradition of deposition, however, sets in with the adoption of the Beaker burial ritual. An important observation is that the kind of objects placed in such graves differs markedly from those of deposits in wet places. The argument was made that with the onset of this burial tradition we see the first clear evidence of selective deposition. The adoption of the Beaker burial ritual (c. 2600 BC) precedes the introduction of metalwork by some centuries. Selective

deposition was already being practised before the adoption of metal. For example: Cigar Chisels, often deposited in marshes, are known to be contemporary to the All-Over-Ornamented Beaker graves. Still, they are very rare in the burial set of contemporary Beaker graves (Bakker in press).

### 5.8.2 *Fluctuations in the rate of deposition*

Leaving the case of burials aside, superficially there seems to have been an overall continuity with the Earlier Neolithic period. On second thoughts, however, things are more complicated. In the southern Netherlands, we probably have to reckon with a severe decrease in the practice of wet-place deposition. In the northern Netherlands, deposition even seems to cease entirely during the Late Neolithic B.

Bakker's research has yielded some 85 flint and stone axes from the research region. It is unclear whether all these flint and stone axes were deposited in wet locations, since Bakker did not study this aspect of the axes, but, as remarked in section 5.2, superficial examinations show that at least a significant part of these does come from streams, rivers and bogs (a conclusion corroborated by the study of Van der Beek (in prep)). Although both flint/stone and copper axes have long dating ranges, the number of flat copper axes is in no proportion to their stone predecessors. There are no more than ten copper axes known, a striking small number when compared with the numerous flint and stone axes. As these copper axes are practically the only depositions we can find for the Late Neolithic B, the conclusion is inevitable that the rate at which deposition was practised must have decreased significantly. For the northern Netherlands, flint/stone axe deposition is known from the Late Neolithic A, albeit in much smaller numbers than before (Ter Wal 1995/1996, 149-151). Remarkable, however, is that the deposition of a number of large wooden disk wheels dates specifically from this period (Van der Waals 1964). For the subsequent Late Neolithic B, only three copper flat axes may represent depositions dated to this phase, so in the north the practice seems to have ceased almost entirely (Butler 1995/1996, nos. 6, 12, 17). This makes the upsurge of deposition in the Early Bronze Age almost an atavistic phenomenon there (fig. 5.17).

This coming-and-going of axe deposition is hard to explain. Problems in dating of late stone/flint axes may partly be responsible, but it is probably no coincidence either that the decrease coincides with the crucial period in which the transition to metal takes place. We should not forget that we 'see' only deposition. The numbers of axes in deposition need not be representative of those in circulation. For deposition of vital tools to flourish, it is crucial that there is a regular supply of such tools. One cannot deposit more than one has. The reorientation in exchange relations that must have taken place during the Late Neolithic B (section 5.7.1)

may have led to a decrease of axes in circulation, which was only improved by the re-establishment of exchange networks during the Early Bronze Age.

After the decrease in the Late Neolithic B, there is a strong upsurge of depositional practice in the Early Bronze Age. With its growing significance it seems as if other ritual activities also came to be subsumed in this field of practice. The deposition of elaborate artefacts in graves that was so characteristic for the Late Neolithic B almost entirely ceases in the Early Bronze Age. Copper/bronze daggers that were almost exclusively known from graves before are since the Early Bronze Age only to be found as deposits outside graves (for example, the dagger in the Wageningen hoard). New ceremonial objects like halberds were now also deposited in watery places and not in graves.

### 5.8.3 *Conclusion*

Louwe Kooijmans (2001) recently argued that object deposition in watery places is fundamentally a Neolithic practice. The findings in this chapter are in line with his statement. There is indeed continuity in the phenomenon of deposition of imported axes in wet places. On the other hand, there is a remarkable decrease in this practice, precisely around the time of the incorporation of metalwork. On top of that, a transformation in depositional practices *pre-dating* the adoption of metal should be reckoned with: the rise in burial deposition as evidenced by the Beaker graves that came into being here from c. 2600 BC onwards. This brings us back to the sharp contrast that was recognized between deposition of metalwork in burials and wet places: how should this be interpreted?

## 5.9 DEPOSITION: GRAVES AND WET PLACES AS CONTRASTING DEPOSITIONAL CONTEXTS

Having discussed the long-term developments in depositional practices, we can now focus on details of the earliest metalwork deposition. Particularly the contrast between burial deposition and deposition in watery places recognized for the Late Neolithic B (section 5.4) seems important, since it is the first sign of a practice of metalwork deposition that is selective. The dichotomy recognized was between daggers and ornaments being placed in graves versus deposition of axes in wet places. How can this be understood? The answer might be looked for in the new ideology of personal display and personhood that became pronounced in the burial ritual of the Beaker graves. Following the terminology of chapter 3, it will be argued that daggers and ornaments were primarily significant as valuables relating to the construction of personhood, whereas the relevance of axes was rather in a different field.

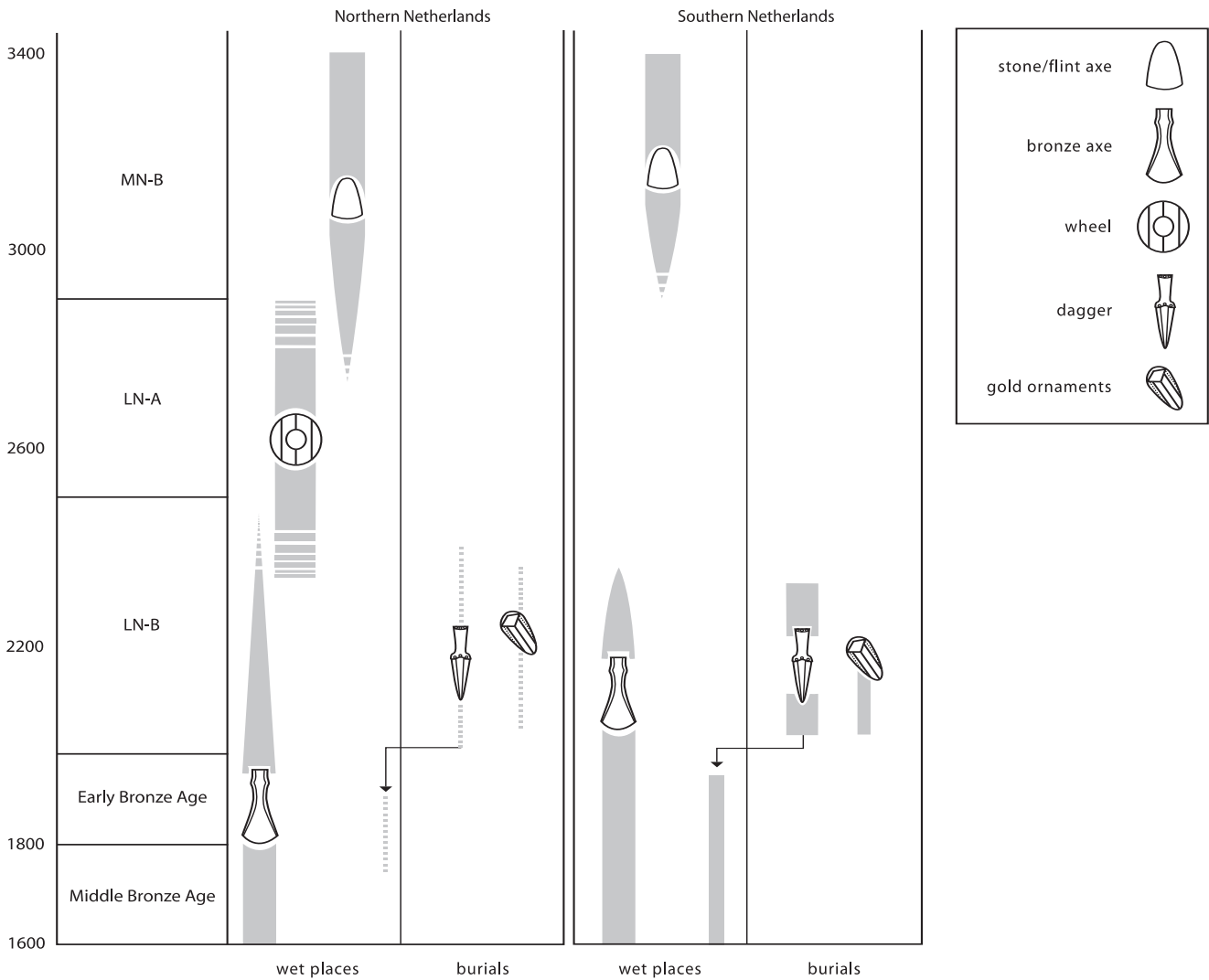


Figure 5.17 Developments in depositional practices in the northern and southern Netherlands compared (3400 - 1600 BC).

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

Before going into detail, some words should be said about the general characteristics of the beaker burial ritual of the southern Netherlands. It involves the burial of a single individual with a specific, stereotyped selection of artefacts underneath a mound or in a flat grave (Fokkens 1998b). Characteristic aspects of this kind of burial ritual are the deposition of one or more thin-walled, decorated beakers, flint knives, amber buttons with V-shaped perforation, a wristguard and a set of flint arrowheads (Lanting/Van der Waals 1976). The reason why Beaker graves are considered a unique 'phenomenon' is the extremely wide distribution of this way of burial across north-west Europe, which is indeed unprecedented (Harrison 1980).

In dealing with Beaker graves in the study region, one cannot separate any discussion about such graves in a region from the general debate about the so-called 'Beaker phenomenon'. In brief, this long-lived debate is about the explanation of interregional – almost pan-European – similarities between burial traditions (Barrett 1994, 88-97). An extensive survey of its history can be found in the work of Zita van der Beek (in prep). For the present argument, I shall only deal with the explanation that has received considerable international attention in the last decades. It is an important one for the present discussion because it lends much weight to the role of metal objects in the Beaker burial ritual. This explanation may be characterized as a political-economic approach, since it stresses that the Beaker ritual was related to the acknowledgement of individual power (Clarke *et al.* 1985, 81-95).



This view takes the development of the Beaker burial ritual to be related to the rise of 'a more entrepreneurial form of leadership in which emphasis on the individual was altogether more acceptable and desirable' (Clarke *et al.* 1985, 83), contrary to more collective power, associated with communal burial monuments (Thorpe/Richards 1984; Shennan 1986a). In the Beaker period, power would increasingly have been based on the control of exchange networks of prestige goods, including metal objects. Metal had a role in the symbolization of this differentiation (Shennan 1986a, 117). This new concern with prestige and status, and the supposed growth of long-distance exchange networks are thought to explain the similarity in certain material culture items between regions.

*Beaker burials as reflecting personhood rather than individuals*

The interpretation of the Beaker burial set as a collection of prestige goods may be criticized both on theoretical and on empirical grounds. To start with the first: central to the approach is the ideology of the individual, in contrast to the collective. Here, I want to remind the reader of the discussion in chapter 3, about the difference between 'individual' and 'person'. In most of the studies cited, we may recognize a notion of the entrepreneurial, calculating individual, which is very similar to our own notion of the individual. The term 'individual power' is telling. In chapter 3, it has already been indicated that this notion is typical for modern societies, but uncommon for non-modern ones.

We should certainly not play down the prestigious significance of many of the artefacts in the burial set. It is indeed striking that most are made of imported materials, acquired by long-distance exchange (wrist-guards, amber and of course the copper and gold items). However, the way in which these non-local materials were used is not as if they just served to show off richness and prestige; rather, the set is highly similar and even stereotyped between individual graves. As demonstrated, a study of deposition of material in other contexts shows that artefact deposition in Beaker graves involved strict selections. Explaining the presence of the non-local materials in the grave by means of their prestigious character cannot account for these selections (cf. chapter 2). If we want to make sense of the presence of gold and copper in the grave we should go one step further, and assume that the personal display involved more than just richness and power: the personal display involved dressing and adorning the deceased in such a way as to signal a specific social role. The burial ritual did not conceptualise some successful individual, but rather *a specific kind of personhood*. The specific objects that we encounter time and time again in such graves should therefore be explained as the paraphernalia of that kind of personhood. In the terminology of chapter 3, they are *personal valuables*, the objects by which an individual is transformed into a specific kind of person, with special social and ritual roles.

*What was this social role?*

It is hard to make out what the specific social role was, and probably its meaning was not unequivocal. In general, it can be stated that in the kind of Beaker graves we encounter in the southern Netherlands ritual emphasis was particularly on placing a decorated beaker in the grave, on bodily adornment with ornaments that are often of a non-local nature (amber buttons, wrist-guards, gold ornaments), on daggers or knives (of flint or copper, again often of non-local nature) and archery equipment (flint arrowheads, wrist-guards). The emphasis on archery equipment and daggers is often taken to represent weapons rather than hunting equipment (Fokkens 1999), particularly in view of the fact that economically it is precisely the significance of hunting which is decreasing in this period (section 5.2). So martiality might seem an important personal quality emphasized here. Flint/stone axes are much rarer in such graves, and the impression is therefore that the deceased was much less portrayed in his qualities as a farmer. This implies that the kind of person constructed by the mourners in a Beaker grave is a skewed representation of daily life. After all, it is in the same period that the transition to a fully agrarian way of life seems to have been completed (section 5.2). The meaning of the Beaker, then, is difficult to assess. It is often taken to refer to the social importance of communal meals or alcoholic drinking festivities (Treherne 1995; Fokkens 1998b; Van der Beek in prep.). We might perhaps also think of the theme of hospitality, generosity and communal drinking bouts that is so persistent in later ideologies of European elites (Diepeveen-Jansen 2001, 39-44).

This interpretation, which centres on the meaning of things, can be reconciled with the prestige-goods model mentioned earlier on. A meaning-centred approach should not play down the observation that it was indeed non-local objects that were relevant in this peculiar type of burial. It can be said that the deceased was 'dressed in internationality'. The social role constructed in this kind of funeral is partly constructed by non-local objects, in a way that seems to refer to shared instead of local habits and norms. Put differently, the deceased is dressed in a way that claims membership to non-local communities rather than to local identities.

*The Beaker burial and its conservative character*

In making sense of the Beaker burial rite in this way, some words should be said on its conservative character as well. The burial ritual throughout the Late Neolithic Period must have been used to bury only a small minority of the entire population (much less than 10%). Burials were rare and probably took place only once within several generations (Lohof 1994, 101). In view of the scarcity of the event and the absence of written protocol, one is struck by the general

similarities between burials, not only between roughly contemporary sites, but also in time. In the Low Countries, the presence of one or more beakers in the grave, for example, is a feature found from the Single Grave phase until the end of the Bell Beaker phase, some 900 years altogether (Lanting/Van der Waals 1976). When discussing the Beaker 'phenomenon', it is often the interregional similarities that are dealt with, but the rigid continuity and conservatism in the burial outfit are just as striking. Although the long-term continuities have been recognized (Lanting and Van der Waals (1976), it was never explained why the burial ritual was so remarkably traditional. There is neat continuity in the main categories deposited in graves: beakers and knives/daggers are known for all phases of the Beaker graves. This implies that the conceptualisation of a particular kind of personhood was conservative and stable rather than dynamic and progressive. The notions about the personal qualities that were emphasized in such a grave, whatever they might be, thus seem to have been rooted in a remote past, and were probably of a ritual, perhaps even non-discursive nature. In his study of ritual practices in Madagascar, Bloch (1989, chapter 1) observes that rituals tend to be highly conservative and formal, involving practices and languages that are no longer spoken or understood in normal daily life. 'Ritual' time seems to be entirely untouched by the dynamics of daily life. Bradley (1998, chapter 6) argued that we see the same conservatism in many rituals of prehistoric Europe. We should probably consider the striking traditionalism of the Beaker burial ritual from this same perspective, and one can argue that by its conservatism it *even seems deliberately to reproduce a specific, ancestral way of burial*. It will now be suggested that this is probably no coincidence: non-modern views of personhood often deliberately seem to resort to ancestral roots.

In his quintessential essay on the category of the person, Mauss (1996) gives several examples – and many more recent ethnographies may be added (see the contributions in Carrithers *et al.* 1996) – how within society roles, statuses and matching paraphernalia were circumscribed. They were inherited from ancestors at specific moments, by certain individuals. The individual was defined as a person in the rights he enjoyed and in his place in the tribe, as in its rites (Mauss 1996, 11). In defining a person with names and objects, ancestors are thus reproduced. Continuity may be the essential value in this process (La Fontaine 1996, 132). This same process may be observed in the Beaker burial ritual, in the stereotyped burial set and its continuity throughout time. This implies by no means that burials are exact copies of each other. Every burial reproduces a traditional one, but one should not forget that human agency is involved in this, and that there are considerable intervals in time and/or place between burial rituals (chapter 3).

### 5.9.2 *The deposition of axes in wet places*

The other context into which metalwork was deposited during the Late Neolithic B are the wet, natural places in the landscape. As demonstrated, first and foremost copper axes and items of a more ceremonial nature are involved, and this practice must be seen as a continuation of a much older practice of axe deposition. The first question to be asked is: why axes? The second should be: why were metal axes *not* deposited in beaker graves?

#### *Why axes?*

As the presence of broken flint/stone axes on Middle and Late Neolithic settlement sites illustrates, axes were tied up with the practicalities of daily life. For an important part this should be read as *agrarian* life, where the axe was the most vital tool with which groups reclaimed natural stretches of land, created new settlement grounds, or built new houses. In the daily life of small groups, such tasks are vital to their history and continuity, not only in a practical, but potentially also in an ideological way: building a new house, or reclaiming new territory is often seen as a marked event, coinciding with the self-definition/reproduction of the group in question (cf. Gerritsen 2001, 43-4). It might be ventured that in this period the foundations were laid for a general conceptual link between the biography of an agricultural tool such as an axe, and the biography of the small group on whose behalf it was used.

Be this as it may, the wide-spread evidence on the circulation of axes for such a long time among societies where agriculture was not or only partly an element of daily life (cf. Early Neolithic *Breitkeile* in Northern Europe), implies that its significance as exchange item was based on more aspects than just the one. For a foreign object to be accepted, it is important that it can be translated to local idioms (Sørensen 1991, 198). The wide-spread acceptance of axes probably refers not so much to essential qualities of the object itself, but rather because axes effectively linked a whole range of spheres of human activity (Kristiansen 1984, 79; Tilley 1996, 114). The axe was an important tool for a whole array of daily tasks (forest-clearing, wood-working for houses, fences, canoes and so on), but it could also be effectively used as a weapon and therefore be potentially suitable for expressing power relations. Thus, its multi-vocality is directly related to its wide acceptance.<sup>9</sup>

#### *Why were copper axes not deposited in burials?*

Before the adoption of metalwork, it is clear that axes were seen as imbued with special meaning. Apart from their role in deposition, this is apparent from the fact that magnified, high-quality axes circulated that were impractical in daily life. Although axes do occur in the burials of the Single Grave Culture (2900-2500 BC) north of the Rhine, these are

generally not the kind of axes that were used in daily life. Rather they seem to have been battle axes, thus emphasizing martial qualities rather than evoking associations with the farming way of life. Contemporary multiple-axe hoards from peat bogs in the northern Netherlands consist of different types of axes (for examples: Ter Wal 1995/1996, 149-151). With the onset of the Late Neolithic B, axes hardly figure in the burial set, but if they do, they are small, inconspicuous stone/flint work axes. The contemporary larger copper axes are unknown from this context, but – as we have seen – they are known from wet places. This suggests that the meaning of the new copper axes was more comparable to that of the earlier Neolithic flint/stone axes in hoards, rather than that they functioned as valuables indicating a specific stage of personhood, as we can suggest for the stone battle axe from Single Grave Culture-burials. The dissociation of copper axes and the contemporary Beaker burial set in the subsequent Late Neolithic B is valid for a much larger area than just the Netherlands (Bradley 1990, 64-5; Vandkilde 1996). We can therefore assume that copper axes were generally not regarded as valuables that were significant in the construction of this specific social identity displayed in Beaker burials. Their meaning, then, should have been in a different field. Parallel to Vandkilde (1996, 267-8), we should bring this to its logical conclusion: copper axes were apparently not regarded as valuables indicating a specific personal role. With the theory on different kinds of valuables in mind (chapter 3), it might then be ventured that copper axes and ceremonial double axes were perceived as *valuables associated with a communal instead of personal identity*. Although impossible to prove, this may sound feasible considering the kind of life-path of most axes: they are the tools by which agrarian communities create their existence. With axes, people reclaim land or build houses, activities that are performed on behalf of a collective. Later on in this book (chapter 10), I shall come back to this theory. For the moment it suffices to keep in mind the dichotomy recognized here between valuables indicating personal identities and axes, as this dichotomy was emphasized in selective deposition. As we will see in the following chapters, it would remain a fundamental distinction underlying depositional practices.

## 5.10 CONCLUSIONS

With regard to the questions posed in the introduction to this chapter, the following conclusions can be drawn:

### 1 *The role of metalwork in daily life*

The adoption of metalwork had hardly any consequences for the material culture used in daily life. Metalwork seems to have functioned predominantly in the field of personal display (including weapon-like objects like daggers) and in the ceremonial field (double axes, halberds). The only

exception are metal axes, which by the Early Bronze Age seem to have replaced flint/stone ones as the dominant tool.

### 2 *The properties of metalwork and the new implications for the cultural biographies of objects*

Most of the metal objects that came to figure in deposition in the Late Neolithic B have predecessors in other materials, and were deposited in similar ways: daggers and ornaments in burials, and axes in watery places. There are indications, however, that the metal specimens were held in higher esteem than their non-metal counterparts. In addition, the cultural biographies of the metal objects differ from their non-metal predecessors in two essential aspects. Unlike stone or flint, metalwork does not seem to have been understood as ‘pieces of places’. No attempts were made to give them an outlook that is characteristic for a production place. Unlike stone or flint, metal can be recycled: it is both object and material resource. This makes the decision to deliberately deposit metal objects more marked than in the case of non-metal objects. After all, now it was not just a usable tool that was removed from society, but recyclable scarce raw material as well.

### 3 *The development of a system of selective deposition*

During the Late Neolithic B, a system of selective deposition came into being even *before* the adoption of metalwork. It becomes visible to us with the adoption of the characteristic Beaker burial set, which involved deposition of a strict set of valuables on and near the deceased’s body. Thus, during the burial the deceased was given a distinctive identity, which was probably related to specific social and ritual roles. The deposited valuables were probably related to a special kind of personhood. Although its precise meaning escapes us, martiality seems to have been one of the personal values that was emphasized. It also seems to have been important that this personal identity referred to issues shared among far-flung communities, both in terms of time (the striking traditionality of the personal values) and in space (being for the larger part composed of imported pieces, the Beaker set explicitly referred to non-local identities). Deposition of valuables in burials can be contrasted with the deposition of axes in watery places in the landscape. This contrast became most pronounced in the later phase of the later part of the Neolithic-B, when copper daggers and gold ornaments were deposited in burial context, whilst copper axes and ceremonial items ended up in wet natural places in the landscape. It has been argued that this dichotomy may reflect the distinction between the valuables of *communal* identities (axes, ceremonial items) versus the valuables associated with a specific kind of *personal* identity (daggers, ornaments).



#### 4 *Metalwork deposition as an atavistic phenomenon*

Deposition of axes in wet places is essentially a continuation of age-old Neolithic practices. At the time of the adoption of metalwork, however, the rate of deposition decreased dramatically. This makes the strong upsurge of wet-context deposition in the Early Bronze Age almost an atavistic phenomenon.

#### 5 *The growing significance of deposition in wet places*

By the Early Bronze Age, deposition of metalwork in wet contexts becomes all important at the expense of deposition in burials. Contrasts in depositional practices now become apparent in the offering of different types of objects in different types of wet places.

#### 6 *The ritual appraisal of 'natural places': continuity and re-invention*

Deposition of objects in watery places, however, dates back to times when foraging was still a crucial element of the way of life. We may suspect that the practice of deposition in watery places as it existed in the Early Neolithic was part of the positive attitude of these communities towards natural resources of the land. Louwe Kooijmans (2001, 14-5) speaks of deposition as a way to communicate with the 'spirits of nature'. The attitude towards natural resources must have fundamentally changed precisely at the time of the adoption of metalwork during the Late Neolithic B. The positive *economic* appraisal of the natural richness of the land seems to make way for an attitude to the landscape that is fundamentally culturalist and agrarian. Nevertheless, the continuation of the age-old practice of deposition in wet places at low rates during this phase implies that the *ritual* appraisal of natural places did not cease entirely in our region. Nothing prepares for its strong upsurge during the Bronze Age, certainly not in the northern Netherlands where the practice almost seemed to have disappeared during the Late Neolithic B. In a way, we may therefore also speak of the 're-invention' of natural places as ritual foci. In the following chapters and specifically in chapter 14 we shall trace the history of natural places in the Bronze Age, and see how they acquired a significance of their own in the now largely agrarian Bronze Age world, very different from the way they were valued by Early Neolithic societies. It was during the Late Neolithic B and Early Bronze Age, however, that this transformation must have come about.

## notes

1 Van der Beek (in prep) and Lanting (personal communication) have argued that the stone that was probably part of this grave cannot have been a metalworking tool, since it is not made of suitable material. I follow their arguments here.

2 Although Bakker did not study the Buren axes and Cigar Chisel for their role in deposition, it is likely that for the southern Netherlands at least his catalogue nos. Dl 6 to 10 and Ov 4 and 10 (Belgium: Gent and Wiggelen) seem to represent deposits in watery contexts, as do the following finds of Cigar Chisels: no. 9 (Bladel), 12 (Wanroij), 13 (De Peel), 16 (Echterbroek), 17 (Hunsel) and no. 32 (Belgium: Neeroeteren). Van der Beek (in prep) mentions additional deposits of Buren axes from Roermond-Hatenboer and Kessel –river Meuse (province of Noord-Brabant).

3 From the northern Netherlands, there is only the find of a thick-butted axe of *Form Nieder-Ramstadt*, probably from a stream valley (Butler 1995/1996, no. 6), a Migdale axe from Drouwen (idem, no. 17) and the Noordoost-Polder (idem, no. 12). Both are probably also from a wet context.

4 Verlaeckt (1996, 14) describes a tanged dagger from Lokeren that was dredged from the river Durme in West-Belgium, to the west of the research region.

5 In his most recent publication, Butler also mentions an axe from 'Nijmegen' (1995/1996, no. 29). I recently found out, however, that this axe is in actual fact an unprovenanced find from the collection Kam. Although Kam preferred to collect finds that were found in Nijmegen and surroundings, even the original documentation of his collection does not claim that this particular axe came from Nijmegen. The Haren axe is a genuine and reliable find, though, and this leaves us with just one axe that can be regarded as an import from the British Isles.

6 Personal comment C. Koot.

7 Early Bronze Age stone axes are known from the northern Netherlands, the so-called *Arbeitsäxte* (Fokkens 1998a, 112). As far as I know, such axes are hardly known in the southern Netherlands, at least not in quantities that suggest that it was a regular tool of daily life.

8 If the axe from Nuenen/Gemert was really associated with two Buren axes, this would be different. As stated in appendix 1, there are serious reasons to doubt this association.

9 The significance of axes will be dealt with in more detail in chapter 13.