Conquests and Continuity: Portable metalwork in Late Anglo-Saxon and Anglo-Norman England, c. AD 1000-1200

Robert Webley

PhD

University of York

Archaeology

September 2020

Abstract

This thesis analyses non-ferrous metalwork in England from the 11th and 12th centuries AD to elucidate patterns of social change and changing identities. A dataset approaching 12,000 artefacts was gathered, contextualised by a significant number of objects from Continental Europe. This sheer quantity of material challenges previous claims for a paucity of non-ferrous metalwork at the time. It is these claims that have arguably led to a lack of scholarly engagement in the period's portable material culture. Data was drawn from excavated examples of the objects pursued and from metal-detected material, the latter primarily recorded by the Portable Antiquities Scheme (PAS). Effectively a novel dataset, it allows for a new synthesis of knowledge regarding metal objects at the turn of the medieval period. Such work is also previously lacking for structural reasons concerning the constraining effects on academic enquiry by period divisions relating to the Norman Conquest of 1066. Using object types from three main case study categories – dress accessories, equestrian equipment, and a wide-ranging group of 'elite' objects – patterns could be brought together and traced across the period and across Europe. Ultimately, socio-cultural comment with a focus on identity may now be offered on the evidence of metalwork, one that emphasises continuities in the period following the Norman Conquest, and acknowledges the notable impact of the Danish conquest of 1016 and changes in the early and mid-12th century linked to assertive self-definition of elites.

List of Contents

Abstract	2
List of Contents	3
List of Tables	9
List of Figures	12
List of Illustrations	17
Accompanying material	19
Acknowledgements	20
Author's declaration	22
Chapter 1: Introduction	24
1.1 Introducing the study	24
1.2 Contexts	26
1.2.1 Conquests and immigration	26
1.2.2 Lordship and its performance	28
1.2.2.1 Horses	32
1.2.2.2 Hunting	34
1.2.3 Urbanisation and urbanism	36
1.3 Challenges and opportunities	37
1.4 Approach of the thesis	40
Chapter 2: Literature review	42
2.1 The Norman Conquest and archaeology	42
2.1.1 Continuity and change	42
2.1.2 Archaeological contributions	45
2.2 Metalwork in Britain c. 1000-1200: some issues	48
2.2.1 Perceived paucity	48
2.2.2 Explanatory models	50
2.3 Research using Portable Antiquities Scheme data	56
2.4 Non-ferrous metalwork in Britain c. 1000-1200: previous work	60
2.4.1 Object-specific studies	62

2.4.2 Recent synthetic studies and methodological themes6	57
2.5 Summary7	71
Chapter 3: Methodology7	73
3.1 Aims, objectives and general approach7	73
3.1.1 Archaeologies of identity7	75
3.2 Methodology8	31
3.2.1 Identifying pertinent object types8	35
3.2.2 Establishing close dating for object types	€
3.2.3 Establishing contextual association trends for object types) 7
3.2.4 Establishing identity association trends for object types10)2
3.2.5 Identify trends in associations across object types through time10)4
3.2.6 Summary10)4
3.3 Dataset overview10)5
Chapter 4: Three groups of Dress Accessories12	21
4.1 Buckles	22
4.1.1 Introduction and historiography12	22
4.1.2 Typochronological analysis12	24
4.1.3 Contextual associations14	16
4.1.4 Identity associations15	54
4.1.5 Materials analysis15	57
4.1.6 Summary of key points15	59
4.2 Strap-ends16	50
4.2.1 Introduction and historiography16	50
4.2.2 Typochronological analysis16	51
4.2.3 Contextual associations17	71
4.2.4 Identity associations17	75
4.2.5 Materials analysis17	75
4.2.6 Summary of key points17	76
4.3 Brooches17	77
4.3.1 Introduction17	77
4.3.2 Typochronological analysis17	77
4.3.3 Contextual associations19) 5
4.3.4 Identity associations20)5

4.3.5 Materials analysis	209
4.3.6 Summary of key points	211
4.4 Chapter overview	212
Chapter 5: Three groups of Equestrian Equipment	219
5.1 Bridle cheekpieces and bit links, plus other harness links	220
5.1.1 Introduction and historiography	220
5.1.2 Typochronological analysis	226
5.1.3 Contextual associations	233
5.1.4 Identity associations	237
5.1.5 Materials analysis	237
5.1.6 Summary of key points	238
5.2 Harness pendants and pendant suspension mounts	239
5.2.1 Introduction and historiography	239
5.2.2 Typochronological analysis	242
5.2.3 Contextual associations	256
5.2.4 Identity associations	259
5.2.5 Materials analysis	260
5.2.6 Summary of key points	261
5.3 Stirrup-strap mounts and stirrup terminals	261
5.3.1 Introduction and historiography	261
5.3.2 Typochronological analysis	264
5.3.3 Contextual associations	274
5.3.4 Identity associations	280
5.3.5 Materials analysis	282
5.3.6 Summary of key points	284
5.4 Chapter overview	285
Chapter 6: Three groups of 'Elite' Objects	289
6.1 Scabbard/sheath chapes	290
6.1.1 Introduction and historiography	290
6.1.2 Typochronological analysis	292
6.1.3 Contextual associations	299
6.1.4 Identity associations	
6.1.5 Materials analysis	

	6.1.6 Summary of key points	.307
	6.2 Swivel fittings	.308
	6.2.1 Introduction and historiography	.308
	6.2.2 Typochronological analysis	.310
	6.2.3 Contextual associations	.317
	6.2.4 Identity associations	.320
	6.2.5 Materials analysis	.321
	6.2.6 Summary of key points	.322
	6.3 'Binding strips'	.323
	6.3.1 Introduction and historiography	.323
	6.3.2 Chronological analysis	.325
	6.3.3 Contextual associations	.335
	6.3.4 Identity associations	.339
	6.3.5 Materials analysis	.340
	6.3.6 Summary of key points	.342
	6.4 Chapter overview	.343
Cha	pter 7: Discussion	.349
	7.1 Paucity?	.350
	7.2 Manufacture	.356
	7.2.1 Changes in manufacturing and decoration	.356
	7.2.2 Production mechanisms	.372
	7.3 Spatial change and identities	.377
	7.3.1 Regional patterns	.377
	7.3.2 Second Viking-Age art styles in England	.381
	7.3.3 International connections	.392
	7.4 Social associations and identites	.401
Cha	pter 8: Conclusion	.409
	8.1 Contribution to research	.409
	8.1.1 Summary and approach	.409
	8.1.2 The socio-cultural impact of the Norman Conquest	.410
	8.1.3 Towards an examination of identities in the 11 th and 12 th centurious using the contribution of metalwork	es .412
	8.2 Suggestions for future work	.413
	8.3 Envoi	.418

Appendix 1: Typochronological detail for object types	419
A: Buckles	419
A.i Undiagnostic forms	419
A.ii Second Viking-Age types	420
A.iii 'Romanesque' types (c. 12 th century)	421
A.iv Spur buckles	422
A.v Buckle plates	424
A.vi Strap-fittings of Cassels type 1.71	432
B: Strap-ends	433
B.i Late early-medieval to medieval strap-ends classified according to Thomas's classification	433
B.ii Contemporary strap-ends unclassifiable according to the Thomas classification	437
B.iii Strap-ends post-dating Thomas's survey	439
C: Brooches	440
C.i Plate brooches of circular form (disc brooches)	440
C.ii Plate brooches of other forms	450
C.iii Penannular brooches	452
C.iv Annular brooches	454
D: Bridle cheekpieces and bit links, and other harness links	459
E: Harness pendants and pendant suspension mounts	460
E.i Harness pendants	460
E.ii Pendant suspension mounts	470
F: Stirrup-strap mounts and stirrup terminals	479
F.i Stirrup-strap mounts	479
F.ii Stirrup terminals	481
G: Scabbard/sheath chapes	484
G.i Knife sheath chapes	484
G.ii Dagger scabbard chapes	491
H: Swivel fittings	492
Н.і Туре А1	492
Н.іі Туре А2.і	493
H.iii Type A2.ii	494
H.iv Type A3	495

Н.v Туре В	.496
Appendix 2: Adjusted dating for object types analysed	.498
Appendix 3: Harness pendants in iconographical representations	.503
Appendix 4: Binding strips and 'octopus' mounts and in iconographical	
representations	.519
Abbreviations	.526
Bibliography	.527

List of Tables

Table 1 Gradations of pre-Conquest landowners based on
descriptive names29
Table 2 Works commenting on a lack of 10 th -12 th -century metalwork48
Table 3 Database fields84
Table 4 Object types selected for examination
Table 5 Metal object types, their categories and associations
Table 6 Sites with relevant material110
Table 7 Breakdown of dataset by object types considered120
Table 8 Appraisal of Viking-Age buckles and contemporary types with
zoomorphic decoration125
Table 9 Appraisal of 'Romanesque' buckle types
Table 10 Appraisal of potential spur buckle types 130
Table 11 Appraisal of medieval single-looped buckle frames133
Table 12 Appraisal of forms of buckle plate
Table 13 Appraisal of strap-ends of the 10 th and 11 th centuries in Thomas's
Table 13 Appraisal of strap-ends of the 10 th and 11 th centuries in Thomas's classification 162
Table 13 Appraisal of strap-ends of the 10th and 11th centuries in Thomas'sclassification162Table 14 Appraisal of strap-ends not featuring in Thomas's classification
 Table 13 Appraisal of strap-ends of the 10th and 11th centuries in Thomas's classification
 Table 13 Appraisal of strap-ends of the 10th and 11th centuries in Thomas's classification
 Table 13 Appraisal of strap-ends of the 10th and 11th centuries in Thomas's classification
Table 13 Appraisal of strap-ends of the 10th and 11th centuries in Thomas's classification162Table 14 Appraisal of strap-ends not featuring in Thomas's classification166Table 15 Appraisal of strap-ends post-dating Thomas's survey170Table 16 Appraisal of disc brooches179Table 17 Appraisal of plate brooches [of forms other than disc brooches]184Table 18 Appraisal of penannular brooches187
Table 13 Appraisal of strap-ends of the 10th and 11th centuries in Thomas's classification162Table 14 Appraisal of strap-ends not featuring in Thomas's classification166Table 15 Appraisal of strap-ends post-dating Thomas's survey170Table 16 Appraisal of disc brooches179Table 17 Appraisal of plate brooches [of forms other than disc brooches]184Table 18 Appraisal of penannular brooches187Table 19 Appraisal of annular brooches190
Table 13 Appraisal of strap-ends of the 10th and 11th centuries in Thomas's classificationClassification162Table 14 Appraisal of strap-ends not featuring in Thomas's classification166Table 15 Appraisal of strap-ends post-dating Thomas's survey170Table 16 Appraisal of disc brooches179Table 17 Appraisal of plate brooches [of forms other than disc brooches]184Table 18 Appraisal of penannular brooches187Table 19 Appraisal of annular brooches190Table 20 Comparison of Williams's (2007a) and Pedersen's (1999)
Table 13 Appraisal of strap-ends of the 10th and 11th centuries in Thomas's classification162Table 14 Appraisal of strap-ends not featuring in Thomas's classification166Table 15 Appraisal of strap-ends post-dating Thomas's survey170Table 16 Appraisal of disc brooches179Table 17 Appraisal of plate brooches [of forms other than disc brooches]184Table 18 Appraisal of penannular brooches187Table 19 Appraisal of annular brooches190Table 20 Comparison of Williams's (2007a) and Pedersen's (1999) classifications for cheekpieces225
Table 13 Appraisal of strap-ends of the 10th and 11th centuries in Thomas's classification162Table 14 Appraisal of strap-ends not featuring in Thomas's classification166Table 15 Appraisal of strap-ends post-dating Thomas's survey170Table 16 Appraisal of disc brooches179Table 17 Appraisal of plate brooches [of forms other than disc brooches]184Table 18 Appraisal of penannular brooches190Table 20 Comparison of Williams's (2007a) and Pedersen's (1999) classifications for cheekpieces225Table 21 Appraisal of harness pendant forms suggested by Krabath
Table 13 Appraisal of strap-ends of the 10th and 11th centuries in Thomas's classification162Table 14 Appraisal of strap-ends not featuring in Thomas's classification166Table 15 Appraisal of strap-ends post-dating Thomas's survey170Table 16 Appraisal of disc brooches179Table 17 Appraisal of plate brooches [of forms other than disc brooches]184Table 18 Appraisal of penannular brooches187Table 19 Appraisal of annular brooches190Table 20 Comparison of Williams's (2007a) and Pedersen's (1999) classifications for cheekpieces225Table 21 Appraisal of harness pendant forms suggested by Krabath (2001) as relevant to this period245
Table 13 Appraisal of strap-ends of the 10th and 11th centuries in Thomas's classification162Table 14 Appraisal of strap-ends not featuring in Thomas's classification166Table 15 Appraisal of strap-ends post-dating Thomas's survey170Table 16 Appraisal of disc brooches179Table 17 Appraisal of plate brooches [of forms other than disc brooches]184Table 18 Appraisal of penannular brooches187Table 19 Appraisal of annular brooches190Table 20 Comparison of Williams's (2007a) and Pedersen's (1999) classifications for cheekpieces225Table 21 Appraisal of harness pendant forms suggested by Krabath (2001) as relevant to this period245

Table 23	Appraisal o	of harness	pendant sus	pension	mount forms

suggested by Krabath (2001) as relevant to this period253
Table 24 Main characteristics of stirrup-strap mounts by Williams Class 263
Table 25 Dating proposed for knife sheath chapes in the literature293
Table 26 Appraisal of knife sheath chapes by class 295
Table 27 Appraisal of dagger scabbard chapes by type 298
Table 28 Proposed classification for swivel fittings 311
Table 29 Proposed dating for swivel fittings 314
Table 30 Assessment of relative presence of iron objects compared to
other metal objects at major elite sites
Table 31 Dating evidence for buckle frames of Naylor Classes A1 and A4 .421
Table 32 Dating evidence for later spur buckles frames of
Thuaudet type T423
Table 33 Frame combinations for 'Christ' enthroned plates
Table 34 Frame combinations for M-shaped plates426
Table 35 Classificatory scheme proposed for pronged plate buckles428
Table 36 Frame combinations for pronged plate buckles 429
Table 37 Dating evidence for select strap-fittings of Cassels type 1.71432
Table 38 Sub-division of Weetch Type 20 (cloisonné-enamelled)
brooches445
Table 39 Dated examples of Weetch Type 23 disc brooches
Table 40 Sites featuring penannular brooches in medieval contexts453
Table 41 Cheekpieces with dating evidence459
Table 42 Copper-alloy harness links with dating evidence
Table 43 Select iron harness links with dating evidence 460
Table 44 Additional excavated shell-shaped pendant suspension mounts 473
Table 45 Excavated examples of rectangular pendant suspension mounts477
Table 46 Stirrup-strap mounts found in England through
archaeological activity479
Table 47 Stirrup-strap mounts found in Continental Europe through
archaeological activity480
Table 48 Stirrup irons with evidence for stirrup terminals 482

Table 49 Dating evidence for Class A chapes	485
Table 50 Dating evidence for Class C chapes	486
Table 51 Dating evidence for Class D chapes	487
Table 52 Dating evidence for select Class F chapes	489
Table 53 Dating evidence for select Class G chapes	490
Table 54 Dating evidence for select Class H chapes	491

List of Figures

Fig. 1 Objects decorated in Late Viking-Age art styles61
Fig. 2 Objects by type recorded through the PAS by century dates
allocated89
Fig. 3 Objects by category recorded through the PAS by century dates
allocated90
Fig. 4 Sample aoristic plot93
Fig. 5 Sample frequency distribution after Monte Carlo simulation for
a given dataset95
Fig. 6 Constraints map with the overall dataset plotted98
Fig. 7 Overall dataset plus contemporary coin data as a heat map100
Fig. 8 Sample relative distribution101
Fig. 9 Finds recorded by country106
Fig. 10 Sites with relevant material considered in this study –
England and Wales108
Fig. 11 Sites with relevant material considered in this study –
outside England and Wales109
Fig. 12 Object materials by different site type
Fig. 13 Terminology used for buckle frame elements
Fig. 14 Length versus width plotted for double-looped buckles with a
zoomorphic projection, compared to spur buckles and other forms.129
Fig. 15 Excavated dates for Cassels type 1.7I strap-fittings142
Fig. 16 Single-looped buckle frames by Cassels type145
Fig. 17 Borre-style buckles, showing distribution146
Fig. 18 Ringerike-style buckles, showing distribution148
Fig. 19 Urnes-style buckles, showing distribution149
Fig. 20 'Romanesque' buckle forms, showing distribution150
Fig. 21 Medieval spur buckles of early form, showing distribution151
Fig. 22 Single-looped girdle buckles (12 th -century), showing distribution152
Fig. 23 12 th -century buckle plates, showing distribution153

Fig. 24 Contextual associations for buckle types over time
Fig. 25 Status associations for different buckle types157
Fig. 26 Changing approaches to buckle manufacture through time
Fig. 27 Proposed chronologies for Thomas's main strap-end groups164
Fig. 28 Comparison of strap-end widths through time171
Fig. 29 Broadly 10 th -century strap-end forms, showing distribution172
Fig. 30 Thomas Class H strap-ends, showing distribution174
Fig. 31 Approaches to strap-end manufacture through time176
Fig. 32 Dating simulation of dating evidence for medieval penannular
brooches of Booth Type C188
Fig. 33 Dating simulation of all annular brooches recorded with
pre-1200 dating192
Fig. 34 Proposed timeline of all relevant brooch types194
Fig. 35 First Viking-Age brooches and contemporary Late Saxon brooches,
showing distribution196
Fig. 36 Broadly 11 th -century brooches, showing distribution
Fig. 37 Distribution of c. 11 th -century nummular brooches and
Fig. 37 Distribution of c. 11 th -century nummular brooches and coin-brooches
 Fig. 37 Distribution of c. 11th-century nummular brooches and coin-brooches
 Fig. 37 Distribution of c. 11th-century nummular brooches and coin-brooches
 Fig. 37 Distribution of c. 11th-century nummular brooches and coin-brooches
 Fig. 37 Distribution of c. 11th-century nummular brooches and coin-brooches
 Fig. 37 Distribution of c. 11th-century nummular brooches and coin-brooches
 Fig. 37 Distribution of c. 11th-century nummular brooches and coin-brooches
 Fig. 37 Distribution of c. 11th-century nummular brooches and coin-brooches
 Fig. 37 Distribution of c. 11th-century nummular brooches and coin-brooches 199 Fig. 38 Distribution of cloisonné-enamelled disc brooches 200 Fig. 39 Distribution of annular and penannular brooches 203 Fig. 40 Contextual associations of c. 11th- to 12th-century brooch types 204 Fig. 41 Urban versus rural finds of c. 10th-century brooch types 205 Fig. 42 Urban versus rural finds of c. 11th-century brooch types 207 Fig. 43 Urban versus rural proportions of c. 11th-century brooch types 208 Fig. 44 Urban versus rural proportions of c. 11th- to 12th-century
 Fig. 37 Distribution of c. 11th-century nummular brooches and coin-brooches
 Fig. 37 Distribution of c. 11th-century nummular brooches and coin-brooches
 Fig. 37 Distribution of c. 11th-century nummular brooches and coin-brooches
 Fig. 37 Distribution of c. 11th-century nummular brooches and coin-brooches
 Fig. 37 Distribution of c. 11th-century nummular brooches and coin-brooches

Fig. 48 Dress accessories decorated in Second Viking-Age art styles216
Fig. 49 Reconstruction drawing of a late early-medieval bridle221
Fig. 50 Reconstruction drawing of an 11 th -century snaffle bit222
Fig. 51 Drawings of harness links, noting element terms223
Fig. 52 Williams's (2007a) cheekpiece classification224
Fig. 53 Drawing of a Gaitzsch <i>Typ</i> A curb bit, noting element terms225
Fig. 54 Distribution of bridle cheekpieces and bit links alongside other
harness links233
Fig. 55 Bridle cheekpieces by Williams Type, showing distribution234
Fig. 56 Harness links, showing distribution236
Fig. 57 Drawing of a harness pendant set, noting element terms239
Fig. 58 Early forms of pendant and suspension mount256
Fig. 59 Pre-Conquest harness pendants and subsequent late 11 th - to 12 th -
century forms, showing distribution257
Fig. 60 Reconstruction drawing showing the location of stirrup terminals and
stirrup-strap mounts262
Fig. 61 Williams classification of stirrup-strap mounts263
Fig. 62 Aoristic plot of excavated date ranges for English stirrup-strap
mounts
Fig. 63 Aoristic plot of excavated date ranges for English and continental
stirrup-strap mounts combined268
Fig. 64 Ringerike-style stirrup terminals269
Fig. 65 Stirrup irons271
Fig. 65 Stirrup irons271Fig. 66 Stirrup-strap mounts and stirrup terminals, showing distribution276
Fig. 65 Stirrup irons
 Fig. 65 Stirrup irons
 Fig. 65 Stirrup irons
 Fig. 65 Stirrup irons
 Fig. 65 Stirrup irons
 Fig. 65 Stirrup irons
Fig. 65 Stirrup irons271Fig. 66 Stirrup-strap mounts and stirrup terminals, showing distribution276Fig. 67 Stirrup-strap mounts by Williams Class, showing distribution277Fig. 68 Stirrup-strap mounts and stirrup terminals outside England, showing distribution278Fig. 69 Continental stirrup-strap mounts by Williams classification279Fig. 70 Contextual associations for stirrup-strap mounts and stirrup terminals (site)280Fig. 71 Relative distribution of equestrian equipment287

Fig. 73 Knife sheath chapes by construction, showing distribution
Fig. 74 Swivel fittings
Fig. 75 Lengths of complete swivel fittings by type
Fig. 76 Widths of complete swivel loops by type
Fig. 77 Swivels fittings by Webley type, showing distribution
Fig. 78 Swivels in relation to medieval Forest
Fig. 79 Main approaches to swivel manufacture and decoration
Fig. 80 Aoristic plot for iconographical representations of binding strips on
shields
Fig. 81 Aoristic plot for all binding strips
Fig. 82 Aoristic plot for shield mounts of Loughor type 3
Fig. 83 Aoristic plot for shield mounts of Loughor type 3 against
representations in art331
Fig. 84 Aoristic plot for octopus mounts
Fig. 85 Aoristic plot for iconographical representations of octopus
mounts
Fig. 86 All binding strips and octopus mounts, showing distribution335
Fig. 87 Iconographical representations of binding strips and octopus
mounts mapped

Fig. 99 Weetch Type 13.D disc 'brooches'/dress accessories
Fig. 100 Correspondence analysis plot analysing surface treatments
relating to gilding against site types
Fig. 101 Aoristic plot of gilded objects through time
Fig. 102 Correspondence analysis plot highlighting variables relating to
primary material and surface treatment
Fig. 103 Distribution of Class A, Type 11 stirrup-strap mounts highlighting
variants thought to be made at particular production centres374
Fig. 104 Aoristic plot of approaches to basic manufacture through time376
Fig. 105 Relative distribution of various object types demonstrating a
southerly bias378
Fig. 106 Relative distribution of dress accessories recorded
Fig. 107 Distribution of Borre-style artefacts and Second Viking-Age art-style
artefacts
Fig. 108 Relative proportions of Borre-style artefacts and artefacts in
Second Viking-Age art styles
Fig. 109 Ringerike- and Urnes-style artefacts, showing distribution
Fig. 110 Relative proportions of Ringerike- and Urnes-style artefacts 389
Fig. 111 Distribution of certain 11 th - to 12 th - century object classes centred
on eastern England bearing late Viking-Age art-style decoration390
Fig. 112 Overall dataset before mean end date of c. 1139
Fig. 113 Overall dataset after mean end date of c. 1139
Fig. 114 Map of international connections (11 th to early 12 th century)
divided by major groupings
Fig. 115 Map of international connections (12 th century) divided by
major groupings
Fig. 116 Correspondence analysis plot to compare object types and
site types402
Fig. 117 Monte Carlo simulation for the dating of harness pendant
suspension mounts of Lassure Type B472
Fig. 118 Monte Carlo simulation for the dating of harness pendant
suspension mounts of Lassure Type A

List of Illustrations

Illus. 1 Harold Godwinson hunting on horseback with hawk and hounds \dots 34
Illus. 2 Detail from the effigy of Queen Berengaria (d. 1230) showing an
annular brooch at her neck121
Illus. 3 Buckle in use on a belt122
Illus. 4 Possible gaping-mouth beast buckles on the French royal
sacral spurs128
Illus. 5 Frame variants for medieval buckles of Cassels type 1.3B136
Illus. 6 Krabath Variente I6 buckle137
Illus. 7 Buckles with truncated lower folds138
Illus. 8 Strap-fitting of Cassels type 1.7I141
Illus. 9 Buckle with Ringerike-style decoration (Naylor Class A5ii)143
Illus. 10 Strap-end in use on a belt on a Portail of Chartres Cathedral160
Illus. 11 Statue of the Queen of Sheba, showing detail of knotted girdle 168
Illus. 12 Detail from the donor portrait of the 'Psalter of Eleanor of
Aquitaine' showing a strap-end in use168
Illus. 13 Representation of the month of May from the Fécamp Psalter219
Illus. 14 Depictions of curb bits227
Illus. 15 Double-ended harness links: with Ringerike-style beast
Illus. 16 Detail from Gilbert of Auxerre's Lamentations of Jeremiah240
Illus. 17 'Octopus' mount from Lundy289
Illus. 18 Knife sheath chape and dagger scabbard chape290
Illus. 19 'Wolframleuchter' (c. 1160), Erfurt Cathedral
Illus. 20 Hunting scene panel of the tomb of Alexander MacLeod (c. 1528).
Enlarged detail of swivel fitting
Illus. 21 Swivel fitting of Type A2.ii as part of an ensemble based around an
elongated loop
Illus. 22 Detail from the effigy of Edmund de Thorp (d. 1417), with inset
showing the dog collar315
Illus. 23 Binding strips from Loughor Castle

Illus. 24 'Octopus' mount from Folkingham	4
Illus. 25 Enamelled grave cover of Geoffrey Plantagenet with detail of boss	
mount on shield32	6
Illus. 26 Detail of David and Goliath from the 'Charité-sur-Loire Psalter'34	1

Accompanying material

• Project database (.accdb)

Acknowledgements

This thesis has been a long time in the making, and for sharing the journey and the burden my heartfelt thanks go to my supervisors and my family. Starting with my supervisors, Steve Ashby, Aleks McClain and Michael Lewis, you have always been such a supportive team, ever insightful and quick to respond. I have benefited greatly from the diversity of skills and combined expertise of all three, and I have been very lucky to have had your encouragement over the years. Thank you for your forbearance and letting me take this research in particular directions; this thesis could have been done in many different ways, and I hope the work here reflects some of your original ambitions for the project.

Being a 'mature' student, and living at a remove from the York, has meant that I have been an ephemeral presence among two cycles of PhD cohorts. Yet I have always been made to feel part of the department, and would like to thank in particular Steve Roskams for his advice at TAP meetings, and Janine Lyon and Helen Chan for their help from the office. It was great to work alongside Alison Leonard when teaching at King's Manor.

In many ways my cohort has comprised all the scholars who I have been fortunate enough to meet through this PhD who share a passion for this period's metalwork. I would like to thank Amélie Berthon, Jean Soulat and Olivier Thuaudet in particular for their help, especially where rare French resources were requested. In the same vein, I must thank Fabian Brenker and Ben Rijns, whose interest in 'binding strips', in Germany and the Netherlands respectively, has enriched this part of the investigation. Pieterjan Deckers, Stijn Heeren and Nelleke IJssenagger-van der Pluijm have provided friendly advice on material from the Low Countries. In England, I am grateful to Rosie Weetch for discussing brooches with me over a cup of (good) coffee, especially the use of penannular brooches in this period. I am also grateful to John Clark for his advice on a range of equestrian equipment and Helen Geake for her wideranging insights. Ben Bishop has generously shared his work on knife sheath chapes, and I have enjoyed collaborating to help advance work on this subject. Eljas Oksanen has also been very generous with his time and help with understanding ways of applying multivariate statistical techniques. I appreciate the fact that most of our discussions took place in one or other of Bloomsbury's cake shops.

For help during my visits to examine material from their collections my thanks to Dan Nesbitt, Cath Maloney and Steve Tucker (Museum of London), and Tom Cadbury (RAMM, Exeter). For allowing access to his private collection, and his hospitality, thanks are due to Martin Green.

I am grateful to the AHRC for funding this project, and all those at my partner organisation, the British Museum, for their training and administrative help. Particular thanks are owed to JD Hill, Sally Fletcher and Alice Bourne-May. With a base at the museum, but also a national network of individuals, I would like to thank all those at the Portable Antiquities Scheme (PAS) who have gathered the data through liaison with finders. I have also benefitted from many discussions with PAS staff regarding relevant material – particularly David Williams. I am sorry that David and I never got to discuss my later findings.

The biggest debt of thanks must go to my family, for all of their support along the way. My parents, Blair and Julie, fostered the love for the past which lies behind all that has led to this work. I am sorry that my grandparents did not get to see me finish this thesis, but I am grateful for the interest all of them showed in my studies. My sister, Hannah, has gone beyond the call of duty by copy-editing the entire text, and has done a tremendous job. My wonderful wife, Laura, has been amazingly supportive throughout this long (sometimes trying) process and has brought her archaeological and editing expertise to this work every step of the way. A lot has happened in our lives since I started this project, as the height of our children already testifies; I hope that it has not been too much of a burden. Perhaps one day the boys will find this, maybe even read some of it, and be inspired to find out more about the medieval past.

21

Author's declaration

I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, University. All sources are acknowledged as References.

The following publications arising from the thesis are acknowledged below:

Webley, R. (2014) Stirrup-strap mounts. In: J. Naylor (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 58, 353-356 (340-361).

Webley, R. (2017a) Analyse et interprétation des appliques en alliage cuivreux dites «binding strips » des XIIe -XIIIe siècles en Europe de l'Ouest. *Cahiers LandArc*, 19. Fleurance: LandArc.

Webley, R. (2017b) Copper-alloy 'binding strips' and shield mounts from the twelfth and thirteenth centuries. *The Coat of Arms*, 233-234, 1-12.

Webley, R. (2018) A neglected type of Urnes-style buckle. In: J. Naylor (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 62(2), 392-397 (380-400).

Webley, R. (2021) The enigmatic 'octopus mount' and the characterisation of elite medieval sites. In: C. Léger and S. Raux (eds), *Mélanges offerts à Michel Feugère*. Drémil-Lafage: Éditions Mergoil, 907-914.

Webley, R. (2022) New adventures in 11th-century horse equipment. In: D. Boughton and K. Hawkins (eds), *Back in the bag: Essays exploring artefacts in honour of David Wynn Williams*. Woking: SpoilHeap Publications, 79-89.

Webley, R. (in press) Some select copper-alloy items from Domburg: 'Mounts' for what, and from when? In: P. Deckers and A. Ten Harkel (eds), *A central*

place on the world's edge. Studies on the Early Medieval history and archaeology of the island of Walcheren, the Netherlands. Turnhout: Brepols.

Webley, R. and Burnett, L. (2013) Some unusual late 9th- to 12th-century copper-alloy strap-ends or chapes. In: J. Naylor (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 57, 275-278 (262-284).

Chapter 1: Introduction

'...the coming of the Normans [meant a] fundamental cultural, political and social reorientation towards the Channel...'

- Marritt (2007, 160)

1.1 Introducing the study

This study aims to be one of the first to use a wide range of metallic small finds – mostly non-ferrous examples¹ – to begin to examine changing and intersecting identities in 11th- and 12th-century England. This two-hundred-year period was highly dynamic. Politically, it witnessed conquests by foreign powers – the Danish in 1016 and the Normans in 1066 – and internal upheaval during the so-called 'Anarchy' (1138-1153) which resolved itself in a new ruling, Angevin, line. Socially, longer-term processes were playing out, such as demographic growth,² major Church reform, urbanisation, and manorialisation, which, alongside settlement nucleation (most common in the central zone), affected relations between lords and peasants. As archaeologically recovered objects, metallic small finds can be used to consider social identities as they interacted across the whole period. They can help contextualise change in the political sphere through observations of wider social trends, and thus challenge assumptions regarding the impact of political changes, such as those implied in the quotation above.

It is in the intersection of these political changes and the rhythms and contacts of daily life that identities were performed (Jones 1997, 13), whether maintained, or subject to modification. It is contended here that metallic small finds formed part of social discourse and were active in identity negotiation

¹ Metalwork not made substantially or entirely of iron – relevant examples here include alloys of copper and lead, and also precious metals.

² Estimated at 70% between 1086 and 1150 (Baxter 2011, 101).

(Hadley and Richards 2000, 10). While all layers of identity interlink, this study will foreground its ethnic, elite and urban facets. However, to even approach this aim requires overcoming a big hurdle. Deploying metal artefacts in such an analysis is made difficult due to how the Norman Conquest has structured the period's historiography – 1066 has been strikingly described as a 'historiographical chasm' (Crick and Van Houts 2011, 5). A key objective of this study is therefore to bridge this scholarly divide, by tracing changes in particular metalwork items across an elongated period between c. 1000 and c. 1200. It has, furthermore, been long perceived that we in fact lack sufficient non-ferrous finds through which to examine this period. Despite recent initiatives that confront this perception, and subject the period's material culture to examination (e.g. Thomas 2000a; Hinton 2005; Ashley 2016; Weetch 2017), this study's scope is unprecedented in the range of material covered. By bringing together a dataset approaching 12,000 objects from across northwestern Europe to contextualise trends in England, it marries the benefits of large quantities metal-detected data with the contextual insights offered by excavated material. This 'composite' dataset allows for discussion of the following questions which are suggested by the historiography of archaeological objects of the period (discussed in Chapter 2):

- Was there a paucity of 11th- and 12th-century non-ferrous metalwork in England? If so, why, and was it universal?
- How, and why, did approaches to the manufacture and decoration of metalwork change over the period?
- What spatial patterning can be identified? Does this reflect different material responses to the conquests of 1016 and 1066, or other, longerterm trajectories?
- How did changes in metalwork relate to identity construction, either in relation to these political events and/or wider social trends (for example, local status strategies)?

In what follows next, historical themes that are particularly relevant to the aspects of identities considered – themes of conquest, elites and urbanism – will be introduced through their historical context (Section 1.2). The chapter then sets out why this sort of artefactual study has been lacking for this period so far, why it is both viable and appropriate now (Section 1.3), and how the thesis will proceed (Section 1.4).

1.2 Contexts

The use of metalwork is implicated in multiple practices that structured identity in this period. The following section provides historical context for developments in the 11th and 12th centuries in which the use of metalwork can be considered to be significant. Starting with conquests and immigration, lordship will then be considered before sketching contemporary urban developments.

1.2.1 Conquests and immigration

The coronation of the Danish Cnut as king of the English in January 1017 marked the culmination of decades of Scandinavian incursions dating back to the 980s (Lavelle 2017, 7). Gradually increasing in intensity and purposiveness, these attacks came to a head in the early 1010s when regions of England submitted to Swein Forkbeard – Danish king and Cnut's father (Green 2017, 30-32). This phase of Scandinavian military activity around the turn of the first millennium and the subsequent rule of Cnut and his sons (until 1042) has been termed England's 'Second Viking Age'. An earlier 'First Viking Age' encompasses a period of Scandinavian military activity and settlement (between the mid-9th and mid-10th centuries), following coastal raiding from the late 8th century (Kershaw 2013, 1). This settlement primarily occurred in a region of northern and eastern England which became known as the Danelaw – the name based on an early 11th-century legal distinction (Cross 2018, 197) – an area defined to the west by Watling Street (Van Houts 2011, 209; Kershaw 2013, 4, Map 1.1). The precise density, nature and location of Scandinavian settlement during the First Viking Age has been much debated (Trafford 2000, 18; Ashby 2021, 61-62), but it has been suggested that a 'significant level of migration' occurred, regardless of whether a maximal or minimal view is taken (Cross 2018, 4, 13). By contrast, the Second Viking Age saw decidedly less immigration, and with an emphasis on courtly and regional elites (Mack 1984; Williams 1986; Van Houts 2011, 210; Hadley 2011, 241). However, we may not assume a direct or even proportionate relationship between peoples, culture and ethnic expression (Trafford 2000, 19; see Chapter 3 for further discussion) and, as such, numbers of immigrants are only part of the assessment of Scandinavian cultural impact during the Second Viking Age (Hadley 2011, 238). We may also ask how relevant the Danelaw area was by this period from a societal point-of-view by the 11th century, given cultural assimilation that had taken place since the settlement period (Hadley 2003, 47).

The Norman Conquest of 1066 and subsequent colonisation – as with that of the Second Viking Age – has been characterised as involving a 'modest level of direct immigration' (Creighton and Rippon 2017, 64), perhaps encompassing c. 30,000 individuals (Creighton 2018a, 213). It is famed for its 'tenurial revolution' whereby the landholdings of the English elite were transferred to French lords: around 8,000 foreigners, the majority of whom were Norman (Van Houts 2011, 211; Baxter and Lewis 2017, 371). By 1087 most of the ecclesiastical hierarchy was also foreign born (Van Houts 2011, 214). In an urban context, Norman-French burgesses are known in number from seven boroughs (Creighton and Rippon 2017, 61), including Nottingham, Southampton and Norwich (Griffiths 2011, 164). Furthermore, in the 1086 Domesday survey, Francigenae are noted within the rural population; they have been characterised as the lowest-ranking Norman immigrants (Creighton and Rippon 2017, 65). Overall, though, again, the Norman Conquest was essentially a military and political takeover without a notable folk movement (Rowley 1999, 13).

Having considered briefly the numbers of those involved in the conquests of 1016 and 1066, and their broad social standings, we may note

other factors relevant to the effects of culture contact, which may result in differential experiences of migration. Starting with those involved, it has been alluded to that the Norman Conquest was effected by a group that demonstrated heterogeneity beyond a Norman core (Creighton 2018a, 213). Bretons, Lombards and Flemings, for example, were all part of the Conquest (Hadley 2011, 240). Furthermore, we may note variety across the conquered land, with some scholars emphasising the range of landscape and patterns of settlement nature (Creighton 2018a, 214), and others of the socio-political distinctions across a relatively recently unified England in the 10th century (Griffiths 2011, 64), with the delicacy of loyalties in the North exemplified by the rebellion of Northumbria in 1065. Preservation of contact with Normandy through landholding and ecclesiastical patronage either side of the Channel may have played a role in preserving a Norman identity among the highest level of the baronage (Baxter and Lewis 2017), although the duration of the strength of connection, especially into the later 12th century, has been debated (see Hopkinson 2020, 4-7 for a summary).

1.2.2 Lordship and its performance

The division of society into an elite and those over which they exercised power was played out daily through performance which had material dimensions (Weikert 2020, 64). Both before and after the Norman Conquest there was enormous diversity in terms of wealth within the social elite and it is worth briefly setting out their respective structures to try to frame discussion regarding the archaeological material. This may be done both according to the terms employed for different lordly actors but also in economic terms, lest blanket terminology mask significant difference in status. It is noted that neither approach offers nuanced representation of individual power in a local situation, but they do at least provide a relative framework (Weikert 2020, 57-58). In the early/mid 11th century, below the king, the earls possessed vast amounts of landed wealth, with two families, the Godwinsons and Leofricsons, being disproportionately wealthy (Green 2017, 102; Williams 2018, 124). The

large part of said thegnage below them actually comprised a wide spectrum of lords with landholdings at national, regional or local level, respectively (Green 2017, 103). The development of the thegnage has in part been attributed to long-term processes generalised as fragmentation of large, 'multiple estates' of the 8th and 9th centuries, into individual manors (Crouch 2005, 200-202; Williams 2008, 86; Fleming 2011, 22; Green 2017, 116, 120), though this process was not without regional and chronological variation (e.g. Hadley 1996). Scholars have tried to divide this group up, based on roles (e.g. king's thegn) or landholding value (e.g. lesser thegn), some examples of the latter of which are presented in broad terms in Table 1.

Group ³	Annual land	Annual land	Attributes/% TRE	General
	income	income	landholders	landholding
	(Senecal	(Baxter and		basis/
	2001)	Lewis 2017)		% TRE land
Proceres (great	c. £150+	c. £100+	Major church	National/45%
thegns (including			construction	
earls)) = Corbett			(e.g.	
classes A-D			crucifixes)/0.2%	
Nobilis (wealthy	c. £40+	c. £30+	Chapel, bell-cote,	Regional/10%
thegns) = Corbett			burh gate/0.3%	
class E				
Middling thegns =	c. £5+	c.£10+	Chapel, bell-cote,	Shire-wide/18%
Corbett classes H-F			burh gate/2.8%	
Lesser	-	c. £1-2+	-/7.7%	Local/9%
thegns/prosperous				
ceorls = Corbett				
class I				
Other landholders	-	< c. £1	/88.9%	Individual/11%

 Table 1 Gradations of pre-Conquest landowners based on descriptive names,
 income and landholding

³ Characterisation based on Senecal (2001, 256) and Baxter and Lewis (2017); Corbett classes reproduced by Baxter and Lewis 2017. Not included in the table is the royal demesne in 1066 which accounted for 12% of land value (Baxter and Lewis 2017, 368, table 9).

Within this elite hierarchy, the 'lesser' aristocracy emerge as a key group for this study.⁴ One reason for their importance is that we know something of their material culture as a manifestation of their status (Loveluck 2009, 166). The oft-quoted Gebynão, Archbishop Wulfstan of York's so-called 'promotion law' (c. 1008-1014),⁵ suggested that a ceorl could rise into the thegnage (as a king's thegn) with the possession of five hides of land, a kitchen, church, bellcote (bellhus) and gated enclosure (burgheat) (Reynolds 1999, 60; Fleming 2011, 33; Gardiner 2017, 94). In addition to an adjoining estate church, within the *burgheat* we have come to expect a (public) hall and (private) chamber, based on excavations at manorial sites such as Faccombe Netherton (Hampshire), and Furnells (at Raunds, Northamptonshire) (Williams 2008, 88-97; Baxter and Lewis 2017, 356). We know from Domesday that Faccombe Netherton was owned by one Lanc de Lere in 1066; he held seven other manors in southern central England, perhaps placing him in Corbett's class E (Weikert 2020, 58; see, above, Table 1). This sort of information allows us to better 'place' the manor at Faccombe in contemporary society along with its material culture – which includes zooarchaeological evidence for both hawking (Cherryson 2002, 311-312) and deer hunting (Sykes 2010, 185). A second reason to focus on the lesser aristocracy is that most of its members were land- and property owners at a local level (Williams 2008, 104); their residency and operation was largely restricted and, as such, there was greater requirement to perform their status to their peasants. Indeed, Senecal (2001, 252, 255) has argued that a 'social anxiety' operated at this level of society, due to small gaps in wealth and power between local lords and wealthy, proprietorial peasants (Loveluck 2009, 141). We know something of the cultural strategies used by thegns to distinguish themselves from those who laboured on the land, such as church patronage, hunting and falconry, plus the architectural ones mentioned in the GeÞynðo above (Fleming 2000, 12;

⁴ The term 'aristocracy' has been used to label those in society who are sociologically dominant (economically and socially) for which assessment can be attempted archaeologically (Crouch 2005, 3); the legal status defining a 'nobility' can only be ascertained through documentary evidence (Rego 2018, 12).

⁵ Or 'concerning wergilds and dignities'

Williams 2008, 97-101; Sykes 2011, 337). Later, it is also broadly at this social level that material strategies have been most readily identified archaeologically by McClain (2017), made manifest in post-Conquest church patronage in North Yorkshire. She notes that these local lords, as sub-tenants, were the people 'in close contact with the materials and realities of manorial life' (McClain 2017, 224).

In the post-Conquest period, and especially after 1070 once English rebellions had been quashed, landed wealth was even more keenly concentrated among the highest social echelons, though, at its apex, with considerably more in the hands of the king and less in those of the earls (Baxter and Lewis 2017, 368, table 9). At the level of the 'lesser' aristocracy those with landholdings of net value of £10 per annum or less (Classes H to K) were considerably fewer individuals, around two-thirds fewer than before the Conquest (Baxter and Lewis 2017, 385-386), but this is this stratum in which English landownership persisted (Williams 2018). A squeeze on the free peasantry from the baronial group above them – an 'intensification of lordship' in this period (Creighton 2018a, 222) – may have removed the social 'anxiety' felt by pre-Conquest local elites. As time went on, however, the baronial group may have felt socially pressured by the rising status of a new member of post-Conquest society, the knight (Crouch 2005, 212). Many milites documented in Domesday Book were only minor landholders, as noted by Sally Harvey in the 1970s (Creighton and Rippon 2017, 65; Harvey 2019, 3), typically holding oneand-a-half hides, that is, 'little more than a well-off peasant' (Crouch 1992, 97).⁶ While other knights sat further up a social spectrum which stretched upwards to the high born (Crouch 1992, 97; Crouch and Deploige 2020, 10-11), the broad knightly group rose together in its 'nobilisation', such that by the second half of the 12th century its material culture, beyond purely the equestrian, was emulating that of contemporary magnates (Crouch 1992, 101-103; Crouch and Deploige 2020, 15). Already, as early as the first quarter of the 12th century, the 'belted' knight was a distinguished member of this group

⁶ Other knights were not landholders at all and formed part of magnate households (Crouch 1992, 108).

(Crouch 1992, 103-104, 151; Harvey 2019, 4). Swords were historically 'objects of status' (Cameron 2003a, 3416; Williams 2008, 105-109), and the *cingulum militiae* itself has been described by Le Jan (2000, 286) as 'the expression of the social superiority conferred by the noble's bearing of arms'. Around the middle of the century knights were starting to use seals (Crouch 1992, 187); by the end of the 12th century, 'social anxiety' was evident among the magnates such that they were seeking titles of distinction, such as the label 'knight *portant banière'* (Crouch 1992, 109, 145), alongside material insignia that would distinguish them (Crouch 1992, 134-169, 187-188). Finally, and also coming at the magnate's contemporary sense of status from another direction, were rising urban merchant elites (Crouch 1992, 135; Oksanen 2020, 89).

As this study will consider how metalwork potentially relating to horses and hunting may be related through time to these local elite strategies; this pair of particular themes will be expanded upon separately below.

1.2.2.1 Horses

The frequency with which horses are depicted on the Bayeux Tapestry attests to their importance to the highest echelons in this period (Bouet and Neveux 2013, 156), with will evidence implying that many pre-Conquest magnates owned studs (Keefer 1996, 123, 125-127; Davis 1988, 80-82; Williams 2008, 111; Weikert 2018, 65). This importance is quantified in English legal codes: for example, Cnut's second law code (c. 1020/1021) notes that part of an earl's heriot comprised eight horses, four of whom were saddled. Further details in this document suggest that horses were a mainstay at all levels of aristocratic society. A king's thegn's heriot was set at half the equestrian provision of an earl, while a lesser thegn's included a single, saddled, horse (Davis 1989, 74-75; Green 2017, 104). Such documentary evidence attests to the social significance of the horse (Krauskopf 2006, 200), while sigillography provides a sense of its importance even to kings, from the First Seal of William the Conqueror onwards (Crouch 1992, 186; Nieus 2016). It is important to note, though, that the quality of the horses involved and their apparel (*gerædum*) was highly

significant, as suggested by *The Battle of Maldon* poem (Davis 1989, 75; Owen-Crocker 1991, 229; Williams 2008, 105, 112).

Outwith the evidence of elite wills and heriots, we may still find documented horse riders – and, implicitly, many horse owners. Notably, these sit further down the social hierarchy. Updates in the early 11th-century to the treatise known as the Rectitudines Singularum Personarum state that characteristic obligations of *geneats* (in this context, free, but not thegnly tenants (Williams 2008, 79)) included riding services (Gillingham 2000 [1995], 173).⁷ Furthermore, Domesday Book records 'riding men' (radmanni, radchenistri, radcnihtas), most seeming to have been within the group of free men below the thegnly group, though some thegns were included under these terms (Williams 2008, 7, 79). This implies degrees of overlap between the groups, and perhaps the source of some of the 'social anxiety' noted above. Many of these 'riding men' – and equivalents not labelled as such in Domesday - appear to have owned horses (Faith 1997, 98, 108; Weikert 2018, 63-64), and, by implication, equipment required for riding. When it comes to the miles of Domesday Book it is impossible to know if men on horseback were intended specifically by the term, or soldiers more generally (Crouch 2011, 8). Nevertheless, the overall impression is that many pre-Conquest ceorlisc men not only rode but owned horses, as did many minor landholders after the Conquest – even if they were used in the service of their social superiors. As such, we should perhaps be prepared to temper our sense of the status of riding equipment given by the written evidence, or at least take a contextual approach to it and seek gradations in its quality as components of status: in many cases, horses and their equipment may simply have been of local import, distinguishing owners from the surrounding peasantry (Gillingham 2000 [1995], 175).

⁷ Suggested to include messenger work, escort services and administrative tasks across large distances (Faith 1997, 108; Reynolds 1999, 60; Weikert 2018, 63-64).

1.2.2.2 Hunting

Bayeux Tapestry (Scene 2)



after City of Bayeux, DRAC Normandie, University of Caen Normandie, CNRS, ENSICAEN ; Pictures: 2017 – La Fabrique de patrimoines en Normandie.

Illus. 1 Harold Godwinson hunting on horseback with hawk and hounds

Associated with horses, hunting, mainly with deer as the quarry, evidenced the aristocratic possession of leisure time and of land (Mileson 2009, 106; Fleming 2001, 8; 2011, 33; Sykes 2011, 184; Loveluck 2013, 259). The upper echelons of pre-Conquest society, secular and ecclesiastical, had notable interest in hunting (Liddiard 2003, 12; Sykes 2011, 338; Creighton 2018a, 224-225), with multiple 'hays' (*haga*, deer enclosures) documented for earls in Domesday Book. This interest both persisted after the Norman Conquest and intensified (Sykes 2010, 175; Creighton 2018a, 225), particularly in the 12th century (Creighton and Rippon 2017, 59), with the *par force* [*de chien*] chase (over wide, but defined, landscapes) taking precedence over the bow and stable method (driving quarry into traps) (Mileson 2009, 30-31; Sykes 2007, 70). We know that, in principle, areas delimited for hunting – *hagas*, parks, chases and royal and magnate forests – were exclusive aristocratic leisure zones (see Darby 1977, 197, 202, figs 65, 67 for maps of Domesday forest, parks and hays)

through Norman Forest law and earlier restrictions imposed by Anglo-Saxon rulers (Hadley and Dyer 2017a, 9; Creighton 2018a, 227). Mapping parks of this period, as distinct from later foundations, is difficult due to a lack of contemporary documentary evidence (Cantor and Hatherly 1979, 78), but they did have a focus on southern England (Creighton 2018a, 225). The 150 Forests established by 1200 had a similar geographical focus, based on proximity to royal demesnes and palaces (Rackham 2011, 50). This delineation on the ground offers potential for directing a search for a material culture of ('official') hunting, while acknowledging that other members of society were often present during hunts.

The social importance of hunting to elites both pre- and post-Conquest is not in doubt (Campbell 2011, 165; Creighton 2018a, 224; Illus. 1), but establishing a material signature for it is nevertheless challenging. In her analysis of archaeological evidence for hawking, Annia Cherryson focused on zooarchaeological material, for want of artefactual evidence, especially as some of the latter, including vervels (hawk rings), post-dates the present period of study (Cherryson 2002, 308). Hunting equipment also suffers from similar taphonomic challenges regarding organic materials, such as leashes in hunting (as with leashes, jesses, glove and hood in hawking (Prummel 1997, 335)), and issues of distinguishing objects as they relate to specific activities. An example of the latter are bells: Fleming (2011, 33) has cited a particular find from Cogges Priory, Witney, Oxfordshire, as 'probably... from the collar of [a] hunting dog'. However, this was to repeat the speculation of this object's excavators (Blair and Steane 1982, 123-124, fig. 28, no. 4), highlighting the problems of identifying specific object uses in the archaeological record.⁸ A further example are arrowheads, with forms dedicated to hunting not distinguished earlier than the 13th century (Jessop 1996, 200). However, a focused study of metalwork associated with dog leashes/collars might be profitably pursued since both hunting, in chase and in drive forms, and hawking involved the use of dogs (Prummel 1997, 334-335; Sykes 2007, 2, 96-

⁸ Indeed, this particular bell form, with openwork perforations, has recently been suggested to be Roman (Eckardt and Williams 2018, 187-189, fig. 3).

97; 2011, 338) – as seen on the Bayeux Tapestry and many other iconographical representations (Illus. 1). The packs of hounds owned by the count of Meulan and the earl of Chester appear in documents (Crouch 1992, 234). As finds from sites, relevant objects may conceivably be compared with the presence of deer bones, wild animal bones, and dog skeletal remains (Grieve 2012, 99), and as stray finds with isolated examples of horse equipment.

1.2.3 Urbanisation and urbanism

Having considered conquests and elite structures, we turn to a final theme of urbanism. The period under discussion witnessed what has variously been described as a Europe-wide 'urban revolution' across a 'long twelfth century' of c. 1050-1200 (Nicholas 2012, 229) or an 'urban transformation', more specifically in England in the 10th and 11th centuries (Holt 2010). Along with the profound growth of urban centres (Griffiths 2011, 152) came a shift in their nature, characterised as a change from places of consumption to those of production (Holt 2010, 77). In assessing the characters of these settlements, density of population and a diversified economic base are perhaps the most pertinent, with interregional or international links an expression of the breadth of the settlement's economy. This emphasis is to follow the nature of archaeological discussion which has stressed the economic component of their character within a wide range of characteristics suggested by Martin Biddle in 1976 (including legal ones, and listed by Reynolds 1999, 160; see Stocker 2013, 119 for a similar emphasis). Indeed, at the start of the period studied many boroughs were characterised by higher status residents (Holt 2010, 70-74), featured thegnly property holdings (Fleming 1993), and all but a few centres demonstrated earlier economic complexity (Astill 1991, 108). Through time, with this shift came the development of an urban identity, a town 'maintaining a sense of social separateness from the countryside' (Reynolds 1977), formed of a 'sharply distinguishing' 'social and economic heterogeneity' (Holt 2010, 70). This is our primary concern here, rather than previous (pre)occupations

36
with questions of town origins and definitions (Hadley and Ten Harkel 2013, vii; Holt 2010). With the Conquest some of this elite association with towns was refocused on the countryside (Creighton 2018a, 219), which is not to deny the interdependence of towns and their rural hinterland, but that such developments may have favoured the construction of new urban identities that might be evidenced through metal items.

Definitions remain important, however, as we try to draw a line between a town from a smaller settlement (Hadley and Ten Harkel 2013, vii), especially on surviving archaeological evidence (Reynolds 1999, 160). It must also be remembered that the term encompasses a vast range of settlements. At one end of a spectrum lies the de facto capital city, London (Green 2017, 220), and its de jure one, Winchester. At the other one finds somewhere like a Milverton (Somerset) or Beccles (Suffolk), with, between them, a tier of towns influential at a shire-wide level (Astill 2000, 40-41). The dynamic between the major towns changed over the period, with the urban centres of the north and east relatively economically active at the start of the period (Astill 1991, 112; 2000, 38; Ten Harkel 2013b, 177), especially York and Lincoln, on the back of Scandinavian trade; compared to the boroughs to their south. By the end of the period, London had significantly out-developed all of the regional centres (Astill 2000, 46). David Griffiths (2013, 10) has noted that: 'urban identities were construed through living in a dense and cacophonous multitude of locals, visitors and strangers'. As such, some 'urban' centres were more 'urban' than others, and none more so, by the end of the period, than London; this hierarchy is important for discussions of urban identity that we shall encounter in Chapter 4.

1.3 Challenges and opportunities

Any study of material culture of 11th-/ 12th-century England is inevitably drawn into examining the particular impact of the Norman Conquest, and having to navigate its effects on historiography. While inescapable, the Conquest has seemingly been detrimental to archaeological scholarship, leading to a lack of research not only into the effects of 1066 but also those of 1016 and the long 12th century. In one of the very few archaeological studies of the Norman Conquest, Trevor Rowley (1997)⁹ did not probe the evidence of small finds in any real depth, and subsequent studies have focused on material other than metalwork or only the very earliest part of this period.

As an important recent article by Aleks McClain and Naomi Sykes (2019) argues that in comparison to documentary history studies of the Norman Conquest, archaeological engagement and research has been lacking for various reasons – though not due to a lack of potential. The reasons may be summarised as: a perceived paucity of material, particularly metalwork (especially, Hinton 2005); a focus on the major arts and Romanesque style (Weetch 2017, 263-264) and concomitant lack of discernible change in 'prosaic material elements' (Griffiths 2011, 63; Rowley 1997, 12; Hadley and Dyer 2017a, 7); a sectoral 'loss of nerve' faced with a heavily documented period (McClain and Sykes 2019, 87-88); a lack of fine dating faced with a preciselydated event (Thomas 2017, 291); and structural problems within and beyond academia – i.e. the division of the 200-year period into early-medieval and (high) medieval studies around the date 1066 (Ten Harkel 2017, 16-17). These factors have individually and collectively inhibited enquiry into 11th- and 12thcentury small finds, relegating perceptions of their usefulness compared to other sources, principally historical ones. Some have had a negative effect specifically on the study of metalwork – notably, perceptions of a lack of material and a lack of change.

Despite these challenges, there is a case to be made for a study of 11thand 12th-century metalwork, founded on general claims in favour of using of archaeological evidence in a period so prominent in historical enquiry, alongside arguments more particular to the study of metalwork. In some instances, arguments challenge the above considerations; in other cases, they

⁹ This represents a significant historiographical marker: it was the first general academic book to take an archaeological approach to the Norman Conquest, and one not succeeded for twenty years – until the publication of *The Archaeology of the Eleventh Century* (Hadley and Dyer 2017b).

are acknowledged, with approaches deliberately framed to attenuate their impact.

Utilising archaeological evidence when studying historical periods is imperative if we seek to illuminate those in society who are either undocumented, or who only briefly appear in contemporary writings, as well as social activity that simply evades documentation (Hicks 2010, 85; Crick and Van Houts 2011, 11). Furthermore, material culture was an active agent in politicocultural processes and allows us to nuance views and overcome reductive models. This is true of all historical periods, but it may be that its power is increased in periods and events about which history (as a discipline) has been so vocal (following Halsall 2010, 84), and in moments of profound sociopolitical change, such as the Norman Conquest.

Beyond these generalised benefits of archaeological evidence, metalwork offers the potential to escape restrictions of a focus on the major arts, as most of the material cannot be addressed in these terms. It also allows us to pose questions rarely addressed by documentation regarding changes in commodity production – for example, its relocation from the rural to urban sphere, or measuring consumption and the beginnings of a mass market (see Schofield 2019).

Attempting any analysis of identity using metal small finds depends on the archaeological dataset attaining a critical mass. The main reason we may consider that there is now enough material to work with profitably is not just the wealth of (under-examined) data from rural and urban excavations noted by McClain and Sykes (2019, 85, 90-91; see also Egan 1999, 30-32),¹⁰ but the large metal-detected dataset recorded by the Portable Antiquities Scheme (PAS) since 1997. Metal-detected finds have been described as the chief factor behind an 'explosion' in data for the late early-medieval period (Thomas 2013, 438), and they have underpinned numerous object-specific studies in recent years, across all historic time periods (see Section 2.4.1). Nevertheless, the PAS database remains under-exploited for the medieval period in general, despite

¹⁰ Castle and manor sites are a notably well served subset.

the opportunities it presents (below, Section 2.3). This study draws significantly upon the PAS dataset – at c. 74%, a high proportion of a project database of 11,804 records from the period in question and before, to provide context to it (see also Section 3.3 below). Though sizeable, PAS data is subject to recovery biases against both non-metallic objects and ironwork, as the Scheme mostly deals with metal-detector users. A further, more minor, factor is the potential for relevant objects to have been misidentified or not recognised at all. This cannot be quantified systematically, but developments in the study of certain object types have only been very recent (see Section 2.4.1); this study also identifies, or clarifies the dating of, several groups of material.

1.4 Approach of the thesis

The new datasets referred to above cannot realise their full potential to illuminate changing identities in this dynamic period without dedicated methodologies. Several useful conceptual approaches, conducive to their exploitation, have emerged from recent scholarship particularly on the archaeology of the Norman Conquest, especially longitudinal and international frameworks. The scholarship that has led to these will be discussed as part of the literature review presented in the next chapter, which also frames the challenges raised above through their historiography, particularly regarding paucity. It also sets out previous work using PAS data and on metalwork of the 11th and 12th centuries. In Chapter 3, after considering theories of identity for their impact on methodology and interpretation, the conceptual frameworks used are set out, as are the objects selected for study and the rationale for selecting them. The objects chosen are discussed within a trio of broad categories: dress accessories, equestrian equipment, and, separately, various 'elite' artefacts – objects perceived to have been used in socially restricted contexts. Chapters 4, 5 and 6 constitute substantial case studies, in turn, analysing the objects chosen within these broad categories, in terms of their dating, contextual and identity associations, and manufacture. Chapter 7 discusses the results of these analyses across categories, in the context of

themes raised above and through the literature review. It seeks to respond to the questions raised above, before a concluding chapter, which includes suggestions for further study. Appendices add further detail regarding the dating ascribed to relevant objects, based on both archaeological and iconographical evidence.

Chapter 2: Literature review

As noted in Chapter 1, the impact of the Norman Conquest on scholarship is such that such a longitudinal study of metalwork in 11th- and 12th-century England has rarely been attempted, and certainly not with a large evidence base. The first part of this literature review is therefore devoted to considering this impact on archaeological scholarship of this period (Section 2.1). We then turn to the issue raised of the perceived paucity of relevant material (Section 2.2), and the ways the Portable Antiquities Scheme (PAS) database has elsewhere been used to provide a large and diverse metalwork dataset, thus highlighting its potential for this period (Section 2.3). In Section 2.4 focus returns to the 11th and 12th centuries to consider existing studies of its metalwork and their developing methodological themes, which are discussed further in Chapter 3.

2.1 The Norman Conquest and archaeology

2.1.1 Continuity and change

Over the long term, discussions regarding the impact of the Norman Conquest on English society have oscillated within a binary model of change versus continuity. These discussions have taken place mostly within the discipline of history, with few archaeological contributions to our understanding of the Conquest's socio-cultural effects (Sykes 2007, 1; Griffiths 2011, 63; above, Section 1.3), though this is beginning to change (below,Section 2.1.2). Historically, the 'change' thesis was dominant, with 1066 taken to be a watershed; in the 1940s it had particular topicality as the date of the last successful armed invasion of the English mainland (Fradley 2011, 319; Ten Harkel 2017). The quantity and quality of surviving contemporary documentation, through both the written word and the Bayeux Tapestry, has also engendered a particular focus of research on this historical event (Sykes 2007, 1; Ten Harkel 2017). Consequently, the date 1066 has been given what might be termed a 'centripetal' quality, serving to focus attention and attribution upon itself, in a self-perpetuating way.

The discourse within which material culture has been employed in these discussions has tended to be one fossilised from a dialogue between history and art history dating back to the 1960s and far earlier, and therefore consistent with the change thesis – advocating rapid change after 1066 and profundity of Norman cultural domination (e.g. Clanchy 1998, 28; Zarnecki 1984c, 17-18; B. Cherry 1984, 393). It is a narrative exemplified by demonstrable linguistic and architectural changes resulting from the Norman Conquest, the most commonly evoked being the proliferation of castles and major religious buildings (Rowley 1997, 12; McClain 2012, 154; Creighton 2018a, 219-223). Art history has supported such a discourse, almost unwittingly, because it has tended to have an 'object-domain' favouring the major arts, focussing on architecture, sculpture and painting (including manuscript illustration), that tends to be discussed in terms of the Romanesque art style (e.g. Zarnecki et al. 1984). Predicated on physical survival in a non-archaeological context, such an 'object-domain' has thereby biased attention towards the ecclesiastical sphere (Bartlett 2000, 525), and towards the social elites. As noted, such a focus has tended to reinforce the narrative of 'change' attributable to the Norman repopulation of the political and ecclesiastical elite in the years following 1066 (see Section 1.2.1). Although no longer the dominant narrative, as shall be seen, its cumulative effect has been profound and enduring in the archaeological sphere, not least in terms of how it has structured academic endeavour: 1066 is often taken as a start/end date in archaeological databases, including HERs, English Heritage and the PAS. It has further inhibited research across the perceived early-medieval/medieval boundary of 1066/1100 (see Egan 1999; and below, Section 2.4.1, for a historiography of various object types), in a manner described as 'selfreinforcing' (Ten Harkel 2017, 16-17; see also Section 2.4.2).

When, in the 1960s, alongside revisionism within history, the pendulum began to swing away from those who advocated wholesale social change under the Normans towards a 'continuity' thesis, archaeological contributions started to move towards the foreground, and have continued to since. Initially, archaeology was mainly represented in this interpretative shift through the sub-genres of castellology and landscape archaeology. By the 1960s, though still a relatively new sub-discipline, medieval archaeology was growing in selfconfidence (Gerrard 2003, 131) and in its ability to contribute to debates surrounding historical events. This is exemplified by the work of the Royal Archaeological Institute on the 900th anniversary of the Battle of Hastings (1966) to investigate the origins of English castles through archaeological research (e.g. Barton and Holden 1977). In more recent decades, certain scholars within castle studies have argued for an interpretation of the development of the castle as continuing a trajectory of increasing pre-Conquest lordly defensive construction, exemplified by burgheats and towernave churches (Liddiard 2005, 38; Creighton 2012, 79-82; Shapland 2017), albeit in a form culturally legible to the incoming northern French (Fradley 2011, 336). Indeed, for the rural elite site of Goltho (Lincolnshire), there has been argument for continuity of structures across the period of the Conquest and well beyond, into the 12th century (Creighton 2012, 100-101). Within landscape archaeology, work on the elite landscapes created around castles has demonstrated their pre-Conquest antecedents (Liddiard 2000, 66), with deer parks specifically shown to have an Anglo-Saxon heritage (Gautier 2007, 57; Liddiard 2017, 114). Landscape archaeology and castle studies come together in Michael Fradley's analysis of urban castles, in which he argued for continuity of siting of castles vis-à-vis royal burhs, even if, as heirs of centres of power, their roles were negotiated within a complex, ongoing dynamic of local and national power politics (Fradley 2011, 353). For the urban realm more generally, since the 1960s scholars have seen political developments, and also the general trajectory of growth, as a continuation of patterns of the late Saxon period (Astill 2000, 42; Ten Harkel 2017). This thesis will explore how

continuities (and changes) within metalwork might be related to shifting identities across the period.

2.1.2 Archaeological contributions

Part of the shifting view of the impact of the Norman Conquest, from change to favouring continuity, has involved an expansion of the terms of reference, and with it an ability to alter the scales of analysis. Expansion has occurred in all aspects of investigation: temporal, spatial and social. One consequence of expanding the analytical timeframe used, following the influence of the Annales school in history (Braudel 1972; Chibnall 1999, 76), has been a shift away from the événementiel of contemporary written sources which might emphasise specific, often dramatic, events that demonstrate change, towards analysis over the medium-term (Braudel's 'social time'), which would arguably favour archaeological contributions. Expansion of the spatial parameters of analysis, a post-war development within history, has also resulted in moving beyond an insular analysis of the effects of the Norman Conquest (e.g. Chibnall 1999, 116). Accompanying this has been an ability to shift the scales of analysis in the other direction, towards the micro, thus challenging broad, national generalisations of the effects of the Conquest, and setting out interpretations of how a national political event was negotiated within a local context (McClain 2012, 142), in some cases to the level of an individual household (Jervis 2013). Lastly, with impetus from the rise of writing 'history from below' from the 1960s onwards (Chibnall 1999, 69), and almost in parallel with a move towards more localised analyses, has come a tendency to shift social analysis towards what has recently been described as the 'actual life of most people' (Gautier 2007, 51; see also Chibnall 1999, 6; Rowley 1999, 13; Griffiths 2011, 63-68; Ten Harkel 2017). As with the diversification of temporal parameters, this expansion and reorientation of social analysis arguably favours material culture as studied by archaeologists¹¹ rather than art historians (the latter noted to

¹¹ As McClain (2012, 132) rightly pointed out, this ought to constitute all material culture regardless of social association, though the implication here is towards the non-elite sphere.

have elite connotations, both secular and ecclesiastical), and thereby arguments for continuity derived from those archaeological studies noted.

We have seen how the parameters have changed and expanded when considering specifically the social impact of the Norman Conquest. This has been argued to have favoured both the continuity thesis and the contribution of archaeology. At this point, it is worth unpacking what is actually meant by 'continuity'. This is because, in many instances, the 'continuity' argued for across the date of 1066 is simply an ongoing change, merely one not instigated by the Normans. The period in general has been described as one of socioeconomic dynamism (Sykes 2007, 94; above, Section 1.2.3). Ongoing changes framed as continuities had different durations, impetuses and degrees. Many changes, though, have been attributed to the middle of the 11th century, not long before the Norman Conquest. Of these, several are characterised as being broadly 'European' in impetus (Gillingham 2012, 45), such as the adoption of the Romanesque style in architecture (Chibnall 1999, 143), or reforms to the Church following the Gregorian reform movement from the 1050s onwards (Chibnall 1999, 139; Golding 2001, 146). In such contexts, the impact of the Norman Conquest has been seen as one of accelerating the pace of change, of acting as a 'catalyst' (Golding 2001, 146; Chibnall 1999, 139, 144; Rowley 1999, 13).

The situation, then, is complex. Recent studies have had to acknowledge the social, spatial and temporal contingency of the cultural impact of the Norman Conquest; the same conceptual approach can be applied to 1016. The binary change/continuity model can now be seen as being too reductive, with the reality far more complicated, and 'continuity' requiring explication. All these issues have been brought to bear on the most recent archaeological contributions to our understanding of the socio-cultural effects of the Norman Conquest, and it is to these we now turn.

Until recent decades, the contribution of archaeological studies of portable material culture to debates on the Norman Conquest had been

Certainly, all social groups would have engaged with much of what is studied by art historians, other than that which was immured and of highly restricted access.

minimal, and, where offered, they stressed a lack of innovation; that is, continuity, for example in pottery forms and in coinage (J. Cherry 1984, 350; Archibald 1984, 320; Rowley 1997, 12, 26). Key amongst the more recent archaeological discussions of the impact of the Conquest has been Naomi Sykes's 2005 and 2007 studies of zooarchaeological evidence (Thomas 2017, 290). Through her work, Sykes demonstrated that, amongst complexities, and contra a broad continuity thesis, cultural changes in line with Norman preferences, such as the consumption of pork, or of wild birds or mammals, could be evidenced in the years after 1066, the latter on high-status sites especially (Sykes 2007, 95-96). Further, recent pottery studies have shown that the use of vessels of similar form could vary depending on where, and therefore in what cultural context, they were employed. Analysis of sooting residues on ceramic vessels found in Southampton (Hampshire) suggests different cooking practices in different areas of the town, as reinforced by the Norman Conquest, based on existing cross-Channel contact (Jervis 2013, 473).

The preceding survey contains many implications for this study. First, although analysis of metalwork from this period is increasing, notably in the form of a recent study of brooches (Weetch 2017), the general lack of studies of portable material culture remains conspicuous (McClain 2012, 160); perceptions of the material's paucity will be examined in the next section. The PAS dataset provides a unique resource with which to address any lacuna, and the contribution of this thesis to the overall body of research utilising PAS data will also be discussed below. Second, the enduring effects of the change thesis, as supported through the traditional object-domain of art history, mean that even today analysis can be prescribed through the lens of the Romanesque art style: this is the 'epistemological closure' described by O'Keeffe (2007, 108) in his work on the Romanesque style. As such, this inhibits studies of archaeological small finds which can rarely be treated in such terms (Weetch 2017). A further consequence is the effect of the date 1066 in structuring dating of archaeological small finds, with objects often simply categorised as being either earlier or later (Egan 1999, 31; 2009, 289-290; Weetch 2017). Third, archaeological work has demonstrated the power to help overturn the

binary model of change versus continuity in favour of a nuanced view of continuities and changes which were spatially and socially contingent (Jervis 2013, 487), and, moreover, in which material culture played an active mediating role. Allied to this approach, is a recent methodological concern for context of use in addition to factors of form and style (discussed further in Chapter 3). Finally, it is noted that several changes pertinent to this period, some framed as continuities, require different interpretative models such as Europeanisation or the development of urban identities, over and above the historical impact of conquests.

2.2 Metalwork in Britain c. 1000-1200: some issues

2.2.1 Perceived paucity

Before we can start to explore 11th-12th-century society using analyses of metalwork, the longstanding scholarly impression of a paucity of non-ferrous metalwork of this period requires appraising. This perceived lack is longstanding, and ranges from general observations to more specific ones (detailed in Table 2).

Reference	Specific topic (as applicable)
Wilson 1964, 38	Low number of surviving 9 th -11 th -century
	items from Southern England
Hinton 1975, 171	'Late Saxon' metalwork
Wilson 1975, 200	10 th -century metalwork
Caple 1986	Post-Norman pins
Ross 1991, 465	Late Saxon pins
Lightbown 1992, 101	12 th -century jewellery
Thomas 2000a, 298;	10 th -century dress accessories, including
Thomas 2000b, 241	strap-ends
Hinton 2005, 171-174;	12 th -century dress accessories
Heslop and Ashley 2013, 218, note 3	
Ashley 2006; 2016, 281	11 th - and 12 th -century metalwork
Egan 2007b, 78	Late 11 th - and 12 th -century urban trends
Egan 2009, 297	12 th -century items
Weetch 2017	11 th -century brooches

Table 2 Works commenting on a lack of 10th-12th-century metalwork, detailing topics(as applicable)

As McClain and Sykes (2019, 88) have argued, an unfortunate corollary of this perception has been the advocating of reductive models, which attribute any 'gap' in material to the Norman Conquest, or a dimension of it, such as the Harrying of the North – a closing down of enquiry and interpretation. Another unintended consequence of this perception may have been a focusing of archaeological attention before or after this period, not least on the apparently appealing metalwork of the First Viking Age, well served in recent scholarship (e.g. Thomas 2000b; Leahy and Paterson 2001; Kershaw 2013; Pestell 2013). Looking to the future, and especially if such perceptions cannot be overcome, study of this period's metalwork faces competition from other aspects of contemporary material culture, for which recent scientific advances offer new opportunities. Two examples of such advances are lipid analysis on pottery, and the suite of techniques, including isotopic and genetic analyses, used to investigate animal skeletal material (e.g. Craig-Atkins *et al.* 2020).

Given this perceived lacuna, the period needs brief contextualisation within wider patterns of production and consumption of portable non-ferrous metalwork. For the preceding Middle Saxon period, notable numbers of nonferrous objects have been found at wics/emporia, and the 'productive sites' often found within their hinterlands (Richards et al. 2009, 4.1.2). In the 8th and 9th centuries, characteristic artefacts traded at such sites include pins, hooked tags and strap-ends (Richards et al. 2009, 4.1.3, 4.3.3). Following the decline of said 'productive sites' from the 9th century onwards, such high levels of nonferrous metal production, distribution and consumption are thought not to have been reattained until the 13th and 14th centuries, with the urban-based mass production of copper-alloy objects (e.g. N. Thomas et al. 2008; Bourgeois 2014b, 156). Such objects, typified by dress accessories, in many cases appear to have had a pan-European currency (Berthon 2013; Cassels 2013, 154-157). One task yet to be accomplished is to adequately date the origins of this growth, broadly attributed to the second half of the 12th century (Bourgeois 2014b, 154).

These linked trends – an apparent lack of non-ferrous metal objects datable to the 11th and 12th centuries, and the re-emergence of significant

numbers of metal portable artefacts from at least the late 12th century – have naturally solicited explanation. Forming part of the decline in non-ferrous metal objects is an apparent decrease in finds made specifically in precious metals. In the next section we consider the narrow topic of precious metal use in this period to introduce and critique the different arguments that have been raised and expanded in an attempt to explain a wider decline.

2.2.2 Explanatory models

Since the 1970s, a decline in the use of precious metal has been noted for dress accessories and weapon fittings from the 10th century onwards (Dolley 1971; Hinton 1975, 178; 2005, 147-148, 166-167; Thomas 2000b, 239; Griffiths 2011, 73). This decrease has been measured diachronically using hoard evidence (Hinton 2005, 169), a control on complementary evidence provided by casual losses. An economic explanation was suggested relating to major recoinage, first conducted by Edgar in 973-975, whereby silver coins were over-valued when minted, and therefore lacking in purchasing power (Dolley 1971). Such a view was swiftly dismissed by David Hinton (1975, 180) who argued, inter alia, from will evidence, for continuing private wealth beyond this date. Hinton (1975, 179-180) himself argued that a new lay elite proclivity towards austerity in dress was born of piety – a response to the Church's teaching against luxury, and a tendency apparent by c. 1000, according to some (Crouch 1992, 248). This is not to deny the aristocratic imperative towards conspicuous consumption (in the Veblenesque sense), rather that it took different directions such as the construction and benefaction of church buildings (Senecal 2001, 265; Smith et al. 2001, 585-586; Fleming 2010, 306-307; above, Section 1.2.2). Overall, however, neither explanation, economic or social, sits well with evidence for wider conspicuous consumption amongst the 11th-century thegnly group. Such consumption included food purchased at market rather than generated on the manor, exotic embellishments of clothing (Fleming 2001, 8-10), but also the ecclesiastical patronage that portrayed piety (Williamson 1993, 158).

The relative absence of precious-metal dress accessories was apparently compensated for by a concomitant increase in the number of objects produced in base metals (Thomas 2000b, 239). These artefacts were in lead alloys, imitating silver, and gilded copper alloys, imitating gold, with features on leadalloy pieces sometimes evoking gold working, such as pellets imitating filigree (Weetch 2014, 373). The relative social value of the base-metal pieces has been debated, with some employing a dismissive turn of phrase particularly for the lead-alloy pieces. For certain scholars these were 'trinkets', 'tawdry' (e.g. Hinton 2005; Leahy 2007, 166-167), or made of 'mediocre' alloys (Bourgeois 2014b, 154); such value-laden discourse has been highlighted by Ten Harkel (2013b, 177) and Weetch (2014, 327). For others, artefacts in these alloys were the idiomatic dress accessories of the 10th and 11th centuries, statements of fashion, and of a status that was not necessarily lowly (Thomas 2000b, 240; G. Thomas et al. 2008, 181). Furthermore, if objects in base metals were provided with surface treatments that made them look like precious metals, gold particularly, then they help undermine the social arguments made regarding austerity of appearance (Weetch 2014, 371). Examples include the gilt finishes on 11th-century series of 'coin-brooches' (G. Williams 2001; 2006) and cloisonné-enamelled disc brooches (Buckton 1986; 1989); surface treatment as related to status will be considered further in the case study chapters. Indeed, the dominance of cruciform designs on such brooches suggests the intersection of pious display and local status display through consumption that complemented contemporary church patronage, particularly in a rural context (based on archaeological discoveries; Weetch 2014, 371). With such themes and arguments in mind, we return to the question of the paucity of 11th- and 12th-century metal finds in general.

The decline noted for the use of precious metals would not, in itself, lead to an overall slump in metalwork in this period, especially if base-metal substitutes were employed. Indeed, the numerous base-metal products, particularly items produced in lead-tin alloys, are often seen as some of the earliest examples of mass-produced items, manufactured within an urban context (Thomas 2011, 416). It could be that some of these substitutes, especially those in lead-tin alloys, might not survive to (be identified in) the present day, especially in rural contexts, given their fragility and susceptibility to suffer in acidic soil conditions (Egan 2005, 198; Robbins 2014, 28, 60). If the decline in precious-metal objects is unlikely to have been the sole driver of a decrease in numbers of non-ferrous metalwork, what caused this slump? Alternatively, is the perceived 11th- and 12th-century 'gap' in non-ferrous archaeological metalwork partly a product of our methodological deficiencies, not least dating by art style and working in academic silos either side of the 1066 boundary?

The first of two main reasons proposed for the relative lack of nonferrous archaeological small finds from the 11th and 12th centuries has been economic, based in part on the heavy impact of taxation under William I, an impact which endured until the middle of the 12th century according to Hinton (2005, 169; 2011b, 80). By implication, though, a parallel effect would have been caused by preceding payment of the Heregeld or other similar factors; Hinton (2005, 169) noted the anachronism of his own argument given that certain tendencies towards paucity identified pre-dated Norman rule. Overall, such economic arguments seem to go against general trends in favour of growth in this period. These range from measures of (chance) coin loss – higher in the period c. 970-1100 than in the preceding 130 years (Naismith 2013, 220) – to demonstrable economic success in the urban sphere from the 11th century (Holt 2010, 66), and a general trajectory of demographic growth across the period (Fossier 2004, 13; Astill 2009, 258).

The second argument relates to the social distribution of metalwork, particularly dress accessories, and may explain why fewer are found in areas inhabited by the rural population, and therefore overall. In this period, preceding sumptuary legislation in the 14th century (Pritchard 2008c [1991], 35), it has been argued by some scholars that elites sought to restrict access to material culture vis-à-vis their social inferiors – so-called 'exclusionary closure' (Hinton 1999; 2005, 5), based on Weber's 'closure theory' (Hatcher and Bailey 2001, 198). A more nuanced approach adopts Pierre Bourdieu's notion of 'distinction', whereby elites would have competed against other social groups

for possession of the 'rare', here in terms of portable objects (Bourgeois 2014b, 179). In certain periods these actions might be reflected in relative social distribution of materials; in this period, it has been argued that the division was one of simply possessing metal goods, or not (Felgenhauer-Schmiedt with Graham-Campbell 2007, 252). However, where there is sufficient evidence, 'distinction' can be defined according to multiple criteria (Bourgeois 2014a, 664-666). It may not lie simply in an opposition between possession or its lack, but in notable differentiation based on quantities consumed ('quantitative distinction') or quality of objects ('qualitative distinction'). It may also reside in other measures less accessible when studying metalwork, such as differential use of similar objects. This study aims to elucidate the social distribution of portable metal objects in this period to help test these models, and characterise elite identity performance (see also Section 3.1.1).

We turn, lastly, to the possibility of flaws in our methods for dating artefacts in the late early-medieval and post-Conquest periods. Indeed, reappraising artefact dating is one of the primary aspects of this project. It builds on attempts to re-date various pertinent object groups which have recently shown promise. For example, arguments have been made for the potential 12th-century dating of stirrup-strap mounts bearing lion designs,¹² rather than the conventional 11th-century date given (Section 5.3.2.1, below; Ashley 2006, 105; 2016; Lewis 2007b; Webley 2022). Although such dating is not universally accepted (Williams 2011, 254), it is largely based on closely argued art-historical comparison, drawing upon designs in other media (Lewis 2007b, 180-182), that is, according to the same criteria used for conventional dating (Williams 1997a, 8). For brooches, recent work has convincingly shown that various types continued beyond their previously perceived 10th-century bounds into the 11th century (Weetch 2014; Section 4.3.2, below). Both of these examples are characterised by archaeological responses to dating by art style, but with differing outcomes. In the case of stirrup-strap mounts, fine-

¹² For rare griffins see Webley 2014, 354, note 71

grained analysis on stylistic grounds can be shown to help give nuance to their dating (below, Section 5.3.2.1). For brooches, however, analysis by decoration according to recognised art styles is rarely relevant in this period (Weetch 2017, 264). Here, alternative criteria, such as form and individual motif, in specific instances linking examples to specific, well-dated coin issues, can be analysed to date examples found in the archaeological record.

Beyond issues of dating by art style, the 'structuring effect' of the Norman Conquest of 1066 remains a general factor at work within scholarship and wider archaeological endeavour (Section 1.3). It can lead to scholars working within their own specialisms, tending not to cross the perceived 'watershed' of 1066 (Egan 1999, 31; 2009, 289-290), and, furthermore, being liable to eschew the 11th century entirely when dating artefacts (Weetch 2017). The above approaches to dating might have together helped perpetuate the apparent 11th- and 12th-century 'gap' (Weetch 2017, 264). Such factors are attenuated for medieval scholarship from the 12th century onwards, and it is to considerations of the metalwork of this and later periods that we now move, in order to provide further context to arguments for a lacuna in the preceding centuries.

The notable rise in jewellery items datable to the late 12th and 13th centuries is often associated with the vast increase in the availability of silver in England from as early as the 1170s, following the discovery of silver at Freiburg (Germany) (Spufford 1988, 94). Some scholars have therefore looked back in time, to acknowledge a concomitant decline in the later 11th century (Naismith 2013, 220). The 1180s saw a dramatic increase in minting of coins in England (Spufford 1988, 196; Astill 2000, 47; Naismith 2013, 204; also, below, Fig. 94), and a liquidity within the English economy thereafter that helped facilitate trade in gold and gems with the Muslim world (Hinton 2005, 203). The 12th century is also noted for the first documented insular copper extraction (Hinton 2011a, 427); copper mining was likewise actively pursued by local aristocracies in south-west France, again, from the second half of the 12th century (Bourgeois 2014b, 154).

Any expansion in the availability of raw materials would have to coincide with accompanying demand for, and means of, production (i.e. economic development), if it were to translate into a demonstrable change in quantities of artefacts. These very factors have been argued for in the urban sphere from around 1180 (Astill 2000, 46). In more general terms, an overall move away from rural base metal craft production towards urban manufacture seems to have taken place by the 11th century at the latest (Hinton 2005, 157; Griffiths 2011, 73; Thomas 2011, 414; Bourgeois 2014b, 163). The nature of interaction within an urban context has been argued to favour exchange along formalist lines; this would have aided the commodification of objects in this period (Hinton 2005, 157; Skre 2013, 81). It also has the effect of facilitating craft specialisation and efficiencies - innovations that could lead to production on a large scale (Thomas 2011, 415; Bourgeois 2014b, 156). Such tendencies have been argued as nascent in the Danelaw in the 10th century, far more so than in contemporary southern England (Hinton 2005, 133; Kershaw 2009, 301), but they were evident, especially in London, from the 11th century onwards (Astill 2000, 38). It is therefore in the intersection of increased metal supply and contexts and imperatives for increased production, especially within urban settings, that an increase in metal items seems to have been provoked towards the very end of the period of study.

In the next section we will see how recorded metal-detected finds have contributed to archaeological small finds studies in general terms. In the light of increasing numbers of metal-detected finds being dated to the 11th and 12th centuries, many of the above arguments regarding a lack of metal items in this period would seem to require tempering. This increase has already been noted by scholars regarding equestrian equipment, and horse ownership across society has been subject to deeper assessment (Hinton 2013, 152). Even prior the re-evaluation that follows in the case studies presented in Chapters 4, 5 and 6, some weaknesses in the social arguments put forward to explain a paucity of metal finds have been exposed. Current meaningful explanations for a decline in non-ferrous metalwork in this period would seem to lie in the conjunction of social and economic factors, and it is the hope of this study to

elucidate whether any decline in metal objects was universal (or not), and what lay behind it.

2.3 Research using Portable Antiquities Scheme data

There is no doubt that the work of the PAS, which has recorded archaeological finds found by members of the public since its inception in 1997, has advanced archaeological knowledge and reinvigorated small finds specialism within the archaeological sector. Kelleher (2013, 3) has given a succinct description of the dataset's main qualities, namely 'representivity (sic.), volume and national coverage'. These qualities naturally took time to emerge. The genesis of the PAS is well documented (e.g. Bland 2005; 2009), but it is worth noting that in its initial years its restricted number of Finds Liaison Officers (FLOs) covered limited 'pilot' areas (Walton 2012, 60). Meaningful studies of national distributions of artefact types or along period-based lines were not feasible until its national coverage from 2003 (e.g. Crummy 2004a, 27); even then, distributional biases caused by the early foci had an enduring legacy, despite significant increases in quantities recorded. In its earliest phase, therefore, the contribution of PAS data might be described as qualitative, rather than quantitative. Its early academic contribution thus took the form of notes on rare pieces and new sites, as published in the annual reports on PAS and Treasure. Such contributions sat in a tradition of notes on metal-detected artefacts from before the PAS's genesis; those relevant to the period of study include articles by museum curators (e.g. Margeson 1986; 1987; 1988; Thomas 2001a), archaeologists (e.g. Williams 1996; Ashley et al. 1991), and metaldetector users (e.g. Haldenby 1990; 1992; 1994; Cuddeford 1996).

Academically, a series of landmark dates came around the mid-2000s. At that time a dedicated note on PAS work was inaugurated in the major period journals, largely driven by the appointment of specialist Finds Advisers when the Scheme was expanded nationally: *Medieval Archaeology* (from 2001),

Britannia (from 2004) and Post-Medieval Archaeology (from 2005).¹³ Arguably more significant were developments in these journals away from a 'traditional' format which detailed interesting finds and new sites, to more discursive surveys of object types by Sally Worrell (from 2008) for the Roman period, and various contributors to *Medieval Archaeology* (from 2010). This internal maturity in studies of PAS data was connected to the large volume of finds recorded by the second half of the 2000s, and coincided with large-scale projects in the wider archaeological world which were beginning to draw upon PAS data. By that point these studies drew on a PAS dataset that had reached a critical mass (Clark 2008, 19), exemplified by the 2007 conference on PASbased research, and its proceedings (Worrell et al. 2010). Such studies were facilitated by the widespread adoption of GIS and their application to the georeferenced data that PAS provides in abundance (e.g. Richards et al. 2009; Leins 2012; Walton 2012), and are part of archaeology's version of the 'big data' phenomenon (Bevan 2012, 492).¹⁴ In developing the volume to contribute to analyses on different scales, the PAS dataset in no way lost its qualitative qualities: these dual strengths will be brought to bear in this study.

Despite the aims of the PAS to record all archaeological finds made by members of the public (Bland 2005, 446), statistics from annual reports reveal that the proportion of finds made by metal-detectorists averages c. 76%, though fluctuating year-on-year between 60 and 92% (Robbins 2014, 18-22). It follows that the contribution of the PAS will be greatest regarding metal small finds. Of these, around half are coins, and recent significant doctoral studies have examined coinage at a national level, respectively for the Iron Age (Leins 2012), Roman (Walton 2012) and medieval periods (Kelleher 2013). In each of these studies PAS data has been key, described in one as 'a unique European resource' due to its volume (Kelleher 2013, 6). They were joined by other projects, also national in their scope, examining the variety of metal dress accessories also abundant within the PAS dataset: prehistoric and early historic

¹³ PAS staff took on editorial responsibility for the coin register of the *British Numismatic Journal* (from 2006); the complementary contribution of FLOs to county journals is also noteworthy.

¹⁴ A trend not without its micro-/individual-level counterpoint (e.g. Hansen *et al.* 2015, 2).

penannular brooches (Booth 2014); Iron Age brooches (Adams 2014); Viking-Age brooches (Kershaw 2013); late early-medieval brooches (Weetch 2014); and medieval dress accessories (Standley 2010; 2013; Cassels 2013). Preceding studies of decorative metalwork prior to the widespread impact of the PAS (e.g. Williams 1997a; Thomas 2000a), and based on metal-detected material, required a large amount of work liaising directly with metal detectorists, a task largely obviated nowadays by the work of the FLOs (Naylor and Richards 2005, 86).

Other main themes developed in the late 2000s/early 2010s are the landscape context of portable antiquities (Yates and Bradley 2010; Leonard 2015), and the development of methodologies to identify new sites revealed by PAS data (Brindle 2011; 2013; 2014; Walton 2012; Daubney 2015; Hadley and Richards 2018). Through these recent works, and especially the doctoral work of Katherine Robbins (2012), methods have been developed for dealing with biases within the PAS dataset, over and above the issues of its incremental roll out. These methods are as sophisticated as those that contextualise the equivalent dataset from development-led archaeology; they are directly relevant here and will be detailed in Section 3.1.3. Their utility is demonstrated by their application to recent large-scale landscape studies that have featured PAS data, such as the 'Viking and Anglo-Saxon Landscape and Economy Project' (VASLE) (Richards et al. 2009), the 'Roman Rural Settlement Project' (Allen et al. 2015), and the multi-period 'English Landscape and Identities' project (EngLaID) (Donnelly et al. 2014). Alongside recent examination of the social practice of hoarding through time (Naylor and Bland 2015), the contemporary contribution of the PAS database is that of a key player in archaeological studies of national scope, and one subject to increasing methodological rigour.

Despite the major and mature contribution now made by PAS data to archaeological research, impact has neither been equal across object types nor time periods. Its strong contribution to discussions of numismatics and hoarding sits within a tradition of studies inspired by metal-detected data (Dobinson and Denison 1995, 40-44). This is due to volume, representativity –

exemplified by Iron Age coins (Dobinson and Denison 1995, 41) – and national coverage. The highest quantity of records on the PAS database are Roman; studies into Roman material have consequently been common. Interestingly, though, if numbers of research projects are compared against numbers of relevant database records, those using Roman PAS data are actually less common, in relative terms, than those with a prehistoric or early-medieval focus. Most salient here is the relative lack of research using PAS data for the medieval period (and indeed later periods). Kelleher (2013, 7, note 8) cited four out of 62 (6.5%) doctoral projects focusing on the medieval period; despite the far larger numbers of projects now collated on the PAS website, the percentage of medieval studies remains almost the same. This finding is made starker by an overall trend in doctoral studies for a broad equivalence of focus on the Roman and medieval periods (Gerrard 2009, 88). A number of multi-period studies using PAS data have started to redress this imbalance, including early-medieval studies with a focus on the later part of the period (e.g. Kershaw 2013; Weetch 2014), and recent work using (high) medieval data (Oksanen and Lewis 2020).

As well as being minimal compared to many preceding periods, the application of PAS data to medieval studies is arguably different in its character. This is in part due to settlement continuity between the Middle Ages and the present day, but a PAS-centred contribution towards studies of consumption and identity, alongside production, has not been exploited as for preceding periods. To an extent this is a general characteristic of analyses of medieval artefacts, outside pottery studies, with regional studies having a very intermittent, if long, history (e.g. Jope 1963). A case in point is Cassels's (2013) doctoral study: this largely eschewed PAS data given its lack of apparent relationships to sites and therefore means of social contextualisation. Rather, PAS data in medieval, and indeed post-medieval, studies seem to have served an object-focussed approach whereby objects are used to discuss selfrepresentation, belief and leisure (e.g. Hinton 2005; Gilchrist 2012; Standley 2013), often singly and largely without any geographical dimension, perhaps in part due to an assumption regarding their homogeneity. So, while medieval

finds recorded by PAS are often used to provide increasingly representative corpora which allow for typological categorisations and recategorisations, they have tended to have been perceived as falling short of providing the required contextual associations for this material at different levels of analysis (e.g. Anderson 2010). Such omissions provide a space into which geographical and contextual nuancing could sit; here I aim to build on previous work, detailed next, and provide such an analysis by exploiting the wide-ranging PAS dataset of late early-medieval to medieval artefacts,¹⁵ and sophisticated approaches to dealing with its biases.

2.4 Non-ferrous metalwork in Britain c. 1000-1200: previous work

The historiography of late early-medieval and post-Conquest metalwork, given the relative paucity outlined above, began with documentation of isolated qualitative examples and small groups, before proceeding to works of synthesis. In the first half of the 20th century the latter were generally arthistorical surveys which used metal small finds as stylistic exemplars (e.g. Smith 1923; Brønsted 1924). Next came major museum catalogues issued by the British Museum, London (Wilson 1964) and the Ashmolean Museum, Oxford (Oxfordshire) (Hinton 1974). These focussed on metalwork items that fitted the parameters of English production in the period c. 700-1100. Their approach to dating was also largely art-historical, in the general absence of more definitive dating methods; many of the pieces were decontextualised, hence a reliance on ornamental items in precious metals and copper alloys. The items included were those that had become 'canonical', though some objects in lead-tin alloys were also documented and comparanda offered in other materials such as bone and ivory. The succeeding decades saw major exhibitions which also displayed this 'canon', both in England and on the Continent (Legner 1972; Haussherr 1977; Backhouse et al. 1984; Zarnecki et al. 1984; Böhme et al. 1992; Roesdahl and Wilson 1992; Stiegemann and Wemhoff 2006), some with a 'Viking' focus (Graham-Campbell and Kidd 1980;

¹⁵ As gathered by the late 2010s

Roesdahl *et al.* 1981) and one with a Norman one (D'Onofrio 1994); their catalogues represent important works of synthesis.



Images courtesy of the PAS

Fig. 1 Stirrup-strap mounts bearing relevant art styles:
a) Ringerike – two animal heads with gaping jaws and lip 'lappets' are joined by a characteristic union knot;
b) Urnes – characteristically, a 'great beast' is being attacked by a filiform creature;
c) 'Romanesque' – the solid lion with tail curving round and under its body is typical. Note that little metalwork in the Mammen style is known.

In two of the exhibitions held in London in the 1980s (Backhouse *et al.* 1984; Zarnecki *et al.* 1984) the object-domain was restricted by a focus on decorative metalwork and, to an extent, *ars sacra*, such as censer covers, crucifixes and crosiers. A few pieces were included in the London exhibition catalogues based on their construction rather than decorative content, such as cloisonné-enamelled disc brooches (Webster 1984c, 101). Though late Viking-Age metalwork was often dated based on the art styles apparent in its decorative content (Fig. 1), studies organised according to art style – in chronological order, Mammen (second half of the 10th century; Fuglesang 1991), Ringerike (late 10th to mid 11th century;¹⁶ Fuglesang 1980), Urnes (mid

¹⁶ In Scandinavia, dated to between c. 990 and 1050 (Wilson 2008, 333)

11th to early 12th century;¹⁷ Owen 1979) – covered a wider range of object types, including dress and weapon accessories. Metalwork to which the label 'Romanesque' has been attributed was gathered in a pioneering work by Swarzenski (1974 [1954]); this had 11th- and 12th-century ecclesiastical objects as its focus.

In contrast to the major museum catalogues of the 1960s/1970s, these exhibitions of the 1980s/1990s started to feature objects that were the product of excavation programmes of the preceding decades. Further, scientific developments were evident, with the results of compositional analyses quoted in certain catalogue entries (Zarnecki *et al.* 1984, 241ff.) and a companion work specifically concerned with copper-alloy composition (Oddy *et al.* 1986). However, it was the contribution of the systematic recording of metal-detected finds, especially with the advent of the PAS in the late 1990s, that served to fundamentally expand the purview of metalwork studies for this period and enable the wide-ranging object-specific studies we will consider next (Thomas 2013, 438).

2.4.1 Object-specific studies

In 1975, David Hinton gave a pessimistic assessment of the analytical work possible with metalwork of the late Saxon period, given the 'small size of the corpus'. Since then, publication of urban excavations and, above all, the influx of metal-detected artefacts have allowed for studies of stylistic change and centres of production that he had all but ruled out (Hinton 1975, 171). This influx has expanded the object-domain in terms of artefacts, though much dating and classification has been established based on decorative style rather

¹⁷ Overall, the Urnes style has been dated to between c. 1040 and 1135 (Wilson 1978, 140), although in Scandinavia a transitional phase with the Ringerike style has been identified on runological grounds in the 1020s/1030s (Owen 2001, 205). In England it is thought to be a post-1066 phenomenon, including in an 'English Urnes' iteration (Dixon *et al.* 2001; Kershaw 2010, 6). This latter is exemplified by 'Flambard's crosier', dated to the 1090s and now attributed to another Bishop of Durham – William of St Carileph (Owen 2001, 206-207). The style had some currency until around 1130, to judge by a decorated capital at Norwich Cathedral (Zarnecki 1984a, 167, no. 126), and also by architectural influences felt in early 12th-century Normandy (Nissen-Jaubert 2005, 222).

than criteria such as morphology or method of manufacture. Of the object types that have received particular attention in the literature, the three main groups that will be considered in this thesis are detailed below. Their rationale for selection is laid out in Chapter 3.

Dress accessories (see also Chapter 4)

Object-specific studies of dress accessories have developed significantly over recent years. The large number of brooches recorded through metal-detecting have contributed to typological and analytical studies, such as Kershaw's (2013) on Scandinavian and Anglo-Scandinavian brooches. Into the period studied here, Kershaw's work on the Second Viking-Age brooch types built on Pedersen's (2001) analysis of bird-shaped brooches, including those in the Ringerike style, and is complemented by Røstad's (2012) study of Urnes-style brooches in Norway. However, some have argued that such work, borne on the back of renewed interest in the location and scale of earlier Viking settlement, has somewhat unbalanced study of contemporary brooches, to the detriment of Anglo-Saxon and continental influences (Thomas 2012, 511; Weetch 2014, 8, 270). Weetch's (2014) PhD thesis redressed this issue, drawing together relevant disc brooches into a unified typology (see also Weetch 2017). Separately, annular brooches, largely of the 12th century onwards, have been classified by Deevy (1998), with a focus on evidence from Ireland. Due to the chronological bounds of studies such as Weetch's, which nominally ends at 1100, plate brooches are rarely studied alongside the ostensibly later annular brooches. Furthermore, there is apparently nowhere discussion of the penannular brooch forms that often seem to occur on early castle sites (but see Section 4.3.2.3, below).

Strap-ends have been subjected to a rigorous national survey by Gabor Thomas in his PhD thesis (2000a), with a refined typology later presented in two parts (Thomas 2003; 2004). Further work on examples in the 'Winchester style' was offered by Kershaw (2008). However, Thomas's updated typology does not contain certain types presented in his thesis, including some of

relevance to the latter end of his study period (late Saxon/Viking Age). By contrast, work is less developed for the various strap-fittings attributed to this period (e.g. Hammond 2013, 47, fig. 1.3-n; Ashley 2016, 291-292, fig. 18.8, nos 57-59). Pins have been subject to thorough treatment by Caple (1986), with ringed pins classified by Fanning (1994), and dress pins overall by Ross (1991). The same cannot be said of buckles. Contributions such as Rogerson and Ashley's (2011b) regarding 'gaping-mouth beast' buckles, and Cherry's (1987) gathering of buckle plates with Romanesque designs, have not yet been integrated into wider study.¹⁸ Indeed, the only relevant buckle classification appears to be that created *de novo* for the VASLE project (Naylor 2008), though this has not been widely adopted. Similarly, despite disparate discussions of hooked tags in site reports, the only classification available is also that created for the VASLE project (Richards et al. 2009, 3.1.1), as enhanced by Lewis and Naylor (2013). Finally, finger-rings of this period have not been subject to a collated study (Rosie Weetch pers. comm. 2014), with examples subsumed within catalogues (e.g. Dalton 1912) and base-metal pieces neglected (Webber 1993). There remains considerable scope to analyse post-Viking-Age strap-ends and the other object types mentioned above more generally, plus works of synthesis.

Equestrian equipment (see also Chapter 5)

In recent years, one of the most pronounced increases in evidence has been for non-ferrous equestrian equipment, mostly dated to the 11th century (Margeson 1997, 33). This largely represents a new source of material; much of this equipment had resisted proper investigation due to problems of recognition. For example, the identification of what are now understood to be respectively stirrup-strap mounts (Robinson 1992; Williams 1995; 1997a; above, Fig. 1) and stirrup terminals (Williams 1997b) (shown, below, in Fig. 64) was only fully resolved in the 1990s. Knowledge of relevant material has since spread into wider archaeological circles slowly, with certain items sometimes

¹⁸ See Cassels (2013, 27) regarding omission of the gaping-mouth beast type

not recognised in recent reports (Graham-Campbell 1992, 82).¹⁹ It seems clear that this non-ferrous material was used as part of requisite fittings for riding horse: it comprises elements of bridle bits, harness decoration and, above all, stirrups. Such material is highly unlikely to have been used on pack-horses, the relatively small population of working farm horses (compared to oxen), or the even smaller fraction of other working equids, such as donkeys and mules (Langdon 1986, 29, table 2).

Specific work to collate, classify and analyse stirrup-strap mounts was performed by David Williams in the 1990s, with over 500 examples from England and the Continent documented, most deriving from metal-detecting. Williams (2007a) also provided a classification for bridle cheekpieces. To date, however, no complementary exercise has been performed for England for each component of the range of contemporary horse equipment, though some work has been published on each of the following: stirrup terminals (Williams 1997b; 2001); bridle and harness fittings (Graham-Campbell 1992, 82; Williams 2007a); potential en-suite girth buckles (Fuglesang 1980, 34; Graham-Campbell 1992, 87); harness pendants (Graham-Campbell 1992, 87; Margeson 1997, 33; Williams 2007a, 6); and spurs (Williams 2002). These publications have largely been exercises in identification, dependent on the late Viking-Age art styles of Ringerike and Urnes for inclusion. As such, pieces that are non-decorative in nature are excluded, not least the iron corpus brought together by 1980, but not published until much later, by Ian Goodall (2011, 378-379, fig. 13.8), including, for example, harness fittings and junctions. Also excluded from these studies are the harness pendants, ascribed a 12th-century date, collated by Ashley (2002), albeit solely from the prolific county of Norfolk, and more generally by Baker (2015; 2017). However, not only could this chronological divide be bridged, the material divide can also potentially be overcome. Though typological studies exist for [iron] horseshoes (e.g. Clark 1986; 2004a [1995]), curb bits (Gaitzsch 1997; see also Clark 2018; 2019) and stirrups (Seaby

¹⁹ For example, a harness link at Winchester (Hampshire) (Hinton 1990b, 772, fig. 220, no. 2345), or a stirrup-strap mount published by the excavators of Pevensey Castle (East Sussex) (Fulford and Rippon 2011, 64-65, fig. 3.10, no. 42)

and Woodfield 1980; Goßler 2011), these have not been drawn into synthetic analyses of horse equipment. The only comparable typological studies of prick spurs are Norbert Goßler's (1999) and Cécile Lagane's (2010) Master's theses, which, both being somewhat obscure in English-speaking circles, are similarly not incorporated into wider analyses. Finally, the later, synthetic publication by Goßler (2011), discussing a wide range of medieval German material, ferrous and non-ferrous, has also largely been overlooked by English scholars.

'Elite' objects (see also Chapter 6)

An artificially discrete group of "elite' objects' could encompass artefacts associated with socially restricted activities, such as hunting, and elite settings, such as castles. Here, we consider specific object types not already implicated in the preceding groups. However, not included is the body of objects often incorporated under the title *ars sacra*, to which attention has been devoted historically (Section 2.1.1), or unique or rare objects such as royal or ducal regalia and insignia (Crouch 1992; Steane 1999; Graham-Campbell 2007).

For elite weaponry, many iron items known from contemporary manuscript illustrations, embroideries, and parallels in non-ferrous alloys simply have not survived (Peirce 1986). Indeed, Lewis (2005, 41) had noted that '(paradoxically) less military material culture has survived from the tenth and eleventh centuries than from earlier periods'. In general, this has inhibited synthesis (Egan 2009, 294), though exceptions include a number of swords (see Brunning 2013), and also arrowheads, treated typologically by Jessop (1996). Extant non-ferrous elements of weaponry perhaps offer a more fruitful avenue. Sword pommels have had significant coverage in the major typological works that build on Jan Petersen's studies of the early 20th century, such as those of Oakeshott (1960) and Peirce (2002). A distinctive, enamelled pommel series of late 12th-/early 13th-century date has been recently identified by Ashley and Biddle (2014). Protective and decorative copper-alloy scabbard and sheath chapes relating to daggers and knives have been brought together recently by Woods (2010; 2021) and Bishop (2016; 2020), but such work is yet to be widely known. Other objects thought to have operated within similarly socially restricted circles include so-called 'binding strips', thought to have perhaps adorned caskets owned by the elite and kept in their castles and manor houses (Ashley 2016, 282; but see below, Section 6.3, for a reappraisal), and swivel fittings often thought to be used during hunting (Hall 2005, 84-85). Work on these latter objects – for which metal-detected finds are helping develop the corpus and provide new perspectives – is also in its relative infancy.

2.4.2 Recent synthetic studies and methodological themes

The extent to which the object-specific studies of the previous section have been incorporated into recent synthetic studies or historical narratives has been limited and variable. The high numbers and wide variety of dress accessories have arguably hindered such studies to date. Indeed, one of the most recent object-specific studies called for the integration of spatial patterning for brooches with that of other metalwork for its socio-political and socio-economic potential, including elucidating the regionality of dress practices (Weetch 2014, 384-385). The magnitude of the enterprise is underlined by the fact that this was precisely the call made by Thomas (2000a, 299) nearly fifteen years earlier. As noted, work regarding strap-fittings, buckles, hooked tags and finger-rings is less developed than for brooches and strap-ends, despite a specific appeal by Thomas (2000a, 299) for studies into hooked tags. Work on these two, main object types have, between them, made significant contributions to knowledge regarding the application of the main art styles beyond their traditional elite and ecclesiastical object-domains, and of production centres and distributions: things all inconceivable to Hinton (1975, 171) over 40 years ago. The recent studies into brooches are demonstrations of research into identity, adopting theories of agency to argue for the ability of such objects to help negotiate identity in this period. Kershaw's work argued both for significant Scandinavian female settlement in the Danelaw and continued contact with the homelands, with jewellery being

used to express social difference into the Second Viking Age (Kershaw 2013, 250). As noted, some have considered this focus on the ethnic aspect of identity to be under-contextualised, and therefore to the detriment of a more nuanced appreciation of the multiple identities at play in this region and beyond (Weetch 2014).

Overarching studies of equestrian equipment have also been underdeveloped, though due to the problems of identification outlined. Although the range of known fittings was considered by Fuglesang as early as 1980, in light of present knowledge, a lack of precision regarding bridle cheekpieces in particular is notable (Fuglesang 1980, 44). Later works have brought together a more wide-ranging corpus, though, as noted, it is limited to non-ferrous artefact types; as their function had only recently been confirmed, Graham-Campbell's overview of the early 1990s only included stirrup-strap mounts in a footnote. Williams's (2007a; 2011) surveys of Anglo-Scandinavian harness fittings are largely exercises in identification, classification and dating. Discussing the Danish material, Pedersen (1999) has offered a model for an integrated analysis of equestrian equipment: bridle fittings (cheekpieces), stirrups, stirrup-strap mounts and stirrup terminals were considered together and their respective distributions mapped (aggregated in Pedersen 2004, 51, fig. 4). Her interpretative focus was on the socio-political and socio-cultural links between England and Denmark in the 11th century; these were also considered in later Danish works incorporating these data (Pedersen 2004; Roesdahl 2007; Ulriksen 2011). The only comparable synthesis for English finds was conducted by Sheeran (2009), based on the VASLE dataset, and included the same artefact types, to the exclusion of harness pendants, spurs and ferrous pieces. Its conclusions were also socio-cultural, though with a status dimension, claiming these objects as elite items. However, a contextual reappraisal of status afforded through horse riding has been demanded in recent years by the sheer numbers of items of equestrian equipment recorded, for example of stirrup-strap mounts (Hinton 2005, 157; 2013, 7). Overall, none of these syntheses are exhaustive in terms of object type. Nor do they cross the chronological boundaries imposed by rigid art-style dating - to include, for

example, later harness pendants – and none offer nuanced assessments based on either art style or typology. In that it approaches such evaluations, Goßler's (2011) study is noteworthy, as is its limited consideration by English scholars.

Finally, work is decidedly patchy regarding the artefacts grouped above under 'elite' objects. Simultaneously highly developed and unexplored, it is also generally under-theorised, although recent work has gone some way to address these omissions, with swords having recently been submitted to approaches employing artefact biography (Brunning 2013). This limited exploration is perhaps due to the identity associations of such objects being considered axiomatically elite (see Section 1.2.2). Investigation of certain object types, due to their largely ferrous nature, has also been somewhat immune to the influx of finds from metal-detecting. Recent work has increasingly considered sheath/scabbard chapes (e.g. Bishop 2020), while other non-ferrous items will be further studied here alongside them (Chapter 6).

At first glance, the lack of synthetic studies noted is remedied by two recent overviews which bring together the above main groups, and other artefacts besides. The first is a general survey of 'material culture' between c. 950-1150 by Brett Hammond (2013). Objects, mostly metal ones, are described and illustrated in this book, but not discussed in terms of spatial of contextual patterning – both are made difficult by the sourcing of many examples from old collections or from metal detecting. However, this volume is one of few places where ironwork sits alongside non-ferrous artefacts and where a large range of functional categories is covered. The second collation focuses on nonferrous artefacts, drawing its examples almost exclusively from Norfolk. In a book chapter, Steven Ashley (2016) attempts to marry finds from the countryside discovered through metal-detecting with examples excavated from high-status sites, between the Conquest and c. 1200. In so doing he covered several functional categories, from dress and military equipment, to furniture/locks and trade/exchange. The work occasionally makes assumptions regarding status associations and relies heavily on decorative traits for dating. Collectively, this pair of overviews begins to provide a handlist of the range of

metalwork current in the period considered; we will explore this range further in Chapter 3 before outlining the specific object types chosen for study. The analyses presented in this thesis will move beyond the chronological and geographical limits of pair of two overviews. Syntheses provided here will be less reliant on dating by art style and make fewer assumptions about contextual associations for metalwork items, thus building on many of the important single-object studies.

Three main methodological themes may be drawn out of this historiographical survey. (1) A first is the temporal division imposed by the Norman Conquest of 1066 and concomitant demise of late Saxon England, perceived somewhere around 1100, discussed above (Sections 1.3, 2.1.1). For the London exhibitions of the 1980s the cultural fault-line was 1066 itself, no doubt due to the prominence of the date in the public imagination. For major museum catalogues (e.g. Wilson 1964; Hinton 1974) and many of the key recent object-specific studies (e.g. Ross 1991; Thomas 2000a; Brunning 2013; Kershaw 2013; Weetch 2014) an end date of 1100 was self-imposed, despite the continuity of each object type later in time, and an acknowledgement of continuity by many (e.g. Ross 1991, 12; Thomas 2000a, 299; Weetch 2014, 348). A similar temporal fracturing may occur in studies where art style, particularly the late Viking-Age art styles, forms the basis of identification and dating. Though this type of artificial temporal break is notable in the study of equestrian equipment (e.g. harness pendants) it is also true for many dress accessories, from brooches to hooked tags. In light of many years of revisionism regarding the effects of the Norman Conquest that emphasises continuity, particularly in lower social strata (Section 2.1.2), a number of commentators have therefore advocated studies of material across the dividing line of 1066/1100 (e.g. Egan 1999, 31), and, by extension, across different types defined by art style. Such a framework is offered here as part of a longitudinal model which does not presume change in material culture around this date (e.g. Vince 2003). (2) A second theme is the situating of England within a wider, continental context, where, incidentally, dates other than 1016 and 1066 are thought of as significant (e.g. Legner 1972). This has

been attempted, to an extent, for objects such as brooches, stirrup-strap mounts and sheath chapes, but much more can be done. (3) Finally, the divide between non-ferrous and ferrous datasets, dictated by survival, is one that could be usefully dismantled for the complementary information provided by each group, as demonstrated by Goßler (2011) for horse equipment. However, in a project heavily dependent on metal-detected finds it is the first two themes that will be prioritised in a way the last unfortunately cannot.

2.5 Summary

This chapter has sought to demonstrate the viability using metalwork of the 11th and 12th centuries to consider changing aspects of social identities. However, the level of synthesis across object types aimed for in this study has few scholarly precedents. Existing object-specific studies have been fuelled largely by an influx of metal-detected finds, particularly those recorded through the PAS; cumulatively they help challenge notions of a paucity of metal-detected dataset might have aided the paucity narrative disproportionately for this period.

To start to explore identities in this period, this study seeks to build on previous works – specifically advances in artefact dating (Section 2.2.2) – and to operate across and beyond the constraints imposed by 1066, to offer an improved narrative of metalwork in this period. Whilst acknowledging the reasons for the respect shown towards traditional period boundaries in various artefact studies, primarily those divisions structured by scholarship on the Norman Conquest, here a longitudinal approach will be adopted. This will allow for comment on the consequences of conquest (1016 and 1066) by situating them in the context of longer-term changes, and thus add to the growing archaeological contribution to debates regarding their socio-cultural effects and intersection with existing trajectories of development. It will also contribute to the growing corpus of academic work using the PAS dataset, a body of work with little precedent for the medieval period. In addressing this

gap, this project applies the methodologically mature approaches from which studies of other periods have benefitted. These approaches will be outlined in the next chapter, alongside theoretical approaches to the study of identity.
Chapter 3: Methodology

In the previous chapter the potential for a wide-ranging study of metalwork in the period c. 1000-1200 was set out, with arguments for a dearth of metal items in this period starting to be challenged by the metal-detected corpus collated over recent decades. This chapter reiterates the aims of this study along the social lines deemed viable, and sets out the methods used to achieve each of its objectives in detail. The dataset is summarised at the end of the chapter, before the groups of objects are considered in detail in the case studies that comprise Chapters 4, 5 and 6.

3.1 Aims, objectives and general approach

This project aims to use metal archaeological small finds to approach the dynamics of different social identities across the period c. 1000-1200. In the attempt, it faces the scholarly challenges raised in Chapter 2, and in so doing seeks to provide answers to the questions raised at the start of the thesis, namely:

- Was there a paucity of 11th- and 12th-century non-ferrous metalwork in England? If so, why, and was it universal?
- How, and why, did approaches to the manufacture and decoration of metalwork change over the period?
- What spatial patterning can be identified? Does this reflect different material responses to the conquests of 1016 and 1066, or other, longerterm trajectories?
- How did changes in metalwork relate to identity construction, either in relation to these political events and/or wider social trends (for example, local status strategies)?

To approach such questions, and drawing on recent scholarly developments noted in the literature review, we need to take both a 'long view' and a 'wide view' of the period. As Liddiard (2005) advocated, we should address conquests as processes of transition – rather than focus solely on 1016/1066 and its immediate aftermath. Liddiard (2017, 125) offers a generational framework for discussions of cultural exchange, discussing the inheritance of the Norman Conquest but also novel societal dynamics within even one generation of 1066. Such frameworks allow us to place the impact of the conquests in wider temporal trajectories, and to assess them relative to other drivers of change, for example the religiosity which may have inspired major changes in certain animal and food cultures around AD 1000 (McClain and Sykes 2019, 96-97), or the growth of urban life (Griffiths 2011). This approach also allows insights heretofore inhibited and constrained specifically by the historiographical dividing line of 1066/1100. A longitudinal method has already served other subject areas well: zooarchaeology (Sykes 2007), ceramics (Jervis 2013), or, more broadly, onomastics (Chetwood 2018) and Loveluck's (2013) overview of archaeological evidence.

The adoption of a 'wide view' similarly allows changes observed in insular material culture to be contextualised within broader regions, allowing us to better assess the impact of conquest, and minimising the potential for making reductive arguments (Stringer 2019a, 2). This is recognised, for example, in Oliver Creighton's (2012, 148-149; 2018b, 368) recent calls for an internationalising approach to castle studies. Even in recent work, with the exception of studies such as Sykes's (2007), near continental evidence (e.g. from France or the Empire) has been somewhat neglected. Luc Bourgeois (2018, 313) has criticised English scholars' propensity to turn to Scandinavia for comparisons, to the neglect of contemporary (near) continental material (also Loveluck 2013, xii). This thesis will deploy both Scandinavian and continental

74

material, as necessary, to provide context to changes in material culture in England across this period.²⁰

This broadly contextual approach will be adopted both at the macro and micro scales. Alongside longitudinal approaches, this will enable us to move beyond the constraining effects on scholarship of the Norman Conquest, set out in earlier chapters, allowing metal small finds to play their part in elucidating socio-cultural dynamics in the 11th and 12th centuries.

Before introducing the types of objects that form the sample used to approach these questions, and the methods used to deploy them in this cause, we focus in the next on studies of identity in archaeology and how we might specifically approach ethnic, elite and urban identities in this period from a methodological point-of-view.

3.1.1 Archaeologies of identity

Archaeologies of identity have long been pursued, though have become more overt through time (Meskell and Preucel 2004, 127), especially regarding the medieval period (Hinton 2009, 453). The term 'identity' requires clarifying within a range of definitions from personhood to group identities, lest it lose its utility as an analytical tool (Brubaker and Cooper 2000, 1, 6-7). Here, identity is pursued in terms of group dynamics, put by Díaz-Andreu and Lucy (2005, 1) as: 'individuals' identification with broader groups on the basis of differences socially sanctioned as significant'. Historically, gender and ethnic identities have been examined in archaeology in the form of single-issue studies (Díaz-Andreu and Lucy 2005, 6), but these categories did not operate in isolation, and that to consider them singly overlooks their interaction (Meskell and Preucel 2004, 121-123). For every individual, self-identification could be with many, but differing, groups (Díaz-Andreu and Lucy 2005, 2; Griffiths 2011, 72; Jervis 2012, 475; Weetch 2014, 383; Ten Harkel 2018, 3), and the extent to which a particular 'facet' of one's identity is activated depends on the given

²⁰ This study has been prepared with Brexit as a prominent part of the political background; it is acknowledged that this is bound to have affected my approach.

situation (Brubaker and Cooper 2000, 8; Webber 2005, 139). This has the potential to not align directly with an external attribution of identity. While a holistic approach to identity is desirable it presents challenges within the confines of practicable study; here, the focus will be on ethnic, elite and urban identity, as these facets were felt to be best represented by the evidence as it emerged from analysing the data. Their intersection with other identity layers, not least gender, will be borne in mind, though gender will not in itself constitute a focus of study here. In Chapter 1 we considered historical background that frames analysis of these aspects. Here, work on the three themes will be referred to further in turn, having set out recent approaches to the study of identity in archaeology and how that might affect the gathering and analysis of data.

Contemporary thinking on identities emphasises that they are not inherent (biologically determined) nor are they fixed (Griffiths 2011, 72; Hadley 2020, 176). Rather, identities, though embedded in daily routines, are constructed through interaction and often are 'operationalised' as part of conscious strategies. This 'instrumentalist' approach has won out, largely since the work of Frederik Barth in the late 1960s; although its facets are perceived to be fluid and situational (Jones 1997, 143), its fluidity is not without limitation, being informed by social values. An approach to identity which takes a broadly instrumentalist view acknowledges that group identities are not normative, and that groups are therefore not homogeneous, bounded entities (Lucy 2005, 86). This raises questions for how group identities can be identified in the archaeological record.

The invocation of material culture in identity construction may not direct or linear but it can be an active component (Jervis 2012, 454; 2013, 456). That is, archaeological objects do not simply reflect the enaction of past identities but also were active in their creation and maintenance: as Gosden (2005, 197) put it, 'objects shape people and their social relations'. The meanings of objects though, are contingent upon social contexts (Hicks 2010, 74). From a methodological viewpoint, we must take care to take a contextual approach (Lucy 2005, 87), certainly before advocating that identity can be sought simply in artefactual correlates of form (Jones 1997, 27). In processual archaeology, identity was located in artefactual style, which had communicative properties (Hicks 2010, 45). According to Wiessner, her 'emblemic style', invoking group affiliation, was the more likely dimension of identity to leave a distinct signature, particularly in areas in which power dynamics were unbalanced (Dietler and Herbich 1998, 260), or in times of stress (Jones 1997, 110; Hadley 2011, 235). Beyond style, identity has been sought in social practice, as discerned through patterns of production and use (Sykes 2005, 73; Lucy 2005, 87): the material effects of Bourdieu's habitus. A recent example relating to the Norman Conquest cited above (Section 2.1.2), is Ben Jervis' (2013) analysis of sooting residues on ceramic vessels as a way of reconstructing cooking practices. We need therefore to assess how objects were used as part of strategies, or even particular practices, by placing them in their wider geographical or socio-political context (Pitts 2007, 696). As we approach different identity facets, be they ethnic, elite or urban, we must therefore foreground a contextual approach (Gustin 2017, 214).

Ethnic identity

Ethnic identity is directly relevant to the period discussed, not least with two episodes of conquest in 1016 and 1066 (see Section 1.2.1), but also in the light of continuous immigration and internal movement (Hadley 2020). At the outset it is worth making the basic point that ethnic identity cannot be mapped straightforwardly on to cultural identity, or artefactual patterning (Abrams 2012, 22), as had once been assumed (Hadley 2003, 46; Ten Harkel 2018, 1), nor may one assume that it prevailed over other identity facets or was even operationalised through material culture.

The 'instrumentalist' approach to the mutability of identity in various circumstances allows for rapid acculturation through culture contact where migration has taken place, although this need not be the case (Jones 1997, 73). For both the Viking Age and the Norman period the concept of diaspora has been recently invoked, which perhaps lacks some of the 'baggage' of colonial conceptualisations (Abrams 2012, 18; Stringer 2019b). The concept allows for a further dimension in processes of assimilation of groups once overseas, namely continued contact with the homelands; this may modify such processes of acculturation and hybridisation, as new identities were being constructed (Abrams 2012, 34). At the start of the period, while Cnut 'rapidly assimilated to the norms of English royal behaviour and identity' (Insley 2020, 5), contemporary immigration may have provided opportunities for the (re)activation and deployment of Scandinavian identities. Later, the evidence of contemporary and earlier gesta historians is that there was a keen sense of Normanitas in the minds of the conquerors of 1066, which included core concepts such as military prowess, strong leadership and piety (Webber 2005, 38, 127, 130), and that the gens Normannorum had own origin legend (Loud 1982, 113). Theirs was, furthermore, a group distinction externally ascribed by contemporaries (Foerster and Burkhardt 2013, 8). Standard models of conquest suggest that relatively small numbers of conquerors lead to 'the disappearance of the conquering influence' (Webber 2005, 19), put by Burmeister (2000, 552) as a lack of 'lasting influence on the material culture of the immigration society'. The post-Conquest period was characterised by ethnic hostility until it relatively rapidly ceded to assimilation (Thomas 2003; Hadley 2011, 237), although the amount of time a distinct Norman identity was preserved has been debated.

Initially, the situation in England after the Norman Conquest allowed for a novel self-perception, as 'insular Normans', on the part of the Norman aristocracy (Sykes 2007, 97). By the mid to late 12th century, at least, the supplanting of a Norman identity by an English one – via a hybrid one – has been attributed in no small part to intermarriage (Hadley 2011, 237, 246; Carver and Molinari 2020, 150). It is not the end point which interests us so much as the process of moving from initial ethnic hostility to acculturation (Foerster and Burkhardt 2013, 3). Specifically, we seek to establish whether material culture played a role in either phase, and whether this had specific spatial dimensions.

Elite identity

Determining those who wielded power in the past from the archaeological record is a longstanding endeavour (Babić 2005, 67), although less so now, perhaps, than during the processual search for those prominent in society when they were sought primarily through the burial record using positivist epistemologies (Díaz-Andreu and Lucy 2005, 8). Such identification was often, more simply, predicated on naturalised assumptions about power and wealth (Loveluck 2009, 139-140), particularly during archaeology's culture-historical phase (Babić 2005, 71). Archaeologists have recognised both that power and status are structurally heterogenous - involving ideational factors as well as economic ones – and that they are being constantly negotiated through material culture, potentially in different forms depending on time and location (Babić 2005, 74-75). A good example of this is the access to luxuries observed amongst non-elite communities in late early-medieval coastal Flanders (Loveluck 2009, 142). Contingency of status in time and in space means that we need to guard against a normative approach to luxury or 'elite' objects (Sykes 2004, 82; Pitts 2007, 700; Leonard 2015, 487-488), even if it might be 'logical' to presume a connection between elite groups and such objects (Loveluck 2009, 141-143). As such, a method for assessing status needs to contextualise of numbers of objects involved, the materials utilised, and take into account their contextual associations, as well as attempting a diachronic analysis. Furthermore, we need to hesitate before simply translating assessments made of high-status indicators overseas to England.

Recently, and particularly in continental scholarship, there has been a renewal of interest in determining an elite material culture 'signature' (Krauskopf 2006; Bourgeois 2014a), not least in the rural sphere (Hurard 2017; Rego 2018; Lewis 2019, 219-228). In Germany, for example, work has taken place since the 1980s attempting to establish so-called *Barometerobjekte* for social status based on empirically-determined associations (Goßler 2009; Biermann 2020). While such an approach has validity, it needs to be relativised: that is, while a particular elite marker in Germany may also apply in England, it need not, or not have the same significance. Elsewhere, 'matrices' of criteria have been employed to determine hierarchies within elite sites based on their material culture signature, and, in turn, hierarchies within material culture depending on their contextual associations (e.g. Krauskopf 2005; 2006). In such work metalwork is often subordinated to other measures, such as traditional architectural ones, or, more recently, zooarchaeological approaches (e.g. Creighton 2012, 114; Bourgeois 2014a, 664-666). Moreover, the high numbers of artefactual measures used to discern these relative hierarchies – Krauskopf (2006, 199, fig. 4) used 47 measures – put such a technique beyond the scope of the present study in terms of quantity or primary material.

By the 11th and 12th centuries, the availability of commodities was growing with increased urbanisation (Section 1.2.3; Leonard 2015, 488). Due to the 'trickle-down' effect (Veen 2003, 409), and concomitant emulation by those further down the social hierarchy the consumption of luxury goods had started to become less socially meaningful for the social elite. By way of a response, and in an effort to maintain their status, the elite employed particular strategies. We have already encountered the concepts of 'exclusionary closure' and of consumption through 'distinction' when discussing a perceived paucity of 11th-century material. As noted in Section 2.2.2, archaeological correlates of elite activity may lie in both 'qualitative distinction' and 'quantitative distinction', the latter dimension harder to measure outside the site context.

Urban identity

We noted in Section 1.2.3 that a particular characteristic of the growth of urbanisation is a developing sense of separateness from the non-urban in this period. Letty Ten Harkel (2013, 172) has suggested that 'the collective identity of a town's inhabitants create the identity of the settlement', which seems reasonable. At the same time, it must be remembered that this is no simple equation; towns were full of nested groups made up of individuals who need not coalesce into a characteristic (urban) way of life (Poulsen 2013, 117), even when confronted with the 'other'. Furthermore, some settlements were more cosmopolitan than others and it is these that we might see the mix of cultures that prompted experimentation in fashions in opposition to a relative conservatism in the countryside (Griffiths 2011, 164).

The archaeological correlates of an urban identity have sometimes been taken to reflect this cosmopolitanism, consisting of hybrid identities to which diverse objects contributed (Gustin 2017, 244). Elsewhere, monumental construction in stone has been seen as defining urban elites in this period (Loveluck 2013, 365). A key recent contribution, already alluded to in Chapter 2, is Rosie Weetch's (2017) study of lead-alloy brooches from London. As with Ten Harkel's (2013b) study on non-ferrous dress accessories from Lincoln, she examined how metal products of the could embody developing urbanism, including urban production. In so doing she took a contextual approach, which carefully argued for an urban/rural opposition in brooch-wearing practice (Weetch 2017, 278). It is the nuance of arguments like this which inform the methodological approach taken here.

3.2 Methodology

To accomplish the aims and objectives set out in Section 3.1, the following stages must be worked through:

- To identify a sample of metal small finds pertinent to this period as suggested by the literature review, PAS database and by excavated examples – that have a sufficient critical mass, but can also contribute to the project's aims and objectives;
- To establish as fine-grained dating as possible for the object types selected
 (1). This process includes assessing existing typological schemes, improving their utility, and creating new schemes (as required);
- To establish trends in contextual associations for each object type (1) on a diachronic basis (as permitted by the dating evidence) (2);

- To establish trends in identity associations for each object type (1) on a diachronic basis (as permitted by the dating evidence) (2);
- To establish trends across object types (1), identity and contextual associations (3, 4) on a diachronic and spatial basis (as permitted by the evidence) (2).

These tasks will be treated in detail below, starting with how particular object types were selected for study (Stage 1). Once such choices were made – within broad categories of dress accessories, equestrian equipment and 'elite' objects (see Table 4, below) – to fulfil the remaining objectives, a wide range of information needed cataloguing for each artefact recorded, with particular data dictated by specific objectives. This was done using a bespoke database created using Microsoft Access. As a minimum, core data and locational data were required; this was recorded based on the structure of dedicated small finds databases, principally the PAS database. These, and the other key data categories, are set out in Table 3, and elaborated on below. Above all, as contextual an approach as possible was taken within the demands of gathering the large quantities required to confront problems of paucity and in order to adopt a longitudinal and international approach.

Naturally, precise locational information was required to locate objects to regions, sites or even areas of sites to suggest contextual associations (Stages 3, 5). Relevant objects were pursued in published site reports in as an exhaustive way as possible (for sites see Section 3.3). Where such information exists, stratigraphic details were recorded in pursuance of Stage 2 (see Table 3), with issues of residuality and intrusivity negotiated (discussed further below). Contextual associations were based on a self-assessed, basic site typology, with eleven dropdown options: urban,²¹ burh town, rural (no context), rural (elite settlement), rural (non-elite settlement), deserted

²¹ Urban during the period studied; attribution characterises deposition rather than modernday recovery. Cross-referenced against attributions of town hierarchy set out by Griffiths (2003, 100-101, fig. 3.5) for the United Kingdom and Ireland c. 1100, and with English Domesday boroughs (Darby 1977, 296-297, fig. 102), which, in turn, correspond well (though not entirely) with contemporary mint centres (Griffiths 2003, 78, fig. 3.2).

medieval village (DMV), ecclesiastical (urban), ecclesiastical (rural), castle (urban), castle (rural), not further defined. It is acknowledged that singular labels are restrictive; following Sykes (2010, 176), such attributions were made on a weight of evidence. Attributions need to be made with care, and as accurately as possible, for example, if considering a DMV, could an object be associated specifically with a croft or with a manor site? It is also acknowledged that a site's character may shift through time (Sykes 2010, 176) and that such shifts need to be recognised in the dataset.²² Identity associations were applied to enable Stage 4. These were ascribed for three major identity categories along basic dichotomies, with some nuancing (seven options on a dropdown): rural/urban; high status/low status (nuanced by 'mid status' – neither high nor low); religious/secular. There is an inherent danger in ascribing categories in such a way that nuance will be overlooked (Loveluck 2009, 141): sites both constitute a spectrum within these groups (particularly in status terms) and are polysemous, depending on the given societal actor. Again, a weight of evidence principle was invoked in the knowledge that any basic trends established would benefit from further scrutiny, insofar as a given site's contextual detail allows. Finally, to enable Stage 5, specific information regarding the manufacture and embellishment of objects was noted, mostly using dropdowns (see Table 3). A functional category (after Briand et al. 2013) was also carefully applied to each record to ensure broad coverage and allow for analysis at different levels.

Overall, the project database consisted of eight tables united by a unique reference (key field). In combination, 81 variables relating to contextual and identity associations could be examined across thousands of records; the hundreds of thousands of data outputs were investigated for patterning and trends in pursuance of Stage 5 (see Chapter 7), using multivariate approaches described below.

²² Goltho is an example of a (secular) elite site whose status did not change through time so much as how it might be labelled: from a (rural) elite settlement to a (rural) castle. The chronology of this change has been debated, thought now to have been in c. 1150, rather than c. 1080 (Creighton 2012, 100).

Table 3 Database fields grouped by key categories relating to project objectives

Core data	Locational data	Stage 2	Stage 3	Stage 4	Stage 5
	(context)	(dating)	(context)	(identity by	(identity across objects)
				object)	
Unique database	Country	Stratigraphic unit reference	Functional category	Identity	Primary material (10)
reference (e.g. PAS Find			(6)	associations (7)	
ID, Small find number)					
Object type	(European) region	Associated material	Contextual		Secondary material (11)
			associations (11)		
Classification	County	Assessment of residuality in unit		_	Method of manufacture (5)
Sub-classification	Parish	Terminus post quem/ante quem derived			Inlay
		from nearest relevant stratigraphic unit			
		data/associated material/site dating			
Description	Site name (as	Dating evidence (notes)			Surface treatment (23)
	applicable)				
Ascribed culture	Findspot grid	Evidence of repair/reuse			Openwork/solid
	reference				
Date range ascribed	Latitude/longitude		_		Reuse evidence
Dimensions					
Image (and associated					
metadata)					
Structural data (Date of					
discovery, means of					
discovery, current					
location)					

3.2.1 Identifying pertinent object types (Stage 1)

Led by the literature review and also based on a process described below, a dataset made up of particular object types was decided upon, separated under three main headings – dress accessories, equestrian equipment, and 'elite' objects. The object types considered are detailed in Table 4. As noted, this is not to deny that objects used by social elites are not included amongst either of the groups of dress accessories or equestrian equipment, rather a product of sampling was that initial analysis was performed separately for certain object types traditionally associated with elite contexts.

The object types chosen represent a sample from a range of metallic small finds from the period c. 1000-1200, set out in Table 5, arranged by 'functional category' and its corresponding 'domain'. The functional categories employed were devised as a global interpretative system following collaborative work within French Archaeology (Briand *et al.* 2013), representing a synthesis of previous major systems; they are part of an English scholarly tradition (e.g. Crummy 1983) which seeks to bridge the gap between object type and its context of use. As a comparison, the categories are presented alongside the 'activity categories' devised by Svensson (2008) for the same purpose of understanding and comparing object types. Reassuringly, they demonstrate broad overlap, but there is also minor discrepancy reflecting the element of subjectivity involved in their devising. It is also noted that their application is a subjective process, and one made challenging by the multiplicity of functional categories relevant for a given object type, and also ignorance regarding the function of certain objects, let alone their symbolic qualities.

For those categories in which metal artefacts play a role, tabulation shows a weighting towards dress accessories, equestrian equipment and, to a lesser extent, military equipment (Table 5, functional categories 11, 14 and 20, respectively). With many of the relevant studies leaning heavily on metaldetected data (e.g. Williams1997a; 2007a; Thomas 2003; 2004; Kershaw 2013; Weetch 2014) it is unsurprising that the PAS data follows a similar profile, as

85

Object type chosen for examination	Functional category	Domain	Activity category	Material
	(Briand <i>et al</i> . 2013)	(Briand <i>et al</i> . 2013)	(Svensson 2008)	
Swivel fittings (possibly for dogs, potentially for hunting)	2. Hunting/fishing	1. Production	8. Hunting/fishing	copper alloy, [leather]
'Binding strips'	7. Furniture/locks	2. Domestic	3. Home furnishing	copper alloy (predominantly), iron, [leather]
Buckles (thought to relate to dress); brooches; strap-ends (thought to relate to dress)	11. Dress	4. Personal	5. Clothing and personal adornment	copper alloy, lead alloy, tin alloy, silver, gold, bone, glass, gemstones, [textile], [leather]
Harness fittings, including bridle fittings; harness pendants and suspension mounts; stirrup-strap mounts; stirrup terminals	14. Animal equipment	5. Transport	7. Animal rearing	copper alloy, iron, [leather]
Dagger scabbard chapes	20. Military equipment	8. Military	11. Military objects	iron, copper alloy, silver, [leather]
Knife sheath chapes; strap-ends	24. Polyvalent	10. Unclassifiable	-	copper alloy, lead, iron, silver, [leather]

Table 4 Object types selected for examination, their functional categories, domains, and material associations

Table 5 Metal object types,	their functional	categories and	domains, and	' material a	ssociations
	····· · · · · · · · · · · · · · · · ·				

Function	al category	Domain	Activity category	Object type	Material
(Briand <i>et al</i> . 2013) (B		(Briand et al.	(Svensson 2008)		(predominant material in bold)
		2013)			
1.	Agro-pastoral	1. Production	9. Agriculture	Agricultural tools; shears	iron
2.	Hunting/fishing	1. Production	8. Hunting/Fishing	Swivel fittings; arrowheads; spearheads	copper alloy, iron
3.	Craft/food	1. Production	1. Handicraft/	Quernstones; loom weights; spindle whorls; tools for metalworking,	stone, iron, ceramic, lead?
	production		9. Agriculture	stoneworking, textile working, leatherworking, woodworking	
4.	Diverse production	1. Production	-	-	-
5.	Culinary activity	2. Domestic	4. Housekeeping	Serving and drinking vessels; cooking vessels; cooking implements	copper alloy, iron, wood, horn?, lead alloy,
					ceramic
6.	Lighting/heating	2. Domestic	3. Home furnishing	Lamps; candlesticks; firesteels; firedogs	copper alloy, iron, lead alloy, ceramic, stone
7.	Furniture/locks	2. Domestic	3. Home furnishing	'Binding strips'; keys; padlocks	copper alloy, iron, bone?
8.	Construction works	3. Structural	6. Building activity	Staples; hooks; nails etc.	wood, stone, iron
9.	Fixtures	3. Structural	6. Building activity	Hinges; hooks; grilles etc.	stone, wood, iron
	(doors/windows)				
10.	Plumbing/water	3. Structural	6. Building activity	-	lead
	management				
11.	Dress	4. Personal	5. Clothing and	Pins; beads; finger-rings; buckles; mounts; ringed pins; brooches; strap-ends	copper alloy, lead alloy, silver, gold, iron, textile,
			personal adornment		leather, bone, glass
12.	Toilet	4. Personal	5. Clothing and	Combs	bone, antler
	articles/medical		personal adornment		
13.	Transport	5. Transport	-	-	wood, iron
	equipment				
14.	Animal equipment	5. Transport	7. Animal rearing	Harness fittings; harness pendants and suspension mounts; stirrup-strap	copper alloy, iron
				mounts; bridle fittings; stirrups; stirrup terminals; horseshoes; horseshoe	
				nails; prick spurs; buckles	
15.	Navigation (water)	5. Transport	-	-	wood, iron
16.	Trade/exchange	6. Trade	2. Trade	Trade weights; tumbrels; balances	bone, copper alloy, lead, iron

Table 5 (c	cont.)
------------	--------

Functional category	Domain	Activity category	Object type	Material
(Briand <i>et al.</i> 2013)	(Briand et al.	(Svensson 2008)		(predominant material in bold)
(2110110 21 01 2020)	2013)			
17 Writing	7 Social life/	12 Administration	Seals: hullae: seal matrices	conner alloy lead ivory
	6. Trade			
18. Leisure	7. Social life	13. Leisure	Gaming pieces	antler, ivory, bone, copper alloy?
19. Musical	7. Social life	13. Leisure	Flutes	bone, wood
instruments				
20. Military equipment	8. Military	11. Military objects	Helmets; armour; swords, including pommels; sword and dagger scabbard	iron, copper alloy, silver
			chapes; arrowheads; axeheads; spearheads; mace heads; shield bosses	
21. Statuary	9. Spiritual/	10. Popular belief	-	stone, copper alloy
	2. Domestic/			
	7. Social life			
22. Belief/funerary	9. Spiritual	10. Popular belief	Church furniture; cross-staff fittings	copper alloy, silver, gold
23. Locks	2. Domestic/	3. Home furnishing/	-	-
(miscellaneous)	3. Structural/	6. Building activity		
	10.			
	Unclassifiable			
24. Polyvalent	10.	-	Hooked tags; scabbard/sheath chapes; book mounts; knives; strap-ends;	copper alloy, iron, silver
	Unclassifiable		buckles	
25. Indeterminate	10.	-	-	-
	Unclassifiable			

the PAS mostly records metal-detected finds (Section 2.2). A preponderance of the same types and categories of objects are shown for the PAS dataset in Figures 2 and 3, most notably for equestrian equipment (category 14), but also for dress accessories (category 11). The sheer numbers of particular object types brought to archaeological attention through metal detecting (as opposed to excavation) demand that relevant PAS data be pursued for the morphological, decorative and spatial information it can provide. The discrepancy in quantities recorded through these two sources is amply illustrated by late Saxon brooches (Weetch 2014, 35, table 2.1), sheath chapes, specifically Scandinavian and Anglo-Scandinavian brooches (Kershaw 2013), and stirrup-strap mounts. These are found through metal-detecting compared to excavation at a ratio of approximately 5:1, 8:1, 9:1, and 100:1, respectively. To disregard metal-detected data in the case of these four groups, would, at best, deprive researchers of c. 80% of their dataset. If pragmatism dictates that particular object types within these categories are favoured for further work, their contribution still needs to be contextualised in terms of the range of metalwork available for study, and specifically in terms of this thesis's social aims.



Fig. 2 Objects by type recorded through the PAS by century dates allocated on the PAS database

Just to use the most frequently occurring object types found through metaldetecting – as recorded through the PAS – would be to favour restricted functional categories, as demonstrated (e.g. Ashby 2008, 287; Figs 2 and 3). Duly, other object



Fig. 3 Objects by category recorded through the PAS by century dates allocated

types were considered (see Table 5), and the following chosen: swivel fittings, scabbard and sheath chapes and 'binding strips' – all understudied (mostly nonferrous) object types in their own right (Section 2.4.1). This also widened the range of functional categories, to include categories 2, 7 and 20 (see Table 5). In turn, the domains considered moved beyond just personal (4) and transport (5), to include production (1), domestic (2) and military (8). To go beyond this sample, and explore other object types, would have made the project unmanageable; there would also be difficulties in examining further object types using primarily metal-detected data. Compared to excavated data, metal-detected data has been demonstrated to overlook a large proportion of find types known from archaeological sites, notably, in metalwork terms, those made from iron. For example, for early-medieval settlements in Norfolk, Mary Chester-Kadwell (2009, 70, fig. 6.7d) demonstrated that over 50% of finds, being ferrous, would be unlikely to be captured through normal amateur metal detecting. In part this is due to the active discrimination against iron by metal-detector users who are seeking the 'most desirable' finds (e.g. Brindle 2013, 86; Leonard 2015, 490). Where iron objects are sufficiently diagnostic to be identified and dated – an issue in itself (Chester-Kadwell 2009, 72-73) – new object categories (such as agropastoral (1)) could be explored, or existing categories (such as military (8)) interrogated further; these tend to require a site-based investigation. As ceramics, bone and other non-metallic items are obviously also not picked up through metal detecting per se (Chester-Kadwell 2009, 67; Weetch 2014, 53), examination of

categories such as culinary activity (5), dominated by ceramics (Lewis 2019), or leisure (18), exemplified by gaming pieces in antler, bone and ivory, is similarly restricted here. The question therefore becomes one of whether the objectives of this project can still be fulfilled by considering this constrained range of object types, categories and domains (Table 4).

Examination of the sample object types detailed in Table 4 enables consideration of a number of social practices highlighted in the literature as relevant to this period. We have noted that one practice strongly associated with the male elite of the 11th and 12th centuries is deer hunting with dogs (Section 1.2.2.2), to which swivel fittings have been suggested to relate. Horse ownership and riding can elucidated by the range of equestrian equipment examined (see Section 1.2.2.1), and elite connotations problematised. Could it be that particular object types – such as prick spurs (Hinton 2005, 155) and, arguably, harness pendants – connotated 'elite' riding in the 11th century? Copper-alloy 'binding strips', often gilded, have been thought to be mostly from boxes or caskets (e.g. Ashley 2016), denoting portable wealth of the sort that required security measures (Brenan 2010 [1998], 66); this functional interpretation will be challenged in this study, without necessarily diminishing their social status (Section 6.3). Weapon accessories such as dagger scabbard chapes allow for a perspective on martial practice, with aristocratic associations (Svensson 2008, 342). In historical writing, such as that of Orderic Vitalis and William of Malmesbury, the warlike nature of the Norman gens was a recurrent literary topos (Loud 1982, 104), which was also played out through hunting (Sykes 2005, 73). It is suggested that the insights offered into such social practices are particularly pertinent for a society experiencing increasing social stratification (Felgenhauer-Schmiedt with Graham-Campbell 2007, 237; Sykes 2007, 96).

Furthermore, all of the above object types, through their recurrent or discontinuous use, were active in forming and maintaining personal and group identities. They were all, to a greater or lesser extent, objects of public display which operated within diverse settings, rather than restricted, private ones. It has been noted that a number of the object types selected for study have historically been characterised as providing insights into elite identity. These associations will be tested rather than assumed (Stages 3, 4). They will also be nuanced by other identity associations, given that identities are not singular but 'multi-faceted' in their nature.

Further to these object types, dress accessories offer a particularly clear avenue by which identity can be explored, here through brooches, buckles and strap-ends (Pitts 2007, 701; Svensson 2008, 200; Lund and Semple 2021, 18, 25). This is not to deny that the undecorated object may contribute to social identity, through an examination of its making suggested by Blinkhorn (1997, 120), rather that the semiotics of dress accessories can be read more easily. Certainly, many recent studies of dress accessories and jewellery have emphasised their contribution to identity construction (Hinton 2005, 1; Ashley 2016). There has, perhaps, been an over emphasis on the status component of identity, and also the cultural component, especially in a Viking or Anglo-Scandinavian context (e.g. Thomas 2001c; Kershaw 2009). This has been at the expense of gendered identities (though see Kershaw 2009; 2013), urban ones (though see Weetch 2014; 2017), or religious ones (though see Pedersen 2014a; Weetch 2014). Some studies, such as that of Pestell (2013), have explored multiple identities, though, again, in this instance within a Viking/Anglo-Scandinavian milieu. This thesis will update and further this work on intersecting identities across the artificially imposed divides of 1066/1100.

3.2.2 Establishing close dating for object types (Stage 2)

While taking a 'long view' of the period's conquests, and subsequent transitions, minimises the issue of a lack of fine dating inherent in much archaeological endeavour, it is still vital that dating is fine-grained as possible for each object type to approach questions of change through time. This endeavour is not aided by the fact that metal-detected objects make up the majority of the dataset (below, Section 3.3); these lack stratigraphic dating parameters. As such, other dating methods are required, chief of which is cross-dating using excavated examples. Occurrences of objects in sealed stratigraphic units can be dated by the date ranges attributed to associated material within the unit, and by material in adjacent units. These date ranges can then be aggregated to suggest periods of use for each object type, applying Terrenato and Ricci's 'balanced average' method (for date ranges of material within a stratigraphic unit) to all instances of a given object type. Where appropriate, this dating evidence will be presented graphically in the form of 'aoristic' graphs.





Beyond its visual nature, a benefit of the aoristic technique is its 'weighted' approach to time intervals, rather than representing dating through single time points (e.g. the central date of a chronological range). This allows more precisely dated objects to influence the overall distribution (proportionately) more than less-precisely dated ones. When using the aoristic approach the date range of each relevant stratigraphic unit is given a 'weight' of one; for a given stratigraphic unit this is then spread over all relevant segments of a chosen duration (e.g. one year/ten years/one century) to give a probability mass for each segment. These probability masses per segment are summed and represented on a graph – generated here using the *archSeries* package in R i386 (version 3.6.1); the summed probability distribution can be treated as an approximation of a frequency distribution (Orton *et al.* 2017, 3-5).²³ Visualising the spread of dating of relevant stratigraphic units may reveal discontinuities in the distribution, such discontinuities suggesting potentially intrusive or residual examples (Ferrarese Lupi and Lella 2013, 299). For example, in the sample graph presented in Figure 4 the small rise after the tail of the curve (in the late 14th century) may represent the influence of stratigraphic units containing residual objects; this can be compared with suggestions of residuality in the relevant site reports.

Occasionally dating evidence will be plotted following a 'Monte Carlo simulation', a modelling technique run using the same package in R. In such simulations the software chooses a date at random within the date range of a given object and assigns it to a segment, whose duration has been selected (e.g. one year/ten years/one century). This process is followed for all of the objects in the dataset examined and repeated multiple times (in the order of hundreds or thousands): Figure 5 provides an example. The plot of the results of the simulation provides a median for each segment (connected by the darker line in the figure), and surrounding confidence interval (the lighter band). Narrower bands around the median show a greater degree of confidence therein (the lighter bands in Fig. 5 represent a 97.5% confidence zone), and the prospect of less variability within the range. Both aoristic graphs and plotted Monte Carlo simulations of dating evidence should be treated as indicative and need to be compared with other sources of evidence, set out below.

As part of preparing such representations of aggregated date ranges of deposit for excavated finds, the integrity of each relevant stratigraphic unit was assessed. Consideration was given to the type of context in which the find was made, in conjunction with its assemblages, and thereby a broad assessment of the site formation processes involved. Prompted by changes to the paradigm that would have dismissed all deposits containing residual or intrusive finds (Evans and Millett 1992, 225; Berry 2008, 2), an assessment of residuality was made for a given unit, based

²³ As Orton *et al.* (2017, 5) have noted, to give equal weight to each probability mass per segment, or, put another way, to assume a uniform distribution, is arbitrary and may give the impression that the trend of a given object's deposit dates is later than it may have been. However, not least for consistency's sake, it is perhaps best to work in this way, as, for example, to bias in favour of probability masses per segment earlier in the range could be equally arbitrary.



Fig. 5 Sample frequency distribution after Monte Carlo simulation of a given dataset. Note the narrower confidence band (in light pink) around the c. 10th-century medians (red line), but the wider one for the c. 11th-century data.

either on the report or by this author, and the find given further consideration. In recent publications, it is noteworthy how few objects of this period can be dated by associated finds in sealed contexts. Proportions are further diminished by a reliance on metal-detected data: for example, only seven of 504 Anglo-Scandinavian dress accessories studied by Kershaw (2013) were stratified (1.4%). As noteworthy is the readiness of recent authors to dismiss data from contexts containing residual material (e.g. Kershaw 2013, 144), and thus overlook archaeological dating evidence (though this is not, by any means, universal). Consequently, the extent of residuality/intrusivity for a given unit was assessed either within the context of the site overall, or of directly adjacent units, as applicable. This was guided by ceramic measures which have been noted to best reflect the formation history of a site assemblage (Berry 2008, 112), and provide a guide as to how likely associated material is residual/intrusive (Evans and Millett 1992, 225).

Where this approach was restricted or not possible, other methods were used to improve artefact dating. Occasionally, dating can be achieved through associated data,

for example, provided by coin hoards or by dendrochronology (Kershaw 2010). Typologies have long been recognised as useful mechanisms for ordering and comparing data in time and space (Adams and Adams 1991, 9; Richards et al. 2009, 3.1.1). To maximise their utility they should be, in Gabor Thomas's phrase, 'instrumental'; for the purposes of this study, they ought to have a chronological dimension (Thomas 2000a, 46). Although typological schemes have been devised for many of the proposed object types, for example brooches (Deevy 1998; Weetch 2014), strap-ends (Thomas 2003; 2004) or stirrup-strap mounts (Williams 1997a), some of these cannot be considered to be instrumental, primarily as they lack time depth across the classification. Typologies were therefore tested, and reformulated where required on varying bases, for example on art-style grounds. As appropriate, new typological groups are suggested in the subsequent case study chapters, and, however derived, have been ordered chronologically using the framework of dated examples, art-style derived dating, or both in combination. It is hoped that these new typologies will have a utility beyond this thesis (to the archaeological sector and more wdiely), in the knowledge that chronological parameters are embedded in their structures.

Analysing representations of object types in art (in the broadest sense), provides a useful comparison for artefact date ranges, once biases and limitations are taken into account. It may be that there is a lag between an object's advent, or new decoration and its appearance in art, perhaps due to a slowness of its recognition within the circles of those producing a given artwork. On the other hand, iconographical representations suggest when fashions changed and thereby help frame the dating offered by archaeological examples, suggesting finds that might be residual. However, it has been noted that many types of portable antiquities commonly attested in the archaeological record are not readily represented in art. This is for reasons of simplification and stylisation (Owen-Crocker 1986, 149), while, due to their smallness, some were omitted entirely (Lewis 2008, 141). Further, using the art style of any decoration to date a given object can be problematic, with crossreferencing between objects made in different media often difficult. For example, it is neither necessarily straightforward to attribute dates to so-called 'Winchester-style' metalwork based on manuscript illustration or ivory work (Hinton 1974, xi), nor 'Romanesque' pieces based on architectural or sculptural comparanda (Campbell 1991, 161). On the other hand, art-style dating is a relatively mature procedure; dating for relevant styles is well developed, through identification by formal analysis (e.g. Fuglesang 1980 for the Ringerike style), and curvature analysis (e.g. Owen 1979 for the Urnes style).

Overall, dating from excavated contexts, evidence from iconographical representation and art-style dating can be 'triangulated' to establish the most likely period of use for a given object type (Weetch 2014, 47), and cascaded within typologies where possible.

3.2.3 Establishing contextual association trends for object types (Stage 3)

This aspect of investigation is predicated on the assertion that the social significance of an object is contingent on its context of use, be that social, spatial or chronological (Pitts 2007, 701; Ashby 2011, 12, 16). From the geographical point-of-view, if distributions of groups of archaeological finds are to be used to confidently argue for cultural associations, then biases in the datasets utilised need to be accounted for, whether PAS-derived data or that from excavations. The work of Robbins (2013) on PAS data allows for both sampling and collection/reporting bias to be taken into account when discussing spatial distributions (see also Brindle 2013, 74), over and above taphonomic factors. To deal with amateur collection bias both Robbins and the VASLE project advocated the mapping of factors constraining metal detecting, at all scales of analysis, though only the most extensive at a national level (Richards et al. 2009; Robbins 2013, 61-62, 70; 2014, 48, fig. 4; Taylor 2014, 58). Factors include urban areas, upland areas (beyond the cultivated zone), bodies of water and wetland areas, and areas where permission to metal detect might not be granted – such as Forestry Commission, National Trust and Ministry of Defence land.²⁴ Elsewhere, similar constraints, plus structural factors shown to affect the location of metal-detecting, have been aggregated in what has been termed an 'affordance surface' (Robbins 2014, 59, fig. 21; Cooper and Green 2017, fig. 4); this can be overlain by point data to

²⁴ For a full list and the distinction between 'hard' and 'soft' constraints and their relative importance see Robbins (2014, 40-47)

contextualise the distribution of the latter. In Figure 6 a constraints map is shown, with a plot of the project dataset. In general, the findspots correspond well with constrained land both at a national and a micro level in England and Scotland. On the Continent, data for particular constraints was not obtained, but certain gaps in the distribution can be explained by large expanses of water, such as the Limfjord (Denmark), or the former Zuiderzee (north-west Netherlands). While suggestive, however, one cannot necessarily assume either the presence or absence of artefacts where such modern-day constraints operate. For other areas, such as the Wash and the Weald (Fig. 6), it may be assumed that gaps in distributions reflect historical absences, as constraints are mostly absent in those areas. Having set out these distributional biases here, and though they will be borne in mind, they will not feature explicitly in spatial analysis henceforth; instead, 'control mapping', discussed next, will be favoured.



Fig. 6 Constraints map with the overall dataset plotted (red dots). For England, constraints shown (in yellow) are a combination of the following: access land under The Countryside and Rights of Way Act (2000); Sites of Special Scientific Interest; the National Forest Estate for England. For Scotland, the National Forest Estate for Scotland is shown. The 'control mapping' method contextualises bias in finds group distributions by comparing subsets of material to wider sets generated in the same way. Discrepancies are likely to approximate to patterning that essentially has an historic or archaeological foundation. This approach has been taken with regard to metal-detected material on numerous occasions (Taylor 2014, 59; Robbins 2014, 52-53, fig. 8). It can be exemplified by the comparison of period-specific datasets to wider, often national datasets (Richards *et al.* 2009, 2.5); by a particular object type against a control dataset of the same object type from other periods (Weetch 2014, 56, fig. 2.8; Donnelly *et al.* 2014, 47, fig. 3); or a particular object type against different object types from the same period (Weetch 2014, 58, fig. 2.9). A good example of the last is to map against single finds of coins as a control; a map of relevant coins recorded on the Early Medieval Corpus database has been produced by Bevan (2012, 497, 499, fig. 3). Coinage can be closely dated, both in terms of manufacture and use, given that *renovatio monetae* dictated relatively short circulation of coin types (a matter of a few years), until the 1150s (Archibald 1988).

Control mapping can similarly contextualise distributions of different object types and categories recorded from development-led excavations, as established from what has been described heretofore as 'grey literature'. Even though the urban component of such activity provides a key counterpoint to the primarily rural dataset offered by the PAS (Robbins 2014, 66, fig. 22), control mapping is necessary as such data is no less susceptible to collection bias than metal-detected data (Blair 2013, 6, fig. 2; Evans 2015, 4.1, fig. 5 for base maps). As Evans (2015, 4.1) noted, biases need equally to be countered for 'research' driven investigations, by both academic institutions and community-based research groups. Given the variability of geographical spread of unpublished reports in the ADS' Library of Unpublished Fieldwork Reports ('Grey Literature Library'), mapped by Evans (2015, 4.2, fig. 10), and problems for its database, whose metadata is not sufficiently sophisticated to conduct research on small finds, this project focused on published data. Overall, an aggregated 'base map' compiled from PAS data (including coins) and excavated data will help overcome the biases inherent in each dataset. This base map, built from many thousands of datapoints, is presented in Figure 7 as a combined point and 'heat map'. For the latter, finds were totalled within hexagonal areas 15km across, and

99

represented (above a given threshold) based on their fraction of an overall total: increasing density is indicated by intensifying shades of red. This sort of density mapping can help show patterning otherwise obscured when large amounts of point data is plotted (Robbins 2014, 55).



Fig. 7 Overall dataset plus contemporary coin data presented as a combined dot distribution and heat map. The latter provides a 'base map' against which patterning can be measured within the dataset.

Comparison with mapped historical data provides a further means of contextualising finds distributions. The primary data source for this period is the Domesday Book of 1086 from which population data can be derived for most of England. A hypothetical population surface has been recently constructed and mapped by Bevan (2012, 496-497, fig. 2) and was used for this purpose by Donnelly *et al.* (2014, 53, fig. 9). Further sources can be used to contextualise the impact of commercialisation, as inferred from the densities of markets, boroughs and fairs (Oksanen 2015, 189, 196, maps 2.2, 4.2). Similarly, the distribution of mint centres can be used as a proxy for locations of metalworking and zones of availability for metal items (see North 1980, 148). Additionally, the results of control mapping using the project dataset can be visualised on the same map, an example of which is shown in Figure 8. This is achieved by mapping the difference between a subset of the dataset rendered as a fraction of it for a given area (in this case a 15km wide hexagon), and a wider dataset (e.g. that underlying the base map) also rendered as a fraction of its total. The resulting range of discrepancies can be shown as a spectrum gradient, where different colours show relative levels of activity (Fig. 8). These relative extents of activity are not elucidated by conventional point distributions, but it must be borne in mind that in trying to foreground discrepancies such maps may not display the full range of a given distribution.



Fig. 8 Sample relative distribution. Here a given subset has been compared to the base map (Fig. 7) and is represented as a spectrum to indicate how relatively common/rare these objects are.

Moving to the level of the site, contextual associations will be applied to excavated objects according to the typology of sites given above. This aims at providing a 'social distribution' of artefacts as practised, for example, in the study of Roman coins (Reece 1991), medieval coins (Rigold 1977), Roman metal artefacts (Eckardt 2005) or early-medieval/medieval faunal remains (Sykes 2007). As studies in other domains of archaeology remind us, social significance resides in where and to what extent things were consumed, not simply in the objects themselves (Sykes 2007, 95). Given the large dataset involved, positive trends in contextual associations were sought using correspondence analysis, for object types and for discrete traits, following studies such as that by Barclay *et al.* (1990, 42-73) for medieval Winchester. Such analysis was conducted here using the *MASS* package in R i386 (version 3.6.1) following guidance prepared by Baxter and Cool (2010), and working with presence/absence data for the variables examined.

3.2.4 Establishing identity association trends for object types (Stage 4)

Identity associations for each object type were marked up based on established connections in the literature, be they based on pictorial representations, literary references or archaeological data. Associations were not assumed to be axiomatic, given identity as a situational construct (Pitts 2007, 694), and each form of evidence was used with care. The robustness of identity associations was therefore critiqued for each object type in each case study. Pictorial evidence, such as that from manuscripts or sources such as the Bayeux Tapestry can be very useful, but is known to be susceptible to the copying of earlier models both in terms of individual elements and design schema, particularly to imbue the contemporary with the authority of the antique world (Carver 1986, 117; Lewis 2007a, 101). Methods to try to navigate this issue include comparing depictions of artefact types across manuscripts, particularly direct copies such as the 11th/12th-century 'Harley Psalter' (British Library Harley MS 603) and its prototype, the 9th-century 'Utrecht Psalter' (Utrecht Universiteitsbibliotheek MS 32), to discern design innovation as opposed to reproduction (Carver 1986, 131). However, stylisation and simplification demand that various aspects the object groups are emphasised and others ignored; the problem of

omission cannot be surmounted. For example, scholars have noted the absence of depictions of archaeologically common dress accessories, including buckles, hooked tags, strap-ends and pins (Owen-Crocker 1986, 149; Lewis 2008, 141; Bourgeois 2018, 312-313).

The general absence of British data from grave goods in this period means that while alternative sources of burial data may be used, these should be approached with care. This is to acknowledge methodological approaches which recognise the symbolic and socially constructed nature of burial practice. Burial data does not passively reflect the social status of the buried, rather status is actively negotiated by those participating in the burial ritual (Kjeld Jensen and Høilund Nielsen 1997, 35; Pearce 2013, 8; Loveluck 2009, 144). Furthermore, while burial data from continental and Scandinavian contexts has been used to elucidate practices in Britain, there exist dangers of generalisation and anachronism.

Although gendered associations are not a focus here, a useful example which with to consider the challenges involved in evaluating identities is provided by recent debate regarding the associations of 9th- to 11th-century brooches. Here, archaeological evidence is provided by continental and Scandinavian burial data which associates brooches with graves whose occupants have been sexed as female (Weetch 2014, 321). Though documentary evidence from wills accords with this (Weetch 2014, 321-322), pictorial evidence, for example from manuscripts such as the Benedictional of St Aethelwold (late 10th century), or other sources such as the Bayeux Tapestry (1070s) and seal matrices (e.g. Kershaw and Naismith 2013, 292, fig. 4), suggests that men wore brooches as cloak fasteners (Weetch 2014, 325). Such evidence therefore casts some doubt on the gender assumption largely implicit in work on Scandinavian and Anglo-Scandinavian brooches by Kershaw (2013), assumptions which have been called into question (Wicker 2013, 562; Price 2015, 305), especially for the Second Viking Age. Kershaw assumed these brooches to be associated with females, dismissing such objects as male cloak fasteners on practical, constructional grounds; as Weetch (2014, 326-327) pointed out, they may have acted as badges, or alongside other means of fastening. Guarding against assumptions, we can seek to identify the regularity and repetition of patterning that suggests strong association, stopping short of invoking tests of statistical significance – as has been done elsewhere (e.g. Hayeur

Smith 2003, 230) – due to lack of numbers once the dataset is broken down to this level.

Overall, ascribing identity associations is contingent on contextualising of numbers of objects involved, the materials utilised, and their contextual associations, to try not to make assumptions about relationships. Finer-grained analysis is possible by assessing identity associations by classified groups within object types. As with contextual associations, patterning within identity associations can start to be interrogated and visualised using correspondence analysis.

3.2.5 Identify trends in associations across object types through time (Stage 5)

Taking a panoptic view of an object's elements is predicated on all elements of an object, as instituted during the production process, forming part of the social meaning of that object (Dietler and Herbich 1998). This dictates that raw materials, manufacture methods (Wicker 1994; Ashby 2015, 17), formal qualities, non-stylistic tool trace evidence (Wicker 1994, 65), surface treatments and decorative art styles can all be examined through time to discern material style. Sindbæk's (2012) study of oval brooches provides an application of such an approach: he identified workshops based on formal compositions of designs as much as motifs. The above aspects were therefore noted during data collection to trace these, and identify positive identity and contextual associations, primarily using correspondence analysis. Such analysis allows for commentary that contextualises change in terms of discrete traits (rather than types or forms *per se*) that might be attributable to ethnic or cultural causes. Cross-referencing contextual associations will allow for an evaluation through time of changes in consumption of objects with given characteristics (Sykes 2005, 73), for example the changing status associations of lead-alloy objects argued for by certain scholars (Kershaw 2008, 266; G. Thomas et al. 2008).

3.2.6 Summary

This thesis sets out to consider the dynamics of different social identities in the period c. 1000-1200 using evidence from recorded metalwork that has survived in the

ground. Object types were chosen that would best achieve such an analysis based on the unrivalled opportunities provided by the PAS dataset. Fine-grained dating and typological reassessments for these object types are set out in the three case studies that follow (Chapters 4, 5 and 6), using aoristic plots and Monte Carlo simulations where applicable. This allows for the examination of change through time for the object types in terms of contextual associations, and identity associations; this aspect is similarly addressed in the following chapters. We will look beyond object form and decoration to examine changes in metalworking in this period through the analysis of discrete traits; traits can be mapped onto identity and contextual associations as well as examined in space and time using correspondence analysis. In sum, the approach taken allows for moving around different scales of analysis, from object type to wider groupings, from object form to discrete trait – all to seek to discern how social practices and identities interacted and were transformed through this period.

3.3 Dataset overview

Before turning to analyse the individual object types chosen, starting with three main types of dress accessories in Chapter 4, the underlying data is presented here in outline. A total of 11,804 records were made of objects from across north-western Europe, primarily from England (Fig. 9). This is due in large part to the significant dataset generated through the work of the PAS: PAS data form the vast majority of a major contribution of metal-detected finds from England (c. 91% of finds recorded from England, of which PAS records form c. 94%). Elsewhere in Europe, the presence of different legislative approaches to metal detecting,²⁵ plus the more recent establishment of schemes to record public small finds,²⁶ means that detector finds comprise a far smaller percentage of the dataset outside England (c. 34%).

²⁵ Including where metal-detecting is legal, but relatively highly controlled compared to England, such as with the Scottish Treasure Trove system. By contrast, in France hobby metal-detecting is essentially prohibited and few chance finds are reported, so there is no corpus with which to compare finds from England recorded through the PAS (Weetch 2014, 351-352).

²⁶ Publicly accessible finds recording schemes were established only during the lifespan of the present study: in the Netherlands (PAN, 2016), Belgium (MEDEA, 2017) and Denmark (DIME, 2018; note that the National Museum has maintained its own records of metal-detected finds reported through *Danefæ*).



Fig. 9 Finds recorded by country. Of the large quantity from England, the majority have been found through metal detecting, and the majority of these have been recorded by the PAS.

Objects not found through recreational metal detecting comprise around 14% of the overall dataset. Of these, about a quarter were either chance finds, had relatively rare discovery circumstances (such as building work), or had circumstances of discovery that could not be established. The remainder came from archaeological work – surveys, but primarily excavation (over 1,200 objects). It is these finds – from just under 400 sites – which can help contextualise object use. Figures 10 and 11 shows the sites from which objects in the dataset feature; Table 6 effectively provides an extended key, with references.²⁷ Sites were chosen primarily in reference to the material studied, with relevant material documented based on other references in the literature, plus an initial scoping of sites used by Sykes (2007, 3-8) in her zooarchaeological study of the period.

The three broad categories into which project dataset was divided, and the three or more object types concentrated on in each, are detailed in Table 7 (below). Within this largely metal-detected dataset it follows that the vast majority of the material is non-ferrous – indeed, 95.3% of the dataset is formed by copper-alloy objects. Figure 12 shows how primary materials are distributed across the basic site categories, in numerical terms as well as proportionately. Notable numbers of silver objects have been found (decontextualised) in the countryside, for example. The relatively few precious metal objects found in an urban context might result from a greater affordance for recycling there, though this can be no more than informed speculation. However, a high number of lead-alloy brooches (and brooch-like fittings) have been documented within the urban dataset; we turn to consider these, and other groups of dress accessory, in the next chapter.



Fig. 10 Object materials by different site type. The dataset is, overwhelmingly, of copper alloy (c. 95%), found through metal-detecting in the modern-day countryside. Notable proportions of lead-alloy material have been recorded from urban contexts, and notable numbers of silver objects also decontextualised in the countryside.

²⁷ The main resource, rather than given specific sections; for the latter see References, below



Fig. 11 Sites with relevant material considered in this study – England and Wales


Fig. 12 Sites with relevant material considered in this study – outside England and Wales

No.	Site	Reference
Eng	land	I
Cori	nwall	
1	Launceston Castle	Saunders 2006
Dev	on	I
2	Lundy, Bull's	
	Paradise	Unpublished
3	Lydford Castle	Saunders 1980
4	Totnes Castle	Rigold 1954
5	Exeter, Bartholomew	Alley 1001
	Street East	Allan 1984
6	Exeter, North Street	Allan 1984
7	Exeter, Goldsmith	
	Street	Allan 1984
8	Exeter, Queen Street	Allan 1984
Sorr	nerset	
9	Taunton, Hawke's	Leash 1094
	Yard	Leach 1984
10	Taunton, Benham's	Looch 1094
	Garage	Leach 1984
11	Curland, Castle	Davison 1972
	Neroche	Davison 1972
12	Cheddar, Cheddar	Pahtz 1070
	royal palace	
13	Glastonbury,	Rahtz and Hirst
	Beckery Chapel	1974
14	Glastonbury,	Gilchrist and
	Glastonbury Abbey	Green 2015
15	Wells, Old	
	Archdeaconry, Wells	Williams 1997a
	Cathedral Close	
Nor	th Somerset	1
16	Cleeve, Bickley	Ponsford 2002
Bris	tol	1
17	Bristol, St	Price and
	Bartholomew's	Ponsford 1998
	Hospital	
Bati	h and North East Some	erset
18	Newton St Loe Castle	Arnold 2001
19	Peasedown St John,	Young 2020
	Eckweek	
Dor	set	
20	Powerstock Castle	Unpublished
21	Weymouth, Curtis	Randall 2019
	Fields	
22	Holworth, Holworth	Rahtz 1959
	DMV	
23	Wareham, West	Renn 1959
1	Walls	

No.	Site	Reference
Wilt	shire	
24	Trowbridge Castle	Graham and Davies 1993
25	Trowbridge	Graham and
25	Broad Hinton	Pobinson and
26	Brodu Hinton,	Criffithe 2000
20		Montgomorio
27	Salisbury, Old Sarum	1947
28	Ludgershall Castle	Ellis 2000
Glou	ucestershire	
29	Stoke Gifford, Harry Stoke	Young 1995
30	King's Stanley, King's Stanley moated site	Heighway 2007
	Gloucester, St	Heighway and
31	Oswald's	Bryant 1999
32	Gloucester, Greyfriars	Ferris 2002
33	Whittington Court Roman Villa	O'Neil 1952
34	Guiting Power, Guiting Manor	Marshall 2004
35	Blockley, Upton DMV	Hilton and Rahtz 1967
Wol	rcestershire	
36	Worcester,	Dalwood and
	Deansway	Evans 2004
37	Redditch, Bordesley	A
	Abbey, Watermill	Astili 1993
Сои	nty of Hereford	
38	Hereford, Dean's	Thomas and
	Court	Boucher 2002
39	Hereford, Maylord	Thomas and
	Street	Boucher 2002
Shro	pshire	
40	Uffington.	West and
	Haughmond Abbev	Palmer 2014
Staf	fordshire	
41	Stafford Castle	Soden 2007
We	st Midlands	
42	Dudley Castle	Anon 1985
Wa	rwickshire	,
12	Alcester Botolor's	
45	Castle	Jones <i>et al.</i> 1997
44	Warwick, 25-33	Cracknell and
	Brook Street	Bishop 1992
45	Ratley Castle	Steane 1991

Table 6 Sites with relevant material (see Figs 10 and 11 for location)

No.	Site	Reference	
Coventry			
46	Coventry,	Evison 1977	
	Corporation Street		
47	Coventry, Much Park	Wright 1987	
	Street, Stone House		
Han	npshire		
48	Houghton, Meon Hill	Liddell 1933	
49	Andover, 50/50a	Williams 1997a	
	Chantry Street		
50	Faccombe	Fairbrother	
	Netherton, manorial	1990	
	complex		
51	Southampton,	Platt and	
	Cuckoo Lane	Coleman-Smith	
		1975	
52	Southampton, Bugle	Platt and	
	Hall	Coleman-Smith	
		1975	
53	Southampton,	Brown and	
	French Quarter	Hardy 2011	
54	Swaytniing,	Crockett 1995	
	Nontenore Halls of		
	Residence		
55	Winchester, Castle	Bladle 1990	
56	Minchostor Succov	Poor at al 2008	
50	Street	Nees et ul. 2008	
57	Winchester Assize	Biddle 1990	
	Courts North		
58	Winchester, Assize	Biddle 1990	
	Courts South		
59	Winchester.	Ford and Teague	
	Northgate House,	2011	
	Staple Gardens		
60	Winchester, Victoria	Rees <i>et al.</i> 2008	
	Road		
61	Winchester,	Biddle 1990	
	Cathedral Green		
62	Winchester, Upper	Thomas 2000a	
	Brook Street		
63	Winchester, Middle	Biddle 1990	
	Brook Street		
64	Winchester, City	Biddle 1990	
	Offices Extension		
65	Winchester, Brook	Biddle 1990	
	Street Site C		
66	Winchester, Brook	Biddle 1990	
	Street, Tanner Street		
	and lanes		

No.	Site	Reference	
Hampshire cont.			
67	Winchester, Brook	Biddle 1990	
68	Winchester	Biddle 1990	
00	Wolvosov Castla	Biddle 1990	
60	Wolvesey Castle	Deep at al 2008	
69	Winchester, 84	Rees <i>et al.</i> 2008	
70	Water Lane	C	
/0	Portchester Castle	Cunliffe 1977	
Isle	of Wight		
/1	Carisbrooke Castle	Young 2000	
Wes	st Sussex		
72	Chichester, St Mary's	Down and Rule	
	Hospital	1971	
73	Lodsworth Castle	Holden 1967	
74	Steyning, Steyning	Reynolds 1994	
	(New) Museum		
75	Bramber Castle	Barton and	
		Holden 1977	
East	Sussex	1	
76	Seaford West (ward),	Thomas 2010	
	Bishopstone Manor		
77	Pevensey Castle	Lyne 2009	
78	Pevensey, Site 5	Dulley 1967	
Surr	ey		
79	Weybridge,	Hanworth and	
	Brooklands	Tomalin 1977	
80	Leatherhead, 'The	Jope and	
	Mounts',	Threlfall 1959	
	Pachenesham		
	Magna		
Oxfo	ordshire		
81	Ascott under	Jope and	
	Wychwood, Ascot	Threlfall 1959	
	Doilly Castle		
82	Witney, Mount	Allen with Hiller	
	House	2002	
83	Eynsham, Eynsham	Hardy <i>et al.</i>	
	Abbey	2003	
84	Banbury Castle	Fasham 1983	
85	, Yarnton. Site 23	Hev 2004	
86	Abingdon, Stert	Parrington 1979	
	Street		
87	Oxford, 54-55 St	Hardy 1996	
.	Thomas's Street		
88	Oxford. The Hamel	Palmer 1980	
89	Oxford Castle	Munby et al	
		2019	
90	Oxford St Fhhe's	Hassall <i>et al</i>	
	31-34 Church Street	1989	
L	JI-J- Church Sheel	1.702	

No.	Site	Reference
Oxfo	ordshire cont.	
91	Oxford, St Aldate's	Durham 1979
92	Oxford, Logic Lane	Radcliffe 1963
93	Wytham, Seacourt	Biddle 1961
	DMV	
94	Tetsworth, Copt Hay	Robinson 1973
Ken	t	
95	Canterbury,	Blockley et al.
	Marlowe Car Park	1995
96	Canterbury, St	Sherlock and
	Augustine's Abbey	Woods 1988
97	Folkestone, Castle	Pitt Rivers 1882
	Hill	
98	Dover, Townwall	Parfitt <i>et al.</i>
	Street	1996
Buc	kinghamshire	
99	Walton	Farley 1976
100	Tattenhoe DMV	lvens <i>et al.</i> 1995
101	Westbury DMV	lvens <i>et al.</i> 1995
102	High Wycombe,	Collard 1988
	Desborough Castle	
Milt	on Keynes	
103	Broughton	Atkins <i>et al.</i>
		2014
Gre	ater London	1
104	London, Northolt	Hurst 1961
	Manor	
105	London, St Barts	Marshall in
	Hospital	press
106	London, General	Egan 2010
	Post Office, 81	(1998)
	Newgate Street	
107	London, Bull Wharf	Ayre and Wroe-
		Brown 2015
108	London, Bird-in-	Wilson 1964
	Hand Court	
109	London, Bow Bells	Howell 2013
	House	
110	London, Vintry	Unpublished
111	London, Thames	Unpublished
	Exchange site	
112	London, 72-75	Hill and
	Cheapside	Woodger 1999
113	London, London	Bowsher <i>et al.</i>
	Guildhall	2007
114	London, Queen	Burch <i>et al.</i>
4.65	Street/Poultry	2011
115	London, 1 Poultry	Burch <i>et al.</i>
		2011

No.	Site	Reference
Gree	ater London cont.	
116	London, 8-10	Richardson in
	Moorgate	prep.
117	London, Riverbank	Mackinder 2015
	House	
118	London, Swan Lane,	Egan and
	95-103 Upper	Pritchard 2008
	Thames Street	[1991]
119	London, Angel	Spencer 1961
	Court	
120	London, Seal	Egan 2010
	House, 106-108	(1998)
	Upper Thames	
	Street	
121	London,	Egan and
	Billingsgate lorry	Pritchard 2008
	park	[1991]
122	London,	Clark 2004
	Billingsgate	(1995)
123	London, 10-14	Hunt 2010
	Cooper's Row	
124	London, Lesnes	Clapham 1910
	Abbey	
Heri	tfordshire	
125	South Mimms Castle	Kent <i>et al.</i> 2013
ESSE	X	1000
126	Waltham Abbey, 18	Huggins 1988
127	Sun Street	Uppublished
127	Seffren Welden	Dipublished
120	Sanron Walden,	Dassell 1902
120	Writtle King John's	Pahtz 1969
129	Hunting Lodge	Kall(2 1909
130	Rayleigh Castle	Francis 1913
130	Hadleigh Castle	Drowett 1975
122	Pivonball Priost's	Bodwoll and
152		Rodwell 1993
122	Rivenhall	Rodwell and
133		Rodwell 1993
Suff	folk	Nouwen 1995
135	Brandon Leisure	Tester <i>et al</i>
155	Centre	2014
136	Inswich School	Thomas 2000a
130	Street	
137	Ipswich, Cox Lane	West 1963
138	Framlingham Castle	Knocker 1957
130		

No.	Site	Reference
Nor	folk	
139	King's Lynn, Baker	Clarke and
	Lane	Carter 1977
140	King's Lynn, Marks	Clarke and
	and Spencers	Carter 1977
141	King's Lynn, All	Clarke and
	Saints Street	Carter 1977
142	Castle Rising Castle	Morley and
		Gurney 1997
143	Oxborough,	Thomas 2000a
	Caldecote DMV	
144	Castle Acre Castle	Coad and
		Streeten 1982
145	Thetford, Brandon	Dallas 1993
	Road	
146	Thetford, Redcastle	Andrews 1995
	Furze	
147	Thetford, Site 2N,	Rogerson and
	Thetford	Dallas 1984
148	Thetford, Site 2S,	Rogerson and
	Thetford	Dallas 1984
149	Thetford, Bury Road	Gibson 2015
150	Thetford, Site 6, Hut	Rogerson and
	2	Dallas 1984
151	Thetford, Mill Lane,	Wallis 2004
	Site 5761	
152	Norwich, Bishopgate	Margeson 1993
	site 156N	
153	Norwich, The	Margeson 1993
	Bottling Plant,	
	Westwick Street	
	159/N	
154	Norwich Castle	Ayers 1985
	Bailey	
155	Norwich Castle	Popescu 2009
156	Norwich, Fye	Trimble 1999
	Bridge/Fishergate	
157	Norwich, Greyfriars	Emery 2007
158	Norwich, Cathedral	Wallis 2006
	Refectory	
159	Norwich, St Martin-	Ayers 1987
	at-Palace-Plain	
160	Norwich, Dragon Hall	Shelley 2005
161	Norwich, 285N	Margeson 1993
162	Middle Harling,	Rogerson 1995
	Middle Harling	
163	North Elmham Park	Wade-Martins
		1980

No.	Site	Reference
Carr	nbridgeshire	
134	Burwell, Burwell	Jope and
	Castle	Threlfall 1959
164	Eaton Socon, Castle	Addyman 1965
	Hill Close	
165	Eaton Socon, The	Lethbridge and
	Hillings, Castle Hills	Tebbutt 1952
166	Orton Longueville,	Spoerry and
	Botolph Bridge	Atkins 2015
167	Waterbeach, Denny	Christie and
	Abbey	Coad 1980
168	Ely, West Fen Road	Mortimer <i>et al.</i>
		2005
Nor	thamptonshire	
169	Northampton, Chalk	Williams and
	Lane	Shaw 1981
170	Northampton,	Williams 1979
4	Marefair	
171	Northampton Castle	Williams and
		Shaw 1981
172	Northampton, St	Williams 1979
4 - 0	Peter's Street	
1/3	Northampton,	Williams 1979
474	Newlands	N/III: 4070
174	Northampton,	Williams 1978
175	Greyfriars	Chanman 2010
175	Raunds, west Cotton	Chapman 2010
1/0	Road	Chapman 2009
177	Rounds Eurnells	Audoux and
1//	naulius, ruillelis	Chanman 2009
178	Brigstock Lyveden	Steane and
170	DMV	Bryant 1975
Leic	estershire	bryant 1979
179	Leicester, Jewry Wall	Kenvon 1948
180	Leicester, Freeschool	Buckley and
-00	Lane	Cooper 2009
181	Leicester, Vine Street	Morris <i>et al.</i>
		2009
182	Leicester, Causewav	Conner and
	Lane	Buckley 1999
183	Leicester, Little Lane	Lucas and
	,	Buckley 2007
Not	tinghamshire	, ,
184	Nottingham Castle	Drage 1989
Rutl	and	
185	Oakham Castle	Mepham and
		Good 2015
		•

No.	Site	Reference	
Lincolnshire			
186	South Witham,	Mayes 2002	
	Knights Templar		
	preceptory		
187	Lincoln, The Park	Colyer <i>et al.</i>	
		1999	
188	Lincoln, Flaxengate	Ten Harkel 2018	
189	Folkingham Castle	Cherry and	
		Goodall 1985	
190	Goltho,	Beresford 1987	
	Manor/Castle		
191	Goltho, DMV	Beresford 1975	
192	Louth, Northgate	Field 1981	
Che:	shire West and Cheste	er	
193	Chester, South-	Ward 1994	
	Western Angle		
	Tower		
Wirr	ral		
194	Meols, Meols beach	Griffiths <i>et al.</i>	
	,	2007	
Halt	on		
195	Runcorn, Norton	Brown and	
	Priory	Howard-Davis	
	,	2008	
War	rington		
196	Warrington, Mote	Jope and	
	Hill	Threlfall 1959	
Sout	th Yorkshire		
197	Conisbrough Castle	Johnson 1980	
Wał	kefield		
198	Wakefield, Sandal	Maves and	
	Castle	Butler 1983	
Leed	ls		
199	Kirkstall. Kirkstall	Wrathmell 2018	
	Abbey Guesthouse		
Don	caster		
200	Doncaster, Low	McComish <i>et al</i>	
	Fisher Gate	2010	
East	Ridina of Yorkshire		
201	Wharram, Wharram	Andrews and	
	Percy, Area 6, 10	Milne 1979	
202	Wharram, Wharram	Stamper and	
	Percy, South Manor	Croft 2000	
	Site 44	2.010 2000	
203	Cottam, Cowlam	Richards et al	
200	DMV	2013	
204	Cottam Cottam A	Richards et al	
204	vicinity	2013	
	· · · · · · · · · · · · · · · · · · ·	2010	

No.	Site	Reference
East	Riding of Yorkshire co	ont.
205	Beverley, 33-35	Evans and
	Eastgate	Tomlinson 1992
206	Beverley, Lurk Lane	Armstrong et al.
		1991
207	York, Wellington	Tweddle <i>et al.</i>
	Row	1999
208	York, Baile Hill	Addyman and
		Priestley 1977
209	York, Bishopshill	Williams 1997a
	Senior	
210	York, 16-22	Ottaway and
	Coppergate,	Rogers 2002
	Tenement A/B, B, C,	
	D	
211	York, 46 Lloyd's Bank	MacGregor 1982
212	York, Coppergate	Ottaway and
		Rogers 2002
213	York, Bedern	Ottaway and
		Rogers 2002
214	York, Bedern,	Ottaway and
	College of the Vicars	Rogers 2002
	Choral	
215	York, 22 Piccadilly	Ottaway and
		Rogers 2002
216	York, Hungate	Richardson 1961
217	York, 46-54	Ottaway and
	Fishergate	Rogers 2002
Nor	th Yorkshire	-
218	Burton in Lonsdale,	Moorhouse
	Castle Hill	1971
219	Aldfield, Fountains	Howsam 2016
	Abbey	1007
220	Ripon, Deanery	Whyman 1997
224	Gardens	December 1
221	whitby, whitby	Peers and
0.1	Abbey	Radford 1943
Rea	car and Cieveland	U.a.a.lava 1005
222	Guisporougn,	Hesiop 1995
<u> </u>	Gisborougn Priory	
Cou	nty Durnam	Austin 2007
223	Barnard Castle	Austin 2007
224	Corntorth,	Austin 1989
	manar haves	
Course	manor nouse	
SOU	In Tynesiae	Cromp 2000
225	Jarrow, St Paul's	Cramp 2006
	ivionastery	

No.	Site	Reference
Curr	nbria	
226	Carlisle, Old Grapes	McCarthy 2000
14/~	Lane	
vva	es brokochiro	
227	Nevern Cestle	Caple forth
		Caple forth.
Carr	narthensnire	
228	Kidwelly Castle	1933
Swa	nsea	1
229	Llanrhidian, Llanelen	Schlesinger and Walls 1996
230	Llwchwr, Loughor	Lewis 1993
	Castle	
Vale	e of Glamorgan	
231	Llantrithyd ringfort	Charlton <i>et al.</i> 1977
Pow	vys	1
232	Montgomery, Hen	Higham and
	Domen Castle	Barker 2000
Mor	nmouthshire	
233	Chepstow, Cattle	Shoesmith 1991
	Market, Nelson	
	Street	
234	Chepstow, Priory,	Shoesmith 1991
	Nelson Street	
Scot	tland	
235	Whithorn, Whithorn	Hill 1997
	Priory	
236	Linlithgow, 324 High	Hunter <i>et al.</i>
	Street	2015
237	Perth, Scott Street	Cox 1996
238	Perth, Perth High Street	Hall <i>et al.</i> 2012
239	Canisbay, Freswick Links	Batey 1987
240	ledburgh ledburgh	Lewis and Ewart
240	Abbev	1995
241	Pennan, 'Cullykhan'	Greig et al. 1990
211	Castle Point, Troup	
242	Rattray Castle	Murray and
272		Murray 1993
Nor	thern Ireland	
243	Clough Castle	Waterman 1954
Irela	and	
244	Cork, Hanover Street	Cleary and
		Hurley 2003
245	Waterford. Arundel	Deevy 1998
	Square	

Ireland cont.	
246 Dublin, High Street Deevy 1998	
247 Dublin, Cornmarket Hayden 200	0
248 Dublin, Winetavern Weetch 201	.4
Street	
249 Dublin, Ross Road Deevy 1998	
250 Dublin, Christchurch Frick 1993	
Place	
251 Dublin, Fishamble Weetch 201	.4
Street	
France	
252 Rennes, Place Saint- Beuchet 202	17
Germain	
253 Brie, 8 rue de Beuchet 202	19
Bretagne	
254 La Rochelle, Jardins Berthon 201	13
du Carmel	
255 Yves, Villeneuve Berthon 200)9
256 Surgères, Rue Soulat in pre	ess
Barabin	
257 Rubercy castle Lorren 1977	
258 Saint-Vaast-sur- Halbout <i>et d</i>	al.
Seulles, Chateau de 1987	
Saint-Vaast-sur-	
Seulles	
259 Le Plessis-Grimouit Halbout et d	<i>a</i> .
1987	
Place de la Ville Guadagnin 2	1022
261 La Pommerave Elambard	1900
Château Ganne Héricher et	al
2012	<i>an</i> .
262 Château de Tours Motteau 19	91
263 L'Isle-Bouzon, Corné Lassure 199	8
264 Salies-du-Salat, Unpublished	d
Donjon de Salies-du-	
Salat	
265 Auzat, Castrum de Guillot with	
Montréal-de-Sos Portet 2017	
266 Alizay, Alizay-Igoville Marcigny ar	nd
Mazet 2015	
267 Moulins-sur- Querrien 19	88
Céphons, La motte	
de Moulins-sur-	
Céphons	
268 Levroux, Montbaron Querrien 20	04
269 Machy, Le Pâtis Legros 2015	a
Treunette	

No.	Site	Reference
Frai	nce cont.	-
270	Lisle-sur-Tarn,	Abramowicz et
	Montaigut	al. 1970
271	Chevreuse, Château	Doridot 2008
	de la Madeleine	
272	Craywick, Dunkerque	Desoutter 2018
	Port autonome	
	tranche 2	
273	Château de Boves	Legros 2012
274	Bourges, ZAC	Fondrillon and
	Avicarum	Marot 2013
275	Roissy-en-France,	Legros 2015a
	52-58 avenue	
	Charles de Gaulle	
276	Félines-Minervois,	Loppe <i>et al.</i>
	Castrum de Ventajou	2005
277	Murat, Lastours	Boudartchouk
		2004
278	Hordain, La motte de	Louis 1989
270	Hordain	D 2015
279	Nogent-sur-Seine,	Roms 2015
200	Filot Saint-Espoing	Faut 2016
280	La villeneuve-au-	Fort 2016
201		Cuelier (ed.) in
281	Bezannes, Le village	Gucker (ed.) in
າຊາ	Isle Aumont I a	prep. Scapula 1976
202	Butto	
283	Chaudevrolles	Laffont 2009
205	Château du Mézenc	2005
284	Saint-Romain Le	Beck 1987
201	Verger	
285	Saint-Romain.	Beck 1987
	Château de Saint-	
	Romain	
286	Montcy-Notre-	Lémant and
	Dame, Château des	Moulis 2016
	fées de Montcy-	
	Notre-Dame	
287	Nuits-Saint-Georges,	Sautot 1977
	Les Bolards	
288	Charavines,	Colardelle and
	Colletière	Verdel 1993
289	Chirens, Motte-	Colardelle and
	castrale de Châtelard	Verdel 1993
	à Chirens	
290	Écrille, La Motte	Billoin <i>et al.</i>
		2017

No.	Site	Reference							
Frar	France cont.								
291	Rougiers, Castrum	Démians							
	Saint-Jean	D'Archimbaud							
		1980							
292	Allemagne-en-	Thuaudet 2015							
	Provence, La Moutte								
293	Huez, Brandes-en-	Bailly-Maître							
	Oisans	and Bruno							
		Dupraz 1994							
294	La Garde-Freinet,	Thuaudet 2017							
	Fort-Freinet								
295	Rougemont-le-	Walter 1993							
	Château, Le Vieux								
	Château								
296	Grosbliederstroff,	Peytremann							
	Gungling	2006							
297	Ernolsheim-lès-	Schnitzler 1990							
	Saverne,								
	Daubenschagfelsen,								
	Château du								
	Warthenberg								
Belg	jium	_ · ·							
298	Tournai, Saint-Pierre	Brulet and							
	de Tournai	Verslype 1999							
299	Ename, Ename	Unpublished							
	portus								
300	Sugny, Tchesté de la	Matthys 1991							
201	Rotche	D							
301	Marcourt, Montaigu-	Borremans <i>et al.</i>							
202	Saint-Thibaut	1991							
302	Liege, Pont des	Unpublished							
202	Arcnes	Dhaara and							
303	Heinstert, Le	Dhaeze and							
The	Nothorlands	Fair 011 2014							
204	Domburg Domburg	Capalla 1076							
304	boach	Capelle 1976							
205	Demburg Domburg	Lifkor 2011							
505	Domburg, Domburg,	OIKes 2011							
206	Rurgh Haamstodo	Poor 1955							
500	Wostonschouwon	K062 1922							
207	Diamon	Vanovorboko et							
307	Ouddiemerlaan	al 2011							
	hoerderii Landzigt	ui. 2011							
308		den Hartog 2017							
508	(neighbourbood)	den hartog 2017							
	Leidsche Riin 82								

No.	Site Reference					
The	Netherlands cont.					
309	Leidsche Rijn	Hendriksen				
	(neighbourhood),	2004				
	Leidsche Rijn					
310	Leidsche Rijn	den Hartog				
	(neighbourhood),	2017				
	Sportpark Terweide 5					
311	Utrecht, Hogeweide	Van der				
		Kamp 2011				
312	Utrecht,	Duurland				
	Wittevrouwenstraat 7-11	2009				
313	Geldermalsen,	Van				
	Geldermalsen-Station	Renswoude				
		and				
		Schurmans				
		2015				
314	Wijk bij Duurstede,	Roes 1955				
	Dorestad					
315	Kapel-Avezaath, De Brede	Van				
	School	Renswoude				
		2006				
316	Tiel, Dominicuskwartier	Van				
		Renswoude				
		and				
		Habermehl				
		2014				
317	Tiel, Prins Willem-	Verhelst				
	Alexanderschool	and van				
		Renswoude				
		2015				
318	Helmond, 't Oude Huys	Arts 1995				
319	Maastricht,	Stoepker				
	Ceramiqueterrein	1991				
320	Groningen, Het Tehuis	Huis in 't				
		Veld 2008				
321	Volthe, Hunenborg	Holwerda				
		1917				
Swit	zerland					
322	Vionnaz, Cornillon	Deschler-				
		Erb and				
		Winkler				
		2016				
323	Basel, Petersberg	Berger				
		2003				
324	Reichenbach, Burgruine	Wild 1997				
	Mülenen					
325	Altenberg bei Füllinsdorf	Marti <i>et al.</i>				
		2013				

No.	Site	Reference						
Switzerland cont.								
326	Eptingen, Burg Riedfluh	Degen <i>et al.</i> 1988						
327	Trimbach, Die Frohburg	Meyer 1989						
328	Wenslingen, Ödenburg	Tauber						
	bei Wenslingen	1991						
329	Gipf-Oberfrick, Alt-	Marti <i>et al.</i>						
	Tierstein	2013						
330	Küsnacht, Burgruine Wulp	Bader 1998						
331	Schaffhausen, Rüden-	Bänteli						
	Buchsbaum	1994						
332	Herisau, Burg Urstein	Knoll-Heitz 1985						
333	Marmorera, Burg	Jecklin-						
	Marmels	Tischhauser						
		<i>et al.</i> 2012						
Italy	/							
334	Finale Ligure, Finalborgo,	Palazzia <i>et</i>						
	Piazza Santa Caterina	<i>al.</i> 2003						
335	Torriglia, Castello di	Biagini <i>et</i>						
	Donetta	<i>al.</i> 2004						
336	Pieve, Monte Zignano	Biasotti						
	DMV	1985						
337	Castelnovo ne' Monti,	Mancassola						
	Pietra di Bismantova	<i>et al.</i> 2014						
338	Rome, Crypta Balbi	Sagui and						
220	Canada Calathanat	Paroli 1990						
339	Segesta, Calathamet	Lesnes and						
		2012						
310	Eorni di Sonra, Castello di	Colichi <i>et</i>						
540	Sacuidic							
341	Povoletto, Motta di	Piuzzi 2003						
541	Savorgnano	1 10221 2005						
Nor	wav							
342	Bergen, Bryggen	Busengdal						
		2012						
343	Bergen, Øvre	Busengdal						
	Dreggsalmenning 2-4	2012						
Swe	den							
344	Helsingborg, Helsingborg	Frick 1993						
	kirche							
345	Oxie, Lockarp	Heimer						
		2009						
346	Trelleborg, Town moat	Frick 1993						
347	Lund, Kattesund,	Mårtensson						
	Pkbanken	1976						
348	Lund, No. 19 Stora	Böhme et						
	Kyrkogatan	al. 1992						

No.	Site	Reference
Swe	den cont.	
349	Lund, Kv. Färgaren 28	Mårtensson 1982
350	Degerhamn, Eketorp-III	Borg 1998
351	Fors, Lundby	Anon, 1909
352	Årsunda, Årsunda Grave	Pedersen
		1999
353	Altuna, Göksbo	Paulsen
354	Björkö, Svarta jorden	Hallström 2018
355	Uppsala, Valsgärde, Grave 22	Ljungkvist 2015
356	Alsike, Tuna Grave III	Arne 1934
Den	mark	
357	Ribe,	Unpublished
	Slotsgade/Korsbrødregade	
358	Ribe, Dagmarsgade	Søvsø 2005
359	Viborg, Viborg Søndersø	Hjermind <i>et</i> <i>al.</i> 1998
360	Haderslev, Starup	Hartvig
	Østertoft	2016
361	Horsens, Tamdrup	Pagh 2016
362	Aalborg, Algade 9	Baastrup
		2014
363	Randers,	Mikkelsen
	Benedictinernonnekloster Vor Frue	1990
364	Odense, Skomagerstraede	Buckton 1986
365	Tranebjerg, Gammel	Roesdahl
	Brattingsborg	2015
366	Viby, Bjerge herred, Viby	Buckton
	church	1986
367	Gudme, Søndergade	Madsen 1992
368	Viby, Gammel Viby	Ulriksen 2007
369	Roskilde, Fondens Bro 3	Ulriksen and Nielsen 2021
370	Roskilde, Konventhuset	Ulriksen 2011
Ger	many	· ·
371	Hellenthal, Burgkopf	Rech 2006
	Giescheid	
372	Dockendorf,	Clemens
	Niederungsburg von	2000
	Dockendorf	

No.	Site	Reference
Ger	many cont.	
373	Grevenbroich-	Herrnbrodt
	Frimmersdorf, Der	1958
	Husterknupp	
374	Meerbusch-Büderich.	Böhme <i>et</i>
	Niederungsburg bei Haus	al. 1992
	Meer	2002
375	Mülheim an der Ruhr	Binding
575	Burg Broich	1968
376	Mülheim an der Ruhr	Stouer 1989
370	Abtoi Saarn	Steder 1989
277	Köln Hafanstraße	Stouer 1090
270		Steuer 1989
378	Neviges, Burg Hardenberg	Rech 2006
379	Odenthal, Hohenburg	Untermann
	Berge	1983
380	Menden, Burg Rodenberg	Michl 2008
381	Neuwarfen	Ey 1995
382	Badbergen, St	Frick 1993
	Georgskapelle	
383	Bissendorf, Gebäude A	Lau <i>et al.</i>
		2013
384	Bissendorf, Burg Holte	Anon. 1991
385	Brilon, Burg Altenfels	Lobbedey
		1979
386	Paderborn, Schildern 1-7	Stiegemann
		and
		Wemhoff
		2006
387	Minden, Aldstadt	Krabath
	-	2001
388	Thaleischweiler-Fröschen,	Böhme <i>et</i>
	Burg Steinenschloss	<i>al.</i> 1992
		Kluge-
	Wiesbaden,	Pinsker
389	Mauritiustrasse, probably	1993
	Leutershausen, Ruine	
390	'Schanzenkönfle'	Wendt 1998
301	Mainhausen Zellhausen	Weher 2010
551	Schwieherdingen	
202	Vöhingon DMV	Anon. 1998
392	Wolfbagon Burg	Krabath
202	Podorson	
393	Nuelsen	2001
204	Goldbach, Burgstall	Unpublished
394		
	Gotthardsberg, Burg	Unpublished
395	Frankenberg	
	Romrod, Burg Romrod	Friedrich
396	, 0	2008

No.	Site	Reference							
Ger	Germany cont.								
397	Bad Urach, Burg	Christlein 1974							
	Runder Berg								
398	Höxter, Höxter, Kapelle	Krabath 2001							
	des Heilig-Geist-								
	Hospitals								
399	Höxter, Höxter, Tom	Krabath 2001							
	Roden								
400	Hedeby, Hedeby	Hilberg 2007							
401	Burg Scharzfeld	Krabath 2001							
402	Braunschweig,	Lungershausen							
	Eiermarkt 7	2004							
403	Bad Harzburg,	Stiegemann							
	Harzburg	and Wemhoff							
		2006							
404	Königslutter,	Luckhardt and							
	Benedictiner-	Niehoff 1995							
105		U.S 1001							
405	Elm, Die Warburg	Heine 1991							
406	Treuchtlingen, Burg	Hofmann 1997							
407	reuchtlingen	Cuinana 1000							
407	Kelbra, Pfaiz Tilleda	Grimm 1990							
408	Neustadt an der Donau,	Anon. 1994							
100	Mollingon Burg	Hummal 2011							
409	Mellingen	nummer 2011							
	(Kapellenberg)								
110	Kublen-Wendorf	Herrmann and							
410	Gustävel cemeterv	Donat 1973							
411	Landin Burg Landin	Biermann and							
411		Posselt 2018							
412	Temnitztal Burgwall	Riermann 2020							
112	Wildberg								
413	Spandau, Burgwall	Stiegemann							
		and Wemhoff							
		2006							
Czec	ch Republic								
414	Chvojen, Chvojen	Hejna 1983							
Aus	tria								
	Erpfendorf, Burg	Stadlar 1004							
415	Erpfenstein	stadier 1994							
	Vorchdorf, Burgstall	Popinger 1004							
416	Kögerl	beninger 1964							
Slov	venia								
417	Draga, Gradišče	Gaspari <i>et al.</i>							
		2008							

Dress	Objects	Equestrian	Objects	'Elite'	Objects
Accessories		equipment		objects	
Buckles (including				Sheath and	
strap-fittings)		Bridle cheekpieces		scabbard	
				chapes	
		Ŷ		S 8	
	1,276	CC DO	326		474
		$(D \otimes \Omega)$		V	
				-	
		Harness links			
Strap-fittings		(including bit links)		Swivel fittings	
		A D			
	34	Cho-	913	00	407
C					
Constant of					
0 3 c.m.					
Draashas		Harness pendants		(Dinding string)	
Brooches		(plus suspension mounts)		Binding strips	
		mountsy			
	1 014	A. 2	1 526		567
	1,014		1,530		207
		8 3		and a second	
		(Do Cr			
Strap-ends		Stirrup-strap			
		mounts			
io= or or		0			
00-	2,343	K	2,274	-	-
-1001-1		96			
		Contra 1			
		Stirrup terminals			
		and a			
		65/	645		
-	-	e	615	-	-
Other	2		47		1
Other	Z		17		1
Total: Dress		Total: Equestrian		Total: 'Elite'	
Accessories	4,669	equipment	5,681	objects	1,449
Other					5
Grand total					11,804

Table 7 Breakdown of overall dataset by broad categories and object types considered

Chapter 4: Three groups of Dress Accessories



Mossot, CC BY-SA 3.0 <https://creativecommons.org/licenses/by-sa/3.0>, via Wikimedia Commons

Illus. 2 Detail from the effigy of Queen Berengaria (d. 1230) at L'Épau Abbey, Le Mans (France), showing the annular brooch at her neck.

In the first of three case studies, dress accessories will be examined to start to respond to questions of a gap of metalwork in the 11th and 12th centuries and to consider identity dynamics. Three types of artefacts will be considered in turn: buckles, strapends and brooches (Section 3.3; Illus. 2). Additionally, strap-fittings of Cassels type 1.71 are analysed alongside buckles as they performed a similar function. Though the objects evaluated are thought to have been dress accessories, it can be difficult to distinguish buckles/strap-ends used for other purposes. While acting as fasteners (buckles and brooches), and protectors of belt or girdle terminals (strap-ends), these objects provided a canvas for identity display and formation.

4.1 Buckles

4.1.1 Introduction and historiography



The Pierpoint Morgan Library Ms M. 638, f. 37v Themorgan.org

Illus. 3 Buckle in use on a belt. Detail from the Maciejowski Bible

Buckles were generally metal items used to fasten the loose end of a fabric or leather strap into a loop (Illus. 3); for frame terminology see Figure 13. As well as being used with clothing, buckles functioned as part of equestrian equipment or on bags;²⁸ a constant challenge is to distinguish different functional types (Egan 2008b [1991], 50). The predominantly non-ferrous buckles analysed below are argued to belong to dress, and date primarily to the 11th and 12th centuries, with some 10th-century forms presented to provide context. It is important to note that many buckles used in this

²⁸ Spur buckles sit somewhere between dress accessories and equestrian equipment, but are treated here (Section 4.1.2.3).

period are so simple and/or plain as to be undiagnostic – detail of relevant types is given in Appendix 1.A.i.



Fig. 13 Terminology used for buckle frame elements

Historiography

For late early-medieval buckles (c. 850-c. 1050) the only English typological work traced was that made during the VASLE project. There, John Naylor (2008) divided and dated buckle types based largely on art-style evidence for frames, though chronological logic was not embedded in the classification. The first international survey of (high) medieval buckles was by Ilse Fingerlin (1971), with groups established based on frame form. Fingerlin's dating, also mostly by art style, with some excavated evidence, was implicitly criticised (Krabath 2001, 133), as was Heindel's (1990) extension of the Fingerlin typology. Stefan Krabath's typology (2001), again organised by frame form, distinguished ten basic forms, and used decoration to build a typological hierarchy with multitudinous permutations. It drew on excavated examples for dating evidence, though admittedly few, focusing on buckles dating between the 12th and 15th centuries.

More recent typological work was conducted by Geoff Egan (2007b, 86), using the medieval single-looped oval and rectangular frame forms found unstratified at Meols (Wirral). He dated them based on stratified comparanda found in London, though this evidence seems not to have consistently applied in the Meols report, with some earlier London dating evidence apparently overlooked (Helen Geake pers. comm. 2018).²⁹ The sixteen Meols 'basic-design' groupings were incorporated into Alex Cassels's (2013, 29) expanded typology which extended the date ranges for the types, in certain cases back into the 12th century. Cassels's work provided a classification for multiple frame forms, as with Krabath (2001), though restricted to England. Most recently, Olivier Thuaudet (2015) essayed a European-wide typology, seemingly without reference to Krabath's work, and from the starting point of examples from the south of France. What follows draws mainly upon the typochronological work of Naylor, Krabath, Cassels and Thuaudet, interrogating the types they considered relevant to the 10th-12th centuries, broadly in chronological order, and introducing additional types. This new framework will allow us to start to address questions of paucity.

4.1.2 Typochronological analysis

4.1.2.1 Second Viking-Age buckles and contemporary types with zoomorphic decoration (11th-early 12th century)

The forms considered by Naylor (2008) as belonging to the Viking Age overall, or slightly later, all have single-looped copper-alloy frames. His classification may be divided into two major groups, based respectively on First and Second Viking-Age art styles; the latter form the core of Table 8 (below), alongside more stylised forms. Dating evidence for the 543 examples in the present corpus is limited, with 491 buckles recorded through the PAS (90%). Of the remaining 52 examples, a number were either metal-detected or antiquarian finds, such as those from Meols beach, while a further ten were considered residual. This notwithstanding, the excavated dates and art-historical dating triangulate relatively well (Table 8); further detail is provided in Appendix 1.A.ii.

4.1.2.2 'Romanesque' types (c. 12th century)

Buckle frames of the 12th century continued the moulded and zoomorphic qualities of those preceding them, but were rendered in a 'Romanesque' style. Three relevant

²⁹ For example, Meols type 2 is given as 'late 13th/early-14th century' (Egan 2007b, 88), despite citing Egan (2008b [1991], 68) no. 271, found in London in an early 13th-century context.

Naylor Class	Basic form/art style	Date range suggested by Naylor (2008)	Date range proposed	Example – location	Example – date (reference)	Sample image
A2, A3, A5iii, B1, C1, E3	Various/ Borre style	'Borre style' (i.e. c. 875- 975)	As Naylor	-	-	PAS : WILT-952048 (Class A2i)
A5i, A5ii, E1, F	With zoomorphic heads/ Ringerike style	'Ringerike style' (i.e. c. 1000- 1075)	11 th -early 12 th century	Site 156N, Bishopgate, Norwich (Norfolk) (Class F1)	Grouped with redeposited 11 th - century material (Margeson 1993, 25- 26, fig. 13, no. 128)	PAS : NMS-758B29
A6, E2	Zoomorphic, with interlace/ Urnes style	'Urnes style' (i.e. c. 1050- 1125)	As Naylor	London Guildhall (Class A6)	c. 1070-1090 context (Egan 2007a, 448, no. S2)	after Martin et al. 1995, 338-339; fig. 77C (Class A6)

Table 8 Appraisal of Viking-Age buckles and contemporary types with zoomorphic decoration

Naylor Class	Basic form/art style	Date range suggested by Naylor (2008)	Date range proposed	Example – location	Example – date (reference)	Sample image
G	Integral plate/not given	probably 9 th century	c. 11 th century (devolved Ringerike)	Brook Street, Winchester	11 th century (Hinton 1990c, 513-514, fig. 129, no. 1106)	المعادي المعاد المعادي المعادي المعادي المعادي المعادي الم معادي المعادي مع معادي المعادي المعادي المعادي المعادي المعادي المعادي المعادي معادي المعادي المعادي المعادي المعادي المعادي معاد معادي ال
A1ia, A1ib, A1ii, A4	Beast heads biting bar/n/a – too simple	not given	c. 11 th -12 th century (11 th - century focus)	Lurk Lane <i>,</i> Beverley (Humberside)	terminus ante quem of 1070 (A. Goodall 1991, 149-150, fig. 114, no. 583) (Class A1ia)	المحال

Table 8 (cont.)

Table 9 Appraisal of 'Romanesque' buckle types

Type name	Basic form/art style	Date range proposed	Example – location	Example – date (reference)	Sample image
Naylor Class A1iii	Beast heads biting bar/'Romanesque' detailing	c. 12 th century	n/a	None traced with sufficient evidence	after Goddard 1914, 0 20 mm 108; no. 1
'Gaping- mouth beast'	Three-dimensional zoomorphic moulding/ 'Romanesque'	c. 12 th century	Gammel Brattingsborg, Sims (Denmark)	Late 12 th -century date suggested (Roesdahl 2015, 270-271, fig. 4)	€ 20 mm PAS: NMS-438193
'Standing animal'	Three-dimensional standing quadruped/ 'Romanesque'	c. 12 th century	Low Fisher Gate, Doncaster (South Yorkshire)	c. 1150-1200 (McComish <i>et al</i> . 2010, 90)	after Cox 1996, 804, 806; no. 1 (no scale)

forms are set out in Table 9, with further details in Appendix 1.A.iii. Buckles of Naylor Class A1iii are notably wide, and have been suggested to be from sword belts (Ashley 2006, 106): their bar widths are consistent with a rare find of a c. 11th-century sword belt found in York (North Yorkshire) measuring 45 mm wide (Cameron 2003b, 3367-3368, fig. 1691, no. 15611). The 'gaping-mouth beast' type was brought to scholarly attention by Rogerson and Ashley (2011b). A possible function is contended for such buckles here for the first time for England: as spur buckles (see also Grünewald 2017 for this suggestion, in parallel). This suggestion is inspired by the zoomorphic buckles, effectively of this type, curated on the (replacement) spur 'leathers' of the spurs of the kings of France, now held at the Louvre (Illus. 4; Grünewald 2017, 357, abb. 5). These sacral spurs have been dated to c. 1180 (Carlot and Chodorge 2014, 119; RT 102).



Illus. 4 Possible gaping-mouth beast buckles on the French royal sacral spurs

4.1.2.3 Spur buckles

Further to the gaping-mouth beast type, argued above to be from spur 'leathers', other small buckles can be associated with spurs and therefore with horse riding. Identification is confounded by very rare survivals on contemporary spurs; they are generally too small to discern in pictorial sources. Historically, spur buckles have been overlooked in the English historiography; because they are not girdle buckles, they featured neither in the Meols classification, nor in Cassels's. Neglect may also be a consequence of the London corpus being taken as entirely of 13th- to 14th-century date (Egan 2004 [1995], 150-151, fig. 109, nos 372-376). In Table 10 different forms of spur buckle are proposed and dating evidence provided; this is expanded upon in Appendix 1.A.iv.

A form characterised by a small integral plate and attachment via an integral rivet (Thuaudet type T, dated by him to the 13th-14th century) may be sub-divided to isolate earlier forms of chronological relevance here. Further, it is suggested that a particular double-looped form could also have been a spur buckle of this period; double-looped buckles are rarely considered to have featured before the mid-14th century (Whitehead 2003, 52), though spur buckles of this form are known from 11th-century sites in France (e.g. Colardelle and Verdel 1993, 213-214, fig. 148, no. 12). The type is characterised by a central zoomorphic projection on one loop and often by ribbed decoration on its sides (Table 10). When complete, these frames form a tight group measuring c. 35 mm in length by c. 15 mm in width, comparable to the module of known spur buckles (Fig. 14).



Fig. 14 Length versus width plotted for double-looped buckles with a zoomorphic projection, compared to spur buckles and other forms. Relevant buckles with a zoomorphic projection plot within the width range for spur buckles.

Type name	Basic form	Date range proposed	Example – location	Example – date (reference)	Sample image
-	D-shaped iron frame; separate plate and strap- slide	c. 9 th -11 th century	16-22 Coppergate, York	c. 850-1066 (Ottaway 1992, 700, fig. 304, no. 3832)	after Ottaway 1992, 700; fig. 304, no. 3832 (no scale)
-	Double-looped frame with zoomorphic projection	c. 11 th -12 th century	Chalk Lane, Northampton (Northamptonshire)	 c. 1050-1100 context (Goodall and Webster 1981, 124, fig. 22, no. 4) 	PAS : NMS-294A73
Thuaudet type T (sub group)/Krabath <i>Variente</i> J4	Small sub- circular integral plate; oval frame with central lip on outer edge	c. 12 th century (potentially late 11 th century)	Lurk Lane, Beverley (Humberside)	1130s terminus ante quem (A. Goodall 1991, 149-150, fig. 114, no. 585)	after Egan 2004 [1995], 150-151; fig. 109, no. 372
Krabath <i>Variente</i> J1	As above, but hinged, elongated plate	c. 12 th century	Grave of Kaiser Lothair III von Süpplingenburg, Königslutter (Germany)	1137 <i>terminus ante quem</i> (Rötting 1995, 149- 150, no. C16d)	after Grimm 1990, 157; taf. 51d

Table 10 Appraisal of potential spur buckle types

Table 10 (cont.)

Type name	Basic form	Date range proposed	Example – location	Example – date (reference)	Sample image
Thuaudet type T (sub group)	Similar to above, but with chevron decoration on rectangular plate	c. early 13 th century	<i>Castrum</i> Saint- Jean, Rougiers (France)	Mid-13 th -century <i>terminus ante quem</i> (Démians D'Archimbaud 1980, 492, fig. 465, no. 29)	
Thuaudet type T (sub group)	Similar to above, but inverted D- shaped/broadly square frame on elongated plate	c. 13 th century	Whithorn Priory (Dumfries and Galloway)	c. 1250 <i>terminus post</i> <i>quem</i> (Nicholson 1997, 419-420, fig. 10.99, no. 44.8)	after Stadler 1994, 111, 173; taf. 27, no. F13

We may now observe a development for spur buckles in England from late earlymedieval iron examples with separate plates, to buckles with integral plates and rivets (Thuaudet type T) by the 12th century, if not slightly earlier (Table 10). The latter could be made of iron or copper alloy, though copper alloy seems more common. It is argued here that only certain spur buckles of Thuaudet type T can be attributed an early date. The earliest may be contemporary with the gaping-mouth beast type and a distinctive double-looped form with zoomorphic projection identified here.

4.1.2.4 Single-looped buckles

A final, significant, set of single-looped frames remains to be considered: buckles of (high) medieval date fitted to girdles, considered to be a staple of contemporary dress. Many have oval or D-shaped frames (respectively, Cassels types 1.3, 1.5) and narrowed bars (see Table 11); rectangular frames are also common (Cassels type 1.7). They were worn either with or without a plate. Such single-looped buckles have tended to be dated between the late 12th and early 15th centuries (e.g. Egan 2007b, 86). Though their main floruit spanned the 13th and 14th centuries, such frames should not be stereotyped as just products of this period. Cassels (2013) attempted to distinguish those forms which started in the 12th century from later ones (see Fig. 16, below). This is the departure point for the analysis presented in Table 11, with other types also interrogated to establish if their start might be placed earlier than thought.

Overall, a 12th-century start date is confirmed for types 1.3B, 1.3D, 1.3F (tentatively), 1.3 N, and 1.5D. Recent evidence from Bull Wharf, London, has helped refine the dating of type 1.3D, bringing it earlier, though it is noted that for this (and other types) it is difficult to distinguish 12th-century frames from later examples. A 12th-century start date is newly advanced for types 1.3A, 1.3G and 1.3H. Formal relationships connect type 1.3G with 1.3B; type 1.3H is similarly connected to other types with offset bars (1.3B, 1.3D, 1.3F, 1.3G). Such connections amplify an argument for their all starting in the 12th century. Further, types 1.3D and 1.3N share a formal relationship, the latter being defined by size more than form. Beyond rectangular type 1.7B, for which a 12th-century date is plausible (see Table 11), evidence exists for a potential 12th-century date for examples of Cassels's type 1.7F, and circumstantial

Cassels type	Equivalents	Characteristics	Dating in Cassels (2013, 29)	Suggested dating	Site	Reference	Dating evidence	Image (all after Cassels 2013, 213, fig. 2.4) (no scale)
1.3A	Meols type 1	simple oval frame and narrow bar	13 th -16 th century	12 th century onwards	 (1) Montbaron, Levroux (France); (2) Causeway Lane, Leicester (Leicestershire) 	 (1) Querrien 2004, 123-124, no. 3, fig. 27.1; (2) Cooper 1999, 263-264, fig. 126, no. 106 	 (1) pit with a terminus ante quem of c. 1190; (2) context date c. 1100-1225 	\bigcirc
1.3B	Meols type 2/Krabath <i>Varienten</i> C5, D5, D11/Thuaudet types C7, D3, D4a	plain oval frame and offset bar	12 th -16 th century; c. 1175-c. 1350 (Krabath 2001, 135)	Mid-12 th century onwards	(1) sites in modern-day England, Wales, Scotland, Italy, France, Belgium and Sweden; (2) Bickley, Cleeve (Avon)	(1) various; (2) Ponsford 2002, 94-95, fig. 30, no. 21	(1) numerous termini ante quos of 1200 or slightly later; (2) 12 th century	\bigcirc
1.3D	Meols type 4/Thuaudet type E1b/Krabath <i>Variente</i> J5	oval frame with notch or protrusion for the pin, and offset bar	mid-12 th - 16 th century; c. 14 th century (Krabath 2001, 138)	First half of the 12 th century onwards	Bull Wharf, London	Egan and Blackmore 2015, 51-52, ill. 33, no. A95	1140s context	$\langle \bigcirc$

Table 11 Appraisal of medieval single-looped buckle frames

Cassels type	Equivalents	Characteristics	Dating in Cassels (2013, 29)	Suggested dating	Site	Reference	Dating evidence	Image (all after Cassels 2013, 213, fig. 2.4) (no scale)
1.3F	Meols type 6	oval frame with expanded outer edge bearing multiple transversely engraved lines, and an offset bar	mid-12 ^{th-} 16 th century	Second half of the 12 th century onwards	Billingsgate lorry park, London	Egan 2008b [1991], 76-77, fig. 46, no. 312	second half of the 12 th century	
1.3G	Meols type 7	oval frame with expanded outer edge which is internally biconcave, and an offset bar	13 th century	12 th century onwards	Causeway Lane, Leicester	Cooper 1999, 263- 264, fig. 126, no. 106	11 th - to 12 th - century context	
1.3H	Meols type 8/Thuaudet type E4c	oval frame with outer edge bearing multiple moulded knops and offset bar	mid-13 th - 16 th century	second half of the 12 th century onwards	(1) Billingsgate lorry park, London; (2) Lurk Lane, Beverley	(1) Egan 2008b [1991], 72-73; (2) A. Goodall 1991, 149-150, fig. 114, no. 589	(1) terminus ante quem of c. 1200; (2) late 12 th to early 13 th - century context	
1.3K	Meols type 11	oval frame with expanded outer edge constricted at centre to accommodate a separate sheet roller, and with an offset bar	mid-12 th - 14 th century	13 th century onwards (generally)	Billingsgate lorry park, London	Egan 2008b [1991], 68, 70/pl. 1A, fig. 42, no. 270	second-half- of-the-12 th - century context (singular example)	

Cassels type	Equivalents	Characteristics	Dating in Cassels (2013, 29)	Suggested dating	Site	Reference	Dating evidence	Image (all after Cassels 2013, 213- 214, 216, figs 2.4, 2.6, 2.9) (no scale)
1.3N	n/a	large oval frame with internal width in excess of 30 mm	12 th -16 th century	Mid-12 th century onwards	Bickley, Cleeve	Ponsford 2002, 94-95, fig. 30, no. 20	mid-late-12 th - century context	
1.5D	Thuaudet types C2a, C2b/ Krabath <i>Variente</i> C10	plain D-shaped frame with internal width of 16-30 mm	12 th -16 th century	12 th century onwards (possibly late 11 th century)	 (1, 2) Boteler's Castle, Alcester (Warwickshire); (3) La Mouette, Allemagne-en- Provence (France) 	(1, 2) Jones <i>et al</i> . 1997, 55, fig. 19, nos 2, 4; (3) Thuaudet 2015, 337, fig. 180, no. 1	(1, 2) 12 th - to early 13 th - century; (3) site <i>terminus</i> <i>ante quem</i> of c. 1110 (iron buckle)	
1.7A, B, E, F, G	Meols types A, B/Thuaudet type J1a/ Krabath <i>Variente</i> J21	rectangular frame	12 th century onwards	12 th century onwards (types 1.7B, possibly E, F)	(1) Castle Acre Castle (Norfolk); (2) Westwick Street, Norwich	 (1) Goodall 1982, 236, 238, fig. 44, no. 24; (2) Margeson 1993, 24-25, fig. 13, no. 129 	 (1) c. 1140- 1200 context (type 1.7B); (2) c. 1090- 1180 context (type 1.7) 	

evidence for type 1.7E, based on associated plates (see below, Section 4.1.2.5). Otherwise, there is a dearth of strong evidence for the other types Cassels suggested started as early as the 12th century. Finally, a 12th-century start date for single-looped buckles with sheet rollers (type 1.3K) is rejected given restricted evidence; with only one dated example traced earlier than the 13th century, it is hard to build a strong case for this type being common in the 12th.



Illus. 5 Frame variants for medieval buckles of Cassels type 1.3B: a) angled outer edge; b) decoratively moulded outer edge

Certain frames related to basic type 1.3B are considered relevant here; they were not discussed by Cassels as they do not conform strictly to his type definition. One has a distinctly angled outer edge (Krabath's *Variente* E5) (Illus. 5a). Though dating evidence is scarce, an example attributed to the 12th century was found at Die Frohburg, Trimbach (Switzerland) (Meyer 1989, 81, 161, no. H39). In England, a frame with angled outer edge was found at Guiting Manor (Guiting Power, Gloucestershire) in an early to mid-12th-century context (Marshall 2004, 40, fig. 31, no. 2). Another variant features relief-moulded decoration, often zoomorphic (Illus. 5b). The earliest excavated example to have been published has a *terminus post quem* of c. 1200; it was found at Eynsham Abbey (Eynsham, Oxfordshire) and depicts two confronted lions (Allen 2003, 257-258, fig. 9.2, no. 16). However, I have traced an example from a layer spot dated to c. 1100-1160 at the Vintry, London (VRY89[V310]<1281>). Overall, it seems likely that these angled and moulded variants, as well as the plain oval frames with offset bars of type 1.3B, were in use from around the mid-12th century onwards.

Finally, the early dating sometimes given to a particular, related form – classified as Krabath *Variente* I6 – may be queried (Illus. 6). This has an oval frame, offset bar, and an outer edge which protrudes with varying degrees of exaggeration. An oft-cited example was excavated at Eynsham Abbey and there dated to c. 1066-1109 (Allen 2003, 257-258, fig. 9.2, no. 15). However, such an early date is so far divorced from other examples, presumably because it is either intrusive or incorrectly dated, that Krabath's (2001, 138) 13th-century dating of the form is taken here.



Illus. 6 Krabath Variente I6 buckle

4.1.2.5 Buckle plates

The preceding discussion has been predicated on ascribing date ranges to buckles based on their frame. A significant number of buckles were attached to their strap via a separate plate; plates are often found in isolation. A number of types of relevant buckle plate are presented in Table 12, including published forms and those identified as part of this project (see also Appendix 1.A.v); they can also provide evidence that helps to date frames. Beyond the plates set out in Table 12, many examples formed of folded sheet were used in this period, but are not diagnostic of it (Thuaudet 2015, 260-261, fig. 279; Appendix 1.A.v.1). Many new types appear to have arrived at the end of the 12th century, continuing into the 13th. These include plates with moulded beasts, including lions and wyverns, and pieces with enamelled decoration (see Appendix 1.A.v.1 for further discussion). Focusing on the 12th century, decoration appears to be notably heterogeneous, for example on plates from Castle Acre Castle, or Ludgershall Castle (Wiltshire). A characteristic is a notably short lower fold on plates, noted for the 'Mshaped' and 'pronged plate' types (Table 12), sometimes without provision for a retaining rivet. Elsewhere, as shown in Illustration 7, lower folds taper to a squared off end and were attached to the upper fold by a single rivet. Other lower folds, while matching the upper fold's length, can be comparatively narrow, a phenomenon seen on many plates of the 'Christ' enthroned type (Table 12). In other words, often the lower fold of buckle plates of this period did not match the form of the upper, perhaps as a way of reducing metal use, or weight.





after Gandel *et al.* 2008, 306, fig. 14, no. 7 (not to scale)

after Jones *et al.* 1997, 55, fig. 19, no. 4

Illus. 7 Buckles with truncated lower folds: left, from La Motte, Écrille (France); right, from Boteler's Castle, Alcester

Name/ Publications	Basic form	Frame associations	Date range	Dating evidence	Sample image
(as		(also see	proposed		
applicable)		Appendix			
		1.A.v)			
'Christ'	Moulded scene of	Cassels type	c. 1150-	Stylistic – possibly showing	
enthroned/	seated figure being	1.3B (oval)	1225	Henry II (Cherry 1987,	
Cherry 1987;	crowned by two			368); frame associations;	
Boughton and	flanking figures			no excavated examples	
Egan 2009,				traced	Cms PAS : YORYM-74C51B
344; Ashley					
2021, 23-24			4425		
M shaped/	As a Lombardic	Cassels types	c. 1125-	Constructional; frame	
Rogerson and	letter IVI or bird in	1.3N, 1.7B,	1250	associations; no excavated	
Ashley 2018	fold: conorato	1.9C (Var.),		examples traced	
	roves: rows of	(mostly			H-0-24
	'rouletted'	rectangular/			PAS : LIN-5FFC92
	opposed addorsed	tranezoidal)			(no scale)
	triangles	trapezoidaly			
Pronged	With two-four	Mostly Cassels	c. 1100-	Formal – decoration	
plate/-	protruding bars	type 1.3D	1175	echoes architectural	
	('prongs') – five	(oval), 1.7B		motifs; excavated example	
	forms are set out in	(rectangular)		from 1140s revetment at	
	Appendix 1.A.v.4,	(both with pin		Bull Wharf (Egan and	
	Table 31; short	protrusion)		Blackmore 2015, 51-52, ill.	PAS : IOW-969AE4
	lower fold			33 <i>,</i> no. A95)	(no scale)

Name/ Publications (as applicable)	Basic form	Frame associations (also see Appendix 1.A.v)	Date range proposed	Dating evidence	Sample image
Conjoined crescents/-	Three crescents conjoined between connecting elements; openwork centre	Cassels type 1.7E (rectangular)	c. 1150- 1250	Constructional – short lower fold; frame associations	Cms PAS : BERK-3EF7F4
With lattice designs/-	Upper and lower folds of equal length; engraved lattice design on front	No clear pattern	Late 12 th - 13 th century	Contextual dating – e.g. pre-1180 context at Haughmond Abbey, Uffington (Shropshire) (Goodall 2014, 304-305, fig. 6.78, no. 4)	after Querrien 2004, 123-124; fig. 27.1, no. 3

Table 12 (cont.)

4.1.2.6 Clasp-like buckles/strap-fittings (Cassels type 1.7I)

A small group of buckle-like sub-rectangular frames is argued here to be relevant, with a new, 12th- to 13th-century date range suggested. These objects are relatively wide and characterised by internal projections, normally two or three; there is no pin (Illus. 8). Where such fittings have been discussed, it has been alongside buckles as 'clasps', on the assumption that they could retain the other end of the strap to which they were attached, perhaps by looping and knotting. However, such fasteners tend to have been dated later than the period considered here, and by some margin: by Whitehead (2003, 43) to the 15th century; by Marshall (1986, 12) tentatively to the late medieval period (his type IVD); and by Cassels (2013, 32) to the 15th to 16th century (his type 1.7I). Such late dating is hard to substantiate.



Illus. 8 Strap-fitting of Cassels type 1.71

Although the frames are themselves not diagnostic of date, sometimes the plates with which some have survived can be. A symmetrical foliate motif on a plate illustrated by Whitehead (2003, 43, no. 247) can be compared with that decorating a buckle plate given a 12th-century date by Williams (2006b, 291-292, fig. 6e). Apertures on a plate from Hatfield Heath (Essex) (Illus. 8) can be compared to the openwork that alludes to architectural arcading on buckles with pronged plates, particularly of type 4 (see Appendix 1.A.v.4, Table 35); these have been argued to centre on the 12th century (Table 12). Furthermore, an aoristic plot of deposition dates for seven examples, shows a focus in the late 12th and 13th centuries (Fig. 15); details for particular

examples, including those offering 12th-century dating evidence (Rubercy (France)), or possible dating in the 12th century (Launceston (Cornwall); Winchester), are given in Appendix 1.A.vi, Table 37.



Fig. 15 Excavated dates for Cassels type 1.7I strap-fittings

A partial clay mould was found at Much Park Street, Coventry (Warwickshire), suggested to be for a double-looped buckle frame (Wright 1987, 86-87, fig. 49, no. 7). This mould is taken here to be for a strap-fitting within internal prong(s). Its context was dated to the second half of the 12th century (site phase 1B). A final piece of evidence was noted by Carlot and Chodorge (2014, 87, fig. RP XX) who identified such a strap-fitting on the belt of the Queen of Sheba on the Portail Royal of Chartres Cathedral (France). It is apparently shown with strands of a belt strap taken through it and knotted such that the long strands hung centrally in front of the queen's gown. Though the frame shown is angular, rather than the rounded frames documented archaeologically, it provides a useful mid-12th-century date. In sum, it is argued that such strap-fittings ought to be considered alongside buckles of the 12th century, though they did endure later (see Table 37, e.g. Poultry (London), Château Ganne (France)).

4.1.2.7 Summary

Before attempting a chronological overview of the buckle forms discussed, again it is worth stressing that many buckles relevant to the period cannot be easily dated by form or decoration, because they are either plain and undiagnostic, or idiosyncratic. Both issues are challenges for all periods, and their relative importance is difficult to assess, though it is suspected that there is a strong chance that many buckles of the 11th and 12th centuries could easily be overlooked.



Illus. 9 Buckle with Ringerike-style decoration (Naylor Class A5ii)

Focusing on diagnostic forms, buckles of the 11th century appear to have continued in the tradition of those of the preceding century. Diagnostic 10th-century buckles were characterised by animal art in the Borre style; plates were used relatively rarely. Many 11th-century buckles were also decorated with zoomorphic motifs, in the Second Viking-Age Ringerike style (Illus. 9) and, later, Urnes style (Table 8). The few archaeologically dated examples confirm their use in this period, while at the same time suggesting that more devolved forms may have continued into the 12th century (e.g. Naylor Class F). Alongside these clearly Anglo-Scandinavian buckles were plainer zoomorphic buckles featuring animal heads biting the bar (Naylor Classes A1 and A4). The latter are not readily classifiable according to art-style divisions, but suggested to have been used mostly in the 11th century, but continuing into the 12th century (Table 8). For Hinton (2005, 172), such frames provided the 'only exceptions' to a 'depressed' metalwork market from the Conquest and 'well into the 12th century'. However, it has also been shown here that buckles used on spur leathers can be discerned in this period, starting in the 11th century (or earlier), and with more types identified from the 11th century onwards.

Buckles of the early 12th century onwards seem to have included single-looped frame types present already in the 11th (Naylor Classes A1, A4, F and possibly G). Formal continuities are exemplified by types such as the gaping-mouth beast spur buckle and the 'standing animal', which, along with Naylor Class A1iii buckles, feature zoomorphic decoration moulded in three dimensions (Table 9). Other 12th-century spur buckles include the double-looped type with zoomorphic projection, highlighted here, and a form with an oval frame and integral plate (with integral rivet). Although the latter may be classified as Thuaudet's type T, we noted that this was apparently an early form of the type; other spur buckles which subscribe to the type are demonstrably later (c. 13th century). Very basic frames, such as the D-shaped Cassels type 1.5D, can be evidenced from this period, but are impossible to date typologically.

Around the mid- to late 12th century, a major change seems to have occurred, with the introduction of a series of single-looped buckles that would come to dominate medieval dress for centuries (Fig. 16). Historically these have been given a 13th- to 14th-century focus, but it is worth here quoting Egan's recent comments (and Blackmore 2015, 47) regarding the Bull Wharf assemblage: '...a number of object types previously attributed to the early thirteenth century were already popular, if not at their most popular, in the twelfth century'. A start date from the mid-12th century, or later within the century, has been suggested for particular single-looped oval frame forms (Table 11, Cassels types 1.3A, 1.3B, 1.3D, 1.3F, 1.3G, 1.3H, 1.3N). Many of these are notably plain compared to the generally earlier zoomorphic frames, and as such are far less diagnostic – even those featuring engraved or moulded decoration are adorned in a basic way. This noted, such plain frames were demonstrably often


Fig. 16 Single-looped buckle frames by Cassels type. Embedded in, and expanded by, this classification is that created by Egan (2007b, 86) based on finds from Meols.

accompanied by highly decorated plates. For example, the 12th-century dating for oval type 1.3B is reinforced by the iconography of the 'Christ' enthroned buckle plate, dated to the late 12th century (Table 12). The distinctive M-shaped plate is mutually supportive of a 12th-century date for rectangular frames of Cassels's type 1.7B, further supported by dating of buckles with pronged plates, known from around the middle of the century. Pronged plates also reinforce the mid-12th-century dating of oval type 1.3D and its large iteration, 1.3N. Though it is difficult to quantify the progression of these new buckle types in the mid and later 12th century, it is thought to have accelerated in the years around 1200, with new types emerging then (and slightly later) exemplified by the group of plates depicting lions and the enamelled output of Limoges (France). A final, probably contemporary, development argued for here is the use of strap-fittings with internal prongs (Cassels type 1.7I).

4.1.3 Contextual associations



Fig. 17 Borre-style buckles (comprising Naylor Classes A2, A3, C1, E3), plus Class A5iii, picked out separately for its uniquely Danelaw distribution, and Class C1 to show its broadly southeastern distribution

The distribution in England of earlier buckles decorated in the Borre style may be considered to provide context for later trends (Fig. 17). The late 9th- to late 10th- century buckles were distributed across southern central England, and eastern England generally as far north as North Yorkshire. They are sparse in the South West,

except for West Penwith in Cornwall, and also across large areas of the far north and West Midlands. Within this, there is little sense of the Danelaw acting as a cultural boundary, apart from for buckles with Borre-style interlace (Naylor Class A5iii). Indeed, buckles with 'Borre-style' heads are widely distributed, with a sub-rectangular type with an animal head at each corner (Naylor Class C1) focused on south-eastern England. Overall, this wide patterning seems at odds with the marked eastern focus of Borre-style objects published by Richards and Naylor (2010, 347, fig. 32.5). Their map include brooches as well as buckles; brooches were perhaps deployed in this zone as more explicit markers of identity (see also Kershaw 2013, 54, map. 3.5). In light of such a distribution, buckles of the 11th century as defined by their Ringerike-style decoration show remarkable continuity, both in terms of presence in the same areas, and also absence where earlier buckles were absent (Fig. 18). North of the Humber, though, such 11th-century buckles are notably absent relative to forms thought to be earlier. Within this overall distribution, distinctions can be made between the purer Ringerike forms (Naylor Classes A5i, A5ii) and the debased Class F buckles. Outside East Anglia, where both are present, there is a notable presence of the former in south-east England, in and around London, which may reflect the growing cultural and economic importance of the city under Cnut and his successors (Thomas 2001b, 230). Beyond East Anglia, the latter are also found in modern-day Lincolnshire and its hinterland. This ostensibly Danelaw distribution may represent a persistent Scandinavian affinity in the Norman period, given hints from rare dating evidence that the devolved forms seem to be later than the 'purer' examples.

Zoomorphic forms decorated in the Urnes style of the later 11th and early 12th century, show a notable extension to the pre-existing zone of buckle use, both within England and abroad (Fig. 19). The latter shows such buckles of the post-Conquest era used in modern-day Denmark and Sweden (Webley 2018, 397), implying extended cultural contact in the second half of the 11th century (demonstrated by excavated evidence), if not continuing later. In England, their extension beyond the 10th-century 'core zone' is demonstrated by finds in modern-day Northumberland, Cumbria and North Yorkshire. Broadly contemporary buckles with moulded beasts biting the bar (Naylor Classes A1, A4) help put buckles decorated in late Viking-Age art styles into a wider context. Indeed, they have a more extensive zone of use, particularly notable in



Fig. 18 Ringerike-style buckles (comprising Naylor Classes E1, F2, G), plus Classes A5i/A5ii picked out separately along with Class F1 showing the latter's distinctive Danelaw distribution

North Yorkshire, the North East and the West Midlands. Within this widespread distribution there is a clustering in modern-day Lincolnshire and Yorkshire; this is even more emphasised for the variant groups (A1ib, A4), and may represent manufacture at their major centres of Lincoln and York.

Within the overall set of types dated here to the late Saxon and early Norman period, there is a tendency towards a dichotomy: not as mutually exclusive zones, but



Fig. 19 Urnes-style buckles (Naylor Class A6, and the rare Class E2) plotted with broadly contemporary Classes A1/A4

between the more decorated forms focused more on southern and south-eastern England (e.g. Class A5ii), and plainer designs (e.g. Class A1ia) centred on Yorkshire and the East Midlands (but with certain types spread more widely). The reasons for this may be as much socio-economic as socio-cultural, given the contemporary importance of Winchester and London.

Of the broadly 12th-century buckles described as Romanesque, those of Naylor Class A1iii show a distinctive central southern bias to their distribution, extending west, while being found in other areas (Fig. 20). This restricted focus is interesting for these large frames, possibly belonging to sword belts. Some sword belts did not have buckles (Cameron 2003b, 3367), being instead fastened by one end being split into thongs that were tied (having been passed through slots); however, many did (Hartshorne 1891). These possible sword-belt buckles could represent 'elite' material (see Section 1.2.2 for the high-status belted knight), whole relative circulation was notably high within a southern zone. Gaping-mouth beast buckles are widespread, as are those of the standing animal type, with examples of the latter found as far west as Devon, and as far north as Northumberland, and even Perth (Perth and Kinross).



Fig. 20 'Romanesque' buckle forms (c. 12th century)

Within the spur buckle corpus, the types suggested here to be early – those with zoomorphic projections and certain of those with oval frames, integral plates and rivets – have a notably southern distribution within England, and are rare north of the Wash (Fig. 21). This restricted distribution is comparable with that of prick spurs found archaeologically established by Lagane (2010, vol. 2, 5). It is not the case for examples with square frames, argued to be later in date (c. 13th century). At the same time, early spur buckles – of Thuaudet type T and the more temporally precise Krabath

Varienten J1 and J4 – are present across a large area of Continental Europe, including England, France, the Netherlands, Germany and Switzerland. Through such spur buckles we see a shift, as the 12th century developed, from the enduring connection between England and Scandinavia exemplified by the Urnes-style buckles of the immediate post-Conquest period (Fig. 19), to an elite material culture encompassing England and the near Continent.



Fig. 21 Medieval spur buckles of early form

For those single-looped frames argued to have appeared around the middle of the 12th century, or slightly earlier, their forms' long lives inhibit commentary on their distribution – potentially, shifting distributions through time will be obscured. What can be established, though, is that such frames were being used across a large area of

England, and also across western Europe (Fig. 22), including Scotland, France, Belgium and modern-day Sweden; by this time the Danish medieval state had also been drawn into what was a European mode of fashion (Krabath 2001, 154-155, karten 38, 39).



Fig. 22 Single-looped girdle buckles (12th-century)

Within the general distribution of 12th-century (and later) frame forms, the accompanying plates identified here show interesting particularities. Buckles with pronged plates are generally restricted to a zone south and east of a line between the Severn and Humber estuaries; a few examples have also been recorded from France (Fig. 23). The English pattern is reminiscent of the southern distribution described by the proposed sword-belt buckles (Fig. 20). By contrast, the distribution of M-shaped plates is very clearly centred on East Anglia, with few outliers, suggesting local



Fig. 23 12th-century buckle plates

production and restricted distribution mechanisms (Rogerson and Ashley 2018, 396, 398, fig. 5). Buckles plates with conjoined crescents accompanied by rectangular frames form a mutually exclusive distribution to the west. Similarly, although not to the same extent, plates depicting an enthroned ruler include a cluster in modern-day Yorkshire and Lincolnshire, while they are far more widespread. They overlap with pronged plates in East Anglia and the Midlands, but there are far fewer examples in the South of England. Overall, these 12th-century introductions present something of a

contradiction between their European distribution (for those with pronged plates) and their absence from certain areas of England: the far South West, upper West Midlands, North East and North West. It is perhaps here that we are seeing excavation bias at play and the aforementioned issue of not being able to place the associated single-looped frame forms in the 12th century with certainty, with reporters perhaps assuming a later date for them.

4.1.4 Identity associations

4.1.4.1 Rural/urban

Around 81% of buckles were recorded from rural areas, without any obvious contextual association, although for many spur buckles this may reflect loss in transit. There are further problems in analysing contextual associations for the 12th-century single-looped girdle buckles: those identified in this study are more likely to be from excavations as, unlike other, more distinctive, types, such buckles cannot be straightforwardly identified as being of this date if discovered as rural, decontextualised finds.

Looking through time, the 10th-century Borre-style buckles almost never show contextual associations (Fig. 24). This pattern is largely maintained for the Ringerikestyle buckles of the early-to-mid-11th century; the main exception is the presence of particular forms in urban contexts, such as three Naylor Class A5ii buckles from London, and one from Exeter (Devon), implying the growing importance of these major centres in the Anglo-Danish period (Thomas 2001b, 230). A similar level of urban association can be seen in the buckles attributed to the later 11th century, decorated in the Urnes style (e.g. Naylor Class A6), or the double-looped examples with zoomorphic projections, suggested here to be spur buckles. The simpler buckles of Naylor Classes A1i and A4, with animal heads biting the bar, which may be contemporary or later, show a striking variety of contextual associations compared to the more decorated pieces. They are slightly more often found on sites such as villages, for example at Cowlam (East Yorkshire), Wharram Percy (tofts and crofts), and at the coastal trading settlement at Meols, but are also known from ecclesiastical sites, urban locations – such as Lincoln (Lincolnshire), Perth and Beverley, and even from the site of Stafford Castle (Staffordshire). Such diverse use may, however, reflect the far larger numbers documented.



Fig. 24 Contextual associations for buckle types over time. While some forms have very few contextual associations (orange), others, such as the Ringerike-style Naylor Class A5ii, demonstrate a degree of urban association (purple)

Within the context of a largely rural PAS dataset, forms identified of the early 12th century show continuity with the 11th-century pattern for urban presence, including buckles with animal heads biting the bar (if they are assumed to have been still used at the time). This is particularly true for frames depicting standing animals (Fig. 24), known from Perth, Doncaster and Leicester. Buckles of the gaping-mouth beast type are not currently known from urban contexts (Cassels 2013, 27). That noted, other spur buckles show a strong tendency (beyond a decontextualised rural find location) to be found in urban contexts, such as at London, Geldermalsen (Netherlands) and Winchester, but also at rural elite centres (e.g. Corné, L'Isle-Bouzon (France)) and castles (e.g. La Butte, Isle Aumont (France)). This trend was noted by Lagane (2010, vol. 1, 45, fig. 1) in her European study of prick spurs, though her data collection might demonstrate a greater excavation bias towards such sites. Tempering this tendency slightly, an example is also known from the deserted medieval village of Westbury-by-Shenley (Buckinghamshire) (Mills 1995, 348, 355, fig. 151.49, no. 214).

Towards the middle and later 12th century, the single-looped frames which proliferated from then onwards show the greatest diversity of contextual associations, being found across a large range of site types (Fig. 24). This variety must be treated with caution given both the larger sample and a focus on excavated examples (rather than decontextualised PAS finds). That said, there is an unprecedented urban tendency within the contextual associations of single-looped buckles, which may point to the rise of such centres in the latter part of the 12th century. The forms of contemporary plates identified tend to lack contextual associations, although for the pronged plate type one is documented from King's Lynn (Norfolk), and two from elite rural settlements – 'Le Verger', Saint-Romain (France) and Old Sarum (Wiltshire). A similar trend can be seen with the strap-fittings of Cassels type 1.71: examples have been found (outside the rural sphere) in the major urban centres of London and Winchester, and elsewhere at castles such as Rubercy and Lydford (Devon).

Overall, within a dataset dominated by metal-detected data, site associations tend to increase through time, not least an urban one, culminating with the singlelooped frames of the mid-12th century onwards. The large group of relatively simple buckle frames depicting animals biting the bar seem to have been used in diverse contexts, though the vast majority have been found in the rural sphere, decontextualised. Finally, the use of particular forms in more rarefied contexts has been identified, for example, spur buckles, and will be explored further below.

4.1.4.2 Status

The status associations of particular buckles, inferred from their find locations, draw out some of the patterning already discerned. While many buckles have been found on sites attributed a mid-status classification, the more common the type, the more they tend to be spread through society. There do seem to be some trends, however. The relatively simple frames with animal heads biting the bar seem to gravitate further down the social spectrum, while trends among certain spur buckles appear to point in the opposite direction. Spurs have elsewhere been noted as the best measure of *milites* status, and go beyond broader evidence for equestrianism (Portet and Raynaud 2009, 216; see also Creighton and Wright 2016, 177). While only known from small

156

numbers, certain of the more distinctive forms, such as Cassels type 1.7I fittings, Naylor Class A6 buckles (Urnes style) and gaping-mouth beast buckles tend to have high-status associations (Fig. 25). What seems most remarkable is the wide range of social access to forms that at the same time show an inclination towards higher-status sites. At the ZAC Avaricum site in Bourges (France), an industrial and commercial area, single-looped buckles of Cassels types 1.3B and 1.3C were as normal as they were in contemporary urban centres (Mathis and Rajade 2013b, 112-113, fig. 4-13, nos 2528, 2541, 2559). At Bickley, Cleeve, a buckle was found of the pronged plate type. Here, on a relatively isolated settlement site in Avon, is a type described as 'high quality' when found in London (Egan and Blackmore 2015, 51).



Fig. 25 Status associations for different buckle types

4.1.5 Materials analysis

The present buckle corpus is predominantly copper alloy, given the predominance of metal-detected material. A few items were manufactured from organic material such as horn and morse (walrus) ivory. The existence of spur buckles in iron, throughout time, although particularly at the start of the period, is common for equestrian associated equipment; it extends to the use of iron as a secondary material (mainly for

the pin), and may mask wider numbers. Many buckles also in iron were unable to be pursued further here due to their undiagnostic forms.

Within this largely copper-alloy corpus there is a distinct trend through time towards a multiplicity of manufacturing approaches, away from the predominance of casting. Starting in the later 11th century, there seems to be a move away from making elaborately cast frames (or frames with integral plates) to fabricating separate plates, primarily worked or sometimes cut, to accompany rather simpler frames. However, just examining this trend of declining complexity of frame decoration skews our sense of the investment of time and effort in buckle manufacture. Plates of the 12th century were often highly decorated, using a multiplicity of techniques, to the point that they emphasise the relative lack of decoration on the associated frames.



Fig. 26 Changing approaches to buckle manufacture through time

The majority of buckles analysed were moulded through casting (Fig. 26), with many further embellished by engraving. While this approach dominates at the start of the period, more variety develops in the late 11th and 12th century. As noted, there

was not a decline in decoration per se, rather a change in approach. Gilding, for example, appears to be mainly restricted to this 'long 12th century', and continued until the mid-13th century (Egan 2008a [1991], 27). While the variety of decorative techniques seem present across social milieus, there is a slight tendency for gilt buckles to appear more often in high-status locations.

4.1.6 Summary of key points

D	Many forms documented for this period – both frames and plates – are undiagnostic					
A	when outside a datable archaeological context					
1	The extent to which this disproportionately affects the corpus presented here					
I N	is difficult to measure					
G	Certain types dominate the corpus: Naylor Class A1ia, broadly of the 11 th to 12 th					
	century; spur buckles; and single-looped buckles. The general trend is towards greater					
	numbers at the end of the period, if Class A1ia are spread across their supposed					
	period of use.					
	• The question of the presence of the ubiquitous medieval single-looped buckle					
	in the 12 th century has been addressed, with particular types picked out as					
	relevant to this period.					
	Late Viking-Age forms persisted into the post-Conquest 11 th century and simpler					
	zoomorphic forms, which appear to be inspired by them, into the 12 th .					
	The period appears to see a rise in the use of separate plates; earlier, integral plates					
	were more frequent (Riddler and Walton Rogers 1996, 261), or no plate.					
	An apparent decline in decoration of frames through time intersects with increasing					
	elaboration of plates. This confounds the use of frames as criteria for both typological					
	work and assessments of time/effort involved in buckle manufacture. Where possible,					
	relationships between frames and plates need to be established to reinforce					
	chronologies and make more rounded assessments of approaches to manufacture.					
А	If, as argued here, the double-looped frames with zoomorphic projections and the					
S	gaping-mouth beast form are taken to be spur buckles, then, significantly, spur buckles					
S	represent over 19% of this corpus. There was an apparent rise of spur wearing during					
0	the period of study, though earlier use may be masked by a bias against iron in the					
C	dataset.					
I	The 12 th century sees a shift within connections between England and Scandinavia					
А	shifting south to the near Continent, the relatively late date of which suggests					
Т	persistence of Scandinavian forms and styles.					
I	There is a general absence of buckle use in particular areas towards the edges of					
0	England throughout the whole period. Patterns discerned within the main zone of use					
Ν	include a southern bias towards elite buckle types (spur buckles, possible sword-belt					
S	buckles), and regionalised use of particular plate forms in the later 12 th century,					
	probably relating to restricted production and distribution networks.					

4.2 Strap-ends

4.2.1 Introduction and historiography



Illus. 10 Strap-end in use on a belt on a Portail of Chartres Cathedral (c. 1150-1200)

Strap-ends were attached to the terminals of straps for protection and embellishment, including making the strap hang down (Illus. 10; Thomas 2003, 1). Many, particularly as dress accessories, protected the strap's terminal during repeated threading through a buckle frame (Thuaudet 2015, 669). Although the majority of strap-ends were produced in copper alloys, examples are known in iron or lead, and occasionally in precious metals; they are also known in animal skeletal material (MacGregor 1985). Strap-ends have a long pedigree, featured in Roman dress (Thomas 2003, 1), and persisted into the late medieval period (e.g. Pritchard 2008a [1991]), and beyond. They are very common items on the productive sites centred on the 9th century (Richards *et al.* 2009, 4.3.3; see Thomas 2000a, 271; Thomas 2009, 12). In this period their function was varied: as well as being used on girdles they were possibly garter

accessories,³⁰ harness fittings, or used on bags (Thomas 2000a, 262; 2003, 1). By the late 9th, and particularly the 10th century, the tongue-shaped form, inspired by earlier, Carolingian baldrics (Thomas 2004, 1),³¹ is attested from hoards and pagan burials as part of leather waist belt sets, alongside matching buckles (Thomas 2000a, 244, 262, 269, 281). Examples with relatively small widths may have been used on contemporary spur 'leathers', or, again, on garters (Thomas 2000a, 268).

Major typochronological work on late Viking-Age and late Saxon strap-ends was performed by Gabor Thomas for his PhD thesis (completed in 2000), which informed two FRG Datasheets (2003, 2004). His seven major classes (Thomas 2000a; 2003; 2004) have proved to be applicable to most examples dating between the 8th and 11th centuries (e.g. Green 2017). Simpler strap-ends were also present, including those made simply by folding strips of metal (Thomas 2003, 1), found, for example, at Flixborough (Lincolnshire) (Thomas 2009, 9-10); other strap-ends not addressed by Thomas are dealt with in Section 4.2.2.2. The challenge of charting strap-ends beyond the parameters of Thomas's surveys, into the 12th century, is heightened for reasons discussed in Section 4.2.2.3.

4.2.2 Typochronological analysis

4.2.2.1 Late early-medieval to medieval strap-ends classified according to Thomas's classification

In Table 13 the forms attributed by Thomas (2000a, 454) to the 10th and 11th centuries are considered, with further detail provided in Appendix 1.B.i. Thomas's dating is largely upheld, with few examples having since been found in stratified contexts. The major exception is Class I, for which his dating, based partly on stylistic assessment of the zoomorphic terminal, has been rejected (see also Appendix 1.B.i.8). The forms' relative chronology is shown in Figure 27 and can be compared with Thomas's (2000a, 454) diagram 6.1.

Of the forms extant before the 10th century (Classes A, B, D and F), few persisted beyond it. As the century progressed, a far wider, tongue-shaped form, known as

³⁰ Garters being strips of leather or cloth bound around the lower leg over cloth trousers or over hose
³¹ A baldric being a strap worn diagonally over the shoulder to hang a sword [scabbard] at or above the hip, often supported by a second strap

Thomas Class	Basic form/art style	Date range suggested by Thomas (2000a; 2003; 2004)	Date range proposed	Example – location	Example – date (reference)	Sample image
Class B, Type 1	Transverse grooved decoration; zoomorphic terminal/-	c. late 8 th /early 9 th -11 th century	c. 800-1025	Brook Street, Winchester	Early- to mid-11 th century (Hinton 1990d, 501- 502, fig. 126, no. 1065)	PAS : WILT-7AC4CE
Class B, Type 6	Animal-head terminal displayed side on/late Viking-Age styles	11 th century	As Thomas	None known stratified	n/a	PAS : SOM-F5A912
Class E, Type 1	Symmetrical plant scroll, sometimes inhabited [by animals] /'Winchester style'	Late 9 th -11 th century	c. 925-1075	Bow Bells House, London	c. 1050-1100 context (Richardson 2013, 96-97, fig. 62, no. S34d)	Cm PAS : SOM-F33A5F
Class E, Type 2	Anthropomorphic/-	c. 10 th -11 th century	c. 925-1050	Norwich Castle	11 th -century context (Margeson and Williams 1985, 29, pl. XVI, no. 4)	PAS : NMS-199370

Table 13 Appraisal of strap-ends of the 10th and 11th centuries in Thomas's classification

Thomas Class	Basic form/art style	Date range suggested by Thomas (2000a; 2003; 2004)	Date range proposed	Example – location	Example – date (reference)	Sample image
Class E, no Type	Various/Romanesque (some)	Post Conquest (some)	As Thomas	None known stratified	n/a	PAS:HAMP-1ECDF1
Class G	Wedge-shaped split end; openwork zoomorphic terminal/Urnes	c. 1050-1100	As Thomas	All excavated examples assumed to be residual	n/a	PAS : LIN-D9A478
Class H	Lobe-shaped, foliate tongues (some)/Ringerike	Early-mid 11 th century	As Thomas	Goltho Manor (Lincolnshire)	c. 1130s terminus ante quem (following site redating in Everson 1988, 94)	PAS : SF-67B347
Class I	Cast front plate with zoomorphic terminal; sheet back plate	Later 11 th century	c. 14 th century	Bordesley Abbey, Redditch (Worcestershire)	late 14 th to early 15 th century (Astill 1993, 193- 194, fig. 88, no. 145)	PAS : BH-3005B4



Fig. 27 Proposed chronologies for Thomas's main strap-end groups – examples of 10th- and 11th-century types depicted

Class E, came to dominate. At the start of the 11th century, Thomas suggested the persistence of Class B, Type 1 strap-ends, alongside those of Class E. However, this appears to rest on an arguably singular example found in an 11th-century context in Winchester (see Table 13), maybe a residual object; in the city similar examples were found in far earlier levels. As the 11th century progressed, several classes featuring late Viking-Age art styles appeared: initially Class H, decorated in the Ringerike style, then Class G, from around the middle of the century, decorated in the succeeding Urnes style. Class B, Type 6 is given a more general 11th-century date as, though its decorative treatment is consonant with late Viking-Age art, it cannot be attributed specifically to a style (Thomas 2003, 6). Excavated evidence suggests the persistence of Class E, Type 1 into the second half of the 11th century, especially in a more abstracted, uninhabited form (Thomas 2000a, 209; Kershaw 2008, 264). Rare Romanesque designs on unclassified Class E strap-ends also implying the general

form's endurance beyond the Norman Conquest. Quite how long the Scandinavian and Anglo-Scandinavian types endured is difficult to deduce. Limited evidence for Class H (from Goltho Manor) suggests it might have been used in the post-Conquest period. While evidence for Class B, Type 6 is unforthcoming, the limited evidence identified in this study supports Thomas's suggestion that Class G strap-ends continued into the second half of the 11th century, if not slightly later (Appendix 1.B.i.6).

4.2.2.2 Contemporary strap-ends unclassifiable according to the Thomas classification

Further to the types isolated by Thomas, three groups, with an early to mid 11thcentury focus, have been discerned and are set out in Table 14, with further detail supplied in Appendix 1.B.ii. The existence of 'ball-ended' strap-fittings is noted, but not pursued; Rogerson and Ashley (2015b, 304), who isolated the group, noted that while they may have acted as strap-ends, they need not have. Similarly, the object type described as a 'hasp' known from excavation at Middle Harling (Norfolk) is not treated further (Margeson 1995a, 65-66, fig. 46, no. 99), though a function as a strapend cannot be ruled out. Within the three forms identified, the constructional difference of the socketed end type from those with typical split attachment ends (Table 14), might suggest changing approaches to manufacture, as Thomas (2000a, 218) had suggested for his Class I.

4.2.2.3 Strap-ends post-dating Thomas's survey

Although some of the types already discussed may have continued beyond the 11th century, the distinct impression is that there was an overall hiatus in the use of strapends in the 12th century, one exacerbated once Thomas's Class I is discounted. This is based on a general absence of strap-ends on major sites of the period. Though this may represent an absence of evidence for a given location (e.g. Pritchard 2008a [1991], 126 – for London), its cumulative effect is significant. At London, no strap-ends were documented by Geoff Egan (2008a [1991], 24, fig. 12) from ceramic phase 6

Type name	Basic form	Date range suggested (reference)	Date range proposed	Example – location	Example – date (reference)	Sample image
Arched terminal	Split attachment end; two, sometimes three, sub- rectangular apertures; thickened terminal bar	Roman (Ashley 2016, 292)	c. 975-1050	Bury Road, Thetford (Norfolk)	c. 1000-1050 ceramic dating (Gibson 2015, 273- 274, fig. 5.1, no. 9)	PAS : NMS-C64CF4
Socketed end	Socketed attachment end; thickened terminal bar	c. 12 th century (Ashley 2016, 292)	c. 11 th century (based on typological similarities to 'arched terminal' form, and Danish examples)	None traced	n/a	PAS : NMS-BOB8BD
Globular terminal	Trapezoidal plate with deep split; globular terminal, sometimes decorated with knops	- (n/a)	Wide, but including the 11 th century	Meon Hill, Houghton (Hampshire)	Found in grave with coin of 1053- 1056 (Liddell 1933, 153, fig. XV, no. M7)	Cms PAS : HAMP-E56C6D

Table 14 Appraisal of strap-ends not featuring in Thomas's classification

contexts (c. 1150-1200), and only two from the succeeding phase (c. 1200-1230; Pritchard 2008a [1991], 126), now dated 1235 onwards (Schofield *et al.* 2018, 452, artefact table 20). Furthermore, strap-ends are absent from major sites with significant quantities of 12th-century material, such as Castle Acre Castle (Goodall 1982), Bull Wharf, London (Egan and Blackmore 2015), or Leidsche Rijn, Utrecht (Netherlands) (Hendriksen 2004), or from places prolific over a wider timespan, such as Lund (Sweden) (Mårtensson 1976) or York (Ottaway and Rogers 2002).

Major European synthetic works further imply a general absence of 12th-century strap-ends (Krabath 2001, 160; Thuaudet 2015). It has also been observed by Cassels (2013, 36) for England. He attributed the absence to a lack of 12th-century material in general, though this is perhaps too simplistic a reading of the situation. Ward Perkins (1993 [1940], 265) related a lack of strap-ends to contemporary fashion in which *bliaut* (gown) girdles were knotted, rather than fastened using buckles (Illus. 11); strap-ends were therefore not required to ensure that the ends of the girdle hung down. The material used for bliaut girdles may also have obviated the need for strapends (Eleanor Standley pers. comm. 2020), but, even on the buckled (presumably leather) belt depicted on the effigy of Robert FitzRoy, 1st Earl of Gloucester (d. 1147), which hangs down, no strap-end appears to be shown. Pendent strap-ends can be seen on sculpture dated to the second half of the 12th century at Arles (France) (Thuaudet 2015, 731, fig. 31), and, in manuscript art, on the late 12th-century donor portrait of the 'Psalter of Eleanor of Aquitaine' (Illus. 12), though most invocations of iconographical evidence tend to be for early 13th-century examples (e.g. Ward Perkins (1993 [1940], 265). Such (late) iconographical evidence generally relates to the highest social echelons and may not be representative of wider society.

Even if the iconographical evidence for strap-ends implies use (to an extent) at the end of the 12th century, there may be taphonomic reasons why strap-ends of this period cannot be readily identified. In general, strap-ends of the high medieval period were predominantly of sheet construction, compared to the cast one-piece examples of the late early-medieval period (Ottaway and Rogers 2002, 2900; Pritchard 2008a [1991], 129; Thuaudet 2015, 730). Whether formed of simple, folded sheets, or separate sheets attached at their terminals, such strap-ends are not only difficult to



Illus. 11 Statue of the Queen of Sheba from Notre-Dame de Corbeil, Corbeil-Essonnes (France), showing detail of knotted girdle (c. 1150s)



Illus. 12 Detail from the donor portrait of the 'Psalter of Eleanor of Aquitaine' showing a strapend in use (c. 1185)

date out of context, they can also be difficult to distinguish from plates for folded clasps, especially when they lack lateral frame recesses (Pritchard 2008a [1991], 158). As Thuaudet (2015, 730) noted, strap-ends were by their nature subject to more use and abrasion than most other dress accessories; wear and fragmentation exacerbates difficulties in distinguishing them from plates.

Faced with this void, only Ashley (2016, 290-292) has suggested plausible forms,³² based on their construction and decoration; these are set out in Table 15, with further detail in Appendix 1.B.iii. The 'split attachment end form' represents continuity of construction with the latest of Thomas's types (e.g. Class G; see Table 13 and Fig. 27). It is presumably on this basis that Ashley (2016, 291-292, fig. 18.8, no. 53) attributed a copper-alloy example with split attachment end and zoomorphic terminal to the 12th century. Pritchard (2008a [1991], 151) noted a hiatus in such an approach to construction between the late early-medieval period and the late 14th century in London, and that when the approach was revived the favoured materials were lead or tin alloys, not copper alloy. On the Continent, strap-ends of such manufacture (Thuaudet type G) are not only rare, but absent in southern France throughout the *premier Moyen Âge* (Thuaudet 2015, 718-719); later examples found at Corné are therefore unusual for the region (see Table 15), yet they provide dating for such construction in the late 12th and early 13th century.

The second type dated to the 12th century by Ashley, strap-ends formed of a sheet folded widthways at its centre are not noted in medieval London until the late 13th century (Pritchard 2008a [1991], 129). In itself, the construction is chronologically undiagnostic. Ashley (2016, 292) dated his examples to the 12th century, by implication to the end of the century, by reference to the presence of gilded relief or engraved zoomorphic decoration, comparable to buckle plates with similar decoration dated to the late 12th or early 13th century (see Section 4.1.2.5).

Though one cannot put the strap-end classes overall into neat chronological boxes, a decline in the use of strap-ends can be noted for the period between the 9th century and the 12th. If the 12th-century date advocated by Ashley is taken for the

³² Further, and varied, examples attributed to the 12th century on the PAS database appear to have been done so based on speculation regarding various traits; while they lack excavated parallels, their chronological status lacks certainty.

Type name/Equivalent	Basic form	Date range suggested (Ashley 2016, 291-292)	Example – location	Example – date (reference)	Sample image
Split attachment end /Thuaudet type G	Split attachment end; zoomorphic terminal	c. 12 th century	Corné, L'Isle- Bouzon	late 12 th -early 13 th century (Lassure 1998, 465, fig. 404)	PAS : NMS-39F935
Folded widthways/ Thuaudet type A	Sheet, folded widthways at its centre; gilded, relief or engraved [zoomorphic] decoration	c. 12 th century	Vintry, London	c. 1100-1160 (VRY89[V622]<928>)	Cm PAS : NMS-2266D5

Table 15 Appraisal of strap-ends post-dating Thomas's survey

socketed end type and various examples that have been folded widthways, then only 2% of the dataset can be attributed to this period (and such dating has been queried for the former). To go further would require differentiating different functions for strap-ends of different modules. Our understanding is not sufficiently advanced for such an analysis, but we may observe that a broad dichotomy of widths observable in the earlier part of the corpus (Fig. 28) – perhaps suggesting differential use – seems to give way in the second half of the 11th century to a more singular use, presumably as a girdle terminal (as implied by iconographical evidence), with some small examples perhaps from spur leathers.



*Fig. 28 Comparison of strap-end widths through time, showing discrepant widths for 9*th- to early 11th-century types, and more regular widths for later 11th- and 12th-century types

4.2.3 Contextual associations

Of the strap-ends recorded, the vast majority (98%) lack a direct contextual association given that almost all examples were recovered through metal-detecting. However, the preceding discussion allows for diachronic mapping of strap-ends; such maps can be compared with those created by Thomas for items he attributed to the 10th and 11th centuries. In some cases, for example Class H, Thomas (2000a, 256) was not able to make any observations regarding distribution from his few examples. Strap-ends from the centuries preceding those under consideration were recorded to provide a comparison, principally Thomas Class A – a type fossil of the 'long 9th century' – and Class B.



Fig. 29 Broadly 10th-century strap-end forms

Thomas Class A dominates the wider dataset (c. 36% of examples); the more varied Class B are contemporary (c. 17% of examples), though some may be 10th, even

11th century in date. Comparing the classes shows the relatively weak distribution of Class B, Type 1 north of the Humber, but its relatively strong distribution in the south of England, as observed by Thomas (2000a, 244). This, he suggested, was possibly due to production in urban centres such as Winchester and Canterbury (Kent) for his 'stereotyped' group (later termed Class B, Type 1), particularly Winchester, based on the most recent mapping (Fig. 29). Given the doubts expressed above over the lateness of the sub-type this may be more likely than a minor spatial shift in strap-end use through time. This notwithstanding, the distribution described by Class B, Type 1 and Class E, Type 1 is comparable (Fig. 29). As Thomas (2000a, 249) noted, the significance of the distribution of the latter, 'Winchester-style' strap-ends (c. 30% of the dataset) is that it counters older interpretations of this style being essentially southern or south-eastern, a point developed by Kershaw (2008). It is difficult to make any attempt to distinguish earlier and later examples within the sub-type and therefore make observations about their respective distributions. Thomas's (2000a, 250) stated focus of Class E, Type 2 examples in Norfolk remains valid.

Turning now to strap-ends attributed solely to the 11th century (forming only 7%) of the dataset), the distribution of Class B, Type 6 remains widespread, though it has now lost its southern bias (Thomas 2000a, 247). This wide distribution may be interrogated by considering other types with late Viking-Age art-style decoration, but which can be categorised more precisely. The earliest of such is Thomas Class H, specifically the variant with lobe-shaped tongues decorated with Ringerike-style foliage. On the one hand, they are very widespread, with examples known from Devon, Oxfordshire and Cumbria (Fig. 30). On the other hand, a clear focus for the group can now be discerned within Lincolnshire, providing a counterpoint to the rising pre-eminence of the southern centres of London and Winchester during the reign of Cnut. As Thomas (2000a, 260) suggested, the Danelaw continued to play a key role in the circulation of this Anglo-Scandinavian metalwork, at least in the 11th century, and perhaps also its production. Class G, a succeeding type, based on its decoration in the Urnes style, certainly has a widespread, but fuller distribution, compared to the earlier, Ringerike-style objects. Though still present in Lincolnshire, examples are known from the rest of the Midlands and across southern England. Following Thomas (2000a, 255), this helps provide a corrective to an earlier stress on the Danelaw for

173

items decorated in the Urnes style. Of the other types identified in this study, the type with an arched terminal, suggested to be a 10th- to 11th-century object, has a strong focus on Norfolk, extending somewhat into Suffolk, with only a few outliers to the west and north of East Anglia. This is also the case for the socketed end type, perhaps implicating Norwich in their manufacture.



Fig. 30 Thomas Class H strap-ends with Ringerike-style decoration

4.2.4 Identity associations

The social status of strap-ends has been discussed by Thomas (2000a) for his extended timeframe. There is much variety of contextual association for the broadly 10th- century strap-ends found through excavation. While many have been found in urban contexts, Class E strap-ends are also known from deserted medieval villages or sites such as Meols. There are relatively strong associations between both the 11th-century type with arched terminals and Thomas Class G with urban contexts, though numbers are few and they are tempered by metal-detected examples. The finding of a Class H strap-end, also of the 11th century, at Goltho Manor (Table 13), is suggestive of a high-status association of strap-ends at this later date, though not too much should ever be read into a single example. If a tendency towards urban contexts, and perhaps those of elevated social status, can be discerned in the present dataset, then the overriding impression echoes Thomas's observations of the ubiquity of strap-ends in a variety of social milieus.

4.2.5 Materials analysis

The relative decline of manufacture of strap-ends in silver after the 9th century has been long documented (e.g. Thomas 2000a, 287). Notwithstanding the predominant use of copper alloys across all centuries, the 10th century saw the greatest variety of primary materials, with Class E, Type 1 strap-ends in lead, lead alloys and bone. Perceived as evidence of mass production, the use of lead has perhaps been considered too pejoratively in the past (G. Thomas *et al.* 2008, 181). By contrast, only copper alloy was documented for the strap-ends attributed to the 11th and 12th centuries.

A distinction can be made between the cast, often openwork, objects of the 11th century (Thomas 2000a, 154), often the results of detailed 'lost-wax' castings, and the decreased investment of time implied by the few examples attributed to the 12th century. The latter are of less prestigious solid sheet manufacture, though even these, if gilded, represent a higher degree of effort than later objects which lack gilding (Fig. 31).



Fig. 31 Approaches to strap-end manufacture through time

4.2.6 Summary of key points

D	The extensive study by Thomas (2000a; 2003; 2004) has largely stood the test of time
А	• However, his suggestion that Class I is 'Saxo-Norman' is rejected – rather, examples
Т	are high medieval and as such not relevant here
Ι	
Ν	A distinct decline in use of strap-ends by the 12 th century is apparent, with a significant
G	return only in the early 13 th century
А	There are no strong relationships between strap-ends and particular contexts of use –
S	they are found in a wide variety of milieus
S	
0	There is a slight decline in investment of time in manufacture between the 11 th and the
С	12 th century pieces, although the latter are rare
Ι	
А	
Т	
Ι	
0	
Ν	
S	

4.3 Brooches

4.3.1 Introduction

Relevant brooches up to c. 1100 have recently been dealt with in detailed studies on Scandinavian and Anglo-Scandinavian material by Jane Kershaw (2013), and on brooches ultimately of Carolingian and Ottonian inspiration by Rosie Weetch (2014). In combination, their work showed that, by the 11th century, the disc form of plate brooch had superseded the fibula (ansate form), and that during the Second Viking Age, Anglo-Scandinavian designs came to be made manifest on other forms of plate brooch. Such work, however, probably for structural reasons, has not been developed through time to assess the intersection of such brooches with the dominant later form, the annular brooch, documented from the 11th century onwards. It has been suggested recently that annular brooches may have developed from disc brooches whose central hole was progressively widened (Egan and Blackmore 2015, 49). However, an alternative source of inspiration, , might be the penannular form, until now thought not to be used in the (high) medieval period in England; a recent study by Anna Booth (2014) ended in the 7th century. The following survey will assess these main forms – disc, plate, penannular and annular – and aims to locate each within the 11th and 12th-century period.

4.3.2 Typochronological analysis

4.3.2.1 Plate brooches of circular form (disc brooches)

Plate brooches of a circular form (disc brooches) dominated in the 10th century (Weetch 2017, 264). Also present, in lower quantities, were continentally inspired ansate brooches, and Scandinavian trefoil, oval and openwork-lozenge brooches, all continuing fashions from the 9th century and before. Often cast in base metal and characteristically flat (certain Scandinavian-inspired brooches were more convex), brooches of the 10th century were often decorated in art styles of the First Viking Age, or with plainer motifs far less susceptible to art-style dating – such as crosses or peltae (Weetch 2017, 264, 266). Weetch (2017) has recently made a case for this late Saxon

tradition for flat circular brooches enduring and developing into the 11th century; it is harder to argue that disc brooches with Scandinavian or Anglo-Scandinavian decoration, or trefoil and ansate brooches, lasted significantly into the 11th century (Kershaw 2013, 155, fig. 4.2). Instead, brooches in the 11th century bearing Anglo-Scandinavian art styles tended to have different forms of plate, discussed below.

Weetch's (2017) recent analysis by of brooch types of discoidal form thought to have been in use in the 11th and 12th centuries is developed in Table 16; further detail is provided in Appendix 1.C.i. Though her (2017) piece focused on types made in lead alloys, generally used in urban contexts, other relevant forms are noted. Disc brooches of the 11th century, as Weetch (2017, 273) has argued, suggest an underlying continuity of dress practices regardless of variety and novelty of brooch form. They can be more or less related to the 10th-century corpus, dominated as it was by flat, base-metal brooches. Types set out in Table 16 rarely exceeded a range of diameters between c. 20 and 40 mm, the exceptional examples mostly belonging to Types 13 and 14. The relatively huge Bredfield (Suffolk) and Sutton (Cambridgeshire) brooches of Type 10.A are rare examples in precious metal; relics of a former tradition (Hinton 2005, 143) they are peripheral to the present discussion. It is thought that the vast majority of brooches in this period were worn in the chest area (Weetch 2017, 273), many in the manner of badges; indeed, Kelleher (2013) refers to Type 2.B examples as 'badges' rather than brooches. The smallness of the documented brooches, and the flimsy pins retained on some, suggests that they would not be practical as the cloak fasteners depicted in contemporary iconography (Krabath 2001, 120; Weetch 2014, 326).

Weetch's work has altered our sense of brooches in the 11th century, particularly lead-alloy examples – for which a 10th-century date had previously been given on typological grounds (Weetch 2017, 268). Within the underlying conservatism for 11thcentury disc brooches, she was able to chart a number of changes across the century (Weetch 2014; 2017). As well as convincingly demonstrating the continued strength of the use of lead alloys from the 10th century, in forms that were traditional (flat; Types 2.Ai, 2.Aii, 4.B), she also argued for novel forms around AD 1000 (three-dimensional; Types 13, 14, 23-25).

178

Weetch Type (short name)	Basic traits	Date range suggested by Weetch (2014)	Date range proposed	Example – location	Example – date (reference)	Sample image
2.Ai (nummular)	Design elements related to coin obverses	c. 750- 1100*; most based on <i>solidi</i> of Louis the Pious	c. 800- 1050*	-	-	PAS: BUC-717EA7
2.Aii (nummular)	Design elements related to coin reverses	c. 750-1100*	c. 950- 1150 focus*	Bull Wharf, London	c. 1103-1120 context (Egan and Blackmore 2015, 47-48, ill. 30, no. 1044); short cross fleury design suggests a prototype from William I onwards	Image: Constraint of the second sec
2.B (coin- brooch)	Adapted silver pennies; reverse displayed, often gilded; pin fittings applied to obverse	c. 750-1100*	As Weetch*; c. 1040- 1080 focus	n/a	All clearly residual (Kelleher 2013, 210- 212)	Cms PA5 : SOM-F7FD62
4.B (cross motif)	Cross of four, equal lentoid/lozengiform arms; cross- hatching in field	c. 1000-1100	c. 1000- 1050	Fishergate, Norwich	c. 1050 <i>terminus ante quem</i> (Huddle 1999, 10-11, fig. 4, no. 45)	Cms PAS : LEIC-53A198

Table 16 Appraisal of disc brooches

*closer dating may be attempted based on establishing manufacture/use date of their prototypes

Weetch Type (short name)	Basic traits	Date range suggested by Weetch (2014)	Date range proposed	Example – location	Example – date (reference)	Sample image
includes 10.A (Ringerike- and Urnes- style (disc))	Large, silver, with bosses (10.A); openwork (some)	Up to c. 1100	c. 1000- 1125	Sutton (Cambridgeshire)	c. 1070 hoard dating (Wilson 1964, pl. XXXI, fig. 34, no. 83 (cat.))	PAS : SF-92B213 (Type 10.A)
13 (stepped profile), four sub- divisions	Raised central field bearing various motifs	c. 900-1050	c. 1000- 1150	Leidsche Rijn, Utrecht	c. 1125-1150 (Hendriksen 2004, 51, afb. 74) (Type 13.A)	PAS : YORYM-488741 (Type 13.A)
14 (domed) (Ger. <i>Buckelfibeln</i>)	Domed centre; 'laddering' on border	c. 950-1050	c. 1000- 1150; c. 1000- 1100 focus?	Mainz (Germany)	11 th century (Wamers 1994, 98)	PAS : SWYOR-939E21
17 ('hub-cap'), two sub- divisions	Central glass bead surrounded by (often six) indentations/perforations	c. 900- 1000/1150?	c. 900- 1150	Chalk Lane, Northampton	Later 11 th -century phase (Goodall and Webster 1981, 124, fig. 22, no. 7) (Type 17.B)	PAS: NMS-2F2185 Cms (Type 17.A)
Weetch Type (short name)	Basic traits	Date range suggested by Weetch (2014)	Date range proposed	Example – location	Example – date (reference)	Sample image
---	---	--	---------------------------	--	--	------------------------------
20.A (cloisonné- enamelled, 'Saunderton type'/Frick Typ 1, variente 1)	Cloisonné- enamelled plaque set on base plate; circumferential lobes	c. 1000-1100	c. 975- 1150	Old Grapes Lane, Carlisle (Cumbria)	12 th -century ceramic dating (McCarthy 2000, 118-119; no. C12)	Image: Cms PAS : НАМР-Е99А7А
20.B (cloisonné- enamelled, 'Colchester type'/Frick Typ 2, varienten 1, 2)	Cloisonné- enamelled plaque set on base ring; no lobes; plain/beaded border	c. 1000-1100	c. 975- 1150	Skomagerstraede, Odense (Denmark)	c. 1120 dendrochronologic al dating (Lindahl 2003, 163)	PAS : SUR-8C91E4
20 other (cloisonné- enamelled, other types/Frick Typ 1, variente 2)	Cloisonné- enamelled plaque set on base plate; wide circumferential collar set with glass 'beads'	c. 1000-1100	c. 975- 1150	Helsingborg kirche (Sweden)	c. 1100 <i>terminus</i> ante quem, grave good (Schulze-Dörlamm 1992, 146, no. 2)	PAS : SUR-AB3160

Weetch Type (short name)	Basic traits	Date range suggested by Weetch (2014)	Date range proposed	Example – location	Example – date (reference)	Sample image
21 ('Kettlach'- enamelled)	Champlevé- enamelled decoration; zoomorphic moulding (often)	c. 900-1000	c. 900-1050	Various continental locations	10 th -century focus, radiocarbon dating (Eichert 2018)	after Hinton 1990f, 638; fig. 170, no. 2011
23 ('Cheapside'), four sub- divisions	Lead-alloy; central glass setting surrounded by imitation filigree	c. 1000- 1100/?1150	c. 975-1100	Lurk Lane, Beverley (Humberside)	c. 1070 terminus ante quem (Foreman 1991, 155, 159, fig. 117, no. 705) (Type 23.D)	Museum of London ID : 3905 (Type 23.C)
24 (with bosses)	Lead alloy; multiple imitation filigree domes and bosses	c. 1000- 1100/?1150	c. 975-1125	Guildhall Yard, London	c. 1120-1140 (Egan 2007a, 62, 449, no. S15)	Museum of London ID : 3904 (no scale)
25 (with lobes), two sub- divisions	Lead alloy; circular or oval; multiple projecting circumferential lobes	c. 1000-1100	c. 975-1125	Guildhall Yard, London	c. 1070-1090 (Egan 2007a, 33, 448, fig. 384, no. S13) (Type 25.A)	PAS : LIN-F70B24 Cms (Type 25.B)

The work set out in Table 16 confirms dating provided by Weetch for many types, but offers minor refinements for certain others. It is proposed here that Type 4.B – a flat brooch depicting a cross – contended by Weetch (2017, 268) to be a product of the 11th century, may not have endured much beyond the middle of century. By contrast, the three-dimensional forms, argued to have been inspired by Ottonian precious-metal brooches (Weetch 2017, 271), as well as the so-called 'London series' (Types 23-25) – with their glass settings or bosses – not only seem to have endured into the second half of the century, but in some cases beyond (see also Egan 2009, 291). Alongside such white metal brooches formed in lead alloys, was a parallel use of small disc brooches gilded to give the appearance of yellow metal. Some of these gilded coin 'badges' (Type 2.B) are eminently datable, and centred on the period immediately before and after the Norman Conquest (G. Williams 2001, 60). Uniting these coin 'badges', cloisonné-enamelled disc brooches (also gilded), and many of the lead-alloy brooches, is the displaying of a cross – an overt symbol of piety. As with some of the lead-alloy brooches, the cloisonné-enamelled series (Weetch Type 20) has been shown to have been present in the second half of the 11th century, and into the 12th. However, despite being contemporary and connoting similar religious meaning, Weetch (2014, 278) observed interesting particularities regarding, on the one hand, the contexts of use for brooches in lead alloy and, on the other, the brooches imitating gold. We will return to these when analysing spatial and social distributions.

4.3.2.2 Plate brooches of other forms

Alongside plate brooches of disc form, Weetch (2017, 271) suggested several other types, previously not recognised as belonging to the 11th century. Their chronologies are examined in Table 17, together with brooches with Anglo-Scandinavian decoration; further detail is provided in Appendix 1.C.ii. In general, plate brooches are numerically very few, including the examples in lead alloys (Types 26, 28.E), the rectangular Type 29.A, and the openwork Urnes-style pieces; even bird-shaped brooches (Type 30.A) are uncommon compared to disc brooches.

Weetch Type (short name)	Basic traits	Date range suggested by Weetch (2014)	Date range proposed	Example – location	Example – date (reference)	Sample image
26 (shield shaped) ³³	'Kite shape'; laddering (some)	c. 1050- 1150	c. 1075- 1175	Limited (e.g. Vintry/Moorgate, London)	Limited – typological shield dating favoured (see Appendix 1.C.ii.1)	PAS : SWYOR-788773
27 (Ottonian)	Three-dimensional gold, or imitative, brooches	c. 1000- 1100	c. 900- 1100	None found stratified	n/a	PAS : NMS-349C14
28.E (cross shaped)	Lead alloy, cruciform; face of ?Christ (some); laddering (some)	c. 1000- 1100	c. 1000- 1150	Bull Wharf, London	Late 1140s phase (Egan and Blackmore 2015, 48-49; ill. 30, nos A132, 405)	after Egan and Blackmore 2015, 48-49; 25mm ill. 30, no. A132

Table 17 Appraisal of plate brooches [of forms other than disc brooches]

³³ As Weetch (2014, 356) notes, these may have been attached more often in the manner of badges than using traditional brooch fittings.

Weetch Type (short name)	Basic traits	Date range suggested by Weetch (2014)	Date range proposed	Example – location	Example – date (reference)	Sample image
29.A (rectangular)	Rectangular plate, inlaid with enamel	c. 950-1050	As Weetch	Not traced for England	-	after Weetch 2014, vol. 2, 179; no. 877 (no scale)
30.A (bird-shaped)	Copper-alloy plate, as a bird in profile; fan-shaped tail; crested head (often)	c. 1000- 1100	As Weetch	Lund	c. 1020-1050 (Stenholm 1976, 295/pl. IX, figs 265-266, no. 66166:770)	PAS : LIN-39FB8D
n/a (Urnes-style (openwork animal))	Openwork great beast entwined with filiform beast	-	c. 1050- 1125	Ribe (Denmark)	c. 1050-1150 (Søvsø and Jensen 2020, 25)	PAS : LIN-F79A53

4.3.2.3 Penannular brooches

The penannular form was long standing by the medieval period, with a varied history of use depending upon the area of Europe considered. Booth's recent *long durée* analysis (2014) charted their use in England from the Middle Iron Age to the 7th century AD. Given Leahy and Lewis's (2018, 44) recent statement that 'penannular brooches were not used [in medieval England]', their consideration here requires some justification. The present investigation was prompted by Alison Goodall's (1992, 138) identification of a recurrence of penannular brooches in 12th-century contexts on castle sites. Being generally small, the brooches identified here were presumably used for the delicate fabrics consonant with elite costume.

During data collection over twenty penannular brooches were noted from relevant sites or contexts. Examples fall into two groups which are set out in Table 18, one of which classifiable within Booth's typology. To argue that a subset of Booth's Type C – otherwise dated to the Roman to early-medieval period – is of medieval date may be bold, but the group's small module and engraved decoration is noteworthy given Booth's (2014, 144) assessment that 'grooving is rare overall' on Type C brooches. The decoration, perhaps, can also be seen in the context of a proclivity for architectural chevron ornament in the Romanesque period, between the late 11th century and the end of the 12th (Moss 2009). Though the examples documented were found in medieval contexts, many were found at sites with varying quantities of Roman material (Appendix 1.C.iii.1, Table 40). However, with various examples found at sites with little or no Roman material, the weight of evidence suggests either a new production of penannular brooches in this period, or – as tantalising, but much more speculative – the appropriation of antique material, perhaps with embellishment added in the Middle Ages. When dating evidence is aggregated it reveals a focal period of use in the 12th century, with particular strength in its second quarter (Fig. 32).

Dating evidence is limited for the form which does not fall into Booth's typology, but provides an earliest *terminus post quem* of c. 1100, and *termini ante quos* in the 13th century (see Appendix 1.C.iii.2). Although one cannot rule out entirely the possibility that such penannular brooches represent Roman objects found residually, Table 18 Appraisal of penannular brooches

Booth Type	Basic traits	Date range suggested by Booth (2014)	Date range proposed	Example – location	Example – date (reference)	Sample image
within Type C	Small (most 18-22 mm in diameter); simple terminals coiled perpendicular to the hoop; engraved zigzag decoration (often); simple sheet/wire pin	1 st -7 th centuries AD	c. 1075-1275	Castle Acre Castle	1140s contexts (Goodall 1982, 238-239, fig. 44, nos 29 and 30)	after Oakley 1979, 248-250; fig. 107, no. 7
No Туре	Twisted/imitation cabling; separately applied sheet terminals	n/a	c. 1100-1300	St Peter's Street, Northampton	c. 1100-1250 feature (Oakley 1979, 248-250, fig. 107, no. 5)	after Oakley 1979, 248-250; fig. 107, no. 5



Fig. 32 Monte Carlo simulation of dating evidence for medieval penannular brooches of Booth Type C

their absence on Roman sites suggests that they were another medieval form of penannular brooch, worn during the 12th and, perhaps, 13th centuries. Taken together with those with coiled terminals (Type C), there is now a weight of evidence to suggest the limited use of penannular brooches in the 12th century, perhaps a deliberate re-appropriation of a form known to be Roman, or, at least, ancient.

4.3.2.4 Annular brooches

The annular form dominated the brooches of the late Central and High Middle Ages (Campbell 2009, 36), and especially the 13th and 14th centuries (Søvsø 2011, 263). Known earlier, from the period we are concerned with they are variously termed 'ring brooches', 'fermaux' and 'frame brooches', the last given that their form need not be circular. They were used by both sexes to fasten the slit at the neck of a surcoat or gown (Lightbown 1992, 138; Deevy 1998, 58-59; Illus. 2, above); larger examples were used to fasten mantles (Søvsø 2009, 203; Thuaudet 2015, 1059). Dating of annular brooches relevant here has been hampered by a lack of typochronological study at the European level (Lightbown 1992, 393, note 1); although Krabath (2001) and Thuaudet (2015) worked at such a scale, neither focused on brooches. Classification is further complicated both by a notable plainness and lack of documentary evidence prior to the 13th century (Lightbown 1992, 147-148).

In the medieval period, annular brooches have been argued to have been used from the 12th century, if not the late 11th, onwards (Heindel 1990, 12; Spiong 2000, 78; Thuaudet 2015, 1057), although costume evidence places them from the 12th century onwards (Søvsø 2009, 190), with new modes of dress described. Evidence from coindated grave finds from the West Slavic area puts their introduction there in the second half of the 12th century (Heindel 1990, 11-12). Sculpture from the 12th century occasionally shows an annular brooch worn at the breast: by St Helena on the doorway of the basilica of St Just in Valcabrère (France) (Ward Perkins 1993 [1940], 274), or by a servant on a statue probably from the cloister of Notre-Dame-des-Doms, Avignon (France). The latter shows a plain ring, and has recently been dated to c. 1150-1175 (Chen 2013, 133, fig. 1d). A frequently cited example is more even precisely dated: that of the Queen of Sheba from the west portal at Notre-Dame-de-Corbeil, attributed to the 1150s (e.g. Ward Perkins 1993 [1940], 273; Illus. 11, above).³⁴ Other examples with useful termini ante quos are the funeral effigies of the aforementioned Robert FitzRoy (d. 1147), and that of Henri le Jeune (d. 1183). The former is only known from an 1840 drawing, but both seem to show plain annular brooches (though this apparent plainness may have been in part circumscribed by the medium of the effigies). Herod is depicted wearing an annular brooch to secure his mantle on the gilded altar front of Odder church (Denmark), dated to c. 1200 (Søvsø 2009, 203, fig. 15). Many more examples date to the 13th century or later (Ward Perkins 1993 [1940], 274; Deevy 1998, pls 24-34). As well as being numerically limited, the iconographical examples mentioned reveal neither much social range nor chronological refinement.

In the absence of a Continent-wide study, two typologies created for brooches found in different countries will be drawn upon here: Mary Deevy's (1998) for Ireland, with its basis in decoration, and Mette Højmark Søvsø's (2009) for Denmark, based on form. Archaeological and stylistic evidence suggests that annular brooches became more elaborate over time, with various types only starting in the 13th or 14th centuries (Søvsø 2009, 196, fig. 8). A few types, however, have been suggested to have begun in

³⁴ Its elaborate bossed form and method of fixing are unusual; Lightbown (1992, 102) suggested that it was shown as if sewn in place.

Table 19 Appraisal of annular brooches

Deevy Class	Basic traits	Date range	Date range	Example –	Example – date (reference)	Sample image (all after
(snort name/Søvsø		Suggested by	proposed	location		Deevy 1998, 9, fig. 5) (no scale)
equivalent)		(1998)/(Søvsø				(110 00010)
		2009)				
1 (undecorated/ 1.1, 2.1)	Circular; plain; small (c. 18 mm diameter on average)	12 th -15 th century, 13 th century focus/ (as Deevy)	c. 1050-1500	Marlowe Car Park, Canterbury	c. 1050-1100 context (Garrard 1995, 1048, fig. 447, nos 523, 526)	
2a (with engraved decoration/ 1.2)	Decorated with (basic) incised, engraved or false relief abstract motifs	12 th -15 th century, 13 th century focus/ (as Deevy)	As Deevy	Bull Wharf, London	c. 1103-1181 context (Egan and Blackmore 2015, 51, ill. 32, no. 128)	
3a (with cable decoration/ 2.3)	Cabled, or cast-in twisted decoration	12 th -14 th century/ (12 th -15 th century)	c. 1200-1450	Billingsgate lorry park, Lower Thames Street, London	c. 1230-1260 context (Egan 2008c [1991], 249-250, no. 1310)	

Deevy Class (short name/Søvsø equivalent)	Basic traits	Date range suggested by Deevy (1998)/(Søvsø 2009)	Date range proposed	Example – location	Example – date (reference)	Sample image
6a (with multiple collets/ n/a)	'Gem' set, generally in collets	13 th -14 th century/ (n/a)	c. 1150- 1400	Dagmarsgade, Ribe	c. 1175-1200 context (Søvsø 2007, 26)	after Deevy 1998, 9; fig. 5 (no scale)
8 (with derivative decoration/ imitating 2.5, 2.6)	Generally cast decoration, imitating decorative features on brooches of other classes, notably collets	late 12 th -14 th century/ (12 th -15 th century – Type 2.6)	c. 1150- 1400	Bull Wharf, London	c. 1103-1181 context (Egan and Blackmore 2015, 51, ill. 32, no. 990)	after Deevy 1998, 9; fig. 5 (no scale)
9 (miscellaneous)	Various and variable (see Appendix 1.C.iv.6)	n/a	c. 1100- 1500	South Mimms Castle (Hertfordshire)	c. 1136-1180 site dating (Clark 2013, 67; fig. 56 – gilded openwork quincunx)	after Ottaway and Rogers 2002, 2 2912; fig. 1486, no. 12899

the 12th century; these are set out in Table 19 according to Deevy's typology, with further detail provided in Appendix 1.C.iv.



Fig. 33 Monte Carlo simulation of all annular brooches recorded with pre-1200 dating

The assessment of annular brooches given in Table 19 would suggest that, contrary to any commentary placing them solely in the 13th century, or later (e.g. Redknap 1996, 92), they were a prominent feature of dress in the 12th century. This new emphasis on the 12th century can be justified by examples found in urban centres across England and Ireland, though it has been bolstered by recent evidence coming from excavations at Bull Wharf, London (Egan and Blackmore 2015). The survey here has corroborated work on their respective material by Deevy (1998) and Søvsø (2009) by reinforcing their dating of particular types of annular brooches to include the 12th century. Furthermore, despite suggestions of intrusivity of annular brooches in 11thcentury contexts, there is limited, but persuasive, evidence of their use in the second half of the 11th century. The dating evidence gathered moves beyond the general, and limited, dating evidence of iconographical representations set out above, to provide a distinct sense of the growing use of annular brooches as the 12th century progressed. The plot provided of this evidence in Figure 33, of course, only gives a sense of the date ranges of brooches with chronologies relevant to this study; the drop-off in the 13th century is a product of these parameters, rather than overall use, which can be amply demonstrated to have lasted into the 15th century.

Beyond refining the dating of what might be described as 'early' annular brooches, their character can also be assessed. These include plain examples (Deevy Class 1/Søvsø Types 1.1, 2.1), and brooches with engraved decoration (Deevy Class 2a/Søvsø Type 1.2). Such brooches can be, respectively, relatively small and relatively plain: unfortunately, neither of these observations assist identification of examples found outside unstratified contexts. Apart from miscellaneous brooches (Deevy Class 9), which at the same time exhibit variety and a common use of twisted wire, there is 12th-century evidence for brooches with applied 'gems', generally set in collets (Deevy Class 6a/Søvsø Type 2.6). For these latter the limited dating evidence from the Continent is augmented by imitative examples (Deevy Class 8), which presuppose the imitated type. However, use of brooches with cabled decoration (Deevy Class 3a/Søvsø Type 2.3) in the 12th century is harder to evidence (Table 19), despite the assertions of both Deevy (1998) and Søvsø (2009). Overall, there is a diminutive quality for brooches of the late 11th and 12th centuries within the above types, and a frequent use of basic wire pins (e.g. Egan and Blackmore 2015, 51, ill. 32, no. 128). Development through time can be seen in the degree to which brooches were decorated: the plain and basically engraved examples of the late 11th and early 12th century were joined by gem-set examples from the middle of the century, and, probably, cabled pieces by the end.

4.3.2.5 Dating synthesis

The preceding sections set out a long-term development of brooch forms between the 10th and 12th centuries, one rarely seen for structural reasons: objects are often discussed solely within their period boundaries. We may now profitably examine the chronological interface between the major late early-medieval form – the disc brooch – and the dominant medieval form – the annular brooch. Forms of plate brooch other than the disc will be also considered within the narrative. Finally, we will consider the role of the penannular form, otherwise overlooked in this period.

The main 10th-century form, the disc brooch, shows a general continuity through the 11th century and into the 12th (Fig. 34). Weetch (2017), in a key article, has recently argued for the redating of various types previously attributed solely to the 10th century to the 11th. A novel characteristic for disc brooches identified by Weetch (2017), initiated perhaps in the late 10th century, is a three-dimensional quality provided by a raised centre. Though representing a major advance in knowledge, Weetch's redating lacks fine nuance (though this is admittedly hard to achieve for metal small finds). It is argued here that certain (Weetch) types (2.Ai, 4.B, 14, 29.A) represented continuity with 10th-century forms probably into the first half of the 11th century, but not significantly beyond. These 'traditional' disc brooches were joined at this time by bird-shaped brooches of Scandinavian extraction (Type 30.A).



Fig. 34 Proposed timeline of all relevant brooch types

While the dating for some of the broadly 11th-century brooches is necessarily general, for others it is more precise, thus allowing for tracing of styles around the 1066 boundary. The key source of evidence is provided by those brooches formed of coins (Type 2.B), which demonstrate a clear continuity of fashion between the reigns of the last two Anglo-Saxon rulers and the first two Norman kings. Other types which seem to have survived across the Conquest include Types 2.Aii, 13, 23 and 25. It has

been suggested here that other disc brooch types endured into the 12th century (Types 13, 20, 24-26). An underlying cultural connotation to these disc brooches – including the late Saxon types continuing from the 10th century – is their Christian symbolism. Many types bore crosses (2.Aii, 2.B, 4.B, 13.C), or particular examples within types did (14, 20). Other plate brooches were Christian symbols; this has been argued for Type 30.A examples thought to represent peacocks or doves (Pedersen 2014a, 207), and is self-evident on cross-shaped examples (Type 28.E).

Alongside types which continued, in the later 11th century – though this need not be the years immediately post Conquest – apparent novelties include Urnes-style and shield-shaped plate 'brooches', as well as annular brooches. Such brooches lacked the overt religious connotations of contemporary brooches, while remaining open to multiple interpretations, including religious. As it progressed, the 12th century seemingly saw the decline of the disc brooch, and the ever-increasing rise of the annular brooch, prompted by changes in dress fashions (Fig. 34). It has been argued here that the 'transitional' 12th century also witnessed the use of penannular brooches of two main types, though relatively few in number. Over the 12th century, it appears that annular brooches came to be decorated with gradually increasing complexity, anticipating the heavily engraved, gem-set or cabled examples of the 13th century and later.

4.3.3 Contextual associations

4.3.3.1 Contextual (spatial)

PAS data can be used to establish a 10th-century (and earlier), background, based on both the Viking-Age brooches studied by Kershaw (2013), and the discoidal forms discussed by Weetch (2014). Aggregated evidence suggests that in an eastern province (consisting of modern-day Lincolnshire, Norfolk and Suffolk), identity was constructed around brooch-wearing as part of dress practice in and of itself – quite apart from further, cultural or ethnic identities (Fig. 35). An association with the Danelaw is pronounced for Scandinavian and Anglo-Scandinavian types, but also for late Saxon types, notably the back-turned animal series (Weetch Type 1). Later types can be set in contrast to this underlying 9th- to 10th-century distribution, which Weetch (2014, 299) argued had even earlier antecedents.



Fig. 35 First Viking-Age brooches and contemporary Late Saxon brooches (Weetch Type 1), showing a core use zone in eastern England, plus slightly later lead-alloy brooches of the $10^{th}/11^{th}$ century (Weetch Type 4)

The first group to consider are brooch types thought to have been products largely of the 10th century, sub-types of which may have endured into the 11th. Brooches of Type 4 bearing cross designs can be shown to have circulated both within

the aforementioned core province, and also demonstrably outside it, to its west and south. This latter is not just the case for brooches of Type 4.B, argued here to date to the first half of the 11th century, but also for Type 4.A, thought to be 10th century in date (Weetch 2014, 287). Weetch (2014, 288, fig. 6.14) reminds us that these lead-alloy brooches had a common currency either side of the North Sea, on the Continent particularly in modern-day Netherlands and Germany. Furthermore, brooches of Type 2.Aii were used on the edges of this core area, as well as within the main zone.

Next, we may consider those types recently proposed by Weetch as characterising 11th-century use, some with antecedents in the late 10th century. They can be divided into three groups, whose distributions have overlapping qualities (Fig. 36). The first consists of brooches whose distribution both sits within the legacy of the eastern province and differs from it. Taking Classes 13 and 14 by way of example, while brooches of many of their sub-classes have been found in the old core area, many others have been documented outside it. As with certain of the broadly 10thcentury brooches, they are also found abroad: in urban centres such as Dublin (Leinster) (Type 13.A), Rennes (France) (Type 13.B), Mainz (Type 14), Schleswig (Germany) (Types 13.D and 14) and Utrecht (Type 13.D). Within the old core area itself, there seems to be a shift in the 11th century away from the former emphasis on modern-day Norfolk, to one on Lincolnshire (Weetch 2014, 276). A second group consists of the brooches of Weetch's 'London Series', exemplified by the brooches of the Cheapside Hoard and related types (23-26, 28.E). This effectively describes a similar distribution to those just discussed, but with a self-evident emphasis on London sites. Interestingly, outside London, Type 23 brooches are known from Beverley, Cranwich (Norfolk), and Badbergen and Osnabrück (both Germany). Beside a few exceptions, most other relevant types (24-27, 28.E) plot either in Norfolk, or, more commonly, in an area between North Yorkshire and Lincolnshire. Indeed, shieldshaped brooches were thought to be a purely London-based phenomenon until Weetch (2017, 276) was able to cite examples found in the zone just mentioned, suggesting that Lincoln may have been a redistribution centre in this period, perhaps a production centre. Weetch (2017) argued that such a distribution implied a social impetus; this will be discussed further below. A final group has Scandinavian connections – the bird-shaped brooches of Type 30.A. These have been charted across large areas of late early-medieval Denmark (Pedersen 2001, 30, fig. 15), which included modern-day Skåne (Sweden) (see Isberg 2019), though their distribution has rarely been examined in England. The mapping can therefore only be compared with that made by Kershaw (2013, 117, map 3.22); though Figure 36 shows far more finds, the conclusions to be drawn are similar. Such brooches, held by Kershaw (2013, 124) to be Scandinavian imports, are restricted to the Danelaw area of eastern England, with very few exceptions. Given close links between England and Denmark in the first half of the 11th century, is it striking that bird-shaped brooches do not observe the widespread distribution of, for example, equestrian equipment decorated in the Ringerike style (Richards and Naylor 2010, 346-347, figs 32.4-5; below, Fig. 55).



Fig. 36 Broadly 11th-century brooches showing international connections and the distribution of the 'London series' outside London. Note that bird-shaped brooches have not been catalogued in Scandinavia, where they are common

Within the 11th century, some brooches can be given more refined dating, primarily those based on elements of coin designs (Type 2.A) or made from coins themselves (Type 2.B). Focusing on the latter, which provide the most detailed *termini post quos*, a contrast can be made between their distribution and the 11th-century brooches discussed so far. While there is some overlap in East Anglia and the East Midlands, coin-brooches are the dominant brooch form in the South, particularly in modern-day Hampshire and Wiltshire (Fig. 37). These objects do not stand entirely as a rural counterpoint to the apparent urban character of the lead-alloy brooches already discussed; they have been found in Winchester and in its hinterland, in Canterbury, Trowbridge (Wiltshire), and in London, with the potential for others to have been recycled. However, as Weetch (2017, 276) has pointed out, their golden



Fig. 37 Distribution of c. 11th-century nummular brooches and coin-brooches, the latter showing a southern shift

aesthetic contrasts with the primarily silver urban one; they may represent a simultaneous expression of rural wealth and piety. Assuming short use dates starting either within or shortly after the coin utilised, they demonstrate continuity either side of 1066 (Weetch 2014, 348); brooches formed of coins of Edward the Confessor and of William I were deployed in the same main zone.

Of the 'long 11th century', cloisonné-enamelled disc brooches (Weetch Type 20) have a notably widespread English distribution (Fig. 38). Such ubiquity contrasts with the coin-brooches of the South, and/or the 'London series' (which additionally seem to have circulated out of select urban centres in the East Midlands, Norfolk and Yorkshire). These cloisonné-enamelled brooches have been argued to represent a downgraded version of precious-metal brooches in an ostentatious Ottonian aesthetic (Weetch 2014, 334, table 7.1), with direct Ottonian imports (Type 27) being known in tiny numbers. The presence of such cloisonné-enamelled brooches in South Scandinavia has been long acknowledged (Buckton 1986; 1989; Frick 1993); indeed, Frick termed them 'Anglo-Saxon-South-Scandinavian enamel cell brooches'.³⁵ What the distribution seems to demonstrate, for want of more precise chronological



Fig. 38 Cloisonné-enamelled disc brooches (Weetch Type 20)

³⁵ Angelsäschsisch-südskandinavische Zellenemailfibeln

markers, is continued cultural contact between England and late Viking-Age/medieval Denmark across the Norman Conquest and beyond, into the 12th century.

There are contrasts, however, between the Scandinavian and English corpora. For Scandinavia the Colchester type (Weetch Type 20.B) has been noted as more common than the Saunderton type (Weetch Type 20.A), while in England the proportions are reversed (Weetch 2014, 335). Though this remains a clear difference, numbers of Saunderton type brooches have risen for Scandinavia in the most recent years (Fig. 38). It is also worth clarifying that the Colchester-type brooches (Type 20.B) seen in Scandinavia are exclusively of Frick's Typ 2, variente 2, whereas those in Britain are of Typ 2, variente 1. Another development to note is the higher number of Buckton's 'hybrid' type (Frick Typ 1, variente 2) now documented from England, both due to under-recording by Weetch and the reporting of more examples in recent years. This, and the presence of Saunderton type brooches in Scandinavia, may suggest the travel of individual brooch wearers rather than mainly trading in the components of these composite items (Weetch 2014, 337). In England, the distribution of these brooches speaks to the rural aesthetic for gilded items noted already by Weetch for coin-brooches/badges. In common with many of the urban brooches, however, the use of cross motifs on many examples suggests that these items too were expressions of the Christian beliefs of their wearers (Weetch 2014, 342).

The relatively wide dating attributed to brooches means that it can be difficult to make informed analyses of brooch use in the second half of the 11th century and into the 12th. However, in addition to continuities across the Norman Conquest already observed (coin-brooches), or presumed (cloisonné-enamelled disc brooches; the more urban, lead-alloy series), we can note the limited use of openwork Urnes-style brooches of Scandinavian type, a type widely known across Scandinavia, which can be dated to the second half of the 11th century with certainty.³⁶ When Kershaw (2013, 117, map 3.22) plotted their distribution, numbers were too few to develop firm arguments beyond a general trend towards their being found in the Danelaw area, except a clear outlier – the famed Pitney brooch (Somerset). Even now the increase in

³⁶ For a distribution in modern-day Norway see Røstad (2012, 186, fig. 4); for south-west Skåne see Isberg (2019, 20, fig. 1)

numbers is modest, but the Pitney brooch remains the exception, with all other examples found either in East Anglia or Lincolnshire. This pattern therefore continues that noted for bird-shaped brooches (Fig. 36) and suggests a continuity of contact between the east of England and Scandinavia in the post-Conquest period; some birdshaped brooches have Urnes- as well as Ringerike-style traits (Kershaw 2013, 123). The deployment of these brooches may have served a dual function: on the one hand they could have Christian connotations; on the other they could have been cultural markers. Røstad (2012, 204) has argued for their use in the Østlandet region of eastern Norway as markers of Danish affiliation or ancestry, even after rule had passed from Denmark to the Norwegian kings.

The later 11th century also seemingly saw the small beginnings of a use of brooch that would come to replace the plate brooch as the dominant form by the second half of the 12th century – the annular brooch. The geographical distribution of annular brooches is hard to assess given problems of dating: the earliest forms have been suggested to also be the plainest and, as such, the least diagnostic of date. The brooches documented here therefore tend to come from excavated contexts, with a focus on urban excavations. What we can note, in general, is their widespread distribution across England, in contrast to the southerly fashion for mid-11th-century coin-brooches, or the strong urban associations of the lead-alloy series. Their distribution is not restricted to England, with brooches documented from the modernday Republic of Ireland, Norway, Denmark, France and Italy (Fig. 39); they were to become the dominant brooch form across Europe by the 13th century. In this context, it can be hard to unpick the relationship between the annular brooch and Norman influence. In Ireland, for example, the earliest annular brooches are likely to have been Anglo-Norman imports in the later part of the 12th century (Deevy 1998, 39); however, such Norman impact may simply have been to catalyse wider contemporary trends in European dress. The same arguments have been made for Scotland in the reign of David I, where annular brooches have been described as representing 'the best example of [a] new internationalism [within dress accessories]' (Shields and Campbell 2011, 71). These authors argued for its pan-European adoption not to represent Anglo-French acculturation in Scotland, but that the introduction of various institutions in this period, including burgh foundations, acted as 'vectors' of wider

202

changes. For England, as Weetch (2014, 350) noted, we currently lack chronological resolution to assess the shift from the plate to the annular brooch in fine detail, though we may suggest, on the evidence presented above, that it was gradual, occurring over the course of the late 11th and 12th centuries. As such, it seems that there was no 'dramatic abandoning' of late Saxon dress fashions (Weetch 2014, 350), and that the adoption of garments requiring an annular brooch was in response to pan-European changes in dress – changes which coincided with the Anglo-Norman and Angevin periods.



Fig. 39 Distribution of medieval annular and penannular brooches

We turn finally to the penannular brooch, argued to have been a product mainly of the 12th and 13th centuries. These were therefore often contemporary with the earlier of the annular brooches, and perhaps even a factor in their inspiration. Numbers of penannular brooches are few, but, like annular examples, they show a widespread distribution within England, and have contemporary continental parallels (Fig. 39). A better appreciation of their importance is gained by studying their social distribution, to which we turn next.



4.3.3.2 Contextual (site)



The social status of a brooch is hard to assess when it has been found through metaldetecting; this accounts for 76% of the corpus drawn on, encompassing the 10thcentury and earlier examples, as well as those of the 11th and 12th centuries. The broadly 10th-century corpus can be framed in terms of the rural/urban opposition described; examples were barely noted for any other site type. The same is largely true of the ostensibly 11th-century corpus, though with a few more different site types represented (see also below, Section 4.3.4). Turning therefore, tentatively, to those types generally thought to be of either 12th-century date – or at least potentially present in the early part of the century – the types continue to be either mostly or exclusively characterised by having either urban or rural findspots (Fig. 40). We can note that certain types, for example Type 13, have also been found on deserted medieval village sites. Most variation comes from the later forms, most typical of the 'long 12th century'. The strongest relationship is between penannular brooches and (rural) castles, amongst other associations for the type; this association is not replicated amongst other brooch types. A particular presence of penannular brooches at 12th-century castles was observed by Alison Goodall (1992, 138), and a minor one can also be noted for ecclesiastical sites.

4.3.4 Identity associations

One of the major factors behind changing and differential brooch use in the 'long 11th century' alluded to above was a developing dichotomy between urban and rural brooch styles (Weetch 2017). Taking all broadly 10th-century brooch types by way of background, the overwhelming weighting is towards types found in modern-day rural contexts (Fig. 41). Even if this is largely a product of recovery practices, primarily metal-detecting, it is striking that even for forms with an urban presence, proportions relative to their rural presence are universally lower. Amongst these, the urban presence of some of the lead-tin-alloy Type 4 brooches might represent the beginnings of the technological developments of the period which culminated in urban production of lead-alloy objects en masse in the 11th century (G. Thomas *et al.* 2008, 180; Weetch 2017, 274).

Types present in the 'long 11th century' exhibit far greater quantities and diversity of urban types compared to the preceding century (Fig. 42). While a few subtypes are entirely restricted to one or other category, many more can be said to be overwhelmingly rural or overwhelmingly urban (Fig. 43). Coin-brooches (Type 2.B) and cloisonné-enamelled disc brooches (Type 20) are overwhelmingly rural. By contrast, the brooches of the 'London Series' and related plate forms are, as the name suggests, either exclusively urban (Types 23-25.A, 28.E), or predominantly so (Types 25.B, 26). Other three-dimensional brooches, such as disc brooches with raised (Type 13) or domed (Type 14) centres are also predominantly urban. Finally, a few brooch types are close to parity in proportions between urban and rural findspots (Types 2.Aii, 4.B). Interestingly, these have been argued here to have centred on the first half of the 11th



Fig. 41 Urban versus rural finds of c. 10th-century brooch types



Fig. 42 Urban versus rural finds of c. 11th-century brooch types

century, and might bear witness to the transition of production from a rural to an urban focus.



Fig. 43 Urban versus rural proportions of c. 11th-century brooch types

Measuring the differential use of (early) annular and penannular brooches is made difficult by the lack of diagnostic traits on the annular brooches and the rarity of penannular brooches. As a result, it is hard to assess the 12th-century diversity of brooch use, especially given the further difficulty of knowing whether to attribute certain disc brooches to the 11th century or the 12th. Data presented in Figure 44 suggests that annular and penannular brooches were rural and urban phenomena in fairly equal measure. Urnes-style brooches – which could be earlier as well as belonging conceivably to the early 12th century – are known exclusively from the rural sphere in England. Of disc brooch types for which a proportion could date to the first half of the 12th century, we have noted that Types 13 and 14 (three-dimensional leadalloy forms) were predominantly urban (Fig. 43). These, however, would be dwarfed in numerical terms by cloisonné-enamelled disc brooches, if a proportion were allowed



Fig. 44 Urban versus rural proportions of c. 11th- to 12th-century annular and penannular brooches

an early 12th-century date. A more revealing way of exploring the social distribution of these 11th and 12th century brooches is perhaps through their status, as derived from the intersection of their primary materials (see below) and contextual associations (Section 4.3.5).

4.3.5 Materials analysis

Developing an underlying theme of the above discussion, we should consider further the appearance and status of the period's brooches as related to their materials and manufacture. Excluding certain site types at the extremities, where low numbers skew the picture, Figure 45 shows a propensity for the use of silvery brooches in an urban context compared to golden-looking brooches in a rural one. Here, tin-alloy, lead and lead-alloy can be lumped as they are impossible to assess without scientific analysis.³⁷ Weetch (2017) has viewed this dichotomy through the lens of identity construction, with rising urbanism and nascent urban identity embodied and reinforced through the wearing of silvery lead-alloy brooches in the very places they were being manufactured, and particularly in London. Opposed to this were brooches of a golden appearance, be they the silver-gilt coin-brooches of Type 2.B, or the gilded copperalloy cloisonné-enamel disc brooches of Type 20 (Weetch 2017, 278). In turn, Weetch (2017, 278) suggested that such brooches helped engender a sense of belonging to a rural elite community. As tempting as Weetch's arguments are for the long 11th century, they become somewhat attenuated if projected forwards. On the one hand, one is unlikely to see 12th-century annular brooches of lead alloys outside an urban context, although this might result from a lack of survival. However, at the major urban centres outside London, York and Dublin, one is unlikely to find annular or penannular brooches made of anything other than copper alloy, that is, in a golden aesthetic rather than the earlier silver one. Indeed, at Dublin and York more copperalloy than lead-alloy annular brooches datable to this period have been recovered. Only within London is there a notably high proportion of leaden pieces, though only representing around half of the annular brooch corpus.

³⁷ Where this has taken place (e.g. Egan and Blackmore 2015), it is common for brooches of the period to technically show as tin alloys.



Fig. 45 Contextual associations for the primary material of c. 11th- to 12th-century brooch types

Beyond their often different aesthetic, mainly 'rural' brooches evidence a multiplicity of techniques which stand in contrast to the relatively simple manufacture of urban products (Fig. 46). Weetch (2014, 339) has discussed the involved process by which cloisonné-enamelled disc brooches were produced, involving the reclamation of glass tesserae from ancient buildings as a raw material, not to mention the cloisonné work and gilding. However, Weetch (2014, 345) also reminds us to temper our sense of their social status given their relative ubiquity, and their relationship to preciousmetal Ottonian brooches, being perceived as lesser versions thereof (Weetch 2014,



Fig. 46 Urban versus rural proportions of the decorative treatment used for c. 11th- to 12th- century brooch types

334, table 7.1), a concept explored elsewhere by Sven Spiong (2000). Within the urban corpus, while some brooches bear minimal decoration,³⁸ others are not decorated at all (Fig. 28).

4.3.6 Summary of key points

D	Weetch's recent chronological adjustments regarding lead-alloy disc and other plate
А	brooch forms (2017) have been upheld, thus populating the 11 th century where before
Т	there was a gap.
Ι	• Certain forms have been here argued to be predominantly earlier 11 th century
Ν	(e.g. Type 4.B), with others suggested to endure into the 12 th century (e.g. Type
G	13). While this level of precision (and greater) is aspired to it is not always
	achievable given the dataset's find circumstances
	The clearest evidence of continuity of practice across the Norman Conquest are the
	coin-brooches (Type 2.B) which were expressions of piety.
	The presence of penannular brooches in the medieval period is suggested for England
	denarting from conventional assumptions of excavated items being residual Roman
	objects
^	Continental parallels persisted throughout the period implying engoing contact
A C	Continental parallels persisted throughout the period, implying ongoing contact.
s c	Inrough Type 20 cloisonne-enamelied disc broocnes, contact with Scandinavia is
0	suggested to continue from the late Saxon into the Norman period.
C C	Further evidence of continued contact as evidenced through Type 30.A bird-
ı	shaped brooches and Urnes-style brooches is geographically limited to the old
Ā	Danelaw, suggesting particular identity work being done in this zone through the
т	use of Scandinavian art styles.
I	Annular brooches can be seen as a European mode which gradually took over
0	from late Saxon forms of dress fastener, rather than an immediate change
Ν	resulting from the Norman Conquest; this argument is strengthened by their
S	contemporary appearance in areas which did not experience such a conquest. By
	1200, brooches looked much the same across large areas of Europe.
	The circulation of penannular brooches was restricted, generally to elite milieus.
	The greatest contrast to develop through the period is between brooch use in rural
	versus urban spheres, forming part of strategies for identity construction and
	maintenance in these areas. As noted above, these seem to have been played out
	within broader expressions of religious devotion. However, both these aspects seem
	to have become attenuated by the end of the period, with a more homogenised,
	European fashion adopted by c. 1200. Within the 12 th century the use of particular
	brooches, notably the penannular form, appears to have been dictated along socio-
	economic lines.

³⁸ The only presences of nicked, stamped and possibly painted brooches were urban

4.4 Chapter overview

Within the over 4,600 dress accessories recorded (Table 7), 22% of the corpus are brooches, 50% strap-ends, and the remaining 27% buckles plus a few strap-fittings (1%). Within the context of wider trends discernible in the PAS dataset, the period discussed sits in the middle of a general shift towards a relative rise in the use of buckles between the early-medieval and medieval periods, and a concomitant decline in the use of brooches (Fig. 47). Strap-end use is heightened within the present dataset as an overall proportion. While exaggerated by the percentage of examples which may partly pre-date the dataset, this shows significant continued use of strapends. In turn, this may imply that many girdles were used in this period without buckles, although it ought to be remembered that not all strap-ends were used with girdles.



Fig. 47 Percentages of dress accessory types discussed in the present dataset (middle) compared to wider PAS data for earlier (left) and later (right) periods. Note the relative rise in buckle use through time, and relative decline in brooches.

Challenges have been encountered in trying to analyse dress accessories of the 11th and 12th centuries, not least the presence of undiagnostic forms (especially of buckle). Furthermore, many buckle and brooch types demonstrated here as having been used in the 12th century could not be told apart from later examples found out of context, though association with a plate might aid the dating of particular buckle

frames. A further challenge is how to deal with idiosyncratic examples of buckles and strap-ends which do not subscribe to ready classification – if broad analysis is the aim.

Of the strap-ends and buckles discussed, based on pure metrology,³⁹ it is very difficult to suggest which might have formed en suite sets, though evidence does point to existence of sets, be it excavated grave goods or stylistic traits (e.g. Paterson and Tweddle 2014, 213-219). For example, one might note that the module of most strapends of Thomas Classes G and H are comparable to the spur buckle corpus; it would be a further leap to suggest that they were strap-ends from spur leathers without further evidence (currently lacking) to counter objections regarding their length and elaborate form. As Thomas (2000a, 281) pointed out, though, there is a vast discrepancy between the number of buckles decorated in the 'Winchester style' and the number of strap-ends (1:95 in his survey).

A key matter sought to be addressed in this thesis is the impact of the Norman Conquest on the artefacts discussed. Brooches provide one of the most nuanced ways of looking at 1066 as a cultural juncture through examples formed from contemporary coins (Weetch Type 2.B). These demonstrate a continuity of practice specifically between the last two Saxon rulers and the first two Norman ones (Weetch 2014, 348). This demonstration of continuity at a micro level sits within a much longer continuity of dress practice whereby disc brooches were the main brooch form used from the 10th century and into the 12th century (Weetch 2017, 273), despite changes of detail throughout this period. Within the strap-end corpus, it has been suggested that examples of various sub-types of Thomas's Class E provide a continuity of form before and after 1066. A more specific point relates to the continuing use beyond 1066 of Second Viking-Age art styles and objects with Scandinavian connections (see also Section 7.3.2, below). It is hard to assess the use of Ringerike-style objects into the third quarter of the 11th century, although this is implied by objects such as the Thomas Class H strap-end found at Goltho and the Naylor Class F1 buckle frame noted from Norwich. The existence of dress accessories of all of the types discussed decorated in the later Urnes style, suggests continued orientation towards

³⁹ That is, not 'modelled'. For example, the width of a buckle frame may have a general relationship with the width of a strap-end at its attachment end, but it is too variable to be modelled with confidence.

Scandinavia in this functional category even into the late 11th century, if not the early 12th century. This is reinforced by the presence of cloisonné-enamelled disc brooches in both England and Denmark over broadly the same period (Pedersen 2004, 56-58).

If continuity is considered to have generally characterised the decades following 1066, two main junctures can be observed in terms of this period's brooches. The first is in the later 10th century, when the disc form became dominant over all others. The second is centred on the late 11th to 12th century as, in turn, disc brooches were first joined and then gradually superseded by annular, and, to a far lesser extent, penannular brooches. For buckles, the major change came with the rise to predominance of the single-looped buckle frame around the middle of the 12th century or slightly earlier. The main change for strap-ends comes in the form of an apparent hiatus in use in the 12th century, between the last of the Second Viking-Age forms and the later, high medieval forms of simpler construction. The reasons for these changes, centred as they seem on the 12th century, will be explored below.

For brooches, the major geographical shift of the period has been argued to have been a move away from a core brooch-wearing province in eastern England as we enter the period, to both a more widespread engagement with brooch-based fashions and the rise of the urban centre – most notably London, and, secondarily, Lincoln. Of importance is not simply that the relative proportions of urban examples rise through the period, but that such a rise is dictated by particular types which formed part of urban strategies of identity. The rise of the urban centre can also be seen, to some extent, for other object types. However, it has been noted that by the end of the period the urban aesthetic for lean-tin brooches had subsided, perhaps as artefacts no longer needed to be invoked in discourses of identity with the increasing self-confidence of the urban dweller.

For buckles, a noteworthy distribution is the southerly spread of early spur buckles, as established here, and the pronged plate type in the 12th century. This has been suggested to be an 'elite' distribution, but one which does not have many correlates with the other forms of dress accessory, except for the earlier coinbrooches of Weetch Type 2.B (mid-11th century). Other forms of buckle suggest regionalised production and distribution in the later 12th century, exemplified by the M-shaped plates of East Anglia and environs. Regionalised production can be detected

214

earlier, of course, in the production of strap-ends – such as the c. 11th-century arched terminal type in East Anglia – or 10th-century brooch forms, but the evidence of buckle distributions suggests the continuation of a regional tradition alongside modes that appeared to operate on a national, if not international, scale.

Distribution patterns of artefacts decorated in Second Viking-Age art styles merits further investigation. The very general distribution of Ringerike- and Urnesstyle objects within an overall core zone for dress accessories, seems not to hold for brooches, which have been noted to have been restricted largely to Lincolnshire and East Anglia (Fig. 48). This is the case both for bird-shaped brooches (Weetch Type 30.A) and the few Urnes-style brooches. It is not the case for cloisonné-enamelled disc brooches (Weetch Type 20) which are widespread and evidence for contacts with Scandinavia. It would seem therefore, that, in the East, brooches with imagery with specific Scandinavian association was being chosen and deployed in the way it was not elsewhere. In Roman Britain the persistent use of pre-Roman forms of brooch, such as the Dragonesque type, has been interpreted as operating as part of a strategy of resistance to the new regime (Gosden 2005, 205). If brooches can be taken to be more powerful agents than other types of dress accessory in strategies of identity construction and maintenance, then their deployment in these particular areas suggests a cultural association between such areas and Scandinavia beyond the Norman Conquest. In turn, strap-ends and buckles with Second Viking-Age art style depictions were perhaps representative of other facets of identity, which may be analysed to an extent along gendered or status lines. That noted, particular types of buckle, such as Naylor Class F1, and of strap-end, such as Thomas Class H, tend to be focused in the same eastern areas (Fig. 30), and may have been part of the same of localised identity strategy.

On a wider geographical canvas, the 12th century came to see a shift back to the kind of 'internationalism' in dress accessories that was latent from the 10th. The immediate change was away from the Scandinavian lands, focused on Denmark. Anglo-Scandinavian connections have been documented for all types of dress accessory, for example in Urnes-style artefacts, such as Naylor Class A6 buckles (Webley 2018, 397) and Thomas Class G strap-ends. These, along with cloisonné-enamelled disc brooches mentioned above, represent a continuity of alignment

215



Fig. 48 Dress accessories decorated in Second Viking-Age art styles highlighting trends for brooch use in a restricted eastern zone – alongside other, particular object forms – within an overall context of widespread use

dating back from the rule of Cnut and lasting until the early 12th century, according to current dating evidence. From this point on, brooches, through the annular form, and to a lesser extent the penannular, seem to show a shift in alignment towards Continental Europe in a general sense. Strap-ends contribute little to elucidating this contemporary trend, other than in an apparent decline across the whole of Europe until the end of the (12th) century. For buckles, a realignment is best exemplified by
the distribution of early, non-ferrous, spur buckles, and single-looped frames of the mid-12th century onwards. Other near continental connections can be seen in buckles with pronged plates and strap-fittings of Cassels type 1.7I. As noted, this cultural reorientation southwards appears to have been notably late, and, for certain buckle forms, far more characteristic of southern England.

Very few status-based relationships may be discerned, with, apparently, wide access to dress accessories across most levels of society, even for forms that appear more elaborate. An exception noted both here and elsewhere is a relationship between penannular brooches and high-status sites, especially castles. To a lesser extent, certain buckle forms, particularly spur buckles (including the gaping-mouth beast type), tend to have higher-status associations.

The main change of primary material used appears to be within the brooch corpus whereby lead-alloys were deployed to create brooches in urban centres from the late 10th century onwards, which, in turn, were employed in the construction of an urban identity. They can be set in contrast to rural brooches, dominated in the 11th and 12th centuries by a use of copper alloys. This general trend, however, appears to have been attenuated by the time of the 12th-century annular brooches.

Regarding approaches to manufacture, a major change seems to have taken place in the 12th century. This period saw something of a move away from lost-wax casting, of varying degrees of elaboration, to a more mixed approach to the production of strap-ends and buckles which involved multiple techniques, particularly the use of sheet, with a concomitant decreased investment of time. At the same time, this trend towards serialised production should not be taken over emphasised. Within the buckle and strap-end corpora, a gilt surface treatment seems to have been a feature of the 'long 12th century'; gilding was deployed earlier for brooches, particularly on coin-brooches. Thuaudet (2015, 737) noted a decline in surface treatment by gilding as mass production really took hold, later, in the 14th century; others observed this decline in their corpora by the late 13th century (Egan 2008a [1991], 21, 27; Barrère 2014, 676).

Alongside the apparent 12th-century change in approaches to manufacture, there seems to have been something of a shift away from the use of lost-wax zoomorphic forms moulded in the round towards far plainer forms. All of the main

217

groups of dress accessory examined seem to have become fundamentally simpler and plainer over the course of the 12th century, although zoomorphic depictions retained a certain level of importance, as exemplified by buckle plates with moulded or embossed lions from the end of our period. The zoomorphic character of many of the Second Viking-Age buckles and strap-ends contrasts to an extent with the more overtly Christian connotations of brooches, arguably items more apt for the display of personal affinities.

With challenges duly acknowledged, much can be said about changes in dress accessories through the period treated here. Noteworthy is the persistent use of Second Viking-Age art style-decoration in the post-Conquest period, as late as the early 12th century. Objects decorated in these styles have been shown to vary in their distributions, with brooches seemingly involved as more important agents of identity, specifically in cultural strategies in the former counties of the Danelaw. This observation keys into a shifting orientation of international focus in England, from an Anglo-Scandinavian axis to a near continental one, but apparently not until the early 12th century on the evidence gathered here. Finally, we have observed a major change, broadly contemporary with such a reorientation, away from cast, more threedimensional, moulded dress accessories, towards plainer artefacts, made using a greater number of techniques. However, the persistence of surface embellishment, and relatively involved decoration, is characteristic of an intermediary phase: one prior to a later period of mass production (by the 14th century at the latest; Egan 2008b [1991], 123), by which point demonstrably less time was invested in creating an individual object (Barrère 2014, 676). Many of these themes – not least late Viking-Age style decoration and a changing in orientation of international focus - will reemerge through the next case study regarding equestrian equipment.

Chapter 5: Three groups of Equestrian Equipment

Eorl sceal on eos boge ('a nobleman ought to be on a horse's back')

- Maxims I, 62 (written down in the late 10th-century Exeter Book, quoted by Williams 2008, 112)



Illus. 13 Representation of the month of May from the Fécamp Psalter (c. 1180). It shows harness pendants adorning the horse's breast-band, amongst other elements of metal equestrian equipment used by the hawking noble depicted.

This second case study examines equipment related to horse riding to further identify trends in metalwork consumption. As noted in Chapter 2, there has been a recent upsurge of equestrian equipment studies due to an explosion in metal-detected data. Certain studies have raised interesting questions about the social distribution of this new, non-ferrous material, challenging automatic assumptions of its high status. To date, though, longitudinal syntheses of equestrian equipment have been lacking in English scholarship, a situation this case study begins to remedy.

Over 5,600 items of mostly non-ferrous equestrian equipment were catalogued, dating to the period of study, or slightly earlier/later which provide context to the dataset. Two major groups are examined here – harness fittings and stirrup fittings.⁴⁰ Firstly, cheekpieces and bit links, as bridle fittings, are taken together, along with related fittings which may come from the bridle but could also have been used elsewhere on the harness (Section 5.1). Then, considered together, are harness pendants and their suspension mounts (Section 5.2; see Illus. 13). It has been suggested that we cannot necessarily distinguish some pendants associated with harnesses from similar pendants used as dress accessories, or on dog's collars or hawk's leathers (Griffiths 1986, 2); inclusion in the present dataset was based on size. The second group provides evidence for riding with stirrups and is represented by stirrup-strap mounts and stirrup terminals which are discussed together in Section 5.3. Finally, patterns are discussed across the range of material examined (Section 5.4).

5.1 Bridle cheekpieces and bit links, plus other harness links

5.1.1 Introduction and historiography

In this period bridles had bits formed of an iron mouthpiece and leather straps connected by metal junctions; the latter often survive from this period as they were mostly non ferrous (Fig. 49).⁴¹ 'Cheekpieces' and 'bit links', with an iron bit, were the

⁴⁰ While spurs were not studied in detail for reasons of scope evidence for their deployment in riding can be brought to bear through the spur buckles examined in Chapter 4.

⁴¹ Conceivably, rope halters were used on horses used for carriage rather than riding



after Williams 2007a, 2; fig. 2a

Fig. 49 Reconstruction drawing of a late early-medieval bridle showing proposed locations of elements

components of a 'snaffle' bit (Clark 2004b [1995], 44, fig. 27a) – a common type throughout the period, as well as before and after (Goodall 2011, 365). Cheekpieces connected the leather cheek strap of the headstall to the bit (Fig. 49). Some cheekpieces also connected directly to the reins, for example in a 'ring snaffle' (Clark 2004b [1995], 44, fig. 27a) – a chronologically undiagnostic form, and generally made of iron. Often in this period a rein was connected to the outer loop of a two-part, jointed iron mouthpiece,⁴² via the end loop of a 'bit link' (Figs 49, 50). Bit links are distinguished from other double-ended harness junctions (discussed below) by having a boss adjacent to one of the loops, rather than centrally (Figs 49, 50).⁴³ Alongside the

⁴² Mouthpieces tend to be chronologically undiagnostic and, moreover, rarely survive.

⁴³ The two loops are often of different forms.

snaffle bit, the period saw the re-introduction of the 'hinged curb' bit, prefigured in the prehistoric and antique periods. Curb bits gave greater control and elicited quick responses (Ward Perkins 1993 [1940], 77; Hyland 1994, 15; Goodall 2011, 364), including for warhorses, as illustrated from the Battle of Hastings onwards (Clark 2004b [1995], 46).⁴⁴ The extent to which curb bits supplanted snaffle bits is debatable, as archaeological and artistic evidence are not easily married for either type (Section 5.1.2.1).



after Williams 2007a, 2; fig. 2b

The phrase 'harness links' encompasses metal junctions used at points across the whole harness to connect straps; the location of individual examples – apart from the aforementioned bit links – is difficult to define (Williams 2007a, 4). There are two main forms: a bar-like link with a loop at each end, and a cross-shaped link with a loop at each of its four terminals (Fig. 51). It is likely the latter were used on the headstall,

Fig. 50 Reconstruction drawing of an 11th-century snaffle bit with elaborated copper-alloy cheekpieces, detailing components

⁴⁴ Bennett (2003, 52-53) suggested that holding a shield in the left hand and a lance/sword in the right necessitated reins being held 'long'; the more severe curb bit would have been more effective in such circumstances.

to connect the brow-band and cheek strap (Fig. 49).⁴⁵ Copper-alloy harness links often feature three knobs on each loop (Graham-Campbell 1992, 82), one at each cardinal point excepting the junction with the bar (Fig. 51).



Fig. 51 Drawings of harness links, noting element terms: 'double-ended' example (left); 'four-way' example (right)

These object types are mostly known in copper alloy in this period, with rare iron examples (Williams 2007a, 1). Fragments can be hard to identify or classify if diagnostic elements have been lost; as Anne Pedersen (1999, 134) has noted, cheekpieces often broke around their hole (for the bit). The three knobs on loops, characteristic on harness links, can also be noted for many contemporary cheekpieces and bit links (Figs 49, 50). Given these formal connections, the dating of these objects may be considered in parallel.

Of the few synthetic works on equestrian equipment of this period, three stand out (but see also Fuglesang 1980; Graham-Campbell 1992). Two focus on metaldetected finds, and therefore on copper-alloy examples: Pedersen's (1999) discussion of the Scandinavian corpus, and Williams's FRG Datasheet (2007a) regarding English examples. Most recently, Goßler (2011) discussed snaffle bit components as part of a

⁴⁵ On the earlier 'Stuttgart Psalter' (820s) a cruciform link or mount is shown in this location (Stuttgart (Germany), Württembergische Landesbibliothek, Bibl. fol. 23, f. 14v).

wider analysis of early-medieval and medieval bits. All three authors applied typologies to cheekpieces (see below), but considered bit links and harness links insufficiently varied for division. Most harness links have been published as isolated examples; the main recent work discussing them as a group is Williams's datasheet (2007a, 4-6), though it focused on non-ferrous pieces; Goodall (2011) has published iron examples. Williams did not acknowledge an early note by Reginald Smith (1917) which examined ten copper-alloy links of double-ended and four-way type from England and Sweden. Dating for such links was confused by a stray four-way piece intrusive in the late Iron Age Polden Hill Hoard (Somerset) (Smith 1917, 30-31). However, Smith saw a typochronological progression between his 'late Iron Age' items and Viking-Age ones from Lundby (Sweden). Now, harness links, of copper alloy at least, are thought to centre on the 11th century.

Pedersen (1999, 136-137) divided snaffle bit cheekpieces into three types: copper-alloy examples with either one or two animal heads, and iron examples. Goßler's (2011, 27) one-piece *Typ* C category covers some relevant cheekpieces, but many are excluded by his classificatory criterion of openwork decoration. The most comprehensive classification is that advanced by Williams (2007a, 2-4) for copperalloy examples (Fig. 52); it is compared with Pedersen's in Table 20. The nature of the zoomorphic decoration on his Type 3 was misunderstood by Williams, as only fragmentary examples were known to him; it has since been clarified by more complete examples (Webley 2022, 83-85). This notwithstanding, Williams's cheekpiece classification is utilised for analysis here.



Fig. 52 Cheekpieces illustrating Williams's (2007a) classification

Table 20 Comparison of Williams's (2007a) and Pedersen's (1999) classifications for
cheekpieces

Williams Type	Pedersen Type	Zoomorphic?	Characteristics		
Type 1	Type 1	Yes	Two animal heads		
_46	Type 2	Yes	Animal head and tail		
Туре 2	-	No	Each half-plate tapers to a terminal knob		
Type 3 ⁴⁷	-	Yes	Relief moulded en-face animal mask at the junction of the arm and plate halves; rectangular or trapezoidal loop at the end of the arm		



after Portet 2007, 757; fig. 895

Fig. 53 Drawing of a Gaitzsch Typ A curb bit, noting element terms (terms after Goßler 2011, 30-31, abb. 12, 13; Clark 2019, 179)

⁴⁶ No English examples were noted of Pedersen's Type 2 at the time of Williams's (2007a, 2) publication, though one is now known (Webley 2022).

⁴⁷ See now Webley 2022, 83-85.

Curb bits have been divided into two types based on form (rather than chronological differences) by Gaitzsch (1997): *Typ* A has an 'A'- or 'Y'-shaped 'port' (Fig. 53), while the port on *Typ* B is 'U' shaped.⁴⁸ Although Gaitzsch's classification has since been employed by Goßler (2011), it is something of a blunt tool if the mouthpiece is absent or fragmented, as is often the case with archaeological finds. Furthermore, the two types cannot be distinguished in pictorial representation, as, being held in the horse's mouth, the diagnostic elements are obscured (Illus. 14, below).

5.1.2 Typochronological analysis

5.1.2.1 Iconographical evidence

Little useful iconographical evidence is present from this period to elucidate the material set out above, other than for curb bits: the Bayeux Tapestry, for example, seems to show bridle bosses rather than links, notably below the horse's ears on the headstall (Illus. 14, left). Curb bits are depicted from the second half of the 11th century onwards such as in the *Beati* of Saint-Sever (ante 1072) and Osma (c. 1086) (Illus. 14; Arquint 2015, 157, figs 11, 12, 14, 15). Most famously, as noted long ago, the Bayeux Tapestry shows curb bits in the majority of its depictions of mounted horses (Illus. 14, left; Zschille and Forrer 1893, 10, 16, taf. IX, nos 15-17; Lefebvre des Noëttes 1912, 224; Clark 2019, 178-179), including ones ridden by Englishmen. In the 'Harley Psalter', curb bits appear in ff. 29r and 29v, part of a 12th-century addition to the 11th-century text (Carver 1986, 131, 139, fig. 16/table 6). Assessment of the use of curbs thereafter is difficult, however. As Ward Perkins (1993 [1940], 77) pointed out, their portrayal in art becomes disproportionate due to a bias towards representations of elite riding, and this type of bit possibly becoming an iconographical convention (also Deborde and Portet 2016, 6).

⁴⁸ Both forms avoid the horse's tongue; the ports extend into the horse's mouth and their terminals exerted pressure on the palate when the reins were pulled.



after City of Bayeux, DRAC Normandie, University of Caen Normandie, CNRS, ENSICAEN ; Pictures: 2017 – La Fabrique de patrimoines en Normandie. after Arquint 2015, 157

Illus. 14 Depictions of curb bits. Note the bits' lower frames emerging from the horses' mouths.

5.1.2.2 Art-style dating

There is nothing distinctive about (largely iron) curb bits in art-style terms which would help date them. Bit links and most harness links are also morphologically simple, with decoration usually restricted to a central boss (Williams 2007a, 4). Cheekpieces and a few harness links are somewhat larger, offering a canvas for decoration which can be analysed stylistically.

As Williams (2007a, 1-2) noted, his Type 1 cheekpieces are decorated with engraved animal heads of 'late Viking inspiration' (Fig. 52), specified as Ringerike style (Pedersen 2004, 52, fig. 5 (left)). Though his Type 2 are not zoomorphic, some feature the typically Ringerike-style motif of a pendent lobe with opposed spirals (Fig. 52). Williams's Type 3 examples have been identified as inspired by the Ringerike style (Webley in press), both in the beasts depicted in profile and their en-face masks, despite echoes of (earlier) Borre-style heads. Such stylistic evidence suggests all of these cheekpiece types were in contemporary use during the floruit of the Ringerike style in the early to mid-11th century, although archaeological evidence, discussed below, suggests Type 3 examples may have continued later.

Williams (2007a, 1-2) stated that there were no obvious examples of the later 11th-century Urnes style among the harness fittings discussed. Continental evidence

suggests such cheekpieces lasted beyond the transition into that style, exemplified by a find (with three knobs on its loops) from Leck (Germany) of Pedersen's Type 2 (Pedersen 1999, 156, no. 11). Continental examples of Type 1 with Urnes-style traits have also been documented (Gustafsson 2011, 8).



Illus. 15 Double-ended harness links: with Ringerike-style beast (left); with en face animal head on a crescentic plate (right)

Some double-ended harness links also have zoomorphic decoration rendered in the Ringerike style. These include links depicting a beast with back-turned head: from Saxilby (Lincolnshire) (Illus. 15, left; Leahy and Paterson 2001, 198, pl. 10.9), and a plainer example from Lund (Bergman and Billberg 1976b, 230, fig. 175, no. 66166:711). Further, non-zoomorphic, Ringerike-style motifs have been noted on central expansions of various links, such as a 'pendent lobe and opposed spirals' (Williams 2007a, 4-5, fig. 6a). Another subset features a central en-face animal head at the centre of a crescentic plate (Illus. 15, right). Such heads resemble those on stirrupstrap mounts of Williams Class B (Fig. 61, below; Williams 1997a, 86-95, figs 54-59). Although these heads 'recall' the Borre style (Williams 1997a, 13), there is nothing about the objects they are found on – stirrup-strap mounts, bridle cheekpieces and these double-ended harness links – that is inconsistent with a later (late 10th- to early 11th-century) date (Webley in press). Such links are formally connected to 'purer' Ringerike-style examples by the three knobs on their loops, and to larger and more decorated harness fittings, such as cheekpieces, many of which depict Ringerike-style beasts. No links have been identified with Urnes-style decoration. As noted by Williams (2007a, 6), decoration is rare on four-way links, and where present it is not diagnostic in art-style terms (e.g. PAS: HAMP-58B723).

Williams suggested that links (and allied equipment) with loops lacking projecting knobs might be 'a little later in date [than the floruit of the Ringerike style]' (Williams 2007a, 1). His reasoning is neither clear in the text, nor sustained by the current study. The oval loop form is so basic it is chronologically undiagnostic, with simple, oval loops on harness fittings demonstrably earlier than the pieces with knobs, but also on objects that feature Ringerike-style decoration (e.g. PAS: PAS-5B678F). Overall, stylistic evidence for harness links is restricted to double-ended examples bearing Ringerike-style traits. This is reinforced by comparable decoration on cheekpieces and stirrup-strap mounts (Figs 52, 61), connected to harness links by similarities of either morphology or motif.

5.1.2.3 Dating by stratigraphy/association

The number of objects that can be interrogated for contextual dating is very small, the vast majority being metal-detected finds (97.3%), while a few are old, chance finds. In total, eleven cheekpieces and bit links have been traced, including three antiquarian finds from a grave in Lundby; there are a further 21 harness links, but these include two from the Lundby grave.

In addition to the pair of cheekpieces plus single bit link from Lundby, and a single iron cheekpiece from Tuna (Sweden), discussed below, archaeological dating evidence – bedevilled by residuality – has been traced for four cheekpieces (given in Appendix 1.D, Table 41). Examples from Domburg (Netherlands), and Holworth DMV (Dorset), hint that the unusual Ringerike-style form of Williams Type 3 may have endured beyond the style's usual floruit; if the Holworth find belongs to the site's occupation then it could date to the 12th century, but probably not earlier.

Only one contextually dated copper-alloy bit link has been traced: from Thetford (Norfolk), with a *terminus ante quem* of c. 1100 (Mould 2004, 42-44, fig. 36, no. 393). Three iron bit links with dating evidence raise questions about the comparability of iron and copper-alloy datasets. That said, an example with oval loops from Brook Street, Winchester, dated to the early or mid-11th century, parallels objects with Ringerike-style decoration (I. Goodall 1990b, 1044, 1046, fig. 334, no. 3881). A fragmentary link found at 22 Piccadilly, York, is formally connected, but was found in a mid-to-late 12th-century context (Ottaway and Rogers 2002, 2959, 3078, fig. 1524, no. 13049). Lastly, an example from Goltho Manor was found in a far earlier context dated between c. 850 and c. 950 (I. Goodall 1987, 184-185, fig. 160, no. 160). While this has the features of later links, its bar and boss are narrower. Bit links from the 10th century have been documented in a variety of forms (e.g. Pedersen 1999, 133, fig. 1; Capelle 1976, taf. 39, no. 511), some more or less close to a more standardised 11th-century form. Due to these formal imprecisions, perhaps not much weight can be put on the dating evidence provided by bit links, in iron at least.

Of the harness links with dating evidence, the seven copper-alloy pieces are given in Appendix 1.D (Table 42); the weight of evidence points to a focus in the 11th century. In Table 43, select iron examples with dating evidence are presented, mostly double-ended examples with plain oval loops. One exception has three knobs on its extant loop; from the Bedern site, York, it is presumably residual in its early 13thcentury context (Ottaway and Rogers 2002, 2959, 3111, fig. 1524, no. 14122). Although not typologically distinctive, the iron examples share features with the copper-alloy corpus, such as bevelling on the loops and central bosses (Goodall 2011, 379, fig. 13.8). They provide *termini ante quos* around the early/mid-11th century but also *termini post quos* in the late 11th and early 12th centuries. This led Goodall (2011, 366) to suggest such objects may have endured into the 'very early medieval period'. The demise of such harness links is hard to establish, but it might be indicative that none were noted in the major survey of equestrian equipment for London, which begins in c. 1150 (Clark 2004d [1995]).

Turning briefly to sets – the aforementioned grave assemblage from Lundby (see Table 42), and others – these can be attributed 11th-century dates, reinforcing the dating provided by art-style evidence, but offering no further precision.

Curb bits were considered at a remove from the thesis corpus as only one copper-alloy fragment has knowingly been recorded through the PAS (GLO-61557E). Being generally iron objects, they are difficult to date out of context as they lack stylistically diagnostic elements, and changed little in overall form between the 11th

and 14th centuries (see Gross 1992, 126, abb. 4). Later curbs can sometimes be distinguished through dating by applied, non-ferrous heraldic mounts (Goßler 2011, 72), or associated harness hooks (Clark 2019, 181). The iconographical evidence set out above contrasts with Gaitzsch's (1997) dating of his *Typ* A from the 13th century, and *Typ* B from the 12th. Goßler's (2011, 72) more recent survey also placed both types far earlier.⁴⁹ Two recently published *Typ* A examples from the *castrum* of Andone, Villejoubert (France), have a terminus ante quem of c. 1028 (Portet and Raynaud 2009). Typ B bits seem to be as early, the earliest known coming from la motte d'Olivet at Grimbosq (France), attributed to the first half of the 11th century (Halbout et al. 1987, 239, no. 998; Flambard Héricher 2004, 286). Overall, dating currently suggests hinged curb bits were present from the first half of the 11th century onwards in both forms defined by Gaitzsch, that is, slightly earlier than the iconographical evidence traced. For England, the earliest dating evidence is provided by the Bayeux Tapestry (1070s), and, archaeologically, by a fragment found at Sulgrave (Northamptonshire) (Goodall 2011, 374-375, fig. 13.6, no. L47), dated to the second half of the 11th century. On current evidence, the curb bit seems to have been a Norman introduction to England (Clark 2019, 178-179; Caple forthcoming).

5.1.2.4 Dating synthesis

Discussion of these four types of harness equipment reveals a discrepancy in dating objects made from different materials. For Denmark, Pedersen (1999) gave a persuasive narrative of a shift from iron snaffle bits in the 10th century, to a mixed use of iron and copper alloy in the 11th century (on bits with slightly different mouthpieces). In 11th-century England we see similar copper-alloy components to those in Scandinavia, but, with no burial evidence, it is harder to contextualise them within the iron tradition. Evidence for the en suite use of copper-alloy cheekpieces and bit links is strong, and formal similarities connect these objects to harness links – which could have been used on the headstall or elsewhere. It therefore seems reasonable to treat these three object types together, and assume examples with

⁴⁹ An example sometimes attributed to the 10th century (Deborde and Portet 2016, 6, note 12) from 'Le Verger' at Saint-Romain (Beck 1987, 177, no. 438), is of a form elsewhere argued to be late Iron Age to early Roman (Legros 2010, 95, fig. 49, no. 5).

similar traits and with decoration rendered in the Ringerike style were contemporaneous and used en suite (Graham-Campbell 1992, 82; Pedersen and Roesdahl 2008, 35). This is reinforced by rare discoveries of groups in which different objects have been found in association (e.g. Pedersen 2014b, 124, fig. 4.29; Rysgaard 2017; Webley 2022,⁵⁰ 85-87).

Dating by art-style criteria suggests that copper-alloy cheekpieces and select harness links date to the early to mid 11th century, based on their Ringerike-style decoration. This is supported by the date given to a zoomorphic double-ended link featuring a Ringerike-style beast found in context at Lund. Formal similarities – such as the three knobs on the loops on the Lund example – connect those links not susceptible to art-style dating to others, regardless of material. No chronological discrepancy has been revealed between copper-alloy double-ended and four-way links, not least because of a lack of stylistic or stratigraphic evidence for the latter.

While, for England, the Ringerike style is associated with the Anglo-Danish empire, from 1016 to 1042 (Williams 2007a, 1; Kershaw 2010, 4-5), such precise dating cannot be corroborated by current archaeological evidence. There are suggestions that examples of Williams Type 3 cheekpieces may have endured as late as the 12th century, suggesting a longer period of use for the style, albeit the lack of Urnes-style fittings is noteworthy. Excavated data suggests plainer examples could be at least as early as the Ringerike-style corpus, and may have endured later – in themselves they are not diagnostic of date. This is particularly true for iron pieces, which, though less susceptible to typological or stylistic analysis, provide a relatively high number of excavated examples with dating evidence. Finally, I suggest snaffle bits with elaborated copper-alloy cheekpieces and concomitant bit links may have been superseded by curb bits for some, and for others possibly by more basic cheekpieces, mostly in iron. Due to relative recovery rates of iron and non-ferrous items, especially by detectorists, comparison is difficult. The end of this phase of non-ferrous material, and a return to prominence for iron is tentatively placed in the early 12th century (Goodall 2011, 374-377).

⁵⁰ This recent group found at Chirbury (Shropshire), consists of a four-way harness link, two cheekpieces and one bit link: it may be considered an incomplete set of bridle fittings (PAS: HESH-2AE0D1).

5.1.3 Contextual associations

Overall, we will see that the distribution of non-ferrous equestrian items does not notably deviate from other finds (Fig. 7, above), except in the North, and, to a lesser extent, in the South West. The lacunae are even starker for bridle fittings – cheekpieces and bit links (Fig. 54). Harness links are also relatively rare north of the Humber, though not to the extent for fittings we can be more confident came specifically from bridles (Fig. 54).



Fig. 54 Bridle cheekpieces and bit links mapped alongside other harness links

The cheekpiece corpus, when analysed by Williams type, reveals little insular variation (Fig. 55). An exception can be made for Williams Type 3 which, though widespread, has a stronger presence in Lincolnshire, towards the periphery of the overall distribution (Webley in press).



Fig. 55 Bridle cheekpieces mapped by Williams Type

Beyond England, different connections can be observed with Scandinavia and with modern-day France. These are seen strongly when considering primary material. The copper-alloy cheekpieces and harness links follow an Anglo-Scandinavian axis, including those with Ringerike-style decoration. Rather plainer links including in iron, seem to fit an earlier, and more general, tradition. An example from Le Plessis-Grimoult (France), suggests similar (iron) links were used in both England and Normandy (France) before the Conquest. Similarly, certain iron cheekpieces seem to have had an earlier, and more universal, currency. This is exemplified by the late 10th-to early 11th-century cheekpieces of inverted-Y form present at Charavines-Colletière (France) (Colardelle and Verdel 1993), the *castrum* of Andone (Portet and Raynaud 2009, 209-210), in Oslo (Norway), and in York (Waterman 1959, 72, fig. 8, no. 1). It is plausible that iron cheekpieces were largely supplanted by the copper-alloy forms in England but persisted elsewhere in Europe (Goßler 2011). In turn, it has been suggested that curb bits may have helped supplant snaffles with copper-alloy elements. Such bits are known from pre-Conquest contexts in Normandy, suggesting

the Norman Conquest was the vector by which they arrived in England, despite their more general distribution across modern-day France and further afield on the Continent (Gaitzsch 1997; Clark 2019, 178-179).

There is a notable difference in the international distribution of copper-alloy cheekpieces for snaffles by Williams type. Current evidence suggests that Williams Type 2 is an English development, restricted to this country. Examples of Type 1/Pedersen Type 1 have been found in England and in southern Scandinavia (Williams 2007a, 1; Pedersen 2004, 51-52). Type 3 cheekpieces have a distinctive distribution: while examples are known from modern-day Denmark (Pedersen 2009, 14, fig. 4; Ulriksen 2011, 106, fig. 23.3) and Mecklenburg-Vorpommern (Germany) (Schirren 2017, 337, abb. 219.1, no. ALM 2015/1218), the group focusses on the Low Countries, particularly the Belgian and Dutch littoral (Deckers 2014, 25; 2017, 100, 115; Spoelder 2018; Webley in press), although increasing numbers are being documented from the Dutch interior (Spoelder 2018). Whether this relates to Anglo-Flemish relations before the Norman Conquest, after, or both, is currently intractable due to dating limitations. However, though a few examples could have a relatively late date, their use probably centred around the early to mid-11th century, based on aggregated analysis of associated equipment (Webley in press). Furthermore, after the Conquest the presence of similar cheekpieces in England and Denmark cannot be seen definitively in this study (Pedersen 2004, 67; though compare Section 5.3.2.1 below).

As expected, for objects considered to be en suite with other equestrian equipment, there is no substantial discrepancy between the distribution of doubleended and four-way harness links, either between themselves or with other related groups (Fig. 56). Although the corpus is mostly not very morphologically distinctive, limiting analysis, the group of double-ended links with a central en-face mask (which tends towards the anthropomorphic or zoomorphic; Illus. 15, right) has all been found south of the Severn estuary-Wash line, and cluster along the Channel coast.



Fig. 56 Harness links by form within England and Wales

Site associations are few, and mixed. Decontextualised rural finds comprise 95.2% of the corpus, suggesting items mostly lost in transit. Excluding grave deposits, the remainder cover almost every type of site – secular and religious, urban and rural, elite and non-elite (see below).

5.1.4 Identity associations

As with contextual associations, efforts to identify identity associations are inhibited by a lack of contextualised finds. However, the range of sites represented suggests that they were not alien objects in any given social arena. For example, while the vast majority have been found in rural contexts, four cheekpieces, five bit links and 13 harness links come from 'urban' sites showing they were not alien in towns. They also permeated religious spaces, for example a bit link found at the Greyfriars site in Norwich (Huddle 2007, 202-203, fig. 5.93, no. 1835), or a four-way harness link from Glastonbury Abbey (Somerset) (Courtney *et al.* 2015, 305-306, fig. 8.46, no. 73).

These fittings are seldom found on low-status settlement types, supporting their identification as more socially exclusive objects. Many were found on high-status sites such as the urban castles of Norwich, and Winchester, and the rural castles of Goltho and Le Plessis-Grimoult. Similarly of a high social status are examples known from religious sites such as Norwich Cathedral and the Benedictinernonnekloster Vor Frue, Randers (Denmark) (Mikkelsen 1990, 217, fig. 32). However, this elite association should be qualified. The same sort of double-ended harness links used at high-status sites have also been found at the deserted medieval villages at Goltho, Tattenhoe (Buckinghamshire), and Westbury-by-Shenley. Furthermore, the same type of cheekpiece found at Domburg's ringfort was found at Holworth DMV (see Table 41, Appendix 1.D). A notable exception is provided by curb bits, which are mostly found at castle sites and elite rural settlements, as well as in urban contexts. Although this may represent bias in site excavation choices to an extent, such a trend is not unexpected (Deborde and Portet 2016, 6).

5.1.5 Materials analysis

In the 11th century, cheekpieces, bit links and harness links were often non-ferrous items, but our overall impression may be being biased by the PAS dataset. A few lead finds are thought to have been mould models (PAS: WMID-47A3DE, LVPL-B6EE02): lead's plasticity would make them unsuitable to take the strain of a strap. Iron fittings are limited to excavated finds, and make up c. 43% of the excavated corpus

documented. This tentatively suggests approximately half of the corpus could be missing due to metal detectorists' discrimination against ironwork, and problems of survival and recognition. No iron cheekpieces from the 11th-century Anglo-Scandinavian series have been traced from England to parallel those few known from Sweden (Pedersen 1999, 137). The presence of iron on the reverse of some Williams Type 3 pieces may represent a corroded back plate (Webley in press). The type's unusual moulded decoration alongside this constructional difference gives it a morphological distinctiveness that parallels its unusual distribution (see above).

Low numbers inhibit analysis of relationships between material and site status, or between decorative treatment, such as engraving or use of openwork, and social status or contextual association. Based on the small corpus, however, it would seem that there are no clear distinctions between the kinds of links or cheekpieces used in different milieus.

5.1.6 Summary of key points

	Ringerike-style decoration is present on many copper-alloy cheekpieces and some double-ended harness links. These are connected by formal traits to other contemporary equestrian equipment not susceptible to art-style dating, such as bit links.
D	Excavated dates provide a wide chronological range for this material going beyond
A	the end date taken for the Ringerike style, and potentially starting earlier. As always,
Т	it is difficult to know where persistence of use (and curation) ends and residuality
I N	begins.
G	Curb bits (hinged) seem to be an 11 th -century phenomenon across western Europe,
	starting in the early part of the century, but one reaching England through a Norman
	vector.
	 The (Norman) introduction of the curb bit may have helped cause the decline in the use of snaffles embellished with copper alloy, which reflect other, older geographical connections (see below). This is a major chronological rupture for this group of (mostly bridle) material, though not seemingly for copper-alloy embellishments used on stirrups or stirrup straps (discussed below in Sections 5.3 and 5.4).

A S	Harness links, cheekpieces and bit links are present in a large core zone which largely excludes the North of the country							
S O C I A T I O	 Internationally, copper-alloy links and cheekpieces connect England with the Scandinavian material of the Anglo-Danish realm; plainer (iron) objects are compatible with a wider, European tradition. Cheekpieces of Williams Type 3 travelled mainly along an axis connecting England and the Low Countries. Curb bits are present across Europe and provide the most diagnostic evidence for 12th-century bridle fittings. 							
N S	 There was a certain amount of access through social levels to copper-alloy cheekpieces and harness links, which are not restricted to high-status sites Curb bits appear to have been more socially restricted, as the nature of their representation in art implies 							

5.2 Harness pendants and pendant suspension mounts

5.2.1 Introduction and historiography



after Goßler 2011, 45; abb. 22

Fig. 57 Drawing of a harness pendant set, noting element terms

Harness pendants were decorative items attached to harness straps (Ashley 2002, 4; Thuaudet 2021, 274), generally by a suspension mount. In general, pendants hung from an integral loop set at 90 degrees and centrally at their top. This loop was suspended from an axis bar, often of iron (Griffiths 1986, 2), retained between two loops on the suspension mount (Fig. 57). Pendants were mostly made of copper alloys, but examples are known in iron, including one from a 12th-century context in Norwich (Mould and Ashley 2009, 350, fig. 5.54, no. SF 408). They could have surface decoration of many types in this period, with gilding relatively frequent, while enamelling and inset 'gems' were relatively rare.



Walters Art Museum, W.30, f. 3r, © 2011 Walters Art Museum, used under a Creative Commons Attribution-ShareAlike 3.0 license: http://creativecommons.org/licenses/by-sa/3.0/

Illus. 16 Detail from Gilbert of Auxerre's Lamentations of Jeremiah (c. 1150-1200). Note nine pendants visible on the breast-band (others presumably cannot be seen from this viewpoint) and, possibly, one on the brow-band. Previous dating has tended to proceed solely from the pendants rather than the suspension mounts, or from when these elements survive together as 'sets'; these components are thus treated separately in the dating discussion below. Harness pendants have a long pedigree, with Roman, and even Iron Age, examples known (Thuaudet 2021, 271); they continued, in a more limited way, in the early-medieval period. Medieval artistic depictions show pendants mainly attached to the breast-band, but also the brow-band, the rear strap ('crupper') (Cherry 1991, 17), and the reins, as 'fringeing' (Griffiths 1986, 2; e.g. Legner 1985, 72, no. A17), although some of the pendent items shown might be made of fabric or leather. Most 12th-century depictions show pendants on the chest (Illus. 16; Griffiths 1986, 1; Cherry 1991, 17; Creighton and Wright 2016, 179), with brow-band pendants appearing mostly on later depictions (Ward Perkins 1993 [1940], 118; Thuaudet 2021, 272, fig. 10).

Although various formalised groupings of pendants have existed since the 1940s (Ward Perkins 1993 [1940], 118, fig. 38; Griffiths 1986, 2-3; Ashley 2002), there has been no detailed typological assessment of English harness pendants comparable to the international classification by Stefan Krabath (2001, 232-251). Such studies were inhibited by a historic lack of material in combination with a lack of good dating evidence (Krabath 2001, 234). Traditionally, suggestions for dating focused on the 13th and, especially, 14th centuries (Griffiths 1986, 1); all examples published in the Museum of London's 1940 medieval catalogue were attributed this (or later) dating (Ward Perkins 1993 [1940], 119-122). Such a chronology was challenged in the 1980s by Nick Griffiths (1986), citing 12th- and 13th-century manuscript illustrations (see Illus. 16), as well as (then new) archaeologically dated finds. However, Griffiths (1986, 1) was tentative in ascribing pendants to the 12th century, suggesting limited forms were used – 'perhaps... circular and openwork'.

More recent work has asserted use of harness pendants in the 12th century more confidently, based on iconographical as much as archaeological evidence (Cherry 1991, 17; Griffiths 2004 [1995], 62). In the 1990s, new work appeared on earlier pendants, dated by their Ringerike-style decoration (Graham-Campbell 1992, 86-87; Williams 2007a, 6). Such pendants were characterised as part of a tradition stretching back to the 9th-/10th-century pendant found with a bridle at Balladoole (Isle of Man), interpreted as being from a brow-band (Graham-Campbell 1992, 83, fig. 1). Ashley's (2002) study of harness fittings – derived mostly from metal detecting in Norfolk – greatly advanced knowledge of potential 12th-century types. Adding to Griffiths's circular and openwork forms, Ashley (2002, 5-8) argued for a 12th- to early-13th- century date for a number of other forms, including ('kite-shaped' and triangular) shields, triangles, crescents, ovals, quatrefoils, squares and rectangles (see also Baker 2015; 2017).

Though constituent parts of harness pendant sets, the suspension mounts from which pendants hung have rarely been studied in their own right. Indeed, Griffiths (2004 [1995], 62) stated that 'there appears to be no direct correlation between the various types of pendant and the mount'. This may be contested. A frequent feature of pendant sets, particularly in the 12th and 13th centuries, is that the suspension mount echoes its pendant's form (Baker 2017, 29, discussing pendants he dates to the earlier 13th century). For example, Ashley (2002, 8, fig. 8) illustrates a group of square pendants, many of which form sets with suspension mounts which are also square (with protruding rounded attachment tabs).

For studies of pendant suspension mounts one must turn to the continental literature. A typology by Krabath (2001, 236) is based on basic formal criteria and features eight main forms, two of them (circular and rectangular) having sub-forms. Goßler's publication of German equestrian equipment gave a more prominent place to suspension mounts (e.g. Goßler 2011, 128, abb. 50, for a distribution map), but discusses few pre-13th-century examples. Interestingly, for the site of Corné, Lassure (1998) categorised harness pendants by suspension mount form rather than pendant shape, but being a site-specific study it detailed a limited range. Krabath's (2001, 241) discussion of suspension mount typology and dating will therefore form our starting point.

5.2.2 Typochronological analysis

5.2.2.1 Harness pendants

Unfortunately, dating using heraldry, only possible with the tinctures provided by enamelling, is only relevant at the very end of the period, and then only rarely (Baker 2015, 22-23). Analysis will therefore focus on stratigraphic dating, as with recent continental studies (Krabath 2001; Goßler 2011), and on depictions. Looking beyond form, Ashley (2002, 5) and Baker (2015; 2017) have highlighted various approaches to the manufacture of the purportedly 12th- to early 13th-century pendants. These approaches include gilding, engraved (both linear and wrigglework) decoration, and stamped/punched decoration, often of annulets, which either created a design or filled the background. The pendants and mounts thus decorated were all relatively thin (Ashley 2002, 5); in contrast, 13th-/14th-century examples were generally cast and enamelled, and duly thicker. Favouring such a dating approach over that of excavated evidence runs the risk of teleology, whereby authors seem to have worked back from intrinsically datable examples and assumed that simpler examples must precede them, rather than arguing for any degree of contemporaneity.

Depictions of harness pendants

The small scale of many of the objects in this thesis means they were often omitted from contemporary artistic representations (Section 3.1.2). Harness pendants form a welcome exception, though forms are only shown to a basic level due to simplification (Krabath 2001, 239). Duly, 44 pictorial representations were analysed (see also Appendix 3): nearly half from manuscript illustration (20), and others from carved architectural features (5), painted walls and ceilings (3), coins (2), seal matrices/seals (9), and other artefacts (5), including aquamaniles. Most of these sources span a period from the last quarter of the 11th century to c. 1200.⁵¹

Simple circular pendants are the oldest form, based on the seal of Odo of Bayeux (dated 1071-1082), as rendered in a drawing of c. 1640 (Davis 1989, 22, fig. 8). Usually they are attached to the breast-band, they are the most common form throughout this period, at 70% of pendants represented. They number between three and sixteen per horse,⁵² with an average of eight pendants.⁵³ Albeit not to the same extent, the

⁵¹ The major resource utilised was the Index of Medieval Art. Available at: <u>https://theindex.princeton.edu/</u> [accessed June 2020]

⁵² This can only be compared to a singular survival of a breast-band (or half breast-band), albeit dated to the early 13th century: this remarkable object from Caherduggan Castle (Co. Cork) would have had 48 pendants (Schousboe 2012, 10).

⁵³ Though these figures are often determined by extrapolation from profile or three-quarters views (see Illus. 16)

most common form of contemporary archaeologically datable pendant is also circular (see below), suggesting that this is not solely an artistic convention.

Non-circular pendants are found on most types of representation, but there is some connection between the variety of forms represented and the size of the medium. Other early types – based only on single depictions in the years around 1100 – are annular, cruciform and lozengiform pendants, and also pendent bells (Appendix 3). Around the middle of the 12th century crescentic pendants start to appear in depictions, while shield-shaped pendants do not appear until the early 13th century, in England at least.⁵⁴ This repertoire of relatively simple forms correlates well with dated excavated finds (see below), with the exception of cruciform pendants, which are difficult to attribute to this period archaeologically despite their presence on the tympanum at Fordington Church (Dorset) dated to c. 1100 (Ashley 2002, 27, pl. I).

Analysis by form

A total of 87 pendants with dating evidence focused on the 11th and 12th centuries were assessed, 28 forming parts of sets for which the form and decoration of the suspension mount can aid stylistic dating and provide typological parallels. Overall, the appraisal set out below (Tables 21 and 22) builds on and expands Krabath's (2001, 236-241) dating discussion. Based on Krabath's assessment, only the following forms (*Varienten*) appeared relevant to this period: circular (4000; including openwork pieces – 4100, 4300), annular (4200), crescentic (4500), shell shaped (6000), drop shaped (8100), and other, more idiosyncratic, pendants, including openwork pieces. The dating applied to each form is either challenged or accepted (Table 21), with further detail provided in Appendix 1.E.i.

According to Krabath's dating assessment, his remaining *Varianten* either lacked sufficient evidence to merit consideration, or fell outside the end of the date range (c. 1200). However, numerous other pendant forms are included in Table 22 as they are here suggested to be relevant to the period; further detail can be found in Appendix 1.E.i. These include the following major/minor forms: shield-shaped (1000) – including

 ⁵⁴ Shield-shaped pendants are known from 12th-century Italian iconographical sources (below, Appendix 3; Ashley 2002, 27).

Form	Typological equivalents	Date range suggested by Krabath (2001)	Date range proposed	Example - location	Example – date (reference)	Sample image
Circular	Krabath Variante 4000; Ward Perkins Type IV; Goßler circular Varianten I-II	Late 11 th - 15 th century	As Krabath	Vintry, London	c. 1100-1160 (VRY89[V310]<661>)	•
Circular (openwork)	Krabath <i>Variante</i> 4100; Goßler circular <i>Variante</i> III	12 th -13 th century	Early 12 th century onwards	Llantrithyd ringwork (Vale of Glamorgan)	c. 1100-1150 (Charlton <i>et al</i> . 1977, 50, no. 82)	after Fitzpatrick 2000, 137-138; fig. 49, no. 17
Circular (openwork – quatrefoil perforation)	Krabath <i>Variante</i> 4300	Late 11 th century onwards	As Krabath	Burg Berge, Odenthal (Germany)	c. 1060-1138 (Untermann 1984, 128, taf. 12, 20, no. Br. 2)	after Gossler 2011, 233, 290; taf. 8, no. 183
Annular	Krabath <i>Variante</i> 4200	12 th century onwards	12 th -14 th century	Ruine Schanzenköpfle, Leutershausen (Germany)	c. 1100-1230 (Wendt 1998, 40)	after Bader 1998, 70, 101/ taf. 14; no. 518

Table 21 Appraisal of harness pendant forms suggested by Krabath (2001) as relevant to this period

Form	Typological equivalents	Date range suggested by Krabath (2001)	Date range proposed	Example - location	Example – date (reference)	Sample image
Crescentic	Krabath <i>Variante</i> 4500	12 th -15 th century	Later 11 th century onwards (N.B. to be dis- ambiguated from Roman examples)	Altenberg bei Füllinsdorf (Switzerland)	c. 1050-1100 (Marti 2013, 145-147, taf. 194-195, no. 59)	after Marti 2013, 145-147; taf. 194-195, no. 59
Shell shaped	Krabath <i>Variante</i> 6000	12 th -14 th century	As Krabath	Castle Acre Castle	c. 1145-1150 (Goodall 1982, 238- 239, fig. 44, no. 36)	8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
Drop shaped	Krabath <i>Variante</i> 8100	12 th -c. 14 th century	As Krabath	Höxter (Germany)	c. 1100-1150 (Krabath 2001, 526, no. XXIX.6)	after Mills 1995, 348, 355; 5 fig. 151.50, no. 215
Miscellaneous (quadrilateral with incurved sides, pointed oval)	including Krabath <i>Varianten</i> 3300, 7400	12 th century	As Krabath	Gisborough Priory (North Yorkshire)	c. 1119-1200 (Jackson 1995, 97, fig. 18, no. 16)	after Jackson 1995, 97; fig. 18, no. 16

Form	Typological equivalents	Date range suggested by Krabath (2001)	Date range proposed	Example - location	Example – date (reference)	Sample image
Annular, with separate 'swinger'	Krabath <i>Variante</i> 4210	Not discussed	11 th century onwards	Neuwarfen (Germany)	11 th century (Goßler 2011, 236, no. 221)	after Goßler 2011, 236, 290; taf. 9, no. 221
Shield shaped	Krabath <i>Varianten</i> 1000, 4400, 4410; Ward Perkins Type I	Later 12 th -14 th century	Later 12 th century onwards (especially 4400)	Burg Isenburg, Hattingen (Germany) (4400)	c. 1167-1225 (Krabath 2001, 642, no. 3254)	after Goodall 1993a, 96, 98; fig. 116, no. 17 (no scale)
Lozengiform	Krabath <i>Variante</i> 2000; Ward Perkins Type II	Later 13 th -14 th century (archaeological dating); 12 th century (iconography)	12 th century onwards	Llantrithyd ringwork	c. 1100-1150 (Charlton <i>et al</i> . 1977, 50, no. 83)	after Robinson and Griffiths 2000, 125; fig. 6.1, no. 2
Rectangular	Krabath <i>Variante</i> 3000	13 ^{th-} 14 th century	?12 th century onwards	Burg Treuchtlingen (Germany)	c. 1100-1266 (Goßler 2011, 84, 228, 285, taf. 4, no. 103.2)	after Rodwell 1993, 38-39/ pl. XXVa; fig. 15, no. 29

Table 22 Reappraisal of harness pendant forms not considered by Krabath (2001) as relevant to this period

Form	Typological equivalents	Date range suggested by Krabath (2001)	Date range proposed	Example - location	Example – date (reference)	Sample image
Square	Krabath <i>Varianten</i> 3100, 3200; Ward Perkins Type III	c. 13 th century	?later 12 th - 13 th century	Lower Thames Street, London	c. 1180-1230 (Griffiths 2004 [1995], 64-65, fig. 47, no. 54)	after Hinton 1990g, 1048, 1051/pl. LXIV; fig. 336, no. 3907
Quatrefoil (also sexfoil)	Krabath <i>Variante</i> 5100 (5300); Ward Perkins Type V	c. 14 th century (c. 13 th century – 5300)	?12 th -14 th century	Burg Isenburg (5300)	c. 1200-1333 (Krabath 2001, 240, note 1423)	PAS : SUR-F1DE86
Octofoil	Krabath <i>Variante</i> 5400	Not discussed	Later 12 th century onwards	Rubercy Castle	c. 1150-1200 (Lorren 1977, 156, 170, fig. 29, nos 11-12)	after Marin 1994b, 380-381; fig. 13
Lobate/foliate	Krabath <i>Variante</i> 7100	Not discussed	12 th -13 th century	Burg Treuchtlingen	c. 1100-1266 (Steeger 1997, 69, taf. III.52, top left)	PAS: HAMP-222B53

Form	Typological equivalents	Date range suggested by Krabath (2001)	Date range proposed	Example - location	Example – date (reference)	Sample image
Cross-shaped	Krabath <i>Variante</i> 9000	Not discussed	?Later 12 th century onwards	-	-	PAS : NMS-6A8637
Pendent bell	Krabath <i>Variante</i> 4600	13 th -14 th century	12 th century onwards	The Hamel, Oxford	c. 1167-1233 (A. Goodall 1980a, 184, C01, fig. 24, no. 71)	after Goodall 1980a, 184, C01; fig. 24, no. 71
Anglo- Scandinavian	N/a	N/a	11 th century (c. 1025- 1075)	London Guildhall	c. 1050-1075 (Egan 2007a, 335, 452, fig. 314, no. <s47>)</s47>	after Williams 2007a, 7; fig. 7b
Miscellaneous (triangular, lis shaped, zoomorphic)	including Krabath <i>Varianten</i> 7200, 7300	Not discussed	12 th century onwards	Vintry, London	c. 1100-1220 (VRY89[V97]<2348>)	PAS : Cm MMS-1664A2

kite-shaped shields (4400); lozenge-shaped (2000); rectangular (3000); square (3100, 3200); annular with separate 'swinger' (4210); quatrefoil (5100); octofoil (5400); lobate/foliate (7100); cross-shaped (9000); and pendent bells (4600). Alongside these, other forms are suggested to be pertinent, most notably pendants decorated in late Viking-Age art styles.

Of the pendants, 26% are circular (n=322), with other large groups including rectangular (9%) and square pendants (7%) restricted to later in the period (see below). The earliest pendants discussed are dated to the early and mid-11th century because of their Ringerike-style decoration, supported by some archaeological dating evidence (Table 22; Anglo-Scandinavian). Their relative paucity (1% of dataset) compared to later pendants, and also compared to other 11th-century equestrian equipment, implies they may have been prestige items; perhaps they were attached to the brow-band. From this period, albeit at a geographical remove, pendants have been found adorning the former brow-bands of horses found in graves primarily in the Sambian peninsula of modern-day Kaliningrad Oblast (Russia) (Shiroukhov 2020). Later, certain forms of harness pendant have been identified from high medieval iconographical sources as more commonly used in this location at the horse's forehead, arguably as some sort of protective amulet – notably crescentic and cruciform pendants (Fiedler 2002, 318; Thuaudet 2021, 272) – and this may also have been the case in the 11th century.

Of the pendants which succeeded them – which were mostly placed on the breast-band – excavated data affirms that circular pendants were some of the earliest. These could be relatively plain pieces, otherwise undiagnostic of date, occasionally gilded. The earliest *terminus post quem* for such a pendant is in the later 11th century, specifically one with a decorative aperture (*Variente* 4300), though this object's *terminus ante quem* lies in the 1130s. While they could be later 11th century in date, as implied by artistic representations (Appendix 3), the 12th-century floruit of circular pendants is unequivocal – for openwork, figurative examples (*Variente* 4100) as well as solid pieces. Other simple forms were contemporary, such as the crescentic and annular, including examples with separate internal swingers; some have been shown to date to the late 11th century, although they continued beyond 1200.

The 12th century certainly seems to have witnessed the diversification of forms suggested by various authors, with other simple forms joining circular, annular and crescentic pieces. The first half of the century sees the first evidence for shell-shaped and drop-shaped pendants. Idiosyncratic forms were also present, such as oval (Table 21, Gisborough Priory), or an open lozenge-shaped piece from Castle Acre Castle (Appendix 1.E.i.6). Potentially, lobate/foliate forms also start in this period. In the second half of the century the trend in diverse forms seemingly continued, with elaborate openwork octofoil examples known, and the probable introduction of triangular pendants and pendent bells. At the end of the century pendants in the form of shields appear – kite-shaped, and probably triangular – plus quadrangular forms (see below). Our overall sense of 12th-century harness pendants now centres on their 'considerable variety' (Ashley 2016, 294), as opposed to a limited repertoire.

As noted by certain authors, we can look beyond basic form to characterise early pendants, the forms used in the 11th and 12th centuries often so simple as to be undiagnostic, as the often wide date ranges in Tables 21 and 22 bear witness. Griffiths (1986) suggested openwork decoration to be a characteristic of early pendants; this is borne out here, illustrated in Table 21 by an elaborately cast piece from Carisbrooke Castle (Isle of Wight), found in a very early 12th-century context (Fitzpatrick 2000, 137-138, fig. 49, no. 17). Simultaneously, many other early pendants are notably plain, with only surface treatments (mainly gilding), or simple engraved decoration.

Ashley (2002, 5) and others (see above) have suggested pendants with specific decorative characteristics – e.g. engraving and stamping, particularly of annulets – date between the second quarter of the 12th century and the early 13th century. However, for various pendant forms bearing such decoration (particularly rectangular), current excavated data does not support such dating strongly (see Table 22). At the earliest, these traits have been identified from the second half of the 12th century onwards on octofoil pendants from Rubercy Castle (Table 22) with punched annulets, and, possibly a rectangular pendant from Montaigut (France) (Abramowicz *et al.* 1970, 47, 50, fig. 29, no. 8). At present, therefore, the dating of pendants thus decorated as early as the Anarchy in England does not appear to be justified (Creighton and Wright 2016, 179), with archaeological examples appearing to demonstrate such decoration continuing well into the 13th century. As such, this

decorative approach may have overlapped with, rather than preceded, the frequently enamelled pendants that came to dominate from the mid-13th century.

5.2.2.2 Pendant suspension mounts

Unfortunately, when it comes to pendant suspension mounts pictorial representations are not helpful, with detail absent even where pendants are shown. Baker (2015, 18) observed that circular pendants are often shown 'on long stems', for example in Geoffrey of Monmouth's *History of the Kings of Britain* (MS Leiden BPL 20, f. 20r) dated to c. 1160. Such stems might be leather thongs from which pendants were suspended directly; they might be artistic convention, as actual circular pendants feature a conventional suspension loop rather than a protruding stem (Table 21, circular). Overall, 55 pendant suspension mounts with dating evidence were therefore assessed. Around half of these form part of sets where the form and decoration of the pendant can aid dating.

Analysis by form

Krabath's (2001, 241) assessment would suggest only two mount forms date to the 12th century: circular (*Variante* 1000) and shell shaped (*Variante* 1300). The remainder of his *Varianten* either did not have sufficient evidence for consideration or were judged to be later. However, we may now suggest pre-1200 dates for select others, including square forms, based on the survey presented in Table 23 (see also Appendix 1.E.ii). This survey advances discussion of 11th- and 12th-century harness pendant suspension mounts, discussion virtually non-existent, in the English literature at least. The overall sense is of a diversity of mounts, as with their pendants, alongside a tendency for basic forms. The simple circular form (Lassure Type B) represents 29% of the dataset, with the later rectangular and square forms contributing 12% and 8%, respectively; shell-shaped mounts are also common (11%).

Seemingly, an important observation relating to construction has been previously overlooked. A general shift in construction is apparent between the 11thcentury sets and the succeeding period. The earlier mounts, on admittedly limited evidence, appear to be sub-rectangular bars set transversely on straps, with basal
Form	Typological equivalents	Date range suggested by Krabath (2001)	Date range proposed	Example - location	Example – date (reference)	Sample image
Circular	Krabath <i>Variante</i> 1000; Lassure Type B	12 th -14 th century	12 th -14th century (overall); 12 th - 13th century (Lassure Type B)	Marlowe Car Park, Canterbury	c. 1100-1325 (Garrard 1995, 1052, 1054, fig. 450, no. 579)	•
Shell shaped	Krabath <i>Variante</i> 1300	12 th century onwards	12 th -13th century	Vintry, London	c. 1100-1160 (VRY89[V312]<2521>)	after Hinton 1990g, 1050-1051; fig. 336, no. 3919 (no scale)
Oval	Krabath <i>Variante</i> 1100	Not discussed	?Later 12 th century onwards	None traced	None traced	PAS : KENT-55705E
Flower/foliate	Krabath Variante 1200	c. 14 th century	?Later 12 th century onwards	Wolvesey Castle, Winchester	c. 1167-1233 (Hinton 1990g, 1050- 1051, fig. 336, no. 3912)	after Hinton 1990g, 1050-1051; fig. 336, no. 3912
Lozenge shaped	Krabath <i>Variante</i> 4000	Not discussed	?Later 12 th century onwards	Wolvesey Castle	c. 1267-1300 (Hinton 1990g, 1050- 1051, fig. 336, no. 3922)	after Hinton 1990g, 1050-1051; fig. 336, no. 3922 (no scale)

Table 23 Appraisal of harness pendant suspension mount forms suggested by Krabath (2001) as relevant to this period

Form	Typological equivalents	Date range suggested by Krabath (2001)	Date range proposed	Example - location	Example – date (reference)	Sample image
'Triangular'	Krabath <i>Variante</i> 7000; Lassure Type A	Not discussed	Later 11 th -13 th century	Carisbrooke Castle	c. 1100-1110 (Fitzpatrick 2000, 137-138, fig. 49, no. 17)	PAS : NMGW-4C93BD
Rectangular	Krabath <i>Varianten</i> 5000, 5100, 5200	c. 13 th -14 th centuries	12 th century onwards (5100)	Wolvesey Castle	c. 1134-1200 (Hinton 1990g, 1050- 1051, fig. 336, no. 3911)	PAS : DEV-F7BE86
Square	N/a	N/a	?Later 12 th century onwards	Brook Street, Winchester	c. 1167-1233 (Hinton 1990g, 1050- 1051, fig. 336, no. 3915)	after Hinton 1990g, 1050-1051; fig. 336, no. 3917
Miscellaneous	N/a	N/a	11 th century	London Guildhall	c. 1050-1075 (Egan 2007a, 335, 452, fig. 314, no. <s47>)</s47>	after Egan 2007a, 335, 452; fig. 314, no. S47

loops formed from perforated solidly cast lobes (Table 23, Miscellaneous). Towards the end of the 11th century, and into the 12th century, loops tended to be formed instead by cutting a slot in a basal tab which was then folded back on itself, thus creating the pair of loops (Table 23, e.g. Circular).⁵⁵ This constructional approach persisted into the 13th century. From at least the mid-13th century, loops formed from perforated cast lobes again dominated – on stud-like forms, T-shaped forms (*Variante* 2000) and related cruciform mounts (*Variante* 3000) (see e.g. Griffiths 2004 [1995], 69, fig. 52); this construction method was also, occasionally, present earlier.

In terms of form, circular mounts have proved common, in the simple Type B form and construction identified by Lassure at Corné (Table 23). These are attested in 12th-century contexts, but continued into the 13th century. Related to them are 'triangular' mounts (Lassure Type A), which have a similar floruit, perhaps starting slightly earlier, in the late 11th century (Fig. 118, Appendix 1.E.ii.6). Shell-shaped mounts can be demonstrated for the 12th century (Table 44, Appendix 1.E.ii.2), dating reinforced by concomitant shell-shaped pendants, though these too potentially went later. Towards the end of the period, limited dating evidence from excavated examples suggests a late 12th- to early 13th-century date for fleur-de-lis shaped mounts, and a 12th- to early 13th-century date for longitudinally set rectangular mounts and some hollow-backed square mounts (Table 23). Due to some of these 'early' forms' basic nature, constructional detail ought also to be taken into account, as outlined above, when attempting to date decontextualised mounts.

Commentary, noted above, on purported 12th-century pendants highlighted fabric and decoration as potentially key characteristics; this can also be applied to suspension mounts (Ashley 2002, 5; Baker 2015; Creighton and Wright 2016, 179; Berthon with Linlaud 2013, 109). Relevant decorative traits (see above) feature on many forms with 'folded loop' construction: large circular, lateral rectangular, moulded square, oval, lozenge shaped, and quatrefoil.⁵⁶ However, at present, the absence of excavated evidence remains an issue, as does the focus of dated evidence

⁵⁵ Note that, in principle, such a constructional approach is comparable with that used for contemporary buckle plates. Herein lies potential for confusion between the two, especially the small plates used on spur leathers.

⁵⁶ By implication, morphological variations from the 'pure' form are included, e.g. sub-lozengiform.

for concomitant pendants on the 13th century (Section 5.2.2.1); a later 12th-century start is therefore only tentatively suggested for these forms.

5.2.3 Contextual associations

5.2.3.1 Contextual (spatial)



Fig. 58 Early forms of pendant and suspension mount (c. late 11th to mid-12th century)

Mapping of medieval harness pendants at a European level has only been performed by Krabath (2001, 245, karte 58). He established a pan-European distribution, with foci in England and modern-day Germany, a northern European bias perhaps reflecting his research focus in Nordrhein-Westfalen. As his work was biased towards the 13th and 14th centuries, the present study is the first to focus on the preceding centuries. Interestingly, though, mapping of the 11th- and 12th-century dataset, as defined here, shows the same pan-European spread, with the same foci, with pendant suspension mounts effectively describing the same distribution (Fig. 58).⁵⁷

For England, the distribution of pendants shown by Krabath (2001, 245, karte 58) compares to a similar underlying 11th- and 12th-century distribution; if anything, PAS data have filled a gap in the Midlands between the focus in the South and East, and a cluster in Yorkshire (Fig. 59).



Fig. 59 Pre-Conquest harness pendants and subsequent late 11th- to 12th-century forms

⁵⁷ Not included in Figure 58 are the openwork circular examples considered relevant only to Germany, Austria and Hungary, stylistically of mid-12th- to early-13th-century date (for these, see Krabath 2001, 240, 246, karte 59).

The earliest examples assessed, zoomorphic pendants decorated in the Ringerike style (Table 22, Anglo-Scandinavian), are concentrated in the eastern counties, from Norfolk to Yorkshire, as Williams (2007, 6) noted, with an emphasis north of the Humber estuary (Fig. 59). In addition, an early style with open latticework (Appendix 1.E.i.16) has a uniquely southern distribution. As Williams (2007a, 6) commented, these pendants seem to be a uniquely English manifestation of equestrian material culture, with none currently known from southern Scandinavia. Too few of the small zoomorphic pendants with parallels from the Low Countries are currently known to examine in detail (see Appendix 1.E.i.16).

The later forms, i.e. without Ringerike-style decoration, and located on the breast-band, are harder to assess because they are often formally simple and not limited to the timeframe discussed. This notwithstanding, circular pendants (*Variante* 4000), common in this period, may be indicative: they show a wide spread which is far stronger in the South and East Anglia than the Ringerike-style pieces (see also Krabath 2001, 247, karte 60). Other early forms, comprising annular (including those with separate swingers), crescentic, and openwork circular pendants, along with bifurcated pendant suspension mounts of Lassure Type A ('triangular'), have started to be documented from across Europe (Fig. 58).

What these distributions seem to demonstrate is that a horse-riding social stratum was using harness adornment in the same forms across Europe to emphasise status by around 1100. In England, they appear to be a novel way of adorning horses in the post-Conquest period, in their number and location. On the other hand, although circular pendants are depicted on the seal of Odo, Bishop of Bayeux, there is nothing peculiarly Norman about their usage. These, and other 'early' forms, are extensive in their distribution, both as archaeological finds and where represented iconographically. Indeed, the pendants from Rubercy Castle (Table 22, octofoil), could date at least a century after the Norman Conquest and probably reflect influence coming back across the Channel to Normandy from the royal domain in England.

Shell-shaped pendants and other types seemingly characteristic of the 12thcentury diversity, such as drop-shaped and lobate forms, also reveal that similar forms were being used across wide areas of Europe.⁵⁸ However, other types thought to be contemporary based on decoration and manufacture are largely absent from continental Europe, except for a few rectangular examples (Table 22; Appendix 1.E.i.9). Such pendants and mounts have a distribution which follows the core English zone, that is, largely absent from the South West, North West and Wales, and with a focus in East Anglia.

5.2.3.2 Contextual (site)

As with other equestrian equipment, harness pendants and their mounts are assumed to have been casual losses, usually during transit. Therefore 91% of the dataset have no context, with proportions similar for pendants and suspension mounts. For the remainder, 52% of pendants and mounts were recovered from urban contexts, and a further 16% from urban castles and ecclesiastical contexts. While this may to some extent be a product of historic urban excavation, it shows that harness pendants were familiar sights in towns and cities, and both in secular and ecclesiastical contexts. Finally, the loss of pendant sets at castles is abnormally high, perhaps suggesting stabling contexts, compared to deserted medieval settlements.

5.2.4 Identity associations

The social status of harness pendants has rarely been analysed diachronically. Discussing the 11th century, Graham-Campbell (1992, 78) argued that horse trappings were an important reflection of the owner's status, in addition to the steed's quality. The subsequent period has been characterised by some as featuring many pendants of 'poor quality', appropriate only for knightly and lordly retainers (Griffiths 2004 [1995], 62). Ashley (2002, 30) countered this, appealing to their impressive visual effect, due to gilding or white metal coating. We have seen that multiple examples were used to decorated breast-bands and would have had an aural effect with the jangling of metal, as well as a visual one through the reflection of light during movement (Thuaudet 2021, 279). For our timeframe, visual sources such as seals and bracteate coins show

⁵⁸ Not mapped, but see examples referred to in Appendices 1.E.i.4, 1.E.i.5, 1.E.i.13 and 1.E.ii.2

pendants adorning the breast-bands of earls, counts, princes and kings (Appendix 3). That the majority of the pendants are simple circles may be due to the depiction's size, but it could imply that simple possession of pendants was notable. Between the period c. 1070-1150 and the subsequent 80 years (c. 1150-1230), there is an average increase in the numbers of pendants used, extrapolated from numbers depicted in images (Appendix 3). Those from lower social strata are less frequently depicted with pendants, perhaps reflecting their lack of depiction in such media, rather than contemporary reality. However, the pictorial evidence provides a sense that, in the 12th century, harness pendants, while simple in form, were mainly used by the social elite.

5.2.5 Materials analysis

While the vast majority of harness pendants and suspension mounts studied are copper alloy, the excavation of iron examples hints at a potentially unrecognised corpus. The presence of settings for gems or glass in a few examples might suggest a local tradition in the Gers (France), where two were found (Thuaudet 2021, 273), or ostentation on elite pendants; the other was found at Gisborough Priory (Table 21). However, in this phase, before the floruit of enamelling, gilding was the key means of decoration; just over half of the dataset were gilded, generally with further embellishment. There is a slight, but discernible, tendency for greater decorative elaboration – gilding and engraving – in elite settings, such as castles, compared to urban sites. Similarly, openwork examples, though present elsewhere, represent a greater proportion of castle material (e.g. Table 21, from Carisbrooke Castle).

5.2.6 Summary of key points

D	Harness pendants and their concomitant mounts were used throughout the period of
А	study in increasing numbers
Т	A shift is identified from limited use in the Anglo-Scandinavian period, possibly
	on the brow-band, to increased use from the late 11 th century, primarily on
N	the breast-band.
0	Forms used became increasingly diverse in the 12 th century; when each may have
	started is now clearer.
	Most 'early' pendants were suspended from a mount formed in a particular way –
	from a folded back and slotted tab; the later (and indeed preceding) means of
	construction was to drill a cast, double protrusion.
А	The later 11 th -century expansion in such equine decoration was a European
S	phenomenon, but coincided with Norman rule in England
S	Harness pendants of this 'early' period were elite items based on their representations
0	on lordly seals.
С	 However, their presence in multiple milieus relativises their use.
Ι	
А	More elaborate examples, by construction and by surface treatment, were more
Т	common in elite settings, such as castles.
Ι	
0	
Ν	
S	

5.3 Stirrup-strap mounts and stirrup terminals

5.3.1 Introduction and historiography

Stirrups, in metal at least, were relative novelties in this period, with very few known in England and Wales before c. AD 1000 (Seaby and Woodfield 1980). 'Stirrup-strap mounts' were ornamental, cast copper-alloy mounts which reinforced and protected the stirrup leather (a strap connecting a stirrup to the saddle) as it looped round the stirrup's apex (Fig. 60). They were riveted at their base to an iron fitting bent around the end of the folded strap, and, at their apex, through the strap itself (Fig. 60, to right; Robinson 1992, 63, fig. 1b). Since the copper-alloy mounts tend to survive without these iron fittings – and divorced from the leathers and stirrups – over time they have been attributed various functions: initially book fittings (e.g. Smith 1923,

104; Wilson 1961, 212; Kluge-Pinsker 1993; Adler 2010), then box fittings (Wilson 1964, 59; Margeson 1986). As noted in Section 2.4.1, resolution regarding their function only really came in the 1990s.



Fig. 60 Reconstruction drawing showing the location of stirrup terminals and stirrup-strap mounts in relation to the stirrup and 'leather'

In the late 1990s, David Williams (1997a) provided a classification for stirrupstrap mounts, and this remains useful (Fig. 61; Webley 2014, 353). Williams's three main classes (1995; 1997a, 2, fig. 1), with their various sub-divisions, have been universally adopted by researchers (Williams 1997a, 2, 24-25; Pedersen 1999, 143); their main characteristics are summarised in Table 24. All sub-divisions were made on the basis of 'shape and decoration' (Williams 1997a, 2), although no explicit hierarchy or logic of classification was outlined.

Class A	Class B	Class C
Elongated three-/five-sided form	Rectangular or sub-trapezoidal form	Elongated forms
One upper fixing hole	Multiple upper fixing holes	One upper fixing hole
Inlay sometimes present	No inlay present	Inlay sometimes present
Zoomorphic decoration mostly in	Zoomorphic decoration mostly en	Zoomorphic decoration
profile	face	mostly in profile
Sometimes openwork	Mostly openwork	Mostly openwork
Perpendicular flange	Obliquely angled flange	Perpendicular flange
No side flanges	No side flanges	Side flanges
'Normal' size	'Normal' size	Comparatively large

Table 24 Main characteristics of stirrup-strap mounts by Williams Class

Little use has been made of the large dataset of over 1,600 mounts recorded through the PAS to re-examine either their distribution or dating (but see Lewis 2007b; Webley 2022). Recent writings discussed below do pass comment on their surprising ubiquity, arguing they cannot therefore be associated uniquely with the highest echelons of society (Pedersen 1999, 195; Hinton 2013, 7), as they previously were. However, the mounts are deployed as an undifferentiated mass of 11th-century date, to discussions as separated in time as the reign of Cnut (Graham-Campbell 1992; Sheeran 2009) and the Domesday population (Hinton 2013, 7). A nuanced and diachronic approach will therefore be taken.



Fig. 61 Williams classification of stirrup-strap mounts

'Stirrup terminals' were copper-alloy components which could be decorative or structural parts of composite stirrups otherwise made of iron (Figs 60, 64) (Williams 1997b, 1). They were soldered between the base of the stirrup's arms and its treadplate, sometimes connecting the two. Stirrup terminals are related to copper-alloy stirrup 'sides'. The latter sheathed and decorated the iron stirrup arms above a terminal, either connected to it, or as a separate element (Williams 2005a).

Few works have discussed these terminals. Elaborate zoomorphic examples were first definitively identified in the late 1990s (Williams 1997b); they were absent in Graham-Campbell's (1992) overview of 11th-century equestrian equipment, for example, with isolated examples often mis-identified (Owen 1979; Webster in Goodall and Webster 1981; Nicholson 1997). Williams's focus mostly on zoomorphic examples with relatively detailed decoration meant that other, plainer pieces were overlooked. He did not cite those stirrups with copper-alloy components illustrated in 1940 by John Ward Perkins (1993 [1940], 90-92, fig. 24, nos 3, 4), and discussed in conjunction with other, basic examples by Wilfred Seaby (1950). Until recently, work on stirrup 'sides' did not refer to Seaby's (1950) earlier publication of effectively the same components (compare Williams 2005a with Williams 2011). Other than the work of Williams (1997b) and, for Denmark, Pedersen (1999), no synthetic work has been attempted for stirrup terminals. Although David Williams (1997b, 2) drew out distinctive groups, by his own admission this was not a classification. At the time of his untimely death in 2017, work on a classification (D. Williams 2001), obtained and used here, remained unpublished.

In the following section the dating of stirrup-strap mounts and stirrup terminals will be discussed separately, before the case is made for them to have belonged to broadly similar stirrup irons. Discussion will then proceed with associations for both being discussed together.

5.3.2 Typochronological analysis

5.3.2.1 Stirrup-strap mounts

Most stirrup-strap mounts are metal-detected or chance finds and therefore lack the contextual information required for archaeological dating (Vilsteren 2010, 197). They

also seem to have post-dated the custom of furnished burial in Denmark (Pedersen 1999, 133). This notwithstanding, discussions of the mounts' dating have centred on the 11th century (when their precise dating was not glossed by the more vague descriptor 'late Saxon' (Robinson 1992, 63)). Although Roes (1958) and Wilson (1961) were tempted to date them earlier than the 11th century apparently on stylistic grounds, or based on known book mounts (their identification at the time), the 11th century was still included Wilson's (1961, 212) date range based on three examples known to early scholarship decorated in the Urnes style.⁵⁹ Similarly, in the 1980s, Margeson (1986, 323, 326) based dating on their decoration in the late Viking-Age art styles (Ringerike and Urnes). Following positive identification as equestrian fittings, Robinson (1992) and Williams (1997a) essayed a more definitive date range. For Williams (1997a, 8), naturally enough, a terminus post quem of c. 1000 was provided by Seaby and Woodfield's (1980) study of stirrups. For many, decoration of stirrupstrap mounts (and other equestrian equipment) in the Ringerike style placed their advent squarely in the reign of Cnut (Graham-Campbell 1992, 88; Roesdahl 2007, 26; Sheeran 2009, 3.4.2; Kershaw 2013, 177).

A *terminus ante quem* has been less forthcoming: as Paul Robinson (1992, 63) noted, 'as yet there is no good evidence to show how long they continued in use'. Robinson (1992, 63-64) identified a post-Conquest date for some pieces, based on his interpretation of the stirrups on the Bayeux Tapestry (see also Lewis 2005, 125-126, note 837; 2008, 171). Williams (2011, 252) acknowledged the presence of stirrupstrap mounts in early Norman England, first suggesting an end 'around 1100 or not long after' (Williams 1997a, 8), later styled 'early 12th century' (Williams 2000, 493). In the absence of detailed archaeological dating and in the spirit of earlier scholarship, Williams used decorative content to provide an end date, with the later 11th-century Urnes style the latest datable style he identified. Contra Williams (1997a), Lewis (2007b) essayed the redating of Class A, Type 11 mounts, placing them c. 1070-1140. This was based on the 'Romanesque' lion they generally depict, dated by examples of the motif in other media such as manuscripts and architectural sculpture. An early 12th-century date was also suggested by Ashley (2006, 105) for a sub-type with leonine

⁵⁹ listed in Williams 1997a, 53, 57, nos 176, 178, 184

decoration – now Class B, Type 5 (Webley 2014, 354). Decorative techniques present on some mounts have prompted mention of yet later dates. Use of punched triangles has often been perceived as a 13th- or 14th-century characteristic (Williams 1997a, 24), with Robinson (1992, 69, no. 11) mooting a 12th-century date for one example; these traits will be discussed below. Overall, an early 12th-century *terminus ante quem* seems generally accepted, although precise dates can only be conjectured, based on primarily art-style evidence (Webley 2014, 354, note 71; 2022, 80-83).

Here, the dating of stirrup-strap mounts was further interrogated through examples found in excavated contexts, as it is suggested that none can confidently be identified in illustrations (contra Robinson 1992). Of over 2,200 examples currently known to scholarship, only around 30 (c. 1.3%) come from excavations or other archaeological activity. Eighteen pieces found in England during archaeological activity are presented in Appendix 1.F.i, a number of which were either unstratified or associated with very mixed pottery (Table 46). Only four have been published since Williams's (1997a, 8) work: three unstratified, and the last considered residual by its excavators. The aggregated dating evidence is plotted in Figure 62. Bearing in mind the small numbers involved, the chart seems to show an initial flourishing in the early and mid-11th century, before a drop-off in the immediate post-Conquest period, and a sustained drop-off around the mid-12th century. The long 'tail' directly represents examples from the London Guildhall, thought to be residual; from Andover (Hampshire), described as 'clearly residual' by Williams (1997a, 8); and from Wells (Somerset), found with 12th- and 13th- century pottery, but also with some 'Saxo-Norman sherds' (Williams 1997a, 105, no. 501). This point of potential residuality is suggested on the plot. The start of the curve in the late 10th century is noteworthy, though itself influenced by a singular example: a 'rather unusual' mount from Waltham Abbey (Essex) (Williams 1997a, 8).



Fig. 62 Aoristic plot of excavated date ranges for English finds of stirrup-strap mounts, with cut-off line based on documented residuality

Despite their relatively small number, twelve continental mounts provide key dating evidence (see Table 47, Appendix 1.F.i), especially a rectangular openwork mount with Ringerike-style decoration found in a pit in Lund (Pedersen 1999, 152), the fill of which dated to the 1060s by dendrochronology (Williams 1997a, 8). A further example of this particular group was found at Haithabu (Germany), a site thought to have gone out of use by the final third of the 11th century (Hilberg 2018, 220, abb. 3). Notably early dates include those for an openwork example of Class A, Type 12 found in the bottom of a sunken hut in Sebbersund (Denmark), dated to the years around AD 1000 (Pedersen 1999, 150), and a mount from the Niederungsburg bei Haus Meer, Meerbusch-Büderich (Germany), found below a building dating to the early 11th century (Kluge-Pinsker 1993, 144, no. 2). Overall, the start date for cast stirrup-strap mounts as a European phenomenon seems to lie somewhere at the end of the 10th century, as suggested by Pedersen (1999, 153). When aggregated with the English data, the dating shows an even stronger initial phase in the early 11th century, especially relative to the later 11th/early 12th century (Fig. 63).



Fig. 63 Aoristic plot of excavated date ranges for English and continental stirrup-strap mounts combined, with cut-off line based on documented residuality

Unfortunately, excavated data offers little insight into the date ranges of the particular sub-types identified by Williams (Fig. 61). An exception is the geometric Class A, Type 12, for which openwork examples have been found in a mid-11th-century context in Winchester, and the very early 11th-century context at Sebbersund (Tables 46 and 47). At present, nuancing the corpus is best attempted therefore using decorative style, which accounts for c. 30% of examples (Sheeran 2009, 3.4.2). Urnesstyle mounts (Class A, Type 10) are datable to the later 11th century, and perhaps

beyond (Owen 2001, 209; Kershaw 2010, 6). Also post-Conquest, Romanesque mounts (Class A, Type 11; Class B, Type 5) continued into the 12th century (Lewis 2007b; Webley 2014, 354; 2022, 80-83).

5.3.2.2 Stirrup terminals

Three main strands of evidence can be pursued in dating stirrup terminals: art historical, stratigraphic, and typological (based on stirrup forms). Such typological dating appears to have been neglected because basic terminal forms have been rather overlooked in favour of those more susceptible to art-style dating.

Art-style dating



Fig. 64 Ringerike-style stirrup terminals

Terminals with zoomorphic decoration in the late Viking-Age art styles of Ringerike (Fig. 64) and Urnes (Williams 1997b, 1-2) are seemingly the only ones amenable to art-style dating (compare e.g. Thomas 2001a, 124-125, fig. 1, no. 6 which is rather crude). Williams did not venture to attribute examples to a given style, but this has been attempted by Pedersen (2004, 53). Based on such dating, the following typochronology can be set out (for further detail see Appendix 1.F.ii):

Williams (2001) provisional type	Art style	Dating
А, В, К	Ringerike	Early to mid-11 th century
D-F	Ringerike or Urnes	11 th century
G, H	Urnes	Mid to late 11 th century
L	n/a	'Later' [than the 11 th century?]

This provides a date range for stirrup terminals from the early 11th century until at least its end, if not into the 12th century. As such, it suggests stirrups of bimetallic composite construction were used from the early 11th century onwards, an assertion that can be compared with their typological dating.

Typological dating of associated stirrup irons

Eighteen stirrup irons with stirrup terminals have been traced. All, apart from one (probably of Goßler's *Gruppe* All), are stirrups of Goßler's *Gruppe* B. *Gruppe* B irons are defined by an integral apex loop on a broadly 'D' shaped hoop (Fig. 65, right), which can occasionally be taller, or closer to an inverted 'V'. These stirrups have traditionally been seen as typologically later than the 'tall, triangular' irons of Goßler's *Gruppe* A, that have a loop characteristically separated by a short 'neck' (Seaby and Woodfield 1980, 101). The assumed chronological progression will be debated. In general, *Gruppe* A stirrups are typical of the Viking Age – the 10th century in particular (Goßler 2011, 73-74; Pedersen 2014b, 108). In England, they had a late iteration dated to the first half of the 11th century and termed Type 2c by Seaby and Woodfield (1980) (Fig. 65, left).

Dating for stirrup irons with terminals is given in Table 48 (Appendix 1.F.ii). It is focused on the 11th and 12th centuries, but such dating has a historiographical dimension, discussed below. While some stirrups just have terminals at each lower corner (Table 48, e.g. from Christ's Hospital, London, and from Chalgrove), others have copper-alloy plating/sheathing on the arms above, sometimes integral to the terminal (Table 48; also Williams 2005a). Such decoration may be contrasted with that on Seaby and Woodfield Type 2c irons, which was generally constituted of non-ferrous wire 'overlaid' in scrolled patterns (Seaby and Woodfield 1980, 96; Graham-Campbell 1992, 87). Historically, it seems that a different mode of decoration, combined with a



Fig. 65 Late early-medieval to medieval stirrup irons. Note the 'neck' connecting the apex loop and hoop on the Gruppe A stirrup; on the shorter Gruppe *B example the apex loop is integral.*

form apparently later than the typically Viking-Age irons, led authors to place stirrups with 'terminals' (Goßler *Gruppe* B) mostly in the 12th century (Table 48), or otherwise only slightly earlier (Seaby and Woodfield 1980, 101).

It now seems that the historic literature regarding such stirrups (e.g. Ward Perkins 1993 [1940]; Seaby 1950) may have misled – by both its late (12th-century) date and assumptions about the chronological relationship, and thus any typological progression, between Goßler's *Gruppen* A and B. As noted, *Gruppe* A irons – in the English Type 2c form – could date as late as the first half of the 11th century. Furthermore, the atypical decoration of an example from Seagry (Wiltshire) brings the group closer to *Gruppe* B: it bears Ringerike-style ornamentation etched onto applied brass sheet (Seaby and Woodfield 1980, 118-119, no. 35; Graham-Campbell 1992, 87-88). How long *Gruppe* A endured is hard to assess, but it is taken to have been superseded by the mid-late 11th century as stirrups depicted in the Bayeux Tapestry (1070s) are apparently of *Gruppe* B form (Seaby and Woodfield 1980, 101, 104; Graham-Campbell 1992, 88; Goßler 2011, 154). Such (late) dating for *Gruppe* B, however, stands at odds with the earlier art-style dating of many examples of terminals set out above. It may be resolved by turning to continental evidence.

Based on Scandinavian grave deposits, the low D-shaped hoop emerged at the end of the 10th century within *Gruppe* A stirrup irons (Seaby and Woodfield 1980, 92; Pedersen 2014b, 171, fig. 5.11). It is also the general shape of the 'Bavelse' type stirrup, characterised by being cast entirely in copper alloy and having an integral strap-plate instead of a suspension loop and 'neck' (Fuglesang 1980, 132-133, appendix 5; Pedersen 1999, 138-140). Such stirrups are typologically dated from the turn of the 11th century to its middle, in Scandinavia at least (Pedersen 2014b, 116). In such developments we see a formal shift that is analogous with *Gruppe* B forms. Goßler (2011, 74) himself applied a wide 10th-to-14th-century date range to his *Gruppe* B irons, with a focus on the 11th and 12th centuries. This early focus is strengthened by recently published examples which put the type's dating potentially as far back as the late 10th century (Table 48, Lauenburg Castle). In the absence of archaeological dating from England, the continental evidence now suggests a presence for this form from at least c. 1000 – that is, far earlier than was once thought.

As such, it is contended that stirrup irons of Goßler *Gruppe* B could have overlapped with those of *Gruppe* A, rather than having simply succeeded them. Their relationship might therefore have been one of status, with the taller, *Gruppe* A irons being the more prestigious. Consequently, if the *Gruppe* B form can be argued to be plausibly early 11th century then so too can its copper-alloy embellishment, both plating and terminals (Table 48, e.g. Farstorp) – rather than such decoration being a development of the late 11th century (see Seaby and Woodfield 1980, 101). Contra Seaby (1950, 42), simple terminals, whether zoomorphic or not, need not post-date the forms in late Viking-Age art styles; at the same time, though, they need not predate them (Pedersen 1999, 42).

Unfortunately, approaching the dating of stirrup terminals in this way provides little in the way of a *terminus ante quem*, with Goßler's *Gruppe* B present in the 13th and even 14th century. This noted, an iron of this form found in an early 13th-century context in London (Clark 2004c [1995], 72, fig. 54, no. 82) has neither terminals nor sheathing; nor does a stirrup found at Nevern Castle dated by a destruction event that occurred in 1195 (Caple forthcoming).

272

Archaeological dating

As per a lack of excavated examples of stirrups of Goßler *Gruppe* B, there is a dearth of excavated terminals. The overwhelming majority of detached terminals are metal-detected finds, with only three examples susceptible to archaeological dating. One, with Urnes-style decoration (Williams provisional Class G), was found below the rampart of Northampton Castle, giving it a *terminus ante quem* of c. 1100 (Owen 1979, 137); it can be presumed to have been in use in the second half of the 11th century. The second, of Williams provisional Class L, was found at Whithorn Priory in a site Period IV context (Nicholson 1997, 382, fig. 10.68, no. 17), giving it a wide date range (11th to 13th centuries). A final example – of such a basic zoomorphic design it does not readily fall into Williams's classification – was found at Faccombe Netherton manorial complex (Hampshire) (Webster 1990, 256, 258, fig. 7.7, no. 6). The dating for its site Period 3-4 context has recently been adjusted to c. 920s-c.960-late 1010s (Weikert 2015, 256, table 1), originally having a *terminus ante quem* attributed to the late 10th century. Though a date in the 1010s would be plausible for a stirrup terminal on typological grounds, it is unlikely to be any earlier.

Summary

Here, copper-alloy stirrup terminals have been associated primarily with a particular form of stirrup iron, one defined by an integral suspension loop and broadly D-shaped hoop, often with further non-ferrous embellishments. These irons – of Goßler's *Gruppe* B – had been thought to date to the 12th century, but can now be considered part of the 11th-century stirrup repertoire, in England from the beginning of the Second Viking Age onwards. However, stirrup typology does not provide a firm sense of when these terminals ceased to be used. Archaeological dating, though provided by only a few examples of isolated terminals, is rather more useful, with a *terminus ante quem* of c. 1100 provided by the example found at Northampton. Finally, art-style evidence gives the best sense of relative use of bimetallic stirrups, based on decoration in the 11th-century Ringerike and Urnes styles. The grounds on which plainer, and non-zoomorphic terminals have historically been dated later than the 11th century, are difficult to substantiate either archaeologically or typologically. Further

discoveries in stratified contexts should help elucidate the overall date range for stirrup terminals and the irons they adorned.

5.3.2.3 Stirrups with non-ferrous adornment

The preceding sections have elucidated a group of bimetallic stirrups with copper-alloy fittings that were at the same time functional and decorative. Consideration of stirrup terminals allows us, to an extent, to reconstruct the irons on which they were used. These irons seem to have been primarily of Goßler's Gruppe B, with a relatively low, Dshaped hoop and integral apex loop. As no stirrup-strap mounts have been found reliably associated with a stirrup,⁶⁰ suggesting how these objects related to stirrup forms is made even harder. However, the Ringerike-style decoration on some Williams Class A stirrup-strap mounts suggests that they were used with Gruppe B irons, along with Ringerike-style terminals. It may be, as Vilsteren (2010, 203) has suggested, that Williams Class B mounts were used with *Gruppe* B irons that had wider apex loops, given their broader module. Finally, it seems clear, based on their unusually large module, that Williams Class C mounts must have been used with the far larger, and potentially more prestigious irons, of Goßler's Gruppe A which has far wider apex loops (Webley forthcoming). While it follows that stirrup-strap mounts and stirrup terminals were used en suite, and would have made for highly decorated stirrups, precise relationships between forms are yet to be defined.

5.3.3 Contextual associations

5.3.3.1 Contextual (spatial)

Since very few stirrup-strap mounts and stirrup terminals come from excavated contexts the implication is they were mostly lost during equestrian activity in the countryside (Williams 1997a, 3; 2011, 252). This could be conceived of as a contextual

⁶⁰ The objects found with *Gruppe* AI irons at Velds (Denmark) are best described as 'strap plates' (Williams 1997a, 4, fig. 2a); they may be seen as a predecessor of the cast stirrup-strap mounts discussed here but are of different construction and far larger. Association of a Williams Class A, Type 1 stirrup-strap mount with a *Gruppe* AI iron from Kvalsta (Sweden) is perceived to have been a museum's attempt at a reconstruction of collocated material that was recovered unscientifically (Williams 1997a, 4-5, pl. 1).

association – whereby loss in the medieval countryside is taken to be an elite marker, demonstrating the ability of certain individuals to traverse the countryside on horseback (Davies 2010, 105). At a regional level, transit along local routeways has been conjectured from modern-day findspots, for example, a particular stirrup-strap mount likely being lost by 'someone travelling along the Fosse Way' (Robinson 1992, 69, no. 12), or the distribution of a particular sub-type tracking Watling Street (Lewis 2007b, 183). However, there are a number of other conceivable circumstances by which stirrup-strap mounts might have entered the archaeological record: Gareth Davies (2010, 286) gives the examples of stabling and activity at market.

Metal-detected data provides clusters of relevant material from which contextual associations can be inferred, at different scales of analysis: from the micro, via the regional and national levels, to the European. In his doctoral study, Adam Daubney (2015, 193) identified a group of equestrian equipment forming a 'halo' around Osbournby (Lincolnshire). They concentrate in the village's north-west quadrant, and also to the south-west, towards the deserted medieval village of Scott Willoughby, perhaps representing stabling areas (Daubney 2015, 197, fig. 4.59; Leonard 2015, 232, fig. 5.40).⁶¹ There are currently five stirrup-strap mounts recorded from Osbournby. At Domesday it had two manors and population of 33 households, including sixteen freemen (Leonard 2015, 474). For Domesday Romney (Kent), a large village with fourteen freemen, eight stirrup-strap mounts have been recorded by the PAS to date. Such high numbers for relatively minor locations are striking and their significance with be considered further below. Finally, Williams (1997a, 23) noted a number of groups of mounts 'found in the same field', though the spatial data is not sufficiently defined to attribute these finds to rural settlement fields as with the above examples.

The 'negative' association north of the Humber for harness fittings (Section 5.1.3), is also evident within the combined stirrup-strap mount and stirrup terminal corpus (Fig. 66). Drilling down into the dataset, distinctions between the three main classes are most apparent in the differential distribution of Class C mounts (Fig. 67). What is less clear is the bias towards the eastern coastal counties noted by

⁶¹ They do, though, follow the local distribution of detector finds specifically from the early Anglo-Saxon and Middle Saxon period (Daubney 2015, 196-197, figs 4.58-4.59).



Fig. 66 Stirrup-strap mounts and stirrup terminals

Williams (1995, 2; 1997a, 23) for Class B mounts, at this level of resolution.

At the level of sub-type, distributions often lose some clarity, with the exception of some of the sub-types of Class A. A set of Class A, Type 1 mounts (Williams 1997a, 34, nos 58-61) with distinctive curvilinear engraving and of 'likely East Anglian origin' (Williams 1997a, 14), can now be suggested to have been produced in Norwich, based on additional PAS find locations. Class A, Type 11C mounts also cluster around Norwich (Williams 1997a, 20, fig. 15; Fig. 103, below), their probable production



Fig. 67 Stirrup-strap mounts by Williams Class

centre as suggested by Hinton (2005, 157; see also Webley 2022, 83, fig. 8.4), while a particular subset of Class A, Type 11A mounts noted in passing by Williams (1997a, 23, 60) has been suggested as having been manufactured in Lincoln (Webley 2014, 354, 356, fig. 8) (Fig. 103, below). In terms of contextual associations, then, perhaps only a few sub-types can be argued to express a regional distribution, notably Class A, Type 14 in East Anglia, with Class A, Type 9 and 10A, perhaps expressing supra-regional

connections, in this case in the South. Other clusters identified appear to be related to localised production and distribution networks.

Further patterning can be discerned internationally. Williams (1997a, 105-108) published 23 non-English stirrup-strap mounts; a further 137 mounts were recorded here;⁶² 29 stirrup terminals were also documented outside England. This does not extend their use much beyond modern-day England, Wales, Denmark, Sweden, Germany, and the Netherlands (Hammond 2013, 80), though Belgium and France are now included (Fig. 68),⁶³ but it allows the most nuanced consideration of spatial variation to date (see Vilsteren 2010, 202).



Fig. 68 Stirrup-strap mounts and stirrup terminals outside England

Although all of Williams's Classes are found in Denmark (Pedersen 1999, 144; 2004, 53), its corpus is dominated by a limited variety of sub-types, particularly within Class A (Fig. 69). Class A, Type 12 mounts in openwork, are notably common in both

⁶² Numbers should rise significantly following the establishing of publicly accessible finds recording schemes in particular countries in north-west Europe (see Section 3.3, note 26).

⁶³ The identification of a mount found in 'Northern France' noted by Williams (1997, 108, no. C23) is rejected on formal grounds. However, two French examples have now come to light (Serdon-Provost 2016, 153-154, figs 3.73, 3.74, no. 95; Morel 2018, 200-201, fig. 4, no. 158417_111_6672_1).

Denmark and Sweden, as are Class B, Type 1, Group 1 examples, currently only known from Scandinavia and England. On the near Continent (modern-day Netherlands and Germany) it is striking that only Class B (and unusual) examples are found, when they form only 20% of the English corpus. Many near continental types are also barely known in England, such as pentagonal forms with a trio of upper fixing loops (e.g. Vilsteren 2010, 202-203; though see Williams 2000). Notable amongst sub-groups found in both England and the near Continent is Class B, Type 2, Group 2, with three examples from the latter (Kluge-Pinsker 1993, 145-146; Williams 1997a, 107-108, nos C14, C15, C20), and six from England – two published by Williams (1997a, 89, nos 415, 416), and four recorded by the PAS (Webley in press). It is notable that the distributional focus of these mounts, in Norfolk, with an outlier in Dorset, differs subtly from the focus of Class B, Type 1, Group 1 mounts, centred on Lincolnshire and North Yorkshire. This suggests two different axes of connection, between the near Continent and Norfolk for Class B, Type 2, Group 2, and Lincolnshire and Scandinavia for Class B, Type 1, Group 1.



Fig. 69 Continental stirrup-strap mounts by Williams classification

5.3.3.2 Contextual (site)

For site-based contextualisation, 68 examples of stirrup-strap mounts and terminals can be collated, from excavated and metal-detected data (see Appendix 1.F). Fortythree stirrup-strap mounts are taken from Williams's (1997a) corpus, plus five from excavations in England, and an additional sixteen from Continental excavations and collations; Figure 70 charts their associations alongside those for seven stirrup terminals. On the Continent most examples come from urban excavation, with rural examples underrepresented due to differing legislative approaches to metaldetecting. These potential biases noted, the main sense is the sheer variety of contextual associations, rural and urban, secular and ecclesiastical, and elite, in all its forms, to non-elite. The variety remains when Williams's Classes are interrogated, or when comparing insular and continental data.





5.3.4 Identity associations

Association with a cavalry elite, given the elite connotations of equestrianism, is solidly embedded within writing on these objects, with their use perceived to both reflect and structure elite identities (Sheeran 2009; Davies 2010, 105; Ten Harkel 2013b, 185; Daubney 2015, 193). However, the numbers of examples recorded in recent years have necessitated an adjustment to the view that these objects pertained to a very restricted elite, to one seeing them as encompassing a level of tenantry socially below them, though perhaps associated with them (Graham-Campbell 1992, 88; Pedersen 1999, 155; Hinton 2005, 157; 2013, 7; Roesdahl 2007, 26). The evidence presented here supports the suggestion that stirrup adornments were not restricted to the aristocracy. Of note is new evidence for their 'mass' production in urban contexts, shown in localised distributions, alongside more subjective observations regarding the 'poor execution' of certain pieces (Pedersen 1999, 155). Furthermore, contextual associations have been proven with rural non-elite settlements, based both on micro-level distributional analysis and numerous excavated examples. Some of these objects may well have been lost during such socially restricted activities as hunting, this much is hard to prove. We should not thus disavow connotations of equestrianism with at least the higher levels of the social spectrum. Indeed, many stirrup-strap mounts are known from a number of castle sites and major ecclesiastical centres (Fig. 70).

Stirrup-strap mounts have been documented from ecclesiastical contexts, such as the Old Archdeaconry in Wells Cathedral Close, and Eynsham Abbey (Williams 1997a, 60, 105, 109, nos 501, 208, respectively). One of only three excavated stirrup terminals known comes from Whithorn Priory (Williams 1997b, 1). The iconography of stirrup-strap mounts has been debated (see Williams 1997a, 11-12). The extensive use of motifs in late Viking-Age art styles does not imply an evocation of paganism, just that there is nothing explicitly Christian about the majority of the motifs. However, some, such as the lion on Class A, Type 11 mounts, would not seem out of place in an ecclesiastical context, with many comparanda for the beast coming from church sculpture (Lewis 2007b, 180-181, fig. 8). If the distribution and internal iconography of stirrup-strap mounts points to the secular realm, their presence in the ecclesiastical realm should not be unexpected, let alone seen as confrontational. Indeed, numerous religious institutions are known to have received horses in tithes, or to have been involved in horsebreeding at the time (Davis 1988, 77-79). In the same vein, though largely discovered today in rural locations, there is also much evidence to suggest the presence of horses and equestrian equipment in an urban context, including on urban castle and religious sites. As such, stirrup-strap mounts ought not to be perceived as de facto rural articles.

281

In certain strands of the historiography, intimately intertwined with elite identity has been a Scandinavian cultural identity, mainly Danish, or at least an association. The narrative is one of the Danish importation of riding gear in the reign of Cnut, and for its take up among the higher social echelons in England (Roesdahl 2007, 24-26; Sheeran 2009, 3.4.2; Kershaw 2013, 177). This implicates both immigrant Danes in England (Roesdahl 2007, 25-26), and emulation by those not ethnically Scandinavian (Hinton 2005, 157). The association might be reasonable for mounts with Ringerikestyle decoration, presumably en suite with other equestrian equipment similarly decorated (above, Section 5.1), but it is inappropriate to gloss the entire object type with such cultural connotations, as many scholars have. Around 70% of the stirrupstrap mount corpus does not feature late Viking-Age art styles, and as such may not have implied any association with Scandinavia. Furthermore, to associate the object type as a whole with a Scandinavian 'imperial style' is not to consider stirrup-strap mounts through time, beyond the Norman Conquest and into the 12th century (Webley 2014, 354). Finally, scholarship has over emphasised the Anglo-Scandinavian axis, neglecting the connections that many sub-types evidence between parts of England and the near Continent, set out here.

5.3.5 Materials analysis

The stirrup-strap mount/stirrup terminal corpus presents a relatively homogenous group in so far as all pieces are cast in copper alloy, with designs generally in relief, seemingly made in two-piece moulds. The main exception is Williams's Class A, Type 1, which are generally cast flat, with decoration engraved onto the surface (Williams 1997a, 25).

Intriguingly, study of post-casting embellishment seems to reveal its own patterning. Williams discussed the possibility of a connection between Class B stirrupstrap mounts and the near Continent, based on shared use of en-face animal heads and their eastern coastal distribution in England (Williams 1997a, 13, 22-23, fig. 17). Indeed, as noted, mounts of Class B, Type 2, Group 2 are known from both the Netherlands and Germany as well as England, while in the Netherlands and Belgium numerous examples of Class B, Type 3 have come to light (Capelle 1976, taf. 24; Deckers 2017, 115). The near continental corpus features two distinctive decorative elements: grooving along the sides of the frame (Kluge-Pinsker 1993; Vilsteren 2010), and engraved lines on the angled flange (Kluge-Pinsker 1993). It is interesting that the first of these traits occurs predominantly in England in material from Norfolk.⁶⁴ Linear engraving on the flange appears to be peculiar to examples of Class B (Williams 1997a, 87-96).⁶⁵ In England these examples all tend to have a broadly eastern or southern distribution, with some variation within the groups. Non-stylistic tool trace elements are therefore important in suggesting connections between near continental stirrup-strap mounts and eastern and southern England, especially East Anglia; such links are not directly apparent when considering either object form or motif.

Wrigglework is rare and appears to be confined to the East of England, on two examples of Class A, Type 1 mounts from Lincolnshire and northern Norfolk (PAS: NLM-265802; Williams 1997a, 31, fig. 22, no. 48). It has also come to light on a group of mounts of with an unusual multifoil apex, all with northern Norfolk findspots, first published by Gurney (2005, 748, fig. 10A), suggesting local employment of this decorative trait (PAS: NMS-3F8900, NMS-A99842, NMS-42A713, NMS-4DF205). More common are rows of punched marks, such as triangles or squares (e.g. Williams 1997a, 69-72, figs 45, 46, nos 290, 306, 307, 312). These tend to occur in rows two punches wide, with triangular marks generally addorsed. They are found on examples of Class A, Type 12 (Williams 1997a, 24), generally in openwork, and also Class B, Type 3, Group 7; squares feature on some Class A, Type 1 examples. They provide a rare link between Classes A and B, otherwise differentiated by form, decorative motif and inlay (Table 24). Furthermore, all of these sub-types can be argued to be relatively early within the floruit of the object type, especially Class A, Type 12 (see above). Mounts with punched triangles are fairly widespread, while those with squares focus on East Anglia. Punched squares are also known on Class A, Type 12 mounts from the Continent: two from Sweden (Williams 1997a, 106, nos. C2, C3), and one from Denmark (Pedersen 1999, 144, fig. 17a). In combination, it seems that such punched

⁶⁴ On three examples of Class A, Type 11C (Williams 1997a, 67, nos 273-275), and on one each of Class

B, Group 3, Type 4 (PAS: SUR-7578F7) and Class B, Type 3, Group 10

⁶⁵ Class B, Type 1, Group 2 and Class B, Type 3, Groups 1-4 and 7-8

embellishment is entirely consistent with an 11th-century date, rather than later dating (see Section 5.3.2.1).

Surface coatings can be very hard to discern on material that has been found in the plough soil, and one cannot be categorical about its presence where reportage is involved. Indeed, Williams (1997a, 24) noted a singular example of gilding among his corpus of over 500, but stressed that he had not examined the object in question himself (contra Ten Harkel 2013b, 185). Gilt is clearly visible on the image of a probable Class A, Type 10A example recorded through the PAS (SF3811). Interestingly, the presence of gilding noted on various continental stirrup-strap mounts stands in contrast to its general absence in the English dataset. It is known on a mount from Lund (Kluge-Pinsker 1993, 147, no. 11), and examples from Wiesbaden (Germany) and Meerbusch-Büderich (Kluge-Pinsker 1993, 144, nos 1, 2). Hinton (2005, 154) remarked on the absence of gilding, suggesting that it formed part of a new mode whereby an object itself expressed status, rather than requiring surface treatments to connote it. Finally, the only evidence for a white-metal coating occurs on two of the unusual multifoil mounts with wrigglework discussed above. Complementing the form's distinctiveness and the tool-trace evidence, this seems further evidence of choices within the workshop in which this group was presumably made.

5.3.6 Summary of key points

D	Of the variety of approaches taken to dating stirrup-strap mounts and stirrup
А	terminals, on current evidence, archaeological and typological dating play a
Т	supporting role to art-historical evidence.
I	
Ν	
G	

Based on the socio-cultural associations of stirrup-strap mounts, recent studies have А S been justified in suggesting that they occupied a relatively wide social range, one S towards the top of the social scale, but not uniquely so. 0 European distributions have been charted for the first time, drawing out associations С made previously between England and Scandinavia and emphasising their Т А importance elsewhere in the North Sea world, specifically the near Continent; these Т have so far been neglected partly due to a lack of insular attention on German and Dutch scholarship. I 0 Connections with the near Continent have been emphasised by looking Ν beyond formal similarities to utilise non-stylistic tool trace evidence. S

5.4 Chapter overview

This final section reviews the evidence for the changing nature of riding equipment in this period – an exercise only so far conducted for equipment found in Denmark (Pedersen 1999; 2004) – providing a concise synthesis for the English material.

The material analysed falls in two main chronological groups, with a certain amount of overlap. The first group comprises apparently en suite copper-alloy embellishments or components which were used with iron equipment in the 11th century. These are characterised by decoration in the Ringerike style, or by features such as three knobs at the terminal of arms of cheekpieces or harness links. The ensemble nature of such equipment has been confirmed in recent years, based on new work and the discovery of groups found together; it encompassed cheekpieces and accompanying bit links from snaffle bits, harness links, stirrups mostly of Goßler *Gruppe* B, as based on their terminals, stirrup-strap mounts, and a relatively few harness pendants. A rather intractable aspect has been dating the demise of such sets, with different elements suggesting varying *termini ante quos* from the later 11th century into the 12th. The pre-eminence of copper-alloy components and adornment within the equestrian equipment of the 11th century appears to be unprecedented, and never to be repeated in the same way in the medieval period.

The second group is characterised by a different type of bit, the curb, and a relative lack of embellishment in copper alloy, with the notable exception of harness pendants. In this broadly successive period the relative rise in numbers of harness

pendants may imply that previously they were prestigious embellishments to the brow-band; later pendants were mostly displayed on the chest, based on iconographical evidence. Finally, it may be that certain elements of the first group, characterised by copper-alloy embellishment, persisted into the 12th century to create 'transitional', hybrid sets of equipment. Stirrup-strap mounts and certain stirrup terminals have been argued to have endured into the late 11th century, and in some cases into the early 12th (Lewis 2007b; Webley 2014; 2022). Some snaffle bits may have also continued to have had copper-alloy embellishments for as long, notably the Williams Type 3 examples, as redefined (Webley 2022).

The status of the earlier (Anglo-Scandinavian) group of material has been subject to debate over the years, with automatic association with an 'elite cavalry group' recently tempered by their sheer quantity. There are indications that a significant quantity of iron equivalents will have been underrepresented due to discrimination against iron by metal-detector users and problems of survival and recognition. Together, this has consequences for estimations of the amount of (riding) horse use of in this period and of their relative social status. As a result of this spike in the quantity of copper-alloy material it is hard to compare subsequent equipment. That the material of the Anglo-Scandinavian period was seldom gilded may suggest that its status was not quite so elevated as that which followed, which is not to say that that it was not used in localised status identity strategies.

The contextual associations of such objects are naturally hampered by the loss of so many in the landscape, although this may in itself indicate that their status was an elevated one, these objects associated with an ability to traverse the landscape quickly. Associations that can be documented are notably varied, particularly for the first period. Within the second group, the contextual associations are somewhat more refined, for example for curb bits, and early harness pendants, with castle sites. To what extent this is a product of the survival of elite representation, on seal matrices or painting, for example, and of preferential excavation of such sites is open to question.



Fig. 71 Relative distribution of equestrian equipment Spectrum, from the strongest relative proportions of such equipment, shown in red-oranges, to the weakest, shown in blue-greens

Within England, a zone of particular horse use is consistently described by these groups of equestrian equipment, even allowing for modern recovery biases (Fig. 71). It excludes large areas of northern England, with an almost complete absence in the North West. This contrasts with a relative strength further south, including in the West (also Williams 1997a, 14; Sheeran 2009, 3.4.2). Absence can be extended to Wales and Scotland beyond, on the basis of Williams's work (Williams 1997a, 14; Hinton 2005, 153; Vilsteren 2010, 202). In broader terms, material forming the first typochronological group mostly operated along an axis between the Anglo-Scandinavian lands – England, and historic Denmark (Pedersen 1999; 2004). An exception are Ringerike-style harness pendants which appear to have been peculiarly English. Other groups of objects seem to represent a specific axis of communication between southern England and the Low Countries littoral: cheekpieces of Williams Type 3 and stirrup-strap mounts of Williams Class B, Types 2 and 3 (Webley 2022). Material comprising the second typochronological group represents a shift southward and an English (re)orientation towards the near Continent, in the later 11th century for some categories of equestrian equipment, but as late as the 12th century for others such as stirrup-strap mounts. That the novel objects, curb bits and early harness pendants, have been traced across contemporary Europe suggests that they were not necessarily culturally Anglo-Norman phenomena. Some of the objects encountered in the next chapter have a similarly wide geographic range: their 'elite' nature is examined in the final case study.
Chapter 6: Three groups of 'Elite' Objects



Illus. 17 'Octopus' mount from Lundy (Devon)

We have already met a number of objects generally taken to have been used by a socially elite spectrum. They include spur buckles, sword-belt buckles and stirrup fittings. Here, we encounter three more groups of objects for which elite associations have been posited elsewhere (Section 2.4.1). The groups will be examined in turn: chapes from scabbards/sheaths (Section 6.1), swivel fittings (Section 6.2) and so-called 'binding strips' – with 'octopus' mounts (Illus. 17) (Section 6.3). These object types were selected as, unlike many other elite objects, they currently lack the kind of synthetic study attempted below.

6.1 Scabbard/sheath chapes

6.1.1 Introduction and historiography

Chapes are protective and decorative terminals from the leather sheaths and scabbards of knives, daggers and swords;⁶⁶ on knife sheaths both the chape and accompanying mounts could also protect the seam (Krabath 2001, 76). As very few chapes from the period have been found attached to either scabbards (Cameron 2000; 2003b) or sheaths (Ward Perkins 1993 [1940], 190/pls XL, XLII), the chapes tend to have been studied in isolation.⁶⁷ Most relevant knife sheath chapes are made from copper alloy, but examples are known in bone (Steuer 1993, 81, 83, abb. 11) and iron (e.g. I. Goodall 1992, 159-160, fig. 82, nos 449, 450). For sword scabbard chapes, study is hampered for this period by the relatively plain forms involved, primarily a simple U-shaped terminal, as seen on Henry II's effigy at Fontevraud (France) (Ward Perkins 1993 [1940], 280-282, fig. 86, no. 1); as such, they are not pursued in the following analysis.



Illus. 18 Knife sheath chape (left); dagger scabbard chape (right)

Remarkably, study of such objects is still in its infancy, in England at least; this thesis therefore seeks to raise their profile. It can even be hard to tell whether a given terminal was from a flexible sheath, as normally associated with knives (Ger. *Messerscheidebeschlag,* Dutch *Schedepuntbeschermer*), or a rigid scabbard for a

⁶⁶ Seaxes had largely gone out of use by this period (Lewis 2005, 43)

⁶⁷ Presumably many were removed prior to discard of the sheath (Cameron 2003, 3366)

dagger (Ger. *Dolchortbänder*) or sword (Ger. *Schwertortbänder*). Heiko Steuer (1993, 82) suggested that dagger/sword scabbard chapes can be differentiated from knife sheath chapes by their size and their symmetrical form, including a solid base or basal fold, and 'arms' on both sides of the scabbard, for a double-edge bladed item. This distinction is pursued here (Illus. 18). Knife sheath chapes tended to be made from metal plate, of varying thickness, folded centrally to produce a bifacial fitting with a side fold. Dagger chapes relate to items of weaponry, and form part of functional category 20 (military equipment). Knife sheath chapes are polyvalent objects (functional category 24), due to the multipurpose uses of knives: for a particular function (as with scribes, for example), as a weapon (as required), for other daily tasks, but increasingly as cutlery (Sykes 2010, 182, 188; Jervis *et al.* 2017, 256; Richardson and Woosnam-Savage 2018, 63). As knives were ubiquitous objects, the chapes on their sheaths could potentially distinguish them, and their owner (Biermann 2020, 233).

In hindsight, the English historiography of chapes from knife sheaths has been confounded by an overwhelming degree of misidentification, at least until the 1990s. Chapes have been published variously as: a mount from a comb-case (Spencer 1961, 214-216, fig. 2); a 'belt-chape' (Parrington 1979, 13-14, fig. 8, no. 2); or, simply, ornamental fittings (e.g. A. Goodall 1980a, 185, C02, fig. 25, no. 73). However, over the last 25-30 years such objects have been consistently published as knife sheath or dagger scabbard protectors, though still with occasional hesitation (e.g. Goodall 2009b, 526, fig. 7.35, no. SF5150). This gradual functional enlightenment has meant a lack of synthetic work, with overviews the exception. De Reuck's (1991) unpublished catalogue of 'scabbard' chapes consists just of images, without discussion or justification for the dating. The first discussion of sheath chapes as a group took the form of a series of articles by Peter Woods in the Searcher magazine about the 'Chapes Research Project' (Woods 2006a; 2006b; 2006c; 2006d; 2006e; 2006f; 2007a; 2007b; 2008a; 2008b). In a later, unpublished manuscript, Woods (2010) summarised this work, providing a revised classification which was eventually published in book form (Woods 2021). Woods's work was superseded in 2016 by a Masters dissertation by Ben Bishop (University of Reading); Bishop's work on sheath chapes continued throughout the preparation of this thesis.

By contrast, work is far more developed on the Continent, where the first typological exercise was performed by Heinz Knorr in the late 1930s, based on Slavic grave finds (Krabath 2001, 68). In the 1980s, German scholars started producing transregional and transnational syntheses and typologies (Timpel 1987; Schoknecht 1988; Gabriel 1988; Steuer 1989), with Steuer (1989; 1993) extending discussion of Timpel's *Gruppe* 4, *Variente* III – then the most westerly type published – to include related English finds. The only typology to cover Europe is by Krabath (2001, 71, 74, abb. 13, karte 14). His 50 Varienten brings together the 'Slavic', generally rectangular, forms (see Knorr 1938), triangular and zoomorphic forms classified by Timpel (1987) and Steuer (1993), and other, more idiosyncratic, forms. Though Krabath includes a number of 'English types', they represent only part of the present English corpus. There is therefore a need to develop new, insular typologies (for England, see Woods 2010; 2021; reconfigured and expanded by Bishop 2016; 2020; see also Feveile 2017, for the Danish corpus). The analysis here is restricted to types of knife sheath chape found in England, but including continental finds of these types. Though chapes from sword and dagger scabbards have historically received more attention - with work on the English corpus by Ward Perkins (1993 [1940], 280-288), and from Krabath (2001, 60-68) – there is room for development, despite the aforementioned problem of simplicity of form.

6.1.2 Typochronological analysis

6.1.2.1 Knife sheath chapes

Most assessments of knife sheath chapes' dating have been limited to the object type overall, excepting Krabath (2001) who offered date ranges for wide formal groups. Their use has been taken to have lasted between the late 11th and early 13th centuries, with various scholars suggesting different emphases within this range (Table 25).

Dating	Study area	Reference
11 th century	Denmark	Feveile 2017, 77
late 11 th - 12 th century	England	Ashley 2016, 293
late 11 th - early 13 th century	Germany	Timpel 1987, 281
12 th -century focus	Germany	Schoknecht 1988, 165

Table 25 Dating proposed for knife sheath chapes in the literature

Unhelpfully, there is something of a dearth of iconographical representations of knives (Sykes 2010, 188). Only one representation of a knife sheath was noted within our period – that depicted on the 'Wolframleuchter' (c. 1160) in Erfurt Cathedral (Germany) (Krabath 2001, 69). The lack of detail on the statue means this useful chronological marker cannot be pursued at a typological level (Illus. 19). The following survey utilises Bishop's (2016)⁶⁸ classification, drawing upon continental classifications only where relevant to attempt to refine dating. Around 14% of the corpus have contextual dates; more detailed information derived from excavated examples and comparative data is provided in Appendix 1.G.

Attempts to provide dating for knife sheath chapes set out in Table 26 move beyond previous conflation with chapes from dagger scabbards. It is striking that dating based largely on archaeological evidence – to between the later 11th and mid-13th centuries – contrasts so strongly with Bishop's (2016) dates, based more heavily on stylistic traits. Attempting art-style dating for such small objects seemingly overstretches the evidence. An exception is Class B, which can perhaps be linked to the late Viking-Age Urnes style. The overall date range is consonant with that in much of the north-west European literature (Table 25). Bishop's suggestions of dates in the earlier 11th century, and even the later 10th, for some English types have not been substantiated, although the archaeological focus taken here provides greater evidence (and therefore confidence) for use *termini ante quos*, rather than good evidence for when such chapes' use began. That said, useful evidence is provided for manufacture in the 12th century at Paderborn (Germany) (Stiegemann and Wemhoff 2006, 226, nos 329c, d).

⁶⁸ Since modified, but too late for the present study (Bishop 2020)



Photo: James Steakley / CC BY-SA (https://creativecommons.org/licenses/ by-sa/3.0)

Illus. 19 'Wolframleuchter' (c. 1160), Erfurt Cathedral. Note the sheathed knife suspended from the belt

Before making a case for internal chronological variation within the corpus, it is worth considering whether one can legitimately consider these chapes as a collective, as they are often treated within the European literature. Certainly, discrete traits are common to different types, for example a distinctive sub-oval terminal with bifid end present on chapes of Classes A and E (see Table 26, Class E image). Lozengiform terminals with transverse ridge below are found on chapes of Class C, Type 5, Class D, Type 3 and Class F, Type 3, suggesting possible contemporary manufacture. Stronger

Table 26 Appraisal of knife sheath chapes by class
--

Bishop Class	Basic form	Date range	Date	Example –	Example – date	Sample image
		suggested	range	location	(reference)	
		by Bishop	proposed			
Δ	L shaned	c 950-1150	12 th -13 th	Nevern Castle	c 1108-1195	
(divided into	Lanaped	0. 550 1150	century	(Pembrokeshire)	(Canle	
six types.			(12 th -	(i embronesinie)	forthcoming)	
and includes			century			PAS : BH-297687
Krabath			focus)			(Class A, Type 1;
Variente 36)			,			no scale)
В	J shaped	Late 11 th -	c. 12 th	n/a (residual)	n/a (residual)	A A O
(compare	-	early 12 th	century			
Krabath		century				
Variente 19)						
						after Goodall 1984a. 348:
						[m] 1 2 3 4 5 6 7 6 7 fig. 193, no. 192
C	Zoomorphic	c. 1000-	c. 12 th	London	c. 1150-1175	
(divided into	plate	1250	century	Guildhall	(Egan 2007a, 97,	
five types,					460, no. S127)	
one into two						
sub-types)						
						(Class C, Type 5)
D	Zoomorphic	11 th -12 th	c. 12 th	Vintry, London	c. 1100-1160	
(divided into	plate.	century	century		(VRY89[V313]<665>)	
three types,	generally	,	· · · · ,		(,	
one with	winged					
two sub-	beasts					Author
types)						Author (with thanks to MOLA)
						(Class D, Type 3)

Bishop Class	Basic form	Date range suggested	Date range	Example – location	Example – date (reference)	Sample image
		by Bishop (2016)	proposed			
E ('Angel Court' type)	Knight /?'lion fighter'	c. 1030- 1150	c. 12 th century (c. 1100- 1150 focus)	Little Lane, Leicester	c. 1075-1200 (Cooper 2007, 398, 400, fig. 141, no. 179)	after Spencer 1961, 214-216; fig. 2 (Class E, Type 1)
F (Type 1 = Steuer <i>Typ</i> 4 = Timpel <i>Gruppe</i> 3)	Triangular plate	c. 950- 1150	Late 11 th - mid-13 th century	London Guildhall	c. 1070-1090 (Egan 2007a, 33, 460, fig. 393, no. S124)	PAS : HAMP-D08C40 (Class F, Type 3)
G (Type 3B = Krabath <i>Variente</i> 13 = Steuer <i>Typ</i> 3 = Timpel <i>Gruppe</i> 4, <i>Variente</i> 3)	Sub- triangular, zoomorphic, plate	c. 1000- 1150	c. 12 th century- early 13 th century	Geldermalsen- Station (Netherlands)	c. 1150 terminus ante quem (Renswoude 2015, 105-106, fig. 7.14.4, no. 1367)	PAN-00063569 (Class G, Type 3B)

indications of contemporary manufacture are common approaches to surface decoration. One example will suffice: that of (often double) lines of punched opposed triangles. This is seen across all classes of knife sheath chape, particularly notably on Class D, Type 3 and Class G, Type 3B. Such evidence suggests that all classes of decorated sheath chapes were broadly contemporary in England. Decoration of this type appears on a variety of different dress accessories found in London dated between the late 12th and 14th centuries (Egan 2008a [1991], 28, 30, fig. 15), and elsewhere dated from the second half of the 12th century onwards (Thuaudet 2015, 733). Interestingly, the dating evidence from chapes shows that this technique was present from at least the second quarter of the 12th century onwards (Hendriksen 2004, 42, afb. 61), while its presence on stirrup-strap mounts datable to the 11th century pushes it earlier still (Section 5.3.5).

Though it seems appropriate to consider knife sheath chapes as a group – focused on the 12th century in general, its first half in particular – it is worth attempting some chronological nuancing given the current available evidence. The earliest dating evidence relates to the triangular chapes of Class F, and comes from the second half of the 11th century (Table 26). This simple form, though, appears to be one of the most long-lived (Table 52, Appendix 1.G.i.6). Most other classes appear to be products largely of the 12th century, with only Classes A and G seeming to endure, along with Class F, into the 13th (Table 49, Appendix 1.G.i.1). For Class A, however, this may be an illusion of limited dating evidence; recent evidence from Nevern Castle places it rather more firmly in the 12th century (Table 26).

6.1.2.2 Dagger scabbard chapes

Dating for relevant dagger scabbard chapes is set out in Table 27, with further detail in Appendix 1.G.ii. Given the dating suggested for Class H is later than elsewhere (e.g. De Reuck 1991; Bishop 2016, 210), it is worth considering whether or not they have similar discrete traits to the corpus of knife sheath chapes. The main impression gained is that the 'two armed' chapes for daggers (technically, four) do not really sit within the same manufacturing tradition. Their terminals, for example, are far more likely to be simple than elaborated, being squared, rounded or angled off. Only one

Type name	Basic form	Date range suggested by Bishop (2016)	Date range proposed	Example – location	Example – date (reference)	Sample image
Bishop Class H (divided into seven main types, and includes Krabath Variente 25)	Trapezoidal plate with 'two' arms	Late 11 th -late 13 th century	?late 12 th -13 th century	Boteler's Castle, Alcester	First third of the 13 th -century <i>terminus ante</i> <i>quem</i> (Jones <i>et al.</i> 1997, 55-56, fig. 19, no. 8)	after Goodall 1980a, 185, C02; fig. 25, no. 73
'French variant' (not discussed by Bishop)	Triangular plate with 'two' arms	n/a	12 th -13 th century	ZAC Avicarum, Bourges	Late 12 th century - c. 1250 (Mathis and Rajade 2013a, 242, fig. 10-21, no. 273)	after Sautot 1977, 303/ pl. XLV; no. 3

Table 27 Appraisal of dagger scabbard chapes by type

example, of Class H, Type 1 (PAS: NMS-0FB9C8), has one of the more elaborate terminal forms – a lozenge with basal ridge; this may therefore be an unusually early example. That only Class H chapes feature wide 'tremblé'-style engraving may also be indicative of a later manufacturing tradition, though it may be that only the thicker plates of such chapes could withstand this technique. Finally, the technique of punched triangles, so common across the knife sheath corpus, is currently not known on chapes of Class H. In support of slightly earlier dating suggested for the 'French variant', the form is occasionally decorated with punched opposed triangles.

6.1.3 Contextual associations

6.1.3.1 Spatial

Knife sheath chapes

The first attempt to map an English distribution of knife sheath chapes was constituted in Krabath's (2001, 74, karte 14) European distribution map.⁶⁹ Krabath (2001, 72) demonstrated a pan-European currency for such sheathed knives, rather than a unique focus in Slavic areas (Knorr 1938), and/or in modern-day Germany (Timpel 1987). The present survey has found relevant chapes seemingly restricted to the westerly area of Krabath's distribution – for example, his *Variente* 13 (Krabath 2001, 81-82, karte 18), at the time characterised as found in 'France east of the Loire to Alsace' and in the 'Rhineland and the Netherlands' – plus types apparently unique to England.

In fact, Krabath (2001, 598, no. 829 (cat.)) only noted two knife sheath chapes from England: a Class A, Type 2 example from Wharram Percy (Table 49, Appendix 1.G.i.1), and a Class D, Type 3 example from Abingdon (Oxfordshire) (Table 51, Appendix 1.G.i.4, mis-categorised as *Variente* 25 (for dagger scabbards)). He also catalogued another six which we would now conventionally categorise as from dagger scabbards, to be discussed below. The over twenty chapes cited by Steuer (1993, 82-83) from the Vintry, London, were overlooked, and also the famous example from Angel Court, London, of Class E, Type 1 (Table 26; Steuer 1993, 83, note 62). To these

⁶⁹ Steuer's (1989, 237, abb. 4) map featuring Timpel's *Gruppe* 4, *Variente* 3 (Bishop Class G, Type 3B) did not include England (see now Fig. 72).

few, we can now add nearly 400 examples, which serve to place England firmly into this pan-European phenomenon.

For classes that include both English and continental examples, two main groups can be distinguished: chapes which appear to show connections to the East, across the North Sea, and those more oriented to the South, across the Channel. The first is exemplified primarily by Class G, and in particular its Type 3B form (Illus. 18, left). These are concentrated in southern England, below a line connecting the Severn Estuary and the Wash, apart from a few outliers in East Yorkshire (Fig. 72). On the Continent, they are found along the Low Countries littoral, from Bruges (Belgium) up to Groningen (Netherlands); large numbers are starting to be recorded by the PAN. They are most common along the Rhine-Maas/Meuse corridor, a pattern already noted by Steuer (1989, 233, 236-238, abb. 4; 1993, 80) and Krabath (2001, 78, 82) although they omitted the English examples. Riverine and coastal patterning is also clear in the English dataset, suggesting that waterborne trade was the main vector for users of such sheathed knives; the patterning is comparable to that of contemporary pottery (Dunning et al. 1959, 72, fig. 40), and Cologne (Germany) was a key 12thcentury trading partner (Oksanen 2012, 149-150). Notions of production centres have changed through time, from Cologne solely (Steuer 1989, 236), for which production evidence exists, to include Paderborn (Stiegemann and Wemhoff 2006, 226), at which manufacturing evidence has also emerged, and with it the possibility of other urban centres of production. Chapes of Class B, Type 1, which shows an abstracted animal with back-turned head, are also found both in England and the Netherlands, though too few are known at present to analyse the type further.

In contrast to Class G, chapes of Classes A and F follow an axis of communication primarily with modern-day France. Numbers are too few to reveal clear patterning, other than particular tendencies for Class F, Types 2 and 3 to cluster in coastal southern England, within a wider tendency to be southern finds. Otherwise, it is notable that finds of chapes that are very common beyond these particular continental zones ('France' and the 'Rhineland and the Netherlands', respectively; Krabath 2001, 82), are few and far between in England. For example, Krabath's



Fig. 72 Knife sheath chapes: selected types found both in England and Continental Europe

Varienten 22/23 (Bishop Class G, Type 1), so common to the East in Thüringen (Germany) (Krabath 2001, 81, karte 18), has only one English example (PAS: KENT-476C48). Similarly, only one example of Krabath's *Variente* 4/Feveile *grundform* C2, ubiquitous in modern-day north-west Germany and Denmark (Krabath 2001, 79, karte 16; Feveile 2017, 64, fig. 9), is currently attested, excavated at Botolph Bridge, Orton Longueville (Cambridgeshire) (Duncan 2015, 85, fig. 50, no. 68 (not identified as such – but see now Webley 2021a)). It would seem, therefore, that interactions between England and the Continent, demonstrated by knife sheath chapes, were generally restricted to trade with the Rhineland and Low Countries and to cross-Channel communication.

As noted, within England itself there are notably more knife sheath chapes in the South, below a line between the Wash and the Severn, though few in the South West. North of this line, most areas showing as relatively strong are more a product of the statistics, with low numbers overall. Small areas of relative weakness for chapes can be found in Norfolk, Suffolk and Lincolnshire; these are areas strong in data. Various sub-types subscribe particularly closely to this southern bias, for example the relatively common Class D, Type 3 (n=23) and Class E, Type 1 (n=39), both of which are purely insular on current evidence (see Table 26 for images).⁷⁰ The main aberrant insular sub-type is Class C, Type 1A (Woods 2010, 3, 7; 2021, 98, fig. 4 (Type I); Bishop 2016, 106, 234), with two examples in Yorkshire and the Humber, two in the East Midlands and two in the East of England. Based on this distinctive distribution, within the Danelaw, Woods (2010, 3, 7) argued for an early date for this sub-type. There is little about its form, however, that distinguishes it typologically from others, and it may perhaps represent a local centre of manufacture. This overall bias for the use of such decorated sheaths towards the South may be a reflection of social status in addition to trading patterns evident in those types with continental reach.

Dagger scabbard chapes

Noting that Class H dagger scabbard chapes have been argued to largely date later, their distribution maintains the generally southern bias of sheath chapes, though their representation in the Midlands is slightly stronger. As its name implies, the distribution of the 'French variant' is not insular, but encompasses locations in modern-day France. In England, the distribution is restricted to an area of southern central England, north of the Solent, with an outlier near the Wash.

6.1.3.2 Site type

Site associations of knife sheath chapes were considered in one previous study – Steuer's (1989), on German excavated examples. This included grave finds from the Slavic area (n=8/37; Steuer 1989, 236); these are not a feature elsewhere in

⁷⁰ Others with numbers worthy of mention include Class A, Types 1, 4 (Bishop 2016, 91) and 5, Class C, Types 1B and 3, and Class D, Type 2B (Bishop 2016, 127)

contemporary Europe. Of the remaining 29, thirteen (45%) were found at castle sites and fifteen (52%) at urban sites, with one from a monastery (Steuer 1989, 236, 244, abb. 6). The strong association with both castles and urban sites may be tested using the far larger dataset assembled here.

Once decontextualised detector finds are excluded from the present dataset, a strong representation of urban findspots is clear. Of 113 chapes, 74% were found at urban sites (n=84), compared to only 12% from castle sites (n=14); 3% were found at ecclesiastical sites (n=3), with the remaining 11% found elsewhere (n=13). Within the classes, there is a strong tendency towards an urban context in England for chapes of Class G (primarily Type 3B), but also on the other side of the North Sea, particularly in the Low Countries and Germany. For Steuer (1989, 238), the presence of knife sheath chapes in such contexts related to a combination of their urban manufacture and bias towards urban excavation. Analysis for the other classes is inhibited by low numbers, although Class F chapes are perhaps found at castle sites more often, as, to an extent, are Class A examples. This trend appears to operate on a north-south axis, with numerous relevant examples found in modern-day France. Overall, the presence of knife sheath chapes across a wide range of site types, from castles to non-elite rural settlements, demands a nuanced, rather than blanket, approach to assessing their status, one made alongside assessments of their quality (discussed below).

6.1.4 Identity associations

Most chapes have been reported via metal detecting in England, and increasingly in the Low Countries. However, proportions vary: only 62% of knife sheath chapes (n=166/269), but 88% of dagger scabbard chapes (n=92/105). Analysed purely as a rural/urban dichotomy, this produces figures of 70% rural/30% urban for sheath chapes (n=260), and 91% rural/9% urban for scabbard chapes. It is apparent in these figures that decorated knife sheaths were a more characteristically urban phenomenon than the dagger scabbards discussed.

Early writing on the status of knife sheath chapes focused on find associations for the Slavic areas in which they had first been studied. Schoknecht (1988, 165) and Gabriel (1988) duly associated them with the upper classes, given their presence in rich grave deposits, castles and trading centres. Krabath (2001, 69) noted that the 'Wolframleuchter' may depict an imperial official (*Ministeriale*; Illus. 19). Furthermore, authors have pointed to the technical complexity of various forms' manufacture, their elaborate cast openwork decoration and engraved detailing, in particular Class E, Type 1 (Bliss 2017, 198; Table 26, for image). More recent research, however, better contextualises these objects' status, given increased numbers reported and examination beyond their initial core area. Steuer (1989), in particular, declared that their status was difficult to assess, but that increasing quantities found in urban centres, such as Cologne (where he was working), temper previous high-status connotations. Feveile (2017, 120) has also highlighted urban production (in Denmark), and their 'mass-produced and cheap' nature there.

Turning specifically to England, there is an apparent disparity between the technical proficiency of certain types and their contextual associations. To pre-empt the materials analysis below, these objects generally lack surface coatings or inlays, and only a proportion are the product of elaborate castings. Furthermore, so many having been found in an urban context serves to relativise any previous assumptions about their status. On the other hand, these could still be socially 'elite' objects, as suggested in part by their relative rarity on the corpus of extant sheaths (though probably a great many would have been removed), and also by the elaborate casting of some. At the site level, the deserted medieval village of Wharram Percy, two chapes have been found, both in association with the 12th-century South Manor complex (Goodall 1979, 112-113, fig. 57, no. 79; Goodall and Paterson 2000, 130-131, fig. 61, no. 24). Similarly, a Class D, Type 3 chape was recovered at the 12th-century moated manor house at King's Stanley, Gloucestershire (Heighway 2007, 32, fig. 27, no. 41).

6.1.5 Materials analysis

Although 98% of examples documented were made from copper alloy (n=398), sufficient knife sheath chapes were catalogued in iron (n=9) to suggest that this material is potentially underrepresented in the predominantly metal-detected corpus. In the excavated dataset 9% of chapes are iron (n=8/92); two examples were not reported as chapes, meaning other examples could therefore have been overlooked. A

304

chape of Class F can be noted in antler, though being from Burgruine Wulp, Küsnacht (Switzerland), it is somewhat peripheral to the present discussion.

Putting wrought iron chapes to one side, a major, general manufacturing distinction can be made. On the one hand are chapes of thin sheet construction, sometimes with cut openwork decoration, and often with repoussé detailing. These seem to be restricted to Denmark (Feveile 2017), eastern Germany and Poland (Krabath 2001, 88, karte 24), with almost none found in England. At the other end of the spectrum, are chapes with thick plates with cast-in openwork and low relief moulded decoration, exemplified by Class E, Type 1: on current evidence these are uniquely English. Sitting somewhere between these two approaches are chapes with minimal or no moulding, and openwork formed by cutting or drilling; these do, though, tend to have incuse detailing from punching or engraving, rather than raised decoration. Most chapes found in England, or related to them, occupy a range between pieces with minimal moulding (but incuse decoration), and the elaborate openwork casting of Class E, Type 1.

A precious-metal inlay was documented on only one example: silver wire on a chape found at Nevern Castle (Caple forthcoming). Indeed, surface treatments are also exceptional, with gilding only noted on two French pieces, and a non-ferrous coating documented on two iron examples from Eastgate, Beverley, though this last perhaps as much a protective measure. As such, these chapes apparently served to adorn purely through their form and original metal colour (as polished, presumably), but also their interplay and colour contrast with the sheath's leather. Many sheath chapes feature openwork decoration, either cast-in or created by cutting or drilling. Notably, outside England, the openwork types are found to the East, predominantly in the Rhine-Maas/Meuse corridor and Low Countries littoral; chapes further south, in France for example, are all of solid forms (Fig. 73).

Analysis of surface treatment throws up some unusual associations. Examples of the elaborate Class E, Type 1 are more likely to be found in a present-day rural context, while urban chapes are more likely to simply be engraved. If there is any particular association with high-status sites, then it is with engraved chapes, or even



Fig. 73 Knife sheath chapes by construction

those without decoration. Openwork chapes are likely to have punched decoration, following the geographical patterning described above, while those on the northsouth axis, including the solid French examples are unlikely to, and, if anything, are most likely to be plain. In addition, Krabath (2001, 90, karte 26) identified engraved (loose) wrigglework amongst the Rhine-Maas/Meuse group, suggestive of specific workshops; one can no longer be so confident of this given the wealth of widespread new data (Krabath 2001, 82), with examples with wrigglework and with opposed punched triangles found in the Rhine-Maas/Meuse zone and southern England.

The repertoire of decoration on the dagger scabbard chapes identified here is much more restricted than that for knife sheath chapes. They share some of the engraved embellishment – including wrigglework often in a pecked/'tremblé' style on various Class H chapes – though opposed punched triangles are limited to the 'French variant'. It may be that the chape's importance in display terms was significantly reduced compared to the scabbard and the dagger contained within, both in terms of size and connotations.

6.1.6 Summary of key points

DA case has been made for such objects to date primarily from the 12th century.AThough forms differ, connections may be made between different types based on discrete decorative traits.IHowever, chronological variation can be identified within the corpus, with the earliest types demonstrably of 11th-century date (the relatively plain sub-types of Class F).AKnife sheath chapes found in England can now be situated within overall studies of the object type at a European level (e.g. Steuer 1993; Krabath 2001).S• 'English types' relate to those found to the west of general European distributions, and only extremely rarely to those further eastITwo main axes of communication have been observed which are generally mutually exclusive:O• One western European form (Class G) connects southern England to the Rhineland and the Low Countries, apparently along Rhenish trading routes.O• Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman oneOOther types are insular on current evidence, but generally with a bias towards southern England.Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised:• Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble.• That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types.									
 A Though forms differ, connections may be made between different types based on discrete decorative traits. However, chronological variation can be identified within the corpus, with the earliest types demonstrably of 11th-century date (the relatively plain sub-types of Class F). A Knife sheath chapes found in England can now be situated within overall studies of the object type at a European level (e.g. Steuer 1993; Krabath 2001). 'English types' relate to those found to the west of general European distributions, and only extremely rarely to those further east T wo main axes of communication have been observed which are generally mutually exclusive: One western European form (Class G) connects southern England to the Rhineland and the Low Countries, apparently along Rhenish trading routes. Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman one Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 	D	A case has been made for such objects to date primarily from the 12 th century.							
Tbased on discrete decorative traits.IHowever, chronological variation can be identified within the corpus, with the earliest types demonstrably of 11th-century date (the relatively plain sub-types of Class F).AKnife sheath chapes found in England can now be situated within overall studies of the object type at a European level (e.g. Steuer 1993; Krabath 2001).S• 'English types' relate to those found to the west of general European distributions, and only extremely rarely to those further eastITwo main axes of communication have been observed which are generally mutually exclusive:T• One western European form (Class G) connects southern England to the Rhineland and the Low Countries, apparently along Rhenish trading routes.O• Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman oneOther types are insular on current evidence, but generally with a bias towards southern England.Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised:• Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble.That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types.	А	 Though forms differ, connections may be made between different types 							
I However, chronological variation can be identified within the corpus, with the earliest types demonstrably of 11 th -century date (the relatively plain sub-types of Class F). A Knife sheath chapes found in England can now be situated within overall studies of the object type at a European level (e.g. Steuer 1993; Krabath 2001). S • 'English types' relate to those found to the west of general European distributions, and only extremely rarely to those further east I Two main axes of communication have been observed which are generally mutually exclusive: • • One western European form (Class G) connects southern England to the Rhineland and the Low Countries, apparently along Rhenish trading routes. • • Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman one Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: • Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types.	Т	based on discrete decorative traits.							
Nearliest types demonstrably of 11th-century date (the relatively plain sub-types of Class F).AKnife sheath chapes found in England can now be situated within overall studies of the object type at a European level (e.g. Steuer 1993; Krabath 2001).S'English types' relate to those found to the west of general European distributions, and only extremely rarely to those further eastCTwo main axes of communication have been observed which are generally mutually exclusive:T• One western European form (Class G) connects southern England to the Rhineland and the Low Countries, apparently along Rhenish trading routes.O• Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman oneOOther types are insular on current evidence, but generally with a bias towards southern England.Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: • Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble.That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types.	Ι	However, chronological variation can be identified within the corpus, with the							
 G Class F). Knife sheath chapes found in England can now be situated within overall studies of the object type at a European level (e.g. Steuer 1993; Krabath 2001). 'English types' relate to those found to the west of general European distributions, and only extremely rarely to those further east Two main axes of communication have been observed which are generally mutually exclusive: One western European form (Class G) connects southern England to the Rhineland and the Low Countries, apparently along Rhenish trading routes. Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman one Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 	Ν	earliest types demonstrably of 11 th -century date (the relatively plain sub-types of							
 A Knife sheath chapes found in England can now be situated within overall studies of the object type at a European level (e.g. Steuer 1993; Krabath 2001). 'English types' relate to those found to the west of general European distributions, and only extremely rarely to those further east Two main axes of communication have been observed which are generally mutually exclusive: One western European form (Class G) connects southern England to the Rhineland and the Low Countries, apparently along Rhenish trading routes. Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman one Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble.	G	Class F).							
 the object type at a European level (e.g. Steuer 1993; Krabath 2001). 'English types' relate to those found to the west of general European distributions, and only extremely rarely to those further east Two main axes of communication have been observed which are generally mutually exclusive: One western European form (Class G) connects southern England to the Rhineland and the Low Countries, apparently along Rhenish trading routes. Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman one Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 	А	Knife sheath chapes found in England can now be situated within overall studies of							
 S 'English types' relate to those found to the west of general European distributions, and only extremely rarely to those further east Two main axes of communication have been observed which are generally mutually exclusive: One western European form (Class G) connects southern England to the Rhineland and the Low Countries, apparently along Rhenish trading routes. Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman one Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. It to the types and the labour involved in the manufacture of particular types. 	S	the object type at a European level (e.g. Steuer 1993; Krabath 2001).							
 distributions, and only extremely rarely to those further east Two main axes of communication have been observed which are generally mutually exclusive: One western European form (Class G) connects southern England to the Rhineland and the Low Countries, apparently along Rhenish trading routes. Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman one Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 	S	• 'English types' relate to those found to the west of general European							
 Two main axes of communication have been observed which are generally mutually exclusive: One western European form (Class G) connects southern England to the Rhineland and the Low Countries, apparently along Rhenish trading routes. Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman one Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 	0 C	distributions, and only extremely rarely to those further east							
 A exclusive: One western European form (Class G) connects southern England to the Rhineland and the Low Countries, apparently along Rhenish trading routes. Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman one Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 	L I	Two main axes of communication have been observed which are generally mutually							
 One western European form (Class G) connects southern England to the Rhineland and the Low Countries, apparently along Rhenish trading routes. Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman one Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 	A	exclusive:							
 Rhineland and the Low Countries, apparently along Rhenish trading routes. Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman one Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 	Т	• One western European form (Class G) connects southern England to the							
 O Others are oriented across the Channel (Classes A and F) and connect England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman one Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 	Ι	Rhineland and the Low Countries, apparently along Rhenish trading routes.							
N England to modern-day France, apparently as much in the Angevin period as the Anglo-Norman one Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: • Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types.	0	• Others are oriented across the Channel (Classes A and F) and connect							
 S the Anglo-Norman one Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 	N	England to modern-day France, apparently as much in the Angevin period as							
 Other types are insular on current evidence, but generally with a bias towards southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 	5	the Anglo-Norman one							
 southern England. Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 		Other types are insular on current evidence, but generally with a bias towards							
 Previous assumptions regarding the high status of such embellished sheaths may be somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 		southern England.							
 somewhat revised: Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 		Previous assumptions regarding the high status of such embellished sheaths may be							
 Their presence at a range of site types, though with a trend towards urban connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types. 		somewhat revised:							
connections, suggests that we should probably not view such objects as noble. That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types.		• Their presence at a range of site types, though with a trend towards urban							
That they should be still regarded as elite in a relative sense is suggested by their relative scarcity on sheaths and the labour involved in the manufacture of particular types.		connections, suggests that we should probably not view such objects as							
relative scarcity on sheaths and the labour involved in the manufacture of particular types.		That they should be still regarded as elite in a relative sense is suggested by their							
types.		relative scarcity on sheaths and the labour involved in the manufacture of particular							
		types.							

6.2 Swivel fittings

6.2.1 Introduction and historiography

Cast metal objects featuring loops of a certain module (generally 20-30 by 20-30 mm) have been variously called a 'swivel-mount ring', 'swivel strap-distributor', or simply 'swivel'. A conventional characteristic of such objects – one that has been considered diagnostic– is zoomorphic decoration on the constituent loops. Swivel fittings have long been associated with the Anglo-Norman period (e.g. Ashley 2006, 105; 2016, 295; Egan 2007b, 184; Hammond 2013, 99-100; Read 2016, 64, 67). Most commonly, they have two D-shaped loops linked either by a ball-and-socket joint or a rivet through a central perforation on their flat side (Fig. 74, right). Other arrangements exist. Decorative animal heads tend to 'bite' the boss of the ball-and-socket joint (Fig. 74, right), or are set either side of the loop which accommodates a rivet.

Functions for such swivels could potentially have been manifold (Egan 2007b, 184), but the most frequently mooted ideas are use as part of horse harness (Fansa 1995, 470; Egan 2007b, 184), or on dog leashes, possibly used when hunting with hounds (e.g. Ashley 2006, 105; 2016, 295; Read 2016, 64; 2021, 85). While some sort of swivel is clearly depicted as part of a harness for dogs on an early 16th-century Scottish tomb monument (Illus. 20; Steer and Bannerman 1977, 186, pl. 32B), it is rather large (even allowing for the medium), and a sizeable chronological gap exists between it and the present study period.



Fig. 74 Swivel fittings of Type A1 (left), Type A2.i (right)



Illus. 20 Hunting scene panel of the tomb of Alexander MacLeod (c. 1528) at Rodel, Harris (Na h-Eileanan Siar). Enlarged detail of swivel fitting shown top right. © RCAHMS

Here, the first attempt at a typochronological analysis is essayed for non-ferrous swivels: the different forms have never been properly divided, despite this potentially elucidating date and function. If 11th- and 12th-century swivel fittings for hunting leashes can be distinguished, then their social and geographical patterning can help elucidate this elite practice, complementing zooarchaeological markers (Section 1.2.2.2; Sykes 2007; Cherryson 2012; Loveluck 2013, 262).

Swivel fittings tend generally to have been published as individual site finds, although the earliest relevant publication traced is in fact a synthesis – of examples found in Scotland, erroneously attributed to the Pictish era (Laing 1975). More recently, Ashley (2006, 105) discussed swivels found in Norfolk, calculating the proportion with animal heads on the loops at c. 70% (n=24/34). Previous attempts at dating have tried to make formal comparisons with objects such as buckles (e.g. Hinton 2005, 182, fig. 6.7) or staff terminals (Cherry 2005, 116). A different approach is proposed here, grounded primarily in archaeological evidence, typological comparison and art-historical evidence.

6.2.2 Typochronological analysis

6.2.2.1 A classification for swivel fittings

A classification is now required to approach the mass of objects now documented under the label 'swivel'; this is offered in Table 28. Major types A and B are distinguished by the respective presence or absence of animal heads; groupings within major type A can be further refined according to construction and decoration. Type A1 loops have an interrupted bar between animal heads which would have gone into a perforated swivelling bolt,⁷¹ itself connected to a central (hollow) spherical element (Fig. 74, left). Type A2 loops have a central boss, which may be either socketed or perforated. Socketed examples (Type A2.i) operated with a counterpart whose boss had an integral rivet – the rivet has an expanded, rounded terminal for retention. Perforated examples (Type A2.ii) were variously attached to counterpart loops (with integral rivets on their bosses) or to swivel hooks. If a given example has an integral rivet it may not be clear what this went into (classified simply as Type A2) – potentially, a hollow hemisphere (Ashley 2016, 295, no. 74) or a hollow connecting element as with a find from Rattray Castle (Aberdeenshire) (Murray and Murray 1993, 191-192, fig. 41, no. 204). Type A3 examples have screw-thread-like grooving between the animals' jaws.

Certain examples of each type have been found attached to separate components (Table 28); these other elements help suggest a function and sometimes provide additional dating clues. To date, Types A1 and A2.i have been occasionally found with attached copper-alloy plates, suggesting that they formed a junction between leather straps. Type A2.ii swivels, by contrast, have been found attached to swivelling bolts or hooks, in copper alloy or iron, attached in turn to ensembles based around elongated loops and featuring either strap plates or buckles (Illus. 21). Dating implications of these associations, along with such excavated dates as exist, are set out in Table 29, with extended discussion provided in Appendix 1.H.

⁷¹ Examples may be disambiguated from buckles of Naylor Class A1i (see Table 8, above) by this interruption to their bar

Table 28 Proposed classification for swivel fittings

	Decoration	Characteristics	Junction	Attached to	Select references	Sample image
Type A1	Animal heads	Ears can be well defined	Interrupted bar and bolt	Bolt/copper-alloy attachment plate (Cherry 2005)	Stratford 1984a, 250, no. 248 Cherry 2005, 115- 117, fig. 76, no. 569	
Type A2	Animal heads	Crude moulding; engraved chevrons on boss	Integral rivet/hole	Nothing extant, suggesting organic material	Goodall 1993b, 188, 191-192, fig. 41, no. 204 Egan 2007b, 183- 184, pl. 35, no. 2325 Scott 2011, 170-171, fig. 5.24, no. 20	
Type A2.i	Animal heads	Crude moulding	Ball-and-socket – attached to counterpart	Plate (e.g. PAS: SF-CA5816); integral plate (WMID-4E4CFE); two plates (SUSS-101B44)	Ashley 2006, 105- 106, fig. 1, no. 2	0

	Decoration	Characteristics	Junction	Attached to	Select references	Sample image
Type A2.i (inverted)	Animal heads	Ears can be well defined	Inverted	Plate (PAS: ESS-59EAC0; WAW-26DE03)	-	
Type A2.ii	Animal heads	Basic moulding	Counterpart/Separate bolt/hook and hole	Bolt; swivel hook (e.g. PAS: BH-8036D2; BH-619211; YORYM- 2298E3; in iron – LEIC- 5DE569; WMID-4E7A93)	Campbell 2011, 164- 165, figs 1, 2	
Type A3	Animal heads	Long jaws, bulbous eyes	Screw and threaded bolt	Threaded bolt	Egan 2010 [1998], 242-243, fig. 189, no. 745; Rees <i>et al</i> . 2008, 232-233, fig. 122, no. 1587	\mathbf{P}
Туре В	None	Often plain; iron or non ferrous	Flat plate and hole (often)	Swivel hook (PAS: YORYM-910FAE)	Read 2016, 64, 67, no. 485; Goodall 2011, 330- 331, fig. 11.15, no. J209	\$0



Illus. 21 Swivel fitting of Type A2.ii as part of an ensemble based around an elongated loop, including a buckle with integral plate

6.2.2.2 Summary and discussion

The types suggested above relate to each other in differing degrees of connectedness. The typochronological analysis laid out in Table 29 challenges stereotyped dating for swivel loops, either as solely an Anglo-Norman phenomenon of the late 11th and 12th century (see above), or else undifferentiated across the medieval period (Geake 2001). Here, chronology is clarified, including dating many swivel fittings later than the 11th and 12th centuries, despite their zoomorphic decoration (Table 29 and Appendix 1.H).

Putting the formally undiagnostic Type B initially to one side, the earliest dating evidence is from the 12th century. This relates to Type A1, and is based on arthistorical assessments particularly of various of their openwork central elements (Appendix 1.H.i; see also Fig. 74, left). Zoomorphic decoration on other Type A swivels is restricted to the end of their loops and is qualitatively more stylised. Unfortunately, archaeological evidence is lacking for Type A2.i. Apart from Type A1, this is the only type found so far with copper-alloy plates attached to their loops; this may suggest a degree of contemporaneity, or of chronological and functional overlap at least. For Type A.2ii – formed of connected loops – archaeological dating is broad, with the only *terminus ante quem* (of c. 1350) coming from Southampton (Table 29). Other

Table 29 Proposed dating for swivel fittings

Туре	Date range proposed	Example – location	Example – date (reference)	Other dating evidence	Sample image
A1	c. 12 th century (focused on c. 1100-1150)	N/a – none stratified	N/a	'Romanesque' detailing on animal heads and particularly on central elements	٨
A2.i (and A2.i (inverted))	?12 th century and later	N/a – none found excavated	N/a	Formal similarities to Type A1	0
A2.ii	13 th -14 th century	Southampton, French Quarter	c. 1250-1350 (Scott 2011, 170-171, fig. 5.24, no. 20)	Typological dating of components of ensemble fittings based around long, oval loops (13 th and 14 th centuries)	
A3	Later 13 th -14th century	London, Baynard House, Queen Victoria Street	Late 14 th -century context (Egan 2010 [1998], 242-243, fig. 189, no. 745)	Typological dating of components of fittings based around long, oval loops and other ensembles (later 13 th and 14 th centuries)	\mathbf{Q}
В	12 th -17 th century	Llantrithyd ringwork	12 th century (Charlton <i>et al.</i> 1977, 47, nos 26, 27)	n/a – stylistically undiagnostic	\$0

examples of this type, with loops which operated with separate hooks or bolts, are known as part of composite objects based around elongated loops (see Illus. 21, 22). Swivels of Types A.3 and B have also been documented as components on such ensembles. One composite object has been found at 13th-century Castell-y-Bere, Llanfihangel-y-Pennant (Gwynedd) (Butler 1974, 92-93, fig. 6, no. 2), another, broadly contemporary, at Burg Elmendorf, Bad Zwischenahn (Germany) (Fansa 1995, 469-470, no. 70), while dating evidence for the T-shaped buckles that often feature on such groups (e.g. Read 2021, 86, no. 496) centres on the later 13th and 14th centuries (Appendix 1.H.iv). Continuation into the (early) 15th century is suggested by this sort of connector apparently in situ on the collar of Edmund de Thorp's (d. 1417) hound on an effigy at All Saints, Ashwellthorpe (Norfolk) (Illus. 22). Finally, other, plain examples of Type B can come from far later contexts, such as a pair of connected loops from the post-medieval 'Valkhuis' – a falcon house at The Hague (Netherlands) (Prummel 2018, 468, 470, fig. 4). Overall, previous dating of such non-ferrous swivels to the Anglo-Norman period seems not to be justified in light of this dating assessment, except for Types A1 and A2.i.



Illus. 22 Detail from the effigy of Edmund de Thorp (d. 1417), with inset showing the dog collar with connecting ensemble of two buckles and a swivel fitting attached to an elongated loop (Image: D. Bate (2019))

Having divided the corpus into types, insights regarding function can be pursued. A distinction has often been made between larger swivels, used 'on the leashes of hunting dogs or lapdogs', and smaller examples 'used on straps for raptors when hawking' (Ashley 2016, 295), although there was a significant difference in size between a hunting dog and a lapdog! Comparison with the length of a complete hawking swivel from the aforementioned 'Valkhuis' shown in Figure 75 suggests that Types A.1 and A2.i were too large for hawking and served some other purpose. Seemingly, examples of Types A.2ii and B could potentially be from hawking swivels. However, where zoomorphic Type A.2ii swivels survive complete – formed of a pair of equally-sized loops, as on the 'Valkhuis' hawking swivel – they exceed the length threshold based on the 'Valkhuis' dimensions.



Fig. 75 Lengths of complete swivel fittings by type. Line showing length of hawking swivel from the 'Valkhuis' (26 mm)

After the exclusion of potential hawking swivels on length grounds, for the rest of the corpus loop widths can be compared with a recent find from Nowy Targ Square, Wrocław (Poland) which features a Type B swivel loop (Matóg 2013, 341, ryc. 1). This is part of an ensemble like that shown in Illustration 21, but with hooked plates (rather than buckles) attached to the elongated loop. Based on an extrapolation of its neck thickness given the surviving collar leather, the Wrocław dog was suggested to have been a small breed (Matóg 2013, 342). Figure 76 shows that the majority of loops documented here are comparable in width with that from Nowy Targ Square, if not smaller. Furthermore, the [external] width of the loop only gives an indication of that of any leash attached to it. Where attachment plates survive in situ on swivel loops they suggest a strap sometimes only c. 9-12 mm wide (see Table 28);⁷² often the strap was only retained by a single rivet. The internal evidence of the corpus of swivel fittings suggests that many were used for relatively small dogs. The implication that they were most likely to have been used outwith hunting contexts may be examined further by considering their contextual associations.



Fig. 76 Widths of complete swivel loops by type. Line showing width of swivel from the Wrocław dog collar (27 mm)

6.2.3 Contextual associations

6.2.3.1 Spatial

Focusing on non-ferrous swivels, examples have been found across the United Kingdom. Consideration of relative density reveals a relative lack in London, and relative strength in the North and Scotland; elsewhere the picture is mixed, with zones

⁷² Select widths of attachment plates: c. 12 mm (Castell-y-Bere); c. 9-10 mm (Dragon Hall, Norwich); c. 9 mm (PAS: SF-CA5816); c. 9 mm (PAS: GLO-2DE0FD); c. 11 mm (PAS: YORYM-AF13C3)

of relative strength and weakness adjacent. The classification devised here allows for a broad view of patterning through time, with the main types demonstrating a widening distribution (Fig. 77). Type A1 examples, argued here to be the earliest, are generally restricted to southern, eastern and central parts of England, below a line between the rivers Severn and Humber. The spread of Type A2.i is far greater, also encompassing the West Midlands, Yorkshire and the Humber and the North East. This distribution might imply a different dating profile for this type – perhaps partly contemporary with Type A1, as suggested above, but continuing later. Finally, Type A2.ii (suggested to be 13th to 14th century) shows a wide distribution, as with A2.i, but with new representation across areas of Scotland, including the Kingdom of Mann and the Isles. The only types for which a non-ferrous examples have been traced overseas are of Types A2.i and A2.ii (Fig. 77), which may have similar chronological import.



Fig. 77 Swivels fittings by Webley type

The overwhelming majority of the swivel corpus (96%) was found decontextualised in a modern rural setting. This, in itself, is suggestive of frequent use in the countryside, and fits the relative absence from London. However, there seems little relationship between the distribution of swivel fittings and early deer parks, as recorded in Domesday Book (see Liddiard 2003, 8, fig. 2), or even with the density of later deer parks (see Cantor and Hatherly 1979, 75, fig. 1). A comparison between areas designated as Forest and the swivel fitting corpus documented here is shown in Figure 78. Again, any relationship between swivel fittings and these hunting zones is unclear, and almost entirely lacking in areas either strong in Forest such as the South West, or areas where swivels are documented in large numbers, such as Lincolnshire or Norfolk. While an association with dogs seems clear, further evidence is required to link these swivels with the hounds of the hunt.



Fig. 78 Swivels in relation to medieval Forest. Forest layer courtesy of Robert Liddiard (based on Langton and Jones 2010)

6.2.3.2 Site type

Eight examples with contextual associations present an intriguingly mixed picture. Two of Type A2.ii come from rural ecclesiastical sites: Norton Priory (Cheshire) and Fountains Abbey (North Yorkshire). Charlotte Howsam (2016, 111) suggested that the object from Fountains was included on a chain used to attach a book to its shelf or a lectern. However, this swivel was singular in her thesis dataset. Though it was found in the reredorter, a utilitarian function is preferred here given the sheer numbers of swivels of this sub-type found in the landscape (n=117). A similar suggestion can be made for the presence of a swivel at Norton Priory; it could equally have related to abbatial dogs as to a secular visitor. The presence of swivels at castles in this period is not unexpected: for example, Rattray Castle (Type A2), Pevensey Castle, and the Château at Saint-Vaast-sur-Seulles (France) (Type B). Objects from Castell-y-Bere and Burg Elmendorf have also been cited, though they were not included in the dataset as they post-date the 12th century on typological and historical grounds. Finally, there are the two examples from English urban contexts: from Dragon Hall in Norwich (Type A1) and from Southampton (Type A2.ii), noted above. This variety of site types is better framed through identity associations and an analysis of materials, which, together, suggest a unifying theme.

6.2.4 Identity associations

The few objects recovered from sites tend towards high-status associations, despite the mixture of site types documented. This is demonstrated by three associations with castles, and two with monastic institutions; a further pair of Welsh castles have typologically related material (Appendix 1.H.iii). However, two find locations, Southampton and Meols, have been attributed middling-status associations. As both swivels of are Type A.2ii this association may represent a function of time, both potentially being later objects.

6.2.5 Materials analysis

Of the swivel fittings recorded, 99% are made of copper alloy. Only two iron examples were documented, though manifold iron swivels have been published by Goodall (2011, 335, fig. 11.17); these (plain loops of Type B) are thought to have been mainly domestic fittings, used for the suspension of cooking vessels, for example. It might therefore be presumed that non-ferrous swivels had more specialist uses, such as those associated with animals discussed. Two fittings were recorded in silver. One is a notably diminutive example of Type A.2ii (PAS: SF-37CB60) which could have conceivably have been used with a lapdog (Ashley 2016, 295). A gilded silver swivel of Type A3 would have looked very impressive (PAS: SF-86DE13), but is tangential here given its 13th- to 14th-century typological dating.

These non-ferrous swivel loops are exclusively cast objects. A surface treatment or inlay is exceptionally rare within the corpus. Further to the above silver-gilt example, gilding has been noted for only a handful of other pieces (e.g. Ashley 2016, 295, fig. 18.12, no. 75). The only inlay recorded is silver wire present on the aforementioned elaborate swivel from Rattray Castle; this was described in the site report as a high-status object (Murray and Murray 1993, 173), and, elsewhere, of 'outstanding quality' (Hinton 2005, 182). As such, swivels must largely be assessed, somewhat subjectively, on the quality of their casting and decoration. Most examples are moulded, with many featuring engraved detailing; some have punched detail, often in the form of ring-and-dot motifs. However, the quality of the casting within the corpus is variable. On a purely qualitative basis, Type A1 swivels are both the best rendered and the least stylised. While quality need not be a product of chronology, it is suggested to be the determining factor here, with these the earliest type. Sometimes moulding extends to complicated openwork decoration or animals (Fig. 74, left). The former is largely restricted to forms with separate sub-spherical elements (Types A1 and A2), and the inverted variant of Type A2.i. Such elaboration in casting is suggestive of the high status of these types of swivel (Ashley 2006, 105), and, as noted, has been compared to contemporary staff terminals (Cherry 2005, 116). It is absent on the common Types A2.i and A2.ii, which generally consisted simply of loops, in pairs, or just one.





A further distinction can be drawn between Types A1 and A2 – more likely than not to feature engraved embellishment – and Types A2.i and A2.ii, for which examples that are (just) moulded outnumber those with further decoration (Fig. 79). Echoing the trends regarding openwork decoration, this reinforces indications of a higher status for the former, arguably earlier, examples.

6.2.6 Summary of key points

D	The novel classification for non-ferrous swivels presented here eschews							
А	generalisations, based in no small part on their zoomorphic decoration, which tend							
Т	to place such objects purely in the Anglo-Norman period.							
Ι	• A long chronology has been suggested for swivels with zoomorphic							
Ν	decoration (Type A), with the earliest type (A1), the most elaborate,							
G	suggested to date to the 12 th century.							
	• The more stylised Type A2.i is difficult to date, and has a far wider							
	distribution than Type A1; however, examples feature similar plates to							
	accommodate leather straps, and some may also date to the 12 th century,							
	though a later date cannot be ruled out							
	• Types A2.ii and A3 are currently best placed in the 13 th or 14 th century; they							
	also observe a far wider distribution than Type A1 examples, and the							
	presence of Type A2.ii in modern-day Scotland is noteworthy.							
Α	Site associations help suggest that swivels were used in high-status contexts: these							
S	could be in association with powerful religious as well as secular structures							
- C	Though anhywery receiving ideal or inlaid with proving metal, their easting could often							
2	Though only very rarely glided or iniaid with precious metal, their casting could often							
0	be very elaborate, with decoration in openwork or formed of complex designs.							
С	It has been suggested here that the swivels used on hawking leashes were limited to							
Ι	examples of Type B.							
А								

Swivels functioned with leather straps either attached to them – certainly for the
 earliest, or in ensembles including straps. While a strong connection has been
 identified with dog collars and leads, evidence is currently lacking to associate such
 swivels with the high-status activities of the hunt.

6.3 'Binding strips'

6.3.1 Introduction and historiography

The phrase 'binding strip' is a catch-all term for a group of copper-alloy strip-like mounts with certain shared characteristics (see Webley 2017b, 1-6). In cross-section they are generally of shallow D-shape, with a flat reverse (Illus. 23), assumed to have been mounted to a flat surface, via rivets (Goodall 1987, 176). Their name implies that they helped attach elements of another object together, as with retaining leather on wood (Webley 2017b, 10-11). However, despite a long historiography (see Webley 2017b, 2-3) – which succeeded in establishing contextual relationships between binding strips and sites of high status, such as castles and manors (e.g. Jope and Threlfall 1959, 267; Goodall 1981, 70; Clark 2013, 66) – there has been a lack of international consensus regarding the function of such mounts.



Illus. 23 Binding strips from Loughor Castle (Swansea)

My own recent publications on binding strips have increasingly advocated their identification as mounts from shields (e.g. Webley 2017b; 2021b), thus moving away from French claims associating them with harnesses (e.g. Legros 2015a, 97), or indeed English ones connecting them with boxes such as caskets (e.g. Ashley 2016, 282). This proposal is based on iconographical evidence and on formal connections between such objects and so-called 'octopus' mounts (Illus. 24). The English scholarly literature has shied away from essaying an identification for octopus mounts (e.g. Ashley 2016, 282), but identification as decorative mounts for shield bosses – present in German, Dutch, Swedish, French and Swiss writings – is followed (Webley 2017b, 11, note 44). Such an identification being accepted, binding strips form part of functional category 20 (military equipment), although, being pragmatic, cannot be certain that every object we might call a 'binding strip' came from a shield (Webley 2017b, 11). This represents a shift away from previous identifications as a box mount (Section 3.1.1), which would have placed it in functional category 7 (furniture/locks), and for which rather different connotations follow.



Illus. 24 'Octopus' mount from Folkingham, Lincolnshire (PAS: LIN-B35B23; Image courtesy of the PAS)
6.3.2 Chronological analysis

Elsewhere, I have argued that a meaningful typological division of binding strips cannot be established on current evidence (Webley 2017a, 4-5; 2017b, 4-6). Not least, this is because where distinctive types have been defined, such as by Lewis (1993) for the corpus from Loughor Castle (Illus. 23), two of the said 'types' can be present on the same mount (Webley 2017b, 5-6). As such, a general chronological analysis will follow here; first binding strips will be considered, then the dating of octopus mounts.

6.3.2.1 Binding strips

From the earliest synthetic work on binding strips – Jope and Threlfall's (1959, 267-268) discussion following the publication of mounts from Ascot Doilly Castle, Ascottunder-Wychwood (Oxfordshire) – they have been associated with sites dating to the 12th and 13th centuries (e.g. Goodall 1981, 70). Despite little developed discussion of dating since, Clark (2013, 65) has provided a good recent appraisal, emphasising the 12th century (see also Legros 2015a, 94). Beyond this range, examples found in Anglo-Saxon deposits at Portchester Castle (Hampshire) (Hinton 1977, 204, 206, no. 72), and Wareham (Dorset) (Renn 1959, 135-137, fig. 50, no. 16), have been suggested to be intrusive (Hinton 1990b, 766). Hinton (1990b, 766) has argued that binding strips continued into the 15th century, based on evidence from Winchester; a similarly late date was noted for an example from Northampton by Clark (2013, 65). The dating of binding strips will be considered in more depth by using the evidence of the objects themselves (briefly), iconographical evidence, and archaeological dating.

Unfortunately, there is very little about the decorative detail of 'binding strips' that betrays their dating; being generally so narrow there is little scope for decoration. A small subset particular to south-west France features expansions decorated with designs imitating coins issued in the mid to late 12th century (Chareyron 2009). Additionally, an openwork roundel expansion on a strip from Bezannes (France) echoes Romanesque architectural arcading and objects which imitate such arches (Webley 2017b, 8).

Turning to iconographical sources, images of binding strips were pursued based on identification as mounts from shields. Unfortunately, extant shields of the period



after Taburet-Delahaye and Boehm 1995, 99

Illus. 25 Enamelled grave cover of Geoffrey Plantagenet, Count of Anjou, from Le Mans Cathedral (c. 1151). With (right) detail of boss mount on shield.

are extremely rare, with only two 12th-century examples published from Szczecin (Poland) – neither have applied strips (Dowen et al. 2019).⁷³ However, much evidence survives from various iconographical sources for applied strips, often rendered in association with a shield boss mount, the so-called 'octopus' mount: 31 images have been traced, for which details are provided in Appendix 4. One of the most famous sources is the grave cover of Geoffrey of Anjou at Le Mans (Illus. 25). This shows strips with openwork lozengiform expansions extending from the boss mount on the shield. Further examples come from other grave covers, mainly effigies. The remainder fall into three, other main categories. These range from the small – seal matrices and other artefacts – to large sculptural details, in Italian architecture specifically. Equestrian seals might provide even more dating evidence if it were not for a tendency for the individual depicted to be travelling right: if right-handed, only the interior of the shield is visible as it was generally held in the left hand covering the individual's left flank (Demay 1880, 141). This notwithstanding, a graph of dated representations of shields seemingly adorned with binding strips can be effected (Fig. 80).



Fig. 80 Aoristic plot for iconographical representations of binding strips on shields

⁷³ Arguments that the 13th-century shield from Seedorf (Switzerland) (Gaier 2002, 91) is a truncated kite-shaped shield have recently been rejected (Dowen *et al.* 2019, 124).

The dating plot seems to confirm the evidence of the coin design elements cited: that there was a strength of representations of shields bearing binding strips around the middle of the second half of the 12th century. Overall, shields are shown with such strips from the early part of the 12th century, continuing until a strong decline from the second quarter of the 13th. As such, the historiographical focus on the 12th century appears justified, but continuation into the 13th century appears limited to the early part. This can be compared with evidence derived from the objects themselves.



Fig. 81 Aoristic plot for all binding strips

The dataset of archaeological examples gathered here represents a twenty-fold increase on the fourteen sites listed by Jope and Threlfall (1959, 267-268); dating

evidence is plotted from over 300 mounts from almost 100 sites (Fig. 81).⁷⁴ Although the historic focus on the 12th and 13th centuries has been justified, the real emphasis is on the 12th; the graph shows a peak of deposition in the second quarter of the century (see also Webley 2017b, 9). A line based on examples thought by their excavators to be either intrusive or residual is indicative of a floruit of such mounts between the latest decades of the 11th century and the close of the 13th century, but with a decline from c. 1200 onwards. The earliest mounts with good dating come from Germany, from the site of the Salian Palace at Bad Harzburg, Goslar (Stiegemann and Wemhoff 2006, 153, no. 155a); these were dated to the late 1060s or early 1070s. This can be compared with dating from England: the earliest comes from Wolvesey Castle, Winchester (Hinton 1990b, pl. LIIIA/770, 772, fig. 220, no. 2344), with a *terminus ante quem* of c. 1110. A significant quantity then seem to be associated with the 'Anarchy' period (Webley 2017b, 9).

By way of control, dating for a particular form highly likely to be from a shield can be interrogated – Lewis's (1993) type 3 for the Loughor assemblage. This distinctive form is characterised by having regular perforations within successive oval lobes (Illus. 23, bottom centre), perhaps a skeuomorph for seaming in leatherwork (Quita Mould pers. comm. 2017). The form can also be found on various octopus mounts, such as that found at Cornillon, Vionnaz (Switzerland) (Deschler-Erb and Winkler 2016, 141), or one from Lundy (Illus. 17, above; A. Goodall 1980b, 165, note 89). Its dating profile in Figure 82 shows very similar results to that presented for all binding strips (in Fig. 81): a peak in the second quarter of the 12th century, and a decline from c. 1200 onwards. Based on estimations of residuality, presence in the 11th century is less likely; the earliest *termini ante quos* fall in the 1150s, at sites such as Goltho Castle, Castle Neroche (Somerset), Loughor Castle and l'îlot Saint-Espoing (France). At the other end of the plot, a slightly longer 'tail' into the 14th century is noticeable.

Put together, dating evidence from iconographical representation and archaeological evidence suggests clear parameters for the use of binding strips (Fig. 83). It would appear that such mounts were used to adorn numerous shields from at

⁷⁴ Representing around 70, and around 30, more data points, respectively, than two previously published representations (Webley 2017a, 6, fig. 8; 2017b, 10, fig. 5a).



Fig. 82 Aoristic plot for shield mounts of Loughor type 3

least the earliest decades of the 12th century onwards, both on the evidence of Loughor type 3 mounts and iconographical representations. Earlier use of binding strips appears rare, though it has been evidenced archaeologically (see above), and also in the *Song of Roland* in c. 1080 (verses 526, 1968), in which an 'écu bouclé' was described, that is with an umbo (boss) and metal armature (Bouly de Lesdain 1907, 190). Their decline is best framed by the iconographical evidence, although it is difficult to be certain at what point representation became anachronistic. Pictorial evidence suggests use of such decoration on shields until around the 1230s; though the archaeological evidence gives an impression of continuity beyond this point, it simultaneously shows a decline in use from c. 1200. The two measures give different peaks for use of binding strips, with the iconographical evidence displaying a lag of approximately twenty years. This might be explained by a slowness for artefact trends to reach the consciousness of those producing artistic representations.



Fig. 83 Aoristic plot for shield mounts of Loughor type 3 against representations in art

6.3.2.2 'Octopus' mounts

The dating profile of octopus mounts, considered here to be shield boss decorations, may be taken as a control on the dating profile provided by binding strips; as they share formal qualities, we may argue that they were used en suite. The dating of such mounts has not been considered directly before, other than by the present author (Webley 2021b, 909); they have, though, been discussed alongside 'binding strips', and had the same 12th- to 13th-century floruit attributed to them. Here, dating evidence has been gathered from excavation for fourteen mounts (Fig. 84). These describe a trend very similar to that of mounts of Loughor type 3 (Fig. 82) and of binding strips more generally (Fig. 81). Again, a peak is shown in the second quarter of the 12th century, and a decline beginning around 1200, albeit a slightly more gradual one. By comparison, there is a notable relative absence at the dawn of the 12th century, with the earliest *termini ante quos* coming from contexts dated to the 1150s at Goltho Castle.



Fig. 84 Aoristic plot for octopus mounts

Again, excavated dating was compared with iconographical dating (Fig. 85), for which 24 representations were found, from a variety of sources (Appendix 4): architecture, sculpture, artefacts (including bracteate coins and seal matrices), manuscript art, and rare examples in textile and paint (Webley 2021b, 909). As with binding strips, depictions help frame the archaeological data. At the earliest end of the range, iconographical evidence helps place these shield boss mounts around 1100, based on f. 92v of the *Vita et miracila s. Mauri* (Troyes BM MS 2273). At the other end, although the plot shows continuity into the early 13th century, there is a drop off from around the 1230s, as with representations of binding strips. Also, as with binding strips, the peak of representations of shields with such boss decoration occurs later than the data from excavations – again, by around 20 to 30 years, and presumably for the same reasons.



Fig. 85 Aoristic plot for iconographical representations of octopus mounts

6.3.2.3 Summary and discussion

A dating profile has been offered for 'binding strips' that both confirms and advances previous suggestions that they date mainly to the 12th and (early) 13th century (e.g. Legros 2015a, 95). It cannot be certain that all 'binding strips' decorated kite-shaped shields, but evidence derived from the formal similarity of some to the shield boss decorations known as 'octopus' mounts, and from pictorial representations, suggests that many were (Webley 2017b, 11). The cumulative evidence of iconographical representations helps frame binding strips as objects primarily of the 12th century, largely obsolete by the second quarter of the 13th. This suggests that excavated examples found in later contexts, as some have been, are likely to be residual. Archaeological data, while largely complementary, provides an earlier start date, in the late 11th century, a date corroborated by evidence from literature, primarily representations of military equipment in certain *chansons de geste*. Furthermore, the dating evidence presented here offers precision within this floruit (late 11th to early 13th century). Archaeological evidence focuses attention on the second quarter of the

12th century, while there is a lag of around 20-30 years before these objects become common in representations of shields. The archaeological evidence also provides a sense of steady use after the peak of c. 1125-1150 prior to a decline from around 1200 onwards.

Elsewhere, I have suggested that the floruit of binding strips and octopus mounts as shield adornments can be contextualised by the developing formalisation of heraldry (Webley 2017b, 12; 2021). Such applied ornamentation has only been traced on the kite-shaped shield form, which dates ultimately from the first half of the 11th century onwards (Richardson and Woosnam-Savage 2018, 54). The start for these mounts is less clear; as kite-shaped shields were held by strapping, a boss was a relict memory of their functional predecessors of the early-medieval period. Many of these bosses were plain, that is, not adorned with octopus mounts; none of the shields depicted on the Bayeux Tapestry have this elaboration (Lewis 2012, 11-15, figs 2-5). Although such an absence does not provide conclusive evidence of absence for these mounts in the third quarter of the 11th century, the sheer quantity of shields depicted on the Bayeux Tapestry implies that such embellishments were not in use at the time, in England at least.

The emergence of consistent depictions of (heraldic) arms by the 1130s/1140s (Ailes 1992, 10-11), seems not to have spelt an immediate end to shield embellishment formed by designs using mounts: the grave cover of Geoffrey of Anjou (c. 1151) shows binding strips applied to a shield otherwise decorated with heraldic lions (Illus. 25; Webley 2021b, 909). Rather, by a gradual process, as kite-shaped shields became smaller – with their top edge cut straight by around the 1150s (Peirce 1993, 258) – then were replaced by the 'heater-shaped' form in the early 13th century, a reduced canvas might have dictated the concession of the field to purely painted or embossed heraldic devices. Indeed, on seals, depictions of knights' armorial devices also came gradually, but followed a similar trajectory, becoming more commonplace in the final decades of the 12th century, and universal by the 1230s (Crouch 1992, 232).

6.3.3 Contextual associations

6.3.3.1 Spatial



Fig. 86 All binding strips and octopus mounts mapped

Binding strips are found across a large area of north-west Europe, as demonstrated visually for the first time in recent publications (Webley 2017a, 3, 5, fig. 4; 2017b, 3, 6, fig. 1). The map presented here advances the extent of the spread shown previously, particularly eastwards into modern-day Germany, Austria and Sweden, and south-eastwards, into modern-day Switzerland, Italy and Slovenia (Fig. 86); a core area in the British Isles, France, the Netherlands and western Germany had already been well established. Octopus mounts are well spread within this distribution, though they

have not been found as far to the east, perhaps given the relative smallness of the corpus (n=38, plus four 'possibles'); [shield] mounts of Loughor type 3 are present at all extremities of the distribution (Fig. 86). This is suggestive that a high proportion of 'binding strips' were shield mounts. Within England, there is a relatively strong weighting towards the southern and eastern parts of the country, below a line connecting the Severn estuary and the Wash, and including the South West.



Fig. 87 Iconographical representations of binding strips and octopus mounts mapped

The map of iconographical representations of these objects is relatively sparse in some areas (Fig. 87), but describes a similar distribution, affirming that these objects were being used across north-west Europe. An addition to the south comes from a painted altar from San Miguel, Tubilla del Agua, implicating use in modern-day northern Spain despite archaeological evidence not having been traced.

6.3.3.2 Site type

Binding strips have long been associated with high-status sites, and interpreted as relating to high value possessions given their perception as mounts for boxes and caskets (Ashley 2016, 282). The different primary function proposed, as shield adornments, does nothing in principle to invalidate a strong association between such objects and sites of high status. However, the vastly expanded corpus gathered here, of over 500 examples, allows for an appraisal of this association. We may ask whether moves away from a historic emphasis on excavation of sites such as castles and manors, or the development of European schemes to record metal-detected material, prompt any corrective (Webley 2017b, 8).

In fact, very low numbers of binding strips and octopus mounts have been recorded through metal detecting: 12% (n=62/511), even allowing for potential decay in the plough zone or a lack of recognition amongst metal-detectorists (Webley 2017b, 8). Appeals on my behalf in the Dutch magazine *The Coinhunter* (Rijns 2017; 2018) have yielded few results, apart mainly from one exceptional site cluster in Germany. As such, there are over 400 objects from excavations with which to explore site associations, having excluded certain finds or items for which the means of discovery is unknown.

Despite a diversity of site associations, the predominant one is with castles (Fig. 88). Urban and rural castles account for nearly two-thirds of the objects, with elite rural settlements adding another 4%: at castles such as Castle Acre and Goltho a large proportion of the copper-alloy finds are these strips (Ashley 2016, 282). Discard at such sites could have followed damage during combat, or perhaps been due to obsolescence, for the reasons set out above regarding their demise in the face of the rise in heraldic devices; many are found bent and damaged (Goodall 1987, 176). The next highest association is an urban one, accounting for 15% of the material overall; Clark (2013, 66) made a point of listing urban examples. Of these, just under a third came from the Vintry, London, but, this notwithstanding, the urban proportion is not



Fig. 88 Site associations for binding strips and octopus mounts

negligible, and exceeds the 10% found apparently decontextualised in the rural sphere (i.e. by metal detecting). Of these last, it is noteworthy that the largest collocation of material occurs in the Blyth-Tickhill area, and may thus be associated with the famous tournament that took place between these two settlements (Webley forthcoming).⁷⁵ A dozen finds have come from ecclesiastical site locations. These minor associations raise questions about our ability to disambiguate shield mounts from other mounts lumped under the 'binding strip' label. At the moment, octopus mounts and strips of Loughor type 3 provide our best measures of shield adornments; both have been found in urban contexts, and the latter, exceptionally, in an ecclesiastical one. Their presence in an urban context is rather easier to explain not just in terms of defence of towns and cities, but of manufacture and repair of shields, as evidenced by street names. Presence in an ecclesiastical context might be fortuitous, or related to display;

⁷⁵ PAS: SWYOR-16050E (Hodsock CP), SWYOR-F69F46 (Tickhill CP), SWYOR-7F994B (Blyth CP) – all octopus mounts

a 13th-century shield from Marburg (Germany) formed part of a funerary monument in St Elizabeth's Church (Richardson and Woosnam-Savage 2018, 54). However, despite these minor associations and recent metal-detected discoveries, the predominant site association remains with castles and also manors. Elsewhere, I have shown that this association is consistent across Europe (e.g. Webley 2017b, 7, fig. 3).

6.3.4 Identity associations

The small minority of binding strips in religious contexts has already been mentioned. This section will therefore develop other identity associations for these overwhelmingly secular objects.

Beyond the minor proportion of binding strips and octopus mounts with an urban contextual association, noted above, when other, secondarily urban site types are accounted for, such as urban castles or ecclesiastical sites, the proportion increases to 29% (n=147/500). As noted, it was not alien to see such shields in urban contexts, in and around castles or otherwise. The rural association, though predominant, serves to mask other, stronger relationships. Specifically, three quarters of objects with rural associations were found at castles (n=263/353), with multiple examples found at particular sites (above; see also Webley 2017a, 3, fig. 4). A further 14% of finds are seemingly decontextualised objects in the rural sphere, leaving few other rural associations. One might infer from the low numbers found through metal detecting that few were lost 'in action', although their depiction in the meeting of the armies of German Henry IV and Henry V in the Chronicle of Otto von Freising suggests that shields decorated in such a way were used in combat (Arts 1995, 88, afb. 6). Examination of artefact destruction evidence might help advance this matter in the future (Ben Rijns pers. comm. 2018), but the evidence from Blyth-Tickhill noted above suggests that they were parts of practical defensive armour.

An association of binding strips with high-status sites, long noted in the literature, has withstood a diversifying of circumstances of discovery (Clark 2013, 66). The aggregated figures for sites deemed as being of high status is overwhelming, at 89% (n=372/418). This is reinforced by pictorial evidence, with such objects depicted on images connected with royal or imperial figures, such as the aforementioned Henry IV and V, and representations of regional lords (Illus. 25; Appendix 4), for example, the first great seal of Philip I of Flanders, or the lost effigy of William Clito (Crouch 1992, 191, fig. 4). Of the rest, only 10% (n=42/418) were deemed mid status, while the inuse status of the four other binding strips is uncertain as they were found in dumped deposits outside the town walls of Waterford (Munster) (Scully 1997, 479-481, fig. 15:17, nos 1-4). The mid-status label has mostly been attributed to urban sites, but also three deserted medieval villages: Westbury-by-Shenley, Vöhingen (Germany) and Monte Zignano (Italy). Further work would be required to establish whether more precise locational data within such sites might alter the status association attributed. This affirmation of the high-status nature of these objects suggests that their consumption in socially-restricted settings helped create and reinforce seigneurial identity. Furthermore, I have suggested elsewhere that they helped engender connections between the elites of 12th-century Europe (Webley 2017b, 12; 2021b).

6.3.5 Materials analysis

All objects documented were made of copper alloy, though they vary in proficiency of manufacture. If an attribution as shield mounts is to be accepted (for most), it ought to be remembered that these objects adorned a larger whole, and therefore need not have been virtuoso pieces in their own right: 43 examples were documented as having no apparent surface treatment or decorative quality further to their form, while another 100 were, simply, moulded. That large numbers of the binding strips were openwork, including the Loughor type 3 examples, presumably relates to their visual interplay with the leatherwork on which it is assumed they were mounted; this also applies to the gaps between the arms on the octopus mounts and whatever may have supported them (see Hendriksen 2017, 86, afb. 6.23; above, Illus. 25).

A long-noted tendency for binding strips is decoration by gadrooning, that is, by engraving transverse/angled grooves (Goodall 1981, 70). A total of 21% of the dataset (n=95/443) have some sort of engraved decoration; given the scale of the objects such engraving is assumed to have been in part an attempt to catch the light. The main surface treatment is gilding, sometimes in combination with moulding or engraving (55%; n=242/443). Such treatment would have enhanced the lustrous quality of the

copper alloy, adding to the impression made by such objects. On certain examples traces of gilt may have been lost; if so, this dominant surface treatment could even be somewhat under-represented.



London, BL Harley 2895, f. 82v © The British Library

Illus. 26 Detail of David and Goliath from the 'Charité-sur-Loire Psalter' (c. 1175-1200). Note the shield embellishments, apparently by binding strips and a shield boss mount.

Rivets rarely survive, but on binding strips such as one found at Castle Hill, Folkestone (Kent) (Pitt-Rivers 1883, pl. XIX, no. 27), and more commonly on octopus mounts, they are of a globular-headed form (Illus. 24). These too are evidence of the ostentation of these objects, being prominent and, generally, gilded; they echoed the splendour of contemporary reliquaries which also often feature such rivets (Webley 2017a, 6, note 31). On three, rare, examples a claw bezel survives in a rivet hole.⁷⁶ While none retain any setting, we may speculate that they once contained either a gemstone or glass, based on survivals on other objects. In such objects we come closer to the early heraldic charge of the 'escarbuncle', which may have been set with precious stones (Webley 2017b, 1, note 1); as a formalised charge, it may have derived from ornamentation of bosses and radial strips on shields (Ailes 1992, 15, note 61; Creighton and Wright 2016, 175; Webley 2017b, 12). Such decoration can be related to references in *chansons de geste* to shields set with stones and crystals (Bouly de Lesdain 1907, 233), or later representations of shields with inset stones (Dowen *et al.* 2019, 142).

The overall impression provided by binding strips and octopus mounts is that every attempt was made to create as impressive an effect as possible, within the confines of their narrowness and the fact that each strip merely formed part of an ensemble (Illus. 26). Surface decoration, though simple, helped these objects catch the light and thereby enhance the visual impact of shields – until such times as they began to detract from shields' new, heraldic messages.

6.3.6 Summary of key points

D	The previous 12 th - or 13 th -century date range for binding strips and octopus mounts	
А	has been confirmed and refined through a triangulation of archaeological and	
Т	iconographical evidence, following the reattribution of many as shield mounts.	
I	• A floruit has been established between the late 11 th century and early 13 th	
Ν	century, with a peak in the mid-12 th .	
G	The chronological end point has been related to the growth of heraldry, and the	
	diminishing size of shields – gradually these embellishments became obsolete.	

⁷⁶ Claw bezels – Binding strips: South Mimms Castle (Clark 2013, 65, fig. 50); Castrum de Montréal-de-Sos, Auzat (France) (Guillot with Portet 2017, 285, 287, fig. 288, no. 25550). Shield boss mount: Die Frohburg, Trimbach (Meyer 1989, 80, 160, no. H10)

А	Following previous iterations of the work presented (Webley 2017a; 2017b; 2021b),
S	such mounts have been shown to have been present across north-west Europe, based
S	both on artefactual evidence and that of iconographical representation.
0	
С	Previous associations with high-status sites, particularly castles, have been sustained
I	despite diversification in sites examined.
А	Despite being elements of an ensemble, significant attempts were made to give the
Т	individual strips, and by extension the whole, a striking visual impact, not least by using
Ι	gilding and engraving to help these mounts catch the light.
0	
Ν	
S	

6.4 Chapter overview

Through the three types of objects discussed, this chapter has attempted to make a novel contribution to the analysis of elite objects in this period, beyond the object domain of the ars sacra which has dominated thus far. New synthetic work performed for each object type moves our understanding forward where it had historically been hampered by problems of misidentification. Here we have seen original mapping presented for knife sheath chapes in England (Section 6.1), and a new classification for 'swivel fittings', which has helped clarify their dating (Section 6.2). Most fundamentally, I have proposed a new function for the majority of gilded copper-alloy 'binding strips', and for 'octopus' mounts, advocating that they were used to adorn shields in their pre-heraldic, proto-heraldic, and even into the heraldic phase (though they soon became obsolete) (Section 6.3). Here, these three object types are compared, not least to assess their relative elite connotations. In so doing, the study draws inspiration from Steuer's (1989, 244) comparison of the contextual associations of knife sheath chapes with five other, contemporary 'elite' object types: styli, balances, copper-alloy (Hanseatic) bowls, enamel-decorated glass vessels and Islamic glass vessels.

Overall, these 'elite' object types all appear to be novelties of the 'long 12th century', with date ranges within the Anglo-Norman and Angevin periods, and lacking firm pre-Conquest antecedents. The dating appraisals undertaken have shown that previous assumptions, in particular regarding the dating of swivel fittings, may have

been unfounded; many of these may be put to one side here due to their late date. Indeed, following these reappraisals, the corpus gathered diminishes by around 30%, not just for swivel fittings, but also for relevant chapes (Fig. 89). With binding strips demonstrably elite objects, perhaps the other, rarer object types could also be considered as such.



Fig. 89 Numbers of 'elite' objects examined, by type. Fewer sheath chapes and swivel fittings were considered relevant to the period following reappraisal of their dating.

Taken together, the 'elite' items studied do not show clear patterning across England and Wales when compared to other objects, other than a relative paucity in Norfolk (Fig. 90). This seems to be due to the distorting effect of high relative numbers in London, and also at particular castle sites, for example the binding strips at Loughor Castle, South Mimms Castle or Castle Acre Castle. At an international level, the Rhine-Maas/Meuse corridor shows as relatively prominent, with other areas affected by the same elite site biases present for England and Wales.



Fig. 90 Relative distribution of 'elite' objects

Internationally, binding strips have a well spread continental distribution, matching that of the castle sites with which they are strongly associated. This is also true to an extent for certain forms of scabbard chape, especially those related to English types found mainly in France. The more clustered set of chape types to the East, focused on the Low Countries littoral and Rhine-Maas/Meuse corridor, appear connected with riverine and maritime trade networks. Notably few swivel fittings have been traced outside England, and, later, Scotland. A pattern observed in the overall spread of these elite objects is a move southwards, to a communication axis with the near Continent.

In a national context, binding strips do not tend to observe particular geographical patterns, so intimately are they tied to the sites at which they are found. The geographical biases of chapes and swivels, however, can be compared, with chapes relatively strong below a line extending between the Severn Estuary and the Wash, though rare west of Dorset. Swivels, while also being relatively strong in the same zone, also show relative presence further north, through the Midlands, and beyond, via Yorkshire and the Humber, to parts of the North East and North West. This geographical bias for such sheaths might in part be a product of their use across the Continent and of maritime connections.

Site associations for these three groups of object contrast significantly (Fig. 91). Binding strips have been long associated with castles and manors, and the present dataset confirms this. Despite some further urban finds (many actually from urban castles), their absence in the massive metal-detected dataset is telling (Section 6.3.3.2). Swivels, on the other hand, are almost exclusively found through metaldetecting, with contextual associations available for only a few finds – these are from largely high-status site types (Section 6.2.3.2). Knife sheaths show a spread across different site types, as with binding strips, but apart from decontextualised detector finds are otherwise mostly associated with urban sites. In part, this may relate to where certain types were being made, but seems also to relate to the mercantile context in which many may have been used. This may have contributed towards a mercantile identity, potentially an elite one in urban terms (Loveluck 2009, 143). It is surely no coincidence that the object types examined by Steuer (1989) whose site type profile most closely matches that for sheath chapes, were imported glassware and, even more so, balances, which owed their urban presence to reasons of trade.



Fig. 91 Contextual (site) associations for 'elite' objects

Regarding social status, the high-status connotations which merited each object type's discussion in this chapter have been upheld in the preceding discussion, with the newly suggested function for binding strips having no material effect on this assessment. Relative assessments are difficult to make given the quantity of decontextualised swivels. The overlap of binding strips and certain knife sheath chapes – notably of Classes A and F – at particular sites such as Burgruine Wulp, King's Stanley moated site (Gloucestershire) or the château at Tours (France), suggests that many were used within similar milieus. However, it has been argued that a strength of association between other types of sheath chapes and urban contexts mitigates against an aristocratic association, while they remain elite objects in a relative sense. Finally, only for binding strips, perceived as shield mounts, does pictorial representation really exist in any real quantity. For these, we can suggest that such shield mounts were used by the nobility (Section 6.3.4). The archaeological evidence shows that they spread through this stratum, but perhaps not all that far: the material at South Mimms Castle might perhaps be associated with Geoffrey de Mandeville, Earl of Essex, and that at Castle Acre Castle with the de Warenne earls of Surrey. Such

social restriction has been argued to have helped cohere social elites across national boundaries (Webley 2021b, 910), perhaps including such contexts as tournaments.

When assessing the technical quality of these non-ferrous object types, it must be remembered that they formed components of larger wholes, many operating in conjunction with leatherwork. Binding strips were sometimes of basic manufacture, but operated as part of an ensemble metal armature which interplayed with the shield's leather covering. Similarly, certain sheath chapes were rendered in openwork, and contrasted with the leather of the sheath they adorned. Except for Class E, Type 1 examples, sheath chapes tend not to have cast-in openwork decoration, in contrast to the technical proficiency of Type A1 swivels. Beyond manufacture method, there is minimal evidence for either surface treatment or decorative inlay on sheath chapes or swivel fittings. By contrast, binding strips, though more simply made, were often gilded. It is also notable that some of the plainest sheath chapes have been found in the higher-status contexts, a reminder of the contextual nature of status.

The question of whether the presence in England of these trans-national 'elite' objects was owed to the Norman Conquest is a legitimate one in light of the dating proposed here. However, although such objects may be labelled Anglo-Norman or Angevin in temporal terms, their geographical associations are far more extensive. Overall, these 'elite' objects demonstrate an increasing socio-cultural focus on the near Continent, rather than that with Scandinavia seen in the previous case studies, datable, not to the 'long' Norman Conquest, but to the early-mid 12th century. We will revisit this theme, with others that cut across the three case studies, in the discussion chapter which follows.

Chapter 7: Discussion

The preceding trio of case study chapters have taken a longitudinal, international and contextual approach to the examination of non-ferrous metalwork of the 11th and 12th centuries; this chapter considers the major themes highlighted in the literature review (Chapter 2) across the object types and case study groups globally. Questions are revisited under four main themes (paucity; manufacture; spatial change and identity; and social associations and identity), with results summarised here, and expanded thereafter in this chapter:

Paucity (7.1)			
Question	Findings		
Does the dataset sustain arguments for a dearth of portable material culture in England traditionally dated to the 11 th and 12 th centuries?	No. Not by the non-ferrous metalwork measures used here, and especially not for equestrian equipment.		
Are the trends detected universal?	No. There is variability within the case study groups: decline identified in some might have disproportionately affected narratives of the period.		

Manufacture (7.2)			
Question	Findings		
How did approaches to the	The decline in precious-metal use, noted		
manufacture and decoration of	elsewhere, is observable in the dataset.		
metalwork change over the period?	Imitation of precious metal in base metals		
	followed different trajectories across the		
	period.		
What do they tell us about production	The shift from rural to urban production is		
mechanisms?	affirmed, with regional circulation patterns		
	elucidated. Casting became less dominant		
	towards the end of the period, but not unduly		
	to the detriment of decoration.		

Spatial change and identity (7.3)		
Question	Findings	
What regional patterns can be observed?	Beyond patterning relating to production and for the Second Viking-Age art styles (below), a southern bias is noted for particular groups.	

Does material dated on the basis of the Second Viking-Age art styles (Ringerike and Urnes) show any particular patterning? Can their floruits be clarified beyond conventional art-style dating, particularly in respect of the Norman Conquest?	Yes. Widespread use of both styles can be contrasted with the distribution of particular groups, especially dress accessories. Archaeological dating makes a useful contribution, but art-style dating is generally upheld.	
How do the international connections	A major shift is witnessed from an Anglo-	
evidenced by the dataset change	Scandinavian axis to a near continental one.	
through time, and how does this help	This is dated largely to the 12 th century,	
contextualise the impact of the	diminishing the direct role of the Norman	
Norman Conquest?	Conquest in this change.	

Social associations and identity (7.4)			
Question	Findings		
To what extent can the metalwork of	Most metalwork analysed is relatively socially		
the period be analysed along status	homogenous. Higher status was apparently		
lines?	derived from a few specific object types, or		
	subtle differentiation.		
What does the social distribution of	Primarily, increasing social stratification in the		
metalwork tell us about prevailing	12 th century is revealed, with social distinctions		
trends?	having been minimised in the early 11 th		
	century.		

7.1 Paucity?

When the cumulative dataset is modelled, across a wide period with 1066 broadly at the middle,⁷⁷ no gap is apparent for the 11th century (Fig. 92). On the contrary, in terms of non-ferrous metalwork, the 11th century is stronger than the 10th or 12th century. It is clear that new, primarily metal-detected, material should prompt us to significantly adjust our view of the overall frequency of non-ferrous material from this period, and look beyond the view of its paucity established primarily through excavated material and old chance finds. The dataset is presented in two iterations: the first represents the dating taken from records as drawn into the database (Fig. 92, upper), while the second shows the enhanced dating applied to each object based on the typochronological analysis undertaken for this thesis (Fig. 92, lower; see Chapters 4-6 and Appendix 2). The latter includes more precise stratigraphic dates, when ranges for excavated finds sat within the typochronological assessments.

⁷⁷ The Monte Carlo simulation approach used for modelling dating was described in Section 3.2.2



Fig. 92 Monte Carlo simulation of date ranges imported into the database (above) and after enhancement (below)

Both plots show the same upsurge in non-ferrous material towards the start of the 11th century, but the refined data is more nuanced, picking up decline in such

material around the start of the final third of that century. As such, the enhanced dating starts to unpick a tendency to apply a blanket 11th-century date range to particular artefacts. The patterning changes from this point in time onwards too. Previously, the aggregated data suggested gradual growth from a low point of c. 1100 (Fig. 92, upper). This nadir, no doubt the result of the artificial date bounds of an applied 11th-century date range, vanishes on the plot of enhanced dating (Fig. 92, lower). Instead, 1100 sits in the middle of a period of gradual growth between the new 11th-century low point around the 1070s and a later point of decline, visible around the 1120s. Finally, by comparison with the 10th century data, the 12th-century material shows more strongly on both plots, despite the drop-off just noted. Indeed, the most dramatic juncture – in terms of rate of change – is a jump in overall quantities around the start of the 11th century.

Both plots inevitably raise questions. Even before data enhancement, why does the 11th century show so strongly, given arguments for a paucity of 11th-century metalwork (see Sections 1.3, 2.2.1)? Is it universally strong, or attributable to a particular dataset component or components? Is the increase in numbers in c. 1000 a simple product of a blanket 11th-century date range being applied (i.e. rounding dates to a century)? If the drop-off in the enhanced plot in the 1070s represents the immediate impact of the Norman Conquest, does a stability in numbers prior to the 1120s imply the relative lack of impact on metalwork production of the 'long Norman Conquest'? Where is the upsurge in material at the end of the 12th century, referred to in the literature (see Section 2.2)?

To examine the nature, and relative influence, of the dataset's components the data was divided into the three case study groups: the dress accessories, equestrian equipment, and 'elite' objects. Comparison of these constituent groups with the overall profile (Fig. 93, bottom left, in green) reveals that equestrian equipment clearly reflects, and also influences, the overall trends most closely (Fig. 93, top right, also in green). Non-ferrous horse equipment, derived mostly from metal detecting and dating to a period beginning about 1000, seems to have had a big impact on the 11th-century spike and sustained peak (Williams 2011, 252).

It has been argued that in England the new approach of adorning horses using mixed metal components can be associated with Danish influence under Cnut; 1014 or

1016, though, would be as artificial a start date for this material as AD 1000. Comparison with Denmark shows that this shift towards the use, and prevalence, of non-ferrous adornment was a contemporary development, dated there to around 1000 or slightly earlier (Pedersen 1999). It must be stressed that although this is a measure of use of horses in Denmark, given the general absence of iron material in the dataset, it only suggests a rise in use of a particular type of decoration, and does not by itself provide evidence for preceding absence of horse equipment and riding horses in England. What this does allow, though, is for us to better 'place' many of these riding horses in social terms (see Section 7.4).



Fig. 93 Monte Carlo simulation for the overall dataset (bottom left), and its component parts: the dress accessories (in red, top left), equestrian equipment (in green, top right), 'elite' objects (in blue, bottom right). X axis split by lines into the centuries between AD 900 and 1200, with a further line right of centre marking 1066

Elsewhere, the breakdown shows a decline in use of metal dress accessories across the period (Fig. 93, top left, in red). It is likely that this decline has been a strong factor in previous suggestions of a general decline in metalwork of the time (see Section 2.2.1): many of the observations were founded specifically on analyses of dress accessories (see Table 2, above), rather than more synthetic works. Looking in more detail, it seems that the purported '11th-century gap' (Weetch 2017, 264) is not apparent for the groups of dress accessories considered in this thesis – brooches, buckles and strap-ends. Rather, it is the 12th century which shows a notable lack of material, perhaps in part because strap-ends seem to have become relatively rare (Section 4.2.2.3); the fastening of girdles on high-status *bliauts* (gowns) or on certain sword-belts by knotting would also, in part, explain a relative lack of contemporary buckles. Work by Weetch (2014; 2017) in redating brooch forms, refined here, has helped populate the 11th century in terms of dress accessories, although an overall decline in the third quarter of the century is apparent. The lack of any upsurge towards the end of the 12th century can be contrasted with that for coinage shown in Figure 94, with the recoinages of the late 1150s and early 1180s apparent, though this might be contextualised by their new, immobilised character.⁷⁸ This lack may be a product of the thesis cut-off date (c. 1200), whereby even short use life is difficult to detect at archaeological timescales, acting in combination with the relative plainness of the new buckles and brooches of the later 12th century (Sections 4.1.2.7, 4.3.2.4). If not dated (in part) to the 12th century at source these last would not have featured in this dataset, and thus not influence the end of the dating profile in the way they perhaps might. This would change if dating proposed here came to be adopted widely.⁷⁹

If the preceding groups – equestrian equipment and dress accessories – form the majority of the dataset, and thus contribute most to, and therefore echo, the overall profile, then it is interesting to compare the trend visible for the final main group – the three 'elite' objects (Fig. 93, bottom right, in blue). The object types discussed – non-ferrous sheath and scabbard chapes, swivel fittings and 'binding

⁷⁸ See e.g. Kelleher (2013, 83-85) for the cessation of short-term recoinages and system of *renovatio monetae* and the start of longer, immobilised cycles from 1158.

⁷⁹ Already, in the PAN database a start date of 1150 is applied to single-looped buckles with integral offset bars (PAN-type 05-01-04).

strips' – seem to be either novel or scarce artefacts in England, until around the middle of the 11th century. From then onwards their numbers increase, until a dominant period in the 12th century: the large increase in numbers at the very start of the century is probably somewhat artificial, the product of rounding dates. Their gradual rise, and peak in the mid-12th century, stands in contrast to the other major components of the dataset. Does it suggest a medium-term impact of the Norman Conquest: a process which over a longer period saw the adoption of various artefacts whose circulation was often restricted to elite milieus? We will revisit the theme of the contexts of consumption for objects in Sections 7.3 and 7.4.



Fig. 94 Aoristic plot of coin losses based on dates of issue

Returning to the questions posed above, and acknowledging the limitations of the present dataset, we may eschew the notion of a general gap in the 11th century for the dataset discussed here. Turning to the phenomena observed in that century, it is worth trying to identify significant moments in terms of rate of change. The challenge, noted above, is to distinguish significant historical moments from an apparent significance produced by the application of generalised dating (e.g. temporal or art-

style divisions), though itself natural in the absence of more precise date ranges. Noting the significant jump in non-ferrous material at around 1000, at 1100 the change in century is barely apparent in the aggregated (enhanced) data; only in the 'elite' group does it seem to be a notable factor. This suggests something of genuine import happening in the early 11th century, although its reflection in the dataset might be the application of art-style dating, specifically the influence of the recording of Ringerike-style objects: this will be examined further below (Section 7.3.2). The other major moment for which rate of change has already been noted is a decline across the total dataset in the decades immediately after the Norman Conquest of 1066, clearest in terms of dress accessories but also obvious in the plot of equestrian equipment. Again, untangling this from the end of the floruit of Ringerike-style material (c. 1000-1050/1075) is difficult, but the plots presented here tend to show a low point in the 1080s rather than a change specific to c. 1075 or earlier. After this apparent impact of the Conquest itself, it appears that the material examined remains relatively stable for a generation or so. We may therefore rebut arguments made by scholars such as Hinton for an enduring adverse effect of the Norman Conquest on metalwork circulation (Section 2.2.2), and argue strongly for a longitudinal approach by which to contextualise trends across 1066. The significant dip around the 1110s does not seem to relate to the end of the given floruit of the Urnes style. We will return to the question of the later 12th-century upsurge in the following discussion of manufacture and materials.

7.2 Manufacture

7.2.1 Changes in manufacturing and decoration

The predomination of copper-alloy artefacts in this dataset at the expense of ironwork may be masking wider trends in contemporary material culture.⁸⁰ Iron was clearly the dominant metal at elite sites of the period, an impression given in part due to the number of horseshoes and shoeing nails recovered (Table 30). This is even more apparent for sites in France (Bourgeois 2009, 490); though the dates and methods of

⁸⁰ Discrimination against iron by metal-detectorists was discussed in Section 3.2.1

the excavations may account for some of this discrepancy, it nonetheless seems real. We should also note the absence of organic materials in this dataset, given that some medieval assemblages seem to have been dominated by bone and antler (Cool 2009a, 227).

Site	Total iron objects (of which	Number of iron objects for
	shoeing nails)	each non-ferrous object
Andone <i>, castrum</i> (10 th -11 th	8,009 (6,000+)	286
century)		
Niozelles, la roca (10 th -11 th	504 (252)	42
century)		
Décines-Charpieu (10 th -11 th	237	237
century)		
Blois, château (8 th -12 th	428	33
century)		
Colletière (11 th century)	2,700 (2,100)	104
Distré, Les Murailles (9 th -	212	71
11 th century)		
Pineuilh, La Mothe (10 th -	289	58
12 th century)		
Doué-la-Fontaine, La Motte	403	34
de la Chapelle (10 th -11 th		
century)		
Boves, château (10 th -16 th	1647	24
century)		
La Grande-Paroisse, Les	c. 800	c. 53
Sureaux (9 th -10 th century)		
Rennes, Place Saint-	462 (138)	33
Germain (11 th century-12 th		
century)		
Flixborough (7 th -11 th	c. 6,000	6
century)		
Goltho Manor	85	7
(10 th -11 th century)		
Cheddar (10 th -11 th century)	83	3
Winchester (11 th century-	no figure/no figure	1.5/1.7
12 th century)		

Table 30 Assessment of relative presence of iron objects compared to other metal objects at major elite sites*

*Based primarily on Bourgeois (2014b, 155, fig. 1), with additional data from Bourgeois (2009, 490), Loveluck (2009, 146); Legros (2012, 91) and Portet (2017, 839)

For the non-ferrous corpus, precious-metal use forms our initial focus. Data analysis shows that, for objects that are common site or stray finds, precious metals survive relatively infrequently, perhaps affirming suggestions of their decline in various object categories (see Section 2.2.2). Figure 95 shows a correspondence analysis plot of all thirteen primary materials across the dataset.⁸¹ Silver and, particularly, gold show as outliers. That gold was very much available at the time is confirmed by survival of ecclesiastical objects such as crosses and reliquaries (e.g. Legner 1985), despite ensuing losses of the Reformation and Commonwealth, and by mentions of objects in wills (Loveluck 2013, 319) and other documentary sources (Fleming 2001, 20). Apart from two Ottonian-inspired brooches,⁸² the only gold



Generated using the MASS package using R i386 (version 3.6.1). Silver variable illustrated with strap-end fragment SUR-970F39, gold variable with brooch GLO-8F79CA (both PAS)

Fig. 95 Correspondence analysis plot showing primary material variables across the whole dataset. Note the extent to which particularly gold and, less so, silver and base silver are outliers from the centre cross (0,0).

⁸¹ As extracted from an analysis of multiple variables (n=81), considering 799,470 data points

⁸² PAS: PAS-D5D967, GLO-8F79CA

secular items traced are dated to the second half of the 12th century: the French royal sacral spurs (Illus. 4, above (detail)) and two brooches.⁸³ Their rarefied contexts suggest that the use of gold as a primary material was very much restricted to – and by – the highest levels of contemporary society, primarily in Church contexts but also in the secular realm, until at least the end of our period. The two could be intimately connected, exemplified by gifts from secular lords to churches, including the treasure bindings and other *ornamenta ecclesiae* given by Harold Godwinson to the church at Waltham Holy Cross (Essex) (Fleming 2001, 13-14).

Silver seems somewhat less restricted, but still relatively rare (Fig. 95). Figure 96 shows the use of silver as a primary material through time scaled against background use of copper alloy. It can also be compared with losses of coins (Fig. 94), made exclusively from silver. Use of silver for objects is generally low throughout the period, though slightly stronger in the 10th century than the 12th. It is difficult to know how much recycling affects this trend, especially given the growth of towns in this period. This notwithstanding, the overall trend is bucked in the mid-11th century – a phenomenon represented by a spike between the 1040s and 1070s. This spike can be explained by a sudden rise in numbers of coin-brooches, themselves part of a longterm phenomenon for converting contemporary (silver) pennies into brooches (Section 4.3.2.1). It centred primarily on the reigns of Edward the Confessor and William I (Hinton 2005, 159), and, based on the coins utilised, specifically from the 1050s onwards (G. Williams 2001, 67; 2006; Weetch 2014). What seems clear is that this phenomenon does not represent a direct influx of new silver,⁸⁴ it being expedient to utilise currency coin. Interestingly, nor does it represent renewed interest in a silver aesthetic: the majority of these coin-brooches were gilded (G. Williams 2006, 337; Kelleher 2013, 208; Weetch 2014, 371). This relative expense represented a move towards a golden appearance, at the same time implying constraints on gold as a raw material. In the context of this discussion, such brooches seem to represent a fashion which exploited a ready-made precious-metal object. It was probably as an expression of personal piety, rather than factional affiliation (Weetch 2014, 366), and not one

⁸³ Respectively, from Rubercy Castle (Berthelot 1994b, 434, no. 112 (cat.)) and Folkingham Castle (Lincolnshire), an earl's residence (Cherry and Goodall 1985, 482)

⁸⁴ Indeed, this very period saw the supplies of silver from mines in Germany start to decline (Naismith 2020, 93).

immediately to be linked with contemporary developments in the English Church (G. Williams 2001, 70). Finally, not apparent in Figure 96 is the increased availability of silver from the 1170s (see Section 2.2.2 and Fig. 94), which may reflect both inadequacies in fine dating and a delay in its effects in the craft economy.



Fig. 96 Aoristic plot of use of silver as a primary material through time (blue line), scaled against use of copper alloy (bars)

A corollary of a lack of precious-metal artefacts was a rise in use of base-metal items (Section 2.2.2). Trends in the appearance of copper-alloy objects, in terms of surface treatment or object manufacture, will be examined momentarily. The present discussion will focus on the silver aesthetic of lead-alloy objects. We may dismiss old suggestions that lead finds were simply models for casting rather than functioning dress accessories (G. Thomas *et al.* 2008, 179; Kershaw 2008, 262). On the one hand, these items imitated precious metal, including in the ways they were worked and finished; on the other, they constituted a fashion in their own right, and not necessarily one of lowly status (G. Thomas *et al.* 2008, 180). Leaden alloys need be taken together; though tin alloys have a more lustrous appearance, akin to silver when new (Heyworth 2008 [1991], 390), they are difficult to isolate once patinated, and
without metallurgical analysis. Figure 97 shows that objects made of leaden alloys were a constant feature of the period, broadly following trends in the wider dataset, until a significant decline in the second half of the 12th century. Strap-ends form a significant component of their relative strength in the 10th century and into the 11th; otherwise, brooches constitute the vast majority of the remainder, and were a fairly constant presence throughout the period, until the decline noted. The fashion for leaden dress accessories has been discussed by Kershaw (2008) and G. Thomas *et al.* (2008) specifically in terms of strap-ends, and for brooches by Kershaw (2013) and Weetch (2017).



Fig. 97 Aoristic plot of use of leaden alloys as a primary material through time (pink line), scaled against use of copper alloy (bars)

G. Thomas *et al.* (2008, 180) associated lead jewellery with urban production in its early manifestation. Distributions mapped in Figure 98 show therefore the potential distribution networks for such strap-ends and brooches. The left-hand plots show distributions if any of the object's date range encompasses a given century; those to the right only allow for date ranges that start in a given century. In the 10th century, and into the 11th, though broad in spread, the distributions show a focus on



Fig. 98 Leaden objects plotted through time (top to bottom); to left, map of objects with date range that includes a given century; to right, map of objects with date range starting in a given century. Taking the 12th century by way of example, the map to the left shows a distribution for leaden objects that may conceivably have been in use in this century, based on their dating;

the map to the right shows a distribution of leaden objects for which a 12th-century production date can be claimed with reasonable certainty – a notably restricted one, with an urban focus.

Danelaw production centres such as Lincoln, York and Ipswich (Suffolk) (see also Weetch 2014, 312-315).⁸⁵ Two miscast examples from Coppergate, York, suggest a production site for brooch-like accessories of a particular openwork form within a group classified as Weetch Type 13.D (Bayley 1992, 780, fig. 340, nos 4277, 4278). The distribution of this variant is shown in Figure 99 within that for the sub-type, and shows, primarily, a restricted network (Weetch 2014, 368), but on the other hand, examples being found up to 75 miles away in southern Lincolnshire (and a Suffolk outlier). The extent of these consumption networks appears to diminish through time, to the point that production limited to the 12th century (shown bottom right in Fig. 98) - as opposed to use potentially including the 12th century (Fig. 98, bottom left) seems confined purely to urban contexts (e.g. Dublin, Utrecht, London, Beverley). This urban focus for the production and consumption of leaden brooches has been identified by Weetch (2017) for the 11th century, but seems even starker by the 12th on the evidence presented here. Weetch (2017, 277, 279) argued that in the 11th century such brooches helped construct an urban identity distinct from those living outside the town limits. By examining the use of leaden dress accessories across the 1066 boundary we can frame their use within wider temporal parameters. It seems that by the second half of the 12th century employment of their silver aesthetic was far less desirable (Fig. 97). It can also be contextualised by the use of copper-alloy brooches, which, in the 12th century, outnumbered lead-alloy pieces in most towns and cities (Section 4.3.5) and were starting to be used more widely beyond. This trend in dress accessories was to continue, with non-ferrous white metals only seeing a resurgence in use for strap-fittings from the late 14th century (Egan 2008a [1991], 18-19). We may tentatively conclude that by the later 12th century leaden brooches were

⁸⁵ A brooch mould in stone and a limestone mould potentially used for lead casting are known from Flaxengate, Lincoln (respectively, Bayley 1991, 122; Ten Harkel 2018, 6-7, fig. 6), while a pair of possible mould duplicate brooches are known from The Park, Lincoln (Ten Harkel 2013b, 181). Further, though more circumstantial, evidence for production in Lincoln is set out by Weetch (2017, 275-276). Antler moulds are known from three sites in Ipswich (Franciscan Way, Queen Street and Buttermarket), the Buttermarket example apparently retaining lead-alloy residue (Newman 1993, 1). Evidence in the form of scrap metal, including unfinished and miscast artefacts, has been published from 16-22 Coppergate, York (Bayley 1992, 780, 810-814).

no longer deemed necessary as part of urban identity construction as they were when urban settlements were developing in the preceding two centuries.



Brooch image after Mainman and Rogers (2000, 2476, 2650; fig. 1197, no. 4277)

Fig. 99 Weetch Type 13.D disc 'brooches'/dress accessories, specifying a form thought to be manufactured in York

Imitation of precious-metal colours is of particular pertinence to dress accessories (Baker 2013, 338), but should be considered in relation to all object types examined here in as much as they were objects of display (possibly excepting the tinning of iron objects, which was both protective and did not fundamentally alter surface appearance). Using base metals to imitate objects made in precious metals was achieved in two main ways: (1) use of an alloy which most closely replicated the precious-metal colour range; (2) application of a thin layer of precious metal as a surface coating. Here attempts to imitate gold will be considered, respectively by the use of zinc-rich alloys ('brass' and 'zinc-rich gunmetal'⁸⁶) which gave a rich gold colour (Blades 1995, 135), and the process of 'fire gilding'. The present dataset does not allow for in-depth analysis of the first, as compositional analyses were not undertaken.⁸⁷ It will therefore suffice to briefly recapitulate other work on metal composition, given its direct relationship with gilding, and possibly with the use of gilding itself a response to a lack of fresh brass (Baker 2013, 407).

Deployment of zinc-rich copper alloys required careful approaches to production: either the importing of new metals or a careful recycling of old objects.⁸⁸ In general terms, the 'flow' of zinc-rich metals in this period was fundamentally comprised of recycled Roman brass (though zinc content would be gradually depleted through recycling), plus new, but minor, injections of brass identified in the Middle Saxon period from the Continent (Baker 2013, 429-430; Walton Rogers 2020, 260). It was further enhanced by later new metal supplies leading to an overall increase in zinc-rich copper alloys (Blades 1995, 182). Placing specific influxes in this long-term development is difficult at present due to a lack of data (Kershaw 2013, 35). However, an upsurge in brass has been noted from the mid-10th century at 16-22 Coppergate, York, and Flaxengate, Lincoln (Bayley 1992, 809-810; Blades 1995, 156), perhaps reflecting overseas Anglo-Scandinavian contacts in the Danelaw area. This phenomenon has been interpreted as a cultural rather than socio-economic distinction, with brass, and later, recycled brass, restricted to Anglo-Scandinavian workshops (Kershaw 2013, 35-37).⁸⁹ Later, and more generally, a change has been noted between the national pre-1050 copper-alloy dataset analysed by Blades (1995, 182) and that of the 11th to 13th centuries, with an increase in zinc-rich alloys through time. Despite these last trends, the use of zinc-rich alloys was limited in the period discussed here, with gilding the best way of achieving a finish that imitated gold.

In this period, a gilt finish was generally achieved by application of a gold-

⁸⁶ In American and continental historiography often termed 'red brass'

⁸⁷ At the time of writing, Kathryn Libby (University of Sheffield) is examining metal production in Viking-Age Lincolnshire, including such analyses. Recently there have been useful XRF analyses of Dutch coastal material of relevant date (Roxburgh *et al.* 2018).

⁸⁸ Before the 16th century requisite ores were only extracted overseas, and brass there produced through the 'cementation' process (Blades 1995, 29).

⁸⁹ It has similarly been noted for contemporary Hiberno-Scandinavian workshops in Ireland (Scott 2020, 273-274).

mercury amalgam to the surface of copper-alloy objects, with the mercury evaporated off under heating – thus 'fire gilding' (Campbell 1991, 132). Neither raw material required was readily available, with mercury coming potentially from the Iberian Peninsula or Italy (Coatsworth and Pinder 2002, 130). Furthermore, a preference for using impure copper for gilding was noted by Theophilus Presbyter in his early 12thcentury technological treatise (Book III, chapter 68; Hawthorne and Smith 1979, 145-146). This specialised composition aided application – specifically a copper-rich alloy with small quantities of tin to aid casting, but most importantly with highly restricted lead levels; excessive lead could otherwise blemish the gilded surface (Blades 1995, 136). It is also attested archaeologically – in compositional analyses of gilded earlymedieval and medieval objects (Blades 1995, 136; Oddy et al. 1986, 9-10, 21, fig. 1; Baker 2013, 409; Egan 2008a [1991], 27). Despite the source metal being less expensive than alloyed copper (Baker 2013, 409), the raw materials and technical aspects of the processes involved – the refining out of impurities (Mitchiner 1988, 74), the higher melting point of copper-rich alloys making casting more difficult (Baker 2013, 428) – suggest that gilding was a restricted activity, perhaps reserved for specialists (Thuaudet 2015, 1345), but one that also required wide operational networks (réseaux opératoires). In the earlier part of this period, evidence for gold working only comes from a handful of sites (Bayley 1991, 122; Thomas 2011, 414), while mercury has been found in a singular urban context, at 16-22 Coppergate, York (Bayley 1992, 789, 795).

Within this context of a rarity for zinc-rich alloys and the technicalities of fire gilding we may consider the artefacts recorded here. Though changes in alloy composition cannot be detailed, the use of gilding in space and through time may be analysed. Following a correspondence analysis, relationships between gilded objects (sometimes with various further embellishments) and types of site can be visualised as a plot (Fig. 100). The objects are mostly of copper alloy, with the exception of the gilded (silver) coin-brooches discussed above. Copper alloy (as a primary material) itself sits near the plot's centre point (the cross at 0, 0) as it dominates the dataset; it lies in proximity to a 'decontextualised rural' location, as to be expected with metaldetected finds so prominent. However, the various gilded objects all congregate towards the lower right of the plot, at various removes from the centre. Here, the plot shows, at the same time, a relationship between gilding and rural site types (as opposed to urban ones), but, even more strongly, one with elite sites, such as castles. When the two categories, rural/urban and high/low status, overlap, a site's status appears to be the dominant factor; urban elite sites behave more like other highstatus sites than other urban ones, and feature more gilded objects. Although this relationship between gilded material and elite sites might seem axiomatic, changes through time may also be identified concerning the level of the use of gilding and types of objects gilded.





In Figure 101 use of gilding is charted across the dataset against a background of objects for which gilding is seemingly not deployed.⁹⁰ Gilded objects were grouped to include those with a variety of additional manufacturing steps, such as moulded

⁹⁰ Presence of gilding is based on visual examination by a given object's recorder/reporter, and has been verified neither in person by the author nor through metallurgical analyses.

details, or surface decoration such as stamping or punching (see also Fig. 100). Within the dataset there is a consistent rise in gilding throughout the period, from a virtually non-existent base in the 10th century to a peak around the mid-12th century. This general trend masks a number of particularities that merit drawing out. A first is that the ratio of gilded to non-gilded objects was lower in the 11th century than in the 12th, even either side of the peak noted. Furthermore, apart from select strap-ends, the 11th-century corpus of gilded objects is dominated by cloisonné-enamelled disc brooches (Weetch Type 20; see Section 4.3.2.1), and to a lesser extent the coin-



Fig. 101 Aoristic plot of gilded objects through time (red line), scaled against a background of non-gilded objects (bars)

brooches of the mid-11th century (Sections 4.3.2.1, 7.2.1). The former are arguably exceptional, given their inlaid enamel settings as well as their gilt finish; the elaborate nature of their production was discussed by Weetch (2014, 339; Section 4.3.5, above). Their presence at one of the poles of the production spectrum is shown in Figure 102. This method of production (variable 39), plots alongside its constituent primary material of glass (variable 17), and is slightly further from the centre point (0, 0) even than gold (as primary material). Despite recent calls to temper our sense of the social status of such brooches, based on a perception of their relative lack of sophistication compared to their probable Ottonian prototypes and the ever-increasing numbers documented (Weetch 2014, 344-345; Section 4.3.5, above), their use of gilding at the time still stands out as unusual. Indeed, very few other objects feature enamel inlays, and their proportion is low compared to these particular disc brooches. Indeed, Weetch (2017, 278) recently considered such brooches signifiers of wealth and status appropriate to 'a burgeoning rural aristocracy'.



illustrated with a cloisonné-enamelled disc brooch (PAS : SUR-AB3160)



In the 12th century use of gilding for dress accessories continued, though at a lower level (Section 4.4). Gilding is known on particular series, such as wrought strapends of folded widthways construction (Section 4.2.2.3), or on buckle plates, including the 'Christ' enthroned type (Section 4.1.2.5). Where published, such objects have been characterised as high status (Boughton and Egan 2009, 344; Ashley 2016, 291-292; Ashley 2021, 23-24). Also noteworthy is the presence of gilding on spur buckles (also objects with elite connotations). Indeed, looking beyond the period discussed, it has been noted that gilding was uncharacteristic in the London metalwork assemblage after the mid-13th century (Egan 2008a [1991], 21, 27).

Rather than by dress accessories, the 12th- and early-13th-century corpus of gilded objects is dominated by a particular object type discussed in Chapter 6's 'elite' objects – the mount known as the 'binding strip'. I suggested that many such pieces were applied to shields, alongside 'octopus' mounts, many of which were also gilded. Indeed, over half of the corpus of binding strips bears extant gilding (Section 6.3.5). Even though the strips themselves could often be fairly unprepossessing, their cumulative effect when assembled on a shield was impressive; the strong visual impact of the gilded shields of the Maccabees, as mentioned in John of Salisbury's Policratus (c. 1159), perhaps alludes to this (Jones 2010, 109), as do the gleaming shields reportedly used during Geoffrey of Anjou's knighting tournament in John of Marmoutier's Gesta consulum Andegavorum (1169-1174).⁹¹ An association of binding strips with high-status sites has been affirmed here, further to its long historiography (Sections 6.3.3.2, 6.3.4). Alongside such objects, there is a smaller, but nonetheless significant, quantity of gilded items of contemporary equestrian equipment. Interestingly, the other object types considered in Chapter 6 – sheath chapes and swivels – were only very exceptionally gilded (Sections 6.1.5, 6.2.5).

In England, gilt harness pendants are known from the first half of the 12th century, with an 11th-century continental example documented from the Altenberg bei Füllinsdorf (above, Table 21, crescentic). Pendants represent a major change in the decorative approach to equestrian equipment, and were seemingly the main vehicle for it; suspension mounts were seemingly not gilded to the same extent. Prior to the

⁹¹ '...a clipeis aureis sole relucentibus... resplenduit' (Halphen and Poupardin 1913, 182)

first half of the 12th century the dataset is characterised by the Anglo-Scandinavian tradition of copper-alloy embellishments to iron sub-structures, be they cheekpieces on snaffle bits, terminals on stirrups, or stirrup-strap mounts at the junction of stirrups and their leathers (Pedersen 1999). Very little compositional analysis has been performed on this material, but visual examination would suggest that, generally, it was not gilded (contra Ten Harkel 2013a, 167). It remains to be seen therefore whether recent evidence for 'fire gilding', established through surface XRF analysis, on the two cheekpieces from a group of bridle fittings from Chirbury (Shropshire), is exceptional (Webley 2022). This notwithstanding, it may well have been that such components would have looked 'rather splendid, shining and glittering in the sun' (Roesdahl 2007, 22). Still, with the new fashion for displaying multiple pendants, mostly along the breast-band (Section 5.2.1), the contemporary elite newly employed a gilt finish on their equestrian equipment. Gilding as tincture came, along with enamelling, with the rise of heraldry and the use of heraldic pendants primarily from the 13th and 14th centuries, though probably with a start at the end of the 12th (Baker 2017, 42). The gilded pendants of the 12th century were therefore more straightforwardly objects of display, though some may be described as 'proto heraldic' (Creighton and Wright 2016, 179).

Overall, it seems apparent within this dataset that the use of gilding both increased over the period discussed and that its deployment developed through time. In the 11th century it was mainly used on dress accessories, mostly the cloisonnéenamelled disc brooches argued to have been owned largely by rural elites. In the first half of the 12th century, its use largely shifted to 'binding strips', argued here to have belonged to shields, and to a lesser, but not unimportant, extent to harness pendants. To trace any progression of the use of such pendants down the social scale is currently beyond the evidence's capacity; suffice to say that most 12th-century depictions of the use of harness pendants based on 'real life' (mostly from seal impressions),⁹² belong to either kings, counts or earls (Appendix 3). While we know that knights were using seals from the 1150s (Crouch 1992, 243), the only seals depicting pendants documented at anything nearing that social level were that of baron Robert of

⁹² Pendants are also found on the harnesses of literary figures in representations, ranging from the Horsemen of the Apocalypse, to Roland and Ferragut, and the Magi (Appendix 3).

Bonnebosq (1170s; Baker 2017, 26) and of knight (H)elias Pidele (undated; Clemmensen 2012, 99, fig. 4b). Indeed, the earliest archaeological finds of gilded pendants were recorded at castles of the de Warenne Earls of Surrey (Castle Acre Castle), the de Bohun Barons of Trowbridge (Trowbridge Castle),⁹³ and of Hugues Wac, Lord of Negreveille (Rubercy Castle). In the first half of the 12th century, gilding was apparently employed to make the objects of the social elite those of distinction. Given the timing and international scale of this phenomenon, it may be argued that this was not so much a product of the Norman Conquest as an exercise in self-definition which helped cohere militaristic elites across national boundaries.

7.2.2 Production mechanisms

Processes by which non-ferrous metalwork production became concentrated in the urban sphere, having previously been practised by itinerant smiths often at elite rural centres, are well documented (for example, Thomas 2011; Bourgeois 2014b). In examining these processes through the present dataset, the persistent ecclesiastical metalworking tradition, perhaps best exemplified for the period by the (early 12th century) Gloucester candlestick, will not be touched upon, as it cannot be readily informed by the present data (for an overview see Thomas 2011, 417-418). The rural-to-urban shift was a gradual but fundamental transition, ultimately leading to the creation of distinctive craft guilds by the 12th century at least (Thomas 2011, 414). It has been argued that this process was largely completed by the 11th century, with (rural) thegnly sites no longer those of production but of consumption, and with a concomitant increase in pre-Conquest thegnly presence in towns for reasons of market access (Fleming 2001, 12).

The present study has not been one of evidence for manufacture as such, but some observations can be made on the basis of unfinished objects and of circulation patterning. We have already considered the case for urban production of leaden jewellery in Danelaw centres in the 10th and 11th centuries (Section 7.2.1), with a zone of production and consumption set out for a particular brooch form (within Weetch Type 13.D) based on production evidence from York (Fig. 99). Elsewhere, others have

⁹³ It was only after the period of this study that the de Bohun family became earls of Hereford

commented on innovations in Danelaw centres at that time, namely 'serialised' production of leaden objects in re-usable moulds (Thomas 2011, 416), relative to their dearth in contemporary West Saxon or Mercian burhs (Ten Harkel 2013b, 177). Evidence presented here suggests that brooches of Weetch Type 4.B may have been a manifestation of this process; they have been dated to the first half of the 11th century (Section 4.3.2.1). Such evidence can be projected forwards, revealing both widespread urban production, but increasingly restricted consumption patterns for leaden jewellery in the 11th century, diminishing even further in the 12th (Fig. 98), before lead fell out of favour.

In the 10th century copper-alloy working was still taking place at manorial sites such as Faccombe Netherton (Richards 2004 [1991], 150); contemporary evidence shows it was also being practised in an urban context, for example at Coppergate in York (Thomas 2011, 417). The latter, urban context, was soon to supersede the former (Ten Harkel 2013b, 176). From the 11th century possible workshop evidence for the production of copper-alloy hooked tags has been discovered at Lincoln's Flaxengate (Ten Harkel 2013b, 176-178; 2018, 7-9). Based on decorative traits, Ten Harkel (2013b, 178, fig. 11.3) plotted their zone of distribution and consumption within Lincolnshire.⁹⁴ The extent of their distribution, assuming a Lincoln production, can be compared with that presented here for the 11th- to early 12th-century disc brooches of Weetch Type 13.D (Fig. 99), suggesting the extent of distribution/consumption networks for urbanproduced dress accessories at this date - best categorised as regional. From data gathered here, the socketed end type strap-end may have been a contemporary product of Norwich (Sections 4.2.2.3, 4.2.3). In the 12th century, such regional distribution systems appear to have been maintained in case of M-shaped buckle plates (Rogerson and Ashley 2018, 396, fig. 5), and the plates bearing conjoined crescents isolated here (Sections 4.1.2.5, 4.1.3; Fig. 23). This restricted circulation stands counter to the increasing internationalisation of buckles noted in Section 4.1, a trend that was to intensify significantly in the 13th and 14th centuries (Berthon 2013, 93-94).

⁹⁴ Elsewhere noting an example found in York (Ten Harkel 2018, 9)

There is little evidence for production for the other groups of copper-alloy objects considered, with moulds and lead models generally lacking. Our only production evidence for sheath chapes comes from urban contexts, with direct evidence from Cologne and Paderborn, and a suggestion for production at the Vintry site in London, by Steuer (1993, 83 – based on the large numbers of similar types found there). Evidence for production of non-ferrous equestrian equipment is similarly scant. A single mould has been traced for a cheekpiece: from an urban site in Sigtuna (Sweden) (Gustafsson 2011). It is entirely conceivable that such bimetallic equipment, common between the late 10th and early 12th centuries, required the kind of expanded réseau opératoire that favoured urban production, one that involved blacksmiths working in proximity with both non-ferrous metalworkers and leatherworkers; a specific group of lorimers is not documented until 1260/1261 (Geddes 1991, 182).95 Further evidence gathered here has set out a combination of constructional and tool-trace evidence to argue for particular groups of stirrup-strap mounts having been made in urban centres, building on suggestions made by Hinton (2005, 157; Section 5.3.3.1).



Fig. 103 Distribution of Class A, Type 11 stirrup-strap mounts, highlighting variants proposed to have been made in Lincoln (red) and Norwich (blue)

⁹⁵ This simply represents its earliest appearance in the documentary record; other groups of craftspeople are attested from the 1120s onwards (Ramsey 1991, xx-xxi).

Proposals have been based on restricted distribution networks surrounding Norwich and Lincoln (Webley 2014, 354, 356, fig. 8; 2022, 83, fig. 8.4; Fig. 103), the suggested centres of manufacture. The sub-types involved, within Williams Class A, Type 11, suggest that such networks extended into the early 12th century, based on current dating evidence (Section 5.3.2.1; Webley 2022).

The preceding discussion has drawn on evidence from this study and elsewhere to trace major urban-based production, sometimes as inferred from particular regional patterns of distribution, from its beginnings in the 10th century through to evidence from the 12th century, the latter through the examples of particular buckle types and of stirrup-strap mounts. It is complemented by negative evidence for craft production noted elsewhere at aristocratic sites, in contrast to the pre-Conquest period (Astill 2000, 45; Bourgeois 2014b, 163). The examples given, of centres such as Norwich, Lincoln, and, in the case of sheath chapes, London, suggest a process paralleled by the minting of coins whereby urban production came to be increasingly concentrated in the major centres of the realm (Astill 2000, 45). That London came to be preeminent in craft production is in no doubt, but the importance of its role, based solely on recent analysis of lead-alloy brooch production (Weetch 2017), has perhaps been exaggerated for the period examined here.

To an extent, the method of manufacture for non-ferrous metal items was dictated by the end product (Blair and Blair 1991, 85-87). However, within the set of objects analysed there was an element of choice in the technique employed; patterns may thus be observed. A consequence of metalworkers coalescing in urban contexts was a development in casting technique, whereby lead models were used to impress details into clay piece moulds (Ashby and Sindbæk 2020, 227). Using such models and moulds, copper-alloy production could become serialised. Wrought metalworking also offered a rapid and efficient means of non-ferrous metal production; mass production of dress accessories in 14th-century Paris (France) drew heavily on this technique alongside casting of basic elements in gang-moulds (N. Thomas *et al.* 2008, 37). Casting of pewter was even more efficient as the mould could be reused, if made of stone or copper alloy (Thomas 2011, 416). At the other end of the spectrum, casting could be a heavily involved process, when the 'lost-wax' process was used to make complicated forms in three dimensions. In this study a general trend may be observed

whereby the relative proportions of casting and multiple techniques, which could be a combination of cast and wrought metalworking, changed through time in favour of the latter (Fig. 104).



Fig. 104 Aoristic plot of approaches to basic manufacture through time. Data after c. 1200 (shown as a black line) cannot be treated as indicative as object data was not collected consistently after this cut-off date.

Strap-ends are a good example of an object type that seems to show a shift from generally cast copper-alloy forms in the 11th century to wrought pieces in the 12th century – after a general hiatus, it has been argued (Section 4.2.5). For objects with multiple components, such as buckles with separate plates, elements (the plates, here) increasingly came to be wrought rather than cast (Section 4.4); all examples of 12th- to 13th-century strap-fittings of Cassels type 1.7I have wrought plates (when they were not integral, and still connected). This general trend, towards the efficiencies of urban mass production of the high medieval period through an emphasis on wrought elements, needs to be considered in the context of the nature of the castings of the 11th and early 12th century. Given the lack of evidence for piece moulds, much

interpretation is based on inference, with some of the three-dimensionally moulded buckle forms such as the zoomorphic gaping-mouth beast and standing animal types surely cast through the involved 'lost-wax' process (Section 4.1.2.2). Some mould evidence does exist, though, with aforementioned broken piece moulds for 11thcentury bridle cheekpieces and harness links from Sigtuna (Gustafsson 2011), suggesting that a proportion of the copper-alloy equestrian equipment was cast in this more serialised way. This is further implied by the evidence presented here for particular sub-types as urban products. It may also be noted that the decline of the simply cast leaden brooch by the mid-12th century will have contributed to the relative decline of casting in the plot (Section 7.2.1). The general trend identified may further be tempered, as this change in manufacturing approach did not necessarily mean an overall decline in decoration through time. As noted, the use of gilding remained relatively strong through this trend (Section 7.2.1), as did relatively involved surface decoration (Section 4.4). This phase at the end of our period may be characterised as an intermediary one, prior to a later period of mass production (by the 14th century at the latest; Egan 2008b [1991], 123), by which point demonstrably less time was invested in creating an individual object (Barrère 2014, 676). We have seen, though, how the beginnings of urban commodification helped engender urban identity construction in the case of lead-alloy brooch fashions (Martin 2021, 111).

7.3 Spatial change and identities

7.3.1 Regional patterns

Three main types of patterning may be observed in the data gathered which have apparently regional dimensions. First, there are clusters of finds that appear to relate to regionalised distribution networks. Evidence for such networks was presented in Section 7.2.2; it will suffice to reiterate that they persisted throughout the period, initially based on Danelaw centres, to later cede their primacy to London in particular. A second trend will be treated and interpreted separately below: a distinct clustering of specific types of objects decorated in the two Second Viking-Age art styles within the overall pattern of artefacts thus decorated (Section 7.3.2). Here the focus is on patterning in particular object types in the south of England.



Fig. 105 Relative distribution of various object types (detailed in the text) demonstrating a southerly bias

Distinctive patterning may be observed for certain types of brooch, buckle and knife sheath chape (detailed below), for which relative proportions show a clear bias towards the south of England (Fig. 105). Their relative strength is largely confined to a zone below a line connecting the Severn and the Wash, with absences in Cornwall and Devon, as well as those to be expected from the 'base map' presented in Chapter 3 (Fig. 7) – in the New Forest, the Weald and the area north of London. This southerly strength of use does not extend to areas of Norfolk and Suffolk, where their use is relatively weak. The brooches isolated are the coin-brooches of Weetch Type 2.B, discussed already (Sections 7.2.1, 7.2.2). Buckles comprise the early spur types,

possible sword-belt frames (Naylor Class A1iii), and the form characterised by its pronged plate. Finally, this distinctive distribution is common to a wide range of sheath chape sub-types (above, Fig. 72).



Fig. 106 Relative distribution of dress accessories recorded. Spectrum, from the strongest relative proportions of such accessories, shown in red-oranges, to the weakest, shown in blue-greens

The unusualness of this pattern for the objects isolated is further emphasised by comparison with those for the major dataset groups. Figure 106 gives an indication of relatively strong and weak numbers of dress accessories. This shows a relative strength in eastern England, consistent with patterns identified by Weetch for brooches in an earlier period, but also one more widely spread, and with a particular focus on London. Part of this eastern focus will be explored below in terms of objects decorated in late Viking-Age art styles. For present purposes, the coin-brooch distribution and those for the buckle types mentioned are seemingly aberrant (Section 4.4). The spread of the early forms of spur buckle may be further compared with the relative distribution of equestrian equipment (Fig. 71, above), as spurs lie somewhat at the intersection of animal equipment and dress as functional categories. While equestrian equipment shows relatively sparsely north of the Humber, it does not possess such a degree of emphasis towards southern England as that noted for these spur buckles (Fig. 21, above). Finally, comparison with those objects discussed under the 'elite' heading reveals similarities in the southern zone (Fig. 90, above) – presumably driven by the sheath chape data component – but also significant differences, notably the high relative presence of elite objects on the peripheries of the other major category distributions – in northern England, but also in Scotland and parts of Wales.

It is unlikely a single factor unifies these objects that cut across the major categories. The object types may be considered diachronically, with the mid-11thcentury coin-brooches largely the exception within an otherwise 12th-century group. Comparison with external mapped data reveals partial correspondences of this material with a southern bias and the locations of contemporary mints (North 1980, 148) and also Domesday population densities, specifically in the former Wessex heartlands (Bevan 2012, 498, fig. 2), though not more generally in the case of the latter. A greater correspondence is apparent with landed wealth as mapped Domesday data (Andrews 2019, 46, fig. 4.20). If there are therefore hints that wealth was a factor in defining this distribution, then political and commercial factors seem to be at play also, notably the prominence of Winchester and London, and the proximity to the near Continent. If the sheath chapes do not represent the pinnacle of society overall, certain forms, particularly within Classes A and F, might be relatable to castellans, possibly with cross-Channel landholdings. Spurs are naturally indicative of a knightly class, while the buckle forms identified might have even more elevated connotations. It would be significant if Naylor Class A1iii buckle frames and perhaps the pronged plate type buckles may be associated with the sword belt with certainty, as the implied 'belted knight' occupied a lofty place in noble society. Beyond any concentrations of wealth implied by the 11th-century brooches, the relative density of such members of 12th-century society in the South, near any potential landholdings

across the Channel, and proximal to the nation's centres of power, seems to have duly left a portable material signature of relative strength.

7.3.2 Second Viking-Age art styles in England

The dating assessments show clearly that the early 11th century was a significant moment in time for the non-ferrous corpus examined here (Section 7.1). It has long been noted that the Second Viking Age was a significant time for equestrian riding equipment in England, both in terms of the advent of the use of metal stirrups (Seaby and Woodfield 1980) and for the fashion of non-ferrous decoration on iron equipment and leather harnesses (Graham-Campbell 1992; Pedersen 2004; Roesdahl 2007; Kershaw 2013). Much of this equipment, as well as material from the other main groups considered, was decorated in the late Viking-Age art styles of Ringerike and Urnes (Chapter 5). The two, broadly successive styles will be considered in turn; for material whose decoration is stylistically late Viking Age – while not attributable specifically to either of these styles – there are no stratified examples known from England.⁹⁶

In general, the use of Ringerike-style objects in England has been attributed to the period of Cnut's dynasty (Kershaw 2010, 5). While the art-historical (c. 990-1050/75) and historical (1016-1042) conventions best determine a *terminus post quem* for material found in England bearing Ringerike-style decoration, in practice the start date tends to be rounded to AD 1000. It is conventional to think that the style's use did not last much beyond c. 1050, in line with Scandinavian art-historical dating (Kershaw 2010, 5). *Termini ante quos* represent the more tractable element of the date range when working with archaeological evidence. Though few dates are forthcoming, those that are are explored below.

Kershaw (2013, 155, fig. 4.2) speculated that Ringerike-style brooches may still have been used in the third quarter of the 11th century. The 'Ædwen/Eadwynn' brooch was deposited in a coin-dated hoard of c. 1070 found in Sutton (Cambridgeshire), but it shows considerable use evidence (Haith 1984c, 109-111, no. 105; Hinton 2005, 143).

⁹⁶ Examples include bird-shaped brooches of Weetch Type 30.A, dated to the 11th century in Scandinavia (Pedersen 2001, 33-34), and strap-ends of Thomas Class B, Type 6 (Thomas 2000a, 205).

A further example of a Weetch Type 10.A brooch, a relatively recent find from Bredfield (Brown 2013), exhibits a mixture of Ringerike- and Urnes-style traits and has been dated to the later 11th century. For strap-ends, the only group attributed exclusively to the Ringerike style falls within Thomas Class H. Only one such example has archaeological dating: a strap-end found at Goltho Manor, allowing for a date either up to c. 1080 (Goodall 1987, 172-173, 176, fig. 153, no. 5), or the 1130s (following the site's redating; Everson 1988, 94). Examples of buckles are slightly more forthcoming, with certain examples of Naylor Class F1 having been found in 12thcentury deposits (e.g. Margeson 1993, 25-26, fig. 13, no. 128). It has been argued that Naylor Class G should be considered as being in the Ringerike style (Section 4.1.2.1); examples have been found in contexts which allow for a date after c. 1050 (e.g. Hinton 1990c, 513-514, fig. 129, no. 1106). We may also note that a recent hoard found at Ahlesminde on Bornholm (Denmark) – thought to have been deposited in around 1080 – contained a Naylor Class A5ii buckle (Ingvardson and Nielsen 2015, 33-34, fig. 7). Overall, of the very few Ringerike-style dress accessories with stratigraphic dating evidence a number allow for a use date after c. 1050, though their context of discovery does not necessarily mean they need have been in use that late. A few brooches and buckles provide evidence that the style lasted even beyond 1066, although generalising based on such evidence is done tentatively, as with Kershaw's speculation that the style may have endured until c. 1075.

Although Ringerike-style decoration is common on equestrian equipment, little has been found in excavated contexts – no relevant stirrup terminals, for example (Section 5.3.2.2). This is as might be expected for material often lost in transit. Although Williams (2007a, 1) speculated that Ringerike-style harness equipment may have lasted beyond 1042, evidence was not provided. One harness pendant may now be cited, found in a context dated to the third quarter of the 11th century at the London Guildhall (Egan 2007a, 26, 335, 452, fig. 314, no. S47). All except one bridle cheekpiece found in an archaeological context has been perceived as residual; the Williams Type 3 example found at Holworth DMV provides a suggestion this material may have endured into the 12th century, as the site began in c. 1100 (Rahtz 1959, 146, fig. 12, no. 8). Of nineteen stirrup-strap mounts with associated archaeological dating documented, only five bear Ringerike-style decoration. Though one of these was considered to be residual, an example was found with 11th-/12th-century pottery at Weston Underwood (Buckinghamshire) (Williams 1997a, 42, no. 95). Perhaps the best dating indication comes from a type considered by Pedersen (1999, 152) to bear a Ringerike-style beast (unclassified within Williams Class B). The type has been found in England,⁹⁷ but its dating evidence derives from the Continent: from Haithabu, there dated by the site's demise around the 1060s, but foremostly from dendrochronological evidence for a pit dated to the 1060s in Lund. This latter suggests a *terminus ante quem* of c. 1070 for such Ringerike-style objects, though, again, they need not either have been in use this late, or lost this late elsewhere. Cumulative evidence for equestrian equipment, then, is as for dress accessories: although some suggests that Ringerike-style material endured beyond c. 1050, and indeed beyond the Norman Conquest, such evidence is currently not strong enough to generalise from with certainty.

The later, Urnes style (c. 1040-1135) is thought to be a post-1066 phenomenon in England (Section 2.4). There has been a latent debate about whether metalwork in the style endured as long as architectural examples (dated to the first third of the 12th century). Certainly, as with Owen (1979), Kershaw (2013, 155, fig. 4.2) included the early 12th century in her estimation of the style's floruit.⁹⁸ Thomas (2000a, 217), however, debated whether its influence on metalwork endured beyond the turn of the 12th century. As with Ringerike-style material, the few available *termini ante quos* provided by dated examples of metalwork will be collated.

The Weetch Type 10.A brooch from Bredfield has already been mentioned, in terms of its hybrid decoration and later 11th-century date. None of the animal brooches in the (Scandinavian Urnes) style have been found in an archaeological context in England; on archaeological evidence from Scandinavia they date between the mid-11th and early/mid-12th century (Kershaw 2013, 151; Søvsø and Jensen 2020, 1-2). Of the buckles attributable to the Urnes style, only a single object has archaeological dating (Webley 2018, 394). An example of Naylor Class A6 was found at the London Guildhall site in a context dated to c. 1070-1090 (Egan 2007a, 33, 448, fig.

⁹⁷ PAS: LIN-3B5399, SUSS-929D3F, BUC-1693A1, BH-9C3582, PUBLIC-589DA1, SF-A8B9E4, SF-A14C79, WAW-4319D1, SOM-9892F1

⁹⁸ Given as c. 1050-1125

33, no. S2). This represents a significant piece of dating evidence given the (not unexpected) dearth of information provided by finds of equestrian equipment. The only equestrian object found in a stratified archaeological context is an Urnes-style stirrup terminal found in a pit sealed under the rampart of Northampton Castle (Goodall and Webster 1981, 122/pl. 20, fig. 22, no. 17). This provides a *terminus ante quem* of c. 1100; the object was found with 'late Saxon pottery' (Owen 1979, 218/pl. 14, no. 14). Aggregated dating evidence from so few stratified objects should be approached with caution. Nevertheless, the London Guildhall buckle and Northampton stirrup terminal currently back up Thomas's suggestion that Urnes-style metalwork, at least, may not have endured beyond c. 1100, as does 'Flambard's crosier' (see above, note 17). This stands in apparent contradiction to the even longer life suggested for certain objects in the preceding Ringerike style and architectural evidence – hence the caution.

In sum, although a significant proportion of the dataset features decoration in the two late Viking-Age art styles, little traction can currently be made to refine the dating of such pieces beyond that derived from conventional art-historical analysis. A major reason for this is the general lack of stratified equestrian equipment. The combined evidence, however, suggests continued use of objects decorated in a late Viking-Age style well beyond the Norman Conquest (Owen 2001, 220). That said, the dating offered suggests they may not have endured as long as they seem to have in architecture, in the case of the early 12th-century Norwich Cathedral capital or the Southwell lintel (Dixon *et al.* 2001).

For the VASLE project, Richards and Naylor (2010, 347, fig. 32.5) presented a distribution plot of a subset of their overall dataset (overall total n=3,379), comparing objects decorated in these two late Viking-Age art styles with those in the preceding 9th-/10th-century Borre style. This seemed to show a clear distinction between the earlier material, largely confined to the area of Scandinavian settlement in eastern England, and that of the 11th century, which was much more widespread. It does seem, however, that this distinction may have been exaggerated as a result of the limited amount of data at the time, as well as by sample selection; strap-ends and

384

buckles were omitted, for example (Richards and Naylor 2010, 350).⁹⁹ Had a wider range of dress accessories been included, the clustering in eastern England would not have appeared so distinctive as it does for, say, disc brooches (see also Kershaw 2013, 62, 136-137, maps 3.7, 4.2-3). Richards and Naylor's diachronic comparison may be revisited in light of the vastly expanded dataset accumulated since. Although Borrestyle material was not gathered exhaustively (given the date parameters of the present project), around 350 examples of relevant brooches, plus strap-ends and buckles of the types outlined (see note 99), provide ample background data against which to compare objects decorated in the Ringerike and Urnes styles. They also act to give a clearer sense of the distribution of such material compared to the more selective picture painted by Richards and Naylor. Here, the earlier material is compared with over 1,400 examples of objects decorated in the Second Viking-Age art styles (Fig. 107). Although Borre-style objects may be noted outside the core eastern zone noted by Richards and Naylor (2010), they remain negligible compared to the quantity within this zone. The Ringerike- and Urnes-style artefacts are distributed across a wider area than the earlier material: this was indicated in Richards and Naylor's (2010, 347, fig. 32.5) plot, but is shown far more clearly here (Fig. 107). Data from areas such as the South East, once 'sparse' around the Weald and Greater London (Richards and Naylor 2010, 350), are no longer so. The two chronological groups are compared against each other in relative terms in Figure 108. This confirms that even if the Borre-style material was demonstrably present beyond eastern England this latter area was where it was clearly focused (the lighter spectrum yellow through to blue) relative to the later material. In turn, the Second Viking-Age material was relatively strong (the darker spectrum – orange and red) in southern England, but also in a few pockets in the Midlands.

That objects decorated in the Second Viking-Age art styles are widespread within England is not unexpected, given recent work on this material (e.g. Owen 2001, 210, fig. 11.2) – which challenged a former emphasis on the Danelaw (e.g. Webster 1984c, 111). The increasing importance of Winchester and London under Cnut and his

⁹⁹ Respectively, Thomas Classes B, Type 4, Type 5 and E, Type 4, and Naylor Classes A2, A3, A5iii, B1, C1 and E3



Fig. 107 Distribution of Borre-style artefacts and Second Viking-Age art-style artefacts

successors is reflected in the distribution in the prominence of the South (Thomas 2000a, 247, 260), although, of course, the Danelaw saw continued circulation of such material (Figs 107, 108). It is instructive to compare the distribution of the Ringerike-style objects with the broadly successive pieces decorated in the Urnes style. The general plot shows a coterminous distribution (Fig. 109). Plotting these distributions as relative proportions reveals a far more mixed picture than the preceding comparison



Fig. 108 Relative proportions of Borre-style artefacts and artefacts in Second Viking-Age art styles

between Borre-style and Second Viking-Age objects (Fig. 110). While there are isolated areas of a relative strength for Ringerike-style objects, such as near Cnut's capital, Winchester, the only area consistently showing as relatively strong in Ringerike-style artefacts is modern-day Norfolk. For Urnes-style objects we should be mindful of lower numbers which might skew results (n=217; Ringerike n=1,204), but relative strength of numbers is apparent towards the distribution's periphery. This is important because it shows no contraction in the zone of acceptability of material decorated in a Viking art style in the second half of the 11th century: on the contrary, its acceptability was, as Owen (2001, 220) put it, 'widespread [...including] Anglo-Norman milieus'. As such, we can no longer accept generalisations, made only a few decades ago, that the distribution of Urnes-style metalwork 'centred on the Danelaw'



Fig. 109 Ringerike- and Urnes-style artefacts, showing distributions which are largely coterminous

(Webster 1984c, 111), or its corollary: that 'the virtual absence of [...] finds in the south, [...] reflects the stylistic hiatus produced by the Conquest'.

We may go further by unpacking these patterns. Internal patterning within the distribution of Second Viking-Age material identified has been previously overlooked, given the recent notion that material decorated in this way had a general currency



Fig. 110 Relative proportions of Ringerike- and Urnes-style artefacts

(Owen 2001, 220; Richards and Naylor 2010, 350; Weetch 2014, 338-339). Against this general background, though, particular types of artefact have been identified here as having a distinctively eastern distribution (Fig. 111; Section 4.4). Specifically, they are buckles of Naylor Class F (Section 4.1.3; Fig. 18), strap-ends of Thomas Class H (Section 4.2.3; Fig. 30), Ringerike-style harness pendants (Section 5.2.3.1; Fig. 59), and brooches of Weetch Type 30.A (bird-shaped) or in the form of Urnes-style beasts (Section 4.3.3.1; Fig. 36). Comment on this distinct, seemingly anachronistic distribution – a pattern looking towards Scandinavia – has often been avoided for lack of numbers (e.g. Thomas 2000a, 256 – regarding Class H strap-ends); this may be the case for Kershaw (2013, 117, map 3.22) and Weetch (2014, vol. 2, 237, map 22), who both provided maps of Second Viking-Age brooches but shied away from detailed comment.



Fig. 111 Distribution of certain 11th- to 12th- century object classes centred on eastern England bearing late Viking-Age art-style decoration – mainly dress accessories (see text for details)

Many factors could be at play that determine why the particular object types highlighted focus on modern-day East Anglia and Lincolnshire, and to seek a single unifying factor may not be suitable. However, it is striking that within this geographically distinctive subset there is only one type of equestrian item; the group otherwise comprises dress accessories.¹⁰⁰ We have seen that non-ferrous equestrian fittings were widespread, including those decorated in late Viking-Age art-styles (Hinton 2005, 157); these have been suggested to have had an overriding function in constructing a masculine identity (Kershaw 2013, 177), or a local elite one (Ten Harkel 2018, 15, 17) by this time. However, compared to other items of equestrian equipment, harness pendants of the 11th century are very rare and, arguably, played a particularly prominent role in terms of display: they were one of the most visible elements, suggested to possibly have had a singular place decorating the brow-band (Section 5.2.2.1). As such, these harness pendants may have connoted a particular Scandinavian affiliation in modern-day East Midlands and Yorkshire. Of the dress accessories, the tight distribution for the strap-ends in modern-day Lincolnshire may suggest a local production centre. The most numerous relevant object types are the brooches and buckles, and these cluster strongly in modern-day East Anglia and Lincolnshire (Fig. 111). The buckles, in particular, have been argued to be a notably late variant of Ringerike-style ornamented object (Sections 4.1.2.7, 4.1.3), and may therefore represent a lingering affinity to Scandinavia beyond the Norman Conquest, and deep into the 11th century, if not later. Potentially contemporary with them, or later, are the bird-shaped brooches (Weetch Type 30.A), while demonstrably post Conquest are the few Urnes-style animal brooches. As well as being relatively late within the Second Viking-Age corpus, and all potentially, if not certainly, post-Conquest in date, all the objects within this select group show a particular facility for signalling, and potentially (re)activating, a Scandinavian identity, as opposed to a regional, eastern one. This is especially the case for the brooches, which may have formed part of strategies of resistance to newcomers in this region of post-Conquest England (Section 4.4). It is to be borne in mind that these brooch forms are Scandinavian ones, with no obvious evidence of hybridity; in Norway such brooches were argued to help create a Danish identity (Røstad 2012). Of course, these objects may have represented other facets of identity but the lack of site contexts for these finds inhibits assessment. Overall, such evidence thus helps us nuance interpretation of the Norman Conquest which has been in the past conceived of as a 'monolithic

¹⁰⁰ With the caveats that the strap-end might not have been an item of dress, and the harness pendant type represents a very small fraction of the overall corpus of relevant equestrian items.

event' (McClain and Sykes 2019, 100). Drawing together the Scandinavian axis along which the above material operated, both in terms of exchange and semiotics, and its dating, we turn next to the changing connections in this period between England and other parts of Europe.

7.3.3 International connections



Fig. 112 Overall dataset before mean end date of c. 1139

A diachronic overview of the entire dataset is presented in Figs 112 and 113. These maps are based on the mean of the objects' dates, as adjusted following the dating established by this project (for details see Appendix 2) – nothing should be read into the precision of this date. What the maps illustrate is a fundamental shift, emerging

from all of the case studies, in the orientation of England's international parallels for non-ferrous metalwork. Put broadly, the shift is from southern Scandinavia and the Low Countries in the 11th century, to the near Continent in the 12th century – effectively France and the German Empire. Despite the spurious precision of the mean date used (c. 1139) to create such a shift in the mapping software, it is nonetheless indicative of a persistence of Anglo-Scandinavian connections deep into the Norman period, at least two generations after 1066. It may be compared with more monumental aspects of material culture, such the erection of castles or the rebuilding of major churches, already largely effected within the same timeframe (Plant 2003, 236; McClain 2015, 31). The components of these connections will be teased out.



Fig. 113 Overall dataset after mean end date of c. 1139

The background to this apparently 12th-century shift in orientation, lies in the Anglo-Scandinavian socio-cultural axis established in the 11th century. As such, it does not appear to lie in socio-economic trading links inferred from contemporary port locations. Key among these was trade with Flanders, in bulk goods and foodstuffs (Gardiner 2000, 92-93; Oksanen 2012, 147-149); metalwork from that area may be framed in Anglo-Scandinavian terms (see below). Prefaced by a raiding phase in the final years of the 10th century, when evidenced by elite objects such as select swords and stirrups (Pedersen 2004, 47-51; Roesdahl 2007, 10-11), Anglo-Scandinavian connections came largely a result of the Danish Empire (1014-1042), centred on the reign of Cnut (1016-1035). In the 11th century metalwork present either side of the North Sea is dominated by equestrian equipment, mostly embellishments in copper alloy, but is also evident in other object types (Fig. 112). This material will be dealt with in turn.

The presence of comparable equestrian fittings in copper alloy in both England and Scandinavia has a literature going back over 40 years (Fuglesang 1980, 132-135; Graham-Campbell 1992, 82-87; Williams 1997a, 105-107), with important recent surveys by Pedersen (1999; 2004) and Roesdahl (2007). Such material can be analysed on the basis of art style, particularly the late Viking-Age Ringerike style current during Cnut's reign, and formal traits, such as the presence of three knobs on the loops of links (Section 5.1.1). Object types implicated in what presumably operated as sets of equipment, are cheekpieces and bit links from snaffle bits (Section 5.1), harness links (Section 5.1), and stirrup-strap mounts and stirrup terminals (Section 5.3). A map of the international distribution of such equipment is presented here for the first time (Fig. 114), and shows that the modern-day Low Countries participated in this North Sea equestrian fashion (see also Figs 54, 68, above). Growing evidence – primarily from detector finds – in this last area (e.g. Deckers 2014; 2017; IJssenagger 2017) has revealed localised variations in the styles used. Cheekpieces are of Williams Type 3 (Section 5.1.3; Webley 2022, 85), comparable stirrup-strap mounts are confined to particular sub-types (Section 5.3.3.1), and pendants may have formed part of the ensemble (in contrast to Scandinavia where they are apparently absent (Section 5.2.3.1)). In the Low Countries the decorative content of this equipment seems to allude to late Viking-Age art styles, most closely the Ringerike style (Roxburgh et al.

394



Fig. 114 Map of international connections (11th to early 12th century) divided by major groupings (equivalent English finds not shown, for clarity)

2018), and its transformation into a local idiom may have been in evocation of the powerful Danish Empire (Webley in press). It has also been noted that this range of equestrian fittings outlasted the period of Danish rule in England (1014-1042) (Roesdahl 2007, 26); the extent to which use of material decorated in late Viking-Age art styles endured in England has been discussed above. Here, comparison with continental material reveals a disparity between bridle fittings and stirrup fittings. While the latter can be suggested to have endured into the late 11th and even the early 12th century,¹⁰¹ continental bridle fittings in the Urnes style (Pedersen type 2) are

¹⁰¹ In Denmark, stirrup-strap mounts have been recorded in the Urnes style (e.g. DIME ID 24288) and in 'Romanesque' forms (e.g. Williams 1997a, 107, no. C9).

unknown in England. This may represent a particular approach taken to bitting after the Norman Conquest, discussed further below.

Apart from a few particular forms of knife sheath chape, artefacts discussed in the 'elite' objects case study do not feature in this culturally Anglo-Scandinavian axis. Dress accessories, however, do. Dating for some of these objects can be informed by art-style dating, such as the Ringerike-style buckles of Naylor Class A5ii (Section 4.1.3) and certain bird-shaped brooches of Weetch Type 30.A (Section 4.3.3.1).¹⁰² Other objects also provide contemporary connections, such as strap-ends of the arched terminal and socketed end types (Section 4.2.2.2). Due to their Urnes-style decoration, different groups can be dated to the later 11th century: for Thomas Class G strap-ends (Section 4.2.2.1), Urnes-style openwork animal and disc brooches,¹⁰³ and buckles of Naylor Class A6 (Webley 2018). Due to a relative lack of late Viking-Age stylistic decoration on brooches, their influence has been subordinated to more 'masculine' artefacts, such as the equestrian equipment discussed (Kershaw 2013, 175, 177). This is to the neglect of a group that cannot be dated on the same grounds. Cloisonnéenamelled disc brooches (Weetch Type 20) are a well-documented form with Anglo-Scandinavian currency (Pedersen 2004, 56-58). Based on archaeological evidence, their floruit can be suggested to have endured into the early 12th century (Section 4.3.2.1).

Overall, evidence for contact between England and Scandinavia goes beyond the artefacts discussed here to include other 11th-century objects, such as copper-alloy hooked tags and lead-glazed pottery (Pedersen 2004; Roesdahl 2007, 17-18). Importantly, on both sides of the North Sea there is ample evidence that some of these object types continued to circulate after 1066, and even into the early decades of the 12th century. Pedersen (2004, 67) has suggested that this was a result of the maintenance of ecclesiastical and familial links. The second key observation made here is the involvement of areas approximating to the modern-day Low Countries in which this material culture was appropriated and transformed into a regional idiom.

¹⁰² Bird-shaped brooches were not comprehensively documented due to a strong imbalance in favour of Scandinavian finds: see Pedersen 2001.

¹⁰³ Openwork animal brooches were not comprehensively documented due to a strong imbalance in favour of Scandinavian finds: see Røstad (2012) for Norwegian examples and Isberg (2019) for examples from south-west Skåne.
A southward shift away from this axis in favour of Continental Europe is a major observation, drawn from comparing the distribution patterns of the types of metalwork examined. More important, perhaps, is its chronology. A social dynamic is also involved: Figure 115 shows that the material in this later group features a notable proportion in the 'elite' object category (in green). A significant proportion of the 'elite' objects are the mounts known as 'binding strips', many of which have been argued here to have decorated shields, alongside so-called 'octopus' mounts (Section 6.3.3.1). Dating evidence suggests they were a post-Conquest phenomenon, but a European elite one, as suggested by their wide geographic range as well as a strong association with high-status sites. Indeed, before the early 12th century, all of their dating evidence comes from the Continent (Section 6.3.2). It may be argued that they therefore exemplify a process that has been described as a 'Europeanisation of elite culture' (Creighton 2012, 112), otherwise evident in zooarchaeological markers or in high-status examples of 11th- and 12th-century gaming pieces (Barrère 2014, 673; Webley 2021b, 911, fig. 2b).

Other objects discussed outside the artificial confines of Chapter 6 can be argued to have been part of the same process. Chief among them are the small buckles with integral plates and rivets, thought to be from spur leathers (Section 4.1.2.3), and thus connoting high-status riding. These also have a European distribution in the first half of the 12th century, one within which the gaping-mouth beast buckle – arguably also a spur buckle (Section 4.1.2.2) – circulated, but to a far lesser extent. Also relevant in this context are the earliest of the harness pendant sets, from the phase in which pendants primarily decorated the breast-band. Circular, crescentic and annular pendants, with their suspension mounts generally of folded and slotted loop construction (see Section 5.2.2.2), form a group broadly contemporary with the aforementioned objects, though with a late 11th-century start date. These pendants too are found widely across modern-day Europe, and most importantly for the present discussion, outside the Norman realm or adjacent polities. Though elite associations are demonstrable for spur buckles and harness pendant sets, they are not as strong as those for binding strips (also below, Section 7.4). The contextual approach adopted allows for their framing not as part of an insular 'long Norman Conquest', a phenomenon shown to have had an emphasis towards material



Fig. 115 Map of international connections (12th century) divided by major groupings (equivalent English finds not shown)

culture change in elite milieus (e.g. Sykes 2007; Jervis *et al*. 2017), but a wider, broadly contemporary, process of self-definition of elites across northern Europe.

Other object types that exemplify a shift away from the North Sea and towards the Continent include dress accessories, and the sheath and scabbard chapes discussed in Chapter 6. Examples of the latter found both in England and on the Continent are mostly of Bishop Class G, dated to the 12th century or slightly later (Section 6.1.2.2). Despite being discussed under the heading of 'elite' objects, in general knife sheath chapes were suggested as occupying a place somewhere below the pinnacle of the social hierarchy, with Class G examples in particular perhaps associated with an urban elite (Section 6.1.4). The distribution of these chapes is, furthermore, suggestive of mercantile connections, being concentrated with the Rhine-Maas/Meuse corridor (Section 6.1.3.1). Knife sheath chapes of Classes A and F are broadly contemporary, though with an earlier, late 11th-century, start date for some Class F examples (Sections 6.1.2.1). Their social distribution differs from those of Class G, and tends towards higher-status sites (Section 6.1.3.2). Though their range in Europe tends to be southward from England, rather than eastward as with Class G, there is nothing directly northern French about the distribution that would argue that they were a specific product of the Norman Conquest.

In terms of dress accessories, lead-alloy plate brooches of Weetch Types 13, 14 and 23 may date before or after the Conquest and are widely spread; they are best assessed in terms of their strong urban associations (Section 4.3.3.1). The annular brooches that superseded plate brooches gradually over the late 11th and 12th centuries have been argued to exemplify a general trend, one towards the dominance of the form within European dress (Shields and Campbell 2011, 71). This study has demonstrated their wide distribution across Europe, especially by the second half of the 12th century (Section 4.3.3.1), but a rounded sense of their spread is inhibited by a tendency towards plainness for these early examples, which are thus difficult to date out of context. Penannular brooches, suggested here to have been an unacknowledged feature of this period (Section 4.3.2.3), are also hard to assess due to small numbers, but they too are distributed across Europe, often with a close association with high-status sites. To an extent, buckles may also be analysed along social lines. Spur buckles have already been considered; analysis of other 12th-century buckle forms is hampered by low numbers, though the 'pronged' form of plate, and its frames, also tend towards high-status associations; they are widely distributed, as are strap-fittings of Cassels type 1.7I (Section 4.1.4). Finally, the single-looped buckle frames which came to be the common form across Europe in later centuries have been argued, in specific types, to have been present from around the middle of the 12th century (Section 4.1.4). Their contextual associations are mixed, and, as with annular brooches, they represent a major European trend from this point in time – a less socially contingent form of Europeanisation than the set of objects characterised by elite associations discussed. Where such dress accessories are present in Scandinavia, they reveal that these areas had, by the end of the century, been drawn into these 12th-century European modes.

Overall, the shift in metalwork patterning presented – from an Anglo-Scandinavian axis to a continental one – is less surprising than its apparent chronology. The persistence of Anglo-Scandinavian connections into the early 12th century, combined with a contextual approach, demonstrates a pan-European spread of material which first overlapped with it and then succeeded it, albeit initially in higher-status contexts. In combination, these observations make it difficult to attribute these changes to the Norman Conquest, 'long' or otherwise. The forms of evidence considered in this thesis were never likely to evidence Orderic Vitalis's observation of a '[transformation] by foreign fashions', within a matter of years of 1066 (quoted by Weetch 2017, 263). However, the rate of change presented here tallies neither with that observed within elite zooarchaeological assemblages nor in architecture (Section 2.1.2). It may also be contrasted with specific Norman influence, detectable on the margins of this dataset. The iron curb bit used in elite riding seems to have arrived in England via a specifically Norman vector (Section 5.1.3), with a new variety of horseshoe (Clark's Type 2) possibly also a Norman introduction (Clark 2019, 190, note 6). The arrival of such bits may explain the apparent decline in snaffle bits decorated with copper-alloy embellishments in the later 11th century (Section 5.1.2.4). If there was any Norman superiority in equitation, and specifically in terms of warhorses, then this evidence may help provide partial explanation for differences in conduct during war; studies have not revealed fundamental genetic differences between English and Norman elite horses (Keefer 1996, 117, 121). More fundamentally, in this different approach to bitting, and therefore riding, we perhaps come closest to Normanitas as an embodied ethnic 'way of doing'.

Beyond the dataset, other trends may also represent Norman innovations in portable material culture. They include the use of equestrian imagery on aristocratic seals (see Nieus 2016, 7, map 1) and the material culture of certain games, notably chess and tables (MacGregor 1985, 137). Furthermore, within the Anglo-Norman realm, for the non-ferrous material discussed here the material culture of sites in Normandy such as Château Ganne or Rubercy Castle appears to reflect international trends, possibly trends arriving from across the Channel. Overall, it may therefore be concluded, in terms of the material focused on here, that 'there is probably more evidence for the influence of Scandinavian culture on England following Cnut's conquest than there is for the Normans', as Vince (1991, 434) observed of the portable material culture of London.

7.4 Social associations and identities

Assessment of the social status of a metal object is taken to lie in the intersection of the quality of its manufacture, its ubiquity and its context of use. As such, an *a priori* reasoning of a given object's status based purely on perceptions of quality are subordinated to an approach that foregrounds context (Section 3.1.1). Drawing on observations made above regarding approaches to manufacture and decoration in due course, this section will first consider the contextual associations of the objects analysed, and what they suggest about the status of their users.

A correspondence analysis of the main object types and site types is presented in Figure 116. It shows a singularly clear relationship between 'binding strips', held here to be mounts from shields, and castles, be they urban or rural. This is a longstanding association (see Section 6.3.3.2), and one that has not been modified by the advent of schemes to record metal-detected material. Most other types of object cluster near the 'decontextualised (rural)' association, particularly equestrian equipment and swivel fittings, as expected for objects lost primarily in transit through the countryside. Plotting at a remove from this group are brooches, occupying a place around the midway between a 'decontextualised (rural)' association and an 'urban' one. Multiple attempts were made to 'peel' the data to elucidate any further patterning,¹⁰⁴ but, despite these attempts succeeding in separating out the object types that clustered together, none led to any clear associations between the remaining object types and a type of site. It may thus be concluded that there was a certain level of social homogeneity to the types of object studied here, with the exception of 'binding strips'. Though the clustering of most types around the 'decontextualised (rural)' variable shows a clear association, it can be read another way: as indicating a wide spread for other pertinent contextual associations. This

¹⁰⁴ Including omitting the most dominant variables, such as 'copper alloy' (primary material) and 'rural (no context)' (contextual association). Furthermore, outliers were addressed by stripping out 'brooches', 'binding strips' (the only object types lying beyond +/-1 from the centre point), and any variables unique to these object types.

breadth of contextual association has been drawn out particularly in the analyses of cheekpieces and bit links for snaffle bits (Section 5.1.3), harness links (Section 5.1.3), stirrup-strap mounts (Section 5.3.3.2), and strap-ends (Section 4.2.4). On the periphery of the cluster are harness pendants and chapes, whose associations tend, respectively, closer to urban and castle sites. As noted, brooches, as with sheath chapes, fall somewhere between the rural and urban associations, but not directly with any site type, and certainly not towards the elite types of site, when treated globally.



Fig. 116 Correspondence analysis plot to compare object types and site types (see key). Based on all variables (considering 799,470 data points), plus all main object types (for labelling purposes). Icons either show where the variables plotted, or, to clarify where variables cluster this point is indicated by a line. The centre point (0, 0) is shown in red.

Based on the preceding analysis, 'qualitative distinction' can only be identified in binding strips (shields) at the object type level.¹⁰⁵ That they are high-status objects is reflected not just by their strong association with high-status site types, but also in

¹⁰⁵ See Section 2.2.2 for elaboration on Bourdieu's concept of 'distinction'

their gilt surface treatment (Section 7.2.1). Notably, their status cannot necessarily be adduced from their construction alone, which can be relatively basic, excepting the surface treatment. Qualitative distinction has been noted in the case studies for particular formal or typological groups within object types. For example, it has been identified for the small, penannular brooch (Section 4.3.2.3). Again, their elite nature follows not from their manufacture, but their strength of association with castle sites, presumed to imply the use of delicate, and socially restricted, fabrics. Similarly, it has been identified for sheath chapes of Classes A and F (Section 6.1.3.2). Finally, an association with elite sites has been noted for certain types of buckle or strap-fitting, at least more in terms of a 'quantitative distinction': spur buckles, and also – but from a lower evidence base – Cassels type 1.7I strap-fittings, Naylor Class A6 (Urnes-style) buckles and gaping-mouth beast buckles. If the last are accepted as spur buckles (see Section 4.1.2.2), then this group of specialist buckles stands out in terms of elaborate, seemingly bespoke moulding (gaping-mouth beast) and frequent gilding (spur). Object types and sub-types identified in this study as potential objects of distinction, either for qualitative, or, in some cases, quantitative reasons, have been identified on their site associations rather than a perception of the quality of their production. Indeed, an assessment of 'quality' would often not be a direct measure of their status, especially in their present-day fragmented or corroded appearance. Use of the objects identified is best analysed, therefore, not by reference to outward appearance so much as by functional category and domain: as the attributes of a militarised social elite (binding strips; functional category 20 (military equipment)) which not did not simply possess horses but had the specialised equipment required to traverse the landscape rapidly (spurs; functional category 14 (animal equipment)); curb bits may also be cited in respect of the latter (see Section 5.1.4). Their increase may be related to the increasing status of the knight across the century, the development of concomitant ceremonial, and iconography – exemplified by the equestrian seal, chivalry and the tournament, the last from the second quarter of the century onwards (Crouch 1992, 132-148). The equipment can be seen as an active component in the construction of such an identity.

A particular measure of 'qualitative distinction' isolated here is the presence of surface gilding (Section 7.2.1), noted for some of the preceding groups, particularly

spur buckles and binding strips. That gilding alone often distinguished the higher status version of a given object is suggestive of the limited contemporary range in quality terms; for 11th-/12th-century England it is difficult to invoke the four-tiered *Qualitätsgruppen* proposed by Spiong (2000, 118-148) for contemporary continental brooches. It has been noted that, beyond the association of gilding with high-status sites, it was a characteristic of the 11th-century 'coin-brooches', and the cloisonnéenamelled disc brooches also embellished with enamel. Elsewhere, it has been argued that this period can be characterised as one in which status was founded simply on the possession of metal goods (Felgenhauer-Schmiedt with Graham-Campbell 2007, 252; see Section 2.2.2). Here it is argued that, even if such objects were more commonly possessed that had been perceived, often the difference between a higher status object and a lesser one, within an otherwise relatively homogenous corpus, could be as seemingly minor as the addition of a surface treatment.

Having picked out various objects of 'distinction', based on their association with elite settings and/or the nature of their decoration, we may revisit some of the other object types characterised as being more socially homogenous. A reason for doing so is to consider historic 'high-status' labels for certain groups of objects. Examples include sheath chapes, associated with the upper classes in the German literature of the 1980s (Section 6.1.4), or stirrup-strap mounts and allied copper-alloy equestrian equipment, which has been associated with an '[11th-century] military elite' (Sheeran 2009). More recently, suggestions have been made that the social status of both object types be, to an extent, downgraded – by Hinton (2013) in the case of stirrupstrap mounts, and Steuer (1989) for knife sheath chapes. The present study echoes these suggestions, prompted by the large numbers that now form the corpus, and which are ever rising. This is not to disavow the high-status connotations of equestrian equipment or decorated sheaths, but rather to contextualise the object types drawn out here as being more appropriate to a social tier connected to the aristocracy, rather than the highest levels of contemporary society. For stirrup-strap mounts, this also draws on new evidence for urban production which tends towards serialisation (see Section 5.3.3.1).

Within a general heading of elite material culture, we may aspire to establish relative hierarchies, as has recently been performed in German scholarship (Section

3.1.1). However, this exercise tends to implicate many different types of artefactual evidence that have not been covered here. Working within to the present dataset, but at the same time breaking beyond its bounds, an example is offered of a site whose material culture can start to be explored more globally. Copper-alloy material from the Niederungsburg bei Haus Meer, includes a cast strap-end and an openwork stirrup-strap mount (Kluge-Pinsker 1992a, 36-38, nos 10, 65). Alongside them sits a far larger quantity of ironwork; relevant to discussions of horse use is a snaffle bit, a horseshoe and two prick spurs (Kluge-Pinsker 1992a, 37-38, nos 52-54), demonstrating the ability to traverse the landscape rapidly (Loveluck 2009, 168-169). Further indications of lifestyles at 'Haus Meer' include zooarchaeological evidence for the hunting of red and roe deer, wild boar, hares, wild geese, waders and a cormorant (Loveluck 2013, 289). The inhabitants of this moated settlement also bore arms (Loveluck 2009, 169). Taken together, and allowing for problems of conflation of evidence from across time and internal space, these artefacts represent the lifestyle signature of a local elite; whether it is an aristocratic or aspirational, milites one has been debated (Loveluck 2009, 169; 2013, 290). The key object type noted in respect of this study is the stirrup-strap mount; in a recent German study this has been claimed as a Barometerobjekte (Biermann 2020, 239), for the lower nobility at least. In the Ardennes, in modern-day France, one of the very few examples of the object type documented comes from the early castle site of Montcy-Notre-Dame, 'Le Chateau des Fées' (Serdon-Provost 2016, 153-154, figs 3.73-3.74, no. 95). However, the evidence of the most recent work (e.g. Pedersen 2004, 66; Hinton 2013, 152), including that presented here, suggests that a consideration of the combination of the numbers of stirrup-strap mounts found alongside the site assemblages in which they are included, means that we may offer a relativised assessment for England in suggesting that many were owned by the richer free peasantry (see also Loveluck 2013, 289). For this social tier, the possession of arms, their ability to hunt and having the leisure time to play board-games, was in alignment with those higher up the social scale, to whom they perhaps owned service. It is argued here that the differences between their respective portable material culture were sometimes subtle, and that qualitative distinction often resided in minor variations in objects owned or in their decoration.

The preceding analyses have not only challenged the notion of a general lacuna in metalwork of the 11th century, but have attempted to analyse it in social terms. A key theme has emerged relating to equestrianism. Horse ownership was an axiomatic symbol of a relatively high social status (Crouch 1992, 124; Harvey 2019, 3). At the earlier end of the period examined, the importance of horses in elite society is evidenced from later 10th-century and early 11th-century documentary evidence (Section 1.2.2.1); it is also evoked by the extract from *Maxims* quoted at the start of Chapter 5. This study has built on previous work to attempt to relativise it for the 11th century in material culture terms. Studies had already commented on the widespread artefactual evidence for equestrianism in late early-medieval England (Graham-Campbell 1992; Williams 2011; Hinton 2013), offering it as a counterpoint to a perception that contemporary Normandy was far more 'horse minded' (Davis 1988, 81), especially under Cnut or Edward the Confessor. Alongside the metal-detected evidence is recent parallel evidence derived from studies of excavated assemblages (Mould 2004, 43-44; Lewis 2019, 244). What has been reframed is the notion that the material manifestation of such equestrianism was the preserve of a contemporary elite (compare Hinton 2013, 152 with Graham-Campbell 1992, 88; Sheeran 2009). In respect of the copper-alloy material discussed here we may no longer talk of a cavalry elite under Cnut. The various 11th-century copper-alloy elements examined, relating to the stirrups (Section 5.3), harness, and, more specifically, the bridle (Section 5.1), appear to represent the 'standard' equipment of the 'chevalier-paysan', to employ Colardelle and Verdel's (1993) term for the inhabitants of Charavines-Colletière. Further work is required to locate this equipment more widely in society, and at the same time precisely, perhaps amongst the *rædmen* of manorial households (Weikert 2018), geneats who owed riding service (Hyland 1999, 117), or the free tenantry (Hinton 2013, 152); this thesis offered the intra-site assessment of material from 'Haus Meer' as an approach to further this aim.

If this sort of equipment helped distinguish them from the wider peasantry (Loveluck 2013, 290), then it may be speculated that the items of distinction their owners did not possess were the relatively rare spur and harness pendant. While there is a geographical bias towards the east in the distribution of Anglo-Scandinavian harness pendants (Williams 2011, 257; Section 5.2.3.1), their scarcity might also

suggest a particular social distinguishing of their owner. We may be more certain of the importance of the spur, which has been described as the best measure of *milites* status – as opposed to broader evidence for equestrianism (Portet and Raynaud 2009, 216; see also Creighton and Wright 2016, 177). Although not focused on in this study, and in part due to their largely ferrous nature and possibly also due to a relative difficulty of loss, 11th-century spurs are known in notably small numbers (Williams 2011, 257; Weikert 2018, 66), although we have here started to explore using buckles from their leathers as a proxy.

This pattern of general homogeneity of equestrian equipment combined with relatively subtle elements of distinction, suggests a prevailing trend of minimal wealth distinctions at the upper end of late Saxon society (Senecal 2001, 252; Leonard 2015, 489; Gardiner 2017, 99). Given the widespread nature of the bulk of this equestrian equipment, it would seem therefore that in this period 'closure theory', the notion championed by Hinton that elite restricted access to material culture (see Section 2.2.2), provides an inadequate model for assessing social trends.

Coin-brooches may also be cited as objects of distinction, given their rare raw material and surface gilding (Section 7.2.1), but, being fabricated from coins extracted from contemporary currency, even they suggest minimal wealth distinctions and simple strategies for conveying difference. As noted above (Section 2.2.2), these were not objects of restraint borne of piety, rather they were items of local status display which at the same time had devotional connotations. It is clear from this dataset is that the Norman Conquest did little to alter this social patterning, be it based on the short-term evidence of the coin-brooches of the mid-11th century (Section 4.3.2.1), or the more medium-term evidence of stirrup-strap mounts, some of which have been documented for the late 11th century and beyond (Section 5.3.2.1).

Objects which, by contrast, have shown clearest exclusive relationship to the social elite belong to the 12th century. Following reassessment here, the 'binding strip' may be perceived predominantly as a military object, connoting personal wealth, but in a different way to when the object type was thought to have adorned caskets (Section 2.4.1). Alongside 'binding strips', penannular brooches, and to a lesser extent, early spur buckles, harness pendants and some knife sheath chapes, have a distinctive association with elite sites, particularly castles.

This development, of the first half of the 12th century, has been framed within a European elite context (see Section 7.3.3), but also exemplifies a trend to greater social stratification in a contemporary insular context, and what has been referred to as an 'increas[ed] conscious[ness] of social difference' in this century (Gardiner 2017, 99). Indications of a limited trickle-down through society of such objects in the second half of the 12th century may be linked to developments in the construction and expression of knightly identity, and the materialisation of chivalric culture. With the adoption of equestrian seals by knights in the mid-12th century, the response in magnate circles may be characterised as qualitative distinction as they started deploying seals depicting their shield of arms (Crouch 1992, 244). It may have been that towards the end of the 12th century, as a greater social access developed in respect of decorated shields and harness pendants, the magnate response was, in parallel, to turn to heraldry as social distinguisher. If an element of exclusionary closure was demonstrated in respect of these objects in the earlier part of the 12th century, then this model does not hold for the end of the century, by which time those at the apex of society's elite were obliged to adopt new strategies of distinction.

Chapter 8: Conclusion

8.1 Contribution to research

8.1.1 Summary and approach

This study has sought to overcome a lack of archaeological engagement, enquiry and synthesis regarding metalwork of the 11th and 12th centuries and thus provide a new perspective on the period dominated historiographically by the Norman Conquest. The corpus studied has mostly comprised non-ferrous items. Drawing on metaldetected finds recorded primarily through the PAS an ample dataset was gathered, quashing general claims of a paucity of material for these centuries. More specifically, I argue that narratives of paucity have often been based on studies of dress accessories. While this particular trend of decline for dress accessories may be sustained in light of the findings presented in the previous chapter, though attenuated by recent re-dating of brooches (Weetch 2014; 2017; Section 4.3.2), it is not the case when the period's metalwork is considered more globally. Indeed, there are indications elsewhere that by other measures, notably ironwork items, the 10th and 11th centuries were vibrant compared to those that preceded them (e.g. Raffin 2017). The present study has drawn out equestrian equipment as a notable component of the dataset which helps challenge any former perceptions of 'an 11th-century gap', and the significance of the quantities now known of such material has been discussed.

Armed with a new, substantial dataset, this study evaded structural constraints on scholarship by adopting a longitudinal and international approach to the period. By analysing dress accessories and equestrian equipment across the 1066/1100 academic divide, particularly novel surveys have been provided. They have yielded results of a rather technical nature, such as the identification of particular buckle forms as being from spurs (Section 4.1.2), the use in this period of the penannular brooch (Section 4.3.2.3) or a particular constructional method for 'early' forms of harness pendant (Section 5.2.2.2). Nonetheless, by bringing object types, such as strap-fittings of Cassels type 1.7I, into the 12th century, or by amending dating of other types of object to the same end, this thesis enables an enriched discussion of this period's material culture. Arguably, some of the foremost contributions to the study of 11th- and 12thcentury metalwork relate to the object types discussed in Chapter 6. They include a novel typochronology for swivel fittings, an unprecedented distributional analysis of knife sheath chapes, and a new identification for English finds of 'binding strips' and 'octopus mounts' (also Webley 2017a; 2017b; 2021b). These may now all be drawn into debates regarding cultural change in this period and the identities involved in this process. Though these debates should not be limited to the impact of the Norman Conquest on portable material culture, this is a key consideration which merits dedicated comment.

8.1.2 The socio-cultural impact of the Norman Conquest

Across the mid-late 11th century – the period of the Norman Conquest – the main impression is of striking continuities in terms of metalwork. However, rather than simply align ourselves with the continuity thesis, we can use the large dataset gathered here to problematise this observation, parsing the evidence, both socially and geographically. An initial distinction may be made between the quantitative impact of the immediate aftermath of the Conquest and its qualitative impact on craft objects, the latter having tended to have been the focus of previous commentators. While the latter reveals clear continuities in many object types, a quantitative change can be identified in the present dataset. Based on new, more detailed dating there seems to have been a decline in the amount of metalwork in circulation in the decades after 1066 (Fig. 92), and a contemporary change in approaches to production, particularly casting (Fig. 104). It finds parallels in the immediate material impact of the Conquest on major towns of late Saxon England, in terms of prosperity and urban infrastructure (Griffiths 2011, 63). Though a clear trend, it may be exaggerated in the plots presented in Figure 92 due to the demise of metalwork decorated in the Ringerike style, and may also be contextualised by a trend of decline in bullion imports (Naismith 2020, 93), and a less severe, but still notable decline in numbers around the 1120s.

In qualitative terms, direct continuities across the mid-late 11th century are best exemplified by the fine-grained evidence of the 'coin-brooches' of the 1050s-1080s (Weetch Type 2.B) which utilised coins of Edward the Confessor, Harold II, William I and William II to the same end (Sections 4.3.2.1 and 7.2.1). These brooches were argued to have occasioned the notable use of silver for objects across a short, but continuous period – a level of use not replicated across the period of study (Fig. 96). Other objects may not possess the detailed temporal parameters offered by converted coins, but do show similar continuities, be it in terms of use of leaden brooches (Fig. 98) or various copper-alloy embellishments within equestrian equipment, particularly stirrup-strap mounts. In this, the evidence for cultural changes observed in zooarchaeological or architectural material in elite strata (Section 2.1.2) are not being replicated in metalwork. More widely, it seems that changes in commodity production, and in particular the trend for its increasing concentration in an urban milieu, continued unabated across this period, with evidence also presented for similarities in distributional networks (Figs 99, 103).

Within this context of general continuity of form, approach to production and to distribution, particularities have been observed that provide nuance. Firstly, trends implicating more direct Norman influence in material culture have been noted on the margins on this thesis's dataset. Discussed in Section 7.3.3, they include use of (iron) curb bits, equestrian imagery on aristocratic seals and the material culture of particular games. A more developed analysis would require an expansion of the present dataset, a potential future step explored below. Secondly, a clear spatially discrepant pattern has emerged which suggests a regional response to the Norman Conquest in eastern England (discussed in full in Section 7.3.2). This regional pattern is based on carefully picking out objects decorated in Second Viking-Age art styles that were arguably vehicles for Weissner's 'emblemic style', from within a wider distribution of artefacts with such stylistic decoration. The chronology of this persistent patterning, and possible projection of a resistant identity if seen through the diaspora concept, certainly post-dates the Conquest, even if its end dates cannot be resolved fully using current evidence. Even if the dating or evidence is not sufficiently fine to respond to hypotheses which might tie such material with areas of

rebellion in the Norman period, it provides a more nuanced view, elucidating socially and regionally contingent responses to the Conquest.

8.1.3 Towards an examination of identities in the 11th and 12th centuries using the contribution of metalwork

Returning to the quotation on the opening page of this thesis, on the evidence of metalwork we are now inclined to reject Marritt's (2007, 160) suggestion that the 'coming of the Normans' prompted a 'fundamental...reorientation towards the Channel' – in the cultural sphere at least. Such impacts and continuities as identified may be further contextualised by considering the role of the Norman Conquest, immediate or more long term, against other factors lying behind socio-cultural change in the 11th and 12th centuries. This study has identified key changes around the start of the 11th century, and a variety of developments in the 12th. Also, longer trajectories such as the development of an increasingly urban-focused economy (Griffiths 2011, 69) have been argued here to be paramount in terms of metalwork production and distribution.

The impact of changes taking hold around the turn of the first millennium have recently been emphasised by studies of poultry farming and large-scale marine fishing (McClain and Sykes 2019, 95-96). While locating significant changes in portable material culture in broadly the same period, this thesis has foregrounded the importance of the Anglo-Scandinavian socio-cultural axis in terms of metalwork, disentangling it from the relative lack of impact of other major links based on trade (Section 7.3.3). In contrast to broader changes, this influence may be more precisely be dated to the decades following Cnut's conquest, while its persistence further diminishes our assessment of the impact of the Norman Conquest.

The mid-12th century has recently been described as 'more of a watershed than the Norman Conquest' (Creighton and Wright 2016, 289), with various markers of the imposition of Norman power perceived to have been played out in the intervening generations. The present study has identified the 12th century as witnessing major changes in metalwork, initially in elite objects as classified by their contextual associations and surface treatments, then extending to objects further down the social scale, such as various dress accessories, by its second half. Rather than seeing these as the medium- or long-term effects of a 'Normanising' process, the argument put forward here is that they ought to be seen as part of wider processes of lordly self-definition and social stratification, observable at a European level when an international, contextual approach is taken. An exception to this is the potential winning out of a Norman ethnic identity over an elite one when it comes to horse riding. The negative evidence of a lack of decorated snaffle bits, and iconographical and artefactual evidence for the introduction by the Normans of the dynamic curb bit suggests that we might locate such identity in this aspect of practice. Further work based on other artefactual sources would naturally be beneficial to affirm such models; those pertinent to study of the 12th century will be explored in the next section.

8.2 Suggestions for future work

Four main areas may be picked out that would build upon the work pioneered in this study: 1) deepening knowledge of objects examined here and expanding the range of objects studied; 2) drawing further on iconographical and literary sources; 3) undertaking metallurgical analyses; 4) focusing in more depth on 12th-century non-ferrous metalwork. These four areas will be considered briefly in turn.

First, following fundamental reappraisal of certain objects here that had either been misidentified or misdated in the literature sources can now be mined in a more systematic way to extract new information.¹⁰⁶ Approaches might include soliciting unrecorded material through the metal-detecting press (an approach used here on occasion), or combing 'grey literature' or museum archival material. Foreign works and databases could be further interrogated for data, not least in Normandy and adjacent areas of northern France, where relevant data is not readily accessible (Weetch 2017, 273). Publicly accessible databases of metal-detected finds for the Netherlands, Flanders and Denmark, though currently in their relative infancy, are collectively providing an ever-increasing dataset with which to augment and challenge

¹⁰⁶ Examples include 'octopus mounts', various binding strip fragments or sheath chapes (sometimes misidentified) or Cassels type 1.7I strap-fittings (misdated).

the international distributions presented here; ¹⁰⁷ their utility has already been demonstrated here regarding equestrian equipment (e.g. Section 7.3.3) or sheath chapes (Section 6.1.3.1), for example. Of course, the PAS database itself will naturally merit revisiting in respect of the corpus defined here.

Beyond deepening the study of non-ferrous metalwork groups discussed here, a wider study of portable artefacts of the 11th and 12th centuries could follow. A more panoptic view could be taken specifically of the non-ferrous corpus sketched in Section 3.2.1, thus implicating more functional categories, or a more comprehensive assessment of a particular functional category could be taken. An example of the latter would be a fuller, integrated assessment of dress accessories, to combine previous work with the study of buckles, strap-ends and brooches provided here (Chapter 4). It could also involve new work on, for example, finger-rings and hooked tags to contextualise and refine observations regarding the dating and patterning of dress accessories, in response to Thomas's (2000a, 299-300) demand for such a study over twenty years ago.

Of course, a widening of parameters to include objects of iron, or non-metallic objects, would also provide a more rounded overview, with the potential to directly compare distributions of objects which exist in both iron and non-ferrous versions. Studying ironwork comes with its own methodological challenges, including those of survival and a lack of diagnostic morphological or decorative traits for dating, but its utility is clear from its relative quantity (see Table 30). Recent studies have demonstrated the potential both of analysing specific objects – such as a consideration of archaeological and iconographical evidence for flesh hooks (Bourgeois 2018, 317-318) – but also ironwork across wide areas, which implicates many more site types and functional categories than discussed here (e.g. Guillemot 2012; Legros 2015a; Raffin 2017). Interestingly, in one of these recent regional studies, in which iron artefacts constituted 94% of the corpus, the period between the 10th and 12th centuries showed the strongest evidence for metalwork across all medieval

¹⁰⁷ Synthetic work on material collected through these databases was first piloted through the University of York's 'Cultures in communication in the Long Viking Age' project (2016-2017). At the time of writing a portal to search across the various databases is being worked on as part of the ARIADNEplus project. Furthermore, a Treasure Trove Scotland database was being developed as this thesis was being submitted.

periods (Raffin 2017, 275-279). Although these examples come from France, drawing ironwork into the present discussion in quantitative and spatial analyses would be aided by the typochronological work on English material particularly by Ian Goodall (2011). The addition of work on organic remains is made problematic by issues of survival, but, where possible, would provide directly comparable results for composite objects, while other object types could be studied in their own right. Objects made from animal skeletal material would appear to constitute a readily approachable dataset (e.g. MacGregor 1985); its analysis would help provide insights into the archaeology of leisure, with initial charting of tablemen in ivory and antler already performed elsewhere (Webley 2021b, 911, fig. 2b).

Naturally, widening the scales of analysis would be a significant undertaking; there is therefore distinct merit in framing study on smaller areas. The data accumulated here is equally amenable to study at a regional level, or an even more focused unit, down to the level of site. Analysis by site comparison would be facilitated by the corpus defined here, with the potential for matrices of artefact and functional category measures to be developed (Section 3.1.1; Webley 2021b, 910). A final topic which could be elucidated by a micro study is object repair; this was inhibited here by the quantity of third-party data used, and a concomitant lack of direct object analysis. Inferences can be made from evidence of curation, wear, repair and re-use about the lifespans of objects. There could be many reasons for wanting to prolong the use of an artefact, but if a socio-economic imperative is assumed, there are implications for estimates of the overall scale of production. By way of broad comparison, Cassels (2013, 139) noted a repair rate of c. 2% on his corpus of late medieval dress accessories while Williams (1997a, 25) noted a c. 4% one on his corpus of late early-medieval stirrup-strap mounts, implying more curation in the earlier period.

Second, for reasons provided, not all of the object types considered here could be analysed with reference to iconographical representations: the small size of the objects is the key factor, though it is notable that representations increase in number across the period studied. For objects with sufficient representation, analysis could be pursued according to more systematic approaches, as here for harness pendants and binding strips (Appendices 3 and 4). For the former, quantification and locational

analysis were attempted. Taking such an approach requires being wary of artistic conventionalism and archaism (see Carver 1986; Lewis 2005; 2010; Linlaud 2014), but it may be applied to many of the object types discussed here, and others besides, even if typologically useful detail seems generally lacking before the end of the 13th century (Bourgeois 2018, 312).

Iconographical comparanda also provide motifs and stylistic traits which can also be used to refine dating. This, naturally, can only be pursued when sufficient detail is present on the object, and surviving with sufficient clarity, but the utility of this approach to refine dating has already been demonstrated by Lewis (2007b) regarding the 'Romanesque lion' motif and the (re)dating of stirrup-strap mounts of Williams Class A, Type 11 (see Section 5.3.2.1). In the present work, that same motif was used to help refine the dating of swivel fittings of Type A1; elements from candlesticks can also be invoked due to their comparable motifs (Appendix 1.H.i). Dating by art style has proved useful in this epoch, a period that sits well beyond the furnishing of graves but before the proliferation of documentary evidence for artefacts. Its applicability comes to the fore for objects which are not readily dated by stratigraphic examples, such as equestrian equipment. Finally, textual references may be sought for insights they can provide on the practical use of various objects, as well as their symbolism (Bourgeois 2018, 314).

Third, clarification of a corpus of particular non-ferrous object types undertaken here is a necessary step towards other work, which includes metallurgical analyses. Such analyses would be beneficial as they can provide more accurate assessments of surface treatments, over and above visual inspection, and allow for definition of alloy composition. An example of the potential of the former is the group of bridle fittings from Chirbury, Shropshire (see Section 5.1.2.4). On inspection, this group of copperalloy equestrian fittings did not appear to have a surface treatment, but after analysis using surface XRF turned out to have had a white-metal coating further embellished by fire gilding (Webley 2022, 86, fig. 8.10). Such applied decoration is almost unprecedented for this sort of equestrian equipment, even on the international stage (Anne Pedersen pers. comm. 2016), though future metallurgical analyses would help clarify the situation. In terms of alloy composition, precision would allow us to observe 'flows' in metal, which may ultimately lead to establishing origins of new metal

influxes, but more usually in determining levels of contemporary control over recycling. The former has been achieved to an extent in the documenting of a resurgence of brass in the Danelaw from the 10th century onwards (Walton Rogers 2020, 261). The latter is implied by the observation of the prominence of gilding in the long 12th century, itself suggestive of the specific manipulation of impure copper (Section 7.2.1). Further work would establish whether such control over alloys differed for objects manufactured for different contexts and statuses (see e.g. Oddy *et al.* 1986). Further definition of the composition of the objects identified in this thesis would shed light on the contextual associations put forward here, especially regarding zinc-rich alloys. This would build on and contextualise fruitful work in the Netherlands that has recently established clear results for a leaded brass composition for stirrupstrap mounts, argued to have been of local manufacture (Roxburgh *et al.* 2018, 14).

Finally, that the results of this study are drawn into discussing the momentous 11th century is inevitable, but many of the observations made in the case studies evidence changes that apparently took place in the 12th century. Such work, which starts to address a gap in our knowledge of typical 12th-century forms (A. Goodall 1990, 425), has been put forward here for various single-looped buckles and annular brooches which have been stereotypically dated later (Sections 4.1.2.4, 4.3.2.4). Although many such objects seem to be typified by their plainness (Section 4.4), this redating helps reframe the distribution of such objects. Such distributions in turn inform the part they played in various observed phenomena, such as the homogenisation of European dress accessories, traditionally attributed to the 13th century (Roesdahl and Verhaeghe 2011, 208; Berthon 2013), or the resurgence of copper-alloy artefacts at the end of the 12th (Bourgeois 2014b, 154; Linlaud 2018, 339). Future work would further interrogate this last and clarify its chronology in respect of the 'Commercial Revolution' recently attributed to the 'long 13th century', and clearly implicating the 12th century (Kelleher 2018, 122). More generally, the corpus as defined here will contribute to studies of objects of the 12th century, a recent renewal of interest in which is exemplified by the discussion on material culture in a recent publication on the archaeology of the Anarchy (Creighton and Wright 2016). The appraisal of sheath chapes and reappraisal of binding strips offered here are aspects that could fruitfully be worked into new syntheses.

8.3 Envoi

Many of the contributions made by this thesis are necessary steps along the road to a social analysis of identities and constitute technical observations of particular interest to the artefact specialist. Chief among them are a newly proposed function for 'binding strips' (at least in the English historiography), and a new typochronology for swivel fittings. The longitudinal approach taken has also allowed for new diachronic studies of, for example, brooches and harness pendants – studies previously inhibited by the structuring effects of the Norman Conquest on academic endeavour. It is hoped that this thesis's main legacy will be that scholars will eschew any historic presumptions that led them to resist the study of 11th/12th-century metalwork, and that new research will proliferate. Drawing on the contextual approaches taken here, there is much that studies of metalwork could contribute to analysing the developing identities as they intersected in this period overall. Such identities would include, but by no means be restricted to, those implicated in the impact of the Norman Conquest.

Appendix 1: Typochronological detail for object types

This appendix presents further detail to support the typochronological assessments offered for the particular object types referred to in Chapters 4-6.

A: Buckles

A.i Undiagnostic forms

Many types that can be demonstrated to be chronologically relevant cannot be pursued typologically due to plainness and a lack of distinctiveness of form. Of those frame forms considered by Thuaudet (2015, vol. 3 (PDF), 242-246, fig. 267) as being from the 10th- to 12th-century period, many are so simple as to be chronologically undiagnostic, transcending period boundaries; further examples were also simple and, out of archaeological contexts, would not be recognised as being particular to the 10th- to 12th-century period. A few of these undiagnostic frames might be attributed to the period if they were found in association with a distinctive (buckle) plate. Forms falling into these groups include annular frames,¹⁰⁸ very simple D-shaped or oval frames,¹⁰⁹ the simplest rectangular frames,¹¹⁰ including a type with a sheet roller¹¹¹ or separate outer edge¹¹² more common in iron than in copper alloy – probable harness buckles. The same challenges are presented by a group of large, T-shaped buckles (Thuaudet type K), and iron double-looped asymmetrical buckles (Thuaudet type Q9b), again, probable harness buckles. These last raise again the concern that one of the main challenges involved with working with buckles found archaeologically is that

¹⁰⁸ Of varying sizes, some with minor morphological differencing (Krabath *Varienten* C1, C3/Thuaudet types A1a, A2, A3, A4, A6, B1, B3, B4, B6, B10, B11)

¹⁰⁹ Predominantly those in iron (Cassels type 1.5D/Thuaudet type C1b, C2b, C3, C4, C5b, C6b, D4b), but also in copper alloy (Thuaudet type C2a)

¹¹⁰ Whether in copper alloy (Thuaudet type J1a/Meols type A/Cassels type 1.7A/Krabath Variente C21), or iron (Thuaudet type J1b, J1d - trapezoidal)

¹¹¹ Thuaudet type J6

¹¹² Thuaudet type J7

of determining their use, for example distinguishing dress accessories from equestrian equipment.

A.ii Second Viking-Age types

A devolved Ringerike-style example of Naylor Class F1 found in Norwich, though in a 12th- to 13th-century layer, was thought to form a group with redeposited 11th-century material (Margeson 1993, 25-26, fig. 13, no. 128). The dating of Class G, with integral plate, by Naylor (2008, 6) to the 9th century appears to be contradicted by the excavated evidence, which dates somewhat later, albeit it may be that the scope of the class itself had been rather loosely defined. An example from Brook Street, Winchester, was found in a phase dated to the 11th century (Hinton 1990c, 513-514, fig. 129, no. 1106), while one from Mount House, Witney (Oxfordshire), was found in a site phase dated c. 1140-1175 (Allen 2002, 142-143, fig. 3.13, no. 21). Furthermore, Class G can be considered to comprise highly devolved Ringerike-style examples with integral plates (Helen Geake pers. comm. 2018), as such comparable to buckles of Class A5. A recent Ringerike-style buckle (Class A5ii) was found as part of a hoard in Ahlesminde, Bornholm (Denmark) thought to have been deposited c. 1080 (Ingvardson and Nielsen 2015, 33-34, fig. 7). An Urnes-style frame (Class A6) found at the Guildhall site in London was attributed to site Period 10, Phase 2, dated to the 1070s and 1080s (Bowsher et al. 2007, 33, fig. 33; Egan 2007a, 448, no. S2). The above date ranges correspond well with the dating applied to their respective art styles, in the middle and later parts of the 11th century, but possibly with continued use into the 12th.

For the group formed by Classes A1 and A4 on which animal heads bite the bar, recent discussion by David Griffiths (2007, 62) has commented on four examples of Class A1ia found at Meols, while David Haldenby (2013b, 247) has commented on two examples of the same sub-class from Cowlam DMV and a further example from adjacent Cottam. Griffiths (2007, 62) described them as a 'loosely-dated late Anglo-Saxon or Anglo-Norman group spanning the 10th to 12th centuries'; Haldenby (2013b, 247) attributed them to the 11th or 12th century. Dating evidence is relatively forthcoming and is presented in Table 31.

Class	Find location	Dating evidence	Main reference
Class A1ia	Middle Brook Street, Winchester	late 11 th - to early 12 th -century context	Dunning 1955, 9-11, fig. 2, no. 3
Class A1ia	Lurk Lane, Beverley	site phase <i>terminus</i> ante quem of 1070	Goodall 1991, 149-150, fig. 114, no. 583
Class A1ii	Lyveden DMV	Stylistically 11 th century ¹¹³	Cherry 1975, 106-107, pl. 28
Class A4	Norwich	late 11 th - to early 12 th -century context	Margeson 1993, 25-26, fig. 13, no. 127
Class A4	Perth	12 th century	Goodall 2012a, 95-96, ill. 118, no. 29

Table 31 Dating evidence for buckle frames of Naylor Classes A1 and A4

Overall, buckles of this module seem to centre on the 11th century (Ashley 2016, 288) – rather than the earlier start date suggested by Griffiths (2007, 62) – continuing into the 12th century (as at Perth). Somewhat larger buckle frames, of Naylor's Class A1iii, though historically cited as comparanda for the above group (e.g. by Cherry (1975, 107)), have been perceived as chronologically distinct by Steven Ashley (2016, 288) who dated them later overall, to the Anglo-Norman period. No examples with sufficient dating evidence have been traced to test this suggestion, which is otherwise supported by the Romanesque decoration of the example published from Bacton (Norfolk) (Ashley 2016, 289, fig. 18.6, no. 32).

A.iii 'Romanesque' types (c. 12th century)

If certain examples of the aforementioned Naylor Class A1iii can be thought to have Romanesque detailing, then the same applies to two further forms both bearing zoomorphic decoration moulded in three dimensions. The 'gaping-mouth beast' type has been dated to the 12th century based on stylistic comparison to the similar rendering of animal heads on comparanda in metal, stone and in illuminated manuscripts (Rogerson and Ashley 2011b, 300). Cassels (2013, 27) noted an absence of gaping-mouth beast buckles from his survey of medieval urban assemblages of dress accessories; indeed, no English examples of such buckles have been traced

¹¹³ The animal head terminal on the plate is directly comparable that on many stirrup terminals, dated by Williams (1997b, 2) to the second half of the 11th century.

beyond the PAS dataset. However, a comparable buckle made of walrus ivory can be noted from Gammel Brattingsborg, Samsø; a late 12th-century date was suggested for this stray site find (Roesdahl 2015, 270-271, fig. 4). Such dating evidence as has been gathered here would seem to confirm the 12th-century date advocated by Rogerson and Ashley (2011b) for the type.

A second type of buckle has been dated to the 12th century on similar grounds. This, formed of a standing quadruped moulded in the round, is known as the 'standing animal' type. On the most elaborate examples the rendering is of a lion in a Romanesque manner (e.g. PAS: LEIC-EOC8F1; HAMP-06D1F9), particularly the disposition of the tail (Hicks 1993, 249). Only two excavated examples have been traced, one from a site Phase 3 context (c. 1150-1200) at Low Fisher Gate, Doncaster (McComish *et al.* 2010, 90). The other was found in a late 13th- to early 14th-century context at Scott Street, Perth (Cox 1996, 804, 806, no. 1), where it was assumed to be residual.

A.iv Spur buckles

Recent redating of a buckle from London's Swan Lane to the last thirty years of the 12th century invites us to extend our search for similar buckles (Schofield *et al.* 2018, 446, table 5, reassessing Egan 2008b [1991], 106, fig. 68, no. 482). Earlier buckles from York and Northampton, both found in association with a prick spur, and both with strap-slides retained within the fold of a plate, have been dated generally to the 9th to 11th centuries (Ellis 1979, 273, 275, fig. 121, no. 121; Ottaway 1992, 700, fig. 304, no. 3832). Made of iron, and with relatively undiagnostic D-shaped frames, such early spur buckles would be unlikely metal-detected finds.

Spur buckles have been treated in a typological way by continental authors. Of the types discussed, it would seem that certain double-looped forms deemed of potential relevance to this period are particular to the Continent, on current evidence.¹¹⁴ Furthermore, there is a form classified by Thuaudet as his type T (which includes buckles of Krabath *Variente* J4), characterised by a small integral plate

¹¹⁴ Double-looped iron spur buckles of the 11th century onwards (Thuaudet type O1b); double-looped rectangular spur buckles of the 12th and 13th centuries (Thuaudet type P1b/Krabath *Variente* C25); double-looped asymmetrical spur buckles of the 11th century onwards (Thuaudet type Q4b)

attached to the spur leather via an integral rivet, and potentially secured by a separate rove. On typological grounds, Thuaudet (2015, 548) ascribed dating in the 13th and first half of the 14th centuries to this type; however, it is contended here that various spur buckles masked within the formal and chronological diversity of this type can be dated earlier. The most obvious candidate for a date within the period discussed here is exemplified by the aforementioned Swan Lane buckle (recently dated c. 1170-1200): with a small sub-circular plate, and an oval frame with central lip on its outer edge. The form is related to the hinged spur buckle of Krabath *Variente* J1, otherwise similar in form, found deposited in the grave of Kaiser Lothair III von Süpplingenburg, thus with a *terminus ante quem* of 1137 (Rötting 1995, 149-150, no. C16d). The earliest type T *termini ante quos* are in the 1130s, exemplified by finds from Höhenburg Berge, Odenthal (Untermann 1984, 147, taf. 21, no. E5) and Lurk Lane, Beverley (Goodall 1991, 149-150, fig. 114, no. 585), the former in iron, exemplifying the mixed materials used for such largely 12th-century, but potentially late 11th-century, spur buckles.

Outwith this apparently early form with small circular plate, spur buckles which fall within Thuaudet's type T definition seem to indeed be of 13th- and 14th-century date; the challenge is to disambiguate these from early forms. Forms with characteristics such as chevron decoration on the plate, inverted D-shaped frames and square frames all seem to be late; dating evidence for these is presented in Table 32.

Characteristics	Find location	Dating evidence	Reference
Oval frame,	Castrum Saint-	Mid-13 th century	Démians
elongated rectangular plate often decorated with engraved chevrons	Jean, Rougiers	<i>terminus ante quem,</i> although a late 12 th - century date is possible	D'Archimbaud 1980, 492, fig. 465, no. 29
Inverted D-	Burg Erpfenstein,	Context with a	Stadler 1994, 111,
shaped frame	Erpfendorf	terminus post quem	173, taf. 27, no. F13;
	(Austria) (iron	of c. 1225	compare Whitehead
	example)		2003, 34, no. 193
Broadly square	Whithorn Priory	Site period V grave	Nicholson 1997, 419-
frame	(iron example)	fill with a terminus	420, fig. 10.99, no.
		post quem of c. 1250	44.8

Table 32 Dating evidence for later spur buckles frames of Thuaudet type T

Finally, spur buckles with a terminal hook (Thuaudet type U) seem to have been used with rowel spurs of the 13th century onwards, and as such are too late for the present discussion.

A.v Buckle plates

A.v.1 Other plates

Beyond the plates discussed in Chapter 4, applying classifications devised for detached plates by Cassels or Thuaudet was decided to be a somewhat futile exercise for the period in question. For example, Cassels type 1.12.A examples, being rectangular and plain, and thought to date anywhere between the 12th and 16th centuries (Cassels 2013, 34), are not a useful means of identifying specifically 11th- or 12th-century material. Thuaudet's classification is not pursued either, even though it goes into greater detail. For example, a plate of his type C2b was found in a context dated to the second half of the 12th century at Finalborgo, Savone (Italy) (Palazzia *et al.* 2003, 231-232, fig. 60, no. 6), but is so plain that it would not be recognised out of context. It must suffice to note that buckle plates formed of copper-alloy sheet folded into a rectangular or sub-rectangular form were common across Europe between the 12th and 16th centuries, with some having even longer floruits (Thuaudet 2015, PDF 260-261, fig. 279).

Buckle plates bearing enamelled decoration either originating in Limoges, or following in its decorative style (Thuaudet type C2b), have been dated either side of the year 1200, with a recent assessment seeing their beginning in c. 1180 (Thuaudet 2015, 650). Archaeological dating is not sufficiently fine grained to assess to which side of 1200 a given example sits. Another plate seeming to sit on the cusp on 1200 forms a series which bears either a moulded lion, wyvern, or confronted pairs of such creatures; these have been recently dated to the later 12th or 13th century (Boughton and Egan 2009, 344; Ashley 2016, 288). Archaeological dating evidence is not very forthcoming for these plates which had been thought to be typologically 13th-century in date (Hinton 2008, 90). An early date is provided by an example from 'Cullykhan', Pennan (Aberdeenshire), depicting a wyvern and found in a late 12th-century context (Caldwell 1990, 285-286, ill. 6). An example from London bearing a lion passant regardant stamped in relief was dated contextually between c. 1200 and c. 1230 (Egan 2008b [1991], 111-112, fig. 72, no. 500). Both of these types seem to be part of new influx of buckles at the end of the 12th century, but which continued into the early 13th century.

A.v.2 'Christ' enthroned

A group of folded rectangular copper-alloy plates depicting an enthroned ruler apparently being crowned were brought to scholarly attention by John Cherry in the 1980s. Cherry (1987, 368) described them as stylistically 'late Romanesque', and suggested that their iconography drew on a '12th-century formula showing either Christ or a ruler'. His suggestion that their inspiration might have been Henry II (crowned 1154) would place them in the second half of the century; the comparison he made with a group of Limoges-style enamel plates would put them a little later, between c. 1180 and c. 1220 (Thuaudet 2015, 649). The series has since been suggested as dating to the 12th to early 13th century (Boughton and Egan 2009, 344); none have been found in excavated contexts. Boughton and Egan argued for derivative versions of the type, characterised by their manufacture, with cast openwork pieces being copied by solid, repoussé plates; such a change need not have had chronological depth, though, and may represent contemporary production.

Findspot	Frame type	Reference
Rockbourne Roman villa (Hampshire)	Cassels type 1.3B	Cherry 1987, pl. XXXII
Burghead (Moray)	Cassels type 1.3B	Boughton and Egan 2009, 339, fig. 6d
Bungay (Suffolk)	See Cassels type 1.3B – expanded outer edge with moulded, confronted lions	PAS: NMS-EDB47C
Winterbourne (West Berkshire)	Cassels type 1.3B	PAS: BERK-110FAD

Table 33 Frame combinations for 'Christ' enthroned plates

Though very few plates of this type survive attached to their frames, they show a consistent use of the relatively plain Cassels type 1.3B oval frame, suggested to have been present by the late 12th century (Table 32).

A.v.3 M shaped (Cassels type 1.12I)

Another distinctive plate form is depicted by Cassels (2013, 224, fig. 2.25I), though it does not seem to relate to his description of his type 1.12I (Cassels 2013, 34). As such, the first full discussion of these plates can be considered to be that of Rogerson and Ashley (2018). Such plates have three flat prongs to give them the appearance of a Lombardic letter M, or a bird in flight. They characteristically have very short lower folds which are simply wrapped around the frame's bar, separate roves at the attachment end, and were often decorated with rows of 'rouletted' opposed, addorsed triangles. In the absence of an excavated example, the 12th- to 13th-century dating attributed to the type in the early 1990s has persisted (Rogerson and Ashley 2018, 398); elsewhere, such decorative addorsed triangles have been noted on dress accessories of the 12th century (Thuaudet 2015, 733).

Findspot	Frame type	Reference
Tibenham (Norfolk)	Cassels type 1.3N	PAS: NMS-B24B0C
South Walsham (Norfolk)	Cassels type 1.7B	Rogerson and Ashley 2018, 396, fig. 8b
Iford (East Sussex)	Cassels type 1.7F	PAS: PUBLIC-1A50E6
Acton (Suffolk)	Cassels type 1.9A or 1.9C (var.)	PAS: SF-5FF3F5
North Walsham (Norfolk)	Cassels type 1.9A or 1.9C (var.)	PAS: NMS-334163
Sleaford (Lincolnshire)	Cassels type 1.9C (var.)	Rogerson and Ashley 2018, 396, fig. 8a

Table 34 Frame combinations for M-shaped plates

The majority of extant frames are very similar: large, rectangular or trapezoidal, and plain. Some have a protruding grooved pin rest; an exceptional example is oval with an offset bar. As with the previous type, very few frames have survived attached to their plates, but examples are detailed in Table 34. Very rarely were such plates cast with their frames; on ESS-F0D0B5, where this is the case, the frame is also trapezoidal, with a grooved pin rest (Rogerson and Ashley 2018, 396, fig. 8c). A 12th-century date has been argued for the rectangular form with pin rest (Cassels type 1.7B); this supports a 12th-century date for this plate type. An oval frame of type 1.3N was found at La Motte, Écrille; furthermore, a frame of type 1.9C was also found there (Gandel *et al.* 2008, 306, fig. 14, no. 2). Such dating as provided from the site's coins would suggest that the type post-dated c. 1120, but does not rule out a date in the 13th century. The combined evidence would suggest the use of large rectangular or trapezoidal frames from the 12th century onwards, though many of these are so 'unexceptional', to use Rogerson and Ashley's (2018, 397) description, that they would not be recognised detached from their plates. By contrast, the plates of this type of buckle, as with those of the preceding type, are the exceptional components.

A.v.4 Pronged plates

As noted by Rogerson and Ashley (2018, 398), related to the M-shaped plates are buckle plates christened here 'pronged plates', as they also featured extensions between which were gaps where the leather strap could show. Such plates, which could have between two and four 'prongs' which terminated in rivet holes, have not to date been analysed, and have indeed until recently occasionally been thought of as Roman due to their similarities with late Roman openwork plates (e.g. Hawkes and Dunning 1961, 54-55, fig. 18c, no. 15 (cat.); Gandel *et al.* 2008, 306, fig. 14, no. 2; Metropolitan Museum of Art acc. no. 20.152.10). Five main types have been defined as part of this study, as set out in Table 35.

Туре	Characteristics	Sample image
1	Three prongs; curved 'arches' between the prongs; engraved border decoration	cm
2	Two prongs; rectangular plate; engraved decoration	
3	Three prongs; rectangular plate; transversely engraved zigzags	
4	Three prongs; three (or more) openwork cutouts imitating arcading	cms
5	Two prongs; openwork, with rectangular and circular aligned cutouts	

Table 35 Classificatory scheme proposed for pronged plate buckles

Within the variation seen above, these buckles are of similar module, suggesting a similar function and probable contemporaneity; all feature notably short lower folds, as with the M-shaped plate form. The dating of buckles with such plates has been attempted on the basis of decoration apparently derived from architectural motifs (see e.g. Montgomerie 1947, 136), in the form of columns and arches (Table 35, types 1 and 4). Other objects possessing such architectural features have been dated to the 11th and 12th centuries (Ashley 2016, 288). Archaeological dating evidence is limited to two examples; the earliest known to scholarship is an incomplete (type 1) plate found in King's Lynn and dated contextually between c. 1250 and c. 1350 (Geddes and Carter 1977, 287-288, fig. 130, no. 6). More recently, at Bull Wharf, London, a complete (type 3) buckle was found behind a revetment dated to the late 1140s (Egan and Blackmore 2015, 51-52, ill. 33, no. A95). A final example has already been noted for its frame (of Cassels type 1.3N): a buckle found at Bickley, Cleeve, in a mid- to late-12th century context (Ponsford 2002, 94-95, fig. 30, no. 20). Overall, a date in the first half of the 12th century, as suggested by the Bull Wharf find, accords well with the Romanesque architectural parallels to these plates.

Compared to the other plate types, numerous examples have survived with frame and plate elements together, as detailed in Table 36.

Findspot	Frame type	Plate type	Reference (PAS, unless author quoted)
Deopham (Norfolk)	Cassels type 1.3D	1	NMS-09854C
East Meon (Hampshire)	Cassels type 1.3D	1	SUSS-949481
Litcham (Norfolk)	Cassels type 1.3D	1	NMS-61E218
Longwick (Buckinghamshire)	Cassels type 1.3D	1	BUC-99B961
Gussage St Michael (Dorset)	Cassels type 1.3D	1	PAS-A21B61
Newport (Isle of Wight)	Cassels type 1.3D	1	IOW-338178
West Bagborough (Somerset)	Cassels type 1.3D	1	SOM-7E1F00
Icklingham (Suffolk)	Cassels type 1.3D	2	SF-F5FBF9
Alderton (Suffolk) Cassels type 1.3D		2	SF-DE00C2

Table 36 Frame combinations for pronged plate buckles

Findspot	Frame type	Plate type	Reference (PAS, unless
			author quoted)
Shorwell (Isle of Wight)	Cassels type 1.3D	2	IOW-1CC812
Bull Wharf, London	Cassels type 1.3D	3	Egan and Blackmore
			2015, 51-52, ill. 33, no.
			A95
Sleaford	Cassels type 1.3D	4	LANCUM-5C5EE5
Iford	Cassels type 1.3D	5	PUBLIC-87AE7B
Bromeswell (Suffolk)	Cassels type 1.3D	uncertain	SF-A68FA3
Bickley, Cleeve	Cassels type 1.3N	2	Ponsford 2002, 94-95,
			fig. 30, no. 20
Unknown	Cassels type 1.3N	4	Metropolitan Museum
			of Art acc. no. 20.152.10
Wincheap (Kent)	Cassels type 1.7B	3	SUR-32D603
Wenvoe (the Vale of	Cassels type 1.7B	3	NMGW-9F4BEE
Glamorgan)			
Tilshead (Wiltshire)	Cassels type 1.7B	3	WILT-2207D2
Scopwick (Lincolnshire)	Cassels type 1.7B	3	LVPL-7BD375
Harlington (Bedfordshire)	Cassels type 1.7B	3	BUC-550336
Boningale (Shropshire)	Cassels type 1.7B	3	WMID-8AA835
Gedding (Suffolk)	Cassels type 1.7B	3	SF-03BE03
Rogate (Hampshire)	Cassels type 1.7B	3	HAMP-9435C1
Benhall (Suffolk)	Cassels type 1.7B	4	SF-E09D46
Oxborough (Norfolk)	Cassels type 1.7B	4	NMS-8003A2
Edenham (Lincolnshire)	Cassels type 1.7B	4	NLM-53B266
Great Elm (Somerset)	Cassels type 1.7B	5	SOM-802172
La Motte, Écrille	Cassels type 1.9C	No type	Gandel <i>et al.</i> 2008, 306,
			fig. 14, no. 2

The extant examples show a clear trend for two main types of frame to be used with these plates. The first is relatively large and oval, with an offset bar and grooved pin rest (Cassels type 1.3D), only once exceeding width parameters requiring classification as related type 1.3N. Apart from their size, such frames would be relatively undiagnostic when dissociated from their plates. These frames were used across all plate types set out above, implying the contemporaneity of such buckles. The second main frame type is rectangular with a grooved pin rest, generally protuberant (Cassels type 1.7B). Such frames currently have a more restricted association, with three of the plate types; but the fact that they were interchangeable with the oval form suggests their simultaneous use, and also the contemporary use of M-shaped plates which have been shown to have used the same frame type. Again, as with the oval frames, their relatively 'unexceptional' form could make such frames hard to identify as being of 12th-century date in the absence of their plates. Currently exceptional is the large trapezoidal frame (Cassels type 1.9C) known with an unusual plate, related to type 4, from La Motte at Écrille.

A.v.5 Conjoined crescents

A small group has been identified with plates formed of three crescents conjoined between connecting elements and with an openwork centre. Numbering ten examples, they all have the same rectangular frame form which can be classified as Cassels type 1.7E. Though this form is dated very generally between the 12th and 15th century by Cassels (2013, 32), the form of the plate with its truncated lower fold, may, by parallel with the above two types, suggest a date at the earlier end of the range; another similarity is the presence of plain rectangular frames, as found on the pronged plate buckles.

A.vi Strap-fittings of Cassels type 1.71

Dating evidence	Associated material	Site	Reference
'Norman' context	-	Huntingdon Castle (Cambridgeshire)	Hylton and Meadows 2008, 15
Second half of the 12 th century	-	Rubercy Castle ¹¹⁵	Berthelot 1994a, 434, no. 111
12 th -century <i>terminus post</i> <i>quem</i> /13 th - century <i>terminus</i> <i>ante quem</i>	Horseshoe of Clark Type 2 ¹¹⁶	Launceston Castle	Mould 2006, 325-326, 338, fig. 11.24, no. NF67
12 th -century <i>terminus post</i> <i>quem</i> /13 th - century <i>terminus</i> <i>ante quem</i>	Horseshoe of Clark Type 2B ¹¹⁷	Brook Street, Winchester	Hinton 1990h, 1118- 1119, fig. 363, no. 4282
13 th -century terminus post quem	-	Château Ganne	Flambard Héricher <i>et</i> <i>al</i> . 2012, 108, 111, figs 226, 235, no. Po 1159
13 th -century terminus post quem	-	Queen Street/Poultry, London	Egan and Keily 2011, 90, 302, fig. 90, no. S48

Table 37 Dating evidence for select strap-fittings of Cassels type 1.71

¹¹⁵ Uniquely, this has an integral plate, but also features similar arched openwork openings to others discussed

¹¹⁶ Typological dating 11th century - early 13th century
¹¹⁷ Type 'predominant c. 1150-1225' (Clark 2004a [1995], 92, fig. 75)
B: Strap-ends

B.i Late early-medieval to medieval strap-ends classified according to Thomas's classification

B.i.1 Thomas Class B, Type 1

Thomas's Classes A and B appear to be initially contemporary, though apparently Class A was less long-lived, only having persisted as late as the 10th century in northern England (Thomas 2003, 2). Evidence for persistence of use of Class B, Type 1 examples comes from Winchester where an example was found in a context dated to the early to mid-11th century (Hinton 1990d, 501- 502, fig. 126, no. 1065), and from Westminster where an example was found with 10th- to mid-11th century ceramic sherds (Goffin 1995, 88-89, fig. 10.18, no. 50). No further dated excavated examples of Class B, Type 1 have been traced since Thomas's surveys and the form is so relatively plain, making it hard to distinguish examples relevant to the timeframe of this study from earlier ones. Thomas (2001a, 123) noted that the relatively small width of strapends of Class B means that they may have functioned as terminals to straps on objects other than items of dress.

B.i.2 Thomas Class B, Type 6

Though this type subscribes to the length-to-width ratio of Class B, it is dated later than all other sub-types on the basis of the style of its zoomorphic terminal. Depicting a beast's head, predominantly in profile, its characteristics are consistent with the late Viking-Age art styles of Ringerike and Urnes, without being clear as to which of these 11th-century styles it should be attributed, given a lack of diagnostic elements: this is common on such small metalwork items (Thomas 2000a, 206). There is currently no excavated data to support such dating, with one piece found unstratified in Winchester (Thomas 2000a, 205, 401, 439, no. 1039 (cat.)).

B.i.3 Thomas Class E, Type 1

By contrast to those strap-ends which started earlier, the Class E strap-ends that superseded them – in the later 9th and 10th centuries – are characterised by their far smaller length-to-width ratio, being relatively wide, and by their tongue-shaped form. The variant Class E, Type 1 is dated stylistically through its embellishment in the socalled 'Winchester style' of the 10th and 11th centuries (Thomas 2004, 2), starting c. 930 (Blackmore 2015, 153). A terminus ante quem of 1047 is noted by Thomas (2000a, 208) for an example found in a coin-dated hoard from Äspinge (Sweden). Finer dating can rarely be achieved on the internal evidence of individual objects, though the most elaborate examples can be compared with contemporary manuscript art (Thomas 2000a, 210; 2004, 2); on this basis, the manufacture date of the Äspinge hoard find has been suggested as being late 10th century onwards (Thomas 2000a, 209). Thomas (2000a, 211) argued for a distinction between earlier 10th-century examples with inhabited plant-stem designs, of Carolingian inspiration, and the more abstracted, by definition uninhabited, acanthus decoration of pieces from c. 950 onwards (Thomas 2000a, 209), and perhaps enduring until the mid- to late-11th century (Kershaw 2008, 264).

Few Class E, Type 1 examples have been published since Thomas's study, and these have not challenged the traditional dating directly. A find showing an unclear, though probably inhabited, stem from the London Guildhall site was assumed to be residual in a context attributed to site period 10, dated between c. 1050 and 1140 (Egan 2007a, Part II, 344, 461, fig. 324, no. <\$139>); others from St Bartholomew's Hospital (Marshall in press, fig. 1, no. S1), and Bull Wharf, harder to classify definitively (Blackmore 2015, 153, 155, ill. 22, no. 755), were also found residually. An example perhaps of an uninhabited type, though too fragmentary to be certain, was found in a site period 5 context at Bow Bells House, dated to c. 1050-1100 (Richardson 2013, 96-97, fig. 62, no. S34d), which may help support a post-Conquest date for such plainer variants. It was found in a deposit in association with a buckle and a so-called 'staff terminal' (Richardson 2013, 96-97, fig. 62); this may suggest specific, occasional use in a harness-like arrangement for the carrying of an ecclesiastical staff.

434

B.i.4 Thomas Class E, Type 2

Strap-ends of this sub-class have been dated using excavated evidence to the 10th and 11th centuries (Thomas 2000a, 212). Thomas (2000a, 212; 2004, 2) also noted parallels between the anthropomorphic forms with interlace depicted on such strap-ends and stirrup-strap mounts of Williams Class A, Type 3, dated broadly to the 11th century (Williams 1997a). The only example traced here not documented by Thomas was found unstratified at Westbury-by-Shenley DMV (Mills 1995, 352, 356, fig. 156.105, no. 180a).

B.i.5 Thomas Class E, no Type

Examples of tongue-shaped strap-ends that are stylistically diagnostic of a late date are rare, but Thomas (2004, fig. 4, no. 32) isolated one example as bearing a Romanesque leonine creature, while Kershaw (2008, 264) identified another, which she dated to the mid-11th century or later. This latter has since been suggested to be a scabbard chape by Webley and Burnett (2013, 276-277, fig. 8e).

B.i.6 Thomas Class G

Thomas dated this class on the basis of its zoomorphic decoration, taken to be in the English Urnes style of the second half of the 11th century (Thomas 2004, 4), though some examples are thought to be Scandinavian Urnes-style imports. No supporting archaeological dating evidence could be provided by Thomas, though he noted that one example, found in Doncaster, was discovered in a medieval feature adjacent to a pre-Conquest ditch (Thomas 2000a, 217). He also noted the presence of similar decorative motifs, particularly interlace, on other metalwork decorated in the Urnes style, particularly mounts currently of uncertain function and mounts specifically for stirrup straps (Thomas 2000a, 123), and that such motifs seem no longer to have been used on metalwork after c. 1100 (Thomas 2000a, 217).

In the years since Thomas's study two points can be noted. First, a further example has been discovered through excavation, though it was misidentified as a possible furniture mount in the report (Egan 2007a, Part I, 99, Part II, 335, 451, fig. 314, no. <S45>). It was found as a fragment in a site period 11, phase 3, context dated to the late 12th century; it is presumably residual, though an adjacent feature contained pottery dated between c. 1080 and 1200 (Bowsher *et al.* 2007, Part I, 99). It might therefore be reasonable to assume that use of Urnes-style metalwork was mostly post Conquest (see also Kershaw 2010, 6). Second, a number of examples recorded through PAS represent a variant whereby the flared terminal is set perpendicular to the split attachment end (e.g. DENO-7423E6), rather than in line with it. This would make them harder to pass through a buckle, and may suggest that they functioned without one.

B.i.7 Thomas Class H

A class adumbrated in Thomas's PhD thesis did not make it into his 2004 datasheet: Class H examples are not distinguished by their form but by their Anglo-Scandinavian decoration. Two, similar, excavated strap-ends may be pursued under such a classification. These are described as having 'lobe-shaped tongues' depicting 'stylised versions of Ringerike-style foliage' (Thomas 2000a, 123, 418, 443, fig. 3.32D, nos 1324, 1325 (cat.)). As such, these strap-ends can be dated to the early- to mid-11th century on art-style grounds. Archaeological dating comes from an example found at Goltho Manor in a site period 5 context (A. Goodall 1987, 172-173, 176, fig. 153, no. 5). It was associated with the 11th-century kitchen and given a *terminus ante quem* of c. 1080 in the site report, however, redating by Everson (1988, 94) suggests that site period may have endured into the 1130s, if the later castle is taken to belong to the Anarchy period.

B.i.8 Thomas Class I

In his doctoral thesis the last form assigned to this period by Thomas (2000a, 124) was his Class I – with cast zoomorphic terminals depicting animals with gaping jaws. Based on the terminals, considered to be influenced by the late Viking-Age animal heads depicted in profile in Class B, Type 6, he dated Class I to the later 11th century. This late dating was thought to be supported by its composite construction, not seen in earlier types, in addition to its 'debased features' (Thomas 2000a, 218). Such stylistic dating was offered in the absence of excavated examples, though a piece related by its module and construction, albeit with a basic, anthropomorphic terminal was cited as a later comparison (Thomas 2000a, 218). It is contended here that the latter strap-end, found in London dated by ceramics to c. 1350-1400 (Pritchard 2008a [1991], 132-133, fig. 86, no. 614), was not a successor, but rather that Thomas's Class I should also be dated to the high medieval period.

Another anthropomorphic example, showing a crowned king's head, was found at Westbury-by-Shenley (Mills 1995, 352, 356, fig. 156.110, no. 180), though residually in a post-medieval, Period 6, Phase 3 context (Wheeler 2011, 328; Appendix 2.2). Furthermore, a zoomorphic example of Class I, not traced by Thomas, was excavated at the mill race of Bordesley Abbey in a site period 6 context dated to the late 14th to early 15th century (Astill 1993, 193-194, fig. 88, no. 145). Overall, it is argued that one has to reject the late Viking-Age affinities of these strap-ends, accepting instead that they depict a beast's head relatively undiagnostic of date, but regularly seen on a variety of objects of the high medieval period. Evidence, once the allied anthropomorphic variant is taken into account, suggests that a dating centred on the 14th century is plausible for this group, contemporary with other dress accessories that also depict a crowned head (see Gilmore 2019). Although basing an argument for dating on stylistic terms alone is inherently weak, Thomas (2000a, 218) was careful to justify his dating in terms of design and construction. It remains pertinent that Thomas noted a different, composite construction for such strap-ends, specifically with a cast front-plate and smaller sheet back-plate, rather than being wrought from, or cast in, one piece (Thomas 2000a, 218). That this can be considered a medieval trait, rather than a late 11th-century one, helps inform discussion of strap-ends beyond the 11th century.

B.ii Contemporary strap-ends unclassifiable according to the Thomas classification

B.ii.1 Arched terminal

A form with split attachment end and openwork terminal, normally with two, sometimes three, sub-rectangular apertures before a thickened terminal bar, has historically been recorded as Roman based on comparisons with openwork Roman buckle plates (Ashley 2016, 292). However, it is argued here that the form should be considered late early-medieval in date, given recent excavated finds. An example with two apertures has been published from the Leisure Centre site at Brandon (Suffolk) (Riddler 2014a, 346-347, fig. 11.5, no. 0506). Ian Riddler compared its form to a square buckle with pin and plate, the form of the buckle compared to frames, known with or without integral plates from the 11th/12th century onwards. The find was unstratified; however, the site did not have a Roman phase, and much of its ceramic and other artefactual material is typologically datable to the 10th or 11th century (Riddler 2014b, 354). A second example, with three apertures, was found at Bury Road, Thetford, in a rubbish pit for which ceramic evidence suggests disposal of material in the late 10th and 11th centuries, centred on the first half of the 11th (Gibson 2015, 266-267, 273-274, fig. 5.1, no. 9). The module of such strap-ends suggests that they might be functionally comparable to Class E, being contemporary with examples dating to around the first half of the 11th century, rather than the Roman period.

B.ii.2 Socketed end

Related to the preceding type is a loose group of strap-ends which also terminate in a thickened transverse bar; they differ from the preceding group in having a socketed attachment end rather than a split one, though the two groups have been discussed together (Ashley 2016, 291-292, fig. 18.8). However, while the preceding group has been thought to be Roman historically, those with a socketed attachment end have been suggested as being of 12th-century date (Ashley 2016, 292). Two objects of similar module have been published as knife pommels of 11th- to 12th-century date by Hammond (2013, 71-72, figs 1.8.4-c-d); it is assumed that these are also such strapends. No excavated example has been traced for this form. Though this small group is varied in terms of its decoration, the similarity between the openwork examples and the preceding group (e.g. PAS: SF-043AB3 in particular) suggests that a comparable date in the early 11th century, or later, might be valid. Furthermore, two examples have been traced from the Syddanmark region (Denmark) which may help support a late Viking-Age date (Mette Højmark Søvsø pers. comm. 2020), rather than a 12th-century one. The constructional difference in attachment observed on this form might

suggest a change in approach to manufacture; such a change was considered by Thomas to be a later, medieval trait.

B.ii.3 Globular terminal

A group of strap-ends can be isolated with trapezoidal plates which diverge at the attachment end in a deep split, and which terminate in a single globular moulding, often slightly flattened; the 'ball-ended' strap-fittings noted above terminate in three conjoined balls. A variant is decorated with small knops, often equally spaced around the middle of the sphere. Excavated parallels are not numerous, with an example with a hollow sphere found unstratified at Thetford (Goodall 1984b, 69, 73, fig. 112, no. 52). An example with narrow plates and a flattened terminal was found on Meon Hill, Houghton in the grave of a young man who had been executed. Also within the grave was a penny of Edward the Confessor of 'Pointed Helmet' type dating to 1053-1056 (Liddell 1933, 153, fig. XV, no. M7). It seems reasonable to suggest a currency for this form in the mid-11th century, though an overall date range for such a simple form is harder to establish on current evidence.

B.iii Strap-ends post-dating Thomas's survey

A form dated to the 12th century by Ashley (2016, 291-292, fig. 18.8) is of folded sheet construction. Specifically, they appear to be formed of a sheet folded widthways at its centre, riveted together at least at their attachment end. It is to be remembered that such simple construction was noted at Flixborough, there suggested to date to the 9th century (Thomas 2009, 9-10). For medieval London this construction was not noted until the late 13th century (Pritchard 2008a [1991], 129); in Thuaudet's survey (2015, his type A) most examples were found in 13th- or 14th-century contexts. A chronological outlier (of Thuaudet type A2a), found in an 11th-century context in Winchester was interpreted as a strap-end by Hinton (1990e, 505-506, fig. 128, no. 1086). A further example traced in this study, from the Vintry site, London, was dated c. 1100-1160 (VRY89[V622]<928>).

C: Brooches

C.i Plate brooches of circular form (disc brooches)

C.i.1 Weetch Type 2.A (nummular)

Disc brooches of Type 2.A have design elements that can be related, either closely, or more generally, to coins; as such, they are 'nummular' brooches.¹¹⁸ Weetch (2014) divided this sub-type into two groups, depending on whether they had a basis in a coin's obverse design (Type 2.Ai) or its reverse design (Type 2.Aii). The chronology of brooches of Type 2.A is tied into establishing the manufacture/use date of their prototypes, which, as Weetch (2014, 69) noted, is an exercise that varies in ease. The majority of Type 2.Ai brooches imitate early 9th-century *solidi* of Louis the Pious, with degenerate versions of the bust in profile dated to the 10th century (Weetch 2014, 223, 282). In addition, Weetch (2014, 284) noted a number of 10th-century examples based on contemporary Anglo-Saxon coins. One is therefore left with very few candidates of brooches based on obverse designs that might date beyond the 10th century; these often bear facing busts rather than ones in profile.

By contrast, brooches of Type 2.Aii seem to have a longer chronology (Weetch 2014, 284), though they start in the 10th century. As Weetch (2014, 284) noted, precise manufacture/use date is approximate as cross motifs dominate coins of this period; more diagnostic elements are often not forthcoming.¹¹⁹ However, certain elements can be connected with the changing reverse details of, for example, coins of William I and William II (Weetch 2014, 348; 2017, 268), or earlier pennies of Aethelred II (Weetch 2014, 349). Though such evidence from the prototypes gives very useful *termini post quos*, Weetch did not discuss deposit dates; the best evidence for these comes from Bull Wharf, the publication for which post-dated her PhD thesis. At Bull Wharf, five brooches of Type 2.Aii were found in a range of 12th-century contexts, ranging from c. 1103-1120 to c. 1170-1175 (Egan and Blackmore 2015, 47). In the report an identification of their prototypes was not essayed, though they are all described as '11th-century disc brooches', implying either use into the 12th century, or

¹¹⁸ It is unclear why Weetch (2014, 70-71) termed them 'pseudo-nummular'

¹¹⁹ It is also sometimes not always clear whether to use this category or Type 4 (with cross motifs)

residual deposition. Only for one example is an identification perhaps merited; it bears a crude short cross fleury (Egan and Blackmore 2015, 47-48, ill. 30, no. 1044). This design does not appear to be known before Norman pennies, starting with those of William I (though it continued with various embellishments through successive reigns). As such, one might suggest that it was made after the first issue of William I (1066-1068) and deposited before the early 12th century as given by the context dating (c. 1103-1120). In closing, it is noted that the unusually delicate construction of some examples, such as the last, made with a repoussé plate or separate front sheet in copper alloy (Weetch 2014, 71; Egan and Blackmore 2015, 47) might not survive in the plough soil.

C.i.2 Weetch Type 2.B (coin-brooches)

Brooches of Type 2.B can be distinguished from nummular examples (Type 2.A) since they were adaptations of real silver pennies. Continuing the 10th- to 11th-century trend of Type 2.Aii brooches, they displayed the coin's reverse: this was often gilded, having pin fittings attached to the obverse (Weetch 2014, 72). Eminently easier to date than examples of Type 2.A, *termini post quos* can be established based on dating developed for coins of this period. It has been argued that brooches were manufactured from coins current at that time, in an economic period of *renovatio monetae* during which coin types were changed every three to six years (G. Williams 2001, 67). The phenomenon of converting coins in such a way has been documented from a long span between the 9th century to the 12th century, and beyond, but with a clear peak during the reigns of Edward the Confessor and William I in the mid- to late-11th century (G. Williams 2001, 60; Kelleher 2013, 207-208; Weetch 2017, 269). Contextual data is lacking for most brooches of this type. Discussion of deposit dates is limited to that by Kelleher (2013, 210-212); it would appear that all examples to date have been found clearly as residual objects, thus refocusing attention on production dates.

C.i.3 Weetch Type 4.B (with cross motifs)

Disc brooches of Type 4 bear cross motifs, a common design trait on 10th-century brooches (Weetch 2017, 270). Examples of Type 4.B bear a distinctive cross formed of

four lentoid, or lozengiform, arms (Weetch 2014, 76). Weetch (2017, 268) linked its decorative elements to other brooches she attributed to the 11th century: a laddered border and cross-hatching to fill space in the field between the cross and the border. She further identified the same style of cross on other brooch forms she dated to the 11th century. Examples of the latter include a brooch from Osgodby (Lincolnshire) (Weetch 2014, vol. 2, 42, no. 510 (cat.)), with a stepped centre (Type 13.C), and two brooches from Billingsgate, London (Weetch 2014, vol. 2, 44, nos 529, 530 (cat.)), with a domed centre (Type 14). Further in support of a post-10th-century date is a mid-12thcentury spot dating for an example found recently at Bull Wharf, London (Egan and Blackmore 2015, 47, ill. 30, no. 787). Another example cited by Weetch (2014, 347), from Redcastle Furze, Thetford, was found earlier, however, in a context with a mid-11th-century *terminus ante quem* (Little 1995, 90-91, fig. 66, no. 16). The presence of a brooch (not cited by Weetch) in a 10th- to 11th-century phase at Hungate, York (Richardson 1961, 81-82, fig. 18, no. 2), plus an example from Fishergate, Norwich (Huddle 1999, 10-11, fig. 4, no. 45), with a terminus ante quem of c. 1050, suggests that the London examples might be residual, and that, more precisely, such brooches can be dated to the first half of the 11th century.

C.i.4 Weetch Type 13 (with stepped profile)

Brooches of Type 13 are united in having a raised central field, which gives them a stepped profile. Decoration has been subdivided four ways, into examples with: C-shaped scrolls (Type 13.A); back-turned animal motifs (Type 13.B); cross motifs (Type 13.C); and face masks (Type 13.D). Based on their decoration, many such brooches had been dated to the 10th century, during which C-shaped scrolls and crosses were common motifs (Weetch 2017, 267-268). Weetch (2014, 349) identified the three-dimensional quality of the form as the defining feature of this, and other, 11th-century brooch series, along with detailing such as the cross-hatching already noted on brooches of Type 4.B.

Turning to contextual evidence, Weetch (2014, 349-350) gave a mid-11th-century context date to an example of Type 13.A found at Lurk Lane, Beverley, though this ought to have been quoted as late 12th century (site Phase 6C; Tweddle 1991, 155,

159, fig. 117, no. 707). *Termini ante quos* of c. 1160 can be given for this sub-type based on examples found on the London waterfront at the Vintry (Weetch 2014, vol. 2, 41, no. 493 (cat.)), and Bull Wharf (Blackmore 2015, 150-151, ill. 19, no. 946). Although the latter was suggested to be residual in the report, other examples (not noted by Weetch) have been attributed to the second quarter of the 12th century at Leidsche Rijn, Utrecht (Hendriksen 2004, 47, 52, 54, afb. 75, 76, 79).

A similar dating profile can be invoked for brooches of Type 13.D.¹²⁰ Again, the earliest *terminus ante quem*, of c. 1150, comes from Leidsche Rijn (Hendriksen 2004, 51, afb. 74). Other examples are known, for example, three attributed to the late 11th century at Hafengang 11, Schleswig (Hilberg 2018, 226, abb. 11), from a mid- to late-12th century context at Eastgate, Beverley (Spencer 1992, 145-146, 317, fig. 77/pl. 26, no. 175), and from a 12th- to 13th-century context at Coppergate, York (Mainman and Rogers 2000, 2476, 2650, fig. 1197, no. 4278).

Overall, the 11th-century date attributed by Weetch to Type 13 brooches seems justified, although their continuation into the 12th century may be suggested. The spread of dating shows a strength across the 12th and early 13th century; perhaps a focus on the second quarter of the 12th century is overly weighted by the material from Utrecht. The earliest example of a brooch with a stepped profile quoted by Weetch (2014, 350; 2017, 268) is actually a nummular brooch based on a 10th-century prototype – a coin of Henry I as King of East Francia – and as such a Type 2.Ai brooch. It was found in the Klein-Roscherden hoard which has been given a deposit date of c. 1005-1010 (Schulze-Dörlamm 1992, 111-112, fig. 11). Made of silver – whereas the majority were of lead-alloy (Weetch 2014, 91) – this may represent a 10th-century inspiration for what seems to be a later form.

C.i.5 Weetch Type 14 (domed)

Brooches of Type 14 have a domed centre, giving them a three-dimensional quality in profile, as with Type 13. Decorative detailing, such as laddered borders noted for Type 4.B, further connects this form to brooches attributed by Weetch (2014, 95) to the

¹²⁰ Examples of Type 13.B are lacking in contextual data; those of Type 13.C have been assumed to have been found residually

11th century. The lentoid cross motif of Type 4.B also appears on brooches of Type 14 which further seems to align them chronologically. Weetch (2014, 290) at one point placed Type 14 brooches in the 10th century, while elsewhere put them in the 11th century (Weetch 2014, 355; 2017, 268). This is not a contradiction if the type straddles the year 1000, but British dating evidence for the type is not very forthcoming. Weetch (2017, 268) cited an example found at the London Guildhall site as found in an 11th-century context (Egan 2007a, 81, 319, 449, figs 302, 384, no. 14), though site period 11 should be given as c. 1140-1230. Close reading of the report places the find in the first phase of period 11 (1140s-1160s), though it is said to be residual in such a context (Bowsher et al. 2007, 81). The only other British dating traced relates to an example found at Bull Wharf behind a revetment spot dated to the 1140s/1150s (Egan and Blackmore 2015, 49). Further, Weetch (2014, 365; 2017, 268) drew on continental evidence from Mainz which places these base metal *buckelfibeln* in the 11th century (Wamers 1994, 98). Since Weetch's thesis, an example has been published from Hafengang 11, Schleswig, attributed to the later 11th century (Hilberg 2018, 226, abb. 11). Assuming the above London finds are residual, a date in the 11th century perhaps ought to be favoured for domed disc brooches, aligned with that suggested for Type 4.B brooches as some of the domed examples feature similar cross motifs.

C.i.6 Weetch Type 17 ('hub-cap')

Disc brooches of the so-called 'hub-cap' type feature a central glass bead surrounded by a number of circular indentations (Type 17.A), or perforations (Type 17.B), often six (Bos 2008, 722-725). Their dating is problematic due to a lack of contextual information (Weetch 2014, 101), but they merit brief discussion given their suggested presence in the period here by Frick (1993, 327). Weetch (2014, 290) characterised these brooches as belonging to the 10th century. Citing an example found at Chalk Lane, Northampton, in support of such a date, the site report in fact places the object in a later 11th-century phase (Goodall and Webster 1981, 124, fig. 22, no. 7). Furthermore, to examples quoted from Denmark for which use in the 12th century has been suggested (Weetch 2014, 290; see also Bunte 2013, 133), one can add a brooch not documented by Weetch found at Leidsche Rijn, Utrecht, and dated to the second quarter of the 12th century (Hendriksen 2004, 50, afb. 71). Brooches of Type 17 can therefore be considered as potentially relevant to the present work, although future dating evidence may provide clarification.

C.i.7 Weetch Type 20 (cloisonné-enamelled)

Brooches of Type 20 feature decorative cloisonné-enamelled plaques which sit on base plates of gilded copper-alloy (Weetch 2017, 278). The type has been studied extensively and divided into a number of sub-types, the main two based on form and construction (Type 20.A, 20.B). Further divisions were essayed for these *angelsäschsisch-südskandinavische Zellenemailfibeln* by Frick (1993) (see Table 38). Isolated enamel plaques could conceivably be attributed to a sub-type based on design parallels, though the element of conjecture is generally too great to pursue classification on such a basis.

Characteristics	Weetch (2014) classification	Frick (1993) classification	Historic name (Buckton 1986)
Base plate construction; circumferential lobes	Type 20.A	Typ 1, variente 1	'Saunderton' type
Base ring construction; no lobes; beaded border	Type 20.B	Тур 2, variente 1	'Colchester' type
As previous; plain border	Type 20.B	Typ 2, variente 2	'Colchester' type
With wide circumferential collar set with glass 'beads'	Type 20 other	Typ 1, variente 2	'Hybrid' type

Table 38 Sub-division of Weetch Type 20 (cloisonné-enamelled) brooches

Dating of these brooches has been based on a number of factors, contextual dating playing a limited role due to a lack of examples found stratified in excavation. Buckton (1986, 15-16) placed them within the context of late early-medieval enamel production and use, suggesting that these copper-alloy brooches imitated gold cloisonné jewellery – particularly Byzantine and Ottonian material (Weetch 2014, 333) – of the last third of the 10th century and the first half of the 11th century. Buckton (1986, 16) noted the limited potential of English archaeological evidence, detailing an

enamel plaque from the Billingsgate site in London whose medieval floruit began in the second half of the 10th century. More recent studies, for example Weetch's, have also neglected English archaeological data, in favour of that from Scandinavia. The former includes a Type 20.A example from Walpole St Peter (Norfolk), found with other fieldwalked material dated to between c. 950 and 1100 (Ashley and Rogerson 1994, 102-103, fig. 1). An example not identified by Weetch was found in a post pit on Old Grapes Lane, Carlisle, dated by associated pottery to the 12th century (McCarthy 2000, 118-119, no. C12). To this broadly 11th- to 12th-century dating, the evidence from Scandinavia can be brought to bear. This has been set out in a number of works and focuses on the first half of the 12th century for dates of loss (Buckton 1989; Pedersen 2004). One of the most precise dates is given by a Frick Typ 2, var. 2 brooch found in a well on Skomagerstraede, Odense, dated by dendrochronology to the years around 1120 (Lindahl 2003, 163; Pedersen 2004, 57). Finally, a brooch of unusual form published after Weetch produced her thesis, was found in a house at modern-day Algade 9 in Aalborg (Denmark), and was thought by the excavator to have been lost in the 1160s (Baastrup 2014, 169, 202, pl. 14, no. 255).

The combined evidence allows for a late 10th-century start for cloisonnéenamelled disc brooches, although this is based on technological evidence rather than dates from excavation; indeed, the earliest *terminus ante quem* traced is for a Frick *Typ* 1, *var*. 2 example found as a grave good buried with a female at Helsingborg kirche, dated to c. 1100 (Schulze-Dörlamm 1992, 146, no. 2). Other data from excavation strongly suggests use into the early 12th century (Weetch 2014, 110), if not later, potentially as curated items. Currently, it is difficult to offer precision regarding the focus of use within the 11th century, nor is there any clear typochronological patterning; it is assumed that the sub-types were broadly contemporary in their use, all examples of the same technology.

C.i.8 Weetch Type 21 ('Kettlach'-enamelled)

Brooches of the type historically known as having 'Kettlach' enamelling are named after a historic find in Austria. They are decorated using the champlevé-enamelling technique, and can therefore be compared to other brooches which both utilise this decorative technique and depict animals, dated to the 10th century (e.g. Weetch Type 22; Weetch 2014, 48, 117, table 2.4). Although the dating for Type 21 brooches is limited, and can allow for use in the 11th century (Ten Harkel *et al.* 2016, 66-67), the type is thought to centre on the 10th century, based not least on recent radiocarbon dates from the Continent (Eichert 2018).

C.i.9 Weetch Type 23 (Cheapside)

This, and the following two types discussed, were presented together by Weetch as a 'London series', based on a weight of evidence for them from London, particularly as part of the Cheapside Hoard (Weetch 2014, 119). Weetch Type 23, or the 'Cheapside Type', brooches are characterised by a central glass setting surrounded by lead-alloy imitation filigree. This latter can take the appearance of concentric cast laddered rings (Type 23.A), or imitation twisted or beaded wire (Type 23.B). Type 23.C is a composite brooch formed of twisted lead-alloy wires soldered together, around the glass setting at its centre. On brooches of related Type 23.D (not present in the hoard), the glass bead is substituted for a dome, in simulation, surrounded by concentric moulded rings decorated with laddering; the border is perforated with successive holes giving it an openwork quality.

As the name implies, the dating of brooches of Type 23 is based in large part of the dating of the Cheapside hoard itself, which contains 21 examples (Weetch 2014, 120). The hoard, discovered in 1838, was apparently found with coins dating to c. 1000, thus providing its *terminus post quem*. The deposit date for the hoard has been debated (Weetch 2017, 270). Alongside this dating, examples found in excavations help fill out a dating framework for the sub-types, which were all presumably broadly contemporary in their use. Although many of these are residual finds, a number provide useful *termini ante quos* which are detailed in Table 39.

Findspot	Sub-type	Dating	Dating source	Reference
72-75	Type 23.B	c. 970-1100	Associated pottery	Hill and Woodger
Cheapside,				1999, 38-40, fig.
London				40, no. 251
Guildhall	Type 23.B	early 12 th century	Dendrochronology	Egan 2007a, 58,
Yard, London		(site Period 10,		319, 448-449, figs
		phase 4), but post		302, 384, no. S9
		1084		
Guildhall	Type 23.B	post-1079 to 1087	Dendrochronology	Egan 2007a, 448,
Yard, London			of building	no. S10
			destroyed by fire	
Lurk Lane,	Type 23.D	terminus ante	Stratigraphy	Foreman 1991,
Beverley		<i>quem</i> c. 1070 (site		155, 159, fig. 117,
		Phase 5A)		no. 705

Table 39 Dated examples of Weetch Type 23 disc brooches

The aggregated evidence for brooches of Type 23 suggests a start date in the late 10th century, and implies their use beyond the suggested deposit date for the Cheapside Hoard, into the late 11th century. This extended use life is further suggested by the related Types 24 and 25, discussed below.

C.i.10 Weetch Type 24 (with bosses)

These lead-alloy disc brooches are decorated with multiple imitation filigree domes and bosses; some feature an open centre, perhaps intended to take a glass setting or the domed boss seen on other examples (Weetch 2014, 123). As a member of Weetch's 'London Series', their dating is based on the dating of the Cheapside Hoard within which two examples were found (see Type 23, above). Ancillary dating is provided by two examples, both found in contexts dating to around the second quarter of the 12th century, at the London Guildhall (Egan 2007a, 62, 449, no. S15), and at Bull Wharf (Egan and Blackmore 2015, 49-50, ill. 31, no. 1757). These examples might imply curation of certain brooches of the 'London Series' into the early 12th century.

C.i.11 Weetch Type 25 (with lobes)

Brooches of Type 25 feature multiple lobes that project from their circumference, and can be either broadly circular (Type 25.A) or of pointed oval form (Type 25.B). Two examples of Type 25.A were found as part of the Cheapside Hoard and their dating can therefore be based on the overall hoard dating (see Type 23, above). Although no examples of the variant Type 25.B were present in the hoard itself, the sub-type can be assumed to be related, both types perhaps imitating Ottonian-style gold jewellery of the 10th and 11th centuries (Weetch 2017, 271).

Further dating evidence for Type 25.A comes from the London Guildhall, where an example was found in a deposit dated to site Period 10, phase 2, covering the 1070s and 1080s (Egan 2007a, 33, 448, fig. 384, no. S13). Direct dating evidence for Type 25.B also only comes from a singular find, one not noted by Weetch. It was discovered during excavations at 33-35 Eastgate, Beverley, in a context attributed to site Phase 5S, between the mid and late 12th century (Spencer 1992, 146-147, 317, fig. 77/pl. 26, no. 177). Overall, the evidence for this type – beyond the Cheapside Hoard itself – suggests use past its suggested deposit date, into the late 11th century, and possibly beyond.

C.i.12 Ringerike- and Urnes-style (disc)

At the end of a long tradition dating back to the 9th century, are two large disc brooches in silver decorated with bosses in a square formation (classifiable as Weetch Type 10.A; Weetch 2014, 85). One is an old find and part of a mixed hoard deposited in Sutton (Cambridgeshire). It is decorated with engraved beasts rendered in an approximation of the Ringerike style of the first half of the 11th century (Kershaw 2013, 118). The evidence of the coins present in the hoard dates its deposition to c. 1070. The second brooch is a metal-detected find from Bredfield (Brown 2013), bearing Urnes-style creatures. Brooches decorated in the Urnes style can be dated stylistically to the late 11th or early 12th century (Kershaw 2010, 6; 2013, 144, fig. 4.2). Two further disc brooches decorated in openwork are old finds decorated in the Urnes style: the Pitney and Wisbech brooches (Kershaw 2013, 119-120).

C.ii Plate brooches of other forms

C.ii.1 Weetch Type 26 (shield-shaped)

Brooches of Type 26 are shaped like shields, specifically those of a 'kite shape'. The kite-shaped shields used as prototypes were employed between the early 11th and late f12th centuries (Weetch 2014, 355); Lewis (2017, 239) noted that in manuscript art the form is probably exclusively of post-Conquest date, while Weetch (2014, 126) also dated these brooches to the late 11th century due to design parallels noted between them and the shields depicted in the Bayeux Tapestry of the 1070s (c. 1072-1077; Lewis 2017, 234). Weetch (2014, 127) also noted similarities in decorative detail – such as the use of laddering – comparable to other brooches she attributed to the 11th century. This dating places lead-alloy Type 26 brooches earlier than the gold Folkingham brooch, and the bone Caerleon brooch (Redknap 2014, 69-72): two other shield-shaped objects, but dated to the late 12th century on typological grounds – the shields have a flattened, rather than rounded, top, a development of the second quarter of the 12th century (Redknap 2014, 69). Archaeological dating evidence is so limited it was not discussed by Weetch. It consists of two brooches found at the Vintry, London, and spot dated respectively to the 1060s and the 12th to early 13th century (Weetch 2014, Vol. 2, 70, nos 829, 830 (cat.), respectively). An example found since, at 8-10 Moorgate, London, also provides a *terminus ante quem* in the early 13th century (Richardson in prep., fig. 1, no. S4). Overall, the late 11th-century dating for the type suggested by Weetch remains plausible, though with use into the 12th century impossible to rule out (Weetch 2014, 356).

C.ii.2 Weetch Type 27 (Ottonian)

This type consists of probable continental imports of three-dimensional form, either in gold or imitating it (Weetch 2014, 127). Such Ottonian brooches are very rare finds which, in the absence of archaeological dating evidence, with examples being either old finds or metal detected and can be dated typologically to the 10th and 11th centuries. Such precious metal brooches have been argued to have inspired lead-alloy examples within the 'London series' (Weetch 2017, 271).

C.ii.3 Weetch Type 28.E (cross shaped)

Within the set of cross-shaped brooches (Type 28) a small sub-set has been discerned (Type 28.E), characterised in part by its primary material: they were made in lead alloy. These have been argued by Weetch (2014, 354) to be significantly later than the copper-alloy cross-shaped examples of the 8th and 9th centuries. This argument was based on decorative details, such as laddering, and the frequent depiction probably of the face of Christ, which are paralleled on examples of Types 13.D and 24, both dated to the 11th century by Weetch, and even into the 12th century in the present study. Weetch (2017, 271) compared this human face to that depicted on an openwork pin head from Billingsgate, London, previously dated to the second half of the 12th century on ceramic evidence (Pritchard 2008b [1991], 304/pl. 7E, no. 1470), though since reappraised to the 1230s (Schofield et al. 2018, 110, table 26). Two examples of crossshaped lead-alloy brooches recovered from Bull Wharf are likely to pre-date the revetment behind which they were found, dated to site Period 7, Phase 4 – in the late 1140s (Egan and Blackmore 2015, 48-49, ill. 30, nos A132, 405). It is therefore contended here that Type 28.E brooches might be considered to belong as much to the early-12th century as the 11th century.

C.ii.4 Weetch Type 29.A (rectangular)

Brooches of sub-type 29.A are rectangular and decorated with inlaid enamel. They are extremely rare. Dating evidence is lacking from England such that their continental chronology – between the second half of the 10th century and the early 11th – must be adopted (Weetch 2014, 290).

C.ii.5 Weetch Type 30.A (bird-shaped)

Brooches of Type 30 are copper-alloy objects in the shape of a bird shown in profile; sub-type 30.A has a characteristic fan-shaped tail and frequently a crested head; it lacks the projecting cross on Type 30.B. With English examples solely known through metal-detecting, for dating we must turn to a combination of art-style dating and evidence from Scandinavia, where examples are known in number. Studied in detail by Pedersen (2001), evidence was gathered and put forward which dates these brooches primarily to the 11th century. One of the best pieces of dating evidence come from Lund, where evidence for production was found in cultural layers dating between c. 1020 and 1050 (Stenholm 1976, 295/pl. IX, figs 265-266, no. 66166:770). The most stylistically diagnostic examples, such as one published from Stoke Holy Cross (Norfolk) (Margeson 1988, 199, fig. 2), have features characteristic of the Ringerike style, such as lip lappets and spiral joints (Kershaw 2013, 123). The Stoke Holy Cross brooch is otherwise compared to the rendering of a bird on a coin issued by Magnus the Good in Lund in the 1040s (Pedersen 2001, 31, fig. 18). A combination of stylistic and archaeological evidence suggests that these brooches should be dated to the first half of the 11th century, and in England after the accession of Cnut in 1016 (Kershaw 2010, 5), with hypothetical use into the third quarter of the century (Kershaw 2013, 155). In Denmark, other examples with Urnes-style decoration may be dated up to c. 1150 (Søvsø and Jensen 2020, 2).

C.ii.6 Urnes-style (openwork animal)

For the openwork animal brooch in the Urnes style, common in Scandinavia, and when found in England perceived to be imported, Scandinavian dating evidence must be used in the absence of English excavated examples. In Lund examples of openwork animal brooches, plus moulds for their manufacture, were found in a site phase dated between c. 1100 and 1150 (Bergman and Billberg 1976a, 207, fig. 150). For Østlandet (Norway), Røstad (2012, 204), using aggregated evidence, dated them to the second half of the 11th century. Recent evidence from an excavated workshop in Ribe provides the same overall range of c. 1050-1150 (Søvsø and Jensen 2020), which accord well with the dating for the Urnes style between the later 11th and early 12th century.

C.iii Penannular brooches

C.iii.1 Booth Type C

A few observations can be made regarding the group isolated here analogous to Booth's Type C, which suggest that they should be considered separately to Roman and early-medieval pieces. Examples traced are relatively small, most measuring between 18 and 22 mm in diameter. Pins are few to survive, but are relatively simple: either formed of thick sheet, or of simple wire construction. A recurring decorative trait is the presence of engraved zigzags on the front of the hoop.¹²¹

The sixteen brooches traced with coiled terminals have been found at fourteen sites across England, France, Italy and Sweden; two sites have two examples. The locations can be divided into three groups, categorised according to the quantity and nature of Roman material present and, therefore, the likelihood of penannular brooches found in medieval contexts being residual (Table 40).

Sites with significant quantities of Roman or early-medieval archaeological material	Sites dominated by medieval material but with some Roman material	Sites either without Roman material or where it has been brought in
Vine Street, Leicester	St Peter's Street, Northampton	Eastgate, Beverley
Crypta Balbi, Rome (Italy)	Castle Acre Castle	Nottingham Castle
Marlowe Car Park, Canterbury	Castle Rising Castle (Norfolk)	
La Motte, Écrille	Whitby Abbey (North Yorkshire)	
Desborough Castle (Buckinghamshire) ¹²²	'Goltho' Manor/Castle	
Ludgershall Castle ¹²³		

Table 40 Sites featuring penannular brooches in medieval contexts

While it is, of course, possible that all of the brooches could be earlier examples found residually, this possibility diminishes given the quantity of sites presented above, a decreasing presence of earlier material on the given site, and little or no evidence for Roman material in the case of the final group. The weight of evidence suggests a new production of penannular brooches in this period. Two examples from contexts tightly dated to the 1140s at Castle Acre Castle strengthen the early- to mid-12th-century floruit of such brooches (Goodall 1982, 238-239, fig. 44, nos 29 and 30).

¹²¹ This is found on brooches found at Castle Acre Castle, 'Goltho', Ludgershall Castle, Nottingham Castle, Canterbury (Marlowe Car Park) and Northampton (St Peter's Street)

¹²² Though a Norman ringwork within an Iron Age hillfort, the layer from which the brooch was recovered was dominated by Roman pottery (Collard 1988, 25, fig. 14, no. 1).

¹²³ A site with an Iron Age pedigree.

C.iii.2 Booth no Type

A form of penannular brooch seems to sit outside the usual English typology in that it is made/decorated to appear cabled, a trait seen on medieval annular brooches. Furthermore, its terminals, of hemispherical form, are separately applied. The form was recognised at St Peter's Street, Northampton (Oakley 1979, 248-250, fig. 107, no. 5), found there in a feature dated to site Phase 5 (c. 1100-1250). As noted, the site is characterised by predominantly medieval material, though some material of Roman date is present; an example found earlier, at Copt Hay, Tetsworth (Oxfordshire), was assumed to be a Roman object found residually in a medieval layer (Robinson 1973, 42, no. 2). Since these discoveries, three other finds can be added, though the last by no means certainly: from Victoria Road, Winchester; St Oswald's, Gloucester; and Newton St Loe Castle (Somerset). Putting the Newton St Loe piece to one side due to its incompleteness, the other two sites had strong Roman occupation. Overall dating evidence is diminished by the Winchester example having been found residually in a late medieval to post-medieval pit (Rees et al. 2008, 213-214, fig. 113, no. 1313); the brooch from St Oswald's, Gloucester, was found in a 14th-century context (Heighway and Bryant 1999, 137-138, fig. 3.15, no. 44). The earliest terminus post quem for these objects is c. 1100, with *termini ante quos* in the 13th century. Although one cannot rule out entirely the possibility that such penannular brooches are Roman objects found residually, their absence on Roman sites suggests that they were a medieval form, worn during the 12th and, perhaps, 13th centuries.

C.iv Annular brooches

C.iv.1 Deevy Class 1 (undecorated)

Annular brooches of this class are circular in outline and have no decoration (Deevy 1998, 8); this naturally makes them almost impossible to date out of an archaeologically dated context. Of the 29 examples documented from Ireland by Deevy (1998), the two dated either to the late $12^{th}/13^{th}$ century or the first quarter of the 13^{th} century are made from copper-alloy and have a circular cross-section. The class equates to Søvsø (2009, 196, fig. 8) Types 1.1 and 2.1, dated respectively

between the 12th and 15th centuries and the 13th and 15th centuries; Deevy (1998, 11) dated them from the 12th to the 15th centuries, with a high point in the 13th.

In addition to the aforementioned pair from Dublin, four further examples of Class 1 brooches have been traced from relevant contexts. One was found in Winchester, in a 12th- to early 13th-century context in the Brook Street area (Biddle and Hinton 1990, 640, 642, fig. 172, no. 2016). Two brooches were dated to site period 9 (c. 1050-1100) at the Marlowe Car Park site in Canterbury (Garrard 1995, 1048, fig. 447, nos 523, 526). The fourth example does not fall into the class *sensu stricto* as it has a plain lozengiform frame; it was found in a Late Saxon pit of c. 1000-1070 at Norwich Castle and was presumed to be intrusive (Goodall 2009a, 95, 506-507, fig. 7.24, no. 6023). The English examples serve to strengthen the argument set forward by Deevy and Søvsø for plain annular brooches in the 12th century, and even push their dating back into the late 11th century. Finally, it is noted that, being on average c. 18 mm in diameter, these early annular brooches are fairly diminutive, all indeed smaller than Deevy's (1998, 8) overall average diameter of 22.5 mm.

C.iv.2 Deevy Class 2a (with engraved decoration)

Effectively decorated versions of Class 1 brooches, brooches of Class 2a bear incised, engraved or false relief abstract motifs (Deevy 1998, 11). Of the 49 examples documented from Ireland by Deevy, two were dated contextually between the mid-12th and 14th centuries, with a third between the late 12th and early 13th centuries (Deevy 1998, 11-12). All made of copper alloy, one has a circular cross-section and is decorated with oblique engraved lines (Deevy 1998, 98, no. 39). The other two have, respectively, a lozengiform or sub-triangular cross-section, the slightly larger surface allowing for more elaborated detailing – in both cases zigzags/chevrons. The class equates to Søvsø (2009, 196, fig. 8) Type 1.2, dated between the 12th and 15th centuries; Deevy (1998, 14) gave them the same date range, with a high point in the 13th.

A further thirteen brooches have been identified from relevant contexts.¹²⁴ An example from Meols beach identified on the basis of being comparable to London examples by its reporter (Egan 2007b, 141, 143/pl. 25, no. 1690) naturally cannot aid with chronology; it may be that further examples of this Class found at Meols may date to the period, but diagnostic traits have not been identified sufficiently to apply to examples found out of context. The simulated dates based on the contexts in which such brooches have been found show strongly from the start of the 12th century, becoming increasingly common as the century progresses; it is possible that the 11thcentury presence might represent an intrusive object. English and Norwegian examples serve to strengthen the argument set forward by Deevy and Søvsø for engraved annular brooches in the 12th century, and beyond. Although such objects are very hard to date out of context, decoration might be said overall to be basic. On examples from Coppergate, York, Winchester and Bull Wharf, London, it consists of simple successive notches at the edges (respectively, Ottaway and Rogers 2002, 2912, 2914, 3070, fig. 1486, no. 12900; Biddle and Hinton 1990, 640, 642, fig. 172, no. 2017; Egan and Blackmore 2015, 51, ill. 32, no. 1562). On others, basic grooved lines, generally transverse, for example on brooches from Leicester or Bull Wharf (respectively, Cool 2009a, 202-203, fig. 70, no. 232; Egan and Blackmore 2015, 51, ill. 32, no. 128).

C.iv.3 Deevy Class 3a (with cable decoration)

Brooches of Class 3 bear cabling or have been cast to give the appearance of a twisted frame (Deevy 1998, 15). Deevy (1998, 15, 17) argued for the presence of such decoration in the 12th century based on a singular example found in a mid-12th century context in Waterford, within a range enduring into the 14th century. Similarly, Søvsø (2009, 196, fig. 8) dated her equivalent sub-type, Type 2.3, to a range between the 12th and 15th centuries. However, it is difficult to back up such an early date from other sources; no further Class 3a brooch has been traced in relevant contexts through this study. This discrepancy is hard to reconcile, but here we will follow

¹²⁴ From London (3), York (2), Bergen (Norway) (2), Winchester (2), Beverley (1), Gustävel (Germany) (1), Leicester (1) and Southampton (1)

Deevy's (1998, 17) observation: that the *British* corpus started in the 13th century. The earliest examples from London come from mid-13th century context (e.g. Egan 2008c [1991], 249-250, no. 1310), while the 58 brooches with cabled decoration found as a hoard in Hambleden (Buckinghamshire)¹²⁵ were thought to date to the late 13th century (Babb 1997). Further afield, Heindel (1990, 12) used European evidence to date annular brooches decorated in such a way to the 13th and 14th centuries.

C.iv.4 Deevy Class 6a (with multiple collets)

Brooches of this class were set with 'gems', generally in collets (Deevy 1998, 19). They enter the present discussion based on a singular example found in Denmark; Deevy (1998, 20, 23) provided a general 13th- to 14th-century date for the class, based on international examples. The Danish brooch is circular and set with twelve glass 'stones'; any collets are negligible. It was found on the Dagmarsgade in Ribe in a context dated to the last quarter of the 12th century (Søvsø 2007, 26).

C.iv.5 Deevy Class 8 (with derivative decoration)

Within her Class 8, Deevy (1998, 24) grouped together those brooches with decoration, generally cast, in imitation of decorative features on brooches of other classes, notably collets. Attribution to the 12th century is based on two examples from Dublin High Street, cast in lead alloy and dated to the late 12th to early 13th century (Deevy 1998, 126, nos 130, 131). As Deevy (1998, 25) noted, classification was made on socio-economic grounds, with brooches potentially classifiable purely by decorative trait, regardless of its rendering. As such, Deevy's Class 8 is not directly comparable with Søvsø's classification, though one may consider the sub-types that the cited Dublin examples appear to imitate, namely Søvsø Types 2.5 and 2.6. Søvsø (2009, 196, fig. 8) provided a 13th- to 14th-century range for her Type 2.5, and a 12th- to 15th- century range for her Type 2.6. Deevy (1998, 25) argued that, overall, brooches of her Class 8 were products of a period spanning the late 12th to 14th century. Here, then, there appears to be a contradiction between Deevy's date range for Class 6a, brooches with 'gem'-set collets, and those in imitation of them (Class 8), the former

¹²⁵ Along with one, further annular brooch

suggested as being later, which cannot follow. Given the existence of brooches with imitation collets in the late 12th century, it would seem reasonable to assume the existence of their prototypes (Class 6a) also in this period, at the latest; this accords with the Danish dating cited above.

A further eleven brooches have been traced as part of this study; that with the earliest *terminus ante quem* (of 1150) may be less relevant than the others as it was found at the Crypta Balbi, Rome (Sfligiotti 1990, 542-543, tav. LXXXII, no. 730). The other examples all come from London, the majority from the recently published Bull Wharf site (Egan and Blackmore 2015): seven examples of this class were documented from the 12th-century waterfront. Unfortunately, there is no refinement in the date for most of these pieces beyond the general site dates. Where more detail was available, the brooch in question was attributed to site Period 7, Phase 6 (c. 1170-1181) (Egan and Blackmore 2015, 50-51, ill. 32, no. 111). This late 12th-century date tallies with the c. 1170-1200 range given to a brooch found at Swan Lane, London, following recent reappraisal of site dating (Schofield et al. 2018, 446, table 4), and the c. 1170-1220 range for a brooch from Waterfront House, London (Keily 2015, 32, 115, fig. 28, no. 35). The dating from London confirms that from Dublin: that in these urban centres, at least, brooches made in imitation of given decorative techniques were being used certainly by the second half of the 12th century. The corollary of this, noted above, is that brooches with collets were also worn at this time, despite the slightness of the archaeological evidence for them; such also is the evidence of the Corbeil statue of the 1150s.

C.iv.6 Deevy Class 9 (miscellaneous)

Being a catch-all class for miscellaneous examples, Deevy's Class 9 is not a useful typochronological entity. However, by considering the variety contained within the brooches not otherwise classifiable one can gain a sense of a variability within 12th-century brooches. One, in lead-alloy from Dublin, has an openwork border formed of twenty-three radial bars (Deevy 1998, 128, no. 137), while another, from South Mimms Castle is of gilded copper-alloy and, uniquely, takes the form of an openwork quincunx (Clark 2013, 67, fig. 56). Two further brooches are united in having been

formed of, or decorated with, twisted copper-alloy wire, and lacking a pin constriction: one from Billingsgate, London (Egan 2008c [1991], 256, no. 1339), the other from Coppergate, York (Ottaway and Rogers 2002, 2911-2912, 3070, fig. 1486, no. 12899).

D: Bridle cheekpieces and bit links, and other harness links

Williams Type	Dating	Site	Reference	Notes
Williams Type 1	c. 1100-	St Martin-at-	Ayers 1987,	assumed to be
(fragment)	1170	Palace-Plain,	65/pl. XXXIV,	residual
	(site Period	Norwich	fig. 56, no.	
	II, Phase 1		11/67	
	context)			
Williams Type 2	c. 1250-	Southampton's	Scott 2011,	assumed to be
(fragment)*	1350	French Quarter,	179-180, fig.	residual
		Tenement 180	5.31, no. 71	
Williams Type 3	10 th -early	Domburg,	Ufkes 2011,	Associated with 10 th -
(fragment)*	13 th	ringfort	225, no. 10/2;	to 12 th -century
	century		Webley in	pottery; a
			press	conventionally 12 th -
				to early 13 th -century
				fragmentary knife
				sheath chape of
				Bishop Class G
Williams Type 3	13 th	Holworth DMV,	Rahtz 1959,	assumed to be
(incomplete)*	century	Dorset, rubble of	146, fig. 12,	residual
		Building B	no. 8	

Table 41 Cheekpieces with dating evidence

*not identified as a cheekpiece in the site report

Table 42 Copper-alloy harness	links with dating evidence
-------------------------------	----------------------------

Туре	Dating	Site	Reference	Notes
Double ended*	1020-1050	Lund	Bergman and Billberg 1976b, 230	Features a Ringerike-style beast
Double- ended (2)	Mid-11 th century dating, by association	Lundby	Pedersen 1999, 149	Part of a wider group

Four way*	<i>terminus ante</i> quem of c. 1071	Oxford Castle	Allen 2019, 261	found 'between the Norman rampart and the Saxon cultivation soil'
Double ended*	early 12 th century (site Phase 36 context)	Winchester, Castle Yard	Hinton 1990b, 770, 772, fig. 220, no. 2345	-
Double ended*	<i>terminus ante quem</i> of c. 1300	Whittington Court Roman Villa	O'Neil 1952, 77	found below a medieval field wall containing 13 th -century glazed ware
Double ended	13 th -16 th century (residual)	Tattenhoe DMV	Mills 1995, 337, 350, fig. 152.57, no. 64	-

*with three knobs on their loops

Table 43 Select iron harness links with dating evidence

Туре	Dating	Site	Reference
Double ended	mid-10 th to mid-11 th century	Le Plessis-Grimoult	Halbout <i>et al</i> . 1987, 238, no. 994
Double-ended	mid-11 th -century context	Brook Street, Winchester	Goodall 1990b, 1044, 1046, fig. 334, no. 3882
Double-ended	mid-11 ^{th-} century <i>terminus ante quem</i> (site dating)	Haithabu	Westphalen 2002, 255, 257, taf. 97, no. 11
Double-ended	12 th to 14 th centuries (pit dated by ceramic evidence)	Norwich Castle	Mould 2009, 178-179, 526, fig. 4.106, no. SF6776

E: Harness pendants and pendant suspension mounts

E.i Harness pendants

E.i.1 Circular (Krabath Varianten *4000, 4100, 4300; Ward Perkins Type IV; Goßler* Varianten *I-III)*

According to Krabath's (2001, 239) dating discussion, circular harness pendants fall into the date range of this study. The examples he provides stretch potentially from the late 11th century to the 15th century, this being such a basic form. Krabath

distinguished openwork examples (*Variante* 4100), which based on their so-called Romanesque zoomorphic and figural representations can be dated to the 12th and 13th century, though only a few archaeologically dated examples exist to corroborate this. The openwork examples discussed by Krabath (2001, 246, karte 59) and also by Goßler (2011, 126, abb. 48) are a phenomenon of modern-day German, Switzerland, Austria and Hungary. Openwork examples identified in the present study are accorded a similar dating on iconographical grounds, even though they form a separate geographical group. An object described as a 'mount' found at the ringwork at Llantrithyd, and dated to the first half of the 12th century, is comparable to the English openwork pendants, except its suspension loop is in the same plane as the plate (Charlton *et al.* 1977, 50, no. 83). Other examples with simpler open perforations, specifically an openwork quatrefoil (Variante 4300), include an example from Burg Berge, dated to c. 1060-1138 (Untermann 1984, 128, taf. 12, 20, no. Br. 2).

Further distinctions were essayed by Goßler (2011, 46-47) who defined three types, his Variante III equating to the openwork pieces already mentioned. Goßler's Variante I are either plain or lightly engraved; Goßler (2011, 81) provided archaeological dating for his examples between the 13th and 15th centuries. However, this study has identified similar examples from 12th-century contexts, and others from sites which have a strong 12th-century floruit, such as Hen Domen and Old Sarum, even if the pendants cannot be more closely dated (respectively, Higham and Rouillard 2000, 104, no. 109; Cherry 1991, 23, 27, fig. 4, no. 23). Pendants from London from an early 12th-century context at the Vintry (VRY89[V310]<661>) and a late 12th- to early 13th-century context at Newgate Street (Griffiths 2004 [1995], 64-65, fig. 47, no. 57), are shallowly convex, but otherwise plain; some other potentially contemporary pendants have gilding. The general plainness of such circular pendants means that they are difficult to date as stray finds, and could potentially post-date the 12th century. Goßler's Variante II are decorated in low relief, generally with zoomorphic designs. Such pendants have been dated stylistically to the 12th to early 13th century by Ashley (2002, 7), though the earliest archaeological dating in England from Cuckoo

Lane, Southampton, is from the first half of the 13th century (Harvey 1975, 254, 256, fig. 240, no. 1708).¹²⁶

E.i.2 Annular (Krabath Varianten 4200, 4210)

In his dating discussion, Krabath (2001, 240) referred to an annular pendant from Ruine Schanzenköpfle, dated in its report to c. 1100-1230 (Wendt 1998, 40), and another from Minden (Germany), dated to around 1200. Other examples detailed in his catalogue can also be dated to the 12th and 13th centuries, such as that from Burg Rodersen (Germany) (Goßler 2011, 231, 286, taf. 5, no. 140.2), and from Chvojen (Czechia) (Hejna 1983, 388, obr. 11). However, an annular pendant with a moulded, segmented front found at Rougiers, may date later (Démians D'Archimbaud 1980, 529, 521, figs 480-481, nos 13, 3 respectively), highlighting the problems inherent in generalising about forms that are so basic. A few further examples have been traced (Goßler 2011, 83), though they add little to the above date ranges; a solitary excavated example from England was found in a mid-13th-century context in Winchester (Hinton 1990g, 1050, 1052, fig. 337, no. 3929).

A variant form (*Variante* 4210), features a slight expansion below the suspension loop, perforated for a separate internal 'swinger' which tends to be circular (Krabath 2001, 237, abb. 55, no. 10). This type was not pursued by Krabath in his discussion, and the pair of examples in his catalogue lack contextual dating. Two further examples have been identified, one of which unstratified, though its site at Geldermalsen-Station, has yielded much 12th-century material (Renswoude 2015, 94-96). A second example, from Neuwarfen, has been dated to the 11th century by Goßler (2011, 236, no. 221). Overall, the generally early dating of annular pendants with swingers supports the dating of those without, although the simple form means that a later date cannot be ruled out for such pendants.

E.i.3 Crescentic (Krabath Variante 4500)

¹²⁶ The dating of an example from Brighton Hill South, Hampshire, quoted by Goßler (2011, 81, note 690) to the second half of the 11th century cannot be sustained. It was found in layer 0777 which was not attributed a site phase (Fasham and Keevill 1995, 108), with an early 14th-century (Class 10) farthing of Edward II.

Crescentic harness pendants have a long pedigree, stretching from the Roman period onwards (see, for example, Nicolay 2007, 403, pl. 92), and including 7th-century examples in Continental Europe (Krabath 2001, 240). Krabath (2001, 240) discussed an example from Schaffhausen (Switzerland), which he dated to the 12th or 13th century, though the report details the pendant's discovery with 12th-century ceramic finds (Bänteli 1994, 87). Most of the rest of his discussion related to depictions of such pendants, in various media up to, and including, some of 15th-century date (Krabath 2001, 240). Goßler (2011, 45) declared the form to be rare, but noted an 11th- to 12thcentury example from Berlin-Spandau (Goßler 2011, 84, note 733). The only English example mentioned comes from a post-1520 layer at Wharram Percy, East Yorkshire (A. Goodall 1979, fig. 56, no. 37), and is surely residual.

This study has identified further English examples, plus a piece published from Altenberg bei Füllinsdorf, with strong dating evidence from the second half of the 11th century, the castle's Phase 3 (Marti 2013, 145-147, taf. 194-195, no. 59). In England, the only dating evidence comes from an example found at Wolvesey Castle, Winchester, found in a 14th-century site phase (Hinton 1990g, 1048-1049, fig. 335/pl. LXIV, no. 3905). This piece has a separate 'swinger', as would have had an example found at Ludgershall Castle (Robinson and Griffiths 2000, 125, fig. 6.1, no. 3). The above discussion demonstrates that crescentic harness pendants were in use in the 11th and 12th centuries, albeit perhaps not commonly, though they seem to have continued later.

E.i.4 Shell-shaped (Krabath Variante 6000)

Krabath (2001, 241) included examples of shell-shaped harness pendants in his discussion, referring to a pair of examples from Castle Acre Castle both from 12th-century contexts. They both form sets with shell-shaped suspension mounts (Goodall 1982, 238, fig. 44). As with the mounts, the accompanying pendants are rendered as scallop shells, with moulded bodies and engraved detailing. Contextual dating allows for a date range of c. 1140-1200 for the larger, more elaborate example (Goodall 1982, 238-239, fig. 44, no. 37), while the smaller set is dated even more closely, to c. 1145-1150 (Goodall 1982, 238-239, fig. 44, no. 36). Allowing for reattribution as a

shell-shaped pendant (rather than a circular one), an example from Eiermarkt, Braunschweig (Germany), has been dated to the period c. 1050-1175 (Lungershausen 2004, 291, taf. 16, no. 268). However, Krabath (2001, 241) also noted examples from Burg Tannenberg (Germany), a site with a *terminus ante quem* of 1399, and which are unlikely to be earlier than the 13th century (Schmitt 2008, 447, taf. 42).

Further to these examples, this study has identified a number of pieces from excavation, though they mostly lack dating information. A group of three pieces has been documented from the Vintry, London, two from layers dated c. 1100-1160, the third layer more generally to c. 1100-1220. The overall weight of evidence suggests that shell-shaped pendants were an early form; an early date is supported by current knowledge of the dating of shell-shaped pendant suspension mounts with which these pendants were generally en-suite (Appendix 1.E.ii.2).

E.i.5 Drop-shaped (Krabath Variante *8100)*

Krabath (2001, 241) discussed a number of examples relevant to the temporal parameters of this study, including two drop-shaped pendants from his study settlement, Höxter. These are virtually identical in form, but from different deposits, the earlier of which dated to the first half of the 12th century (Krabath 2001, 526, no. XXIX.6). An example from the Alter Markt, Magdeburg (Germany), was dated more broadly to the 12th or 13th century (Goßler 2011, 240, no. 278.A.3). However, examples quoted from England were found in 14th-century or later contexts at Southampton (Harvey 1975, 257, 259, fig. 241, no. 1749) and Westbury-by-Shenley (Mills 1995, 348, 355, fig. 151.50, no. 215).

A number of examples can be added to those of Krabath, although the only additional contextual dating comes from Winchester. One pendant was found in a mid-to-late 13th-century context at Wolvesey Castle (Hinton 1990g, 1052, fig. 337, no. 3930), while the other was found in a 12th- to early 13th-century phased layer in the Tanner Street area (Hinton 1990g, 1048-1049, fig. 335, no. 3902A). Overall, it appears that drop-shaped pendants formed part of the 12th-century repertoire, though their use seems to have endured.

E.i.6 Miscellaneous (including Krabath Varianten 3300, 7400)

Further to the forms discussed above, Krabath (2001, 239, 241) referred to a few further, isolated examples which are relevant to this study. These include a solitary example of his *Variante* 3300, which is a subset of his rectangular and square forms when it could be better categorised as a lozenge-shaped pendant. Found at Castle Acre Castle, it has an open centre, slightly incurved sides, and rounded, convex knops at each apex decorated with cross-hatching on the front (Goodall 1982, 238, fig. 44, no. 35). It was attributed to a site phase specifically from the 1140s. Also unique in his catalogue is a piece which is effectively of pointed oval form but described as 'Eichenblattförmig' (*Variante* 7400). At the centre of the oval is raised setting for an extant oval quartz stone (Jackson 1995, 97, fig. 18, no. 16). This was found at Gisborough Priory, Redcar and Cleveland, in a 12th-century 'Norman' phase, a *terminus post quem* given by the priory's foundation in 1119.

E.i.7 Shield-shaped (Krabath Varianten 1000, 4400, 4410; Ward Perkins Type I)

It seems clear that the shield-shaped form was the dominant within pendants from at least the second half of the 13th century onwards, for a period of over a century (Griffiths 2004 [1995], 62). A pendant of this form was discussed by Krabath (2001, 239) found at the Damenstift at Herford (Germany), to which he gave a c. 1150-1200 date. However, the object has been attributed a later date in the 13th century by Goßler (2011, 232, no. 170 – terminus ante quem of 1275). Krabath did not discuss his Varianten 4400 and 4410, which can be described as 'kite-shaped shields', respectively with or without zoomorphic decoration; these at least are more readily associated with the period examined perhaps than the triangular forms, and certainly the socalled 'heater' forms of the 13th and 14th centuries (Ashley 2002, 5; Baker 2015, 21-22). The earliest example of such a kite-shaped shield pendant in Krabath's catalogue was found at Burg Isenburg, where it can be dated to between the end of the 12th century and the first quarter of the 13th (Krabath 2001, 642, no. 3254). Baker (2015, 21-23) discussed further examples which he argued as being plausibly 12th to 13th century on the basis of various characteristics, further to their 'early' form: engraved and punched decoration (including wrigglework), occasional (surface) enamel but a

general lack of tincture, pseudo- or proto-heraldry (rather than designs which can be blazoned). It follows that such shields – if not similarly decorated triangular shields with straight sides – should be dated either side of 1200, though the excavated corpus does not allow greater precision.

E.i.8 Lozengiform (Krabath Variante 2000; Ward Perkins Type II)

The lozengiform pendants discussed by Krabath (2001, 239) were all found in either 13th- or 14th-century contexts. However, he did refer to iconographical evidence from the painted ceiling of c. 1110 at St Martin's at Zillis (Switzerland), on which lozengiform pendants are depicted. The effectively lozengiform example from a mid-12th-century context at Castle Acre Castle (*Variante* 3300) has already been mentioned Appendix 1.E.i.6). Furthermore, a plain example dated to the first half of the 12th century can be noted from Llantrithyd ringwork (Charlton *et al.* 1977, 50, no. 83). It would seem overall that one should include lozenge-shaped pendants in the 12th-century corpus, particularly those either plain, with engraved decoration, or with punched decoration as with one from Kidwelly Castle (Carmarthenshire) (Fox and Radford 1933, 122, fig. 11, no. M.1).

E.i.9 Rectangular (Krabath Variante 3000)

Rectangular harness pendants are evidently very rare in Germany, with Goßler (2011, 50) only able to cite English parallels for a singular example from Burg Treuchtlingen, given a *terminus ante quem* of 1266 (Goßler 2011, 84, 228, 285, taf. 4, no. 103.2). Krabath's (2001, 239) discussion of rectangular pendants focused exclusively on English examples, which were given dates in the 13th and 14th centuries; historically, such dating has been typical for this form (Griffiths 2004 [1995], 62; Rees *et al.* 2008, 288). However, the current orthodoxy has rectangular harness pendants as typically 12th to 13th century in date, specifically those examples with engraved or punched decoration (as opposed to enamelling), and a gilt surface treatment (Baker 2015, 18-20; Ashley 2002, 7), with lions passant being a common device (Baker 2015, 20, fig. 5). Though such dating follows logically in terms of their decorative treatment and proto-

heraldry, such as engraved sexfoils and frets (Baker 2015, 19, fig. 4), excavated dates in support are not particularly forthcoming.

E.i.10 Square (Krabath Varianten 3100, 3200; Ward Perkins Type III)

In his discussion, Krabath (2001, 239) mentioned only one square pendant (*Variante* 3100), which was dated to the 13th century on typological grounds. Contextual dating is lacking for the majority of examples in his catalogue, with the exception of a London piece which has corner bosses and wrigglework decoration, dated by ceramics to c. 1230-1260 (Griffiths 2004 [1995], 64-65, fig. 47, no. 55). A rare example with attached openwork plate (*Variante* 3200) was also found in London in the preceding ceramic phase, now dated to c. 1180-1230 (Griffiths 2004 [1995], 64-65, fig. 47, no. 54). It depicts a knight on horseback which, from its costume, is likely to date to shortly after 1200.

However, Ashley (2002, 7-8, fig. 8) dated square pendants – of the type found with square suspension mounts with rounded attachment tabs for rivets – with identical or complementary designs, to the second half of the 12th to the early 13th century. Such dating rests on stylistic evidence, with limited numbers of pendants and mounts found through excavation.¹²⁷ The elements feature low relief cast decoration centred around beasts and monsters such as passant and rampant lions, birds and griffins on grounds filled with punched annulets to catch the light when the whole was gilded. The dating of such pendants is based on similar representations of creatures tooled in blind on book bindings of the late 12th century; Ashley (2002, 8) cites a possible London binding of c. 1185 illustrated by Foot (1984, 344-345, fig. 471). Ashley's dating is accepted here, without it being certain which side of 1200 a given pendant falls, pending archaeological dating in the future.

E.i.11 Quatrefoil (Krabath Variante 5100; Ward Perkins Type V) and sexfoil

As examined by Krabath (2001, 240), quatrefoil harness pendants (*Variante* 5100) centre on the 14th century. Those pieces included in this survey have been attributed

 ¹²⁷ The 48 pendants and suspension mounts found in 2011 on a probable leather breast-band at
Caherduggan Castle, County Cork, attached by rivets through the suspension mount (Schousboe 2012, 10-11) have been dated to the first half of the 13th century by Baker (2015, 5).

to the 12th to 13th centuries by their PAS recorders on account of their early constructional traits, namely engraved or punched decoration, as opposed to enamelling, and a gilt surface treatment. The same applies to sexfoil pendants.

E.i.12 Octofoil (Krabath Variante 5400)

Though not discussed explicitly by Krabath, the octofoil pendants that he catalogued (*Variante* 5400) have long been considered early. Typified by the pair of examples from Rubercy Castle (Lorren 1977, 156, 170, fig. 29, nos 11-12), dated to the second half of the 12th century, such pendants are characteristically openwork; they sometimes feature punched decoration.

E.i.13 Lobate/foliate (Krabath Variante 7100)

Though these were not discussed explicitly by Krabath, there are suggestions of an early date for the few examples of lobate/foliate pendants which have chronological evidence. One example, from Runder Berg bei Urach (Germany), has been dated on stylistic and typological grounds anywhere between the 10th-11th centuries (Wamers 1987, 108) and the 13th-14th centuries (Goßler 2011, 222, no. 1.A.9). More instructive is a find from Burg Treuchtlingen, which was occupied between c. 1100 and a destruction event in 1266 (Steeger 1997, 69, taf. III.52, top left). No English excavated data has been traced to complement the variety of stray finds of this form, and, though the continental dating does not unequivocally place such pendants in the 12th century, their decorative treatment of gilding and engraving is consistent with such a dating, if not one going into the 13th.

E.i.14 Cross-shaped (Krabath Variante 9000)

Cruciform pendants are not discussed explicitly by Krabath, but are referred to here primarily due to iconographical evidence. An oft-quoted carved depiction is that on a tympanum from the Church of St George, Fordington (Ashley 2002, 27, pl. I). This is dated to the years around 1100. By contrast, excavated examples of pendant crosses are not very forthcoming; the dating of those quoted in Krabath's catalogue and elsewhere, centres on the 13th and 14th centuries. Cruciform pendants are therefore
considered relevant on the potential of the pictorial evidence, though it is noted that the simplicity of the form makes it very difficult to place one or other side of 1200.

E.i.15 Pendent bell (Krabath Variante 4600)

Only one example of a pendant formed of a bell was discussed by Krabath (2001, 240), an example found at Old Sarum, and dated typologically to the 13th or 14th century (Cherry 1991, fig. 25). However, within his catalogue is an example found at the Hamel, Oxford, from a late 12th-century to early 13th-century context (A. Goodall 1980a, 184, C01, fig. 24, no. 71). Further to this, an example can be cited from Wolvesey Castle, Winchester, found in a context dated to the 13th century (Hinton 1990g, 1052, fig. 337, no. 3932). On such evidence it is plausible that bells were mounted in this way on harnesses from the 12th century onwards (see also Thuaudet 2021, 278).

E.i.16 Anglo-Scandinavian

Pendants decorated in the Ringerike style are mostly represented by a broadly lozengiform, openwork type depicting confronted beast heads (Graham-Campbell 1992, 86, fig. 7; Williams 2007a, 6, fig. 7). Based on art style, these date from the early 11th century to around its third quarter, although none are known from excavated contexts. A second, and far rarer, Ringerike-style pendant showing full confronted creatures has been found as a set at the London Guildhall (Egan 2007a, 335, 452, fig. 314, no. <S47>). It was found in a layer attributed to an early phase within site period 10 (c. 1050-1140), in the third quarter of the 11th century (Bowsher *et al.* 2007, 26). A possible type has geometric decoration seemingly in imitation of the latticework known on 11th-century stirrup-strap mounts of Williams Class A, Type 12 (openwork) (e.g. PAS: HAMP-FF4CE2); this is only known through stray finds but assumed to be of the same date.

To this group may be added a growing collection of small zoomorphic pendants also characterised by a pair of confronted beasts. These are less obviously in the Ringerike style, but may owe something to their zoomorphic inspiration. Examples from England are rare (e.g. PAS: BUC-9294A4, SUR-ECCA57), but they find parallels in pieces from the Dutch and Belgian littoral (e.g. Capelle 1976, taf. 15, 22, 24, nos 282, 378, 407; Deckers 2017, 101, 116, no. 166), where they compare formally to stirrupstrap mounts, particularly within Williams Class B, Type 2. It is noted that, in considering the pendants, Roxburgh *et al*. (2018, 28-29) cautioned against categorisation as equestrian equipment based on their small size, without ruling it out entirely.

E.i.17 Miscellaneous (including Krabath Varianten 7200, 7300)

Triangular pendants, that is, with the suspension loop at the apex, rather than an inverted version taken to be a shield, are not commented on in the continental literature. An example with a lobe at each lower corner, and decorated with bands/bars of punched annulets, was published by Ashley (2002, fig. 7, no. 14) amongst the pendants he suggested date to the 12th to early 13th centuries. A piece traced in the present study, with similar lobes and decorated with engraved wrigglework around its perimeter, comes from the Vintry and dated c. 1100-1220 (VRY89[V97]<2348>). Pendants in the form of a fleur-de-lis (Variante 7300), or of the same form but inverted (Variante 7200), are included in this study on the strength of the dating of suspension mounts of the same form with which they are commonly associated. A gilded example, from the Château of Saint-Romain, has been catalogued from a 13th-century layer (Beck 1987, 185-186, no. 515). It is possible that *zoomorphic* pendants, specifically those in the form of single- or double-headed eagles may date from the later 12th century onwards. These are not noted by Krabath, and do not seem to form part of the German corpus, though eagles are often shown on pendants of various forms. However, the two dated examples traced come from the second half of the 13th century: from Northolt Manor, Middlesex (Hurst 1961, 290-291, fig. 76, no. 23) and Perth High Street (Goodall 2012a, 102, no. 78).

E.ii Pendant suspension mounts

E.ii.1 Circular (Krabath Variante 1000; Lassure Type B)

Circular, or round, suspension mounts fall into the date range of this study, according to Krabath's dating discussion. The earliest example he noted, from Magdeburg, dates from c. 1100 (Krabath 2001, 241, note 1434). However, three other examples he noted serve to extend the date range of circular suspension mounts to the early 14th century. It is clear that here form alone is not sufficient to inform a typochronology. It can be noted, however, that circular suspension mounts with cast and drilled lugs seem generally to be later: examples of these form sets with elaborate octagonal pendants dated by Ashley (2002, 23-24, fig. 23) to the late 14th century. A circular pendant suspension mount from Marlowe Car Park, Canterbury, miscategorised as a pendant and therefore not included in dating discussion (Krabath 2001, 638, no. 3028 (sic.) – in fact 3029), was correctly identified in the site report (Garrard 1995, 1052, 1054, fig. 450, no. 579); this has the apparently early loop form made from a folded and slotted tab, and was found in a context dated between c. 1100 and 1325.

Of the circular examples included in Krabath's inventory, another falls into the 12th century, that from the Hamel, Oxford (Krabath 2001, 642, no. 3273), found in a late 12th- to early 13th-century context. This suspension mount forms part of a set with the pendent bell discussed in Appendix 1.E.i.15. Generally speaking, mounts such as this latter have relatively small, often shallowly convex plate and an integral stud. The loops travel down from their bases with fairly straight sides. This type of circular suspension mount was present at Corné, there classified by Lassure (1998, 486) as his Type B mount. It would seem to be on the same formal spectrum as Lassure's Type A mount, which has loops which bifurcate or splay out and smaller, albeit generally circular plates, and attribution to one or other type can be somewhat arbitrary.

Further to the examples cited by Krabath, numerous circular pendant suspension mounts of Lassure's Type B have been identified in this study. Nine from dated contexts are dealt with in the simulation below (Fig. 117), plus a further five which survive as parts of sets, with variously circular, circular (with openwork), annular, cruciform and bell-shaped pendants (this last the piece noted from The Hamel).



Fig. 117 Monte Carlo simulation for the dating of harness pendant suspension mounts of Lassure Type B

The graph shows that the underlying floruit of the type seems to run from the beginning of the 12th century to around the middle of the 13th century; although the earliest site start date is c. 1060, the balance of probabilities puts these mounts largely outside the 11th century. The earliest site end date is in the 1130s, showing that they were certainly present in the 12th century, continuing strongly into the beginning of the following century.

Other circular suspension mounts have been identified as being of largely 12thcentury date, exemplified by a mount forming part of a set with a circular pendant which Ashley (2002, 5-6, fig. 6, no. 7) dated 'possibly...from the second quarter of the twelfth to the early thirteenth century'. These are characteristically larger than those mounts of Lassure Type B, generally with flat plates which were attached by a separate, central rivet; variants have either two protruding perforated tabs for attachment, or four perforated lobes. Many are decorated with a six-pointed star rendered in low relief, the areas between the points decorated with finely punched annulets, and gilded all over their front. This particular type would appear to be ensuite with a circular pendant with identical decoration, as with the example quoted above. Unfortunately, neither this type of mount nor this type of pendant has been found in a dated context. As noted above, attribution of this and other similarly decorated pendants to the 12th century and slightly later is on the basis of their construction and punched and gilded decoration; certainly their folded and slotted loops appear consistent with an early date.

E.ii.2 Shell-shaped (Krabath Variante 1300)

Krabath (2001, 241, note 1436) noted a single example of a shell-shaped suspension mount, from Castle Acre Castle, and dated it to the 12th century. In his catalogue Krabath (2001, 637, 643, nos 2982, 3307, 3308) provided a total of three examples, allowing for the reattribution of a suspension mount from Marlowe Car Park, Canterbury, as shell shaped. The piece noted from Castle Acre Castle is one of two known from the site, both of which form sets with shell-shaped pendants. These, and the Canterbury suspension mount, are all of the same construction: with an integral central stud on the reverse for attachment, and folded and slotted tabs forming the suspension loops. The Canterbury piece (Garrard 1995, 1052, 1054, fig. 450, no. 572) was found in a context post-dating 1400 and is presumed to be residual.

Dating	Site	Reference	Additional notes
c. 1100-1160	Vintry, London	VRY89[V312]<2521>,	-
		layer V312 (unpublished)	
Mid-late 12 th century	Calathamet,	Lesnes and Poisson	-
coins in same	Sicily ¹²⁸	2013, 317, 326, pl. 42,	
destruction layer		no. 79	
Mid-late 13 th -century	Brook Street,	Hinton 1990g, 1050-	Large, with lateral tabs
context	Winchester	1051, fig. 336, no. 3919	for separate rivets
Post-1350 context	Thrislington DMV,	Goodall 1989b, 134-136,	Presumed residual
	County Durham	fig. 57, no. 11	

Table 44 Additional excavated shell-shaped pendant suspension mounts

This study has identified four further shell-shaped suspension mounts from excavated contexts (Table 44). It would seem, on current evidence, that shell-shaped suspension mounts only supported shell-shaped pendants, and that shell-shaped pendants were mainly supported by shell-shaped suspension mounts. Although few shell-shaped pendants have been identified from stratified contexts, this observation has the potential to offer circumstantial evidence in terms of future discoveries. For

¹²⁸ Documented as a buckle plate in the report, reattributed here

the time being, the attribution of shell-shaped suspension mounts to the 12th century is based, slightly uncomfortably, on two examples from the same site, the example from Calathamet, and the piece from the Vintry (where dating is problematic) (Table 44), although their construction would seem to help justify such dating.

E.ii.3 Oval (Krabath Variante 1100)

Oval forms do not appear in Krabath's (2001, 241) discussion of the dating of pendant suspension mounts; none of the examples in his catalogue came from dated contexts, and none have been traced in this study from excavated contexts. They are included for analysis on the basis of their approximation to the circular mounts. In constructional terms, they have the early, slotted and bent back loop form and the presence on some of punched and gilded decoration; variants also exist with four rounded perforated lobes equivalent to the circular series.

E.ii.4 Flower/foliate (Krabath Variante 1200)

Only one foliate mount appears in Krabath's (2001, 241, 639, no. 3093) discussion and catalogue; it is from a 14th-century context. A number of mounts are included here on the basis of their comparable construction to other mounts of the period, for example the hollow reverse seen on some square mounts (see below), as well as the early slotted and folded back loop form. They include limited quatrefoil examples, and a single sexfoil mount. Suspension mounts in the form of a fleur-de-lis, are slightly more common. An excavated example is known from Wolvesey Castle, Winchester, in a context dated to the late 12th to early 13th century (Hinton 1990g, 1050-1051, fig. 336, no. 3912). Its drilled loops suggest the persistence of this construction throughout the 12th century; other fleur-de-lis mounts included in this study are folded and slotted.

E.ii.5 Lozenge-shaped (Krabath Variante 4000)

Lozengiform mounts do not appear in Krabath's (2001, 241) dating discussion. A number are included in this study, some with additional lobes and attachment tabs, on the basis of their early loop construction and the presence on some of decorative punched annulets. A single example has been traced from excavation, from Wolvesey Castle, Winchester (Hinton 1990g, 1050-1051, fig. 336, no. 3922), though from a context dated to the late 13th century, or perhaps slightly later still.

E.ii.6 'Triangular' (Krabath Variante 7000; Lassure Type A)

A particular form, called 'V-förmig' by Krabath, is elsewhere described as 'triangulaire' by Lassure (1998, 483-486), his Type A. As noted, the form can be difficult to disambiguate from the circular mounts of Lassure Type B as they both have circular plates; plates of Type A tend to be smaller. The form is mainly distinguished by its loops, which bifurcate below the plate and splay out. Insufficient data were identified by Krabath for this type to feature in his discussion of dating. However, the present study would suggest that this form is more prevalent than the single example noted in Krabath's (2001, 640, no. 3132) catalogue, which formed a set with a circular pendant. Six examples have been traced, five forming sets, three with openwork circular pendants.



Fig. 118 Monte Carlo simulation for the dating of harness pendant suspension mounts of Lassure Type A

The simulated plot for these has been rendered to be compared against that for Lassure Type B mounts above on the assumption that they are the respective ends of the same spectrum (Fig. 118). Although their date ranges are broadly similar, running up to around the middle of the 13th century, there is a strength of weighting for Type

A towards the period around 1100, including the late 11th century. This is based on examples from two early castle deposits at Norwich (Mould and Ashley 2009, 350, fig. 5.54, ref. SF 408), and Carisbrooke Castle (Fitzpatrick 2000, 137-138, fig. 49, no. 17; Table 23, above); the find from the site of Château du Mézenc would indicate a *terminus ante quem* of c. 1200, if not rather earlier (Laffont 2009, 28, fig. 15, no. 8).

E.ii.7 Rectangular (Krabath Varianten 5000, 5100, 5200)

Rectangular pendant suspension mounts as discussed by Krabath were dated by him largely to the 13th and 14th centuries, based on excavated examples,¹²⁹ with one *breitrechteckige* form dated to the period either side of 1200 (Krabath 2001, 241, note 1441). In England, Ashley has suggested that such suspension mounts form part of the 'early' group tentatively dated from the second quarter of the 12th to the early 13th century, characterised by their relatively thin metal and their surface decoration: gilding, engraved and punched/stamped motifs. He illustrated one example decorated with a crude fretty design with punched annulet fillets supporting an open oval pendant (Ashley 2002, 6, fig. 6, no. 6), although similar examples are known forming sets with parallel pendants (e.g. PAS: KENT-F22333, IHS-D35E55, SUR-15DA79). None of these particular mounts, from which the loops extend from the centre of the longer edge, have been found in an excavated context. Given the folded and slotted construction of the suspension loops of these examples, Ashley's dating is accepted, without it being certain which side of 1200 a given pendant falls (pending future archaeological dating).

A distinctive rectangular design, however, can be attributed with confidence to the 12th century (see Table 45). This can be approximated to Krabath's *Variante* 5100 (*hochrechteckig*), although it can be hard to distinguish from a conventional buckle plate. In the case of the mounts, the slot is for the pendant's suspension loop rather than a pin, and the loops are not recessed at their outer edges as they might be for a frame. Three examples have been traced which show the folded construction of these mounts, with perforations for attaching rivets; the lower fold seems to terminate before the upper rivet (Table 45).

¹²⁹ A 12th-century example of a 'rectangular suspension mount' discussed by Goßler (2011, 84, 282, taf. 1, no. 14) is now thought to be a possible saddle mount (see Deckers 2017, 117 for similar examples).

Dating	Site	Reference	Notes
mid to late 12 th	Wolvesey Castle,	Hinton 1990g, 1050-	-
century	Winchester	1051, fig. 336, no. 3911	
12 th - to early 13th-	Brook Street,	Hinton 1990g, 1050, no.	-
century context	Winchester	3914	
Ante 1240	Old Sarum	Cherry 1991, 23, 27, fig.	Based on site end
		4, no. 23	dating; published as
			13 th to 14 th century

Table 45 Excavated examples of rectangular pendant suspension mounts of Krabath Variante 5100

E.ii.8 Square

It is notable that square pendant suspension mounts did not feature amongst the *Varianten* distinguished by Krabath (2001, 236). Following the above discussion of pendants decorated with low relief cast beasts in Appendix 1.E.i.10, their accompanying suspension mounts are taken to be relevant, without it being certain on which side of 1200 a given pendant falls pending archaeological dating in the future. As with similar rectangular mounts, given the folded and slotted construction of the suspension loops of these examples, Ashley's early dating seems acceptable.

Another type mount – with a raised and faceted front, a hollow reverse, and square perimeter – is considered relevant. It is known archaeologically from Winchester from three examples found during the Brook Street excavations (Hinton 1990g, 1050-1051, fig. 336, nos 3915, 3917, 3918). Although two were found in 13th-century contexts, one (no. 3915), which parallels the form of the others, was found in the late 12th- to early 13th-century context. These mounts also are of the early folded and slotted construction.

E.ii.9 Miscellaneous

Our knowledge of the suspension mounts for supposed pendants decorated in the Ringerike style is limited. The more common form of openwork Anglo-Scandinavian lozengiform pendant has no suspension mount surviving complete (Williams 2007a, 6). What does survive, connected to two such pendants, are broken, rectangular/subrectangular strip mounts, seemingly perforated for attachment (Williams 2007a, 6, fig.

7b; Graham-Campbell 1992, 86, fig. 7). They are distinctive compared to the common form of mount in that the relationship between the loops on mount and pendant is reversed: they have a single rounded and perforated lug to take an axis bar which is retained on a double lug arrangement on the pendant. A rarer type as found at the London Guildhall (Egan 2007a, 335, 452, fig. 314, no. <S47>) was discovered as a set with its mount. The latter is of the conventional arrangement – with two loops; these are cast integrally and perforated for the axis bar. The mount itself is a flat bar with a wavy outline at its long edges formed of two-and-a-half expansions separated by two waisted elements. As noted above, it is only this piece that has any contextual information in terms of dating, being found in a layer attributed to the third quarter of the 11th century. In modern-day Belgium and the Netherlands, mounts of this general construction, with a pair of perforated integral loops, have recently been published as supports for pendants which can be dated typologically to the 11th century, though is it stressed that their small size allows for identification as dress accessories as much as it does harness equipment (Roxburgh et al. 2018). In that such barred mounts are moulded compared to rectangular (specifically hochrechteckig) suspension mounts, they can be considered separately. In the absence of their pendants they are difficult to date stylistically or based on their form.

Other mounts included in the PAS database are of the folded and slotted loop construction which is considered characteristic of the late 11th- to 13th-century series. They include plates which are elaborations on main forms, such as square (PAS: DENO-15C951) or rectangular (PAS: NARC-C28E53); while others are more idiosyncratic, such as an openwork saltire plate above otherwise conventional loops (PAS: NLM-D7C770) or, indeed, a double-headed eagle (PAS: NMS-F38F48).

F: Stirrup-strap mounts and stirrup terminals

F.i Stirrup-strap mounts

Location	Williams	Dating	Site type	Reference
	classification	evidence		
Wells	Class A, Type	Late 12 th /early	Ecclesiastical	Williams 1997a,
	1	13 th century	(urban)	105, no. 501
		pottery		(cat.)
York, Bishopshill	Class A, Type	Uncertain	Urban	Williams 1997a,
Senior	4			39-40, fig. 27,
				no. 79 (cat.)
Weston	Class A, Type	11 th /12 th	Rural (non-	Williams 1997a,
Underwood, Milton	5	century	elite	41-42, fig. 28,
Keynes		pottery	settlement)	no. 95 (cat.)
Middle Harling	Class A, Type	Unstratified	Rural (non-	Margeson 1995a,
	9		elite	65-66, fig. 46,
			settlement)	no. 96
Taunton (Somerset)	Class A, Type	Pre mid-12 th -	Urban	Leach 1984, 131-
	11A	century layer		133, pl.9/fig. 48,
				no. 3
Eynsham Abbey	Class A, Type	Mixed	Ecclesiastical	Williams 1997a,
	11A		(urban)	59-60, fig. 39,
				no. 208 (cat.)
Weymouth (Dorset)	Class A, Type	Unstratified	Rural (non-	Randall 2019, 90,
	11A		elite	92, fig. 4, no. 1
			settlement)	
Winchester	Class A, Type	Mid-11 th	Urban	Hinton 1990h,
	12	century		1116-1117, fig.
		deposit		362, no. 4270
Westbury-by-	Class A, Type	Unstratified	Deserted	Mills 1995, 350,
Shenley	12		medieval	fig. 152.55, no.
			village	297a
Norwich Castle	Class A, Type	Unstratified	Castle	Mould 2009,
	12		(urban)	178-179, fig.
				4.106, no.
				SF6730
Pevensey	Class A, Type	Unstratified	Castle	Fulford and
	12		(urban)	Rippon 2011, 64-
				65, fig. 3.10, no.
				42

Table 46 Stirrup-strap mounts found in England through archaeological activity

Location	Williams	Dating	Site type	Reference
	classification	evidence		
Guildhall site,	Class A, Type	c.1270-1350	Urban	Egan 2007a, 320,
London	12	pottery		452, fig. 303, no.
				S48
Middle Harling	Class A, Type	Unstratified	Rural (non-	Margeson 1995,
	14		elite	65-66, fig. 46,
			settlement)	no. 97
Middle Harling	Class A, no	Unstratified	Rural (non-	Margeson 1995,
	Туре		elite	65-66, fig. 46,
			settlement)	no. 98
Andover	Class B, Type	Well fill with	Urban	Williams 1997a,
	2, Group 5	13 ^{th-} and		97-98, fig. 60,
		?14 th -century		no. 467 (cat.)
		pottery		
Vintry, London	Class B, Type	c. 1100-1160	Urban	Williams 1997a,
	3, Group 10			95-96, fig. 59,
				no. 453 (cat.)
West Cotton	Class B, Type	Unstratified	Deserted	Hylton 2010,
(Northamptonshire)	3, Group 6		medieval	408-409, fig.
			village	11.38, no. 1
Waltham Abbey	Class B, no	Burial context	Urban	Williams 1997a,
	Туре	with late		99-100, fig. 61,
		10 th /early		no. 479 (cat.)
		11 th -century		
		pottery		

Table 47 Stirrup-strap mounts found in Continental Europe through archaeological activity

Location	Williams classification	Dating evidence	Site type	Reference
Haithabu	Class A, Type 8	Dating provided site floruit (ends mid 11 th century)	Urban	Hilberg 2018, 220, abb. 3
Sebbersund	Class A, Type 12 (openwork)	Bottom of sunken hut of c. 1000	Urban	Pedersen 1999, 157, no. 9
Haithabu	Class A, Type uncertain	Dating provided site floruit (ends mid 11 th century)	Urban	Hilberg 2018, 220, abb. 3

Location	Williams	Dating evidence	Site type	Reference
	classification			
Haithabu	Williams	As above	Urban	As above
	Class B, Type			
	3, Group 4			
Haithabu	Williams	As above	Urban	As above
	Class B, Type			
	3, Group 8			
Ename (Belgium)	Williams	Dating provided	Rural (elite	Unpublished
	Class B, Type	site floruit (974-	settlement)	(Pieterjan
	3, Group	1063)		Deckers pers.
	uncertain			comm. 2019)
Wiesbaden	Class B. no	Unstratified	Urban	Kluge-Pinsker
	Type			1993. 144. no. 1
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			1000) 111) 1101 1
Haithabu	Class B, no	Dating provided	Urban	Williams 1997a,
	Туре	site floruit (ends		107, no. C21
		mid 11 th century)		
Lund	Class B, no	Pit fill dated c.	Urban	Williams 1997a,
	Туре	1060-1070 by		108, no. C6
		dendrochronology		
Dominicuskwartier,	Class B, no	Dated to c. 950-	Urban	Renswoude 2014,
Tiel (Netherlands)	Туре	1100		211-212, fig.
				10.6.1, no. V5.15
Meerbusch-	Class B, no	Below building	Castle	Kluge-Pinsker
Büderich	Туре	dated to early 11 th	(urban)	1992a, 36, no.10;
		century		Williams 1997a,
				108, no. C22
Montcy-Notre-	Williams	Site destroyed in	Castle	Serdon-Provost
Dame, 'Le Chateau	Class B, no	1114	(rural)	2016, 153-154,
des Fees'	Туре			figs 3.73-3.74, no.
				95

F.ii Stirrup terminals

A distinctive type with a curled round neck forming openwork, and an elaborated head crest (Williams 1997b, 2, fig. 3; Williams (2001) provisional Class A) has been

described as being in the Ringerike style (Leahy 2007, 174, fig. 75, no. 4; Pedersen 1999, 152-153). Terminals published from Nørregård and Nørholm (both Denmark) with Ringerike-style 'bulging nostrils, flared whiskers/tendrils' may be compared to those placed in Williams's provisional Class B (see Williams 1997b, 2, fig. 2). The trefoil terminal on the example denoted as Class K has engraved decoration including a double fillet, a characteristic trait on Ringerike-style objects (Fuglesang 1980, 111). Without knowing their function, Owen (1979, 101-104), ascribed two zoomorphic stirrup terminals respectively from Northampton (see also Webster in Goodall and Webster 1981, 122, fig. 22, no. 17) and Bishopstone, East Sussex, both to the Urnes style of the later 11th century; Williams (2001) placed the Bishopstone terminal in his provisional Class G. A broadly comparable terminal from Hasseris (Denmark), was similarly ascribed to the Urnes style by Pedersen (1999, 149, 153, 157, fig. 25c, no. 5), who noted that its elongated eyes echoed those on Urnes-style jewellery items. Finally, Williams's provisional Class L, a 'foot' like terminal with three 'toes', is not susceptible to art style dating. It is perhaps the absence of late Viking-Age decoration that led Williams (2011, 255) to suggest that they were 'probably rather later in date', although no substantiation was made for this supposition.

Find location	Form of iron (Goßler <i>Gruppe</i>)	Form of terminal	Dating given in reference(s)	Reference	Additional notes
Nantes (France)	Inverted 'V' shape (AII)	Moulded 'knobbed' form (2)	9 th -11 th century	-	Nantes, Musée Dobrée, inv. nos 930.1.438, 2006.0.5
Farstorp (Sweden)	Inverted 'U' shape (B)	Basic zoomorphic (2)	c. 1000- 1050	Pedersen 1999, 147	Wound copper- alloy plating on arms
Chalgrove (Oxfordshire)	Inverted rounded 'V' shape (BI3)	Zoomorphic (2), in late Viking-Age art style	11 th century	Williams 1997a, 7, fig. 4a	Complete iron
Odder	Inverted rounded 'V' shape	Basic, 'knobbed' form (2)	11 th century	Pedersen 1999, 147, fig. 22	Incomplete iron Copenhagen, National Museum of Denmark, inv. no. D11408

Table 48 Stirrup irons with evidence for stirrup terminals

Find location	Form of iron (Goßler <i>Gruppe</i>)	Form of terminal	Dating given in reference(s)	Reference	Additional notes
Zwinderen (Netherlands)	Inverted 'U' shape (BI1b)	Basic animal head flanked on each side by a further animal head (2)	11 th century	Vilsteren 2010, 203, fig. 10a	Copper-alloy plating on arms
Uncertain	Inverted 'V' shape (BI2)	Ridged knobs (2)	11 th century	-	Vienna, Kunsthistorisches Museum, inv. no. A2115; Gilded copper-alloy plating on arms
Cologne	Inverted 'U' shape (BI1b)	'Animal claw' (1)	11 th -12 th century	Zschille and Forrer 1896, 21, taf. II, no. 8	Metropolitan Museum of Art, acc. no. 42.50.414, copper-alloy plating on arm
Cologne, Heumarkt	Inverted 'U' shape (BI1a?)	Absent – compare Oxford, River Cherwell (below)	11 th century	Rech 2006, 180, fig. 9, no. 2	Plating along the arms, decorated with animal masks
'London'	Inverted rounded 'V' shape (BI2?)	Trefoil- shaped (2) – Williams provisional Class K (probably)	12 th century	Ward Perkins 1993 [1940], 90, fig. 24, no. 4	Complete iron
Christ's Hospital, Newgate Street, London	Inverted 'U' shape (BI1b)	Basic, 'knobbed' form (2)	12 th century	Ward Perkins 1993 [1940], 90, fig. 24, no. 3	Almost complete iron
Uncertain	Inverted 'V' shape (BI2)	'Hoof-like' (2)	12 th century	-	Worcester Art Museum, no. 2014.1008
River Ray, near Islip (Oxfordshire)	Inverted 'U' shape (BI1b)	Basic zoomorphic (1)	c. 12 th century	Seaby 1950, 35, 41-42/pl. VIb, fig. 12A	Incomplete iron; copper-alloy plating on the arms

Find location	Form of iron (Goßler <i>Gruppe</i>)	Form of terminal	Dating given in reference(s)	Reference	Additional notes
Oxford, River Cherwell (Oxfordshire)	Inverted rounded 'V' shape (BI1a)	Unclear – corroded	c. 12 th century	Seaby 1950, 42/pl. Vla, fig. 13.F	Complete iron; plating along the arms, decorated with animal masks
Heddal (Norway)	Uncertain (BI2)	Zoomorphic (2)	c. 12 th century	Seaby 1950, 42, note 31 (cited)	Oslo, Kulturhistorisk museum, UiO, inv. no. C10867
Witney	Inverted 'V' shape (BI2)	'Knobs' (2)	c. 12 th century	Seaby 1950, 41 (cited)	Ashmolean Museum, acc. no. AN1886.581
Lauenburg, Harz (Germany)	Uncertain (BI1b)	Ridged knobs (2)	12 th -13 th century	Fansa 1995, 472, no. 76	Quedlinburg, Städtische Museum, inv. no. V/2467/F
Uncertain	Inverted rounded 'V' shape (BI1b)	Basic 'hoof- like' (2)	13 th -15 th century?	-	Marburg, Museum für Kunst und Kulturgeschichte der Philipps- Universität Marburg, inv. no. 151
Porsgrunn, Eidanger Prestegård (Norway)	Inverted 'U' shape (BI1b)	'Knobs' (2)	-	-	Oslo, Kulturhistorisk museum, UiO, inv. no. C26381

G: Scabbard/sheath chapes

G.i Knife sheath chapes

G.i.1 Bishop Class A (includes Krabath Variente 36)

Bishop (2016, 26-34) dates this L-shaped chape form, divided into six types, between c. 950 and 1150. This was said to be based on style, although comparison to late Viking-Age art styles is not considered valid here. Circumstantial evidence comes from the decoration on various examples of Class A, Types 1 and 2 formed of a wavy line with engraved dashes between the crests. This may be compared with the way the 12th-century 'Waterford knife' is decorated on its blade back (Okasha 1997, 522). Contextual dating is only forthcoming for six examples (out of 43 chapes), detailed in Table 49. Overall, dating for chapes of Class A is problematic, with examples probably either intrusive or residual. It is best placed generally across the 12th and 13th centuries on the dating evidence currently available, but arguably with a focus in the 12th century based on the most recent evidence (Table 49, Nevern Castle).

Bishop Class	Dating evidence	Findspot	Reference
Class A, Type 2	c.1300-1375 (site Period IV), probably residual	Wharram Percy	A. Goodall 1979, 112- 113, fig. 57, no. 79
Class A, Type 2	Pit fill with <i>terminus</i> ante quem of c. 1345 (site Period 4.2 (c. 1200-1345))	Norwich Castle	Goodall 2009b, 526, fig. 7.35, no. SF5150
Class A, Type 4	c. 1100-1160 deposit	Vintry, London	VRY89[V897]<3015>
Class A, Type uncertain	context with a <i>terminus post quem</i> of c. 900, probably intrusive	Villeneuve, Yves (France)	Berthon 2009, 62/pl. 50; ISO 58
Class A, Type uncertain	12 th -13 th century (general site dating)	La Butte, Isle Aumont	Scapula 1981 [1975], 213, fig. 105 (bottom right)
Class A, no Type	c. 1108-1195 (castle floruit)	Nevern Castle	Caple forthcoming

Table 49 Dating evidence for Class A chapes

G.i.2 Bishop Class B

This singular type was held by Bishop (2016, 35, 75) to feature Urnes-style influences, which would date it to the later 11th or early 12th century. However, Kevin Leahy, recorder of the only PAS example (FAKL-7E5827), saw in it earlier, Ringerike-style decoration which would place it in the second (or perhaps third) quarter of the 11th century. This difference of opinion is perhaps symptomatic of the difficulties of stylistic appraisal of such small objects and the small size of the corpus. The present survey has identified four new examples, from locations in the Netherlands and

Germany.¹³⁰ These finds do not have any accompanying stratigraphic information; a chape excavated in Exeter was residual in its late 13th- to 15th-century context (Goodall 1984a, 348, fig. 193, no. 192). The author of both Dutch reports described the examples as being typologically of 12th-century date (see Hendriksen 2011, 204). Finally, a chape with very broad similarities – in so far as it depicts a standing or crouching animal with back-turned head and gaping jaws – can be cited: a singular piece from Lund (Bergman and Billberg 1976a, 206, fig. 149, no. 66166:3014). While not falling neatly into Bishop's classification, it constitutes Krabath's *Variente* 19, and was dated to the first half of the 12th century.

G.i.3 Bishop Class C

Bishop (2016, 37-40) dates this broadly zoomorphic chape form, divided into five types (one into two sub-types), overall between c. 1000 and 1250. Again, this was largely on the basis of stylistic traits considered here not to be valid. Contextual dating can be considered for four examples (out of 25 chapes), detailed in Table 50. The dating evidence for Class C chapes is not strong, though there is evidence for their use and discard in the 12th century, in London at least (Table 50).

Bishop Class	Dating evidence	Findspot	Reference
Bishop Class C,	c. 1050-1250	Vintry, London	VRY89[25]<4171>
Type 1B			
Bishop Class C,	c. 1150-1175 (site	London Guildhall	Egan 2007a, 88, 460,
Type 3 ¹³¹	Period 11, Phase 2)		no. S126
Bishop Class C,	1060s (spuriously	Vintry, London	VRY89[V1030]<3271>
Туре З	precise?)		
Bishop Class C,	c. 1150-1175 (site	London Guildhall, Open	Egan 2007a, 97, 460,
Type uncertain	Period 11, Phase 2)	Area 110	no. S127

Table 50 Dating evidence for Class C chapes

 ¹³⁰ Utrecht: Hendriksen 2009, 56-57, fig. 6.8, no. 413; 2011, 204, afb. 9-18, no. 101; Tiel: PAN-00071533;
Zellhausen (Germany): Weber 2019, 39-40, abb. 134-136

¹³¹ Classified by author following visual examination at the Museum of London store (Mortimer Wheeler House)

G.i.4 Bishop Class D

This class is formed of three types, one with two sub-types, united by their zoomorphic plates which mostly depict winged creatures (including birds and horses). Bishop (2016, 43-45) dates the class to the 11th and 12th centuries in general. Dating evidence is relatively forthcoming for those chapes depicting a winged horse (Class D, Type 3); the weight of evidence for this class overall, presented in Table 51, centres on the 12th century.

Bishop Class	Dating evidence	Findspot	Reference
Bishop Class D,	c. 1100-1160	Vintry, London	VRY89[V313]<665>
Type 2A			
Bishop Class D,	Residual in late	Lurk Lane, Beverley	A. Goodall 1991, 151,
Type 2A	13 th -century		fig. 115, no. 621
	context		
Bishop Class D,	c. 1100-1160	Vintry, London	VRY89[V343]<1661>
Type 3 (probably)			
Bishop Class D,	c. 1120-1150	Bull Wharf, London	BUF90[2944]<1000>
Туре З			
Bishop Class D,	c. 1200 terminus	Brook Street,	Hinton 1990b, 770, 772,
Туре 3	ante quem	Winchester	fig. 220, no. 2348
Bishop Class D,	c. 1205 terminus	Upton DMV	Hilton and Rahtz 1967,
Туре 3	ante quem	(Gloucestershire)	123-124, fig. 15, no. 21
Bishop Class D,	c. 1230 terminus	London Guildhall	Egan 2007a, 460, no.
Туре З	ante quem	environs	S125
Bishop Class D,	c. 1300 terminus	Stert Street, Abingdon	Parrington 1979, 13-14,
Туре 3	ante quem		fig. 8. no. 2

Table 51 Dating evidence for Class D chapes

G.i.5 Bishop Class E

This class was divided in two by Bishop (2016), the vast majority falling into the first type which is one of the most iconic of the designs on knife sheath chapes. Bishop (2016, 139) observed that no finds of this class have stratigraphic dating evidence, although one example of Class E, Type 2 has been documented here found in a context dated c. 1075-1200 at Little Lane, Leicester (Cooper 2007, 398, 400, fig. 141, no. 179).

Exemplified by a piece from Angel Court, City of London (Spencer 1961), the first type is dual faced, depicting a knight with a battle axe and kite-shaped shield on one

face. On the other face is a design that has been difficult to interpret, but which seems to show a human figure astride an animal (Ashley 2016, 293, fig. 18.10, nos 65, 66). Spencer (1961, 214) dated the object to the 12th century, with Bishop preferring an earlier range of c. 1030-1150; most recently, Creighton and Wright (2016, 165) followed Spencer's mid-12th-century dating. The conical helms and the kite-shaped shield depicted on this chape, in combination, would make it unlikely to date after c. 1200 (Bishop 2016, 144-151), and a date range starting in the second half of the 11th century is plausible (Bliss 2017, 199). If the animal on the other face is taken not to be a fox or a stag (Ashley 2016, 293), but a lion, then the human depicted could be the lion fighter Samson, David or Hercules (Ashley 2016, 293); Schirren (2018, 61) favoured Samson. Examples of 'lion fighters' are multitudinous, and found in different media: they include a narthex capital from Vézelay Abbey (Ambrose 2005, 137, fig. 5), a keystone from Keynsham Abbey (Zarnecki 1984b, 68, no. 163c) and ivory tablemen (e.g. Hoffmann and Deuchler 1970, 62, no. 69 (cat.)). The dating of these examples centres on the 12th century, thought generally to be the temporal focus of these 'Romanesque lion fighters' (Ambrose 2005).

A final clue might be provided by the Angel Court chape itself, which is almost unique in this class in preserving its arm terminals. The arms end in a distinctive suboval terminal with bifid end, and a transverse bar at the junction of terminal and arm. As noted by Bishop (2016, 137), such terminals are also present on chapes of Class A, Type 4 (PAS: WILT-252363), and Class A, Type 5 (PAS: HAMP-FF6AF7, WILT-40FFD4). As noted above (Table 48), a date range of c. 1100-1160 is provided for a Class A, Type 4 example found at the Vintry, London. Furthermore, the same terminal form can be seen on plates of buckles termed in this study pronged plate Type 1 (Table 35). Although only one buckle with such terminals is dated contextually, to the period c. 1250-1350 (Geddes and Carter 1977, 287-288, fig. 130, no. 6), the dating argument made above places this type in the first half of the 12th century. Finally, this terminal form can be compared with the 'crown' like head of a bone pin found at Castle Acre Castle, Norfolk (Coad and Streeten 1982, 251-252, fig. 47, no. 39). This was found in a context dating to site phase IIh, from the 1140s. Overall, a dating can be advanced for this class of chape most confidently in the first half of the 12th century, despite their iconography allowing for a slightly wider date range, both earlier and later.

488

G.i.6 Bishop Class F (where Class F, Type 1 = Steuer Typ 4 = Timpel Gruppe 3)

Bishop (2016, 50-53) dates this triangular plate form, divided into four types (one into two sub-types),¹³² overall between c. 950 and 1150. Excavated dating is forthcoming for such triangular chapes (13 out of 31 chapes), mostly of Class F, Type 3, with examples centring on the late 11th and 12th century. Based on the select examples presented in Table 52, there is strong evidence that this basic form began around the mid/late-11th century, was common through the 12th century, but endured into the 13th century, based on the iron example found at Burg Erpfenstein – this castle was not built until the third decade of the 13th century (Steuer 1993, 78).

Bishop Class	Dating evidence	Findspot	Reference
Bishop Class F,	c. 1070-1090 (site	London Guildhall	Egan 2007a, 33, 460,
Type 2 (possibly)	Period 10, Phase 2)		fig. 393, no. S124
Bishop Class F,	c. 1125 terminus	Château de Tours	Motteau 1991, 126,
Туре 3 (2)	ante quem	(France)	132, nos 625, '625a'
Bishop Class F,	c. 1140, c. 1150	33-35 Eastgate,	Goodall 1992, 159-160,
Type 3 (2, in iron)		Beverley	fig. 82, nos 449, 450
Bishop Class F,	c. 1225 terminus	Burg Erpfenstein	Stadler 1994, 126, 183,
Туре 3	post quem		taf. 37, no. F142

Table 52 Dati	ng evidence	for select	Class F	chapes
---------------	-------------	------------	---------	--------

G.i.7 Bishop Class G (where Class G, Type 3B = Krabath Variente 13 = Steuer Typ 3 = Timpel Gruppe 4, Variente 3)

Bishop (2016, 53-56) dated this sub-triangular, zoomorphic, plate form, divided into three types (one into two sub-types), between c. 1000 and 1150 overall. Eight chapes have been identified with archaeologically discerned date ranges (out of 64 examples). Only one of these comes from England, where the plate of a Class G, Type 3B chape was found at the South Manor at Wharram Percy (Goodall and Paterson 2000, 130-131, fig. 61, no. 24). The layer in which it was found related to the manor's abandonment from the mid-13th century onwards, that is, the phase after the site's Norman phase. However, overseas, chapes of this sub-type have been found in 12thcentury contexts; some are set out in Table 53. Two important examples have been found at Paderborn where there was evidence for their manufacture in the 12th

¹³² The distinction between Types 2 and 3 is not clear cut.

century (Stiegemann and Wemhoff 2006, 226, nos 329c, 329d). Overall, the archaeological evidence can be used to argue that chapes of this class were used at least as early as the first half of the 12th century, but that they endured into the 13th century is suggested by finds from Wharram Percy and the monastic site of Abtei Saarn (Germany) (see Table 53).

Bishop Class	Dating evidence	Findspot	Reference
Bishop Class G,	Mid-13 th -century	Wharram Percy, South	Goodall and Paterson
Type 3B	terminus post quem	Manor, East Yorkshire	2000, 130-131, fig. 61,
			no. 24
Bishop Class G,	12 th -century context	Ouddiemerlaan	Vanoverbeke <i>et al</i> .
Type 3B		(Netherlands)	2011, 74-75, afb. 58
Bishop Class G,	12 th century	Paderborn	Stiegemann and
Type 3B (2)			Wemhoff 2006, 226,
			nos 329c, 329d
Bishop Class G,	12 th -century context	Leidsche Rijn, Utrecht	Hendriksen 2004, 22,
Type 2			afb. 24
Bishop Class G,	Ditch with c. 1150	Geldermalsen-Station	Renswoude 2015, 105-
no Type	terminus ante quem		106, fig. 7.14.4, no.
			1367
Bishop Class G,	Site dating c. 1200	Abtei Saarn	Steuer 1989, 232, 235,
Туре ЗВ	onwards		abb. 1,16, no. 6

Table 53 Dating evidence for select Class G chapes

A final piece of dating evidence is provided by chapes of Class G, Type 1 – singular in England (PAS: KENT-476C48), but common particularly in modern-day Germany (Krabath 2001, 78, 81, karte 18). There they are categorised as Timpel's *Gruppe 4, Variente* 1 – equivalent to Steuer's *Typ* 1 (Krabath *Variente* 22) – and related to the more common Timpel *Gruppe 4, Variente* 3 (Steuer *Typ* 3; Bishop Class G, Type 3B) by form, if not by distribution. They both depict an animal with back-turned head, with Steuer *Typ* 3 a far more abstracted version of the animal than on *Typ* 1 (Steuer 1989, 233). This abstraction and a different distribution need not necessarily suggest a progression in time, but rather could be a contemporary one in space. Indeed, the dating of the Class G, Type 1 examples published by Timpel (1987, 280-285) fits the above dating, being centred on the 12th century, but with various ranges spanning the 12th and 13th centuries.

G.ii Dagger scabbard chapes

G.ii.1 Bishop Class H (includes Krabath Variente 25)

Bishop (2016, 210) dates this form with trapezoidal plate and two arms, divided into seven types (four into two sub-types, and one into three), between the late 11th century and the end of the 13th century. However, it would seem that Bishop's reading of certain excavated dates was inexact. Krabath offered a date for this type, his *Variente* 25, in the 13th century and the first half of the 14th century. For De Reuck (1991) the form was 12th century, but no supporting evidence was given.

A total of seven Class H chapes with dating evidence have been traced, including those cited by Krabath (n=96). In general, the dates of deposition focus on the 13th century, as shown in Table 54, with the earliest *terminus ante quem* from its first third. Thus, although it might be suggested that this form was in use towards the end of the 12th century, this cannot be proved on current evidence. The weight of evidence pointing towards use in the 13th century, notably its first half, but also demonstrably in its second half too.

Bishop Class	Dating evidence	Findspot	Reference
Bishop Class H,	First third of the	Boteler's Castle	Jones <i>et al</i> . 1997, 55-
Type 5B	13 th -century		56, fig. 19, no. 8
	terminus ante quem		
Bishop Class H,	Late 13 th century	Beckery Chapel,	Fowler 1974, 63-64, fig.
Type 7B	terminus ante quem	Glastonbury	13, no. 16
Bishop Class H,	Early- to mid-13th	The Hamel, Oxford	A. Goodall 1980a, 185,
Type 3A	century		C02, fig. 25, no. 73
Bishop Class H,	13 th century, mid-to-	Brook Street,	Hinton 1990a, 1082-
Туре 2В (2)	late 13 th century	Winchester	1083, fig. 348, nos
			4030, 4031
Bishop Class H,	c. 1250-1350	Swan Lane, London	Pritchard 2008a [1991],
Type 2A			126-127, fig. 83, no.
			575; Schofield et al.
			2018, 68, fig. 55, no.
			S19

Table 54 Dating	evidence for select	t Class H chapes
-----------------	---------------------	------------------

G.ii.2 French variant

This form has not been discussed in the English literature. French suggestions as to the dating of such chapes, it is suggested, have been clouded by initial examples found intrusively in their contexts. The first example published, from Les Bolards, Nuits-Saint-Georges (France) (Sautot 1977, 303, 349/pl. XLV, no. 3), was found in a Gallo-Roman context, but associated with later pottery. The second followed the early-medieval dating suggested by the pottery found at Les Bolards; this chape, from Villiers-le-Sec (France), was thus dated to the early-medieval period (Cuisenier and Guadagnin 1988, 189, no. 80). However, the material found at the site gives a rather later *terminus ante quem* of c. 1200. The most recently published example, from the ZAC Avicarum site at Bourges (Mathis and Rajade 2013a, 242, fig. 10-21, no. 273), was found in a context dated to between the end of the 12th century and the first half of the 13th. As such, a 12th-century date is proposed here for this form.

H: Swivel fittings

H.i Type A1

These objects seem to have comprised a central hollow element, usually broadly spherical, with opposing flattened, open ends which each retained a swivelling bolt. The bolt was perforated transversely for a separate loop on which the animal heads bite a partial bar (e.g. BH-F34B08). Unusual is a more elaborate arrangement on a famous example from Cirencester (Gloucestershire) (Stratford 1984a, 250, no. 248): this has a main, openwork triangular element which accommodates two bolts and loops at one end, and one at the other. It is imagined that the two loops would have each retained a leather strap, as implied by the only extant attached copper-alloy plate on an elaborate swivel found at Dragon Hall, Norwich (Cherry 2005, 115-117, fig. 76, no. 569).

No example of this type has been traced with firm archaeological dating; the example from Dragon Hall was unstratified. Turning to stylistic evidence, the animal heads on loops of this type are characteristically well moulded and might be described as Romanesque; they have been compared with the heads on (sword-belt) buckle frames dated to the 12th-century by Ashley (2006, 106; Naylor Class A1iii).

Further, arguably better, evidence comes from the central elements of such swivels. The Cirencester piece shows two winged dragons which have been dated stylistically to the first half of the 12th century (Stratford 1984a, 250, no. 248). The central sub-spherical openwork element on the Dragon Hall swivel, with its running acanthus leaf decoration, can be compared with various knops from candlesticks, including a German example dated to the late 12th century (Oddy *et al.* 1986, pl. 8, no. 33). This stylised trefoil meander can also be compared with a piece of vernis brun from Battle Abbey (East Sussex) dated c. 1125-1175 (Stratford 1984c, 254, no. 260a), which has been compared in turn with 12th-century manuscript borders. Finally, an especially elaborate example features a scroll of four roundels each containing a beast (Fig. 74), including possible lions with their tails rendered in a typically Romanesque manner (Hicks 1993, 249). Cited in the record as a comparison for the inhabited roundels is an illuminated calendar from Worcester Cathedral Priory dated c. 1120-1140 (Kauffmann 1984c, 98, no. 23).

Overall, the focus of such dating evidence is on the 12th century, and particularly the first half. Other swivels with central elements but into which the integral pin of a loop travelled (Type A2) have also been dated stylistically to the early 12th century (e.g. Goodall 1993b, 188, 191-192, fig. 41, no. 204; Hinton 2005, 182, fig. 6.7).

H.ii Type A2.i

These swivels comprises two loops with animal heads biting the boss, connected by a ball-and socket-joint (e.g. Ashley 2006, 106, fig. 1, no. 2). Like Type A1, it is imagined that the two loops would have each retained a leather strap, as implied by extant copper-alloy plates attached to various examples (e.g. GLO-2DE0FD); a currently unique example has two plates attached to a loop (SUSS-101B44). A variant has the arrangement of the animal heads inverted such that they emerge from a substantial boss and bite the ends of an external bar (e.g. SF-A7A1D1); no published example of this sort has been traced. These too seem to have had leather straps attached, around the bars or via copper-alloy plates (e.g. ESS-59EAC0).

No example of a Type A2.i swivel has been noted from excavation. Despite the stylised detailing of the animals, such objects tend to be dated to the late 11th and 12th centuries (Ashley 2006, 105). It might be circumspect to extend this date range forwards in time, pending further dating evidence.

H.iii Type A2.ii

This group is defined by the animal heads on the loop biting a ring. Loops of this type could have engaged with a variety of swivelling elements. They could, of course, have operated with counterpart loops with integral pins (Type A2): one such swivel was found at Meols (Egan 2007b, 183-184, pl. 35, no. 2325). Occasionally, loops of this type are found with swivelling hooks, either in copper alloy (e.g. PAS: BH-619211) or iron (e.g. PAS: SWYOR-084013). A currently unique example shows a loop of Type A2.ii retained via an iron hook on an open, oval loop, to which, in turn, two iron plates are attached (PAS: WMID-4E7A93). A comparable example – on which there is a swivelling bolt in the place of the iron hook – is known from Palnure (Dumfries and Galloway) (Campbell 2011, 164-165, figs 1, 2). Here the two plates are made instead from copper alloy; both retain leather from leashes. A further example with a bolt connecting the swivel loop to the oval loop can be cited: from Marchwood (Hampshire), it features not plates but a buckle with oval frame and integral plate, this last perforated to retain it on the oval loop (Collins 2009, 330-331, fig. 2b; Illus. 21, above).

Dating such swivels is no easy task. Only three examples have been traced from excavation, one of these identified as a finger-ring in the site report (Scott 2011, 170-171, fig. 5.24, no. 20). This latter, from Southampton's French Quarter, was found in a pit in Tenement 169 attributed to one of the site's high medieval phases, between c. 1250 and 1350; nothing was recovered from the Anglo-Norman phase at that tenement. A second example was found at Norton Priory, from an occupation layer dated to site period I, which spanned the entire medieval phase (1134-1536), from construction to dissolution (Brown and Howard-Davis 2008, 384, fig. 269, no. 39). The final example was found at Fountains Abbey, in the reredorter (Howsam 2016, 111, 446, fig. 2-59, no. 198). From such limited evidence we might suggest that such swivels were only potentially in use at the earliest in line with the construction of the above ecclesiastical establishments in the 1130s, with the only *terminus ante quem*, of c. 1350, provided by the Southampton example.

Due to the basic decoration on such swivels and the stylised rendering of the animal heads, there is little on which to base a date on stylistic grounds. Nevertheless, Egan (2007b, 184) attributed the Meols swivel to the 'Norman period', albeit cautiously. Campbell (2011, 165) dated the Palnure swivel fitting to the 12th century, comparing the rendering of one of the ends of the bolt as a human fist with the same conceit on the Cirencester piece (Type A1). However, the only archaeological and typological dating for such objects is rather later. A composite object with the same long oval loop as at Palnure and Marchwood, and with two copper-alloy plates, a short bolt and plain swivel loop (Type B, see below) was found at Castell-y-Bere. Thought in the report to be from a curb-rein or sword-belt, it was found in a gatehouse pit, and can be dated in accordance with the castle's lifespan of 1221-1295 (Butler 1974, 92-93). Another composite artefact based around the same oval loop, with a buckle comparable to the Marchwood piece, was found at Criccieth Castle (Gwynedd) (O'Neil 1944, 38-39/pl. IX, fig. 5, no. 2). This features a swivel of Type A3 (see below) suggesting a date in the later 13th or 14th century; the object was suggested to be 14th century in date in the report, while the castle was constructed in the 1230s. Further examples of comparable objects, but in iron, and with Type B loops, have been found at mid-13th-century Dyserth Castle (Denbighshire) and in a 14th-century context in London (respectively, Goodall 2011, 380-381, fig. 13.9, nos L112, L113). Finally, the buckle on the artefact from Marchwood is typologically 13th or 14th century (Collins 2009, 330).

H.iv Type A3

This group is defined by the animal heads biting a shaft with slots which would have twisted on a bolt with concomitant ridges. As noted above, a swivel of this type was found at Criccieth Castle as part of a composite piece with a buckle, based around an open oval loop. The same swivel type has been found in a different arrangement, involving it being connected to two T-shaped buckles via articulated plates (e.g. Rees *et al*. 2008, 232-233, fig. 122, no. 1587, from Winchester; PAS: BERK-703D40, HESH-132E83).

Only one stratified example of a Type A3 swivel can be quoted. This was identified erroneously as a tap key and was found in a late 14th-century context in London (Egan 2010 [1998], 242-243, fig. 189, no. 745). The Winchester example noted above, residual in its context, was thought to date to the second half of the 13th century (Rees *et al.* 2008, 232). Based on the example from Criccieth Castle, this type could well post-date the 1230s, at the earliest. An overall range spanning the later 13th and 14th centuries would seem reasonable for the type; the T-shaped buckle with which it is often associated is thought to date to this period (Collins 2009, 330), with an example of such a buckle (with a rectangular frame) found in a mid-to-late 14th-century context at Ludgershall Castle (Robinson and Griffiths 2000, 126-7, fig. 6.2, no. 10).

H.v Type B

This type distinguishes itself from examples of Type A by lacking zoomorphic decoration on the loops. At their plainest, swivel loops can simply have a flat, plain ring to accommodate the pin of a counterpart, or a swivelling hook (e.g. PAS: YORYM-910FAE). Examples are known in iron (e.g. Goodall 2011, 330-331, fig. 11.15, no. J209) or copper-alloy, as noted at Castell-y-Bere. Other examples can be far more elaborate, such as one comprised of a pair of sub-conical elements with split attachment ends presumably for leather straps, each element decorated with punched ring-and-dot motifs, from Pevensey Castle, archaeologically dated before 1254 (Lyne 2009, 79-80, fig. 19, no. 14; compare PAS: WAW-1A382F).

Such swivels are stylistically undiagnostic in their plainest forms. Simple swivels in iron are known from the 12th century at Llantrithyd ringwork (Charlton *et al.* 1977, 47, nos 26, 27), and from Wintringham (Cambridgeshire) (Goodall 2011, 330-331, fig. 11.15, no. J209), there dated to the late 13th to early 14th century. The non-ferrous example from Castell-y-Bere seems firmly 13th century in date. Another iron swivel, formed of two loops and seemingly plain, is dated to the mid-14th-century from the Château of Saint-Vaast-sur-Seulles (Halbout *et al.* 1987, 179, no. 679). A hawking swivel formed of two plain loops from the 'Valkhuis' in The Hague is dated to the 15th to 17th centuries (Prummel 2018, 468, 470, fig. 4). A wide date range must therefore be offered for this disparate, and generally undiagnostic, type.

Appendix 2: Adjusted dating for object types analysed

Object Type	Classification	Sub-classification	Date range	Notes
Brooch	Annular	Deevy Class 1	c. 1050-1500	-
Brooch	Annular	Deevy Class 2a	c. 1100-1500	-
Brooch	Annular	Deevy Class 3a	c. 1200-1450	-
Brooch	Annular	Deevy Class 6a	c. 1150-1400	-
Brooch	Annular	Deevy Class 8	c. 1150-1400	-
Brooch	Annular	Deevy Class 9	c. 1100-1500	-
Brooch	Annular	zoomorphic	c. 1050-1250	-
Brooch	Penannular	Booth Type C	c. 1075-1275	-
Brooch	Penannular	Booth no Type	c. 1100-1300	-
Brooch	Plate	Weetch Type 26	c. 1075-1175	-
Brooch	Plate	Weetch Type 27	c. 900-1100	-
Brooch	Plate	Weetch Type 28.E	c. 1000-1150	-
Brooch	Plate	Weetch Type 29.A	c. 950-1050	-
Brooch	Plate	Weetch Type 30.A	c. 1000-1100	Ringerike style
				or Urnes style
Brooch	Plate	Urnes style (animal)	c. 1050-1125	Urnes style
Brooch	Disc	Weetch Type 1	c. 900-1000	-
Brooch	Disc	Weetch Type 2.Ai	c. 800-1050	Closer based
				on prototypes
Brooch	Disc	Weetch Type 2.Aii	c. 950-1150	Closer based
				on prototypes
Brooch	Disc	Weetch Type 2.B	c. 1040-1100	Closer based
				on prototypes
Brooch	Disc	Weetch Type 4.B	c. 1000-1050	-
Brooch	Disc	Weetch Type 13	c. 1000-1150	-
Brooch	Disc	Weetch Type 14	c. 1000-1100	-
Brooch	Disc	Weetch Type 17	c. 900-1100	-
Brooch	Disc	Weetch Type 20	c. 975-1150	-
Brooch	Disc	Weetch Type 21	c. 900-1050	-
Brooch	Disc	Weetch Type 23	c. 975-1100	-
Brooch	Disc	Weetch Type 24	c. 975-1125	-
Brooch	Disc	Weetch Type 25	c. 975-1125	-
Brooch	Disc	Weetch Type 10.A	c. 1000-1125	Ringerike style
		(Ringerike style-		or Urnes style
		Urnes style)		
Brooch	Disc	East Anglian Series	c. 875-1000	-
Brooch	Disc	Jellinge style	c. 900-975	-
Brooch	Disc	Terslev	c. 900-975	-
Brooch	Disc	Weetch Type 22	c. 900-1000	-
Brooch	Disc	Weetch Type 3	c. 900-1000	-
Brooch	Disc	Weetch Type 4.A, C-D	c. 900-1000	-
Brooch	Disc	Weetch Type 5	c. 900-1000	-

Object Type	Classification	Sub-classification	Date range	Notes
Brooch	Disc	Weetch Type 6	c. 900-1000	-
Brooch	Disc	Weetch Type 7	c. 900-1100	-
Brooch	Disc	Weetch Type 8	c. 900-1000	-
Brooch	Disc	Weetch Type 9	c. 900-1000	-
Strap-end	Thomas Class B,		c. 800-1025	-
	Type 1			
Strap-end	Thomas Class B,		c. 1000-1100	Ringerike style
	Туре 6			or Urnes style
Strap-end	Thomas Class E,		c. 925-1075	-
	Type 1			
Strap-end	Thomas Class E,		c. 925-1050	-
	Type 2			
Strap-end	Thomas Class E,		c. 1050-1100	Closer dating
	no Type			possible based
				on style
Strap-end	Thomas Class G		c. 1050-1100	Urnes style
Strap-end	Thomas Class H		c. 1000-1075	Ringerike style
Strap-end	Thomas Class I		c. 1300-1400	-
Strap-end	Arched terminal		c. 975-1050	-
Strap-end	Socketed end		c. 1000-1100	-
Strap-end	Globular		c.1000-1300?	-
	terminal			
Strap-end	Split		c. 1100-1225	-
	attachment end			
Strap-end	Folded		c. 1100-1225	-
Charles and	widthways			
Strap-end	Thomas Class A		C. 775-950	-
Strap-end	Thomas Class B,		C. 775-925	-
Strap and	Type 2-5		c 975 075	Porro stylo
Strap-enu	Thomas Class D, $T_{\rm VDO} A_{\rm r} 5$		L. 8/5-9/5	(many)
Stran-ond	Thomas Class C		c 750-900	-
Strap-end	Thomas Class D		c 800-1000	_
Strap-end	Thomas Class E		c 875-1000	-
	Type 3		0.075 1000	
Strap-end	Thomas Class F.		c. 875-975	Borre style
	Type 4			Donie Style
Strap-end	Thomas Class E.		c. 850-1000	-
	Type 5			
Strap-end	Thomas Class F		c. 875-1025	-
Buckle	Naylor Class A2-		c. 875-975	Borre style
	A3			
Buckle	Naylor Class		c. 875-975	Borre style
	A5iii			
Buckle	Naylor Class B1		c. 875-975	Borre style
Buckle	Naylor Class C1		c. 875-975	Borre style
Buckle	Naylor Class E3		c. 875-975	Borre style
Buckle	Naylor Class		c. 1000-1075	Ringerike style
	A5i-ii			

Object Type	Classification	Sub-classification	Date range	Notes
Buckle	Naylor Class E1		c. 1000-1075	Ringerike style
Buckle	Naylor Class F		c. 1000-1125	Ringerike style
Buckle	Naylor Class A6		c. 1050-1125	Urnes style
Buckle	Naylor Class E2		c. 1050-1125	Urnes style
Buckle	Naylor Class G		c. 1000-1125	Ringerike style
Buckle	Naylor Class		c. 1000-1125	Zoomorphic
	A1i-ii			
Buckle	Naylor Class A4		c. 1000-1125	Zoomorphic
Buckle	Naylor Class		c. 1050-1200	Romanesque
	A1iii			
Buckle	Gaping-mouth		c. 1100-1200	Romanesque
	beast			
Buckle	Standing animal		c. 1100-1200	Romanesque
Buckle	Thuaudet Type		c. 1100-1350	-
	Т			
Buckle	Double-looped		c. 1000-1150	-
	with			
	zoomorphic			
	projection			
Buckle	Single-looped	Cassels Type 1.3A	c. 1100-1500	-
Buckle	Single-looped	Cassels Type 1.3B	c. 1150-1400	-
Buckle	Single-looped	Cassels Type 1.3D	c. 1125-1400	-
Buckle	Single-looped	Cassels Type 1.3F	c. 1125-1400	-
Buckle	Single-looped	Cassels Type 1.3G	c. 1125-1400	-
Buckle	Single-looped	Cassels Type 1.3H	c. 1150-1400	-
Buckle	Single-looped	Cassels Type 1.3N	c. 1125-1400	-
Buckle	Single-looped	Cassels Type 1.3K	c. 1175-1400	-
Buckle	Single-looped	Cassels Type 1.5D	c. 1100-1400	-
Buckle	Single-looped	Cassels Type 1.7A-B.	c. 1100-1400	-
	0	E-G		
Buckle	Single-looped	Krabath Variente 16	c. 1200-1300	-
Buckle	Plate	'Christ' enthroned	c. 1150-1225	-
Buckle	Plate	M shaped	c. 1125-1250	-
Buckle	Plate	Pronged	c 1100-1175	-
Buckle	Plate	Conjoined crescents	c 1150-1250	-
Buckle	Plate	Lion wyvern etc	c 1175-1250	-
Buckle	Annular	zoomornhic	c 1050-1250	
Buckle	snur	W/189	c 1100-1300	_
Buckle	spur	W185	c 1150-1300	_
Buckle	spur	W107	c 1200-1350	_
Buckle/Strap	Spui Cassals Type	VV195	c. 1150 1200	-
Eitting			C. 1150-1500	-
Pridlo bit	1./I	Milliams Type 1	c 1000 1075	Dingoriko stylo
Bridle bit	cheekpiece	Williams Type 1	c. 1000-1075	Ringerike style
	checkpiece	Williams Type 2	c. 1000-1075	Dingoriko style
	cheekpiece	VVIIIanis Type 3		Ringerike style
	спеекріесе	Pedersen type 2	C. 1050-1125	-
Bridle bit		ala subla i su di su	c. 1000-1125	
Harness	strap link	double ended	c. 1000-1125	Kingerike style
fitting				(some)

Object Type	Classification	Sub-classification	Date range	Notes
Harness	strap link	four way	c. 1000-1125	-
fitting				
Harness	pendant	Circular	c. 1100-1350	-
mount	suspension			
	mount			
Harness	pendant	Circular (Lassure Type	c. 1100-1250	-
mount	suspension	B)		
	mount			
Harness	pendant	Triangular (Lassure	c. 1075-1250	-
mount	suspension	Type A)		
	mount			
Harness	pendant	Shell shaped	c. 1100-1250	-
mount	suspension			
	mount			
Harness	pendant	Rectangular	c. 1100-1250	-
mount	suspension			
	mount			
Harness	pendant	Fleur-de-lis	c. 1175-1250	-
mount	suspension			
	mount	-		
Harness	pendant	Square	c. 1175-1250	-
mount	suspension			
	mount			
Harness	Ringerike style		c. 1000-1075	Ringerike style
pendant			. 1075 1200	
Harness	annular		c. 1075-1300	-
pendant	Trianaulan		- 1100 1250	
Harness	Triangular		C. 1100-1250	-
pendant			a 1150 1200	
Harness	square		C. 1150-1300	-
pendant	ractangular		a 1150 1400	
namess	rectangular		C. 1150-1400	-
Harposs	croscontic		c 1075 1400	
namess	crescentic		0.1075-1400	-
Harposs	quatrofoil		c 1175 1200	
nendant	quatreron		0.1175-1500	-
Harness	octofoil		c 1150-1250	openwork
nendant	00001011		0. 1150 1250	openwork
Harness	sexfoil		c 1175-1300	-
pendant			5. 11/5 1500	
Harness	Fleur-de-lis		c. 1150-1250	-
pendant			5. 1100 1200	
Harness	lobate		c. 1150-1275	_
pendant				
Harness	Shield shaped		c. 1150-1400	-
pendant				
Harness	Shell shaped		c. 1100-1300	_
pendant				

Object Type	Classification	Sub-classification	Date range	Notes
Harness	drop shaped		c. 1100-1400	-
pendant				
Harness	lozengiform		c. 1100-1400	-
pendant				
Harness	cruciform		c. 1200-1400	-
pendant				
Harness	circular		c. 1075-1400	-
pendant				
Harness	Pendent bell		c. 1150-1350	-
pendant				
Mount	binding strip		c. 1075-1225	-
Mount	binding strip	octopus	c. 1100-1225	-
Scabbard	chape	Bishop Class A	c. 1100-1300	-
Scabbard	chape	Bishop Class B	c. 1075-1175	-
Scabbard	chape	Bishop Class C	c. 1100-1175	-
Scabbard	chape	Bishop Class D	c. 1100-1200	-
Scabbard	chape	Bishop Class E	c. 1075-1175	-
Scabbard	chape	Bishop Class F	c. 1050-1250	-
Scabbard	chape	Bishop Class G	c. 1100-1225	-
Scabbard	chape	Bishop Class H	c. 1200-1300	-
Scabbard	chape	French variant	c. 1100-1200	-
Scabbard	chape	Krabath Variante 141	c. 1050-1150	-
Stirrup	strap mount	Williams Class A,	c. 1000-1075	Ringerike style
-	-	Type 1-2, 6-9, 12-13,		(except Class
		15; Class B, Type 1-5,		A, Type 12;
		Class C, Group 1-2		Class B)
Stirrup	strap mount	Williams Class A,	c. 1070-1140	-
-		Type 11		
Stirrup	strap mount	Williams Class A,	c. 1050-1125	Urnes style
-		Type 10		-
Stirrup	strap mount	Williams Class A,	c. 1000-1100	-
		Type 3-5, 14, 16-17,		
		no Type, Class B, no		
		Type, no Class		
Stirrup	terminal	Williams provisional	c. 1000-1075	Ringerike style
		Class A, B, K		
Stirrup	terminal	Williams provisional	c. 1000-1100	-
		Class D-F		
Stirrup	terminal	Williams provisional	c. 1050-1100	Urnes style
		Class G		
Stirrup	terminal	Williams provisional	c. 1100-1150	-
		Class L		
Strap fitting	swivel	Type A1	c. 1100-1200	-
Strap fitting	swivel	Type A2.i	c. 1150-1300	-
Strap fitting	swivel	Type A2.i (inverted)	c. 1100-1200	-
Strap fitting	swivel	Type A2.ii	c. 1200-1350	-
Strap fitting	swivel	Type A3	c. 1250-1350	-
Strap fitting	swivel	Туре В	c. 1200-1700	-

Appendix 3: Harness pendants in iconographical representations

Source	Provenance	Dating	Туре	References	Notes/links
Mont-Saint-	Mont-Saint-	1050-	Circular – four on breast-band;	-	Heraclius on horseback
Michel	Michel (France)	1065	two on crupper (profile view)		
Sacramentary,					
Morgan					
Library,					
M.641, f. 155v					
Second seal of		c. 1066-	Circular – seven on breast-	Hewitt 1860, 92, pl.	Antiquarian drawing; indistinct on wax seal; Link to image
William the		1087	band	XXV	
Conqueror					
Seal of Odo,		1071-	Circular? – three or four visible	Hatton <i>et al.</i> 1950,	Antiquarian drawing
Bishop of		1082	on breast-band	301/pl. VIII, no. 431	
Bayeux				Baker 2017, 26	
				(cited); Carey-	
				Struillou 2019, 12	
				(cited)	
Seal of Fulk IV,		1090		Baker 2017, 26	Drawing of lost seal
Count of Anjou				(cited); Carey-	
				Struillou 2019, 12	
				(cited)	

Source	Provenance	Dating	Туре	References	Notes/links
Seal of William		1091-	Circular – five? on breast-band	Bishop and Chaplais	
II, King of		1092		1957, pl. XXX	
England, Eton				Baker 2017, 26	
College Library				(cited); Carey-	
				Struillou 2019, 12	
				(cited)	
Silos	Monasterio de	1091-	Circular – four/five on one	Backhouse 2006	Four horsemen of the apocalypse shown in profile; three
Apocalypse, BL	Santo Domingo	1109	side of breast-band (profile	[1979], 23, fig. 13	with four pendants in profile, one with five. Four/five
Add. 11695, f.	de Silos? (Spain)		view)		pendants also shown towards the back of each saddle.
102v.					
Coin of	Antioch	1098-	Uncertain	Ashley 2002, 28	
Bohemond I,	(Turkey)	1111		(cited); Rowley 1999,	
Prince of				139, fig. 67b; Carey-	
Antioch				Struillou 2019, 12	
				(cited)	
Tympanum,	Fordington	c. 1100	Cross-shaped – three-and-a-	Ashley 2002, 27, pl.	Shows St George
above south			half on breast-band (profile	1;	
doorway of St			view)	Creighton and	
George's,				Wright 2016, pl. 15;	
Fordington				Baker 2017, 26	
				(cited)	
Seal of		1074-	Circular – six on breast-band	Luckhardt and	
Heinrich der		1126	(profile view)	Niehoff 1995, 56, no.	
Schwarze				30; Fiedler 2002,	
				318, note 58 (cited)	
Source	Provenance	Dating	Туре	References	Notes/links
-----------------	----------------	------------------	---------------------------------	------------------------	--
London, BL	Canterbury, St	c. 1100-	Circular – three visible (maybe	Kauffmann 1975, 61,	Martyrdom of St Folian in Passionale; Two figures on
Arundel 91, f.	Augustine's	1120 (c.	four) on breast-band (profile	pl. 40; Ashley 2002,	horseback
179r, Initial B	Abbey	1130	view)	28 (cited)	
		given by			
		Ashley			
		2002)			
Second seal of		c. 1100-	Circular – three on one side of	Hewitt 1860, 119, pl.	Antiquarian drawing; indistinct on wax seal; Link to image
Henry I		1135	breast-band (profile view)	XXVIII	
Painted ceiling	Zillis	1109	Circular – three on one side of	Murbach 1967	Old king on horseback panel; other panels on the ceiling
of St Martin's		-	breast-band (three quarters		depict circular pendants
church, Zillis		1114	view – one visible on other		
			side)		
Great seal of		1107	Annular – six on one side of	Hewitt 1860, 107, pl.	Antiquarian insertion of pendants?
Alexander I of		-	breast-band	XXVII	
Scotland		1124			
Seal of Fulk V		1109-	Circular – five on one side of		Link to image
of Anjou		1129	breast-band (profile view)		
Moralia in Job	Cîteaux	1110/11	Bells - two, one on side, one	Dodwell 1971, fig.	Knight falconing; Link to image
by St Gregory,	(France),	20(?) /	on front of breast-band	114; Phoenix 2010,	
Dijon MS	abbaye Notre-	c. 1100-	(profile view)	197, fig. 1; Thuaudet	
0173, f. 174	Dame	1133		2021, 275, note 85	
Font of Our	Dendermonde	Early	Circular – c. nine on breast-	Ashley 2002, 27	Depicts Saul on the road to Damascus
Lady Church,		12 th	band (three quarters view)	(cited); Nicolle 1999,	
Dendermonde		century		31	
(Belgium)					

Source	Provenance	Dating	Туре	References	Notes/links
<i>Beatus of Liébana,</i> Berlin Ms. Theol. lat. fol. 561, f. 47r	probably Southern Italy	Early 12 th century ?	Uncertain – four on one side of breast-band (profile view)	-	Devil mounted
London, BL MS Cotton Titus D. XVI, (1) f. 14r; (2) f. 12r	St Albans (Hertfordshire)	c. 1120	 (1) Circular – two on one side of breast-band (profile view); (2) Circular – two on breast- band (three-quarters view) 	(1) Kauffmann 1975, pl. 69, no. 30 (cat.); Alexander 1993, 3, fig. 3; (2) -	(1) Superbia attacking Humilitas in Prudentius' Pyschomachia; (2) Pride on horseback
'St Albans Psalter', p. 72, Psalm 1, above initial 'B'	St Albans	c. 1120- 1130	Circular – two on one side of breast-band (three quarters view)	Lefebvre des Noëttes 1912, 224, fig. 12 Alexander 1993, 2-3, fig. 1, 2	Held at Hildesheim, Basilica St Godehard Link to image
St Pierre, Angoulême	Angoulême (France)	c. 1120 - 1130	Annular – one on one side of breast-band (profile view)	Enlart 1916, 459, fig. 408	Roland fighting Ferragut Link to image
Wall painting, Poitiers, baptistery of St Jean	Poitiers (France), baptistery of St Jean	First half of 12 th century (1100 in Goßler 2011, 44)	Circular - multiple on rump strap?	Dodwell 1971, pl. 219/186; Goßler 2011, 44, note 260 (cited)	Emperor on horseback Link to image
Capital, Vézelay, Basilique Sainte-Marie- Madeleine	Vézelay (France), Basilique Sainte-Marie- Madeleine	c. 1100- 1150	Drop-shaped - three on breast-band (profile)	-	St George of Cappadocia: slaying Dragon

Source	Provenance	Dating	Туре	References	Notes/links
Archivolt of	Modena (Italy)	c. 1100-	Annulets	Ashley 2002, 27	Depicts rescue of Guinevere
north door,		1150		(cited); Higham and	
Modena				Barker 1992, 158-	
Cathedral				161l, pls 5.9a-b	
Seal of William		c. 1119-	Uncertain	Ashley 2002, 28	
of Bures,		1157		(cited); Runciman	
Prince of				1998 [1952], pl. VI	
Galilee					
First seal of		1126	Circular – two? On one side of	Nieus 2017, 103, fig.	
Raoul I of			breast-band	1a	
Vermandois					
Seal of Milo of	Gloucester?	c. 1126-	Circular – four (at least) on	Cherry 2012, 322-	End date based on lack of Hereford title
Gloucester	(Gloucester-	1141;	one side of breast-band	323, 329, pl. 34, no.	
	shire)	matrix	(profile view)	37(i)	
		dated c.			
		1130			
Cartulaire de	France de	c. 1130-	Circular – four on one side of		Link to image
l'abbaye Saint-	l'ouest (Saint-	1150	breast-band (profile view)		
Maur-sur-	Maur-sur-Loire,				
Loire, drawing	abbaye)				
of the seal of					
Fulk d'Anjou					
(r. 1068-1109),					
Angers, AD					
49, H 1773, f.					
8v					
Cathedral of	Ferrara	c. 1135-	Kite-shaped shield – five on	-	Saint George slaying dragon
San Giorgio,		1150	breast-band (profile view)		
Ferrara (Italy)					

Source	Provenance	Dating	Туре	References	Notes/links
Chronicle of		1141-	Circular – ten on breast-band	Hyland 1994, 11	Link to image
Henry of		1154?	(profile view)	(cited)	
Huntingdon,					
BL MS Arundel					
48 f. 168v.					
Second seal of		1143-	Circular – five on breast-band	Hewitt 1860, 122,	Antiquarian drawing; number of pendants unclear on wax
Stephen, King		1154	(profile view)	no. 30	seal
of England					Link to image
'Third' seal of		1137-	Circular – five on breast-band	Heslop 1984, 303,	So-called 'third seal'
Stephen, King		1138	(profile view)	no. 332 (cat.);	
of England				Hyland 1999, 16	
West front of	Verona	1138	Shield shaped - five on breast-	Ashley 2002, 27	Tympanum – pendants shown gold (polychromatic
Church of San			band (profile view)	(cited); Mende 1983,	representation)
Zeno, Verona				taf. 91; Nicolle 1999,	
(Italy)				52; Goßler 2011, 44,	
				note 257 (cited)	
Seal of William		c. 1140	Circular – eight (perhaps		Link to image
of Nevers			more) on		
(France)			breast-band (profile/three		
			quarters view)		

Source	Provenance	Dating	Туре	References	Notes/links
London, BL	Canterbury,	c. 1140	Circular – two on one side of	Kauffmann 1975, pl.	Psalm 52; pendants depicted as such on two horsemen
Harley 603, f.	Christ Church?	(12 th -	breast-band (profile view)	182; Carver 1986,	Link to image
29		century		131, fig. 16	
		addition			
		to			
		'Harley			
		Psalter')			
		; c.			
		1125-			
		1150			
		(Carver			
		1986,			
		131, fig.			
	11.1	16)			
Chess piece,	Unknown	C. 1140-	Circular – seven on breast-	Kluge-Pinsker 1992b,	Knights in compat with lances on chess piece
Musee de		1160	band at three quarters view	77, 81, 11g. 13, 7, no.	
LOUVIE OA				/	
Seal of		11//	Circular – three on breast-	Luckbardt and	
Heinrich der		1144	band (profile view)	Niehoff 1995 15/	
Löwen			band (prome view)	kat no D1. Fiedler	
Lowen				2002 318 note 58	
				(cited)	
Orosius'.	England, N.	2nd or	Circular – five on one side of		Link to image
Historia	(Yorkshire)	3rd	breast-band (profile view)		
adversus		quarter			
paganos, BL		of the			
Burney 216, f.		12 th			
32v		century			

Source	Provenance	Dating	Туре	References	Notes/links
Saint	Abbaye de	c. 1150	Crescentic – five visible on	Thurre 1987, pl. III;	
Sigismund	Saint-Maurice,		side and front of breast-band	Goßler 2011, 45,	
Mauritius	Switzerland			note 260 (cited)	
chasse					
Seal of Henry		1150-	Circular – six/seven on one	Baker 2017, 26	Antiquarian drawing for ?Roger de Gaignières (d. 1715)
of Normandy		1154	side of breast-band (profile	(cited); Carey-	
(future Henry			view)	Struillou 2019, 12	
II), Angers				(cited)	
Arch. Dép.					
Maine-et-Loire					
242 H1, no. 6					
Seal of William		Mid-12 th	Circular? – six on breast-band	Ashley 2002, 28	
de Roumare,		century	(profile view)	(cited); Ellis 1981,	
Earl of Lincoln				91-92, pl. 27, no.	
				P1970; Carey-	
				Struillou 2019, 12	
				(cited)	
Madrid,	Winchester,	Mid-12 th	Circular – four on one side of	Kauffmann 1975, pl.	Knights in battle
Bibliotec	Cathedral Priory	century	breast-band (profile view)	219; Ashley 2002, 28	
Nacional, Vit.	of St Swithun?			(cited)	
23-28, f. 81v					
Liber Sancti	North or	Mid-12 th	Circular – three on one side of	Cahn 1996, 35, cat.	Charlemagne, so anachronistic
Jacobi	Western France	century	breast-band (profile view)	24, illus. 54	
Seal of Roger		c. 1155	Circular – five (perhaps more)	Ashley 2002, 28	
de Mowbray			on breast-band (profile view)	(cited); Harvey and	
				McGuiness 1996, 47,	
				fig. 41; Carey-	
				Struillou 2019, 12	
				(cited); Fiedler 2002,	
				318, note 58 (cited)	

Source	Provenance	Dating	Туре	References	Notes/links
History of the	Abbey of Bec,	c. 1150-	Circular – five on breast-band	Gravett 2000, 50;	Held at Leiden University Library
Kings of	Normandy	1160	(side and front view)	Bates et al. 2017,	
Britain by				front cover	
Geoffrey of					
Monmouth					
MS Leiden BPL					
20, f. 20r					
Seal of Robert		c. 1160-	Uncertain	Baker 2017, 26	
de Lundres		1165		(cited); Carey-	
				Struillou 2019, 12	
				(cited)	
Seel of		1162	Appular four and a half on	Luckbardt and	
Seal OI		1105	Annual – Tour-and-a-nan on	Nichoff 1005, 156	
Löwen			breast-band (prome view)	kat no D5: Eigdler	
LOWEII				2002 218 note 58	
				(cited)	
Honorius von	Salzburg?	c. 1150-	Circular – two on breast-band	Krabath 2001, 243:	Daughter of Babylon riding on ?camel
Autun.	00.200.81	1175	(profile): three on crupper	n. 1451	
Kommentar			(profile)	-	
zum hohen			u ,		
Lieded					
Reliquary of St	Treasury of	c. 1150-	Alternating circular? and	Gravett 1997, 6	
Hadelin	Church of St	1175	crescentic – five on breast-		
	Matin, Visé		band (profile view)		
	(Belgium)				

Source	Provenance	Dating	Туре	References	Notes/links
Capital	(Probably)	c. 1150-	Annular – four on side of	Chen 2013, 133, fig.	Fitzwilliam Museum, Cambridge inv. no. M.1-1964
probably from	Cloister of	1175	breast-band (profile)	1c	
cloister of	Notre-Dame-				
Notre-Dame-	des-Doms,				
des-Doms,	Avignon				
Avignon					
Broddetorp	Denmark	c. 1150-	Circular – three on breast-	-	Hubert of Liège? on horseback
Altar,		1200	band and three on crupper		
Stockholm,			(profile)		
Statens					
historiska					
museum, SHM					
4674					
Gilbert of	Seitenstetten	c. 1150-	Circular – nine on one side of		Link to image
Auxerre <i>, The</i>	(Austria)	1200	breast-band; one on brow		
Lamentations			band		
of Jeremiah,					
Walters W.30,					
f. 3r					
Capital at	Estella	1166-	Crescentic – six visible on side	Ashley 2002, 27	Roland fights the Saracen Ferragut
Ducal Palace,		1200	and front of breast-band	(cited); Barber 1978,	
Estella (Spain)				59; Barber 2000, pl.	
				5	
Seal of Philip		c. 1168	Circular – nine? on breast-	Heslop 1986, 56, pl.	
of Alsace			band (profile view)	XXVb	
Copenhagen,	Northern	c. 1170-	Uncertain	Kauffmann 1975, pl.	The Magi following the star
Royal Library,	England	1175		273; c; 1984a, 58,	
Thott 143 2, f.				128, pl. 76; Cherry	
10v				1991, 18, note 2	
				(cited)	

Source	Provenance	Dating	Туре	References	Notes/links
Seal matrix of		1160-	Cruciform – four-and-a-half on	Naylor 2015, 299-	
Fulk FitzWarin		1258	one side of breast-band	300, fig. 4d	
III				Leahy and Lewis	
				2018, 22	
Seal of		1163-	Circular – six on breast-band	Ashley 2002, 28	
Bohemond III,		1201	(profile view)	(cited); Runciman	
Prince of				1998 [1952], pl. VI	
Antioch					
Wall painting	Former chapel	c. 1170-	Circular – nine on breast-band	Peirce 1993, 271, pl.	Knight on horseback
	of the Templars	1180	(three quarters view)	13	
	at Cressac				
	(France)				
Seal of Robert		1171-	Uncertain	Baker 2017, 26	
of Bonnebosq		1178		(cited); Carey-	
				Struillou 2019, 12	
				(cited)	
Capital (E1)	Monreale,	1172-	Annular – two-and-a-half on	Sheppard Jr 1949,	
showing the	cloisters of the	1189	breast-band (profile view)	160	
Journey of the	Duomo, north-				
Magi	east				
Seal of Ludwig	Thüringen	1172-	Circular – three on breast-	Luckhardt and	
III, Landgraf of		1189	band (profile view)	Niehoff 1995, 273,	
Thüringen				kat. no. D80; Fiedler	
(Germany)				2002, 318, note 58	
				(cited)	
	1				

Source	Provenance	Dating	Туре	References	Notes/links
Bracteate of	Thüringen	1172-	Circular – two on breast-band	Walcher 2000, 210,	
Luuwig III,		1190		Borgor 1005 627	
Thüringen				629 fig G119e	
(Germany)				025, fig. 01150	
(000111011))					
Sarcophagus	Formerly	1179	Crescentic – three on breast-	-	
of SS Sergius	Verona, in the		band (profile)		
and Baachus	Church of S.				
	Silvestro in				
	Nogara				
Queen of	Parma	c. 1180	Annular – five on breast-band	Jezler 2018, 146,	School of Antelami
Sheba capital,			(profile view)	abb. 4	
Parma (Italy),					
Diocesan					
(Fécamp	Fécamn	c 1180	(1) Circular alternating with	(1) Cabr 1996 160	(1) May (month of) showing hunter with falcon on
Psalter' The	(France) or Ham	0. 1100	crescentic – seven-and-a-half	cat 134 illus 332	horseback Link to image:
Hague, KB, 76	(Trance) of Train		on one side of breast-band	Marti 2013, 148, fig.	(2) King David on horseback Link to image
F 13. (1) f. 5v:			(profile view): (2) Crescentic –	198: Goßler 2011.	
(2) f. 75r			four on one side of breast-	45, note 260 (cited);	
			band (profile view)	(2) -	
Seal of William		c. 1180	Circular – nine on breast-band	Heslop 1986, 56, pl.	Emulates Seal of Philip of Alsace
de Mandeville			(profile view)	XXVa	
Relief of a	Zurich	c. 1180	Circular – Six on breast-band	Goßler 2011, 44,	Link to image
knight, Zurich			(profile view)	note 257 (cited);	
(Switzerland),				Reinle 1969, 25-28,	
Großmunster				abb. 5-7	

Source	Provenance	Dating	Туре	References	Notes/links
Tympanum above south doorway of St George's, Damerham (Hampshire)	St George's, Damerham – found in 1916 and inserted	c. 1175- 1200 (but deb- ated)	Circular – eight on one side of breast-band (profile view)	Alford 1985, 4, pl. 4	Link to image; date debated <u>see Link</u>
Manerius Bible, Bibliothèque Sainte- Geneviève, (1) MS.8, f. 141v (2) MS.10, f. 3v	Champagne (France)	1185- 1195	 (1) Circular or annular (leather, rather than metal?) – eleven (front view) (2) Annular (maybe convention for circular) – five on breast-band (facing view) 	(1) Cahn 1996, 99- 100, cat. 81, illus. 197 (2) -	 (1) Joshua on horseback, so anachronistic (2) Link to image
Seal of Richard of Morville		d. 1189	Uncertain	Baker 2017, 26 (cited); Carey- Struillou 2019, 12 (cited)	
Seal of Gilles, count of Montaigu		1190	Circular – five on breast-band (profile view)	-	Link to image
Seal of Alan Fitzwalter		c. 1190	Uncertain	Baker 2017, 26 (cited); Carey- Struillou 2019, 12 (cited)	

Source	Provenance	Dating	Туре	References	Notes/links
'The St Louis Psalter', Leiden, University Library, MS Lat. 76A, f. 16v	Northern England	c. 1190- 1200	Circular – six on breast-band (front view)	Kauffmann 1984a, 129; I. 79	The journey of the Magi
Image of Constance de Hautville in Petrus de Ebulo, <i>De</i> <i>Rebus Sicilis</i> , Stadtbibliothe k Bern Cod. 120.II, ff. 124r, 138r	Palermo, Sicily (Italy)	1195- 1197	 (1) Circular – four on one side of breast-band (profile view) (2) Circular – four on one side of breast-band (profile view) 	(1) - (2) Haussherr 1977, vol. 2, abb. 605, no. 810 (cat.)	Link to image
Second great seal of Richard I of England		c. 1195- 1198	Uncertain	Ashley 2002, 28 (cited); Nicolle 1999, 58; Carey-Struillou 2019, 12 (cited)	
Bracteate of Friedrich II von Oldisleben		1189- 1217	Circular – three on breast- band	Berger 1995, 627, 629, fig. G119h	

Source	Provenance	Dating	Туре	References	Notes/links
Liber Avium,	Burgundy	Late 12 th	Circular – three? on one side	Cahn 1996, 95, no.	Allegory of the hawk and the dove
by Hugh of	(France) or	century	of breast-band (profile view)	78 (cat.), illus. 184	
Fouilloy	Champagne				
Capital at Saint	Brioude	12 th	Circular – two on breast-band	-	Two knights charging with lances at each other
Julien, Brioude		century	and three on crupper (profile)		
(France)	22	d o th		Desta 2000 st C	
Codex	??	12"	Circular – three on one side of	Barber 2000, pl. 6	Charlemagne, so anachronistic; less evidence of
Callxtinus, T.		century	breast-band (profile view)		suspension
102V		1.2 th	Circular, at least three on one	Clommonson 2012	Link to image
		century	side of breast-band (profile	99 fig <i>A</i> h	
There		century	view)	55, lig. +0	
Church of	Villacantid	12 th	Crescentic – c. five on one side	-	
Santa María la		century	of breast-band		
Mayor,					
Villacantid					
(Spain)					
Capital at	Limoges	12 th	Annular – three on breast-	-	Link to image
Sainte-Marie-		century	band (profile view)		
de-la-Regle,					
Limoges		a a rib i	Chield changed thus and a	Achley 2002 20 22	
English		early 12 th	Shield-shaped – two-and-a-	Ashley 2002, 30, 33,	
Apoculypse		15 Century	view)	pi. vi	
		century			

Source	Provenance	Dating	Туре	References	Notes/links
Mosoll Altar		c. 1200-	Circular – six, 6.5, 8.5 on		Three Magi, all with decorated breast-bands
Enamelled medallion	Limoges?, now at Musée de Cluny, Paris	Second quarter of 13 th	Circular (possibly) – six (or seven), maybe on one side of breast-band (profile view)	Gauthier 1950, 154, pl. 24	Falconer
Aquamanile depicting English prince		13 th century	Shield-shaped – three on breast-band (profile view)	Falke and Meyer 1935, 108, taf. 117 (abb. 269); Fiedler 2002, 318, note 57 (cited); Ashley 2002, 30-31, pl. V	
Aquamanile of falconer on horseback	Lower Saxony (Germany)	13 th century	Crescentic – two visible on side and front of breast-band (3 overall)	Falke and Meyer 1935, taf. 118 (abb. 271); Fiedler 2002, 318, note 54 (cited); Lagane 2010, 12, no. 4	Metropolitan Museum of Art inv. no. 47.101.55 Link to image
Mappa Mundi	Hereford? (Herefordshire)	c. 1300	Circular with crosses alternating with shield-shaped on breast-band – seven on one side of breast-band; bells on rear band	Griffiths 1986, 3, fig. 1b; Griffiths 2004 [1995], 62, fig. 46; Goßler 2011, 44 (cited), note 257; Carey-Struillou 2019, 14 (cited)	
Bodleian Library, MS Ashmole 1511, f. 12			Circular – five on breast-band (profile view)	Muratova 1986, 129, pl. XXXIXa	Knight

Appendix 4: Binding strips and 'octopus' mounts and in iconographical representations

Source	Provenance	Dating	Туре	Reference	Notes
Vita et miracila	France	c. 1100	Octopus on shield	Rijns 2017, 11, afb. 14	
s. Mauri,			(possibly – or boss?)		
Troyes, BM MS					
2273, f. 92v					
Painted altar?	Burgos?	c. 1100-	Possible octopus on		Link to image
at San Miguel		1133	kite-shaped shield		
de Tubilla del			held by angel fighting		
Agua, Burgos			dragon		
(Spain)					
Seal of Ramon		1113-1162	Radial binding strips		
Berenguer IV,			on shield		
Count of					
Barcelona					
(1) Sculpture of	Verona,	1120	Elaborate bifurcating		(1) <u>Link to image</u>
Roland	Duomo (2)		strips (both)		(2) <u>Link to image</u>
(2) Sculpture of	West portal				
Oliver					
Seal of Richard	On charter,	1127-1134	Probable octopus with	Harley Charter 44 E 19 (seal);	Link to image
Basset	re. Manor of		four arms	illustration preserved in Harley MS	
	Heigham			6152, f. 12r (c. 1632)	
	(Norfolk)				

Source	Provenance	Dating	Туре	Reference	Notes
Oxford, Corpus	Worcester?	c. 1130-	Octopus on shield	Arts 1995, 88, afb. 5 (cited);	'Nightmares of Henry I' in John of Worcester's (d.
Christi College,		1140	(probably)	Kauffmann 1984b, 102-103, no. 33	1140) chronicle
MS 157 (p. 382)					
Grave cover of	Uncertain	1144	Radial binding strips		At London, Temple Church; known from
William de			with lis terminals on		antiquarian drawings
Mandeville			kite-shaped shield		Link to image
Gemini,	Chartres	c. 1145	Radial binding strips	-	Link to image
Chartres,			around a pyramidal		
Cathedral of			boss on squared-off		
Notre-Dame,			kite-shape shield, all		
West façade,			bifurcate into lozenges		
right portal					
Grave cover of	Limoges?	c. 1150	Octopus on shield,	Crouch 1992, 208, fig. 6; Arts 1995,	At Le musée Jean-Claude-Boulard-Carré
Geoffrey of	(France)		binding strip	88, afb. 7 (cited); Webley 2017a;	Plantagenêt, Le Mans
Anjou				Hendriksen 2017, 86, afb. 6.22	
Saint Sigismond	Abbaye de	c. 1150	Possible octopus with	Thurre 1987, pl. III	
Mauritius	Saint-		radiating binding strips		
chasse	Maurice				
	(Switzerland)				
Cross of Bury St	Bury St	Mid-12 th	Octopus on shield	Swarzenski 1974 [1954], pl. 153, no.	Dating debated: Lasko 1984 – c. 1125-1150;
Edmunds,	Edmunds?	century	(probably); plus	338; Lasko 1984, 224-226, no. 206;	Swarzenski 1974 [1954] – c. 1150-1200; Parker
Easter panel		(c. 1125-	binding strips	Parker and Little 1993, pl. VI, 82, fig.	and Little 1993 – mid 12 th century Link to image
		1175)		56	
Codex	Fulda	1150-1160	Apparent octopus	-	Link to image
Eberhardi,			mount of eight arms		
Marburg,					
Staatsarchiv,					
Kopiar 425, f.					
78r					
Seal of Robert		1161	Escarbuncle type	Demay 1880, 140, fig. 166	18 th century representation by Pierre-Hyacinthe
III de Vitré			strips		Morice (1693-1750)

Source	Provenance	Dating	Туре	Reference	Notes
Wall hanging	Lower Saxony	c. 1160- 1170	Octopus on shield	Haussherr 1977, vol. II, abb. 590	Embroidered, sleeping knights by tomb
Massgebiet	Uncertain	c. 1160- 1170	Boss with radiating strips with cusped triangular terminals	Haussherr 1977, vol. II, abb. 353	Depicts Gideon (in armour and with arms) with the fleece
Seal of William IV of Nevers		1161-1168	Radiating binding strips		Link to image
Seal of the Abbey of Saint Victor, Paris		1163-1172	Radiating bifurcating binding strips	Gay 1887, 228; <u>Link to image</u> ; <u>Link</u> <u>to image</u>	NB progression to escarbuncle in later seals Link to image
First great seal of Philip I of Flanders	Flanders (Belgium)	1168-1191	Octopus on shield		Link to image
Effigy of William Clito, now lost	Abbey of St Bertin, St Omer (France)	Post 1127 (death of Clito), date given as 1170	Possible octopus boss with eight arms and radiating strips	Bouly de Lesdain 1907, 191, note 6 Gravett 2000, 56; Crouch 1992, 191, fig. 4	Sketch by Francis Sandford in 1677 Link to image
'Hunterian Psalter', MS Hunter 229, f. 3r	England?	c. 1170	Probable radiating binding strips		Depiction of Gemini. Held at University of Glasgow
Bracteate coins of Brandenburg (Germany) under Otto I	Brandenburg	1170-1184	Octopus on shield	Haussherr 1977, vol. II, abb. 113, no. 7; Rijns 2017, 9-10, afb. 3, 8-9	
Sculpture	Castello Sforzesco (Italy), Porta Romana	1171	Possible octopus on shield, with ten? radial strips		

Source	Provenance	Dating	Туре	Reference	Notes
Arch on Santa María, Piasca, Cantabria, west door		c. 1172 or earlier	Kite-shaped shield with probable octopus and radial binding strips		Dedication stone on rebuilding of C12th dated February 1172
Chronicle of Otto von Freising, Jena, Universitdtsbibli othek, Cod. Bose q. 6		1177 (1157- 1185)	Octopus on shields	Arts 1995, 88, afb. 6 (cited); Rijns 2017, 11, afb. 12	Meeting of armies of Henry IV and V
Seal of Henry II of Champagne		1180 (1181- 1197)	Radiating binding strips	Bouly de Lesdain 1907, 191 (cited)	Link to image
'Charité-sur- Loire Psalter'; London, BL Harley 2895, f. 82v	Central France	c. 1175- 1200	Octopus on shield and many binding strips	Backhouse 2006 [1979], 31, fig. 21 Rijns 2017, 11, afb. 11	David and Goliath
Effigy of Geoffrey de Mandeville 1st Earl of Essex	London, Temple Church	1185	Radiating strips with lis		
Seal of Gilles, count of Montaigu		1190	Octopus mount on shield?	-	Link to image

Source	Provenance	Dating	Туре	Reference	Notes
Manuscript KB 76 F 5 Picture Bible, f. 6v	'France'	1190-1200	Radial binding strips on shield; eight lis- tipped from centre (extrapolated from half view)	-	
Ornamented tile	Montech (France)	c. 12 th century	Shield with strips radiating from centre, possibly bosses along strips	Sarret 1983, 145-146	Knight defending himself from attack with spear
Seal of the Commune of Abbeville (France), Archives Nationales, cote D 5734	Abbeville?	12 th century	Possible radiating binding strips on shield around central boss	Fino 1977, 137, fig. 32	
Seal of Morgan ap Caradog	National Library of Wales	Late 12 th century (1158- 1191)	Boss with radiating binding strips?	McEwan and New 2012, 68-69, fig. 27	
Capital Monreale Cathedral, Palermo	Palermo (Italy)	Late 12 th century	Possible radiating binding strips on shield around central boss	Nicolle 1980, figs 2, 5, 12	
Casket in ivory	Cologne	Late 12 th century	Radial binding strips on shield; eight (extrapolated from just over half view)	Haussherr 1977, vol. II, abb. 443, no. 635 (cat.); Gravett 1997, 16	

Source	Provenance	Dating	Туре	Reference	Notes
Seal of the commune of Soissons (France)	Soissons	Late 12 th century	Octopus with radiating binding strips	Gautier 1876, fig. 16; Demay 1880, 128, 140, figs 85, 115; Dowen <i>et al</i> . 2019, 126-127, fig. 3c	
Remigius, in Martianum Capellam, Paris, Bibliothèque Geneviève, MS 1041	Northern France	c. 1200	Binding strips emanating from a possible octopus; six arms terminate in lis, below a double-ended lis strip fills the narrower part of the shield	Legner 1985, 64, fig. A 10	Depiction of Rhetoric
Liber ad honorem Augusti sive de rebus Siculis, Burgerbiblio- thek Bern, Cod. 120.II, f. 133r	Uncertain	c. 1200	Shields bearing octopus mounts?	Marti 2013, 160, abb. 215	Depicts Diepold crossing river with army
Equestrian statue	Ferrara Cathedral, Porta Dei Mesi	c. 1200- 1230 (d. Antelami)	Octopus? and radiating binding strips		Link to image
Sculpted knight on Church of St Justina, Padua	Padua	c. 1210	Possible octopus on shield (four arms), plus recurved ended strips	Gravett 1997, 24	
Tomb of Hugo II, Chatelain de Gand (Ghent)	Nieuwen Bosch Abbey, Heusden (Netherlands)	c. 1232	Grand écu en rais d'escarboucle (eight rays)	Newton 1968, 40-71/pl. 27, no. 64 (cat.)	

Source	Provenance	Dating	Туре	Reference	Notes
Aquamanile,	Niedersachse	c. 1240-	Radial binding strips	Falke and Meyer 1935, 46, 108, pl.	Index of Medieval Art no. 91322
Museo Bargello	n	1260	(eight rays)	116, no. 300	
Seal of the	Aube	1259	Radial binding strips		Anachronistic – the order was founded in the 12 th
Master of the	(France),		(shields in profile) –		century, with the seal used from 1167
Order of the	Archives		eight extrapolated		
Temple	département				
	ales				
Seal of the	Compiègne	13 th	Octopus with radiating		Imitates Soissons (q.v.)
commune of		century	binding strips		
Compiègne					
(France)					
St Gregory's	Abbey of St		Elaborate boss	Magnier 2013, no. 59 (cat.)	
Homilies on	Bertin, St				
Ezekiel	Omer				

Abbreviations

abb.	abbildung (Ger. – figure)
afb.	afbeelding (Dut. – figure)
DMV	deserted medieval village
EngLaID	English Landscape and Identities [Project]
f./ff.	folio/folia
FLO	Finds Liaison Officer (PAS)
FRG	Finds Research Group
GIS	Geographic Information Systems
HER	Historic Environment Record
MS	manuscript
obr.	obrazec (Cze. – figure)
PAN	Portable Antiquities of the Netherlands
PAS	Portable Antiquities Scheme
r	recto
ryc.	rycina (Pol. – figure)
taf.	tafel (Ger. – plate)
tav.	tavola (It. – plate)
v	verso
VASLE	Viking and Anglo-Saxon Landscape and Economy [Project]
XRF	x-ray fluorescence

Bibliography

References prefaced by stars appear in the appendices or database but are not quoted in the main text.

Abramowicz, A., Gassowski, J., Hensel, W., Okulicz J., Suchodolski, S. and Tabaczynski, S. (1970) Dans l'Albigeois, le château et le village de Montaigut (Tarn). *Cahiers des Annales*, 27, 13-53.

Abrams, L. (2012) Diaspora and identity in the Viking Age. *Early Medieval Europe*, 20(1), 17-38.

Adams, S. (2014) The first brooches in Britain: from manufacture to deposition in the early and middle Iron Age. Unpublished PhD thesis. Leicester: University of Leicester.

Adams, W. Y. and Adams E. W. (1991) *Archaeological typology and practical reality*. Cambridge: Cambridge University Press.

*Addyman, P. V. (1965) Late Saxon settlements in the St Neots area: I. The Saxon settlement and Norman castle at Eaton Socon, Bedfordshire. *Proceedings of the Cambridge Antiquarian Society*, 58, 38-73.

*Addyman, P. V. and Priestley, J. (1977) Baile Hill, York: a report on the Institute's excavations. *Archaeological Journal*, 134, 115-156.

Adler, G. (2010) Handbuch Buchverschluss und Buchbeschlag: Terminologie und Geschichte im deutschsprachigen Raum, in den Niederlanden und Italien vom Fruhen Mittelalter bis in die Gegenwart. Wiesbaden: Reichert Verlag. Ailes, A. (1992) The knight, heraldry and armour: the role of recognition and the origins of heraldry. In: C. Harper-Bill and R. Harvey (eds), *Medieval knighthood IV: papers from the fifth Strawberry Hill Conference 1990*. Woodbridge: Boydell Press, 1-21.

*Alexander, J. J. G. (1993) Ideological representation of military combat in Anglo-Norman art. *Anglo-Norman Studies*, 15, 1-24.

*Alford, S. (1985) Romanesque architectural sculpture in Dorset: a selective catalogue and commentary. *Dorset Natural History and Archaeological Society Proceedings*, 106 (for 1984), 1-22.

*Allen, L. (1996) Copper alloy objects. In: A. Hardy, Archaeological investigations at 54–55 St Thomas Street, Oxford. *Oxoniensia*, 61, 254-256 (225-273).

*Allen, L. (2002) The copper-alloy objects. In: T. G. Allen with J. Hiller, *The excavation of a medieval manor house of the bishops of Winchester at Mount House, Witney, Oxfordshire*. Thames Valley Landscapes Monograph 13. Oxford: Oxford University School of Archaeology, 142-146.

Allen, L. (2003) Buckles and clothes fittings. In: A. Hardy, A. Dodd and G. Keevill, *Aelfric's Abbey: excavations at Eynsham Abbey, Oxfordshire 1989-92*. Thames Valley Landscapes Monograph 16. Oxford: Oxford University School of Archaeology, 251-260.

Allen, L. (2019) Metalwork and worked-bone objects. In: J. Munby, A. Norton, D. Poore and A. Dodd, *Excavations at Oxford Castle, 1999-2009*. Thames Valley Landscapes Monograph 44. Oxford: Oxford University School of Archaeology, 260-265.

*Allen, L., Boyle, A., Cropper, C., Dodd, A. J., Gilmour, B. J. J., Thomas, G. and Youngs, S. M. (2004) Objects of copper alloy, iron, bone and glass. In: G. Hey, *Yarnton: Saxon and medieval settlement and landscape*. Thames Valley Landscapes Monograph 20. Oxford: Oxford Archaeology, 277-288. Allen, M., Blick, N., Brindle, T., Evans, T., Fulford, M., Holbrook, N., Richards, J. D. and Smith, A. (2015) The rural settlement of Roman Britain: an online resource [data-set]. York: Archaeology Data Service (doi:10.5284/1030449).

*Ambrose, K. (2005) Samson, David, or Hercules? Ambiguous identities in some Romanesque sculptures of lion fighters. *Konsthistorisk Tidskrift*, 74(3), 131-147.

Anderson, W. (2010) Blessing the fields? A study of late-medieval ampullae from England and Wales. *Medieval Archaeology*, 54, 182-203.

Andrews, M. (2019) *Coin Hoarding in Medieval England and Wales, c.973-1544: Behaviours, motivations, and mentalités*. BAR British Series 651. Oxford: BAR Publishing.

*Anon. (1908) *Catalogue of the collection of London antiquities in the Guildhall Museum*, 2nd edition. London: Blades, East & Blades.

*Anon. (1909) Tillväxten under år 1909. Fornvännen, 4, 213-322.

Anon. (1986) Wiltshire archaeological register for 1984. *Wiltshire Archaeological and Natural History Magazine*, 80, 240-244.

*Anon. (1987) Les chateaux normands de Guillaume le Conquérant à Richard Coeur de Lion [Exposition organisée par le Musée de Normandie à l'Eglise St Georges du Chateau, Caen, 15 mai-31 aout 1987]. Publication du Musée de Normandie 6. Caen: Musée de Normandie.

*Anon. (1990) Archéologie et vie quotidienne aux XIIIe et XIVe siècles en Midi-Pyrénées [Exposition: Musées des Augustins, 7 mars - 31 mai 1990]. Toulouse: Association pour la promotion de l'archéologie et des musées archéologiques en Midi-Pyrénées. *Anon. (1991) 278. Holte. Gde. Bissendorf, FStNr. 1. Archäologische Mitteilungen aus Nordwestdeutschland, 14, 168.

*Anon. (1994) Mittelalter und Neuzeit: Burg Wöhr. *Bayerische Vorgeschichtsblätter* -*Beiheft*, 7, 189.

*Anon. (2003) *Portable Antiquities Scheme annual report 2001/02-2002/03*. London: Department for Culture, Media and Sport.

*Anon. (2006) *Portable Antiquities Scheme annual report 2005/6*. London: Department for Culture, Media and Sport.

*Anon. (2007) *Portable Antiquities Scheme annual report 2006*. London: Portable Antiquities Scheme.

*Anon. (2010) *Portable Antiquities and Treasure annual report 2008*. London: Department of Portable Antiquities and Treasure, British Museum.

*Anon. (2011a) *Treasure trove in Scotland: report by the Queen's and the Lord Treasurer's Remembrancer 2009/2010.* Edinburgh: National Museums Scotland.

*Anon. (2011b) *Treasure trove in Scotland: report by the Queen's and the Lord Treasurer's Remembrancer 2010/2011*. Edinburgh: National Museums Scotland.

*Anon. (2013) *Treasure trove in Scotland: report by the Queen's and the Lord Treasurer's Remembrancer 2012/2013*. Edinburgh: National Museums Scotland.

*Arbman, H. (1935-1937) Vikingatidsgravar vid Ulanda vad. Upplands Fornminnesforeningens Tidskrift, 45, 261-275. Archibald, M. (1984) Coins. In: G. Zarnecki *et al.* (eds), *English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]*. London: Weidenfeld and Nicolson, 320-341.

Archibald, M. (1988) English medieval coins as dating evidence. In: J. Casey and R. Reece (eds), *Coins and the archaeologist*, 2nd edition. London: Seaby, 264-301.

*Archibald, M. (1995) The medieval coins. In: K. Blockley, M. Blockley, P. Blockley, S. S. Frere and S. Stow, *Excavations in the Marlowe car park and surrounding areas*. The Archaeology of Canterbury 5. Canterbury: Canterbury Archaeological Trust, 950-951.

*Archibald, M. (2004) Copper alloy pseudo-coin brooch. In: Q. Mould, Metal artefacts. In: H. Wallis, *Excavations at Mill Lane, Thetford, 1995.* East Anglian Archaeology 108. Dereham: Norfolk Museums and Archaeology Service, 40-41 (33-52).

*Arne, T. J. (1934) *Das Bootgräberfeld von Tuna in Alsike, Uppland*. Stockholm: Kungl. vitterhets-, historie- och antikvitets-akademien.

*Arnold, C. J. (2001) Excavation at Newton St Loe Castle. *Somerset Archaeological and Natural History*, 143, 57-116.

Arquint, P. (2015) Il Medioevo. In: C. Giannelli (ed.), *Equus frenatus: morsi dalla collezione Giannelli*. Fondazione iniziative zooprofilattiche e zootecniche 100. Brescia: Fondazione iniziative zooprofilattiche e zootecniche, 147-159.

Arts, N. (1995) Oorlog in Helmond: Archeologische wapenvondsten uit het Oude Huys (circa 1175-1400). *Brabants Heem*, 47(3), 85-91.

Ashby, S. P. (2008) An eleventh-century copper alloy stirrup-strap mount from Overstone, Northamptonshire. *Northamptonshire Archaeology*, 35, 287-288.

Ashby, S. P. (2011) The language of the combmaker: interpreting complexity in Vikingage industry. In: J. Baron and B. Kufel-Diakowska (eds), *Written in bones: proceedings of the meeting of the 7th meeting of the Worked Bone Research Group 2009*. Wroclaw: University of Wroclaw, 9-24.

Ashby, S. P. (2015) 'With staff in hand, and dog at heel'? What did it mean to be an 'itinerant' artisan? In: G. Hansen, S. P. Ashby and I. Baug (eds), *Everyday products in the middle ages: crafts, consumption and the individual*. Oxford: Oxbow Books, 11-27.

Ashby, S. P. (2021) Technology: Making things in Medieval Europe. In: J. Lund and S. Semple (eds), *A Cultural History of Objects in the Medieval Age*. London: Bloomsbury Academic, 45-70.

Ashby, S. P. and Sindbæk, S. M. (2020) Collaboration and expert knowledge. In: S. P. Ashby and S. M. Sindbæk (eds), *Crafts and social networks in Viking towns*. Oxford: Oxbow Books, 225-230.

Ashley, S. (2002) *Medieval armorial horse furniture in Norfolk*. East Anglian Archaeology 101. Dereham: Norfolk Museums and Archaeology Service.

Ashley, S. (2006) Recent finds of Anglo-Norman 'high-status' objects from Norfolk. *Norfolk Archaeology*, 45(1), 105-108.

*Ashley, S. (2007) All Saints and St Nicholas South Elmham, Suffolk. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 51(1), 223-224 (211-232).

Ashley, S. (2016) Anglo-Norman elite objects from castle and countryside. In: J. Davies, A. Riley, J-M. Levesque and C. Lapiche (eds), *Castles in the Anglo-Norman world*. Oxford: Oxbow Books, 281-298.

Ashley, S. (2021) Lions confronted on Bigod's tower: Proto-armorial decoration on the forebuilding of Norwich Castle keep and elsewhere. In: S. Cunningham, A. Curry, and

P. Dryburgh (eds), *Status, identity and authority: studies in medieval and early modern archives presented to Adrian Ailes*. The Coat of Arms Supplementary Series volume 2. London: The Heraldry Society, 12-28.

Ashley, S. and Biddle, M. (2014) Recent finds of late twelfth or early thirteenth-century sword and dagger pommels associated with the crusades. In: S. Ashley and A. Marsden (eds), *Landscapes and artefacts: studies in East Anglian archaeology presented to Andrew Rogerson*. Oxford: Archaeopress, 199-210.

Ashley, S., Penn, K. and Rogerson, A. (1991) A further group of late Saxon mounts from Norfolk. *Norfolk Archaeology*, 41(2), 225-229.

*Ashley, S. and Rogerson, A. (1994) An enamelled late Saxon disc brooch from Walpole St Peter. *Norfolk Archaeology*, 42(1), 102-104.

Astill, G. G. (1991) Towns and town hierarchies in Saxon England. *Oxford Journal of Archaeology*, 10, 95-117.

Astill, G. G. (1993) A medieval industrial complex and its landscape: the metalworking water mills and workshops of Bordesley Abbey. CBA Research Report 92. York: Council for British Archaeology.

Astill, G. G. (2000) General survey 600-1300. In: D.M. Palliser (ed.), *The Cambridge urban history of Britain, volume 1: 600-1540*. Cambridge: Cambridge University Press, 25-50.

Astill, G. G. (2009) Medieval towns and urbanisation. In: R. Gilchrist and A. J. Reynolds (eds), *Reflections: 50 years of medieval archaeology, 1957-2007*. Leeds: Maney Publishing, 255-270.

*Atkin, M. (1991) A late Saxon mount from Dursley, Gloucestershire. *Transactions of the Bristol and Gloucestershire Archaeological Society*, 109, 219-221.

*Ayers, B. (1987) *Excavations at St Martin-at-Palace-Plain, Norwich, 1981*. East Anglian Archaeology 37. Norwich: The Norfolk Archaeological Unit.

*Baastrup, M. P. (2009) Småfibler af karolingiske og ottonske typer i Danmark. Aarbøger for Nordisk Oldkyndighed og Historie 2005, 209-255.

*Baastrup, M. P. (2014) Continental and insular import in Viking Age Denmark: distribution and circulation. *Zeitschrift für Archäologie des Mittelalters*, 41, 85-207.

*Babb, L. (1997) A thirteenth-century brooch hoard from Hambleden, Buckinghamshire. *Medieval Archaeology*, 41, 233-236.

Babíc, S. (2005) Status identity and archaeology. In: M. Díaz-Andreu, S. Lucy, S. Babíc and D. N. Edwards, *The Archaeology of Identity: approaches to gender, age, status and religion*. Abingdon: Routledge, 67-85.

*Backhouse, J. (2006) [1979] *The illuminated manuscript*. First published 1979, reprinted 2006. Oxford: Phaidon.

Backhouse, J., Turner D. H. and Webster, L. (eds). (1984) *The golden age of Anglo-Saxon art*. London: British Museum Press.

Bader, C. (1998) *Die Burgruine Wulp bei Küsnacht ZH*. Schweizer Beiträge zur Kulturgeschichte und Archäologie des Mittelalters 25. Basel: Schweizerischer Burgenverein.

*Bailly-Maître, M.-C. and Bruno Dupraz, J. (1994) *Brandes-en-Oisans. La mine d'argent des Dauphins (XII-XIVe s.).* Documents d'archéologie en Rhône-Alpes 9. Lyon: Alpara.

Baker, J. (2015) The earliest armorial pendants. The Coat of Arms, 229, 1-24.

Baker, J. (2017) Harness pendants and the rise of armory. In: D. Bates, E. D'Angelo and E. M. C. van Houts (eds), *People, texts and artefacts: cultural transmission in the medieval Norman worlds*. London: Institute of Historical Research, 17-46.

Baker, J. M. (2013) The colour and composition of early Anglo-Saxon copper alloy jewellery. Unpublished PhD thesis. Durham: University of Durham.

*Bänteli, K. (1994) Schaffhausen, seit dem 11. Jahrhundert befestigte Stadt : ein Beitrag zum bevorstehenden 950-Jahr-Jubiläum der Verleihung des Münzrechtes 1045. Nachrichten des Schweizerischen Burgenvereins, 67/4, 82-92.

*Barber, R. W. (1978) *The devil's crown: a history of Henry II and his sons*. London: British Broadcasting Corporation.

*Barber, R. W. (2000) *Tournaments: jousts, chivalry and pageants in the Middle Ages*. Woodbridge: Boydell Press.

Barclay, K., Biddle, M. and Orton, C. (1990) The chronological and spatial distribution of the objects. In: M. Biddle (ed.), *Object and economy in medieval Winchester*. Winchester Studies 7.ii. Oxford: Clarendon Press, 42-73.

Barrère, M. (2014) Archéologie et tentations élitaires : le cas des accessoires de vêtement en alliage cuivreux (Sud-Ouest de la France, XIIe-XIIIe siècles). In: L. Bourgeois and C. Remy (eds), *Demeurer, défendre et paraître. Orientations récentes de l'archéologie des fortifications et des résidences aristocratiques médiévales entre Loire et Pyrénées [Actes du colloque de Chauvigny, 14-16 juin 2012].* Chauvigny: APC, 673-676.

Bartlett, R. (2000) *England under the Norman and Angevin kings 1075-1225*. Oxford: Clarendon Press.

Barton, K. J. and Holden, E. W. (1977) Excavations at Bramber Castle, Sussex, 1966-67. *Archaeological Journal*, 134, 11-79.

*Bates, D., D'Angelo, E. and van Houts, E. M. C. (eds). (2017) *People, texts and artefacts: cultural transmission in the medieval Norman worlds*. London: Institute of Historical Research.

*Batey, C. (1987) *Freswick Links, Caithness: a reappraisal of the Late Norse site in its context*, 2 volumes. BAR British Series 179. Oxford: BAR Publishing.

*Batey, C. (2015) Copper alloy buckle. In: D. Hunter, C. Brooks, D. Caldwell, G. Stell, M. Middleton, C. Smith, *Digging Linlithgow's past: early urban archaeology on the High Street, 1966-1977*. Archaeology Reports Online 16. Glasgow: Guard Archaeology Ltd, 30-31.

Baxter, M. J. and Cool, H. E. M. (2010) Correspondence analysis in R for archaeologists: an educational account. *Archeologia e calcolatori*, 21, 211-228.

Baxter, S. (2011) Lordship and labour. In: J. Crick and E. van Houts (eds), *A social history of England, 900-1200*. Cambridge: Cambridge University Press, 98-132.

Baxter, S. and Lewis, C. P. (2017) Domesday Book and the transformation of English landed society, 1066–86. *Anglo-Saxon England*, 46, 343-403.

Bayley, J. (1991) Anglo-Saxon non-ferrous metalworking: a survey. *World Archaeology*, 23(1), 115-130.

Bayley, J. (1992) *Anglo-Scandinavian non-ferrous metalworking from 16-22 Coppergate*. The Archaeology of York 17/7. London: Council for British Archaeology.

Beck, P. (ed.) (1987) *Bourgogne médiévale: la mémoire du sol: 20 ans de recherches archéologiques*. Dijon: Section fédérée des conservateurs de la Région Bourgogne.

*Beck, M. R., Christiansen, T. T. and Henriksen, M. B. (2019) *Fynske og nordjyske lokaliteter med metalfund 400-1100 e.Kr.. Katalog From Central Space to Urban Place*. CENTRUM Forskningscenter for centralitet rapport 7. Odense: Odense Bys Museer.

*Beninger, E. (1964) Forschungen zur Burgenarchäologie: Kögerl und Steinbach. Jahrbuch des Oberösterreichischen Musealvereines, 109, 194-232.

Bennett, M. (2003) Why chivalry? Military 'professionalism' in the twelfth century: the origins and expressions of a socio-military ethos. In: D. J. B. Trim, *The chivalric ethos and the development of military professionalism*. History of Warfare 11. Leiden: Brill, 41-64.

*Bergen, C. (2005) *Technologische und kulturhistorische Studien zu Bleifunden im 1. Jahrtausend*. Universitätsforschungen zur Prähistorischen Archäologie 125. Bonn: Habelt.

*Berger, F. (1995) Der Ritter im Münzbild. In: J. Luckhardt and F. Niehoff (eds), Heinrich der Löwe und seine Zeit. Herrschaft und Repräsentation der Welfen 1125-1235. Band 1: Katalog. München: Hirmer Verlag, 625-629.

*Berger, L. (2003) Nachlese zu den «Ausgrabungen am Petersberg in Basel». Jahresbericht der Archäologischen Bodenforschung Basel-Stadt, 2001, 151-173.

*Bergman, K. and Billberg, I. (1976a) Metallhantverk. In: A.W. Mårtensson, *Uppgrävt förflutet för PKbanken i Lund : en investering i arkeologi.* Archaeologica Lundensia 7. Lund: Kulturhistoriska museet, 199-212.

Bergman, K. and Billberg, I. (1976b) Hästutrustning. In: A.W. Mårtensson, *Uppgrävt förflutet för PKbanken i Lund : en investering i arkeologi*. Archaeologica Lundensia 7. Lund: Kulturhistoriska museet, 229-231.

*Bergman, K. and Billberg, I. (1976c) Vapen. In: A.W. Mårtensson, *Uppgrävt förflutet för PKbanken i Lund : en investering i arkeologi*. Archaeologica Lundensia 7. Lund: Kulturhistoriska museet, 387-396.

Berry, M. (2008) Methodological study of stratigraphic sequencing. Unpublished PhD thesis. York: University of York.

*Berthelot, S. (1994a) 111. Fibbia. In: M. D'Onofrio (ed.), *I Normanni: popolo d'Europa 1030-1200*. Venezia: Marsilio, 434.

Berthelot, S. (1994b) 112. Fibbie circolare. In: M. D'Onofrio (ed.), *I Normanni: popolo d'Europa 1030-1200*. Venezia: Marsilio, 434.

*Berthelot, S. (1994c) 113a-b. Due fibbie. In: M. D'Onofrio (ed.), *I Normanni: popolo d'Europa 1030-1200*. Venezia: Marsilio, 434.

*Berthon, A. A. (2009) Le mobilier métallique. In: G. Demeure, *Villeneuve, Yves (17). Rapport final d'opération archéologique. Volume 1 – Résultats scientifiques*. Limoges: Service régional de l'Archéologie de Poitou-Charentes, 61-67.

Berthon, A. A. (2013) Les objets métalliques aux XIIIe- XIVe siècles, aspects de la culture matérielle. In: M. Bois (ed.), *Au Moyen Âge entre Provence et Dauphiné, Archéologie et histoire autour de Lachau en Baronnies*. Peaugres: Alpha, 85-94.

Berthon, A. A. with Linlaud, M. (2013) Pendant de harnais. In: A. A. Berthon (ed.), Aspects de la culture matérielle moderne à La Rochelle, les objets archéologiques dans leur contexte. Limoges: Editions Éveha, 108-109.

Bevan, A. H. (2012) Spatial methods for analysing large-scale artefact inventories. *Antiquity*, 86(332), 492-506.

*Biddle, M. (1961) The deserted medieval village of Seacourt, Berkshire. *Oxoniensia*, 26, 70-201.

*Biddle, M. and Hinton, D. A. (1990) Annular and other brooches. In: M. Biddle (ed.), *Object and economy in medieval Winchester*. Winchester Studies 7.ii. Oxford: Clarendon Press, 639-643.

*Biermann, F. and Posselt, N. (2018) Kultplatz, Burgwall, Motte? Der "Teufelsberg" bei Landin (Havelland) im Mittelalter. In: T. Nowakiewicz, M. Trzeciecki and D. Błaszczyk (eds), *Animos labor nutrit. Studia ofiarowane Profesorowi Andrzejowi Buko w siedemdziesiątą rocznicę urodzin*. Warszawa: Instytut archeologii uniwersytetu warszawskiego, 311-320.

*Biermann, F. (2020) Metallene Zeugen adeliger Statusdemonstration auf mittelalterlichen Befestigungen in Brandenburg. In: A. Boguszewicz and J. Radziszewska (eds), *Castrum Bene 15: a castle as a status symbol*. Wrocław: Uniwersytet Wrocławski, 231-241.

*Billoin, D., Borrel, V. and Goy, C. (2017) L'occupation castrale d'Écrille (Jura) La Motte. Les monnaies médiévales et la circulation monétaire dans la région jurassienne du Xe à la fin du XIIIe s. *The Journal* of *Archaeological Numismatics*, 7, 129-188.

*Binding, G. (1968) *Die spätkarolingische Burg Broich in Mülheim an der Ruhr. Die Bauentwicklung bis 1443 nach den Ausgrabungen 1965-1968*. Rheinische Ausgrabungen 4. Düsseldorf: Rheinland-Verlag.

Bishop, B. (2016) Martial identity in the early medieval period. Bifacial scabbard mounts: classification and analysis. Unpublished MA thesis. Reading: University of Reading.

Bishop, B. (2020) Medieval bifacial sheath fittings. Finds Research Group Datasheet 53. Finds Research Group. *Bishop, T. A. M. and Chaplais, P. (eds). (1957) *Facsimiles of English royal writs to A.D. 1100: presented to Vivian Hunter Galbraith*. Oxford: Clarendon Press.

*Blackburn, M. A. S. and Bonser, M. J. (1985) Single finds of Anglo-Saxon and Norman coins – 2. *British Numismatic Journal*, 55, 55-78.

*Blackmore, L. (2015) Selected other finds. In: J. Ayre and R. Wroe-Brown, The post-Roman foreshore and the origins of the late Anglo-Saxon waterfront and dock of Æthelred's Hithe: excavations at Bull Wharf, City of London. *Archaeological Journal*, 172(1), 146-159 (121-194).

Blades, N. W. (1995) Copper alloys from English archaeological sites 400-1600 AD: an analytical study using ICP-AES. Unpublished PhD thesis. London: Royal Holloway, University of London.

Blair, C., and Blair, J. (1991) Copper alloys. In: J. Blair and N. Ramsey (eds), *English medieval industries: craftsmen, techniques, products*. London: The Hambledon Press, 81-106.

Blair, J. (2013) The British culture of Anglo-Saxon settlement. H. M. Chadwick Lecture24. Cambridge: University of Cambridge.

Blair, J. and Steane, J. M. (1982) Investigations at Cogges, Oxfordshire, 1978-81: The Priory and the Parish Church. *Oxoniensia*, 47, 37-126.

Bland, R. (2005) A pragmatic approach to the problem of portable antiquities: the experience of England and Wales. *Antiquity*, 79, 440-447.

Bland, R. (2009) The development and future of the Treasure Act and Portable Antiquities Scheme. In: S. Thomas and P. Stone (eds), *Metal detecting and archaeology*. Woodbridge: Boydell and Brewer, 63-86.
Blinkhorn, P. (1997) Habitus, social identity and Anglo Saxon pottery. In: P. Blinkhorn and C. G. Cumberpatch (eds), *Not so much a pot, more a way of life: current approaches to artefact analysis in archaeology*. Oxford: Oxbow Books, 113-123.

*Blinkhorn, P., Hall, D., Lucy, S., Monteil, G. and Mortimer, R. and Percival, S. (2005) The artefacts. In: R. Mortimer, R. Regan and S. Lucy, *The Saxon and medieval settlement at West Fen Road, Ely: the Ashwell site*. East Anglian Archaeology 110. Cambridge: Cambridge Archaeological Unit, 53-88.

Bliss, A. (2017) The horseman cometh: an 11th- or 12th-century scabbard chape from Clapham, West Sussex. *Sussex Archaeological Collections*, 155, 197-200.

Böhme, H. W. et al. (1992) Das Reich der Salier 1024-1125: Katalog zur Ausstellung des Landes Rheinland-Pfalz [Ausstellung im Historischen Museum der Pfalz, Speyer, vom 23. März bis 21. Juni 1992]. Sigmaringen: Jan Thorbecke Verlag.

*Bolton, A. (2001a) Todenham, Gloucestershire. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 45, 238-239 (236-251).

*Bolton, A. (2001b) Drakes Broughton and Wadborough, Worcestershire. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 45, 251 (236-251).

*Bolton, A. (2001c) Maxstoke, Warwickshire. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 45, 250-251 (236-251).

Booth, A. (2014) A new study of the penannular brooch in Britain. Unpublished PhD thesis. Leicester: University of Leicester.

*Borremans, R., Lassance, W. and Martiny, A. (1991) Fouilles dans le site de Montaigu-Saint-Thibaut à Marcourt. In: H. Remy (ed.), *Archéologie en Ardenne. De la Préhistoire au XVIIIe siècle*. Bruxelles: Crédit communal, 223-228. *Bos, J. M. (2008) Medieval brooches from the Dutch province of Friesland (Frisia): a regional perspective on the Wijnaldum brooches. Part 2: disc brooches. *Palaeohistoria*, 49/50, 709-793.

*Boudartchouk, J.-L. (2004) Jean Pagès-Allary et les travaux de la commission des enceintes de la société préhistoriques françaises : un apport archéologique décisif sur les sites perchés de la fin de l'Antiquité et du haut Moyen Âge. *Revue de la Haute-Auvergne*, 66, 391-460.

Bouet, P. and Neveux, F. (2013) *La tapisserie de Bayeux : révélations et mystères d'une broderie du Moyen Âge*. Rennes: Ouest-France.

Boughton, D. and Egan, G. (2009) Ruthin, Denbighshire. In: J. Naylor, K. Leahy and G. Egan (eds), Portable Antiquities Scheme. *Medieval Archaeology*, 53, 343-344 (327-346).

Bouly de Lesdain, L. (1907) Études Héraldiques sur Le XIIe Siècle. *Annuaire du conseil héraldique de France*, 20, 185-244.

Bourgeois, L. (ed.) (2009) Une résidence des comtes d'Angoulême autour de l'an mil: le castrum d'Andone (Villejoubert, Charente). Publication des fouilles d'André Debord (1971-1995). Caen: Publications du CRAHM.

Bourgeois, L. (2014a) L'objet archéologique comme source d'histoire sociale (IXe-XIIIe siècles) : quelques réflexions. In: L. Bourgeois and C. Rémy (eds), *Demeurer, défendre et paraître. Orientations récentes de l'archéologie des fortifications et des résidences aristocratiques médiévales entre Loire et Pyrénées [Actes du colloque de Chauvigny (Vienne), 14-16 juin 2012]*. Chauvigny: Association des Publications Chauvinoises, 595-605.

Bourgeois, L. (2014b) Production et distinction: l'artisan au château (Nord-Ouest de l'Europe, Xe-XIIe siècles). In: D. Barthélemy et J.-M. Martin (eds), *Richesse et*

croissance au Moyen Âge. Orient et Occident. Paris: Centre de recherche d'histoire et civilisation de Byzance, 151-182.

Bourgeois, L. (2018) Entre réalité et représentations : la culture matérielle du XIe siècle et la Tapisserie de Bayeux. In: S. Lemagnen, S. A. Brown and G. Owen-Crocker (eds), L'invention de la Tapisserie de Bayeux : naissance, composition et style d'un chefd'œuvre médiéval [Actes du colloque de Bayeux, 22-25 septembre 2016]. Rouen: Point de Vues, 311-323.

*Bowsher, D., Dyson, T., Holder, N. and Howell, I. (2007) *The London Guildhall: an archaeological history of a neighbourhood from early medieval to modern times*, 2 volumes. MoLAS Monograph 36. London: Museum of London Archaeology Service.

Braudel, F. (1972) *The Mediterranean and the Mediterranean world in the age of Philip II*, translated by S. Reynolds, 2nd revised edition. London: Collins.

Brenan, J. (2010) [1998] Furnishings. In: G. Egan (ed.), *The medieval household, daily living c.1150-c.1450*. Medieval Finds from Excavations in London 6, New edition. First published 1998, London: H.M.S.O.. Woodbridge: Boydell Press, 65-87.

Briand, A., Dubreucq, E., Ducreux, A., Feugère, M., Galtier, C., Girard, B., Josset, D., Mulot, A., Taillandier, V. and Tisserand, N. (2013) Le classement fonctionnel des mobiliers d'*instrumentum*. In: B. Fort and N. Tisserand (eds), *Le mobilier métallique et l'instrumentum: Approches méthodologiques*. Paris: Editions Errance, 14-19.

Brindle, T. (2011) The Portable Antiquities Scheme and Roman Britain. Unpublished PhD thesis. London: King's College London.

Brindle, T. (2013) Making the most of PAS data: macro- and micro-level studies of Romano-British settlement. *Landscapes*, 14(1), 73-91.

Brindle, T. (2014) *The Portable Antiquities Scheme and Roman Britain*. British Museum Research Publication 195. London: British Museum Press.

Brown, A. (2013) A late Saxon silver disc brooch from Suffolk. In: J. Naylor (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 57, 272-275 (262-284).

Brown, F. and Howard-Davis, C. (2008) *Norton Priory: monastery to museum, excavations 1970-87*. Oxford: Oxford Archaeology.

Brubaker, R. and Cooper, F. (2000) Beyond "Identity". Theory and Society, 29(1), 1-47.

Brønsted, J. (1924) Early English ornament: the sources, development and relation to foreign styles of pre Norman ornamental art in England. London: Hachette.

Brunning, S. (2013) The 'living' sword in early medieval northern Europe: an interdisciplinary study. Unpublished PhD thesis. London: University College London.

*Buckland, P. C., Magilton, J. R. and Hayfield, C. (1989) *The archaeology of Doncaster. Part 2. The medieval and later town*. BAR British Series 202. Oxford: British Archaeological Reports Ltd.

Buckton, D. (1986) Late 10th- and 11th-century *cloisonné* enamel brooches. *Medieval Archaeology*, 30, 8-18.

Buckton, D. (1989) Late Anglo-Saxon or early Anglo-Norman *cloisonné* enamel brooches. *Medieval Archaeology*, 33, 153-155.

*Bulka, K. (2005) Ein Riemenverteiler und drei Steiglederbeschläge des 11./12. Jahrhunderts. In: H. Eilbracht, V. Brieske anhd B. Grodde (eds), *Itinera archaeologica : vom Neolithikum bis in die frühe Neuzeit [Festschrift für Torsten Capelle zum 65. Geburtstag]*. Rahden: Verlag Marie Leidorf GmBH, 55-64. *Bu'Lock, J. D. (1960) The Celtic, Saxon, and Scandinavian settlement at Meols in Wirral. *Transactions of the Historic Society of Lancashire and Cheshire*, 112, 1-28.

*Bunte, T. (2013) Fibeln und Keramik des 6. bis frühen 11. Jahrhunderts aus der Ortswüstung Balhorn bei Paderborn: Studien zum Kulturwandel von der merowingischen zur karolingisch-ottonischen Zeit. Wissenschaftliche Schriften der WWU Münster, Reihe X, Band 13. Münster: Verlaghaus Monsenstein und Vannerdat.

Burmeister, S. (2000) Archaeology and migration: approaches to an archaeological proof of migration. *Current Anthropology*, 41(4), 539-567.

*Burnett, L. (2009a) Telscombe area, East Sussex. In: J. Naylor, K. Leahy and G. Egan (eds), Portable Antiquities Scheme. *Medieval Archaeology*, 53, 328-329 (327-346).

*Burnett, L. (2009b) Houghton, West Sussex. In: J. Naylor, K. Leahy and G. Egan (eds), Portable Antiquities Scheme. *Medieval Archaeology*, 53, 339-340 (327-346).

*Burnett, L. (2013) Finds reported to the Portable Antiquities Scheme in 2010-2011. *Somerset Archaeological and Natural History*, 156, 193-199.

*Busengdal, S. I. (2012) Smykke i to urbane miljø - ei komparativ analyse av smykke frå mellomalderbyane Bergen og London. Unpublished MA thesis. Bergen: University of Bergen.

*Butler, L.A.S. (1974) Medieval finds from Castell-y-Bere, Merioneth. *Archaeologia Cambrensis*, 123, 78-112.

*Cahn, W. (1996) *Romanesque manuscripts: the twelfth century*, 2 volumes. London: Harvey Miller.

*Caldwell, D. H. (1990) Small finds. In: M. K. Grieg, C. Grieg, I. Basham, D. Caldwell, C. Murray, M. Spearman and P. Yeoman, Remains of a 12th-century structure and other

medieval features on the Knoll of Castle Point, Troup (Cullykhan), Banff and Buchan. *Proceedings of the Society of Antiquaries of Scotland*, 119, 283-286 (279-296).

*Caldwell, D. H. (1995) Copper-alloy. In: J. H. Lewis and G. J. Ewart, *Jedburgh Abbey: the archaeology and architecture of a Border abbey*. Society of Antiquaries of Scotland Monograph Series 10. Stroud: Alan Sutton Publishing Limited, 84-88.

Cameron, E. (2000) *Sheaths and scabbards in England AD 400-1100*. BAR British Series 301. Oxford: Archaeopress.

Cameron, E. (2003a) Sheaths and scabbards as mirrors of wealth and status? In: Q. Mould, I. Carlisle and E. Cameron, *Craft, industry and everyday life: leather and leatherworking in Anglo-Scandinavian and medieval York*. The Archaeology of York 17/16. York: Council for British Archaeology, 3416.

Cameron, E. (2003b) Sheaths and scabbards. In: Q. Mould, I. Carlisle and E. Cameron, *Craft, industry and everyday life: leather and leatherworking in Anglo-Scandinavian and medieval York*. The Archaeology of York 17/16. York: Council for British Archaeology, 3354-3391.

*Campbell, E. (1996) Copper alloy ornamental fitting. In. A. Schlesinger and C. Walls, An early church and medieval farmstead site: excavations at Llanelen, Gower. *Archaeological Journal*, 153, 136-138 (104-147).

Campbell, M. (1991) Gold, silver and precious stones. In: J. Blair and N. Ramsey (eds), *English medieval industries: craftsmen, techniques, products*. London: The Hambledon Press, 107-166.

Campbell, M. (2009) *Medieval jewellery in Europe 1100-1500*. London: Victoria and Albert Publishing.

Campbell, S. (2011) Medieval hunting leash mount from Palnure, Dumfries and Galloway, analysis and discussion. *Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society*, 85, 164-167.

Cantor, L. M. and Hatherly, J. (1979) The Medieval Parks of England, *Geography*, 64, 71-85.

Capelle, T. (1976) *Die frühgeschichtlichen Metallfunde von Domburg auf Walcheren.* Nederlandse Oudheden 5. Amersfoort: Rijksdienst voor het Oudheidkundig Bodemonderzoek.

Caple, C. (1986) An analytical appraisal of copper alloy pin production: 400-1600 AD. Unpublished PhD thesis. Bradford: University of Bradford.

Caple, C. (forthcoming) *Excavations at Nevern Castle 2008–2018*. London: Society for Medieval Archaeology Monograph.

*Carey-Struillou, J. (2019) A survey of medieval horse-harness pendants in Devon and Cornwall. Unpublished BA thesis. Exeter: University of Exeter.

Carlot, J.-P. and Chodorge. J.-Y. (2014) L'Histoire en boucles. Lille: The Book Edition.

*Carroll, M. and Quinn, A. (2003) Ferrous and non-ferrous artefacts. In: R. M. Cleary and M. F. Hurley (eds), *Excavations in Cork City 1984–2000*. Cork: Cork City Council, 257-298.

Carver, M. O. H. (1986) Contemporary artefacts illustrated in late Saxon manuscripts. *Archaeologia* 108, 117-146.

Carver, M. O. H. and Molinari, A. (2020) Sicily and England: Norman transitions compared. In: E. Winkler, L. Fitzgerald and A. Small (eds), *Designing Norman Sicily: Material Culture and Society.* Woodbridge: Boydell Press, 133-165.

Cassels, A. K. (2013) The social significance of late medieval dress accessories. Unpublished PhD thesis. Sheffield: University of Sheffield.

*Cavé, E. and Es, J. van (2008) Metaal. In: J. Y. Huis in 't Veld, *Twintig eeuwen* stadsontwikkeling in beeld : een opgraving aan de Lutkenieuwstraat te Groningen. Stadse Fratsen 10. Groningen: Dienst Ruimtelijke Ordening en Economische Zaken van de Gemeente Groningen, 65-71.

Chareyron, R. (2009) Rivets monétiformes. Revue Numismatique, 165, 203-220.

Charlton, P., Roberts, J. and Vale, V. (1977) *Llantrithyd: a ringwork in South Glamorgan*. Cardiff: Cardiff Archaeological Society.

Chen, A. H. (2013) Abigail and David: the iconography of a Romanesque capital from Notre-dame-des-Doms, Avignon. *Journal of the Warburg and Courtauld Institutes*, 76, 131-136.

Cherry, B. (1984) Bibliography. In: G. Zarnecki, J. Holt and T. Holland (eds), *English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]*. London: Weidenfeld and Nicolson, 393-406.

*Cherry, J. (1975) A bronze buckle and associated fragments of buckle plate. In: J. M. Steane and G. F. Bryant, Excavations at the deserted medieval settlement at Lyveden: fourth report. *Journal of the Northampton Museums & Art Gallery*, 12, 106-107 (entire volume).

Cherry, J. (1984) Pottery. In: G. Zarnecki *et al.* (eds), *English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]*. London: Weidenfeld and Nicolson, 350-355.

Cherry, J. (1987) Recent medieval finds from Lincoln: a Romanesque cast copper alloy buckle plate with figural scenes and a bronze buckle. *The Antiquaries Journal*, 67, 367-368.

Cherry, J. (1991) Harness pendants. In: P. Saunders and E. Saunders (eds), *Salisbury and South Wiltshire Museum medieval catalogue: part 1*. Salisbury: Salisbury and South Wiltshire Museum, 17-28.

Cherry, J. (2005) Harness. In: J. Huddle, Copper alloy objects. In: A. Shelley, *Dragon Hall, King Street, Norwich: excavation and survey of a late medieval merchant's trading complex*. East Anglian Archaeology 112. Norwich: Norfolk and Norwich Heritage Trust, 115-117 (114-117).

*Cherry, J. (2012) Seal matrices and impressions. In: P. Saunders (ed.), *Salisbury and South Wiltshire Museum medieval catalogue part 4*. Salisbury: Salisbury and South Wiltshire Museum, 319-329.

Cherry, J. and Goodall, J. (1985) A 12th-century gold brooch from Folkingham Castle, Lincolnshire. *The Antiquaries Journal*, 65(2), 471-472.

Cherryson, A. K. (2002) The identification of archaeological evidence for hawking in medieval England. *Acta zoologica cracoviensia*, 45, 307-314.

Chester-Kadwell, M. (2009) *Early Anglo-Saxon communities in the landscape of Norfolk*. BAR British Series 481. Oxford: Archaeopress.

Chetwood, J. (2018) Re-evaluating English personal naming on the eve of the Conquest. *Early Medieval Europe*, 26(4), 518-547.

Chibnall, M. (1999) *The debate on the Norman Conquest*. Manchester: Manchester University Press.

*Christlein, R. (1974) Der Runde Berg bei Urach I. Die frühgeschichtlichen Kleinfunde außerhalb der Plangrabungen. Heidelberg: Carl Winter.

Clanchy, M. (1998) England and its rulers, 1066-1272. Oxford: Blackwell Publishers.

*Clapham, A. W. (1910) Report on explorations at Lesnes Abbey, Kent. *Woolwich and District Antiquarian Society Annual Report*, 15, 83-173.

Clark, J. (1986) Medieval horseshoes. Finds Research Group Datasheet 4. Finds Research Group.

*Clark, J. (1995) Book mount. In: I.P. Garrard, Other objects of copper-alloy and silver. In: K. Blockley, M. Blockley, P. Blockley, S. S. Frere and S. Stow, *Excavations in the Marlowe car park and surrounding areas*. The Archaeology of Canterbury 5. Canterbury: Canterbury Archaeological Trust, 1054-1057 (1005-1062).

Clark, J. (2004a) [1995] Horseshoes. In: J. Clark (ed.), *The medieval horse and its equipment* c.*1150*-c.*1450*. Medieval finds from excavations in London 5, New edition (2004). First published 1995, London: H.M.S.O.. Woodbridge: Boydell Press, 75-123.

Clark, J. (2004b) [1995] Bits. In: J. Clark (ed.), *The medieval horse and its equipment* c.*1150*-c.*1450*. Medieval finds from excavations in London 5, New edition (2004). First published 1995, London: H.M.S.O.. Woodbridge: Boydell Press, 71-74.

Clark, J. (2004c) [1995] Stirrups. In: J. Clark (ed.), *The medieval horse and its equipment* c.*1150*-c.*1450*. Medieval finds from excavations in London 5, New edition (2004). First published 1995, London: H.M.S.O.. Woodbridge: Boydell Press, 43-53.

Clark, J. (ed.) (2004d) [1995] *The medieval horse and its equipment* c.1150-c.1450. Medieval finds from excavations in London 5, New edition (2004). First published 1995, London: H.M.S.O.. Woodbridge: Boydell Press. Clark, J. (2013) Appendix IV: Small finds. In: J. Kent, D. Renn and A. Streeten, *Excavations at South Mimms Castle, Hertfordshire 1960-91*. London and Middlesex Archaeological Society Special Paper 16, 63-76.

Clark, J. (2018) Bibliography: early medieval 'hinged' curb bits. Available at: <u>https://www.academia.edu/36650371/Bibliography early medieval hinged curb bit</u> <u>s</u> [Accessed 30 July 2019].

Clark, J. (2019) Curbing horsepower: the archaeology of curb bits in medieval England – and elsewhere. In: A. Ropa and T. Dawson (eds), *The horse in premodern European culture*. Studies in Medieval and Early Modern Culture 70. Berlin: Walter de Gruyter GmbH, 177-192.

Clark, K. (2008) *A review of the Portable Antiquities Scheme*. London: The Museums, Libraries and Archives Council.

*Clemens, L. (2000) Die hochmittelalterliche Niederungsburg von Dockendorf (Kr. Bitburg-Prüm) : Ein Vorbericht. *Funde und Ausgrabungen im Bezirk Trier : Aus der Arbeit des Rheinischen Landesmuseums Trier*, 32, 71-94.

Clemmensen, S. (2012) The proverbial banner - an axiom revisited: a re-examination of the evidence of early heraldry pre 1200. *Genealogica et Heraldica* 30, 95-106.

*Coad, J. G. and Streeten, A. D. F. (1982) Excavations at Castle Acre Castle, Norfolk, 1972-77. *Archaeological Journal*, 139, 138-301.

Coatsworth, E. and Pinder, M. (2002) *The art of the Anglo-Saxon goldsmith: fine metalwork in Anglo-Saxon England: its practice and practitioners*. Woodbridge: Boydell and Brewer.

Colardelle, M. and Verdel, E. (eds) (1993) *Les habitants du lac de Paladru (Isère) dans leur environnement. La formation d'un terroir au XI^e siècle*. Documents d'archéologie française 40. Paris: Éditions de la Maison des sciences de l'Homme.

*Collard, M. (1988) Excavations at Desborough castle, High Wycombe, 1987. *Records* of *Buckinghamshire*, 30, 15-41.

Collins, R. (2009) Marchwood, Hampshire. In: J. Naylor, K. Leahy and G. Egan (eds), Portable Antiquities Scheme. *Medieval Archaeology*, 53, 330-331 (327-346).

Cool, H. E. M. (2009a) The small finds. In: M. Morris, N. J. Cooper and R. Buckley (eds), Life and death in Leicester's north-east quarter: excavation of a Roman town house and medieval parish churchyard at Vine Street, Leicester (Highcross Leicester) 2004-2006. Volume 2: the specialist reports. ULAS unpublished report 2009-134. Leicester: University of Leicester Archaeological Services, 152-228.

*Cool, H. E. M. (2009b) The small finds. In: R. Buckley and N. J. Cooper (eds), *Urban life in Leicester: an archaeological excavation at Freeschool Lane, Leicester. Volume 2: the specialist reports*. ULAS unpublished report 2009-140. Leicester: University of Leicester Archaeological Services, 194-250.

*Cool, H. E. M. (2011) Objects of metal, glass, shale and worked bone. In: B. M. Ford and S. Teague, *Winchester - a city in the making: archaeological excavations between* 2002 and 2007 on the sites of Northgate House, Staple Gardens and the former *Winchester Library, Jewry St.* Oxford Archaeology Monograph 12. Oxford: Oxford Archaeology, 305-328.

Cooper, N. J. (1999) The small finds. In: A. Connor and R. Buckley, *Roman and medieval occupation in Causeway Lane, Leicester*. Leicester Archaeology Monograph 5. Leicester: University of Leicester Archaeological Services, 239-282. Cooper, N. J. (2007) Finds of medieval date. In: J. N. Lucas and R. J. Buckley, *The Shires: excavations at Little Lane and St Peter's Lane, Leicester*. ULAS unpublished report 2007-147. Leicester: University of Leicester Archaeological Services, 373-403.

Cooper, A. and Green, C. (2017) Big Questions for Large, Complex Datasets: approaching time and space using composite object assemblages. *Internet Archaeology*, 45 (doi:10.11141/ia.45.1).

Courtney, P., Egan, G. and Gilchrist, R. (2015) Small finds. In: R. Gilchrist and C. Green, *Glastonbury Abbey: archaeological investigations 1904-79*. London: Society of Antiquaries of London, 293-311.

Cox, A. (1996) Backland activities in medieval Perth: excavations at Meal Vennel and Scott Street. *Proceedings of the Society of Antiquaries of Scotland*, 126, 733-821.

*Cracknell, S. and Bishop, M. W. (1992) Excavations at 25-33 Brook Street, Warwick, 1973. *Transactions of the Birmingham and Warwickshire Archaeological Society*, 97, 1-40.

Craig-Atkins, E., Jervis, B., Cramp, L., Hammann, S., Nederbragt, A. J., Nicholson, E., Taylor, A. R., Whelton, H. and Madgwick, R. (2020). The dietary impact of the Norman Conquest: A multiproxy archaeological investigation of Oxford, UK. *PloS ONE*, 15(7), e0235005.

*Cramp, R., Cherry, J. and Lowther, P. (2006) Copper alloy and silver. In: R. Cramp, *Wearmouth and Jarrow monastic sites - volume 2*. Swindon: English Heritage, 230-256.

Creighton, O. H. (2012) *Early European castles, aristocracy and authority, AD 800-1200*. London: Bristol Classical Press. Creighton, O. . (2018a) 1066 and the landscape. In: D. Bates (ed.), *1066 in Perspective*. Leeds: Royal Armouries Museum, 213-237.

Creighton, O. H. (2018b) Overview: castles and elite landscapes. In: C. M. Gerrard and A. G. Gutiérrez (eds), *The Oxford handbook of later medieval archaeology in Britain*. Oxford: Oxford University Press, 355-370.

*Creighton, O. H. and Higham, R. (2003) *Medieval castles*. Princes Risborough: Shire Publications.

Creighton, O. H. and Rippon, S. (2017) Conquest, colonisation and the countryside: archaeology and the midd-11th- to mid-12th-century rural landscape. In: D. M. Hadley and C. C. Dyer (eds), *The archaeology of the 11th century: continuities and transformations*. Society for Medieval Archaeology Monograph 38. Abingdon: Routledge, 57-87.

Creighton, O. H. and Wright, D. (2016) *The Anarchy: war and status in 12th-century landscapes of conflict*. Liverpool: Liverpool University Press.

Crick, J. and Houts, E. van (2011) Introduction. In: J. Crick and E. van Houts (eds), *A* social history of England, 900-1200. Cambridge: Cambridge University Press, 1-14.

*Crockett, A. (1995) Excavations at Montefiore New Halls of Residence, Swaythling, Southampton, 1992. *Proceedings of the Hampshire Field Club and Archaeological Society*, 51, 5-57.

Cross, K. (2018) *Heirs of the Vikings: History and Identity in Normandy and England, c.950-c.1015*. York: York Medieval Press.

Crouch, D. (1992) The image of aristocracy in Britain 1000-1300. London: Routledge.

Crouch, D. (2005) *The Birth of Nobility: Constructing Aristocracy in England and France, 900–1300*. Harlow: Pearson.

Crouch, D. (2011) *The English aristocracy : 1070-1272: a social transformation*. New Haven: Yale University Press.

Crouch, D. and Deploige, J. (2020) Taking the field : knighthood and society in the High Middle Ages. In: D. Crouch and J. Deploige (eds), *Knighthood and society in the High Middle Ages*. Leuven: Leuven University Press, 1-26.

Crummy, N. (1983) Colchester archaeological reports 2: The Roman small finds from excavations in Colchester, 1971-9. Colchester: Colchester Archaeological Trust.

Crummy, N. (2004a) Using PAS data. Lucerna, 28, 23-27.

*Crummy, N. (2004b) Iron and copper alloy objects. In: C. H. Dalwood and R. Edwards, *Excavations at Deansway, Worcester 1988-89: Romano-British small town to late medieval city*. CBA Research Report 139. York: Council for British Archaeology, 386-435.

*Crummy, N. and Scott, I. R. (2014) Metalwork. In: R. Atkins, E. S. Popescu, G. Rees and D. Stansbie, *Broughton, Milton Keynes, Buckinghamshire: the evolution of a South Midlands landscape*. Oxford Archaeology Monograph 22. Oxford: Oxford Archaeology, 382-388.

Cuddeford, M. (1996) Some recent finds of late Anglo-Saxon metalwork from Essex. *Essex Archaeology and History*, 27, 319-322.

*Cuisenier, R. and Guadagnin, R. (1988) Un village au temps de Charlemagne. Moines et paysans de l'abbaye de Saint-Denis du VIIème siècle à l'An Mil. Paris: Musée des arts et traditions populaires. Dalton, O. M. (1912) Catalogue of the finger rings, early Christian, Byzantine, Teutonic, medieval and later bequeathed by Sir Augustus Wollaston Franks, in which are included the other rings of the same periods in the museum. London: Longmans.

Darby, H. C. (1977) Domesday England. Cambridge: Cambridge University Press.

Daubney, A. J. (2015) Portable antiquities, palimpsests, and persistent places in Lincolnshire, with particular reference to three Middle Saxon case studies. Unpublished PhD thesis. Leicester: University of Leicester.

Davies, G. J. (2010) Settlement, economy and lifestyle: the changing social identities of the coastal settlements of West Norfolk, 450-1100 AD. Unpublished PhD thesis. Nottingham: University of Nottingham.

*Davies, J. A. (1994) Walpole St Peter, Norfolk. In: E. M. Besly and N. M. McQ. Holmes (eds), Coin register. *British Numismatic Journal*, 64, 153 (134-163).

Davis, R. H. C. (1988) The warhorses of the Normans. *Anglo-Norman Studies*, 10, 67-82.

Davis, R. H. C. (1989) *The medieval warhorse: origin, development and redevelopment*. London: Thames and Hudson Ltd.

*Davison, B. K. (1972) Castle Neroche: an abandoned Norman fortress in south Somerset. *Somerset Archaeological and Natural History*, 116, 16-58.

Deborde, G. and Portet, N. (2016) Les mors de bride du XIe siècle de La Chapelle-Saint-Luc (Aube). *Cahiers LandArc*, 13. Fleurance: LandArc.

Deckers, P. (2014) 'Productive' sites in the polders? 'Griffin brooches' and other early medieval metalwork from the Belgian coastal plain. *Medieval and Modern Matters*, 3 (for 2012), 21-43.

Deckers, P. (2017) *Een vergeten tijd gedetecteerd. Metaalvondsten uit de Vlaamse kuststreek, 600-1100 n.Chr.* West-Vlaamse Archaeologica 22. Roeselare: V.O.B.o.W.

Deevy, M. B. (1998) *Medieval ring brooches in Ireland: a study of jewellery, dress, and society*. Bray: Wordwell.

Demay, G. (1880) *Le costume au Moyen âge, d'après les sceaux*. Paris: Hachette Livre/BNF.

Démians D'Archimbaud, G. (1980) *Les fouilles de Rougiers (Var): contribution à l'archéologie de l'habitat rural médiéval en pays méditerranéen*. Publications de l'URA 6. Valbonne: CNRS.

De Reuck, A. V. S. (1991) Dating sword chapes. Unpublished manuscript supplied by author.

Deschler-Erb, E. and Winkler, A. (2016) Cornillon VS, eine neue Höhensiedlung im Chablais. *Jahrbuch Archäologie Schweiz*, 99, 117-142.

*Dewit, H., Laudron, D., Vèche, P. M. and Verslype., L. (1999) Le Trésor. In: R. Brulet and L. Verslype (eds), *Saint-Pierre de Tournai. L'archéologie d'un monument et d'un quartier*. Publications d'histoire de l'art et d'archéologie de l'Université catholique de Louvain 99. Louvain-la-Neuve: Département d'archéologie et d'histoire de l'art, 168-173.

*Dhaeze, W. and Fairon, G. (2014) *Le Burgknapp à Heinstert (Attert): La transformation d'une fortification à petite enceinte circulaire en motte castrale (Xe-XIIe s.)*. Les cahiers du G.R.A.S.B./Musée d'Autelbas 43. Attert: Au Pays de l'Attert and G.R.A.S.B./Musée d'Autelbas.

Díaz-Andreu, M. and Lucy, S. (2005) Introduction. In: M. Díaz-Andreu, S. Lucy, S. Babíc and D. N. Edwards, *The Archaeology of Identity: approaches to gender, age, status and religion*. Abingdon: Routledge, 1-12.

Dietler, M. and Herbich, I. (1998) Habitus, techniques, style: an integrated approach to the social understanding of material culture and boundaries. In: M. Stark (ed.), *The archaeology of social boundaries*. Washington DC: Smithsonian Institution Press, 232-263.

Dixon, P., Owen, O. A. and Stocker, D. (2001) The Southwell lintel, its style and significance. In: J. Graham-Campbell, R. Hall, J. Jesch and D. N. Parsons (eds), *Vikings and the Danelaw: select papers from the proceedings of the thirteenth Viking Congress [Nottingham and York, 21st-30th August 1997]*. Oxford: Oxbow Books, 245-268.

Dobinson, C. and Denison, S. (1995) *Metal detecting and archaeology in England*. London and York: English Heritage and Council for British Archaeology.

*Dodwell, C. R. (1971) *Painting in Europe, 800 to 1200*. Harmondsworth: Penguin Books.

Dolley, M. (1971) The nummular brooch from Sulgrave, Northamptonshire. In: P. Clemoes and K. Hughes (eds), *England before the Conquest*. Cambridge: Cambridge University Press, 333-349.

*Dolley, M. and Mays, M. (1990) 'Nummular brooches', In: M. Biddle (ed.), *Object and economy in medieval Winchester*. Winchester Studies 7.ii. Oxford: Clarendon Press, 632-635.

Donnelly, V., Green, C. and Ten Harkel, A. (2014) English landscapes and identities. The early medieval landscape: methods and approaches. *Medieval Settlement Research*, 29, 43-55.

D'Onofrio, M. (ed.) (1994) I Normanni: Popolo d'Europa 1030-1200. Venezia: Marsilio.

*Doridot, A. (2008) Rapport de l'étude du mobilier en cuivre ou alliages cuivreux provenant des fouilles archéologiques du château de la Madeleine (Chevreuse, Yvelines 78). Unpublished report. Montigny-le-Bretonneux: Service archéologique départemental des Yvelines.

Dowen, K., Marek, L., Słowiński, S., Uciechowska-Gawron, A. and Myśkow, E. (2019) Two twelfth-century kite shields from Szczecin, Poland, *Arms & Armour*, 16(2), 121-148.

*Down, A. (1978) *Chichester excavations 3*. Chichester: Chichester Civic Society Excavations Committee.

*Down, A. and Rule, M. (1971) Excavations in the grounds of St Mary's Hospital, 1966. In: A. Down and M. Rule, *Chichester excavations 1*. Chichester: Chichester Civic Society Excavations Committee, 19-49.

*Drage, C. J. (1989) Nottingham Castle: a place full royal. *Transactions of the Thoroton Society of Nottinghamshire*, 93 (entire volume).

*Drury, P. J. (1982) The bronze binding strip from Saffron Walden. In: S. R. Bassett, *Saffron Walden: excavations and research, 1972-80.* CBA Research Report 45. York: Council for British Archaeology, 86-87.

*Dulley, A. J. F. (1967) Excavations [of medieval port] at Pevensey, Sussex, 1962-6. *Medieval Archaeology*, 11, 209-232.

*Duncan, H. B. (1988) Other finds. In. A. Pinder and B. Davison, The Excavation of a Motte and Bailey Castle at Chalgrave, Bedfordshire, 1970. *Bedfordshire Archaeological Journal*, 18, 46-53 (33-56).

Duncan, H. (2015) Metalwork. In: P. Spoerry and R. Atkins, *A late Saxon village and medieval manor: excavations at Botolph Bridge, Orton Longueville, Peterborough*. East Anglian Archaeology 153. Oxford: Oxford Archaeology East, 74-88.

*Dunning, G. C. (1955) Late Saxon buckle. In: S. A. Butcher, Interim report on excavations in St George's Street, Winchester, 1954. *Proceedings of the Hampshire Field Club and Archaeological Society*, 19(1), 9-11 (1-11).

Dunning, G. C., Hurst, J. G., Myres, J. N. L. and Tischler, F. (1959) *Anglo-Saxon pottery: a symposium*, CBA Research Report 4. York: Council for British Archaeology.

Eckardt, H. (2005) The social distribution of Roman artefacts: the case of nail-cleaners and brooches in Britain. *Journal of Roman Archaeology*, 18, 139-160.

Eckardt, H. and Williams, S. (2018) The sound of magic? Bells in Roman Britain. *Britannia*, 49, 179-210.

*Ecroyd Smith, H. (1867) Archaeology in the Mersey district, 1866. *Transactions of the Historic Society of Lancashire and Cheshire*, 19, 169-188.

*Ecroyd Smith, H. (1868) Archaeology in the Mersey district, 1867. *Transactions of the Historic Society of Lancashire and Cheshire*, 20, 87-130.

Egan, G. (1999) Material from a millennium: detritus from a developing city. *Transactions of the London and Middlesex Archaeological Society*, 50, 29-37.

Egan, G. (2004) [1995] Spur buckles and spur straps. In: J. Clark (ed.), *The medieval horse and its equipment* c.*1150*-c.*1450*. Medieval Finds from Excavations in London 5, New edition (2004). First published 1995, London: H.M.S.O.. Woodbridge: Boydell Press, 150-156.

Egan, G. (2005) Urban and rural finds: material culture of country and town c.1050-1500. In: K. Giles and C. Dyer (eds), *Town and country in the middle ages: contrasts, contacts and interconnections*. Leeds: Maney Publishing, 197-210.

Egan, G. (2007a) Accessioned finds. In: D. Bowsher, T. Dyson, N. Holder and I. Howell, *The London Guildhall: an archaeological history of a neighbourhood from early medieval to modern times*, 2 volumes. MoLAS Monograph 36. London: Museum of London Archaeology Service, 446-472.

Egan, G. (2007b) Later medieval non-ferrous metalwork and evidence for metal working AD1010-1100 to 1500-1550. In: D. Griffiths, R. A. Philpott and G. Egan (eds), *Meols, the archaeology of the North Wirral coast. Discoveries and observations in the 19th and 20th centuries with a catalogue of collections*. Oxford University School of Archaeology Monograph Series 68. Oxford: Oxford University School of Archaeology, 77-187.

Egan, G. (2008a) [1991] The metal dress accessories – some observations. In: G. Egan and F. Pritchard, *Dress accessories* c *1150* – c *1450*. Medieval Finds from Excavations in London 3, New edition (2002), reprinted 2008. First published 1991, London: H.M.S.O.. Woodbridge: Boydell Press, 18-34.

Egan, G. (2008b) [1991] Buckles. In: G. Egan and F. Pritchard, *Dress accessories* c 1150 – c 1450. Medieval Finds from Excavations in London 3, New edition (2002), reprinted 2008. First published 1991, London: H.M.S.O.. Woodbridge: Boydell Press, 50-123.

Egan, G. (2008c) [1991] Brooches. In: G. Egan and F. Pritchard, *Dress accessories* c 1150 – c 1450. Medieval Finds from Excavations in London 3, New edition (2002), reprinted 2008. First published 1991, London: H.M.S.O.. Woodbridge: Boydell Press, 247-271. Egan, G. (2009) Material concerns: non-ceramic finds c. 1050-1500. In: R. Gilchrist and A. J. Reynolds (eds), *Reflections: 50 years of medieval archaeology, 1957-2007*. Leeds: Maney Publishing, 289-303.

Egan, G. (2010) [1998] *The medieval household: daily living c. 1150–1450*. Medieval Finds from Excavations in London 6, New edition. First published 1998, London: H.M.S.O.. Woodbridge: Boydell Press.

Egan, G. and Blackmore, L. (2015) Metalwork and other finds of the eleventh and twelfth centuries. In: J. Ayre and R. Wroe-Brown, The eleventh- and twelfth-century waterfront and settlement at Queenhithe: excavations at Bull Wharf, City of London. *Archaeological Journal*, 172(2), 46-59 (1-78).

*Egan, G. and Keily, J. (2011) Accessioned finds. In: M. Burch, P. Treveil and D. Keene, *The development of early medieval and later Poultry and Cheapside: excavations at 1 Poultry and vicinity, City of London*. MOLA Monograph 38. London: Museum of London Archaeology, 291-310.

Eichert, S. (2018) Griffons and birds. Mediterranean motifs on early medieval enamelled disc brooches in Central Europe. In: J. Drauschke, K. Kühtreiber, E. Kislinger, T. Kühtreiber, G. Scharrer-Liska and T. Vida (eds), *Lebenswelten zwischen Archäologie und Geschichte (Festschrift für Falko Daim zur seinem 65. Geburtstag)*. Monographien des Römisch-Germanischen Zentralmuseums 150. Mainz: Schnell & Steiner, 113-122.

*Ellis, B. (1979) D-shaped buckle. In: J.H. Williams, *St Peter's Street, Northampton. Excavations 1973-1976*. Archaeological Monograph 2. Northampton: Northampton Development Corporation, 273.

*Ellis, R. H. (1981) Catalogue of seals in the Public Record Office personal seals. Volume 2. London: H. M. S. O. *Enlart, C. (1916) Manuel d'archéologie française depuis les temps mérovingiens jusqu'à la Renaissance. 3 - Le costume, Paris: A. Picard.

*Eriksen, P. and Jørgensen, P. L. (1995) *Trabjerg: En Vestjysk Landsby Fra Vikingetiden*. Jysk arkæologisk selskab 31. Højberg: I kommission hos Aarhus universitetsforlag.

Evans, J. and Millett, M. (1992) Residuality revisited. *Oxford Journal of Archaeology*, 11(2), 225-240.

Evans, T. N. L. (2015) A reassessment of archaeological grey literature: semantics and paradoxes. *Internet Archaeology*, 40 (doi: 10.11141/ia.40.6).

Everson, P. (1988) What's in a name? 'Goltho', Goltho and Bullington. *Lincolnshire History and Archaeology*, 23, 93-99.

*Evison, V. (1977) An enamelled disc from Great Saxham. *Proceedings of the Suffolk Institute of Archaeology and History*, 34, 1-13.

*Ey, J. (1995) Die mittelalterliche Wurt Neuwarfen, Gde. Wangerland, Ldkr. Friesland. Die Ergebnisse der Grabungen 1991 und 1992. *Probleme der Küstenforschung im südlichen Nordseegebiet*, 23, 265-315.

Faith, R. (1997) *The English Peasantry and the Growth of Lordship*. London: Leicester University Press.

*Falke, O. von and Meyer, E (1935) *Romanische Leuchter und Gefässe, Giessgefässe der Gotik*. Berlin: Deutscher Verein für Kunstwissenschaft.

Fanning, T. (1994) *Viking age ringed pins from Dublin*. Dublin: National Museum of Ireland.

Fansa, M. (ed.) (1995) Beiträge und Katalog zur Ausstellung "Aus dem Leben gegriffen
ein Rechtsbuch spiegelt seine Zeit". Archäologische Mitteilungen aus
Nordwestdeutschland Beihefte 10. Oldenburg: Isensee Verlag.

*Farley, M. (1976) Saxon and medieval Walton, Aylesbury, Buckinghamshire excavations 1973-74. *Records of Buckinghamshire*, 20(2), 153-290.

*Fasham, P. J. (1983) Excavations in Banbury, 1972: second and final report. *Oxoniensia*, 48, 71-118.

*Fasham, P. J. and Keevill, G. (1995) *Brighton Hill South (Hatch Warren): an Iron Age farmstead and deserted medieval village in Hampshire*. Wessex Archaeology Report 7. Salisbury: Trust for Wessex Archaeology Ltd.

Felgenhauer-Schmiedt, S. with Graham-Campbell, J. (2007) Material culture and daily life. In: J. Graham-Campbell with M. Valor (eds), *The archaeology of medieval Europe. Volume 1: eighth to twelfth centuries*. Acta Jutlandica Humanistik serie 79. Aarhus: Aarhus University Press, 237-260.

Ferrarese Lupi, A. and Lella, P. (2013) Gaussian curves for visualizing chronological patterns of ceramic finds and residuality. *Archaeometry*, 55(2), 296-311.

*Feveile, C. (2014) At the geestland edge southwest of Ribe: on the track of a centre of wealth during the 1st millennium AD. In: E. Stidsing, K. Høilund Nielsen and R. Fiedel (eds), *Wealth and complexity. Economically specialised sites in late Iron Age Denmark*. East Jutland Museum Publications 1. Aarhus: Østjyllands Museum and Aarhus University Press, 73-89.

Feveile, C. (2017) Ombukkede beslag af blik. By, Marsk og Geest, 29, 50-120.

*Field, F. N. (1981) A bronze buckle plate from Louth. *Archaeology in Lincolnshire and South Humberside*, 16, 81-82.

*Fillet, R. (2016) Paardentuig uit de Vlaamse kustvlakte en Walcheren (Bulskamp,
 Michem, Leffinge, Oost-Souburg), tussen de 10e en 11e eeuw. Unpublished BA thesis.
 Brussels: Vrije Universiteit Brussel.

Fiedler, U. (2002) Ein wappenförmiger Pferdegeschirränhanger des 13. Jahrhunderts aus der Havelberger Inselstadt. *Jahresschrift für mitteldeutsche Vorgeschichte*, 85, 305-326.

Fingerlin, I. (1971) *Gürtel des Hohen und Späten Mittelalters*. Kunstwissenschaftliche Studien 46. Munich and Berlin: Deutscher Kunstverlag.

*Fino, J.-F. (1977) Forteresses de la France médiévale : construction, attaque, défense,
 3rd edition. Paris: Picard.

Fitzpatrick, A. P. (2000) Objects of copper alloy. In: C. J. Young, *Excavations at Carisbrooke Castle, Isle of Wight, 1921-1996*. Wessex Archaeology Report 18. Salisbury: Trust for Wessex Archaeology Ltd, 134-139.

Flambard Héricher, A.-M. (2004) La Tapisserie de Bayeux et l'archéologie. In: P. Bouet,
B. Levy and F. Neveux (eds), *La Tapisserie de Bayeux, l'art de broder l'histoire*. Caen:
Presses universitaires de Caen, 261-288.

*Flambard Héricher, A.-M., Bisson, E., and Painchault, A. (eds) (2012) Le Château Ganne à La Pommeraye (Calvados), Rapport de postfouille programme 2012. Unpublished report deposited at SRA Basse-Normandie.

Fleming, R. (1993) Rural Elites and Urban Communities in Late-Saxon England. *Past and Present*, 141, 3–37

Fleming, R. (2001) The new wealth, the new rich and the new political style in late Anglo-Saxon England. *Anglo-Norman Studies*, 23, 1-22.

Fleming, R. (2010) *Britain after Rome: the fall and rise, 400 to 1070*. London: Penguin/Allen Lane.

Fleming, R. (2011) Land use and people. In. In: J. Crick and E. van Houts (eds), A social history of England, 900-1200. Cambridge: Cambridge University Press, 15-37.

Foerster, T. and Burkhardt, S. (2013) Introduction: Tradition and Heritage: The Normans in the Transcultural Middle Ages. In: T. Foerster and S. Burkhardt (eds), *Norman Tradition and Transcultural Heritage: Exchange of Cultures in the 'Norman' Peripheries of Medieval Europe*. Farnham: Ashgate, 1-18.

Foot, M. (1984) Bindings. In: G. Zarnecki *et al.* (eds), *English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]*. London: Weidenfeld and Nicolson, 342-349.

Foreman, M. (1991) The lead and lead alloy. In: P. Armstrong, D. G. Tomlinson and D.
H. Evans, *Excavations at Lurk Lane Beverley*, *1979-82*. Sheffield Excavation Reports 1.
Sheffield: University of Sheffield, Department of Archaeology and Prehistory, 155-163.

*Foreman, M. and Tweddle, D. (1992) The fired clay, jet and amber. In: D. H. Evans and D. G. Tomlinson, *Excavations at 33-35 Eastgate, Beverley, 1983-1986*. Sheffield Excavation Reports 3. Sheffield: University of Sheffield, Department of Archaeology and Prehistory, 133-134.

*Fort, B. (2016) L'étude du mobilier métallique. In: A. Guiblais-Starck (ed.), *Une ferme fossoyée médiévale en vallée de Seine: La Villeneuve-au-Châtelot (Aube), "D40b". Volume 2 : Résultats - Études spécialisées*. Unpublished site report. Metz: Inrap Grand-Est Nord, 83-138.

Fossier, R. (2004) The rural economy and demographic growth. In: D. Luscombe and J. Riley-Smith (eds), *The new Cambridge medieval history, volume 4*. Cambridge: Cambridge University Press, 11-46.

*Fowler, E. (1974) Bronze objects. In: P. A. Rahtz and S. Hirst, *Beckery Chapel, Glastonbury, 1967–8*. Glastonbury: Glastonbury Antiquarian Society, 63-65.

*Fox, C. and Radford, C. A. R. (1933) Kidwelly castle, Carmarthenshire, including a survey of polychrome pottery. *Archaeologia*, 83, 93-138.

Fradley, M. G. (2011) The old in the new: urban castle imposition in Anglo-Norman England, AD 1050-1150. Unpublished PhD thesis. Exeter: University of Exeter.

*Francis, E. B. (1913) Rayleigh Castle: new facts in its history and recent explorations on its site. *Transactions of the Essex Archaeological Society*, 12, 147-185.

Frick, H.-J. (1993) Karolingisch-Ottonische Scheibenfibeln Des Nördlichen Formenkreises. *Offa*, 49/50, 243-463.

*Friedrich, W. (2008) Ritterliches Leben in der Baustelle. Vom hölzernen Provisorium zur Burg Romrod. *Mitteilungen der Deutsche Gesellschaft für Archäologie des Mittelalters und der Neuzeit*, 20, 175-184.

Fuglesang, S. H. (1980) *Some aspects of the Ringerike style: a phase of 11th century Scandinavian art*. Odense: Odense University Press.

Fuglesang, S. H. (1991) The axe-head from Mammen and the Mammen style. In: M. Iversen (ed.), *Mammen: Grav, Kunst og Samfund i Vikingetid.* Jysk Arkæologisk Selskabs Skrifter 28. Højbjerg: Jysk Arkaeologisk Selskab, 83-108.

Fulford, M. and Rippon, S. (2011) *Pevensey Castle, Sussex: excavations in the Roman fort and medieval keep, 1993-95*. Wessex Archaeology Report 26. Salisbury: Trust for Wessex Archaeology Ltd. Gabriel, I. (1988) Hof- und Sakralkultur sowie Gebrauchs- und Handelsgut im Spiegel der Kleinfunde von Starigrad/Oldenburg. *Bericht der Römisch-Germanischen Komission*, 69, 103-291.

Gaier, C. (2002) The Lost Shield of Baldwin of Flanders and Hainault, First Latin Emperor of Constantinople. In: D. Nicolle (ed.), *A companion to medieval arms and armour*. Woodbridge: Boydell Press, 91-96.

*Gaimster, M. and O'Conor, K. (2005) Medieval Britain and Ireland. *Medieval Archaeology*, 49, 349-473.

Gaitzsch, W. (1997) Zaumbeschläge hochmittelalterlicher Kandaren. Archäologisches Korrespondenzblatt, 27(3), 497-511.

*Gambaro, L. (1985) Reperti metallici. In: M. Biasotti, D. Cabona, G. Conti, I. Ferrando Cabona, L. Gambaro, M. Giardi, R. Giovinazzo and O. Pizzolo, Scavo dell'area Ovest del villaggio abbandonato di Monte Zignago: Zignago 3. *Archeologia Medievale*, 12, 224-236 (213-243).

Gandel, P., Billoin, D. and Humbert, S. (2008) Écrille "La Motte" (Jura): un établissement de hauteur de l'Antiquité tardive et du haut Moyen-Âge. *Revue Archéologique Est et Centre-Est*, 57, 289-314.

Gardiner, M. (2000) Shipping and trade between England and the Continent. *Anglo-Norman Studies*, 22, 71-93.

Gardiner, M. (2017) Manorial farmsteads and the expression of lordship before and after the Norman Conquest. In: D. M. Hadley and C. C. Dyer (eds), *The archaeology of the 11th century: continuities and transformations*. Society for Medieval Archaeology Monograph 38. Abingdon: Routledge, 88-103.

Garrard, I. P. (1995) Other objects of copper-alloy and silver. In: K. Blockley, M. Blockley, P. Blockley, S. S. Frere and S. Stow, *Excavations in the Marlowe car park and surrounding areas*. The Archaeology of Canterbury 5. Canterbury: Canterbury Archaeological Trust, 1005-1062.

*Gaspari, A., Nadbath, B. and Nabergoj, T. (2008) Grad na Gradišču nad Drago Spanheimska utrdba na severozahodni meji gospostva? *Arheološki vestnik*, 59, 305-323.

*Gauthier, M.-M. S. (1950) *Émaux limousins champlevés des XIIe, XIIIe & XIVe siècles*. Paris: Gérard Le Prat.

Gautier, A. (2007) Game parks in Sussex and the Godwinesons. *Anglo-Norman Studies*, 29, 51-64.

*Gautier, L. (1876) *La Chanson de Roland*, 6th edition. Tours: A. Mame.

*Gay, V. (1887) *Glossaire archéologique du Moyen Âge et de la Renaissance, tome 1, A-G.* Paris: Société bibliographique.

Geake, H. (2001) Finds recording guide version 1.1. Unpublished manuscript supplied by the PAS.

Geddes, J. (1991) Iron. In: J. Blair and N. Ramsey (eds), *English medieval industries: craftsmen, techniques, products*. London: The Hambledon Press, 167-188.

*Geddes, J. and Carter, A. (1977) Objects of non-ferrous metal, amber and paste. In: H. Clarke and A. Carter, *Excavation in King's Lynn 1963-1970*. Society for Medieval Archaeology Monograph 7. Leeds: Society for Medieval Archaeology, 287-291.

Gerrard, C. M. (2003) *Medieval archaeology. Understanding traditions and contemporary approaches*. London: Routledge.

Gerrard, C. M. (2009) Tribes and territories: 50 years of medieval archaeology in Britain. In: R. Gilchrist and A. J. Reynolds (eds), *Reflections: 50 years of medieval archaeology, 1957-2007*. Leeds: Maney Publishing, 79-112.

Gibson, C. (2015) A late Saxon butchery site at Bury Road, Thetford. *Norfolk Archaeology*, 47(2), 264-284.

Gilchrist, R. (2012) *Medieval life: archaeology and the life course*. Woodbridge: Boydell and Brewer.

Gillingham, J. B. (2000 [1995]) Thegns and Knights in Eleventh-Century England: Who was then the gentleman? In: J. B. Gillingham, *The English in the twelfth century : imperialism, national identity, and political values*. Woodbridge: Boydell Press, 163-185.

Gillingham, J. (2012) A historian of the twelfth-century renaissance and the transformation of English society, 1066-ca. 1200. In: T. F. X. Noble and J. H. van Engen (eds), *European transformations: the long twelfth century*. Notre Dame: University of Notre Dame Press, 45-74.

*Gilmore, T. (2019) Decorated two-part clasps. Finds Research Group Datasheet 52. Finds Research Group.

Goddard, E. H. (1914) Notes. *Wiltshire Archaeological and Natural History Magazine*, 38, 106-115.

*Godet, E. (2019) L'étude du mobilier métallique. In: L. Beuchet (ed.), *Brie (35). 8 rue de Bretagne: Genèse et évolution d'un habitat seigneurial entre le Xe et le XVe siècle*. Unpublished site report. Cesson Sévigné: Inrap Grand-Ouest, 114-122.

*Goffin, R. (1995) The accessioned finds. In: P. Mills, Excavations at the dorter undercroft, Westminster Abbey. *Transactions of the London and Middlesex Archaeological Society*, 46, 87-92 (69-124).

Golding, B. (2001) *Conquest and colonisation: the Normans in Britain, 1066-1100*. Basingstoke: Palgrave.

*Good, L. (1998) Copper alloy. In: R. Price and M. Ponsford, *St Bartholomew's Hospital, Bristol: the excavation of a medieval hospital: 1976-8*. CBA Research Report 110. York: Council for British Archaeology, 166-169.

Goodall, A. R. (1979) Copper-alloy objects. In: D. D. Andrews and G. Milne, *Wharram. A study of settlement on the Yorkshire Wolds*. Society for Medieval Archaeology Monograph 8. Leeds: Society for Medieval Archaeology, 108-115.

Goodall, A. R. (1980a) Copper alloy and lead objects. In: N. Palmer, A Beaker burial and medieval tenements in the Hamel, Oxford. *Oxoniensia*, 45, 183-188 (124-225).

Goodall, A. R. (1980b) Copper alloy objects. In: A. D. Saunders, Lydford Castle, Devon. *Medieval Archaeology*, 24(1), 164-165 (123-186).

Goodall, A. R. (1981) The medieval bronzesmith and his products. In: D. W. Crossley (ed.), *Medieval industry*. CBA Research Report 40. York: Council for British Archaeology, 63-70.

Goodall, A. R. (1982) Objects in copper alloy. In: J. G. Coad and A. D. F. Streeten, Excavations at Castle Acre Castle, Norfolk, 1972-77. *Archaeological Journal*, 139, 235-239 (138-301).

*Goodall, A. R. (1983) Non-ferrous metal objects. In: P. Mayes and L. Butler, *Sandal Castle excavations 1964–1973: a detailed archaeological report*. Wakefield: Wakefield Historical Publications, 231-239.

Goodall, A. R. (1984a) Objects of non-ferrous metal. In: J. Allan, *Medieval and post medieval finds from Exeter, 1971-1980.* Exeter: Exeter City Council and the University of Exeter, 337-348.

*Goodall, A. R. (1984b) Non-ferrous metal objects. In: A. Rogerson and C. Dallas, *Excavations in Thetford 1948–59 and 1973–80*. Dereham: The British Museum, Norfolk Museums Service, 68-75.

Goodall, A. R. (1987) Medieval copper alloy. In: G. Beresford, *Goltho: the development of an early medieval manor, c. 850-1150*. English Heritage Archaeology Report 4. London: Historic Buildings and Monuments Commission for England, 173-176.

*Goodall, A. R. (1989a) Copper-alloy objects. In: T. G. Hassall, C. E. Halpin and M. Mellor, Excavations in St Ebbe's, Oxford, 1967–1976: part 1: late Saxon and medieval domestic occupation and tenements, and the medieval Greyfriars. *Oxoniensia*, 54, 223-227 (71-277).

*Goodall, A. R. (1989b) Objects of non-ferrous metal. In: D. Austin, *The deserted medieval village of Thrislington, County Durham: excavations 1973-1974*. Society for Medieval Archaeology Monograph 12. Lincoln: Society for Medieval Archaeology, 134-138.

Goodall, A. R. (1990) Objects of copper alloy and lead. In: J. R. Fairbrother (ed.), *Faccombe Netherton: excavations of a Saxon and medieval manorial complex*, 2 volumes. British Museum Occasional Paper 74. London: Trustees of the British Museum, 425-436.

Goodall, A. R. (1991) The copper alloy and gold. In: P. Armstrong, D. G. Tomlinson and D. H. Evans, *Excavations at Lurk Lane Beverley, 1979-82*. Sheffield Excavation Reports 1. Sheffield: University of Sheffield, Department of Archaeology and Prehistory, 148-154.

Goodall, A. R. (1992) Objects of copper alloy. In: D. H. Evans and D. G. Tomlinson, *Excavations at 33-35 Eastgate, Beverley, 1983-1986*. Sheffield Excavation Reports 3. Sheffield: University of Sheffield, Department of Archaeology and Prehistory, 138-142.

Goodall, A. R. (1993a) Non-ferrous metal objects. In: C. Dallas, *Excavations in Thetford by B. K. Davison, between 1964 and 1970*. East Anglian Archaeology 62. Dereham: Norfolk Field Archaeology Division, 95-99.

Goodall, A. R. (1993b) Copper-alloy objects. In: H. K. Murray and J. Murray, Excavations at Rattray, Aberdeenshire. A Scottish deserted burgh. *Medieval Archaeology*, 37, 188-194 (109-218).

*Goodall, A. R. (2007) Non-ferrous metals. In: D. Austin, *Acts of perception, a study of Barnard Castle in Teesdale*, 2 volumes. Architectural and Archaeological Society of Durham and Northumberland Research Report 6. London: English Heritage, 520-528.

*Goodall, A. R. (2009a) Copper alloy brooches. In: E. S. Popescu, *Norwich Castle: excavations and historical survey 1987–98*, 2 volumes. East Anglian Archaeology 132. Dereham: Norfolk Museums and Archaeology Service, 506-507.

Goodall, A. R. (2009b) Copper alloy scabbard chape. In: E. S. Popescu, *Norwich Castle: Excavations and Historical Survey 1987–98*, 2 volumes. East Anglian Archaeology 132. Dereham: Norfolk Museums and Archaeology Service, 525-526.

*Goodall, A. R. (2009c) Copper alloy strips and mounts. In: E. S. Popescu, Norwich Castle: excavations and historical survey 1987–98, 2 volumes. East Anglian Archaeology 132. Dereham: Norfolk Museums and Archaeology Service, 685-686.

*Goodall, A. R. (2009d) Copper alloy stirrup mount. In: E. S. Popescu, *Norwich Castle: excavations and historical survey 1987–98*, 2 volumes. East Anglian Archaeology 132. Dereham: Norfolk Museums and Archaeology Service, 178-179. *Goodall, A. R. (2009e) Copper alloy mounts. In: E. S. Popescu, *Norwich Castle: excavations and historical survey 1987–98,* 2 volumes. East Anglian Archaeology 132. Dereham: Norfolk Museums and Archaeology Service, 331-332.

*Goodall, A. R. (2012a) The non-ferrous metal objects. In: D. W. Hall, I. Goodall, A. Goodall, J. Cherry, A. Curteis *et al.*, *Perth High Street archaeological excavation 1975-1977. Fascicule 2: the ceramics, the metalwork and the wood*. Perth: Tayside and Fife Archaeological Committee, 89-118.

*Goodall, A. R. (2012b) Objects of copper alloy. In: P. Saunders (ed.), *Salisbury and South Wiltshire Museum medieval catalogue part 4*. Salisbury: Salisbury and South Wiltshire Museum, 90-142.

Goodall, A. R. (2014) Other copper alloy objects. In: J. J. West and N. Palmer, Haughmond Abbey: excavation of a 12th-century cloister in its historical and landscape context. Swindon: English Heritage, 304-308.

*Goodall, A. R. and Goodall, I. H. (1979) Copper alloy objects. In: B. Durham, Archaeological investigations in St. Aldates, Oxford. *Oxoniensia*, 42, 148-152 (83-203).

*Goodall, A. R. and Huddle, J. (2009) Ansate and disc brooches. In: E. S. Popescu, *Norwich Castle: excavations and historical survey 1987–98*, 2 volumes. East Anglian Archaeology 132. Dereham: Norfolk Museums and Archaeology Service, 144-145.

Goodall, A. R. and Paterson, C. (2000) Non-ferrous metal objects. In: P. A. Stamper and R. A. Croft, *Wharram: a study of settlement on the Yorkshire Wolds, VIII. The South Manor area*. York University Archaeological Publications 10, 126-132.

Goodall, A. R. and Webster, L. (1981) Objects of copper alloy. In: J. H. Williams and M. Shaw, Excavations in Chalk Lane, Northampton, 1975-1978. *Northamptonshire Archaeology*, 16, 122 (87-135).

*Goodall, I. H. (1975a) Metalwork from Goltho. In: G. Beresford, *The medieval clayland village: excavations at Goltho and Barton Blount*. Society for Medieval Archaeology Monograph 6. Lincoln: Society for Medieval Archaeology, 79-96.

*Goodall, I. H. (1975b) Metalwork. In: P. L. Drewett, Excavations at Hadleigh Castle, Essex, 1971-1972. *Journal of the British Archaeological Association*, 38, 138-146 (89-154).

*Goodall, I. H. (1977) Medieval copper alloy objects. In: R. Hanworth and D. J. Tomalin, *Brooklands, Weybridge: The excavation of an Iron Age and medieval site 1964-5 and 1970-71*. Surrey Archaeological Society Research Volume 4. Guildford: Surrey Archaeological Society, 76-77.

*Goodall, I. H. (1979) Iron objects. In: P. A. Rahtz, *The Saxon and medieval palaces at Cheddar: excavations 1960-62.* BAR British Series 65. Oxford: British Archaeological Reports Ltd., 263-274.

*Goodall, I. H. (1980a) Copper alloy objects. In: P. M. Christie and J. G. Coad, Excavations at Denny Abbey. *Archaeological Journal*, 137, 255-260 (138-279).

*Goodall, I. H. (1980b) Objects of copper alloy. In: P. Wade-Martins (ed.), *Excavations in North Elmham Park, 1967–72,* 2 volumes. East Anglian Archaeology 9. Dereham: Norfolk Archaeological Unit (for) the Scole Committee for Archaeology in East-Anglia, 499-505.

Goodall, I. H. (1987) Objects of iron. In: G. Beresford, *Goltho: the development of an early medieval manor, c. 850-1150*. English Heritage Archaeology Report 4. London: Historic Buildings and Monuments Commission for England, 177-187.

*Goodall, I. H. (1990a) Iron buckles and belt-fittings. In: M. Biddle (ed.), *Object and economy in medieval Winchester*. Winchester Studies 7.ii. Oxford: Clarendon Press, 526-539.

Goodall, I. H. (1990b) Bridle bits and associated strap-fittings. In: M. Biddle (ed.), *Object and economy in medieval Winchester*. Winchester Studies 7.ii. Oxford: Clarendon Press, 1043-1046.

*Goodall, I. H. (1991) The ironwork. In: P. Armstrong, D. G. Tomlinson and D. H. Evans, *Excavations at Lurk Lane Beverley, 1979-82*. Sheffield Excavation Reports 1. Sheffield: University of Sheffield, Department of Archaeology and Prehistory, 132-147.

*Goodall, I. H. (1992) The iron objects. In: D. H. Evans and D. G. Tomlinson, *Excavations at 33-35 Eastgate, Beverley, 1983-1986*. Sheffield Excavation Reports 3. Sheffield: University of Sheffield, Department of Archaeology and Prehistory, 151-161.

Goodall, I. H. (2011) *Ironwork in medieval Britain*. Society for Medieval Archaeology Monograph 31. London: Society for Medieval Archaeology.

*Goodall, I. H. and Goodall, A. R. (2000) Metalwork from the motte excavations at Hen Domen, 1960-1990. In: R. Higham and P. Barker, *Hen Domen, Montgomery: a timber castle on the English-Welsh border*. Exeter: University of Exeter Press, 94-97.

Gosden, C. (2005) What Do Objects Want?. *Journal of Archaeological Method and Theory*, 12(3), 193-211.

Goßler, N. (1999) Untersuchungen zur Formenkunde und Chronologie mittelalterlicher Stachelsporen in Deutschland (10.-14. Jahrhundert). *Bericht der Römisch-Germanischen Kommission*, 79, 479-664.

Goßler, N. (2009) Materielle Kultur und soziale Differenz. Beobachtungen am archäologischen Fundstoff aus mittelalterlichen Burgen. In: L. Clemens and S. Schmitt (eds), Zur Sozial- und Kulturgeschichte der mittelalterlichen Burg: Archäologie und Geschichte. Trier: Kliomedia, 25-48.

Goßler, N. (2011) Reiter und Ritter: Formenkunde, Chronologie, Verwendung und
gesellschaftliche Bedeutung des mittelalterlichen Reitzubehörs aus Deutschland. Beiträge zur Ur- und Frühgeschichte Mecklenburg-Vorpommerns 49. Schwerin: Landesamt für Kultur und Denkmalpflege.

Graham-Campbell, J. (1992) Anglo-Scandinavian equestrian equipment in eleventhcentury England. *Anglo-Norman Studies*, 14, 77-89.

Graham-Campbell, J. (2007) Elite activities and symbols of power. In: J. Graham-Campbell and M. Untermann, The display of secular power. In: J. Graham-Campbell with M. Valor (eds), *The archaeology of medieval Europe. Volume 1: eighth to twelfth centuries*. Acta Jutlandica Humanistik serie 79. Aarhus: Aarhus University Press, 350-362 (342-365).

*Graham-Campbell, J. (2013) Viking art. London: Thames & Hudson Ltd.

Graham-Campbell, J. and Kidd, D. (1980) *The Vikings*. London: British Museum Publications Limited.

*Gralow, K.-D. (1995) Eine Zellenemailfibel von der slawischen Burg "Dope" bei Flessenow, Kr. Parchim. Ausgrabungen und Funde. Nachrichtenblatt der Landesarchäologie Mecklenburg-Vorpommern, 40(3), 162-166.

*Gravett, C. (1997) *German medieval armies, 1000-1300*. Men-at-arms series 310. London: Osprey.

*Gravett, C. (2000) Norman knight. Oxford: Osprey.

*Gray, H. St. G. (1903) Excavations at Castle Neroche June-July 1903. *Somerset Archaeology and Natural History*, 49, 23-53.

Green, J. (2017) *Forging the Kingdom:* Power in English Society, 973–1189. Cambridge: Cambridge University Press.

Green, R. (2017) Post-casting modifications to Anglo-Saxon strap-ends; hooked and lugged attachments. Finds Research Group Datasheet 48. Finds Research Group.

Grieve, A. L. (2012) The human-dog relationship in early medieval England and Ireland (c.AD 400-1250). Unpublished PhD thesis. Southampton: University of Southampton.

*Griffiths, D. W. (1991) Anglo-Saxon England and the Irish Sea region AD 800-100: an archaeological study of the lower Dee and Mersey as a border area. Unpublished PhD thesis. Durham: Durham University.

Griffiths, D. W. (2003) Exchange, Trade and Urbanization. In: W. Davies (ed.), *From the Vikings to the Normans*. Oxford: Oxford University Press, 73-104.

*Griffiths, D. W. (2007) Early medieval material: AD 400-450 to 1050-1100. In: D. W. Griffiths, R. A. Philpott and G. Egan (eds), *Meols, the archaeology of the North Wirral coast. Discoveries and observations in the 19th and 20th centuries with a catalogue of collections*. Oxford: Oxford University School of Archaeology Monograph Series 68, 58-77.

Griffiths, D. W. (2011) The ending of Anglo-Saxon England: identity, allegiance and nationality. In: D. A. Hinton, S. Crawford and H. Hamerow (eds), *The Oxford handbook of Anglo-Saxon archaeology*. Oxford: Oxford University Press, 62-78.

Griffiths, D. W. (2013) Living in Viking-Age towns. In: D. M. Hadley and A. Ten Harkel (eds), *Everyday life in Viking-Age towns: social approaches to towns in England and Ireland, c. 800-1100*. Oxford: Oxbow Books, 1-13.

Griffiths, N. (1986) Horse harness pendants. Finds Research Group Datasheet 5. Finds Research Group.

*Griffiths, N. (1995) Disc pendant. In: I. P. Garrard, Other objects of copper-alloy and silver. In: K. Blockley, M. Blockley, P. Blockley, S. S. Frere and S. Stow, *Excavations in*

the Marlowe car park and surrounding areas. The Archaeology of Canterbury 5. Canterbury: Canterbury Archaeological Trust, 1054 (1005-1062).

Griffiths, N. (2004) [1995] Harness pendants and associated fittings. In: J. Clark (ed.), *The medieval horse and its equipment* c.*1150*-c.*1450*. Medieval Finds from Excavations in London 5, New edition (2004). First published 1995, London: H.M.S.O.. Woodbridge: Boydell Press, 61-71.

*Griffiths, N. (2009) Other finds from Langham Road and Burystead. In: M. Audouy and A. Chapman (eds), *Raunds: the origin and growth of a midland village, AD 450-1500: excavations in north Raunds, Northamptonshire 1977-87*. Oxford: Oxbow Books, 207-213.

Grimm, P. (1990) *Tilleda: eine Königspfalz am Kyffhäuse. Teil. 2, Die Vorburg und Zusammenfassung*. Schriften zur Ur- und Frühgeschichte 40. Berlin: Akademie-Verlag.

Gross, U. (1992) Eine hochmittelalterliche Kandare aus der Wüstung Sülchen bei Rottenburg, Kr. Tübingen. *Denkmalpflege in Baden-Württemberg*, 21(4), 124-126.

*Gross, U. (1998) Die Funde. In: Anon., *Dorfsterben … : Vöhingen und was davon blieb. Archäologie eines mittelalterlichen Dorfes bei Schwieberdingen*. Stuttgart: Landesdenkmalamt Baden-Württemberg, 31-52.

Grünewald, C. (2017) Löwenmaul und Rittersporn: Ein seltener Typ zoomorph ausgestalteter romanischer Schnallen. In: V. Brieske, A. Dickers and M. M. Rind (eds), *Tiere und Tierdarstellungen in der Archäologie: Beiträge zum Kolloquium in Gedenken an Torsten Capelle, 30.-31. Oktober 2015 in Herne*. Veröffentlichungen der Altertumskommission für Westfalen Landschaftsverband Westfalen-Lippe 22. Münster: Aschendorff Verlag GmbH, 353-362.

*Gucker, D. (ed.) (in prep.) Bezannes (Marne), « Le Village ». Unpublished site report. Metz: Inrap Grand-Est Nord. Guillemot, A. (2012) Le mobilier métallique en contexte d'habitat rural du premier Moyen-Âge (Ve-XIIe siècle) en IIe-de-France, 2 volumes. Unpublished Masters thesis. Paris: Université de Paris 1 - Sorbonne.

Guillot, F. with Portet, N. (2017) *Le castrum de Montréal-de-Sos. 16 ans de recherches archéologiques sur une fortification des Pyrénées ariégeoises*. Archéologie du Midi Médiéval Supplément 8. Carcassonne: Centre d'archéologie médiévale du Languedoc.

*Gurney, D. (1993) Archaeological finds in Norfolk in 1992. *Norfolk Archaeology*, 41(4), 512-532.

*Gurney, D. (1996) Archaeological finds in Norfolk in 1995. *Norfolk Archaeology*, 42(3), 387-396.

*Gurney, D. (1998) Archaeological finds in Norfolk in 1997. *Norfolk Archaeology*, 43(1), 181-192.

*Gurney, D. (ed.) (2003) Archaeological finds in Norfolk in 2002. *Norfolk Archaeology*, 44(2), 356-368.

Gurney, D. (ed.) (2005) Archaeological finds in Norfolk in 2004. *Norfolk Archaeology*, 44(4), 736-750.

Gustafsson, N. B. (2011) New light on tempered clay: 3D white light scanning as a means of analysis of early medieval casting moulds. *Lund Archaeological Review*, 15, 5-10.

Gustin, I. (2017) Contacts, identity and hybridity: Objects from South-western Finland in the Birka graves. In: J. Callmer, I. Gustin and M. Roslund (eds), *Identity Formation and Diversity in the Early Medieval Baltic and Beyond : Communicators and Communication*. Leiden: Brill, 205-258. Hadley, D. M. (1996) Multiple estates and the origins of the manorial structure of the northern Danelaw. *Journal of Historical Geography*, 22, 3-15.

Hadley, D. M. (2003) Viking and native: re-thinking identity in the Danelaw. *Early Medieval Europe*, 11(1), 45-70.

Hadley, D. M. (2011) Ethnicity and acculturation. In: J. Crick and E. M. C. van Houts (eds), *A social history of England, 900-1200*. Cambridge: Cambridge University Press, 235-246.

Hadley, D. M. (2020) The Archaeology of Migrants in Viking-Age and Anglo-Norman England: Process, Practice and Performance. In: M. Ormrod, E. Tyler and J. Story (eds), *Migrants in Medieval England, c.500-1500*. Oxford: Oxford: Oxford University Press: 175-205.

Hadley, D. M. and Dyer, C. C. (2017a) Introduction. In: D. M. Hadley and C. C. Dyer (eds), *The archaeology of the 11th century: continuities and transformations*. Society for Medieval Archaeology Monograph 38. Abingdon: Routledge, 1-13.

Hadley, D. M. and Dyer, C. C. (eds) (2017b) *The archaeology of the 11th century: continuities and transformations*. Society for Medieval Archaeology Monograph 38. Abingdon: Routledge.

Hadley, D. M. and Richards, J. D. (2000) Introduction: Interdisciplinary Approaches to the Scandinavian Settlement. In: D. M. Hadley and J. D. Richards (eds), *Cultures in contact: Scandinavian settlement in England in the ninth and tenth centuries*. Turnhout: Brepols, 3-15.

Hadley, D. M. and Richards, J. D. (2018) In Search of the Viking Great Army: Beyond the Winter Camps. *Medieval Settlement Research*, 33, 1-17.

Hadley, D. M. and Ten Harkel, A. (2013) Preface. In: D. M. Hadley and A. Ten Harkel (eds), *Everyday life in Viking-Age towns: social approaches to towns in England and Ireland, c. 800-1100*. Oxford: Oxbow Books, vii-xii.

*Haegel, B. (1990) 3.13. Eléments de harnachment. In: B. Schnitzler (ed.), *Vivre au Moyen Age: 30 ans d'archéologie médiévale en Alsace*. Strasbourg: Editions Les Musées de la ville de Strasbourg, 423.

*Haith, C. (1984a) 20. Strap-end. In: J. Backhouse, D. H. Turner and L. Webster (eds), *The golden age of Anglo-Saxon art*. London: British Museum Press, 38-39.

*Haith, C. (1984b) 110. The Pitney brooch. In: J. Backhouse, D. H. Turner and L. Webster (eds), *The golden age of Anglo-Saxon art*. London: British Museum Press, 112.

Haith, C. (1984c) 105. The Sutton, Isle of Ely brooch. In: J. Backhouse, D. H. Turner and L. Webster (eds), *The golden age of Anglo-Saxon art*. London: British Museum Press, 109-111.

*Haith, C. (1984d) 81. Strap-end. In: J. Backhouse, D. H. Turner and L. Webster (eds), *The golden age of Anglo-Saxon art*. London: British Museum Press, 96.

*Haith, C. (1984e) 84. Strap-end. In: J. Backhouse, D. H. Turner and L. Webster (eds), *The golden age of Anglo-Saxon art*. London: British Museum Press, 96-97.

*Haith, C. (1984f) 97. Buckle. In: J. Backhouse, D. H. Turner and L. Webster (eds), *The golden age of Anglo-Saxon art*. London: British Museum Press, 104.

Halbout, P., Pilet, C. and Vaudour, C. (eds) (1987) *Corpus des objets domestiques et des armes en fer de Normandie: Du Ier au XVe siècle*. Cahiers des Annales de Normandie
20. Caen: Centre archéologique de Normandie.

Haldenby, D. (1990) An Anglian site on the Yorkshire Wolds. *Yorkshire Archaeological Journal*, 62, 51-63.

Haldenby, D. (1992) An Anglian site on the Yorkshire Wolds – continued. *Yorkshire Archaeological Journal*, 64, 25-39.

Haldenby, D. (1994) Further Saxon finds from the Yorkshire Wolds. *Yorkshire Archaeological Journal*, 66, 51-56.

*Haldenby, D. (2013a) Cottam: the metalwork. In: J. D. Richards, S. P. Ashby, T. Austin, D. Haldenby, M. Hummler, E. Jelley, J. Richardson, S. Roskams and K. Niven, Cottam, Cowlam and environs: an Anglo-Saxon estate on the Yorkshire Wolds. *Archaeological Journal*, 170(1), 222-226 (201-271).

*Haldenby, D. (2013b) Church Farm, Cowlam: the metalwork. In: J. D. Richards, S. P. Ashby, T. Austin, D. Haldenby, M. Hummler, E. Jelley, J. Richardson, S. Roskams and K. Niven, Cottam, Cowlam and environs: an Anglo-Saxon estate on the Yorkshire Wolds. *Archaeological Journal*, 170(1), 244-248 (201-271).

*Haldenby, D. and Richards, J. D. (2016) The Viking Great Army and its legacy: plotting settlement shift using metal-detected finds. *Internet Archaeology*, 42 (doi:10.11141/ia.42.3).

Hall, M. A. (2005) John of Strathearne and Alan Muschamp: two medieval men of Strathearne and their seal matrices. *Tayside and Fife Archaeological Journal*, 11, 80-87.

*Hall, M. A. and Spencer, B. (2012) Devotion and belief on Perth High Street. In: D. W. Hall, I. Goodall, A. Goodall, J. Cherry, A. Curteis *et al.*, *Perth High Street archaeological excavation 1975-1977. Fascicule 2: the ceramics, the metalwork and the wood*. Perth: Tayside and Fife Archaeological Committee, 203-219. *Hall, R. A. (1984) *The Viking dig: the excavations at York*. London: The Bodley Head.

*Hallström, G. (2018) Äldre uppgifter om Björkö. Undersökningar därstädes före Stolpe. In: A-S. Gräslund, C. Hedenstierna-Jonson, J. P. Lamm and R. Edberg (eds), *Fynden från 'Svarta jorden' på Björkö : från Hjalmar Stolpes undersökningar*. Aun 49. Uppsala: Hjalmar Stolpe-samfundet i samarbete med Institutionen för arkeologi och antik historia vid Uppsala universitet, 55-81.

Halphen, L. and Poupardin, R. (eds) (1913) *Chronique des comtes d'Anjou et des seigneurs d'Amboise*. Paris: Auguste Picard.

Halsall, G. (2010) Commentary one: archaeology and its discontents. In: G. Halsall (ed.), *Cemeteries and society in Merovingian Gaul: selected studies in history and archaeology, 1992-2009*. Leiden: Brill, 49-88.

Hammond, B. (2013) *British artefacts: volume 3 - late Saxon, late Viking and Norman*. Witham: Greenlight Publishing.

Hansen, G., Ashby, S. P. and Baug, I. (2015) Everyday products in the Middle Ages: crafts, consumption and the individual in northern Europe c. AD 800-1600: an introduction. In: G. Hansen, S. P. Ashby and I. Baug (eds), *Everyday products in the Middle Ages: crafts, consumption and the individual*. Oxford: Oxbow Books, 1-10.

Hartshorne, A. (1891) The Sword Belts of the Middle Ages. *Archaeological Journal*, 48(1), 320-340.

*Hartvig, A. (2016) Starup Østertoft – a Landing Place and Settlement with a Church from the 11th–12th Centuries. In: L. Holmquist, S. Kalmring and C. Hedenstierna-Jonson (eds), *New aspects on Viking-age urbanism c. AD* 750-1100: *Proceedings of the international symposium at the Swedish History Museum, April 17-20th 2013*. Stockholm: Archaeological Research Laboratory, Stockholm University, 173-182. *Harvey, P. D. A. and McGuinness, A. (1996) *A guide to British medieval seals*. London: British Library and Public Record Office.

Harvey, S. (2019) Horses, knights and tactics. Anglo-Norman Studies, 41, 1-22.

*Harvey, Y. (1975) The small finds: catalogue. In: C. Platt and R. Coleman-Smith, *Excavations in medieval Southampton 1953-1969. Volume 2. The Finds*. Leicester: Leicester University Press, 254-293.

Hatcher, J. and Bailey, M. (2001) *Modelling the Middle Ages: the history and theory of England's economic development*. Oxford: Oxford University Press.

*Hattatt, R. (1987) Brooches of Antiquity: a third selection of brooches from the author's collection. Oxford: Oxbow Books.

*Hattatt, R. (1989) Ancient brooches and other artefacts: a fourth selection of brooches together with some other antiquities from the author. Oxford: Oxbow Books.

*Hattatt, R. (2000) *A Visual Catalogue of Richard Hattatt's Ancient Brooches*. Oxford: Oxbow Books.

*Hatton, C., Lewis, C. L., Stenton, D. M. P. and Stenton, F. M. (1950) *Sir Christopher Hatton's book of seals: to which is appended a select list of the works of Frank Merry Stenton*. Publications of the Northamptonshire Record Society 15. Oxford: Clarendon Press.

Haussherr, R. (ed.) (1977) *Die Zeit der Staufer. Geschichte-Kunst-Kultur*, 5 volumes. Stuttgart: Württembergischen Landesmuseums Stuttgart.

*Hawkes, S. C. and Dunning, G. C. (1961) Soldiers and settlers, fourth to fifth century: with a catalogue of animal-ornamented buckles and related belt-fittings. *Medieval Archaeology*, 5(1), 1-70.

Hawthorne, J. G. and Smith, C. S. (1979) *Theophilus: On divers arts; the foremost medieval treatise on painting, glassmaking, and metalwork*. New York: Dover Publications.

*Hayden, A. (2000) West Side story: archaeological excavations at Cornmarket and Bridge Street Upper, Dublin – a summary report. In: S. Duffy (ed.), *Medieval Dublin I*. Dublin: Four Court Press, 84-116.

Hayeur Smith, M. (2003) Dressing the dead: gender, identity and adornment in Viking-Age Iceland. In: S. Lewis-Simpson, *Vinland revisited, the Norse at the turn of the first millennium [Viking Millennium International Symposium, Sept. 15-24 2000, Newfoundland and Labrador]*. Newfoundland: Historic Sites of Newfoundland and Labrador Inc., 227-240.

*Hayward Trevarthen, C. (2001) Wiveliscombe, Somerset. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 45, 245-246 (236-251).

Heighway, C. M. (2007) Excavations at Kings Stanley 1961-1981: an account of excavations near St George's Church. Unpublished report. Available at: https://www.academia.edu/5057468/Excavations at Kings Stanley 1961 1981 [accessed August 2017].

*Heighway, C. M. and Bryant, R. (1999) *The golden minster: the Anglo-Saxon minster and later medieval priory of St Oswald at Gloucester*, CBA Research Report 117. York: Council for British Archaeology.

*Heimer, O. (2009) Att bygga aristokrati - spår efter en aristokratisk livsstil på det tidigmedeltida godset i Lockarp. In: C. Hadevik and M. Steineke (eds), *Tematisk rapportering av Citytunnelprojektet. Rapport över arkeologisk slutundersökning*. Malmö: Malmö Kulturmiljö, 331-386. Heindel, I. (1990) *Riemen und Gürtelteile in westslawischen Siedlungsgebiet*. Beiträge zur Ur- und Frühgeschichte der Bezirke Rostock, Schwerin und Neubrandenburg 23. Berlin: DVW.

*Heine, H.-W. (1991) Burgen der salischen Zeit in Niedersachsen - Ein Überblick. In: H.
W. Böhme (ed.), Burgen der Salierzeit. Teil 1: In den nördlichen Landschaften des
Reiches. Römisch-Germanisches Zentralmuseum Mainz. Forschungsinstitut für Vorund Frühgeschichte 25-26. Sigmaringen: Jan Thorbecke Verlag, 9-84.

*Hejna, A. (1983) Příspěvek ke studiu malých opevněných sídel doby přemyslovské v Čechách. *Památky archeologickél*, 74, 366-436.

Hendriksen, M. (2004) Afgedamd en Afgedankt. Metaalvondsten uit Twee
Middeleeuwse Nederzettingen in Leidsche Rijn, Utrecht. Utrechtse Materiaalcatalogus
1. Utrecht: Gemeente Utrecht.

*Hendriksen, M. (2009) Metalen voorwerpen en munten. In: M. F. M. Duurland, *Middeleeuwse bewoningssporen op het binnenterrein van de Letterenbibliotheek, Definitief onderzoek aan de Wittevrouwenstraat 7-11, gemeente Utrecht.* Basisrapportage Archeologie 36. Utrecht: Erfgoed gemeente Utrecht, 55-62.

*Hendriksen, M. (2011) De metalen voorwerpen. In: J. S. van der Kamp, *Boeren langs de Hogeweide: Een (post)middeleeuws boerderijlint op kapittelgrondgebied in Leidsche Rijn*. Basisrapportage Archeologie 20. Utrecht: Erfgoed gemeente Utrecht, 195-247.

Hendriksen, M. (2017) Metaal. In: C. W. M. den Hartog, Sportpark Terweide 5, LR84:
Definitief Archeologisch Onderzoek aan de Hogeweide in Leidsche Rijn Centrum.
Basisrapportage Archeologie 106. Utrecht: Erfgoed gemeente Utrecht, 81-97.

*Henig, M. and Woods, H. (1988) Small finds from 1976-78. In: D. Sherlock and H. Woods, *St. Augustine's Abbey: report on excavations, 1960-78*. Monograph Series of the Kent Archaeological Society 4. Maidstone: Kent Archaeological Society, 201-231.

*Henry, R. (2018) 'Highlights from the Portable Antiquities Scheme (PAS) in Wiltshire in 2017', *Wiltshire Archaeological and Natural History Magazine*, 111, 358-365.

*Herepath, N. (2003) Austerson, Cheshire. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 47, 204 (202-217).

*Herrmann, J. and Donat, P. (eds) (1973) *Corpus archäologischer Quellen zur Frühgeschichte auf dem Gebiet der Deutschen Demokratischen Republik, 7. bis 12. Jahrhundert. Lieferung. 1. Bezirke Rostock (Westteil), Schwerin und Magdeburg.* Berlin: Akademie-Verlag.

*Herrnbrodt, A. (1958) *Der Husterknupp. Eine Burganlage des frühen Mittelalters*. Cologne: Böhlau.

*Heslop, T. A. (1984) Seals. In: G. Zarnecki *et al.* (eds), *English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]*. London: Weidenfeld and Nicolson, 298-319.

*Heslop, T. A. (1986) Seals as evidence for metalworking in the England in the later twelfth century. In: S. Macready and F. H. Thompson (eds), *Art and patronage in the English Romanesque*. Occasional Paper (New Series) 8. London: Society of Antiquaries of London, 50-60.

Heslop, T. A. and Ashley, S. (2013) A fragment of a gilt-bronze buckle frame from Soham, Cambridgeshire, and the Dune Hoard belt buckle in Stockholm. *The Antiquaries Journal*, 93, 217-223.

*Hewitt, J. (1860) Ancient armour and weapons in Europe: from the iron period of the northern nations to the end of the seventeenth century. Oxford: J. Henry and J. Parker.

Heyworth. M. (2008) [1991] Metallurgical analysis of the dress accessories. In: G. Egan and F. Pritchard, *Dress accessories* c *1150* – c *1450*. Medieval Finds from Excavations in

London 3, New edition (2002), reprinted 2008. First published 1991, London: H.M.S.O.. Woodbridge: Boydell Press, 387-395.

*Hicks, C. (1993) Animals in early medieval art. Edinburgh: Edinburgh University Press.

Hicks, D. (2010) The Material-Cultural Turn: Event and Effect. In: D. Hicks and M. C. Beaudry (eds), *The Oxford Handbook of Material Culture Studies*. Oxford: Oxford University Press, 25-98.

*Higgett, J. (1987) The Jedburgh comb. In: N. Stratford (ed.), *Romanesque and Gothic:* essays for George Zarnecki. Woodbridge: Boydell Press, 119-127.

*Higgett, J. (1995) Additional items of ivory and horn: the comb, pendant and buckle. In: J. H. Lewis and G. J. Ewart, *Jedburgh Abbey: the archaeology and architecture of a Border abbey*. Society of Antiquaries of Scotland Monograph Series 10. Stroud: Alan Sutton Publishing Limited, 83-84.

*Higham, R. and Barker, P. (1992) *Timber castles*. London: Batsford.

Higham, R. and Rouillard, M. (2000) Metalwork and other material from the bailey excavations at Hen Domen, 1960-1990. In: R. Higham and P. Barker, *Hen Domen, Montgomery: a timber castle on the English-Welsh border*. Exeter: University of Exeter Press, 98-110.

*Hilberg, V. (2007) Haithabu im 11. Jahrhundert. Auf der Suche nach dem Niedergang eines dänischen emporiums der Wikingerzeit. In: M. Posselt, B. Zickgraf and C. Dobiat (eds), *Geophysik und Ausgrabung. Einsatz und Auswertung zerstörungsfreier Prospektion in der Archäologie. Internationale Archäologie*. Naturwissenschaft und Technologie 6. Rahden: Verlag Marie Leidorf GmbH, 187-203.

Hilberg, V. (2018) Handel und Rohstofftransfer nach Skandinavien und ins Ostseegebiet. Haithabu/Schleswig und der Kontinent im 11. Jahrhundert. In: M. Wemhoff and M. M. Rind (eds), *Bewegte Zeiten - Archäologie in Deutschland*. Berlin: Michael Imhof Verlag, 217-227.

*Hill, J. and Woodger, A. (1999) *Excavations at 72-75 Cheapside, 83-93 Queen Street, City of London*. MoLAS Archaeology Studies Series 2. London: Museum of London Archaeology Service.

*Hilton, R. H. and Rahtz, P. A. (1967) Upton, Gloucestershire, 1959-1964. *Transactions* of the Bristol and Gloucestershire Archaeological Society, 85, 70-146.

Hinton, D. A. (1974) *A catalogue of the Anglo-Saxon ornamental metalwork 700-1100 in the department of antiquities, Ashmolean Museum*. Oxford: Clarendon Press.

Hinton, D. A. (1975) Late Anglo-Saxon metalwork: an assessment. *Anglo-Saxon England*, 4, 171-180.

Hinton, D. A. (1977) Objects of non-ferrous metal. In: B. Cunliffe, *Excavations at Portchester Castle. Volume 3: medieval, the outer bailey and its defences*. Society of Antiquaries of London Research Report 34. London: Society of Antiquaries of London, 204-207.

*Hinton, D. A. (1990a) Chapes. In: M. Biddle (ed.), *Object and economy in medieval Winchester.* Winchester Studies 7.ii. Oxford: Clarendon Press, 1082-1083.

Hinton, D. A. (1990b) Fittings from reliquaries and other fine caskets, i. gold, silver, lead or pewter, and copper-alloy fittings. In: M. Biddle (ed.), *Object and economy in medieval Winchester*. Winchester Studies 7.ii. Oxford: Clarendon Press, 762-780.

Hinton, D. A. (1990c) Buckles and buckle-plates. In: M. Biddle (ed.), *Object and economy in medieval Winchester*. Winchester Studies 7.ii. Oxford: Clarendon Press, 506-526.

Hinton, D. A. (1990d) Split-end strap-ends. In: M. Biddle (ed.), *Object and economy in medieval Winchester*. Winchester Studies 7.ii. Oxford: Clarendon Press, 500-502.

*Hinton, D. A. (1990e) Folded-sheet strap-ends. In: M. Biddle (ed.), *Object and economy in medieval Winchester.* Winchester Studies 7.ii. Oxford: Clarendon Press, 505-506.

*Hinton, D. A. (1990f) Unidentified copper-alloy objects. In: M. Biddle (ed.), *Object and economy in medieval Winchester*. Winchester Studies 7.ii. Oxford: Clarendon Press, 1115-1126.

Hinton, D. A. (1990g) Harness pendants and swivels. In: M. Biddle (ed.), *Object and economy in medieval Winchester*. Winchester Studies 7.ii. Oxford: Clarendon Press, 1047-1053.

*Hinton, D. A. (1990h) Relief-decorated strap-ends. In: M. Biddle (ed.), *Object and economy in medieval Winchester*. Winchester Studies 7.ii. Oxford: Clarendon Press, 494-500.

*Hinton, D. A. (1990i) Belt-hasps and other belt-fittings. In: M. Biddle (ed.), *Object and economy in medieval Winchester*. Winchester Studies 7.ii. Oxford: Clarendon Press, 539-542.

Hinton, D. A. (1999) 'Closing' and the later Middle Ages. *Medieval Archaeology*, 43, 172-182.

*Hinton, D. A. (2003) A mid Saxon disc-brooch from Upavon. *Wiltshire Archaeological and Natural History Magazine*, 96, 218-219.

Hinton, D. A. (2005) *Gold and gilt, pots and pins: possessions and people in medieval Britain.* Oxford: Oxford University Press.

Hinton, D. A. (2008) *The Alfred Jewel: and other late Anglo-Saxon decorated metalwork*. Oxford: Ashmolean Museum.

Hinton, D. A. (2009) Medieval identity issues. In: R. Gilchrist and A. J. Reynolds (eds), *Reflections: 50 years of medieval archaeology, 1957-2007*. Leeds: Maney Publishing, 453-463.

Hinton, D. A. (2011a) Raw materials: sources and demand. In: D. A. Hinton, S.Crawford and H. Hamerow (eds), *The Oxford handbook of Anglo-Saxon archaeology*.Oxford: Oxford University Press, 423-439.

Hinton, D. A. (2011b) Archaeology and post-Conquest England. In: A. Galloway (ed.), *The Cambridge companion to Medieval English culture*. Cambridge: Cambridge University Press, 66-84.

Hinton, D. A. (2013) Demography: from Domesday and beyond. *Journal of Medieval History*, 39(2), 146-178.

*Hinton, D. A. and Welch, M. (1976) Iron and bronze. In: B. Cunliffe, *Excavations at Portchester Castle. Volume 2: Saxon*. Society of Antiquaries of London Research Report
33. London: Society of Antiquaries of London, 195-218.

*Hoffmann, K. and Deuchler, F. (eds) (1970) *The Year 1200*. New York: Metropolitan Museum of Art.

*Holden, E. W. (1967) The excavation of a motte at Lodsbridge Mill, Lodsworth. *Sussex Archaeological Collections*, 105, 103-126.

Holt, R. (2010) The urban transformation of England. *Anglo-Norman Studies*, 32, 57-78.

*Holwerda, J. H. (1917) De Hunenborg in Twente. Verslagen en medede(e)lingen van de Vereeniging tot beoefening van Overijsselsch regt en Geschiedenis, 33, 1-33.

Hopkinson, N. (2020) The Cross-Channel Interests of the Baronage of the Pays de Caux and Cotentin, 1189-1204. Unpublished PhD thesis. Cambridge: University of Cambridge.

Howsam, C. L. (2016) Book fastenings and furnishings: an archaeology of late medieval books. Unpublished PhD thesis. Sheffield: University of Sheffield.

Huddle, J. (1999) Small finds. In: G. Trimble (ed.), *An archaeological excavation and watching brief at Fye Bridge/Fishergate, Norwich*. NAU Archaeology unpublished report 1143. Norwich: NAU Archaeology, 10-13.

*Huddle, J. (2005) Copper alloy objects. In: A. Shelley, *Dragon Hall, King Street, Norwich: excavation and survey of a late medieval merchant's trading complex*. East Anglian Archaeology 112. Norwich: Norfolk and Norwich Heritage Trust, 114-117.

*Huddle, J. (2006) Iron objects. In: H. Wallis, *Excavations on the site of Norwich Cathedral Refectory 2001–3*. East Anglian Archaeology 116. Dereham: Norfolk Museums and Archaeology Service, 53-55.

Huddle, J. (2007) Side link. In: P. A. Emery, *Norwich Greyfriars: pre-Conquest town and medieval friary*. East Anglian Archaeology 120. Dereham: Norfolk Museums and Archaeology Service, 202-203.

*Huggins, P. J. (1988) Excavations on the north side of Sun Street, Waltham Abbey. *Essex Archaeology and History*, 19, 117-214.

*Hume, A. (1863) Ancient Meols: some account of the antiquities near Dove Point on the sea coast of Cheshire. London: John Russell Smith. *Hummel, A. (2011) Der Kapellenberg in Mellingen bei Weimar - Ergebnisse der archäologischen Untersuchung im Turmbereich. *Neue Ausgrabungen und Funde in Thüringen*, 6, 157-168.

*Hunt, G. (2010) Along the eastern defences: excavations at 8-14 Cooper's Row and 1 America Square, City of London. *Transactions of the London and Middlesex Archaeological Society*, 61, 41-80.

Hurard, S. (2017) Archéologie des élites rurales ordinaires dans le Bassin parisien (iii^e-xviii^e siècle). Unpublished PhD thesis. Paris: Université de Paris 1 Panthéon-Sorbonne.

*Hurst, J. G. (1961) The kitchen area of Northolt Manor, Middlesex. *Medieval Archaeology*, 5, 211-299.

Hyland, A. (1994) *The Medieval Warhorse: From Byzantium to the Crusades*. Stroud: Sutton.

Hyland, A. (1999) The horse in the Middle Ages. Stroud: Sutton.

*Hylton, T. (2010) Other finds. In: A. Chapman, West Cotton, Raunds: a study of medieval settlement dynamics AD 450-1450. Excavation of a deserted medieval hamlet in Northamptonshire, 1985-89. Oxford: Oxbow Books, 335-426.

*Hylton, T. and Meadows, I. (2008) Other finds. In: J. Brown, *Archaeological evaluation at the British Red Cross Centre, Castle Moat Road, Huntingdon, Cambridgeshire, July 2008*. Northamptonshire Archaeology unpublished report (doi:10.5284/1018825), 15.

*Høilund Nielsen, K. (2014) Key issues concerning 'central places'. In: E. Stidsing, K. Høilund Nielsen and R. Fiedel (eds), *Wealth and complexity. Economically specialised sites in late Iron Age Denmark*. East Jutland Museum Publications 1. Aarhus: Østjyllands Museum and Aarhus University Press, 11-50. IJssenagger, N. L. (2017) Central because liminal: Frisia in a Viking Age North Sea world. Unpublished PhD thesis. Groningen: Rijksuniversiteit Groningen.

Ingvardson, G. T. and Nielsen, F. O. S. (2015) 100 Viking Age hoards of Bornholm: Status, challenges and perspectives. In: L. Larsson, F. Ekengren, B. Helgesson and B. Söderberg (eds), *Small Things Wide Horizons: Studies in honour of Birgitta Hårdh*. Oxford: Archaeopress, 27-34.

Insley, C. (2020) Why 1016 Matters; or, The Politics of Memory and Identity in Cnut's Kingdom. In: L. Ashe and E. J. Ward (eds), *Conquests in eleventh-century England: 1016, 1066*. Woodbridge: Boydell Press, 3-22.

Isberg, A. (2019) Dress brooches and identities - a comparative study of collective identities and dress brooches in early medieval urban and rural sites in South West Scania. Unpublished Masters thesis. Lund: Lund University.

Jackson, S. (1995) Finds of stone, jet, glass, iron, copper alloy, gold, pewter, bone and leather. In: D. H. Heslop, Excavation within the church at the Augustinian priory of Gisborough, Cleveland 1985-6. *Yorkshire Archaeological Journal*, 67, 93-101 (51-126).

*Jannet-Vallat, M. (ed.) (1990) Il était une fois la Côte-d'Or : 20 ans de recherches archéologiques. Paris: Editions Errance.

*Jantzen, C. (1998) Genstande af metal. In: J. Hjermind, M. Iversen and H. K. Kristensen (eds), *Viborg Søndersø 1000-1300 : Byarkæologiske undersøgelser 1981 og 1984-85*. Jysk Arkæologisk Selskabs Skrifter 34. Højbjerg : Aarhus Universitetsforlag, 185-213.

*Jecklin-Tischhauser, U., Frascoli, L. and Janosa, M. (2012) *Die Burg Marmels. Eine bündnerische Balmburg im Spiegel von Archäologie und Geschichte*. Schweizerische Beiträge zur Kulturgeschichte und Archäologie 40. Basel: Schweizerischer Burgenverein, 81-165.

Jervis, B. (2012) Cuisine and urban identities in medieval England: objects, foodstuffs and urban life in thirteenth- and fourteenth-century Hampshire. *Archaeological Journal*, 169, 453-479.

Jervis, B. (2013) Conquest, ceramics, continuity and change. Beyond representational approaches to continuity and change in early medieval England: a case study from Anglo-Norman Southampton. *Early Medieval Europe*, 21(4), 455-487.

Jervis, B., Whelan, F. and Livarda, A. (2017) Cuisine and conquest: interdisciplinary perspectives on food, continuity and change in 11th-century England and beyond. In: D. M. Hadley and C. C. Dyer (eds), *The archaeology of the 11th century: continuities and transformations*. Society for Medieval Archaeology Monograph 38. Abingdon: Routledge, 244-262.

Jessop, O. (1996) A new typology for the study of medieval arrowheads. *Medieval Archaeology*, 40, 192-205.

*Jezler, P. (2018) Das Reiterrelief am Zürcher Grossmünster – Ausdruck der zähringischen Herrschaftsfestigung. *Zeitschrift des Schweizerischen Burgenvereins*, 23, 143-150.

Jones, C., Eyre-Morgan, G., Palmer, S. and Palmer, N. (1997) Excavations in the outer enclosure of Boteler's Castle, Oversley, Alcester 1992-1993. *Transactions of the Birmingham and Warwickshire Archaeological Society*, 101 (entire volume).

Jones, R. W. (2010) *Bloodied banners: martial display on the medieval battlefield*. Woodbridge: Boydell Press.

Jones, S. (1997) *The archaeology of ethnicity: constructing identities in the past and present*. London: Routledge.

Jope, E. M. (1963) The regional cultures of medieval Britain. In: I. L. L. Foster and L. Alcock (eds), *Culture and environment, essays in honour of Sir Cyril Fox*. London: Routledge and Kegan Paul, 327-350.

Jope, E. M. and Threlfall, R. I. (1959) The twelfth-century castle at Ascot Doilly, Oxfordshire: its history and excavation. *The Antiquaries Journal*, 39, 219-273.

*Kauffmann, C. M. (1975) *Romanesque manuscripts, 1066-1190*. Survey of manuscripts illuminated in the British Isles 3. London: Harvey Miller.

*Kauffmann, M. (1984a) 79. Psalter: the St Louis Psalter. In: G. Zarnecki, J. Holt and T. Holland (eds), *English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]*. London: Weidenfeld and Nicolson, 129.

*Kauffmann, M. (1984b) 33. Florence and John of Worcester, Chronicle. In: G. Zarnecki, J. Holt and T. Holland (eds), *English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]*. London: Weidenfeld and Nicolson, 102-103.

Kauffmann, M. (1984c) 23. Calendar: St Isidore, Homilies etc. In: G. Zarnecki, J. Holt and T. Holland (eds), *English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]*. London: Weidenfeld and Nicolson, 98.

Keefer, S. L. (1996) Hwær Cwom Mearh? The horse in Anglo-Saxon England. *Journal* of Medieval History, 22(2), 115-134.

*Keily, J. (2015) Medieval accessioned finds. In: A. Mackinder, *Roman and medieval revetments on the Thames waterfront: excavations at Riverbank House, City of London, 2006-9*. MOLA Archaeology Studies Series 33. London: Museum of London Archaeology, 111-119.

Kelleher, R. M. (2013) Coins, monetisation and re-use in medieval England and Wales: new interpretations made possible by the Portable Antiquities Scheme. Unpublished PhD thesis. Durham: Durham University.

Kelleher, R. M. (2018) From the Commercial Revolution to the Black Death (c.1150– 1350). In: R. Naismith (ed.), *Money and coinage in the Middle Ages*. Leiden: Brill, 122-150.

*Kelly, D. B. (1977) Archaeological notes from Maidstone Museum. *Archaeologia Cantiana*, 93, 207-212.

*Kelly, D. B. (1985) Archaeological notes from Maidstone Museum. Archaeologia Cantiana, 102, 266-273.

*Kelly, D. B. (1987) Archaeological notes from Maidstone Museum. Archaeologia Cantiana, 104, 350-367.

*Kelly, D. B. (1988) Archaeological notes from Maidstone Museum. Archaeologia Cantiana, 105, 297-320.

*Kelly, D. B. (1989) Archaeological notes from Maidstone Museum. Archaeologia Cantiana, 107, 395-409.

*Kelly, D. B. (1990) Archaeological notes from Maidstone Museum. Archaeologia Cantiana, 108, 281-294.

*Kelly, D. B. (1991) Archaeological notes from Maidstone Museum. Archaeologia Cantiana, 109, 338-349.

Kelly, D. B. (1992) Archaeological notes from Maidstone Museum. *Archaeologia Cantiana*, 110, 404-415.

*Kendrick, T. D. (1949) Late Saxon and Viking art. London: Methuen & Co. Ltd.

*Kenyon, K. M. (1948) *Excavations at the Jewry Wall site, Leicester*. London: Society of Antiquaries of London.

Kershaw, J. F. (2008) The distribution of the 'Winchester' style in late Saxon England: metalwork finds from the Danelaw. *Anglo-Saxon Studies in Archaeology and History*, 15, 254-269.

Kershaw, J. F. (2009) Culture and gender in the Danelaw: Scandinavian and Anglo-Scandinavian brooches. *Viking and Medieval Scandinavia*, 5, 295-325.

Kershaw, J. F. (2010) Viking-Age Scandinavian art styles and their appearance in the British Isles. Part 2: Late Viking-Age art styles. Finds Research Group Datasheet 43. Finds Research Group.

Kershaw, J. F. (2013) *Viking identities: Scandinavian jewellery in England*. Oxford: Oxford University Press.

*Kershaw, J. F. (2015) Scandinavian-style metalwork from southern England: new light on the 'First Viking Age' in Wessex. In: R. Lavelle and S. Roffey (eds), *Danes in Wessex: the Scandinavian impact on southern England, c. 800-c. 1100*. Oxford: Oxbow Books, 87-108.

Kershaw, J. F. and Naismith, R. (2013) A new late Anglo-Saxon seal matrix. *Anglo-Saxon England*, 42, 291-298.

Kjeld Jensen, C. and Høilund Nielsen, K. (1997) Burial data and correspondence analysis. In: C. Kjeld Jensen and K. Høilund Nielsen (eds), *Burial and society, the chronological and social analysis of archaeological burial data*. Aarhus: Aarhus University Press, 29-62. Kluge-Pinsker, A. (1992a) Alltagsgerät aus der Niederungsburg bei Haus Meer am linken Niederrhein. In: H. W. Böhme *et al., Das Reich der Salier 1024-1125: Katalog zur Ausstellung des Landes Rheinland-Pfalz [Ausstellung im Historischen Museum der Pfalz, Speyer, vom 23. März bis 21. Juni 1992*]. Sigmaringen: Jan Thorbecke Verlag, 33-38.

*Kluge-Pinsker, A. (1992b) Schachspiele auf burgen. In: H. W. Böhme *et al., Das Reich der Salier 1024-1125: Katalog zur Ausstellung des Landes Rheinland-Pfalz [Ausstellung im Historischen Museum der Pfalz, Speyer, vom 23. März bis 21. Juni 1992].* Sigmaringen: Jan Thorbecke Verlag, 76-81.

*Kluge-Pinsker, A. (1992c) Alltägliche gebrauchgegenstände-vergleiche zu der funden aus Haus Meer und Charavines. In: H. W. Böhme *et al., Das Reich der Salier 1024-1125:* Katalog zur Ausstellung des Landes Rheinland-Pfalz [Ausstellung im Historischen Museum der Pfalz, Speyer, vom 23. März bis 21. Juni 1992]. Sigmaringen: Jan Thorbecke Verlag, 42-45.

Kluge-Pinsker, A. (1993) Verlorene Bücher?: zum Fund eines vergoldeten Bronzebeschlags in der Wiesbadener Innenstadt. In: B. Pinsker (ed.), 200,000 Jahre Kultur und Geschichte in Nassau. Wiesbaden: Verl. des Vereins für Nassauische Altertumskunde und Geschichtsforschung, 131-149.

*Knocker, G. M. (1957) Excavations at Framlingham Castle, 1954. *Proceedings of the Suffolk Institute of Archaeology and History*, 27, 65-88.

*Knoll-Heitz, F. (1985) Urstein: die grösste Burg von Herisau. Appenzellische Jahrbücher, 113, 3-143.

Knorr, H. (1938) Die slawischen Messerscheidenbeschläge. Mannus, 30, 479-545.

*Kotzur, H.-J. (ed.) (2004) Die Kreuzzüge: Kein Krieg ist heilig. Mainz: von Zabern.

Krabath, S. (2001) *Die hoch- und spätmittelalterlichen Buntmetallfunde nördlich der Alpen*, 2 volumes. Rahden: Verlag Marie Leidorf GmbH.

Krauskopf, C. (2005) *Tric-Trac, Trense, Treichel. Untersuchungen zur Sachkultur des Adels im 13. und 14. Jahrhundert*. Veröffentlichungen der Deutschen
Burgenvereinigung: Reihe A, Forschungen 11. Braubach: Deutsche Burgenvereinigung.

Krauskopf, C. (2006) Just noble things?: studies on the material culture of 13th and 14th century nobility. In: P. Ettel, A.-M. Flambard-Héricher and T. E. McNeill (eds), *Chateau Gaillard 22: Château et peuplement [Colloque international de Voiron, 27 août-4 septembre 2004]*. Caen: Publications du CRAHAM, 195-204.

*Labaune, Y. (2000) Le mobilier métallique gallo-romain d'Autun-Augustodunum. Bilan et perspectives à partir des collections anciennes conservées au Musée Rolin à Autun, 3 volumes. Unpublished Masters thesis. Dijon: Université de Bourgogne.

*Labaune-Jean, F. (2017) Étude des autres mobiliers. In: L. Beuchet (ed.), Rennes (35). *Place Saint-Germain : naissance et évolution d'un quartier de Rennes de l'Antiquité tardive à 1944.* Unpublished site report. Cesson Sévigné: Inrap Grand-Ouest, 727-833.

*Laffont, P.-Y. (2009) Une rocca des Xe-XIIe siècles en moyenne montagne. Premier bilan de cinq années d'enquête sur le château du Mézenc (Haute-Loire). In: M. de Framond, P.-Y. Laffont and B. Sanial (eds), *Châteaux du Moyen Âge: de l'étude à la valorisation (actes du colloque du Puy-en-Velay, 2004)*. Le Puy: Société académique du Puy-en-Velay, 57-80.

Lagane, C. (2010) Les éperons à pointes en Europe non méditerranéenne du VIe au XIIe siècle. Unpublished Masters thesis. Poitiers: University of Poitiers.

Laing, L. (1975) Picts, Saxons and Celtic metalwork. *Proceedings of the Society of Antiquaries of Scotland*, 105, 189-199.

Langdon, J. (1986) *Horses, Oxen and Technological Innovation: The Use of Draught Animals in English Farming from 1066 to 1500*. Cambridge: Cambridge University Press.

Langton, J. and Jones, G. (2010) *Forests and chases of medieval England and Wales, c.1000 to c.1500*. Oxford: St John's College Research Centre.

*Lasko, P. (1984) 206. Altar cross. In: G. Zarnecki, J. Holt and T. Holland (eds), *English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]*. London: Weidenfeld and Nicolson, 224.

Lassure, J.-M. (1998) *La civilisation matérielle de la Gascogne aux XIIe et XIIIe siècles: le mobilier du site archéologique de Corné à l'Isle-Bouzon (Gers)*. Toulouse: Editions Médiriennes.

*Lau, D., Grunert, N., Schlüter, S., Unland, S., Eggert, T. and Auf-Derhaar W. (2013) Vorbericht zu den Ausgrabungen eines mittelalterlichen bis neuzeitlichen Herrenhofes in Bissendorf, Gde. Bissendorf, Ldkr. Osnabrück, 2012. *Nachrichten aus Niedersachsen Urgeschicte*, 82, 201-221.

*Lauridsen, J. G. (2014) The metal detector site of Sig Syd. In: E. Stidsing, K. Høilund Nielsen and R. Fiedel (eds), *Wealth and complexity. Economically specialised sites in late Iron Age Denmark*. East Jutland Museum Publications 1. Aarhus: Østjyllands Museum and Aarhus University Press, 91-98.

Lavelle, R. (2017) Cnut: the North Sea king. London: Allen Lane.

*Leach, P. (1984) *The archaeology of Taunton*. Western Archaeological Trust Monograph 8. Gloucester: Western Archaeological Trust. *Leahy, K. (2006) Anglo-Saxon coin brooches. In: B. Cook and G. Williams (eds), Coinage and History in the North Sea World c AD 500–1250; essays in honour of Marion Archibald. The Northern World 19. Leiden: Brill, 267-286.

Leahy, K. (2007) The Anglo-Saxon kingdom of Lindsey. Stroud: The History Press.

*Leahy, K. and Coutts, C. M. (1987) *The lost kingdom: the search for Anglo-Saxon Lindsey*. Scunthorpe: Scunthorpe Borough Museum and Art Gallery.

Leahy, K. and Lewis, M. J. (2018) *The British Museum's PAS finds identified: an illustrated guide to metal detecting and archaeological finds*. Essex: Greenlight Publishing.

Leahy, K. and Paterson, C. (2001) New light on the Viking presence in Lincolnshire: the artefactual evidence. In: J. Graham-Campbell, R. Hall, J. Jesch and D. N. Parsons (eds), *Vikings and the Danelaw: select papers from the proceedings of the Thirteenth Viking Congress, Nottingham and York, 21st-30th August 1997*. Oxford: Oxbow Books, 181-202.

Lefebvre des Noëttes, R. (1912) La Tapisserie de Bayeux datée par le harnachement des chevaux et l'équipement des cavaliers. *Bulletin monumental*, 76, 211-241.

Legner, A. (ed.) (1972) Rhein und Mass: Kunst und Kultur, 800-1400. Volume 1 [Eine Ausstellung des Schnütgen-Museums der Stadt Köln und der belgischen Ministerien für französische und niederländische Kultur]. Köln: Schnütgen-Museum Köln.

Legner, A. (1985) Ornamenta Ecclesiae: Kunst Und Kunstler Der Romanik [Katalog Zur Ausstellung des Schnütgen-Museums in Der Josef-Haubrich-Kunsthalle], 3 volumes. Köln: Schnütgen-Museum Köln.

Legros, V. (2010) Le mobilier métallique. In: F. Malrain, S. Bauvais, B. Henon, V. Legros, M. Saurel and V. Pissot, Le site artisanal de la Tène finale et du gallo-romain de

Ronchères (Aisne) "Le Bois de la Forge". *Revue Archéologique de Picardie*, 1-2, 90-101 (41-166).

Legros, V. (2012) Le mobilier métallique de Boves (1996-2000). *Revue Archéologique de Picardie*, 1-2, 91-105.

Legros, V. (2015a) Archéologie de l'objet métallique aux époques médiévale et moderne en Picardie. Approaches typologique et fonctionnelle. *Revue Archéologique de Picardie*, 1-2 (entire volume).

*Legros, V. (2015b) Catalogue mobilier métallique. In: C. Roms, *Fossé monumental et structures domestiques en liaison avec la château de Nogent : Nogent-sur-Seine, Aube, llot Saint-Epoing*. Unpublished site report. Metz: Inrap Grand-Est Nord, 61-67.

Leins, I. (2012) Numismatic data reconsidered: coin distributions and interpretation in studies of late Iron Age Britain. Unpublished PhD thesis. Newcastle: Newcastle University.

Le Jan, R. (2000) Frankish giving of arms and rituals of power: Continuity and change in the Carolingian period. In: F. Theuws and J. L. Nelson (eds), *Rituals of Power: From Late Antiquity to the Early Middle Ages*. Leiden: Brill, 281-309.

Leonard, A. (2015) Nested negotiations: landscape and portable material culture in Viking-Age England. Unpublished PhD thesis. York: University of York.

*Lesnes, E. and Poisson, J. M. (2013) *Calathamet, archéologie et histoire d'un château normand en Sicile*. Collection de l'École française de Rome 473. Rome: Ecole Française de Rome.

*Lethbridge, T. C. and Tebbutt, C. F. (1952) Excavations on the castle site known as 'The Hillings' at Eaton Socon, Bedfordshire. *Proceedings of the Cambridge Antiquarian Society*, 45, 48-60. Lewis, H. (2019) *Pattern and process in the material culture of Anglo-Saxon non-elite rural settlements*. BAR British Series 649. Oxford: BAR Publishing.

Lewis, J. M. (1993) Excavations at Loughor Castle, West Glamorgan, 1969-73. *Archaeologia Cambrensis*, 142, 99-181.

Lewis, M. J. (2005) *The archaeological authority of the Bayeux Tapestry*. BAR British Series 404. Oxford: Archaeopress.

Lewis, M. J. (2007a) Identity and status in the Bayeux Tapestry: the iconographic and artifactual evidence. *Anglo-Norman Studies*, 29, 100-120.

Lewis, M. J. (2007b) A new date for 'Class A, Type 11A' stirrup-strap mounts, and some observations on their distribution. *Medieval Archaeology*, 51, 178-184.

Lewis, M. J. (2008) The real world of the Bayeux Tapestry. Stroud: The History Press.

Lewis, M. J. (2010) Questioning the archaeological authority of the Bayeux Tapestry. *Cultural and Social History*, 7(4), 467-484.

Lewis, M. J. (2012) 'Incipient armory' in the Bayeux Tapestry? *The Coat of Arms*, 223, 1-26.

*Lewis, M. J. (ed.) (2012) *The Portable Antiquities Scheme annual report 2011*. London: Department of Portable Antiquities and Treasure, British Museum.

*Lewis, M. J. (2017) The Bayeux Tapestry: window to a world of continuity and change. In: D. M. Hadley and C. C. Dyer (eds), *The archaeology of the 11th century: continuities and transformations*. Society for Medieval Archaeology Monograph 38. Abingdon: Routledge, 228-243.

Lewis, M. J. and Naylor, J. (2013) 'Anglo-Saxon' hooked-tags classification. Available at: http://www.academia.edu/3445469/Anglo-Saxon Hooked Tags [Accessed 12 January 2015].

Liddell, D. M. (1933) Excavations at Meon Hill. *Proceedings of the Hampshire Field Club* and Archaeological Society, 12, 127-162.

Liddiard, R. (2000) Landscapes of lordship: Norman castles and the countryside in medieval Norfolk, 1066-1200. BAR British Series 309. Oxford: Archaeopress.

Liddiard, R. (2003) The deerparks of Domesday Book. Landscapes, 4(1), 4-23.

Liddiard, R. (2005) *Castles in context: power, symbolism and landscape, 1066 to 1500*. Bollington: Windgather Press.

Liddiard, R. (2017) The landscape of Anglo-Norman England: chronology and cultural transmission. In: D. Bates, E. D'Angelo and E. M. C. van Houts (eds), *People, texts and artefacts: cultural transmission in the medieval Norman worlds*. London: Institute of Historical Research, 105-125.

Lightbown, R. W. (1992) *Mediaeval European jewellery: with a catalogue of the collection in the Victoria & Albert Museum*. London: Victoria & Albert Museum.

Lindahl, F. (2003) Some late tenth- and eleventh-century cloisonné enamel brooches and finger-rings from Denmark. In: C. Entwistle (ed.), *Through a glass brightly: studies in Byzantine and medieval art and archaeology, presented to David Buckton*. Oxford: Oxbow Books, 163-170.

Linlaud, M. (2014) Culture matérielle des élites : faits archéologiques et iconographiques. In: L. Bourgeois and C. Rémy (eds), *Demeurer, défendre et paraître*. *Orientations récentes de l'archéologie des fortifications et des résidences aristocratiques médiévales entre Loire et Pyrénées [Actes du colloque de Chauvigny* (*Vienne*), 14-16 juin 2012]. Chauvigny: Association des Publications Chauvinoises, 686-696.

Linlaud, M. (2018) L'utilisation des alliages cuivreux dans les mécanismes de serrure et de cadenas entre le 8e et le 16e siècle. In: N. Thomas and P. Dandridge (eds), *Cuivres, bronzes et laitons médiévaux –Histoire archéologie et archéométrie des productions en laiton, bronze et autres alliages à base de cuivre dans l'Europe médiévale [12e-16e siècles] [Actes du colloque de Dinant et Namur, 15-17 mai 2014]. Etudes et documents, Archéologie 39. Jambes: Agence wallonne du Patrimoine, 335-345.*

*Little, A. (1995) The finds. In: P. Andrews, *Excavations at Redcastle Furze, Thetford, 1988-9*. East Anglian Archaeology 72. Dereham: Field Archaeology Division, Norfolk Museums Service, 87-119.

*Ljungkvist, J. (2015) Gravar i en övergångsperiod – de yngsta kammargravarna och brandgravarna i Uppland under 1000- och 1100-talet. *Meta*, 2015, 21-45.

*Lloyd-Morgan, G. (1994) Bone artefacts. In: S. W. Ward, *Excavations at Chester. Saxon occupation within the fortress: sites excavated 1971-1981*. Excavation and survey report (Chester Archaeological Service) 7. Chester: Chester City Council, Department of Development & Leisure Services, 98-99.

*Lobbedey, U. (1979) Der Altenfels nahe Brilon. Rettungsgrabung an einer hochmittelalterlichen Burg. In: W. Bauer (ed.), *Beiträge zur archäologischen Burgenforschung und zur Keramik des Mittelalters in Westfalen 1*. Denkmalpflege und Forschung in Westfalen 2. Bonn: Habelt, 11-78.

*Loppe, F., Marty, R. and Zanca, J. (2005) Le castrum déserté de Ventajou et son terroir (Félines-Minervois, Hérault): première approche (Ve-XIVe s.). *Archéologie du Midi Médiéval*, 23, 293-355. Lorren, C. (1977) Le château de Rubercy (Calvados), Etude de la demeure principale (1150-1204). *Archéologie Médiévale*, 7, 109-178.

Loud, G. (1982) The Gens Normannorum. Myth or reality? *Anglo-Norman Studies*, 4, 104-116.

*Louis, E. (1989) *Recherches sur le château à motte de Hordain (Nord)*. Archaeologia Duacensis 2, Douai: Société archéologique de Douai.

Loveluck, C. P. (2009) The dynamics of elite lifestyles in the 'rural' world. In: F. Bougard, R. Le Jan and R. McKitterick (eds), *La Culture du Haut Moyen Age. Une Question d'Elites*? Haut Moyen Age (HAMA) 7. Turnhout: Brepols, 139-170.

Loveluck, C. P. (2013) *Northwest Europe in the early middle ages, c. AD 600-1150*. Cambridge: Cambridge University Press.

*Lowther, A. W. G. (1983) Pachenesham, Leatherhead; the excavation of the moated site known as "The Mounts". *Surrey Archaeological Collections*, 74, 1-46.

*Luckhardt, J. and Niehoff, F. (eds), *Heinrich der Löwe und seine Zeit. Herrschaft und Repräsentation der Welfen 1125-1235. Band 1: Katalog.* München: Hirmer Verlag.

Lucy, S. (2005) Ethnic and cultural identities. In: M. Díaz-Andreu, S. Lucy, S. Babíc and D. N. Edwards, *The Archaeology of Identity: approaches to gender, age, status and religion*. Abingdon: Routledge, 86-109.

Lund, J. and Semple, S. (2021) Introduction. In: In J. Lund and S. Semple (eds), *A Cultural History of Objects in the Medieval Age*. London: Bloomsbury Academic, 1-28.

*Lundborg, L. (1970) Aktuellt im Antikvariskt. Gullbrandstorp, Halland. *Ale*, 1970(3), 49-50.

*Lungershausen, A. (2004) Buntmetallfunde und Handwerksrelikte des Mittelalters und der frühen Neuzeit aus archäologischen Untersuchungen in Braunschweig. Materialhefte zur Ur- und Frühgeschichte Niedersachsens 34. Rahden: Verlag Marie Leidorf GmbH.

*Lyne, M. A. B. (2009) *Excavations at Pevensey Castle 1936 to 1964*. BAR British Series 503. Oxford: British Archaeological Reports Oxford Ltd.

McCarthy, M. (2000) *Roman and medieval Carlisle: the southern Lanes excavations 1981-2*. Research Report 1. Carlisle: Carlisle Archaeology Limited.

McClain, A. N. (2012) Theory, disciplinary perspectives and the archaeology of later medieval England. *Medieval Archaeology*, 56(1), 131-170.

McClain, A. N. (2015) The archaeology of transition: rethinking medieval material culture and social change. In: J. Hawkes, M. Boulton and M. Herman (eds), *The art, literature and material culture of the medieval world: transition, transformation and taxonomy*. Dublin: Four Courts Press, 22-41.

McClain, A. N. (2017) Rewriting the narrative: regional dimensions of the Norman Conquest. In: D. M. Hadley and C. C. Dyer (eds), *The archaeology of the 11th century: continuities and transformations*. Society for Medieval Archaeology Monograph 38. Abingdon: Routledge, 203-227.

McClain, A. N. and Sykes, N. (2019) New archaeologies of the Norman Conquest. *Anglo-Norman Studies*, 41, 83-101.

McComish, J. M., Mainman, A. J., Jenner, A. and Rogers, N. S. H. (2010) Excavations at Low Fisher Gate, Doncaster, South Yorkshire. *Yorkshire Archaeological Journal*, 82(1), 73-230. *McEwan, J. and New, E. A. (eds) (2012) *Seals in context: medieval Wales and the Welsh Marches*. Aberystwyth: Aberystwyth University.

*MacGregor, A. (1978) Industry and commerce in Anglo-Scandinavian York. In: R. A. Hall (ed.), *Viking Age York and the North*. CBA Research Report 27. London: Council for British Archaeology, 37-57.

*MacGregor, A. (1982) *Anglo-Scandinavian finds from Lloyds Bank, Pavement and other sites*. The Archaeology of York 17/3. London: Council for British Archaeology.

MacGregor, A. (1985) *Bone, antler, ivory & horn: the technology of skeletal materials since the Roman period*. London: Croom Helm.

Mack, K. (1984) Changing Thegns: Cnut's Conquest and the English Aristocracy. *Albion*, 16(4), 375-387.

*Mackreth, D. F. and Ferris, I. M. (2002) Small finds. In: I. M. Ferris, Excavations at Greyfriars, Gloucester in 1967 and 1974–5. *Transactions of the Bristol and Gloucestershire Archaeological Society*, 119, 121-125 (95-146).

*Madsen, C. (1992) Gudme Søndergade. Et hjørne af Gudmes bebyggelse i sen vikingetid og tidlig middelalder. *Fynske Minder*, 1992, 85-92.

*Magnier, T. (2013) Une renaissance : L'art entre Flandre et Champagne 1150-1250 [Exposition, Musée de l'hôtel Sandelin, Saint-Omer, 5 avril - 30 juin 2013, Musée de Cluny - musée national du Moyen Âge, Paris, 17 avril - 15 juillet 2013]. Paris: Réunion des Musées nationaux.

Mainman, A. J. and Rogers, N. S. H. (2000) *Finds from Anglo-Scandinavian York*. The Archaeology of York 17/14. York: Council for British Archaeology.

*Maixner, B. (2020) Connected by water, no matter how far. Viking Age central farms at the Trondheimsfjorden, Norway, as gateways between waterscapes and landscapes. *Archäologische Informationen*, 43, 1-20.

*Mann, J. (1999) Other finds. In: C. Colyer, B. J. J. Gilmour and M. J. Jones, *The defences of the lower city: excavations at the Park and West Parade 1970–2 and a discussion of other sites excavated up to 1994*. CBA Research Report 114. York: Council for British Archaeology, 146-169.

*Marchesi, E. (2014) Materiali metallici. In: N. Mancassola, A. Augenti, M. Cantatore,
S. Degli Esposti, E. Marchesi and F. Zoni, Ricerche archeologiche sulla Pietra di
Bismantova (RE): Il Castello medievale: campagna di scavo 2012. Archeologia
Medievale, 41, 166-167 (151-170).

*Marcigny, C. and Mazet, S. (eds) (2015) Au bord de l'eau ! Les occupations humaines d'une berge de la Seine du Tardiglaciaire à nos jours, Le Postel, Le Pré Rompu, le Chêne, Le Port au Chanvre, Les Diguets, Alizay, Le Fort, Les Limais, Igoville (Eure), Volume 3 : La Tène ancienne - Du Moyen-Âge à l'Actuel – Conclusion. Unpublished site report. Cesson Sévigné: Inrap Grand-Ouest.

Margeson, S. (1986) A group of late Saxon mounts from Norfolk. *Norfolk Archaeology*, 39(3), 323-327.

Margeson, S. (1987) A Ringerike-style mount from Stoke Holy Cross. *Norfolk Archaeology*, 40(1), 126-127.

Margeson, S. (1988) A bird-shaped brooch from Stoke Holy Cross. *Norfolk Archaeology*, 40(2), 199.

Margeson, S. (1993) Norwich households: the medieval and post-medieval finds from Norwich Survey excavations 1971–1978. East Anglian Archaeology 58. Norwich: The Norwich Survey/Norfolk Museums Service.

Margeson, S. (1995a) The non-ferrous metal objects. In: A. Rogerson, *A late Neolithic, Saxon and medieval site at Middle Harling, Norfolk*. East Anglian Archaeology 74. Dereham: Field Archaeological Division, Norfolk Museums Service, 53-69.

*Margeson, S. (1995b) The iron objects. In: A. Rogerson, *A late Neolithic, Saxon and medieval site at Middle Harling, Norfolk*. East Anglian Archaeology 74. Dereham: Field Archaeological Division, Norfolk Museums Service, 69-78.

Margeson, S. (1997) The Vikings in Norfolk. Norwich: Norfolk Museums Service.

*Margeson, S. (2002a) Excavations on World's End Lane off Bishopgate (Site 156N): the small finds. In: M. Atkin and D. H. Evans, *Excavations in Norwich 1971–78, Part III*. East Anglian Archaeology 100. Norwich: The Norwich Survey/Norfolk Museums Service, 38-41.

*Margeson, S. (2002b) Excavations on the Bottling Plant, Westwick Street (Site 159N): the small finds. In: M. Atkin and D. H. Evans, *Excavations in Norwich 1971–78, Part III*. East Anglian Archaeology 100. Norwich: The Norwich Survey/Norfolk Museums Service, 145-149.

*Margeson, S., Seillier, F. and Rogerson, A. (1994) *The Normans in Norfolk*. Norwich: Norfolk Museums Service.

Margeson, S. and Williams, V. (1985) The artefacts. In: B. Ayers, *Excavations within the north-east bailey of Norwich Castle, 1979*. East Anglian Archaeology 28. Norwich: The Norwich Archaeological Unit, 27-48.

*Marin, J.-Y. (1994a) 11a-d. Gruppo di quattro morsi di cavallo. In: M. D'Onofrio (ed.), *I* Normanni: popolo d'Europa 1030-1200. Venezia: Marsilio, 380.

Marin, J.-Y. (1994b) 13. Pendaglio di bardatura. In: M. D'Onofrio (ed.), *I Normanni:* popolo d'Europa 1030-1200. Venezia: Marsilio, 380-381.
*Marin, J.-Y. (1994c) 14. Pendaglio di bardatura. In: M. D'Onofrio (ed.), *I Normanni:* popolo d'Europa 1030-1200. Venezia: Marsilio, 381.

Marritt, S. (2007) Drogo the sheriff: a neglected lost romance tradition and Anglo-Norwegian relations in the twelfth century. *Historical Research*, 208, 157-184.

Marshall, A. J. (2004) Archaeological investigation of a Domesday entry: the later Saxon and early Norman manorial settlement at Guiting Power, Glos. (UK). Guiting Power: The Guiting Manor Amenity Trust.

Marshall, C. (1986) Buckles through the ages. *Treasure Hunting*, January 1986, 1-27.

*Marshall, M. (in press) Medieval small finds from St Barts Hospital (SBQ14).

Mårtensson, A. W. (1976) Uppgrävt förflutet för PKbanken i Lund : en investering i arkeologi. Archaeologica Lundensia 7. Lund: Kulturhistoriska museet.

*Mårtensson, A. W. (1982) Några söljor och beslag i Lund från sen vikingatid. *Kulturen*, 1982, 160-168.

Marti, R. (2013) Die Zeugnisse für Reiten, Jagd und Bewaffnung. In: R. Marti, W. Meyer and J. Obrecht, *Der Altenberg bei Füllinsdorf: Eine frühe Adelsburg des 11. Jahrhunderts*. Schriften der Archäologie Baselland 50. Basel: Schwabe Verlagsgruppe AG Schwabe Verlag, 145-165.

*Martin, E. A., Pendleton, C. and Plouviez, J. (1990) Archaeology in Suffolk, 1989: archaeological finds. *Proceedings of the Suffolk Institute of Archaeology and History*, 37(2), 147-157.

*Martin, E. A., Pendleton, C. and Plouviez, J. (1992) Archaeology in Suffolk, 1991: archaeological finds. *Proceedings of the Suffolk Institute of Archaeology and History*, 37(4), 371-377. *Martin, E. A., Pendleton, C. and Plouviez, J. (1994) Archaeology in Suffolk, 1993: archaeological finds. *Proceedings of the Suffolk Institute of Archaeology and History*, 38(2), 199-204.

Martin, E. A., Pendleton, C. and Plouviez, J. (1995) Archaeology in Suffolk, 1994: archaeological finds. *Proceedings of the Suffolk Institute of Archaeology and History*, 38(3), 335-342.

*Martin, E. A., Pendleton, C. and Plouviez, J. (2004) Archaeology in Suffolk, 2003: archaeological finds. *Proceedings of the Suffolk Institute of Archaeology and History*, 40(4), 485-500.

Martin, T. (2021) Everyday objects: Making and Shaping Medieval Worlds. In: J. Lund and S. Semple (eds), *A Cultural History of Objects in the Medieval Age*. London: Bloomsbury Academic, 97-117.

*Mason, C., Brockway, C. and McCarthy, J. (1997) Archaeological notes from Maidstone Museum. *Archaeologia Cantiana*, 117, 237-259.

Mathis, D. and Rajade, A. (2013a) Fourreaux et bouterolles. In: M. Fondrillon and E. Marot (eds), *Un quartier de frange urbaine à Bourges (ler s. ap. J.-C. - XXe s.), Les fouilles de la ZAC Avaricum*, 2 volumes. Revue Archéologique Centre, Supplément 48. Tours: Bourges Plus/FERACF, 241-243.

Mathis, D. and Rajade, A. (2013b) Boucles. In: M. Fondrillon and E. Marot (eds), *Un quartier de frange urbaine à Bourges (Ier s. ap. J.-C. - XXe s.), Les fouilles de la ZAC Avaricum*, 2 volumes. Revue Archéologique Centre, Supplément 48. Tours: Bourges Plus/FERACF, 109-119.

Matóg, K. (2013) Skórzana obroża z placu Nowy Targ we Wrocławiu. Śląskie Sprawozdania Archeologiczne, 55, 339-346.

*Matthys, A. (1991) Les fortifications du XIe siècle entre Lesse et Semois. In: H. W. Böhme (ed.), *Burgen der Salierzeit. Teil 1: In den nördlichen Landschaften des Reiches*. Römisch-Germanisches Zentralmuseum Mainz. Forschungsinstitut für Vor- und Frühgeschichte 25-26. Sigmaringen: Jan Thorbecke Verlag, 225-280.

*Mayes, P. (2002) *Excavations at the Templar Preceptory, South Witham, Lincolnshire, 1965-67*. Society for Medieval Archaeology Monograph 19. Leeds: Society for Medieval Archaeology.

*Mende, U. (1983) *Die Bronzetüren des Mittelalters, 800-1200*. München: Hirmer Verlag.

*Mepham, L. and Good, O. (2015) Further investigations at Oakham Castle, Rutland: a Time Team evaluation. *Transactions of the Leicestershire Archaeological and Historical Society*, 89, 165-178.

Meskell, L. and Preucel, R. W. (2004) Identities. In: L. Meskell and R. W. Preucel (eds), *A Companion to Social Archaeology*. Oxford: Blackwell, 121-141.

*Metcalf, D. M. (1998) An atlas of Anglo-Saxon and Norman coin finds, c.973-1086. Royal Numismatic Society special publication 32. London: Royal Numismatic Society and Ashmolean Museum.

Meyer, W. (1989) *Die Frohburg: Ausgrabungen 1973-1977*. Schweizer Beiträge zur Kulturgeschichte und Archäologie des Mittelalters 16. Olten: Walter Verlag.

*Michl, E. H. (2008) Die Ausgrabungen auf der Burg Rodenberg bei Rotenburg an der Fulda: Erste Ergebnisse zur Baugeschichte anhand der archäologischen Untersuchung von 1976. *Zeitschrift des Vereins für Hessische Geschichte und Landeskunde*, 113, 257-278. Mikkelsen, H. (1990) Vor Frue benediktinernonnekloster i Randers. En munkestensbygget kongsgård fra anden halvdel af 1100-talet? *Aarbøger for Nordisk Oldkyndighed og Historie 1990*, 178-223.

Mileson, S. (2009) Parks in Medieval England. Oxford: Oxford University Press.

*Mileson, S. and Brookes, S. J. (2014) A multi-phase Anglo-Saxon site in Ewelme. *Oxoniensia*, 79, 1-30.

*Mills, J. M. (1993) The metalwork. In: A. H. Graham and S. M. Davies, *Excavations in the town centre of Trowbridge, Wiltshire 1977 and 1986-1988: the prehistoric and Saxon settlements, the Saxo-Norman manorial settlement and the Anarchy Period castle*. Wessex Archaeology Report 2. Salisbury: Trust for Wessex Archaeology Ltd. 81-92.

Mills, J. M. (1995) The finds catalogues. In: R. Ivens, P. Busby and N. Shephard, *Tattenhoe and Westbury: two deserted medieval settlements in Milton Keynes.*Buckinghamshire Archaeological Society Monographs 8. Aylesbury: Buckinghamshire
Archaeological Society, 335-396.

*Mitchell, J. (1994) 115a-e. Gruppo di cinque spille. In: M. D'Onofrio (ed.), *I Normanni:* popolo d'Europa 1030-1200. Venezia: Marsilio, 435.

Mitchiner, M. (1988) *Jetons, Medalets and Tokens: 1. The Mediaeval Period and Nuremberg*. London: Seaby.

*Moe, O. H. (1955) Urnes and the British Isles: a study of western impulses in Nordic styles of the eleventh century. *Acta Archaeologia*, 26, 1-30.

*Montgomerie, D. H. (1947) The archaeology of Salisbury and district: Old Sarum. *Archaeological Journal*, 104, 129-143. *Moorhouse, S. A. (1971) Excavations of ringwork and later castle at Burton-in-Lonsdale: a reconsideration. *Yorkshire Archaeology Journal*, 43, 85-98.

Morel, A. (2018) L'occupation à travers le mobilier métallique. In: S. Desoutter, *Port Autonome de Dunkerque, Zone à Vocation Industrielle, Tranche 2: Volume 2 – Études*. Unpublished site report. Glisy: Inrap Hauts-de-France, 187-205.

Moss, R. (2009) *Romanesque chevron ornament: the language of British, Norman and Irish sculpture in the twelfth century*. Oxford: Archaeopress.

*Motteau, J. (1991) *Catalogue des objets des fouilles de Tours (1973-1977)*. Recherches sur Tours, 5. Tours: Laboratoire d'archéologie urbaine.

Mould, Q. (2004) Metal artefacts. In: H. Wallis, *Excavations at Mill Lane, Thetford, 1995*. East Anglian Archaeology 108. Dereham: Norfolk Museums and Archaeology Service, 33-52.

*Mould, Q. (2006) The metal finds. In: A. D. Saunders, *Excavations at Launceston Castle, Cornwall*. Society for Medieval Archaeology Monograph 24. Leeds: Society for Medieval Archaeology, 301-340.

*Mould, Q. (2009) Iron horse harness and bits. In: E. S. Popescu, *Norwich Castle: excavations and historical survey 1987–98*, 2 volumes. East Anglian Archaeology 132. Dereham: Norfolk Museums and Archaeology Service, 178-179.

Mould, Q. and Ashley, S. (2009) Iron horse harness pendant. In: E. S. Popescu, Norwich Castle: excavations and historical survey 1987–98, 2 volumes. East Anglian Archaeology 132. Dereham: Norfolk Museums and Archaeology Service, 350.

*Muratova, X. (1986) Bestiaries: an aspect of medieval patronage. In: S. Macready and F. H. Thompson (eds), *Art and patronage in the English Romanesque*. Occasional Paper (New Series) 8. London: Society of Antiquaries of London, 118-144.

*Murbach, E. (1967) *The painted Romanesque ceiling of St. Martin in Zillis*. London: Lund Humphries.

Murray, H. K. and Murray, J. (1993) Excavations at Rattray, Aberdeenshire. A Scottish deserted burgh. *Medieval Archaeology*, 37, 109-218.

Naismith, R. (2013) The English monetary economy, c. 973–1100: the contribution of single-finds. *The Economic History Review*, 66, 198-225.

Naismith, R. (2020) Currency and conquest in eleventh-century England. In: L. Ashe and E. J. Ward (eds), *Conquests in eleventh-century England: 1016, 1066*. Woodbridge: Boydell Press, 85-98.

Naylor, J. (2008) VASLE artefact classification: late Saxon buckles. In: J. D. Richards, J. Naylor and C. Holas-Clark, *The Viking and Anglo-Saxon Landscape and Economy* (VASLE) Project (digital archive) (doi:10.5284/1000044).

*Naylor, J. (ed.) (2015) Portable Antiquities Scheme. *Medieval Archaeology*, 59, 290-310.

*Naylor, J. (ed.) (2017) Portable Antiquities Scheme. *Medieval Archaeology*, 61(2), 400-420.

Naylor, J. and Bland, R. (eds) (2015) *Hoarding and the deposition of metalwork from the Bronze Age to the 20th century: a British perspective*. BAR British Series 615. Oxford: Archaeopress.

*Naylor, J. and Geake, H. (eds) (2011) Portable Antiquities Scheme. *Medieval Archaeology*, 55, 284-303.

Naylor, J. and Richards, J. D. (2005) Third-party data for first class research. *Archaeologia e Calcolatori*, 16, 83-91. Newman, J. (1993) Three antler moulds from Ipswich. Finds Research Group Datasheet 17. Finds Research Group.

*Newns, S. (2020) Copper alloy objects. In: A. Young, *Eckweek, Peasedown St John, Somerset: Survey and Excavations at a Shrunken Medieval Hamlet 1988-90*. Society for Medieval Archaeology Monograph 40. Abingdon: Routledge, 182-190.

*Newton, P. A. (1968) L'Europe gothique, XIIe XIVe siècles. [Musée du Louvre, Pavillon de Flore, Paris, 2 avril-1er juillet 1968]. Paris: Ministère d'État, Affaires culturelles.

Nicholas, D. M. (2012) Lords, Markets, and Communities: The Urban Revolution of the Twelfth Century. In: T. F. X. Noble and J. H. van Engen (eds), *European transformations: the long twelfth century*. Notre Dame: University of Notre Dame Press, 229-258.

Nicholson, A. (1997) The copper alloy. In: P. J. Hill, *Whithorn and St Ninian, the excavation of a monastic town 1984-91*. Stroud: Sutton Publishing, 360-384.

*Nicolay, J. (2007) Armed Batavians: use and significance of weaponry and horse gear from non-military contexts in the Rhine delta (50 BC to AD 450). Amsterdam Archaeological Studies 11. Amsterdam: Amsterdam University Press.

*Nicolle, D. (1980) The Monreale capitals and the military equipment of later Norman Sicily. *Gladius*, 15, 87-103.

*Nicolle, D. (1999) *The Crusades*. Oxford Osprey.

Nieus, J. F. (2016) Early aristocratic seals: an Anglo-Norman success story. *Anglo-Norman Studies*, 38, 97-124.

*Nieus, J. F. (2017) L'invention des armoiries en contexte. Haute aristocratie, identités familiales et culture chevaleresque entre France et Angleterre, 1100-1160. *Journal de savants*, 2017(1), 93-155.

Nissen-Jaubert, A. (2005) Implantations scandinaves et traces matérielles en Normandie. Que pouvons-nous attendre ? In. P. Bauduin (ed.), *Les fondations scandinaves en occident et les débuts du duché de Normandie*. Caen: Publications du CRAHM, 209-223.

North, J. J. (1980) *English Hammered Coinage. Volume I - Early Anglo-Saxon to Henry III c. 600-1272*, 2nd edition. London: Spink & Son.

O'Keeffe, T. (2007) Archaeology and the Pan-European Romanesque. London: Duckworth.

*O'Neil, B. H. (1944) Criccieth Castle, Caernarvonshire. *Archaeologia Cambrensis*, 98, 1-51.

*O'Neil, H. E. (1952) Whittington Court Roman Villa, Whittington, Gloucestershire. *Transactions of the Bristol and Gloucestershire Archaeological Society*, 71, 13-87.

Oakeshott, E. (1960) The archaeology of weapons. London: Lutterworth Press.

Oakley, G. E. (1979) The copper alloy objects. In: J. H. Williams, *St Peter's Street, Northampton. Excavations 1973-1976*. Archaeological Monograph 2. Northampton: Northampton Development Corporation, 248-264.

*Oakley, G. E. (2009) Other finds from Furnells. In: M. Audouy and A. Chapman (eds), *Raunds: the origin and growth of a Midland village, AD 450-1500: excavations in north Raunds, Northamptonshire 1977-87*. Oxford: Oxbow Books, 195-206. Oddy, W. A., La Niece, S. and Stratford, N. (1986) *Romanesque metalwork: copper alloys and their decoration*. London: British Museum Publications.

Okasha, E. (1997) The inscribed knife. In: M. F. Hurley, O. M. B. Scully and S. W. J. McCutcheon, *Late Viking Age and medieval Waterford. Excavations 1986-1992*. Waterford: Institute of Public Administration, 524-528.

Oksanen, E. (2012) *Flanders and the Anglo-Norman world, 1066–1216.* Cambridge: Cambridge University Press.

Oksanen, E. (2015) Trade and travel in England during the long twelfth century. *Anglo-Norman Studies*, 37, 181-204.

Oksanen, E. (2020) Knights, Mercenaries and paid soldiers: Military identities in the Anglo-Norman Regnum. In D. Crouch and J. Deploige (eds), *Knighthood and Society in the High Middle Ages*. Leuven: Leuven University Press, 71-94.

Oksanen, E. and Lewis, M. J. (2020) Medieval commercial sites: as seen through Portable Antiquities Scheme data. *The Antiquaries Journal*, 100, 1-32.

Orton, D., Morris, J. and Pipe, A. (2017) Catch per unit research effort: sampling intensity, chronological uncertainty, and the onset of marine fish consumption in historic London. *Open Quaternary*, 3(1), 1-20.

Ottaway, P. J. (1992) *Anglo-Scandinavian ironwork from Coppergate*. The Archaeology of York 17/6. London: Council for British Archaeology.

Ottaway, P. J. and Rogers, N. S. H. (2002) *Craft, industry and everyday life: finds from medieval York*. The Archaeology of York 17/15. York: Council for British Archaeology.

Owen, O. A. (1979) A catalogue and re-evaluation of the Urnes style in England. Unpublished MA thesis. Durham: Durham University. Owen, O. A. (2001) The strange beast that is the English Urnes style. In: J. Graham-Campbell, R. Hall, J. Jesch and D. N. Parsons (eds), *Vikings and the Danelaw: select papers from the proceedings of the thirteenth Viking Congress, Nottingham and York, 21st-30th August 1997.* Oxford: Oxbow Books, 203-222.

*Owen, O. A. and Trett, R. (1980) A Viking Urnes style mount from Sedgeford. Norfolk Archaeology, 37, 353-355.

Owen-Crocker, G. (1986) *Dress in Anglo-Saxon England*. Manchester: Manchester University Press.

Owen-Crocker, G. (1991) Hawks and horse-trappings: the insignia of rank. In: D. G. Scragg (ed.), *The Battle of Maldon, AD 991.* Oxford: Blackwell, 220-237.

*Pagh, L. (2016) Tamdrup – Kongsgård og mindekirke i nyt lys. *Kuml*, 65, 81-129.

*Palazzia, P., Parodi, L., Falcetti, C., Frondoni, A. and Murialdo, G. (2003) Archeologia urbana a Finalborgo (1997-2001): gli scavi nella piazza e nel complesso conventuale di Santa Caterina. *Archeologia Medievale*, 30, 183-242.

*Parker, E. C. and Little, C. T. (1993) *The Cloisters Cross: its art and meaning*. New York: The Metropolitan Museum of Art.

Parrington, M. (1979) Excavations at Stert Street, Abingdon, Oxon. *Oxoniensia*, 44, 1-25.

*Paterson, C. (2004) Walcott, Lincolnshire. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 48, 240 (232-247).

Paterson, C., and Tweddle, D. (2014) Copper-alloy. In: M. R. McCarthy, M. Archibald, C.Batey, C. Batt, C. Brooks, J. Buckberry, J. Cherry, A. Evans, G. Gaunt, G. Keevill, C.Lerwick, J. Montgomery, P. Ottaway, C. Paterson, E. Pirie, P. Walton Rogers, D.

Shotter, J. Towers and D. Tweddle, A post-Roman sequence at Carlisle Cathedral. *Archaeological Journal*, 171(1), 211-222 (185-257).

*Paulsen, P. (1937) *Der Wikingerfund von Leckhus und seine Bedeutung für die nordwest-europäische Frühgeschichtsforschung*. Beiträge zur Heimatforschung 1. Kiel: Heimat u. Erbe.

*Payne, N. (2008) Milbourne Port, Somerset. In: J. Naylor, K. Leahy and G. Egan (eds), Portable Antiquities Scheme. *Medieval Archaeology*, 52, 330 (316-334).

Pearce, J. (2013) *Contextual archaeology of burial practice: case studies from Roman Britain*. BAR British Series 588. Oxford: Archaeopress.

*Pedersen, A. (1998) Bidselbeslag fra Bogeskov Strand. Kuml, 41, 185-196.

Pedersen, A. (1999) Riding gear from late Viking-Age Denmark. *Journal of Danish Archaeology*, 13(1), 133-160.

Pedersen, A. (2001) Rovfugle eller duer. Fugleformede fibler fra den tidlige middelalder. *Aarbøger for Nordisk Oldkyndighed og Historie*, 1999, 19-66.

Pedersen, A. (2004) Anglo-Danish contact across the North Sea in the eleventh century: a survey of the Danish archaeological evidence. In: J. Adams and K. Holman (eds), *Scandinavia and Europe 800–1350: contact, conflict and coexistence*. Turnhout: Brepols, 43-67.

Pedersen, A. (2009) Materiel kultur, identitet og kommunikation. In: E. Roesdahl and J.P. Schjødt (eds), *Beretning fra syvogtyvende tværfaglige vikingesymposium*. Højbjerg: Forlaget Hikuin and Afdeling for Middelalder- og Renæssancearkæologi, Aarhus Universitet, 7-26. Pedersen, A. (2014a) Late Viking and early medieval ornaments: a question of faith. In:
I. Garipzanov with the assistance of R. Bonté (ed.), *Conversion and identity in the Viking Age*. Turnhout: Brepols, 195-223.

Pedersen, A. (2014b) *Dead warriors in living memory – a study of weapon and equestrian burials in Viking-Age Denmark, AD 800-1000*. Publications from the National Museum, Studies in Archaeology and History 20:1. Odense: University Press of Southern Denmark.

Pedersen, A. and Roesdahl, E. (2008) A Ringerike style animal's head from Aggersborg, Denmark. In: M. C. Stang and K. B. Aavitsland (eds), *Ornament and order. Essays on Viking and Norther medieval art for Signe Horn Fuglesang*. Trondheim: Tapir Academic Press, 31-37.

*Peers, C. and Radford, C. A. R. (1943) The Saxon monastery of Whitby. *Archaeologia*, 89, 27-88.

Peirce, I. G. (1986) The knight, his arms and armour in the eleventh and twelfth centuries. In: C. Harper-Bill and R. Harvey (eds), *The ideals and practice of medieval knighthood: papers from the first and second Strawberry Hill Conferences*. Woodbridge: Boydell Press, 152-164.

Peirce, I. G. (1993) The knight, his arms and armour, c. 1150-1250. Anglo-Norman Studies, 15, 251-266.

Peirce, I. G. (2002) Swords of the Viking age. Woodbridge: Boydell Press.

Pestell, T. (2013) Imports or immigrants? Reassessing Scandinavian metalwork in late Anglo-Saxon East Anglia. In: D. Bates and R. Liddiard (eds), *East Anglia and its North Sea world in the Middle Ages*. Woodbridge: Boydell Press, 230-255. *Peytremann, E. (2006) L'habitat déserté de Gungling à Grosbliederstroff (Moselle) (IXe-XVe siècle). Archéologie Médiévale, 36, 57-113.

*Phoenix, D. (2010) 'Garments so chequered': the Bible of Citeaux, the Bayeux Tapestry and the Vair pattern. *The Antiquaries Journal*, 90, 195-210.

Pitt Rivers, A. H. L. F. (1883) Excavations at Caesar's Camp near Folkstone, conducted in June and July, 1878. *Archaeologia*, 47(2), 429-465.

Pitts, M. (2007) The emperor's new clothes? The utility of identity in Roman archaeology. *American Journal of Archaeology*, 111(4), 693-713.

*Piuzzi, F. (2003) *Progetto castello della Motta di Savorgnano: ricerche di archeologia medievale nel nord-est italiano*. Ricerche di archeologia altomedievale e medieval, 28. Firenze: All'Insegna del Giglio.

Plant, R. (2003) Ecclesiastical architecture, c. 1050 to c. 1200. In: C. Harper-Bill and E. M. C. van Houts (eds), *A companion to the Anglo-Norman world*. Woodbridge: Boydell Press, 215-253.

Ponsford, M. (2002) Excavations at a Saxo-Norman settlement, Bickley, Cleeve, 1982– 89. Somerset Archaeological and Natural History, 146, 47-112.

Portet, N. (2007) Le mobilier métallique. In: F. Prodéo (ed.), *Pineuilh (33),* « La Mothe *», Rapport Final d'Opération: Volume 2 - zones 1a et 1b*. Unpublished site report. Pessac: Inrap, 723-779.

Portet, N. (2017) Etude du mobilier métallique. In: L. Beuchet (ed.), *Place Saint-Germain : naissance et évolution d'un quartier de Rennes de l'Antiquité tardive à 1944*. Unpublished site report. Cesson Sévigné: Inrap Grand-Ouest, 835-945. Portet, N. and Raynaud, M.-A. (2009) Le mobilier en fer: les objets équestres. In: L. Bourgeois (ed.), *Une résidence des comtes d'Angoulême autour de l'an mil: le castrum d'Andone (Villejoubert, Charente). Publication des fouilles d'André Debord (1971-1995)*. Caen: Publications du CRAHM, 202-233.

*Potter, C. (1876) Observations on the geology and archaeology of the Cheshire shore. *Transactions of the Historic Society of Lancashire and Cheshire*, 28, 121-142.

Poulsen, B. (2013) Identities in the Danish Medieval Town. *Norwegian Historical Review*, 16, 115-131.

Price, N. (2015) Book review: Viking identities: Scandinavian jewellery in England. *The Journal of Island and Coastal Archaeology*, 10(2), 304-305.

*Pritchard, F. (1991) Small finds. In: A. Vince (ed.), *Aspects of Saxo-Norman London. 2, Finds and environmental evidence*. London and Middlesex Archaeological Society Special paper 12. London: London and Middlesex Archaeological Society, 120-278.

Pritchard, F. (2008a) [1991] Strap-ends. In: G. Egan and F. Pritchard, *Dress accessories* c *1150* – c *1450*. Medieval Finds from Excavations in London 3, New edition (2002), reprinted 2008. First published 1991, London: H.M.S.O.. Woodbridge: Boydell Press, 124-161.

*Pritchard, F. (2008b) [1991] Pins. In: G. Egan and F. Pritchard, *Dress accessories* c 1150 – c 1450. Medieval Finds from Excavations in London 3, New edition (2002), reprinted 2008. First published 1991, London: H.M.S.O.. Woodbridge: Boydell Press, 297-304.

Pritchard, F. (2008c) [1991] Girdles. In: G. Egan and F. Pritchard, *Dress accessories* c 1150 – c 1450. Medieval Finds from Excavations in London 3, New edition (2002), reprinted 2008. First published 1991, London: H.M.S.O.. Woodbridge: Boydell Press, 35-49. Prummel, W. (1997) Evidence of hawking (falconry) from bird and mammal bones. International Journal of Osteoarchaeology, 7(4), 333-338.

Prummel, W. (2018) The archaeological-archaeozoological identification of falconry – methodological remarks and some Dutch examples. In: K.-H. Gersmann and O. Grimm (eds), *Raptor and human – falconry and bird symbolism throughout the millennia on a global scale*. Kiel/Hamburg: Wachholtz Verlag – Murmann Publishers, 467-478.

*Querrien, A. (1988) Un village médiéval en Bas-Berry: Moulins-sur-Céphons, Saint-Amand-Montrond, Châteauroux, Saint-Amand. Levroux: Association pour la recherche en histoire et archéologie médiévales de l'Indre.

Querrien, A. (2004) La résidence aristocratique rurale de Montbaron (Levroux, Indre), fin XIe siècle - début XIIIe siècle. *Archéologie Médiévale*, 34, 65-174.

Rackham, O. (2011) Forest and Upland. In: J. Crick and E. M. C. van Houts (eds), *A social history of England, 900-1200*. Cambridge: Cambridge University Press, 46-55.

*Radcliffe, F. (1963) Excavations at Logic Lane, Oxford. The prehistoric and early medieval finds. *Oxoniensia*, 26/27, 38-69.

Raffin, A. (2017) Le mobilier métallique médiéval en contexte d'habitat rural dans les Pays de la Loire (ve-xve siècle). *Revue archéologique de l'Ouest*, 34, 271-321.

Rahtz, P. A. (1959) Holworth, medieval village excavation, 1958. *Proceedings Dorset Natural History and Archaeological Society*, 81, 127-147.

*Rahtz, P. A. (1969) *Excavations at King John's Hunting Lodge, Writtle, Essex, 1955-57*. Society for Medieval Archaeology Monograph 3. Lincoln: The Society for Medieval Archaeology. Ramsey, N. (1991) Introduction. In: J. Blair and N. Ramsey (eds), *English medieval industries: craftsmen, techniques, products*. London: The Hambledon Press, xv-xxxiv.

*Randall, C. (2019) Evidence of medieval agriculture and settlement: Excavation at Curtis Fields, Chickerell, Weymouth. *Proceedings Dorset Natural History and Archaeological Society*, 140, 85-98.

*Ratkai, S. (1985) The finds from Dudley Castle. In: P. Boland, *Dudley Castle archaeological project: an introduction and summary of excavations 1983-1985*. Dudley: Dudley Castle Archaeological Project, 39-51.

*Read, B. (1988) *History beneath our feet*, 1st edition. Braunton: Merlin.

*Read, B. (1995) History beneath our feet, 2nd edition. Ipswich: Anglia Publishing.

Read, B. (2016) Identifying metal artefacts. Volume 1. Witham: Greenlight Publishing.

Read, B. (2021) Identifying Detector Finds. Witham: Greenlight Publishing.

*Rech, M. (2006) Pferd und Wagen im Frühen und Hohen Mittelalter. In. M. Rech (ed.), *Pferdeopfer – Reiterkrieger. Fahren und Reiten durch die Jahrtausende*. Bremer Archäologische Blätter 4. Bonn: Habelt, 171-216.

Redknap, M. (1996) Some medieval brooches, pendants and moulds from Wales: a short survey. *Archaeologia Cambrensis*, 143, 92-138.

*Redknap, M. (2013) Ring rattle on swift steeds: equestrian equipment from early medieval Wales. In: A. J. Reynolds and L. Webster (eds), *Early medieval art and archaeology in the northern world: studies in honour of James Graham-Campbell*. Leiden: Brill, 177-210.

*Redknap, M. (2014) Ivories from medieval Wales: contexts and afterlives. *Sculpture Journal*, 23(1), 65-80.

Reece, R. (1991) *Roman coins from 140 sites in Britain*. Cirencester: Archetype Publications.

Rees, H., Crummy, N., Ottaway, P. J. and Dunn, G. (2008) Artefacts and society in Roman and medieval Winchester. Small finds from the suburbs and defences, 1971-1986. Winchester: Winchester Museums Service.

Rego, D. E. M. (2018) Les élites au village : étude de la distinction sociale par les marqueurs archéologiques de part et d'autre de la Manche, entre le XIe et le XVe siècle. Unpublished PhD thesis. Durham: Durham University.

*Reinle, A. (1969) Der Reiter am Zürcher Grossmünster. *Zeitschrift für schweizerische Archäologie und Kunstgeschichte*, 26, 21-46.

Renn, D. (1959) Wareham West Walls. Medieval Archaeology, 3, 120-138.

*Renswoude, J. van (2006) *Verslag Inventariserend Veldonderzoek Kapel-Avezaath De Brede School*. Zuidnederlandse Archeologische Notities 18. Amsterdam: Archeologisch Centrum van de Vrije Universiteit- Hendrik Brunsting Stichting.

*Renswoude, J. van (2014) Metaal. In: J. van Renswoude and D. S. Habermehl, Archeologische opgravingen te Tiel-Dominicuskwartier. Onderzoek naar een vroegmiddeleeuwse ringwalburg, een motteversterking, Ottoonse nederzettingsresten, een versterkt huis en laat- en post-middeleeuwse resten in de oude binnenstad. Zuidnederlandse Archeologische Rapporten 56. Amsterdam: VUhbs archeologie Amsterdam, 199-263.

Renswoude, J. van (2015) Metaal. In: J. van Renswoude and M. D. R. Schurmans, Handel, ambachtelijke activiteiten en belonging langs de rivier de Linge in de Vroege *en Volle Middeleeuwen. Opgraving Geldermalsen-Stationslocatie, Amsterdam.* Zuidnederlandse Archeologische Notities 349. Amsterdam: VUhbs archeologie Amsterdam, 69-120.

*Reynolds, A. J. (1994) A late Anglo-Saxon disc brooch from Steyning, West Sussex. *Medieval Archaeology*, 38, 169-171.

Reynolds, A. J. (1999) Later Anglo-Saxon England – Life & Landscape. Stroud: Tempus.

Reynolds, S. (1977) *An Introduction to the History of English Medieval Towns*. Oxford: Clarendon Press.

*Rhodes, P. P. (1948) A prehistoric and Roman site at Wittenham Clumps, Berks. *Oxoniensia*, 13, 18-31.

Richards, J. D. (2004) [1991], *Viking Age England*. New edition. First published 1991, London: B. T. Batsford. Stroud: Tempus.

*Richards, J. D., Ashby, S., Austin, T., Haldenby, D., Hummler, M., Jelley, E., Richardson, J., Roskams, S. and Niven. K. (2013) Cottam, Cowlam and environs: an Anglo-Saxon estate on the Yorkshire Wolds. *Archaeological Journal*, 170(1), 201-271.

Richards, J. D. and Naylor, J. (2010) The metal detector and the Viking Age in England. In: D. O'Corrain and J. Sheehan (eds), *The Viking Age: Ireland and the West. Proceedings of the fifteenth Viking Congress, Cork, 2005*. Cork: Four Courts Press, 338-352.

Richards, J. D., Naylor, J., and Holas-Clark, C. (2009) Anglo-Saxon landscape and economy: using portable antiquities to study Anglo-Saxon and Viking Age England. *Internet Archaeology*, 25 (doi:10.11141/ia.25.2). Richardson, B. (2013) The medieval accessioned finds. In: I. Howell with L. Blackmore,
C. Philpotts and A. Thorp, *Roman and medieval development south of Cheapside: excavations at Bow Bells House, City of London, 2005–6*. MOLA Archaeology Studies
Series 26. London: Museum of London Archaeology, 95-98.

*Richardson, B. (in prep.) Medieval finds from 8-10 Moorgate (MOQ10).

*Richardson, C. (1998) A catalogue of recent acquisitions to Tullie House Museum and reported finds from the Cumbrian area 1990-1996. Part I: Tullie House accessions. *Transactions of the Cumberland & Westmorland Antiquarian & Archaeological Society*, 98, 1-60.

*Richardson, K. M. (1961) Excavations in Hungate, York. *Archaeological Journal*, 116, 51-114.

Richardson, T., and Woosnam-Savage, R. (2018) The weapons of the Anglo-Saxons and Normans. In: D. Bates (ed.), *1066 in Perspective*. Leeds: Royal Armouries, 57-78.

*Riddler, I. (2014a) Small finds. In: A. Tester, S. Anderson, I. Riddler and R. Carr, A high status middle Saxon settlement on the fen edge: Staunch Meadow, Brandon, Suffolk. East Anglian Archaeology 151. Bury St Edmunds: Suffolk County Council, 345-350.

Riddler, I. (2014b) The middle and late Saxon sequence. In: A. Tester, S. Anderson, I. Riddler and R. Carr, *A high status middle Saxon settlement on the fen edge: Staunch Meadow, Brandon, Suffolk*. East Anglian Archaeology 151. Bury St Edmunds: Suffolk County Council, 353-355.

Riddler, I. and Walton Rogers, P. (1996) Early medieval small finds. In: K. Parfitt, B. Corke and J. Cotter, *Townwall Street, Dover: excavations 1996*. The Archaeology of Canterbury new series 3. Canterbury: Canterbury Archaeological Trust, 256-305.

*Rigold, S. E. (1954) Totnes Castle: recent excavations. *Transactions of the Devonshire Association*, 86, 228-256.

Rigold, S. E. (1977) Small change in the light of medieval site-finds. In: N. J. Mayhew (ed.), *Edwardian monetary affairs (1279-1344): a symposium held in Oxford, August 1976*. BAR British Series 36. Oxford: Archaeopress, 59-80.

*Rijns, B. (n.d.) Schildbeslag. Unpublished manuscript supplied by author.

Rijns, B. (2017) "Pootjes krijgen een staartje": Umbo's en schildbeslag uit de 12de eeuw. *The Coinhunter Magazine*, 139 (December 2017), 9-13.

Rijns, B. (2018) Voortgang international onderzoek schildbeslag/umbo's. *The Coinhunter Magazine*, 140 (March 2018), 9-13.

Robbins, K. J. (2012) From past to present: understanding the impact of sampling bias on data recorded by the Portable Antiquities Scheme. Unpublished PhD thesis. Southampton: University of Southampton.

Robbins, K. J. (2013) Balancing the scales: exploring the variable effects of collection bias on data collected by the Portable Antiquities Scheme. *Landscapes*, 14(1), 54-72.

Robbins, K. J. (2014) Portable Antiquities Scheme: A guide for researchers. Available at: <u>https://finds.org.uk/documents/guideforresearchers.pdf</u> [Accessed 11 July 2015].

*Robinson, M. (1973) Excavations at Copt Hay, Tetsworth, Oxon. *Oxoniensia*, 38, 41-115.

*Robinson, P. H. (1990) Two medieval coin brooches from Wiltshire. *Wiltshire Archaeological and Natural History Magazine*, 83, 208-210. Robinson, P. H. (1992) Some late Saxon mounts from Wiltshire. *Wiltshire Archaeological and Natural History Magazine*, 85, 63-69.

*Robinson, P. H. (1993) Coins, jetons and tokens. In: A. H. Graham and S. M. Davies, *Excavations in the town centre of Trowbridge, Wiltshire 1977 and 1986-1988: the prehistoric and Saxon settlements, the Saxo-Norman manorial settlement and the Anarchy Period castle*. Wessex Archaeology Report 2. Salisbury: Trust for Wessex Archaeology Ltd. 78-81.

Robinson, P. H. and Griffiths, N. (2000) The copper alloy objects. In: P. Ellis (ed.), *Ludgershall Castle: a report on the excavations by Peter Addyman 1964-1972.*Wiltshire Archaeological and Natural History Society monographs 2. Devizes: Wiltshire
Archaeological and Natural History Society, 124-137.

Rodwell, K. A. (1993) Objects of copper alloy - Roman and later objects. In: W. J. Rodwell and K. A. Rodwell, *Rivenhall: investigations of a Roman villa, church and village, 1950-1977. Volume 2 – Specialist studies and Index to Volumes 1 and 2*. CBA Research Report 80. London: Council for British Archaeology, 35-42.

*Roes, A. (1955) Les trouvailles de Domburg, Zélande II. Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek in Nederland, 6, 79-85.

Roes, A. (1958) A strap-end in the Yorkshire Museum and its Continental counterparts. *The Antiquaries Journal*, 38(1-2), 94-96.

*Roes, A. (1965) *Vondsten von Dorestad*. Archaeologica Traiectina 7. Groningen: J.B. Wolters.

Roesdahl, E. (2007) Denmark-England in the eleventh century: the growing archaeological evidence for contacts across the North Sea. In: N. Lund (ed.), *Beretning fra seksogtyvende tværfaglige vikingesymposium*. Højbjerg: Forlaget Hikuin and Afdeling for Middelalder- og Renæssancearkæologi, Aarhus Universitet, 7-31. Roesdahl, E. (2015) Fine belt-buckles of walrus ivory – also made in Greenland. In: I. Baug, J. Larsen, S. S. Mygland (eds), *Nordic in middle ages – artefacts, landscapes and society: essays in honour of Ingvild Øye on her 70th birthday*. Bergen: University of Bergen, 267-273.

Roesdahl, E., Graham-Campbell, J., Connor, P. and Pearson, K. (eds) (1981) *The Vikings in England and their Danish homeland*. London: The Anglo-Danish Viking Project.

Roesdahl, E. and Verhaeghe, F. (2011) Material culture – artefacts and daily life. In: M. O. H. Carver and J. Klápště (eds), *The archaeology of medieval Europe. Volume 2: twelfth to sixteenth centuries*. Acta Jutlandica, Humanities Series 2011/9. Aarhus: Aarhus University Press, 189-227.

Roesdahl, E. and Wilson, D. M. (eds) (1992) *From Viking to Crusader: the Scandinavians and Europe 800-1200*. New York: Rizzoli International.

*Rogers, N. S. H. (1993) *Anglian and other finds from 46-54 Fishergate*. The Archaeology of York 17/9. London: Council for British Archaeology.

*Rogers, N. S. H. (1997) Other artefacts. In: M. Whyman, Excavations in Deanery Gardens and Low St. Agnesgate, Ripon, North Yorkshire. *Yorkshire Archaeological Journal*, 62, 149-152 (119-163).

*Rogerson, A. and Ashley, S. (2008) A selection of finds from Norfolk recorded between 2006 and 2008. *Norfolk Archaeology*, 45(3), 428-441.

*Rogerson, A. and Ashley, S. (2009) A selection of finds from Norfolk recorded in 2009 and earlier. *Norfolk Archaeology*, 45(4), 556-570.

*Rogerson, A. and Ashley, S. (2011a) A selection of finds from Norfolk recorded in 2011 and earlier. *Norfolk Archaeology*, 46(2), 248-262.

Rogerson, A. and Ashley, S. (2011b) Some medieval gaping-mouth beast buckles from Norfolk and elsewhere. In: J. Naylor and H. Geake (eds), Portable Antiquities Scheme. *Medieval Archaeology*, 55, 299-302 (284-303).

*Rogerson, A. and Ashley, S. (2013) An aberrant form of 10th-century strap-end. In: J. Naylor (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 57, 278-280 (262-284).

*Rogerson, A. and Ashley, S. (2014) A selection of finds from Norfolk recorded in 2014 and earlier. *Norfolk Archaeology*, 47(1), 104-121.

*Rogerson, A. and Ashley, S. (2015a) A selection of finds from Norfolk recorded in 2015 and earlier. *Norfolk Archaeology*, 47(2), 312-327.

Rogerson, A. and Ashley, S. (2015b) A group of 11th-century 'ball-ended' strap fittings. In: J. Naylor (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 59(1), 302-305 (290-310).

*Rogerson, A. and Ashley, S. (2016) A selection of finds from Norfolk recorded in 2016 and earlier. *Norfolk Archaeology*, 47(3), 432-446.

*Rogerson, A. and Ashley, S. (2017) A selection of finds from Norfolk recorded in 2017 and earlier. *Norfolk Archaeology*, 47(4), 562-580.

Rogerson, A. and Ashley, S. (2018) A distinctive medieval buckle-type with a bird- or M-shaped plate. In: J. Naylor (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 62(2), 397-398 (380-400).

Ross, S. (1991) Dress pins from Anglo-Saxon England: their production and typochronological development. Unpublished PhD thesis. Oxford: University of Oxford. Rötting, H. (1995) C16d. Die Riemenschnalle und Riemenzunge des rechten Sporns Kaiser Lothars III. von Süpplingenburg (†1137). In: J. Luckhardt and F. Niehoff (eds), *Heinrich der Löwe und seine Zeit. Herrschaft und Repräsentation der Welfen 1125– 1235. Band 1: Katalog*. München: Hirmer Verlag, 149-150.

Rowley, T. (1997) *English Heritage book of Norman England: an archaeological perspective on the Norman Conquest*. London: B.T. Batsford/English Heritage.

Rowley, T. (1999) The Normans. Stroud: Tempus.

Roxburgh, M. A., IJssennagger, N. L., Huisman, H. D. J. and van Os, B. J. H. (2018) Where worlds collide: a typological and compositional analysis of the copper-alloy mounts from Viking Age Walcheren. *The Medieval Low Countries*, 5, 1-33.

*Rudling, D. (1988) A Saxon coin-brooch from Alfriston. *Sussex Archaeological Collections*, 126, 241.

*Runciman, S. (1998) [1952] A history of the crusades. Volume II - The Kingdom of Jerusalem and the Frankish East 1100-1187. First published 1952, Cambridge: Cambridge University Press. London: Penguin.

*Rygh, O. (1885) *Norske Oldsager: ordnede og forklarede*. Christiana: Alb. Cammermeyer.

Rysgaard, K. (2017) Beretning for forundersøgelse af skattefund ved Bøgebjerg, Them. Unpublished report. Hovedgården: Museum Silkeborg.

Røstad, I. M. (2012) En fremmed fugl: 'Danske' smykker og forbindelser på Østlandet i overgangen mellom vikingtid og middelalder. *Viking*, 75, 181-210.

*Sarret, F. (1983) Montech - Une brique médiévale ornée. *Archéologie du Midi Médiéval*, 1, 145-146. Sautot, M.-C. (1977) Une collection d'objets de bronze provenant des Bolards (Côted'Or). *Revue Archéologique de l'Est et du Centre-Est*, 28, 285-349.

*Scapula, J. (1976) Un Haut-lieu archéologique de la Haute Vallée de la Seine: la Butte d'Isle-Aumont en Champagne. Deuxième partie : Isle-Aumont historique du Xème siècle à nos jours. Troyes: Imprimerie Paton.

*Scapula, J. (1981) [1975] Un Haut-lieu archéologique de la Haute Vallée de la Seine: la Butte d'Isle-Aumont en Champagne. Première Partie. Du Neolithique au Carolingien. Troyes: Imprimerie Paton.

*Schirren, M. (2012) Kurze Fundberichte, Mölschow, Lkr. Vorpommern-Greifswald, Fpl. *Bodendenkmalpflege in Mecklenburg-Vorpommern: Jahrbuch 2011*, 59, 404.

Schirren, M. (2017) Kurze Fundberichte, Voddow, Lkr. Vorpommern-Greifswald, Fpl. 19. *Bodendenkmalpflege in Mecklenburg-Vorpommern: Jahrbuch 2015*, 63, 337.

*Schirren, M. (2018) Simsons Kampf – Ein spätromanischer Gürtelbeschlag aus Schmoldow, Lkr. Vorpommern-Greifswald. *Bodendenkmalpflege in Mecklenburg-Vorpommern: Jahrbuch 2017*, 65, 59-65.

*Schmitt, A. (2008) Burg Tannenberg bei Seeheim-Jugenheim/Lkr. Darmstadt-Dieburg : eine spätmittelalterliche Ganerbenburg im Licht der archäologischen Funde. Universitätsforschungen zur Prähistorischen Archäologie 151. Bonn: Habelt.

Schofield, J. (2019) London's waterfront 1100-1666: Summary of the findings from four excavations that took place from 1974 to 1984. *The Antiquaries Journal*, 99, 63-94.

Schofield, J., Blackmore, L. and Pearce, J. with Dyson, T. (2018) *London's waterfront 1100–1666: excavations in Thames Street, London, 1974–84*. Oxford: Archaeopress.

Schoknecht, U. (1988) Baggerfunde von der Kuhtränke bei Demmin. Bodendenkmalpflege in Mecklenburg: Jahrbuch, 35, 145-184.

*Scholte Lubberink, H. B. G. (2014) Nederzettingssporen uit de Prehistorie en de Romeinse tijd op de Whemerenk te Almen. RAAP-rapport 2332. Weesp: RAAP Archeologisch Adviesbureau.

Schousboe, K. (ed.) (2012) A peytrel from Caherduggan near Cork. *Medieval Histories*, 11(2), 9-11.

Schulze-Dörlamm, M. (1992) Schmuck. In: H. W. Böhme *et al., Das Reich der Salier* 1024-1125: Katalog zur Ausstellung des Landes Rheinland-Pfalz [Ausstellung im Historischen Museum der Pfalz, Speyer, vom 23. März bis 21. Juni 1992]. Sigmaringen: Jan Thorbecke Verlag, 108-176.

Scott, B. G. (2020) The Irish "Deer" series of cheek-pieces. In: M. A. Bibby and B. G. Scott (eds), *The Materiality of the Horse*. Budapest: Trivent Publishing, 261-294.

Scott, I. (2011) Metalwork. In: R. Brown and A. Hardy, *Trade and prosperity, war and poverty: an archaeological and historical investigation into Southampton's French Quarter*. Oxford Archaeology Monograph 15. Oxford: Oxford Archaeology, 163-180.

Scully, O. M. B. (1997) Metal artefacts. In: M. F. Hurley, O. M. B. Scully and S. W. J. McCutcheon, *Late Viking Age and medieval Waterford. Excavations 1986-1992.* Waterford: Institute of Public Administration, 438-489.

Seaby, W. A. (1950) Late Dark Age finds from the Cherwell and the Ray, 1876-86. *Oxoniensia*, 15, 29-43.

Seaby, W. A. and Woodfield, P. (1980) Viking stirrups from England and their background. *Medieval Archaeology*, 24, 87-122.

Senecal, C. (2001) Keeping up with the Godwinesons: in pursuit of aristocratic status in late Anglo-Saxon England. *Anglo-Norman Studies*, 23, 251-266.

Serdon-Provost, V. (2016) Le Mobilier Métallique. In: J.-P. Lémant and C. Moulis (eds), Le Château des Fées de Montcy-Notre-Dame, archéologie d'un site de l'an Mil. Nancy: Presses Universitaires de Lorraine, 141-154.

*Sfligiotti, P. (1990) Manufatti in metallo, osso, terracotta, pietra. In: L. Saguì and L. Paroli (eds), Archeologia urbana a Roma: il progetto della Cripta Balbi. 5. L'esedra della Cripta Balbi nel medioevo (XI-XV secolo). Firenze: All'Insegna del Giglio, 513-552.

Shapland, M. (2017) Anglo-Saxon towers of lordship and the origins of the castle in England. In: D. M. Hadley and C. C. Dyer (eds), *The archaeology of the 11th century: continuities and transformations*. Society for Medieval Archaeology Monograph 38. Abingdon: Routledge, 104-119.

Sheeran, H. (2009) Artefact distribution case study: equestrian equipment. In: J. D. Richards, J. Naylor, and C. Holas-Clark, Anglo-Saxon landscape and economy: using portable antiquities to study Anglo-Saxon and Viking Age England. *Internet Archaeology*, 25, 3.4.2 (doi:10.11141/ia.25.2).

*Sheppard Jr., C. D. (1949) Iconography of the Cloister of Monreale. *The Art Bulletin*, 31(3), 159-169.

*Shetelig, H. (ed.) (1940) Viking antiquities in Great Britain and Ireland. 4 Viking antiquities in England. Oslo: Aschehoug.

Shields, J. and Campbell, S. (2011) Sacred and banal: the discovery of everyday medieval material culture. In: E. J. Cowan and L. Henderson (eds), *A history of everyday life in medieval Scotland, 1000 to 1600. Series: a history of everyday life in Scotland*. Edinburgh: Edinburgh University Press, 67-88.

Shiroukhov, R. (2020) Prussian horse forehead pendants with bird of prey images, their analogies and dating. In: O. Grimm (ed.), *Raptor on the fist - falconry, its imagery and similar motifs throughout the millennia on a global scale*, Volume 2.1. Kiel-Hamburg: Wachholtz Verlag, 417-438.

*Shoesmith, R. (1991) *Excavations at Chepstow 1973-1974*. Cambrian Archaeological Monograph 4. Bangor: Cambrian Archaeological Association.

Sindbæk, S. M. (2012) Urban crafts and oval brooches: style, innovation and social networks in Viking Age towns. In: S. Sigmundsson (ed.), *Viking settlements and Viking society: papers from the proceedings of the 16th Viking Congress*. Reykjavik: University of Iceland Press, 409-423.

Skre, D. (2013) Money and trade in Viking Age Scandinavia. In: M. Bogucki and M. Rębkowski (eds), *Economies, monetisation and society in west Slavic lands 800-1200 AD*. Szczecin: Institute of Archaeology and Ethnology Polish Academy of Sciences, 75-88.

Smith, M. F., Fleming, R. and Halpin, P. (2001) Court and piety in late Anglo-Saxon England. *The Catholic Historical Review*, 87(4), 569-602.

Smith, R. A. (1917) Side-lights on Italian 'bow pullers'. *Proceedings of the Society of Antiquaries of London*, 29, 24-41.

Smith, R. A. (1923) *British Museum guide to Anglo-Saxon antiquities*. London: British Museum.

*Soulat, J. (2013) Les fibules discoïdes à décor de « monstre » regardant en arrière (Ix^e-x^e siècle) découvertes en France. *Archéologie Médiévale*, 43, 145-153.

*Soulat, J. (in press) Le mobilier médiéval de Surgères. Unpublished report. Samoissur-Seine: Laboratoire LandArc. Spencer, B. W. (1961) Two new additions to the London Museum. *Transactions of the London and Middlesex Archaeological Society*, 20(4), 214-217.

*Spencer, B. W. (1992) Objects of lead alloy. In: D. H. Evans and D. G. Tomlinson, *Excavations at 33-35 Eastgate, Beverley, 1983-1986*. Sheffield Excavation Reports 3. Sheffield: University of Sheffield, Department of Archaeology and Prehistory, 143-147.

Spiong, S. (2000) Fibeln und Gewandnadeln des 8. bis 12. Jahrhunderts in Zentraleuropa. Eine archäologische Betrachtung ausgewählter Kleidungsbestandteile als Indikatoren menschlicher Identität. Zeitschrift für Archäologie des Mittelalters 12. Bonn: Habelt.

Spoelder, W. (2018) Beestachtige wangplaten. Detector Magazine, 161, 10-19.

Spufford, P. (1988) *Money and its use in medieval Europe*. Cambridge: Cambridge University Press.

Stadler, H. (1994) Der Erpfenstein bei Erpfendorf, Gemeinde Kirchdorf in Tirol. Eine mittelalterliche Burganlage im Leukental. In: H. Stadler, W. von Sydow and K. Spindler, *Ausgrabungen in Kirchdorf in Tirol*. Nearchos, 2. Innsbruck: GOF-Verlag, 11-209.

Standley, E. (2010) Trinkets and charms: the use, meaning and significance of later medieval and early post-medieval dress accessories. Unpublished PhD thesis. Durham: Durham University.

Standley, E. (2013) *Trinkets and Charms: the use, meaning and significance of dress accessories, 1300-1700*. Oxford University School of Archaeology Monograph Series 78. Oxford: Oxford University School of Archaeology.

Steane, J. M. (1999) *The archaeology of the medieval English monarchy*. London: Routledge.

*Steane, K. (1991) Excavations at Ratley Castle, 1968-73. *Transactions of the Birmingham and Warwickshire Archaeological Society*, 96, 5-26.

Steeger, W. (1997) Ritterliche Scutzwaffen von der Oberen Burg Treuchtlingen. In: R. Hofmann (ed.), *Ritter, Burgen und Dörfer [Katalog zur Ausstellung "Mittelalterliches Leben in Stadt und Land"*]. Tüchersfeld: Fränkische-Schweiz-Museum, 68-73.

Steer, K. A. and Bannerman, J. W. M. (1977) *Late Medieval Monumental Sculpture in the West Highlands*. Edinburgh: H.M.S.O.

Stenholm, L. (1976) Dräkttillbehör och smycken. In: A. W. Mårtensson, *Uppgrävt förflutet för PKbanken i Lund : en investering i arkeologi.* Archaeologica Lundensia 7. Lund: Kulturhistoriska museet, 293-305.

Steuer, H. (1989) Mittelalterliche Messerscheidenbeschläge aus Köln. In: H. Lüdtke, F. Lüth and F. Laux (eds), *Archäologischer Befund und historische Deutung: Festschrift für Wolfgang Hübener zu seinem 65. Geburtstag am 15. Juni 1989*. Neumünster: K. Wachholtz, 231-246.

Steuer, H. (1993) Der Messerscheidenbeschlag. In: U. Gross, L. H. Hildebrandt and H. Steuer, Ein Messerscheidenbeschlag der Zeit um 1200 von Sandhausen bei Heidelberg. *Zeitschrift für Archäologie des Mittelalters*, 21, 78-86 (71-86).

*Stevens, F. (1937) A horse trapping from Old Sarum. *The Antiquaries Journal*, 17(4), 438-440.

*Stidsing, E. (2014) Haslund Øst – a newly discovered metal-detector site. In: E. Stidsing, K. Høilund Nielsen and R. Fiedel, *Wealth and complexity. Economically specialised sites in late Iron Age Denmark*. East Jutland Museum Publications 1. Aarhus: Østjyllands Museum and Aarhus University Press, 119-126.

Stiegemann, C. and Wemhoff, M. (eds) (2006) *Canossa 1077 - Erschütterung der Welt : Geschichte, Kunst und Kultur am Aufgang der Romanik*. München: Hirmer Verlag.

*Still, M. and Baker, C. (1994) An archaeological note from Dartford Borough Museum. *Archaeologia Cantiana*, 114, 438-439.

Stocker, D. (2013) Aristocrats, burghers and their markets: patterns in the foundation of Lincoln's urban churches. In: In: D. M. Hadley and A. Ten Harkel (eds), *Everyday life in Viking-Age towns: social approaches to towns in England and Ireland, c. 800-1100*. Oxford: Oxbow Books, 119-143.

*Stoepker, H. (ed.) (1991) Archeologische kroniek van Limburg over 1990. *Publications de la Société historique et archéologique dans le Limbourg*, 127, 223-279.

*Stott, P. (1991) Saxon and Norman coins from London. In: A. Vince (ed.), *Aspects of Saxo-Norman London. 2, Finds and environmental evidence*. London and Middlesex Archaeological Society Special paper 12. London: London and Middlesex Archaeological Society, 279-325.

*Stow, S. (1995) The C. E. C. brooches. In: K. Blockley, M. Blockley, P. Blockley, S. S. Frere and S. Stow, *Excavations in the Marlowe car park and surrounding areas*. The Archaeology of Canterbury 5. Canterbury: Canterbury Archaeological Trust, 982-983.

Stratford, N. (1984a) 248. Double swivel for straps. In: G. Zarnecki, J. Holt and T. Holland (eds), *English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]*. London: Weidenfeld and Nicolson, 250.

*Stratford, N. (1984b) 256. Belt-buckle. In: G. Zarnecki, J. Holt and T. Holland (eds), English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]. London: Weidenfeld and Nicolson, 252. *Stratford, N. (1984c) 260. Two fragments of *vernis brun*. In: G. Zarnecki, J. Holt and T. Holland (eds), *English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]*. London: Weidenfeld and Nicolson, 254.

Stringer, K. (2019a) Prologue: The Norman Edge in context. In: K. Stringer and A. Jotischky (eds), *The Normans and the 'Norman Edge': Peoples, Polities and Identities on the Frontiers of Medieval Europe*. Abingdon: Routledge, 1-27.

Stringer, K. (2019b) The Norman Edge: Some reflections on Norman expansion into 'Outer Europe'. In: K. Stringer and A. Jotischky (eds), *The Normans and the 'Norman Edge': Peoples, Polities and Identities on the Frontiers of Medieval Europe*. Abingdon: Routledge, 219-283.

*Strömberg, M. (1961) Untersuchungen zur jüngeren Eisenzeit in Schonen : Völkerwanderungszeit-Wikingerzeit, 2 volumes. Acta archaeologica Lundensia 4. Bonn and Lund: Gleerup.

Svensson, E. (2008) *The medieval household: daily life in castles and farmsteads: Scandinavian examples in their European context*. Turnhout: Brepols.

Swarzenski, H. (1974) [1954] *Monuments of Romanesque art, the art of church treasures in north-western Europe*, 2nd edition published 1967, reprinted 1974. London: Faber and Faber.

Sykes, N. J. (2004) The dynamics of status symbols: wildfowl exploitation in England AD 410-1500. *Archaeological Journal*, 161(1), 82-105.

Sykes, N. J. (2005) Hunting for the Anglo-Normans: zooarchaeological evidence for medieval identity. In: A. Pluskowski (ed.), *Just skin and bones? New perspectives on human-animal relations in the historic past*. BAR British Series s1410. Oxford: Archaeopress, 73-80.

Sykes, N. J. (2007) *The Norman Conquest: a zooarchaeological perspective*. BAR International Series 1656. Oxford: Archaeopress.

Sykes, N. J. (2010) Deer, land, knives and halls: social change in early medieval England. *The Antiquaries Journal*, 90, 175-193.

Sykes, N. J. (2011) Woods and the wild. In: D. A. Hinton, S. Crawford and H. Hamerow (eds), *The Oxford handbook of Anglo-Saxon archaeology*. Oxford: Oxford University Press, 327-345.

Søvsø, M. (2007) Arkæologiske undersøgelser i Ribes Dagmarsgade – topografi og bebyggelses-struktur i de ånære områder. *By, marsk og geest*, 19, 17-47.

*Søvsø, M. H. (2005) Middelalderlige ringspænder fra Ribe. *By, marsk og geest*, 17, 43-57.

Søvsø, M. H. (2009) Middelalderlige ringspænder. Typologi, datering og brug. *Kuml*, 58, 183-211.

Søvsø, M. H. (2011) Tro, håb og kærlighed: De middelalderlige ringspænders symbolic. *Kuml*, 60, 263-285.

Søvsø, M. H. and Jensen, C. V. (2020) Workshop production of brooches with religious symbolism around the year 1100 in Denmark. *Danish Journal of Archaeology*, 9, 1-31.

Taburet-Delahaye, E. and Boehm, B. D. (eds) (1995) L'œuvre de Limoges: émaux limousins du Moyen Âge. Paris: Réunion des musées nationaux.

*Tauber, J. (1988) Die Funde. In: P. Degen, H. Albrecht, S. Jacomet, B. Kaufmann and J. Tauber (eds), *Die Grottenburg Riedfluh, Eptingen BL - Bericht über die Ausgrabungen 1981-1983*. Schweizer Beiträge zur Kulturgeschichte und Archäologie des Mittelalters 15. Olten: Walter Verlag, 97-168. *Tauber, J. (1991) Die Ödenburg bei Wenslingen - eine Grafenburg des 11. und 12. Jahrhunderts. Bericht über die Ausgrabungen 1976-1979. Basler Beiträge zur Ur- und Frühgeschichte 12. Basel: Schwabe.

*Taylor, A. (1987) Prehistoric, Roman, Saxon and medieval artefacts from the southern fen edge, Cambridgeshire. *Proceedings of the Cambridge Antiquarian Society*, 74, 1-52.

Taylor, A. (2014) Dating the Dark Ages: using material culture to explore cultural identities in the fourth to sixth centuries AD. *Rosetta*, 15(5), 53-66.

Ten Harkel, A. (2013a) Urban identity and material culture: a case study of Viking-Age Lincoln, c. AD 850-1000. *Anglo-Saxon Studies in Archaeology and History*, 18, 157-173.

Ten Harkel, A. (2013b) Of towns and trinkets: metalworking and metal dressaccessories in Viking-Age Lincoln. In: D. M. Hadley and A. Ten Harkel (eds), *Everyday life in Viking-Age towns: social approaches to towns in England and Ireland, c. 800-1100*. Oxford: Oxbow Books, 172-192.

Ten Harkel, A. (2017) The Norman Conquest and its impact on late Anglo-Saxon towns. In: D. M. Hadley and C. C. Dyer (eds), *The archaeology of the 11th century: continuities and transformations*. Society for Medieval Archaeology Monograph 38. Abingdon: Routledge, 14-29.

Ten Harkel, A. (2018) Ethnic identity or something else? The production and use of non-ferrous dress-accessories and related items from early medieval Lincoln. *Anglo-Saxon Studies in Archaeology and History*, 21, 1-27.

*Ten Harkel, A., Weetch, R. and Sainsbury, V. (2016) An early medieval polychromeenamelled brooch from Flaxengate, Lincoln: continental fashions in an Anglo-Scandinavian town. *Medieval Archaeology*, 60(1), 57-71. *Theune-Großkopf, B. (1992a) Schwerter. In: H. W. Böhme *et al., Das Reich der Salier* 1024-1125: Katalog zur Ausstellung des Landes Rheinland-Pfalz [Ausstellung im Historischen Museum der Pfalz, Speyer, vom 23. März bis 21. Juni 1992]. Sigmaringen: Jan Thorbecke Verlag, 105-106.

*Theune-Großkopf, B. (1992b) Schutzwaffen. In: H. W. Böhme *et al., Das Reich der Salier 1024-1125: Katalog zur Ausstellung des Landes Rheinland-Pfalz [Ausstellung im Historischen Museum der Pfalz, Speyer, vom 23. März bis 21. Juni 1992*]. Sigmaringen: Jan Thorbecke Verlag, 99-102.

*Thomas, A. (2002) Objects of copper alloy and iron. In: A. Thomas and A. Boucher (eds), *Hereford city excavations 4: 1976–1990; further sites and evolving interpretations*. Logaston: Hereford City & County Archaeological Trust Ltd, 155-162.

Thomas, G. (2000a) A survey of late Anglo-Saxon and Viking-Age strap-ends from Britain. Unpublished PhD thesis. London: University College London.

Thomas, G. (2000b) Anglo-Scandinavian metalwork from the Danelaw: exploring social and cultural interaction. In: D. M. Hadley and J. D. Richards (eds), *Cultures in contact: Scandinavian settlement in England in the ninth and tenth centuries*. Turnhout: Brepols, 237-255.

Thomas, G. (2001a) Hamsey near Lewes, East Sussex: the implications of recent finds of late Anglo-Saxon metalwork for its importance in the Pre-Conquest period. *Sussex Archaeological Collections*, 139, 123-132.

Thomas, G. (2001b) Vikings in the City: a Ringerike-style buckle and related artefacts from the London. *London Archaeologist*, 9(8), 228-230.

Thomas, G. (2001c) Strap-ends and the identification of regional patterns in the production and circulation of ornamental metalwork in late Anglo-Saxon and Viking-

Age Britain. In: M. Redknap *et al.* (eds), *Pattern and purpose in insular art*. Oxford: Oxbow Books, 39-48.

Thomas, G. (2003) Late Anglo-Saxon and Viking-age strap-ends 750-1100. Part 1. Finds Research Group Datasheet 32, Finds Research Group.

Thomas, G. (2004) Late Anglo-Saxon and Viking-age strap-ends 750-1100. Part 2. Finds Research Group Datasheet 33, Finds Research Group.

Thomas, G. (2009) The strap-ends and hooked-tags. In: D. H. Evans and C. Loveluck (eds), *Life and economy at early medieval Flixborough, c. AD 600-1000: the artefact evidence*. Excavations at Flixborough 2. Oxford: Oxbow Books, 7-22.

*Thomas, G. (2010) *The later Anglo-Saxon settlement at Bishopstone*. CBA Research Report 163. York: Council for British Archaeology.

Thomas, G. (2011) Overview: craft production and technology. In: D. A. Hinton, S. Crawford and H. Hamerow (eds), *The Oxford handbook of Anglo-Saxon archaeology*. Oxford: Oxford University Press, 405-422.

Thomas, G. (2012) Carolingian culture in the North Sea world: rethinking the cultural dynamics of personal adornment in Viking-Age England. *European Journal of Archaeology*, 15(3), 486-518.

Thomas, G. (2013) A casket fit for a West Saxon courtier: the Plumpton Hoard and its place in the minor arts of late Anglo-Saxon England. In: A. J. Reynolds and L. Webster (eds), *Early medieval art and archaeology in the northern world: studies in honour of James Graham-Campbell*. Leiden: Brill, 425-458.

Thomas, G., Payne, N. and Okasha, E. (2008) Re-evaluating base-metal artifacts: an inscribed lead strap-end from Crewkerne, Somerset. *Anglo-Saxon England*, 37, 173-181.
Thomas, H. M. (2003) *The English and the Normans: Ethnic Hostility, Assimilation, and Identity 1066-C.1220*. Oxford: Oxford University Press.

Thomas, H. M. (2017) History, archaeology and the Norman Conquest. In: D. M. Hadley and C. C. Dyer (eds), *The archaeology of the 11th century: continuities and transformations*. Society for Medieval Archaeology Monograph 38. Abingdon: Routledge, 283-300.

Thomas, N., Bourgarit, D. and Pernot, M. (2008) Un atelier de bronziers parisiens au XIVe siècle: fabrication de masse d'objets du quotidian. In: S. Max-Colinart (ed.), *Actes du colloque Science des matériaux du patrimoine culturel: programme national de recherche sur la connaissance et la conservation des matériaux du patrimoine culturel [6 et 7 décembre 2007]*. Paris: Centre de recherche et de restauration des musées de France, 36-42.

*Thompson, A. (2020) Iron and lead objects. In: A. Young, *Eckweek, Peasedown St John, Somerset: Survey and Excavations at a Shrunken Medieval Hamlet 1988-90*. Society for Medieval Archaeology Monograph 40. Abingdon: Routledge, 167-182.

*Thorn, J. (1980) Small finds report. In: S. Johnson, Excavations at Conisbrough Castle, 1973-77. *Yorkshire Archaeological Journal*, 52, 82-83 (59-88).

Thuaudet, O. (2015) Les accessoires métalliques du vêtement et de la parure de corps en Provence du XI^e au XVI^e siècle: étude archéologique et approche croisée d'une production méconnue. Unpublished PhD thesis. Marseille: Aix-Marseille Université.

*Thuaudet, O. (2017) Vivre sur le castrum du Fort-Freinet : le témoignage des objets métalliques. *Freinet - Pays des Maures*, 13, 5-33.

Thuaudet, O. (2021) De senals e de cascavels. Orner le harnachement des équidés à la fin du Moyen Âge (XIIIe-XVe siècle) dans le Sud-Est de la France. In: S. Raux (ed.), *Les modes de transport dans l'Antiquité et au Moyen Âge. Mobiliers d'équipement et*

d'entretien des véhicules terrestres, fluviaux et maritimes. Drémil-Lafage: Éditions Mergoil, 265-282.

*Thunmark-Nylén, L. (1995) *Die Wikingerzeit Gotlands*, 4 volumes. Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien.

*Thurre, D. (1987) La châsse de l'abbé Nantelme du trésor de l'abbaye de Saint-Maurice. *Annales valaisannes*, 62, 161-227.

Timpel, W. (1987) Mittelalterliche Messerscheidenbeschläge in Thüringen. *Alt-Thüringen*, 22/23, 275-295.

*Tompsett, I. (2014) Social dynamics in south-west England AD 350-1150: an exploration of maritime oriented identity. BAR British Series 599. Oxford: British Archaeological Reports Ltd.

Trafford, S. (2000) Ethnicity, Migration Theory, and the Historiography of the Scandinavian Settlement of England. In: D. M. Hadley and J. D. Richards (eds), *Cultures in contact: Scandinavian settlement in England in the ninth and tenth centuries*. Turnhout: Brepols, 17-39.

*Tweddle, D. (1981a) Catalogue entries. In: R. Hall, Markets of the Danelaw. In: E. Roesdahl, J. Graham-Campbell, P. Connor and K. Pearson (eds), *The Vikings in England and in their Danish homeland*. London: Anglo-Danish Viking Project, 100-139 (95-139).

*Tweddle, D. (1981b) Catalogue entries. In: P. Sawyer, Danegeld and Cnut. In: E. Roesdahl, J. Graham-Campbell, P. Connor and K. Pearson (eds), *The Vikings in England and in their Danish homeland*. London: Anglo-Danish Viking Project, 161-164 (157-164).

*Tweddle, D. (1981c) Catalogue entries. In: J. Graham-Campbell, The End in England. In: E. Roesdahl, J. Graham-Campbell, P. Connor and K. Pearson (eds), *The Vikings in* *England and in their Danish homeland*. London: Anglo-Danish Viking Project, 184-185 (181-185).

*Tweddle, D. (1991) Brooches. In: P. Armstrong, D. G. Tomlinson and D. H. Evans, *Excavations at Lurk Lane Beverley, 1979-82*. Sheffield Excavation Reports 1. Sheffield: University of Sheffield, Department of Archaeology and Prehistory, 155-156.

*Tweddle, D., Moulden, J. and Logan, E. (1999) *Anglian York: a survey of the evidence*. The Archaeology of York 7/2. York: Council for British Archaeology.

*Ufkes, A. (2011) *Een archeologische opgraving in de vroegmiddeleeuwse ringwalburg van Domburg, gem. Veere (Z.).* ARC-Publicaties 223. Groningen: Groningen Archaeological Research & Consultancy.

*Ulriksen, J. (2007) Middelalderbebyggelse i Gl. Viby. Romu, 2006, 13-28.

Ulriksen, J. (2011) Fremmed indflydelse i vikingetid og tidlig middelalder (700-1150 e. Kr.). *Historisk Årbog for Roskilde Amt*, 2011, 79-120.

*Ulriksen, J., Fløe Jensen, B., Langkjær, L. G., Rieck, F. and Wurr Stjernqvist, K. (2016) Detektorfund fra Sjælland og Møn - afgjort et vækstområde. Årbog for Museum Sydøstdanmark, 2015, 98-119.

*Ulriksen, J. and Nielsen, J. (2021) En by bliver til: Stenlagsbelægninger og skel i 1000tallets Roskilde. *Gefjon*, 6, 177-208.

*Untermann, M. (1983) Grabungen auf der Burg Berge (Mons) - Altenberg (Rheinisch-Bergischer Kreis). *Archäologisches Korrespondenzblatt*, 13, 115-119.

Untermann, M. (1984) Die Grabungen auf der Burg Berge (Mons) - Altenberg (Gem. Odenthal, Rheinisch-Bergischer Kreis). In: G. Bauchhenss (ed.), *Beiträge zur*

Archäologie des Mittelalters 3. Rheinische Ausgrabungen 25. Köln/Bonn: Rheinland-Verlag, 1-170.

Vale, J. (1988) Archaeological notes from the Kent County Museum Service. *Archaeologia Cantiana*, 106, 209-215.

Van Houts, E. (2011) Invasion and migration. In: J. Crick and E. M. C. van Houts (eds), *A social history of England, 900-1200*. Cambridge: Cambridge University Press, 208-234.

*Vanoverbeke, R. W., Griffioen, A. and van Smeerdijk, D. (2011) Archeologische opgraving "Boerderij Landzigt" aan de Ouddiemerlaan te Diemen. Hollandia reeks 364. Zaandijk: Hollandia archeologen.

Veen, M. van der (2003) When is food a luxury? World Archaeology, 34(3), 405-427.

*Verhelst, E. M. P. and van Renswoude, J. (2015) *Zoeken naar Zandwijk: opgraving en archeologische begeleiding in het plangebied Prins Willem-Alexanderschool, gemeente Tiel.* RAAP-Rapport 2952. Amsterdam: RAAP Archeologisch Adviesbureau.

*Verwers, W. J. H. (1983) Archeologische Kroniek van Noord-Brabant 1979-1980. Bijdragen tot de studie van het Brabantse heem 23. Waalre: Stichting Brabants Heem.

*Vignola, M. (2004a) I metalli. In: M. Biagini, M. Casale, S. Castagnasso, S. Costa, T. Mannoni, S. Martini, G. Pesce, Indagini archeologiche in alta val Trebbia e alta valle Scrivia. Lo scavo del castello di Donnetta (GE). *Ligures*, 2, 94-97 (85-106).

*Vignola, M. (2004b) La "collezione Crosiglia". In: M. Biagini, M. Casale, S. Castagnasso, S. Costa, T. Mannoni, S. Martini, G. Pesce, Indagini archeologiche in alta val Trebbia e alta valle Scrivia. Lo scavo del castello di Donnetta (GE). *Ligures*, 2, 99-101 (85-106).

*Vignola, M. (2008) Oggetti in metallo e osso. In: S. Gelichi, F. Piuzzi, A. Cianciosi (eds), Sachuidic presso Forni Superiore. Ricerche archeologiche in un castello della Carnia. Firenze: All'Insegna del Giglio, 61-76.

Vilsteren, V. T. van (2010) Beslist geen boekbeslag - Een Ottoonse bronsvondst van de Olde Akkers in Emmen. *Nieuwe Drentse Volksalmanak*, 124, 193-209.

Vince, A. (1991) The development of Saxon London. In: A. Vince (ed.), *Aspects of Saxo-Norman London. 2, Finds and environmental evidence*. London and Middlesex Archaeological Society Special paper 12. London: London and Middlesex Archaeological Society, 409-435.

Vince, A. (2003) The new town: Lincoln in the high medieval era (c.900 to c.1350). In:D. Stocker (ed.), *The city by the pool: assessing the archaeology of the City of Lincoln*.Oxford: Oxbow Books, 159-296.

*Walcher, C. (2000) Neue Funde von Pferdegeschirranhängern in Österreich. *Beiträge zur Mittelalterarchäologie in Österreich*, 16, 209-223.

*Walter, P. (1993) *Le vieux Château de Rougemont, site medieval*. Belfort: Editions Deval.

Walton, P. J. (2012) Rethinking Roman Britain: an applied numismatic analysis of the Roman coin data recorded by the Portable Antiquities Scheme. Unpublished PhD thesis. London: University College London.

Walton Rogers, P. (2020) Non-ferrous metalworking networks in Scandinavianinfluenced towns of Britain and Ireland. In: S. P. Ashby and S. M. Sindbæk (eds), *Crafts and social networks in Viking towns*. Oxford: Oxbow Books, 251-283.

*Wamers, E. (1987) A 10th-century metal ornament from Mainz, West Germany. *Medieval Archaeology*, 31, 105-109. Wamers, E. (1994) Die Frühmittelalterlichen Lesefunde aus der Löhrstrasse (Baustelle Hilton II) in Mainz. Mainz: Archäologische Schriften.

*Ward, S. W. (1990) *Excavations at Chester - the lesser medieval religious houses - site investigated 1964-83*. Grosvenor Museum archaeological excavation and survey reports 6. Chester: Chester City Council, Department of Leisure Services.

Ward Perkins, J. P. (1993) [1940] *London Museum medieval catalogue 1940*. First published 1940, London: London Museum. Reprinted 1993. Ipswich: Anglia Publishing.

*Waterman, D. M. (1954) Excavations at Clough Castle, Co. Down. *Ulster Journal of Archaeology*, 17, 103-163.

Waterman, D. M. (1959) Late Saxon, Viking, and early medieval finds from York. *Archaeologia*, 97, 59-105.

Webber, N. (2005) *The evolution of Norman Identity 911-1154*. Woodbridge: The Boydell Press.

Webber, P. (1993) Pewter finger rings. In: H. Lindsay and P. Webber, Studying finds from the medieval waterfront. *London Archaeologist*, 7(4), 137-140 (133-140).

*Weber, G. (2019) Bericht der 9. archäologischen Grabung in Mainhausen-Zellhausen, Kreis Offenbach, Bahnhofstraße o.Nr. (Flur 4, Zellgarten, Flurstück 64-65) Fläche 19. Unpublished site report.

Webley, R. (2014) Stirrup-strap mounts. In: J. Naylor (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 58, 353-356 (340-361).

Webley, R. (2017a) Analyse et interprétation des appliques en alliage cuivreux dites «binding strips » des XIIe -XIIIe siècles en Europe de l'Ouest. *Cahiers LandArc*, 19. Fleurance: LandArc.

Webley, R. (2017b) Copper-alloy 'binding strips' and shield mounts from the twelfth and thirteenth centuries. *The Coat of Arms*, 233-234, 1-12.

Webley, R. (2018) A neglected type of Urnes-style buckle. In: J. Naylor (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 62(2), 392-397 (380-400).

Webley, R. (2021a) New finds of Romanesque Bronze Bowls and their reuse. In: J. Naylor (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 65(2), 384-387 (368-389).

Webley, R. (2021b) The enigmatic 'octopus mount' and the characterisation of elite medieval sites. In: C. Léger and S. Raux (eds), *Mélanges offerts à Michel Feugère*. Drémil-Lafage: Éditions Mergoil, 907-914.

Webley, R. (2022) New adventures in 11th-century horse equipment. In: D. Boughton and K. Hawkins (eds), *Back in the bag: Essays exploring artefacts in honour of David Wynn Williams*. Woking: SpoilHeap Publications, 79-89.

Webley, R. (in press) Some select copper-alloy items from Domburg: 'Mounts' for what, and from when? In: P. Deckers, and A. Ten Harkel (eds), *A central place on the world's edge. Studies on the Early Medieval history and archaeology of the island of Walcheren, the Netherlands*. Turnhout: Brepols.

Webley, R. (forthcoming) Horse equipment. In: O. H. Creighton, R. Liddiard, A. K. Outram and C. Ameen (eds), *Warhorse. A Medieval Revolution?* Liverpool: Liverpool University Press.

*Webley, R. and Burnett, L. (2013) Some unusual late 9th- to 12th-century copperalloy strap-ends or chapes. In: J. Naylor (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 57, 275-278 (262-284). *Webster, L. (1984a) 271. Zoomorphic buckle. In: J. Backhouse, D. H. Turner and L. Webster (eds), *The golden age of Anglo-Saxon art*. London: British Museum Press, 207.

*Webster, L. (1984b) 107. Decorative mount. In: J. Backhouse, D. H. Turner and L. Webster (eds), *The golden age of Anglo-Saxon art*. London: British Museum Press, 111.

Webster, L. (1984c) Metalwork and sculpture. In: J. Backhouse, D. H. Turner and L. Webster (eds), *The golden age of Anglo-Saxon art*. London: British Museum Press, 88-138.

*Webster, L. (1984d) A late Saxon circular brooch. In: P. Leach, *The archaeology of Taunton*. Western Archaeological Trust Monograph 8. Gloucester: Western Archaeological Trust, 133-134.

Webster, L. (1990) Anglo-Saxon metalwork and metalworking debris. In: J. R. Fairbrother (ed.), *Faccombe Netherton: excavations of a Saxon and medieval manorial complex*. British Museum Occasional Paper 74. London: Trustees of the British Museum, 254-269.

Weetch, R. (2014) Brooches in late Anglo-Saxon England within a north west European context: a study of social identities between the eighth and eleventh centuries. Unpublished PhD thesis. Reading: University of Reading.

Weetch, R. (2017) Tradition and innovation: lead-alloy brooches and urban identities in the 11th century. In: D. M. Hadley and C. C. Dyer (eds), *The archaeology of the 11th century: continuities and transformations*. Society for Medieval Archaeology Monograph 38. Abingdon: Routledge, 263-282.

Weikert, K. (2015) The biography of a place: Faccombe Netherton, Hampshire, ca 900 – 1200. *Anglo-Norman Studies*, 37, 257-284.

Weikert, K. (2018) Of pots and pins: The households of Late Anglo-Saxon Faccombe Netherton. In: B. Jervis (ed.), *The Middle Ages Revisited: Studies in the Archaeology and History of Medieval Southern England Presented to Professor David A. Hinton*. Oxford: Archaeopress, 57-70.

Weikert, K. (2020) *Authority, Gender and Space in the Anglo-Norman World, 900-1200*. Woodbridge: Boydell Press.

*Welch, M. (1977) A medieval bronze mount and pendants from Oxfordshire. *Oxoniensia*, 42, 265.

Wendt, A. (1998) Archäologische Prospektionsergebnisse zur Entstehung der Hirschberg-Strahlenbergischen Burgen an der Bergstraße. *Denkmalpflege in Baden-Württemberg*, 27, 37-44.

*West, S. E. (1963) Excavations at Cox Lane (1958) and at the town defences, Shire Hall Yard, Ipswich (1959). *Proceedings of the Suffolk Institute of Archaeology and History*, 29(3), 233-303.

*West, S. E. (1998) *A corpus of Anglo-Saxon material from Suffolk*. East Anglian Archaeology 84. Ipswich: Suffolk County Council Planning Department.

*Westphalen, P. (2002) *Die Eisenfunde von Haithabu*. Die Ausgrabungen in Haithabu 10. Neumünster: Wachholtz.

*Wheeler, C. (2011) A re-examination of medieval material culture: Buckinghamshire and Oxfordshire rural and urban sites reconsidered. Unpublished PhD thesis. Reading: University of Reading.

Whitehead, R. (2003) Buckles 1250-1800. Witham: Greenlight Publishing.

Wicker, N. L. (1994) On the trail of the elusive goldsmith: tracing individual style and workshop characteristics in migration period metalwork. *Gesta*, 33(1), 65-70.

Wicker, N. L. (2013) Review of Jane F. Kershaw 'Viking identities: Scandinavian jewellery in England'. *Cambridge Archaeological Journal*, 23, 561-562.

*Wideen, H. (1955) Västsvenska vikingatidsstudier. Arkeologiska källor till Vänerområdets kulturhistoria under yngre järnålder och äldsta medeltid. Skrifter utgivna av Göteborgs arkeologiska museum 2. Göteborg: Rundqvists boktryckeri.

*Wild, W. (1997) *Reichenbach - Burg und Letzi Mülenen. Die Rettungsgrabungen von 1941 und 1990-96*. Bern: Berner Lehrmittel-und Medienverlag.

*Wilkinson, D. (2007) Objects of copper alloy. In: I. Soden (ed.), *Stafford Castle: survey, excavation and research 1978 - 1998, volume 2 - the excavations*. Stafford: Stafford Borough Council: 134-141.

Williams, A. (1986) 'Cockles amongst the wheat': Danes and English in the western midlands in the first half of the eleventh century. *Midland History*, 11, 1-22.

Williams, A. (2008) *The World before Domesday: the English Aristocracy, 900–1066*. London: Continuum.

Williams, A. (2018) 1066 and the English. In: D. Bates (ed.), *1066 in Perspective*. Leeds: Royal Armouries Museum, 123-132.

Williams, D. (1995) Stirrup mounts. Finds Research Group Datasheet 20. Finds Research Group.

Williams, D. (1996) Some recent finds from East Surrey. *Surrey Archaeological Collections*, 83, 165-186.

Williams, D. (1997a) Late Saxon stirrup-strap mounts. A classification and catalogue.CBA Research Report 111. York: Council for British Archaeology.

Williams, D. (1997b) Stirrup terminals. Finds Research Group Datasheet 24. Finds Research Group.

Williams, D. (1997c) Two Anglo-Scandinavian harness cheek-pieces from Tandridge and Nutfield. *Surrey Archaeological Collections*, 84, 192-193.

Williams, D. (2000) A stirrup-strap mount from Little Glemham, Suffolk: a possible import. *Proceedings of the Suffolk Institute of Archaeology and History*, 39(4), 493-494.

Williams, D. (2001) A classification and catalogue of late Saxon stirrup terminals. Unpublished manuscript supplied by author.

Williams, D. (2002) Two late Saxon spur fragments from Sussex and Hampshire. *Medieval Archaeology*, 46, 115-118.

*Williams, D. (2004a) Old Romney, Kent. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 48, 237-239 (232-247).

*Williams, D. (2004b) Crondall, Hampshire. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 48, 234-235 (232-247).

Williams, D. (2005a) Little Wilbraham, Cambridgeshire. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 49, 329-331 (326-349).

*Williams, D. (2005b) Clipstone, Isle of Wight. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 49, 342-343 (326-349).

*Williams, D. (2005c) Gatcombe, Nottinghamshire. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 49, 332-333 (326-349). *Williams, D. (2006a) Wendover, Buckinghamshire. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 50, 276-279 (274-294).

Williams, D. (2006b) West Clandon, Surrey. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 50, 291-292 (274-294).

*Williams, D. (2006c) Walton-on-Thames, Surrey. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 50, 292-293 (274-294).

Williams, D. (2007a) Anglo-Scandinavian horse harness fittings. Finds Research Group Datasheet 39. Finds Research Group.

*Williams, D. (2007b) Surrey, Shere. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 51(1), 227-228 (211-232).

*Williams, D. (2009a) Blandford Forum, Surrey. In: J. Naylor, K. Leahy and G. Egan (eds), Portable Antiquities Scheme. *Medieval Archaeology*, 53, 339-341 (327-346).

*Williams, D. (2009b) Broughton, Hampshire. In: J. Naylor, K. Leahy and G. Egan (eds), Portable Antiquities Scheme. *Medieval Archaeology*, 53, 330-331 (327-346).

*Williams, D. (2009c) Betchworth, Surrey. In: J. Naylor, K. Leahy and G. Egan (eds), Portable Antiquities Scheme. *Medieval Archaeology*, 53, 339 (327-346).

Williams, D. (2011) Research into riding gear: Scandinavian influence in late Anglo-Saxon metalwork. In: M. Lewis, A. Richardson and D. Williams, Things of this world: portable antiquities and their potential. In: M. C. Hyer and G. Owen-Crocker (eds), *The material culture of daily living in the Anglo-Saxon world*. Exeter: University of Exeter Press, 252-257 (231-257).

*Williams, F. (1979) Excavations on Marefair, Northampton, 1977. *Northamptonshire Archaeology*, 14, 38-79. Williams, G. (2001) Coin-brooches of Edward the Confessor and William I. *British Numismatic Journal*, 71, 60-70.

Williams, G. (2006) More late Anglo-Saxon and Norman coin jewellery. *British Numismatic Journal*, 76, 337-339.

*Williams, J. H. (1978) Excavations at Greyfriars, Northampton, 1972. Northamptonshire Archaeology, 13, 96-160.

*Williams, V. (1997) Non-ferrous metal objects. In: B. Morley and D. Gurney, *Castle Rising Castle, Norfolk*. East Anglian Archaeology 81. Dereham: Field Archaeology Division, Norfolk Museums Service, 87-93.

Williamson, T. (1993) The origins of Norfolk. Manchester: Manchester University Press.

Wilson, D. M. (1961) An Anglo-Saxon bookbinding at Fulda (Codex Bonifatianus I). *The Antiquaries Journal*, 41, 199-217.

Wilson, D. M. (1964) *Anglo-Saxon ornamental metalwork 700-1100 in the British Museum*. London: Trustees of the British Museum.

Wilson, D. M. (1975) Tenth-century metalwork. In: D. Parsons (ed.), *Tenth century studies: essays in commemoration of the Millennium of the Council of Winchester and Regularis Concordia*. Chichester: Phillimore, 200-207.

Wilson, D. M. (1978) The dating of Viking art in England. In: J. T. Lang (ed.), *Anglo-Saxon and Viking Age Sculpture and its Context. Papers from the Collingwood Symposium on insular sculpture from 800 to 1066*. BAR British Series 49. Oxford: BAR Publishing, 135-144.

Wilson, D. M. (2008) The development of Viking art. In: S. Brink (ed.) *The Viking world*. London: Routledge, 323-338.

*Wollschläger, M. (2017) Kurze Fundberichte, Flessenow, Lkr. Ludwigslust-Parchim, Fpl. Bodendenkmalpflege in Mecklenburg-Vorpommern: Jahrbuch 2015, 63, 293.

Woods, P. (2006a) From small beginnings... the Chapes Research Project - part 1. *The Searcher*, 247 (March 2006), 18-20.

Woods, P. (2006b) From small beginnings... the Chapes Research Project - part 2.*The Searcher*, 248 (April 2006), 26-29.

Woods, P. (2006c) From small beginnings... the Chapes Research Project - part 3. *The Searcher*, 249 (May 2006), 26-28.

Woods, P. (2006d) From small beginnings... the Chapes Research Project - part 4. *The Searcher*, 250 (June 2006), 26-28.

Woods, P. (2006e) From small beginnings... the Chapes Research Project - part 5. *The Searcher*, 251 (July 2006), 25-27.

Woods, P. (2006f) From small beginnings... the Chapes Research Project - part 6. *The Searcher*, 254 (October 2006), 26-27.

Woods, P. (2007a) From small beginnings... the Chapes Research Project - part 7. *The Searcher*, 257 (January 2007), 52-54.

Woods, P. (2007b) From small beginnings... the Chapes Research Project - part 8. *The Searcher*, 262 (June 2007), 60-62.

Woods, P. (2008a) From small beginnings... the Chapes Research Project - part 9a. *The Searcher*, 271 (March 2008), 48-49.

Woods, P. (2008b) From small beginnings... the Chapes Research Project - part 9b. *The Searcher*, 272 (April 2008), 60-62.

Woods, P. (2010) A group of late Saxon and early Norman dagger chapes. Unpublished manuscript supplied by author.

Woods, P. (2021) *Late Saxon and Early Medieval Knife Sheath and Sword Scabbard Chapes*. Privately published.

*Worrell, S. (2002) Colden Common, Hampshire. In: H. Geake (ed.), Portable Antiquities Scheme. *Medieval Archaeology*, 46, 132-133 (128-145).

Worrell, S., Egan, G., Naylor, J., Leahy, K. and Lewis, M. (eds) (2010) *A decade of discovery: proceedings of the Portable Antiquities Scheme Conference 2007*. Oxford: Archaeopress.

*Wrathmell, S. (ed.) (2018) *Kirkstall Abbey. Volume 2: The guest house excavations 1979-86*. Yorkshire Archaeology 12. Leeds: West Yorkshire Advisory Service.

Wright, S. M. (1987) Much Park Street, Coventry: the development of a medieval street, excavations 1970-74. *Transactions of the Birmingham and Warwickshire Archaeological Society*, 92 (for 1982), 1-92.

Yates, D. and Bradley, R. (2010) The siting of metalwork hoards in the Bronze Age of South-East England. *The Antiquaries Journal*, 90, 41-72.

*Young, A. C. (1995) Excavations at Harry Stoke, Stoke Gifford, North Avon. *Bristol and Avon Archaeology*, 12, 24-45.

*Youngs, S. (2016) A Hiberno-Norse strap-end from Bulford near Amesbury, Wiltshire. Journal of the Cork Historical and Archaeological Society, 121, 11-18.

Zarnecki, G. (1984a) 126. Cloister capital. In: G. Zarnecki, J. Holt and T. Holland (eds), English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]. London: Weidenfeld and Nicolson, 167. *Zarnecki, G. (1984b) 163. Three keystones from Keynsham Abbey, Somerset. In: G. Zarnecki, J. Holt and T. Holland (eds), *English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]*. London: Weidenfeld and Nicolson, 194.

Zarnecki, G. (1984c) General introduction. In: G. Zarnecki, J. Holt and T. Holland (eds), *English Romanesque art, 1066-1200 [Exhibition Hayward Gallery, London 5 April-8 July 1984]*. London: Weidenfeld and Nicolson, 15-26.

Zarnecki, G., Holt, J. and Holland, T. (eds) (1984) *English Romanesque art, 1066-1200* [*Exhibition Hayward Gallery, London 5 April-8 July 1984*]. London: Weidenfeld and Nicolson.

Zschille, R. and Forrer, R. (1893) *Die Pferdetrense in ihrer Formen-Entwicklung, ein Versuch zur Characterisirung und Datirung der Mundstücke der Pferdezäumung unserer Kulturvölker*. Berlin: Paul Bette.

*Zschille, R. and Forrer, R. (1896) *Die Steigbügel in ihrer Formen-Entwicklung: Characterisirung und Datirung der Steigbügel unserer Kulturvölker*. Berlin: Paul Bette.