

Iron Age keys, locks, and chests

GOTARC Series B. Gothenburg Archaeological Theses 79

Iron Age keys, locks, and chests

*Exploring locking practices and social identities at Birka, Helgö,
Lovö, Sanda, and Vallhagar*

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UNIVERSITY OF
GOTHENBURG

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Abstract

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The use of keys, locks, and chests in the Scandinavian Iron Age is a subject overshadowed by the assumed connection between keys and the housewife with her administrative role on the farm. The key is sometimes even seen as the very symbol of this role. The present thesis instead focuses on locking practices, to which locks and chests also naturally belong. This includes assessing, but also looking beyond, the role of the housewife in order to broaden the analysis and explore which roles or social identities may be connected with these. This is achieved through studying keys, locks, and chests and their contexts, and by considering what their presence could imply in terms of control, access, private property, responsibility, accountability, trust, mobility, and social status. The study also includes exploring which types of structures or objects were locked, as well as some of the symbology connected with keys, locks, and chests. The theoretical framework used is based on ideas involving social identities, structure, agency, and practice, and the idea that material culture is polysemous – that its meanings can vary depending on its particular social history, the position of specific social agents, and the contexts in which it was used.

The first part of the thesis provides a background to the subject and the theoretical framework, followed by a section dealing with medieval sources, in the form of Old Norse literature and medieval laws, mentioning keys, locks, or chests. Since the assumed connection between keys and the housewife is heavily based on a narrow selection of these medieval sources, it was necessary to include and evaluate these. However, a wider selection of texts was also included to give a fuller account of the contexts in which these objects occur. The third part of the thesis deals with the previously excavated archaeological material from Birka, Helgö, Lovö, Sanda, and Vallhagar, which includes both settlements and graves. While the settlements mostly gave information that can relate to locking practices, the graves provided clues concerning the individuals who were involved in these.

Some of the more important points of the thesis, as discussed in the fourth and final part, are that the very presence of keys, locks, and chests on the settlement sites demonstrate that some form of restricted access and control was in place. This indicates that there was some form of social differentiation or inequality where some had access to things and/or spaces that others did not. It also suggests the presence of private property. Additionally, the locking device facilitated the mobility of people by taking over the role of physically guarding property. The results also point to a connection with travelling and trading, and to inheritance and the right of occupancy. When it comes to the graves, the results show a varied picture and that the individuals buried with keys, locks, or chests were not a homogenous group. Most of these graves did however contain costly grave goods. Placing a key, lock, or chest in the grave was a rare practice, suggesting a rather exclusive or special expression.

This study shows that there was variation and complexity in locking practices and the individuals who were involved. Focusing on the connection with the role of the housewife is greatly limiting for the analysis and does nothing to increase our knowledge of Iron Age society. The hope is that this study can lead to more nuanced interpretations of keys, locks, and chests in the future.

Keywords: locking practices, social identities, keys, locks, chests, settlements, graves, Birka, Helgö, Lovö, Sanda, Vallhagar, Iron Age, Viking Age, Old Norse literature, medieval law.

In loving memory of my grandmother Greta Nordström

** 1926-11-23 – † 2017-05-10*

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Emma Nordström
Alingsås, October 2021

Table of Contents

<i>Part One - Background</i>	1
<i>Chapter One - Introduction</i>	3
Aims and research questions	5
Theoretical framework	7
Similarity and difference, structure, agency, and practice	8
Multiple categories of identity	13
Identity and burials	17
Regarding ownership and property	20
Material and method	26
<i>Chapter Two - Keys, locks, and chests in the Iron Age</i>	43
Previous research on keys, locks, and chests	43
Technical and historical aspects of locks and keys	53
Padlocks	68
<i>Part Two - Medieval Texts</i>	73
<i>Chapter Three - Keys, locks, and chests in Old Norse literature</i>	75
Keys, locks, and chests in the Icelandic Sagas	75
Locked doors in the sagas	79
Sagas where chests are mentioned	84
Keys, locks, and chests in the Poetic and Prose Edda	89
The Poetic Edda	89

Table of Contents

The Prose Edda	99
Keys, locks, and chests in The Legendary sagas	102
Concluding remarks on the keys, locks, and chests in Old Norse literature	106
<i>Chapter Four - Keys, locks, and chests in medieval law</i>	109
Concerning the medieval law sources	111
Keys, locks, and chests in Frankish and Anglo-Saxon law	114
The Scandinavian provincial laws and their dating	119
Keys, locks, and chests in the Scandinavian provincial laws	123
Norway	123
Iceland	125
Denmark	126
Sweden	130
Concluding remarks on the keys, locks, and chests in the medieval laws	139
<i>Part Three - The archaeological material</i>	143
<i>Chapter Five - Birka</i>	145
The Viking Age town of Birka	145
Short overview of the excavations	150
Keys, locks, and chests found in The Black Earth	153
Stray finds	154
Hjalmar Stolpe's excavations	155
Excavations in the harbour area 1969-1971	157
The keys, locks, and chests from the Black Earth harbour	160
The 1990-1995 excavations	161
The keys, locks, and chests from the 1990-1995 excavations	165
Concluding remarks on the keys, locks, and chests found in the Black Earth	169
Keys, locks, and chests found in the Garrison area	170
The hillfort Borg	171
The Garrison area	172
Excavations on Terrace II	174
The keys, locks, and chests on Terrace II	178
Excavations on Terrace III	181
Excavations on Terrace I and in the Hall-building	182

Table of Contents

The location of the keys, locks, and chests	188
Keys, locks, and chests from Terrace I	191
Excavations on Terrace 0 and Area A	195
The keys, locks, and chests from Terrace 0 and Area A	196
Concluding remarks on the keys, locks, and chests found in the Garrison area	198
Keys, locks, and chests found in the Birka graves	199
The graves on Björkö	200
The excavations of the graves	203
Birka graves with keys, locks, or chests and inner grave types	205
The keys from the graves	207
The chests and boxes - with and without locks - from the graves	211
The padlocks from the graves	221
The find categories in the Birka graves with and without keys, locks, or chests – similarities and differences	223
Similarities and differences between inner grave types regarding find categories	236
Cremation graves	239
Coffin graves	241
Inhumation graves	244
Chamber graves	246
Concluding remarks on the keys, locks, and chests in the Birka graves	249
 <i>Chapter Six - Helgö</i>	 253
The Iron Age settlements and their location	255
Short overview of the excavations	258
Keys, locks, and chests from the Building Groups on Helgö	259
Building group 2	260
Terrace VI	261
Terrace IX	262
Terrace V	263
Terrace VII	264
Terrace II	266
Terrace I	267
Terrace III	269
Terrace IV	270

Table of Contents

Terrace VIII	272
Summary of Building Group 2	273
Building Groups 1 and 4	277
Building Group 1 – Structures and finds	278
The keys and locks from Building Group 1	280
Building Group 4 – Structures and finds	282
The keys and locks from Building Group 4	284
The periods of use on BG1 and BG4	286
Building Group 3	287
The character and finds of Building Group 3	289
The keys and locks from Building Group 3	291
Building Group 5	292
Building Group 6	293
The keys, locks, and chests from Building Group 6	295
Building group 7	295
Concluding remarks on the finds from the Building Groups on Helgö	298
Keys, locks, and chests from the grave fields on Helgö	302
Grave field Ekerö 150:1	303
Grave field Ekerö 116:1	304
Graves with keys, locks, and chests	305
Grave field Ekerö 118:1	310
Graves with keys, locks, and chests	310
The Helgö-graves with keys, locks, and chests	316
The find categories in the Helgö graves with and without keys, locks, or chests – similarities and differences	318
Concluding remarks on the keys, locks, and chests in the Helgö graves	323
<i>Chapter Seven - Examples for comparison</i>	325
Lovö	326
Grave field Lovö 57:1	328
Grave field Lovö 16:1	330
Grave field Lovö 27:1	334
Grave field Lovö 28:1	337
Grave field Lovö 34:1	343
The Lovö-graves with keys, locks, or chests	346
The find categories in the graves with keys, locks, and chests – similarities and differences	350

Table of Contents

Sanda	354
Vallhagar	370
<i>Chapter Eight - Comparisons of the keys, locks, and chests from Birka, Helgö, Lovö, Sanda, and Vallhagar</i>	383
The keys, locks, and chests from the settlement sites	384
The keys, locks, and chests from the graves	388
Find categories in the cremation graves - Similarities and differences between sites	391
Find categories – similarities and differences between inner grave types	398
<i>Part Four - Analysis, Conclusions, and Summary</i>	403
<i>Chapter Nine - Locking practices and social identities</i>	405
Kept under lock and key – archaeological contexts and medieval texts	405
Chests taken to the grave	409
Locking practices at Birka, Helgö, Sanda, and Vallhagar	411
Unlocking identities	420
The symbolism and meaning behind keys, locks, and chests	440
<i>Chapter Ten - Keys, locks, and chests – beyond the housewife</i>	449
<i>Svensk sammanfattning</i>	463
<i>References</i>	465
<i>Appendices</i>	493

Table of Figures

Figure 1:1. <i>Map showing the locations of the five sites included in the present study</i>	32
Figure 2:1. <i>The names of various parts on three of the types of keys occurring in the present study.</i>	54
Figure 2:2. <i>A construction suggestion of an ancient Mesopotamian locking system.</i>	55
Figure 2:3. <i>Roman tumbler lock with spring.</i>	56
Figure 2:4. <i>Examples of Roman T- and L-shaped lift-keys.</i>	57
Figure 2:5. <i>Examples of Roman tumbler lock slide-keys.</i>	58
Figure 2:6. <i>Examples of latch lifters.</i>	59
Figure 2:7. <i>Examples of Roman rotary keys.</i>	59
Figure 2:8. <i>Example of lever lock operated with a rotary key.</i>	60
Figure 2:9. <i>Example of rotary keys.</i>	61
Figure 2:10. <i>Example of chest lock from Birka to be operated by a rotary key.</i>	62
Figure 2:11. <i>Example of an L-shaped lift-key with three teeth, a T-shaped lift-key with a single tooth on each side of the stem, a T-shaped lift-key with two teeth on each side of the stem, and an 'S-shaped' lift-key.</i>	63
Figure 2:12. <i>Bottom: Construction suggestion of a door lock with a sliding bolt and L-shaped lift-key. Top: Construction suggestion of a door lock with a sliding bolt and T-shaped lift-key.</i>	64
Figure 2:13. <i>Example of angular L-shaped lift-keys.</i>	65
Figure 2:14. <i>Construction suggestion of chest-lock.</i>	67
Figure 2:15. <i>Incomplete Roman padlock.</i>	68
Figure 2:16. <i>Example of barb-spring padlock construction.</i>	69
Figure 2:17. <i>Example of box-shaped padlock from Helgö.</i>	70
Figure 2:18. <i>Examples of padlock keys from Birka and Helgö.</i>	71

Table of Figures

Figure 3:1. <i>The Ramsund runestone, Eskilstuna, Södermanland.</i>	95
Figure 5:1. <i>Northern Björkö with the Black earth, the town rampart, the pile barricade, the grave fields, the garrison, and the hillfort Borg marked out.</i>	148
Figure 5:2. <i>The location of the 1969-1971 and the 1990-1995 excavations.</i>	158
Figure 5:3. <i>Schematic plan over the buildings found during the 1990-1995 excavations at Birka.</i>	163
Figure 5:4. <i>Schematic plan over the area south of the Black Earth, by the hillfort Borg, showing the location of the Garrison area and the terraces.</i>	173
Figure 5:5. <i>Schematic plan of the structures on Terrace II.</i>	176
Figure 5:6. <i>Top: Interpreted plan of the hall building. Bottom: Excavation plan.</i>	185
Figure 5:7. <i>The box from grave Bj 542.</i>	212
Figure 5:8. <i>A reconstruction of the larger chest from Bj 639 where the original bronze fittings were mounted on a wooden chest replica.</i>	215
Figure 5:9. <i>The back of the lock plate from the chest in Bj 639.</i>	215
Figure 5:10. <i>A reconstruction drawing of the chest from Bj 845.</i>	216
Figure 5:11. <i>Details from Hjalmar Stolpe's grave plans, depicting chamber grave Bj 823 and chamber grave Bj 967.</i>	218
Figure 5:12. <i>The chest in chamber grave Bj 854.</i>	219
Figure 6:1. <i>Elevation map of eastern Helgö with the Building Groups and grave fields marked out.</i>	255
Figure 6:2. <i>Schematic plan of Building Group 2.</i>	261
Figure 6:3. <i>The "key-handles", perhaps more likely to be parts of chest-handles, from Terrace V, VII, IV and VIII, and the chest-handle from Birka grave Bj 212.</i>	265
Figure 6:4. <i>Schematic plan of Building Group 1.</i>	279
Figure 6:5. <i>Schematic plan of Building Group 4.</i>	283
Figure 6:6. <i>Schematic plan of Building Group 3, including Area VIII and IX.</i>	288
Figure 6:7. <i>The possible key handle and the fragmentary padlock.</i>	295
Figure 6:8. <i>Schematic plan over the area covering grave field 118 and the remains from Building Group 7, including Terrace I and II.</i>	296
Figure 6:9. <i>The rotary key from Building Group 7.</i>	297
Figure 6:10. <i>Schematic plan over grave field Ekerö 116:1 with the graves containing keys or chests marked out.</i>	306
Figure 6:11. <i>Possible key handle from Helgö grave A26.</i>	307
Figure 6:12. <i>Chest hinges from grave A28.</i>	308
Figure 6:13. <i>The angular L-shaped lift key and a holding ring from grave A48.</i>	309
Figure 6:14. <i>Schematic plan of grave field Ekerö 118:1 with the graves containing keys, locks, or chests marked out.</i>	311
Figure 6:15. <i>The iron rotary key from Grave 12.</i>	312

Table of Figures

Figure 6:16. <i>The grave urn in Grave 12 with the key showing.</i>	313
Figure 6:17. <i>The Bronze key from Grave 17.</i>	314
Figure 7:1. <i>Map of Lovö, with the ancient remains marked in black.</i>	327
Figure 7:2. <i>Schematic plan over grave field Lövä 57:1.</i>	329
Figure 7:3. <i>Plan over grave field Lövä 16:1.</i>	331
Figure 7:4. <i>The key from grave A7, along with the possible awl and the unspecified tool.</i>	332
Figure 7:5. <i>The key from Grave 38.</i>	333
Figure 7:6. <i>Schematic plan over grave field Lövä 27:1.</i>	335
Figure 7:7. <i>The iron mounts from grave A16, possibly part of a lock-mount.</i>	336
Figure 7:8. <i>The possible lock-mount from grave A34.</i>	336
Figure 7:9. <i>Schematic plan over grave field Lövä 28:1.</i>	338
Figure 7:10. <i>The chest-mounts from grave A37.</i>	339
Figure 7:11. <i>The possible key fragments from grave A44.</i>	340
Figure 7:12. <i>The possible chest/lock fragments from grave A75.</i>	341
Figure 7:13. <i>Schematic plan over grave field Lövä 34:1.</i>	344
Figure 7:14. <i>The angular L-shaped lift-key from grave A36.</i>	345
Figure 7:15. <i>Plan over the excavation area in Sanda with the buildings associated with the second Vendel Period phase.</i>	357
Figure 7:16. <i>Plan over the excavation area in Sanda with the buildings associated with the early Viking Age phase.</i>	359
Figure 7:17. <i>Bent and broken potential key from backfill dated to the 10th century in sunken featured building K64.</i>	360
Figure 7:18. <i>Plan over the excavation area in Sanda with the buildings associated with the later Viking Age phase.</i>	361
Figure 7:19. <i>Plan over the excavation area in Sanda with the buildings associated with the second early medieval phase.</i>	363
Figure 7:20. <i>Lock-spring case from house K21.</i>	364
Figure 7:21. <i>Lock-spring case from the eastern part of the excavation area.</i>	366
Figure 7:22. <i>Plan showing the farms at Vallbagar with the buildings containing keys or locks marked out.</i>	371
Figure 7:23. <i>Plan over Building 2 at Vallbagar with some categories of finds marked out, and a drawing of the lock-spring found in the building.</i>	373
Figure 7:24. <i>Plan over Building 7 at Vallbagar with some categories of finds marked out, and a drawing of the lock-spring case found in the building.</i>	375
Figure 7:25. <i>Plan over Building 11 at Vallbagar with some categories of finds marked out.</i>	377
Figure 7:26. <i>Plan over Building 19 at Vallbagar with some categories of finds marked out.</i>	379
Figure 9:1. <i>Detail from the Ramsund runestone, Eskilstuna, Södermanland (Raä Jäder 39:1, Sö 101), depicting the horse Grani with a treasure chest on his back.</i>	418

Table of Figures

Figure 9.2. <i>Grave plans showing Birka grave Bj 644 and Bj 750.</i>	424
Figure 9.3. <i>Grave plans showing chamber grave Bj 624 and chamber grave Bj 985.</i>	427
Figure 9.4. <i>Grave plans showing chamber grave Bj 735 and chamber grave Bj 739.</i>	429
Figure 9.5. <i>Grave plans showing chamber graves Bj 845 and Bj 834.</i>	430
Figure 9.6. <i>Grave plans showing coffin grave Bj 526 and chamber grave Bj 825.</i>	438

Tables

Table 1:1. <i>The find categories used in the present study and examples of the various objects belonging to each of these.</i>	36
Table 5:1. <i>The keys, locks, and chest-parts found as stray finds in the Black Earth, listed according to type.</i>	155
Table 5:2. <i>The keys, locks, and chest-parts found during Hjalmar Stolpe's investigations in the Black Earth, listed according to type.</i>	156
Table 5:3. <i>The types of keys, locks, and chest parts found in each Strata during the excavations in the Black Earth harbour area, 1970-1971.</i>	160
Table 5:4. <i>The keys found in the 1990-1995 excavations in the Black Earth, sorted into types.</i>	166
Table 5:5. <i>The keys found in the 1990-1995 excavations in the Black Earth, assigned to layers/contexts, with key-type and material also included.</i>	166
Table 5:6. <i>The locks found in the 1990-1995 excavations in the Black Earth, sorted into types/parts.</i>	167
Table 5:7. <i>The locks found in the 1990-1995 excavations in the Black Earth, assigned to layers/contexts, with lock type and material also included.</i>	167
Table 5:8. <i>The chest-parts found in the 1990-1995 excavations in the Black Earth.</i>	168
Table 5:9. <i>The locks from Terrace II and the contexts in which they were found.</i>	179
Table 5:10. <i>The keys from Terrace II and the contexts in which they were found.</i>	180
Table 5:11. <i>The chest parts from Terrace II and the contexts in which they were found.</i>	181
Table 5:12. <i>The locks from Terrace I and the contexts in which they were found.</i>	192
Table 5:13. <i>The keys from Terrace I and the contexts in which they were found.</i>	194
Table 5:14. <i>The chest-parts from Terrace I and the contexts in which they were found.</i>	194
Table 5:15. <i>The keys from Terrace 0 and the contexts in which they were found.</i>	196

Tables

Table 5:16. <i>The locks from Terrace 0 and the contexts in which they were found.</i>	197
Table 5:17. <i>The chest-parts from Terrace 0 and the contexts in which they were found.</i>	197
Table 5:18. <i>The number and percentage of all the Birka graves, divided into the four inner grave types: Cremation graves, Coffin graves, Inhumation graves, and Chamber graves.</i>	201
Table 5:19. <i>The percentage of graves within each of the four inner grave type categories for graves grouped into: ‘Graves without key/lock /chest’, ‘Graves with key/lock/chest’, ‘Graves with key’, ‘Graves with lock’, and ‘Graves with chest’.</i>	205
Table 5:20. <i>The keys from the Birka graves sorted according to material and type.</i>	208
Table 5:21a and 5:21b. <i>The Birka graves sorted into five grave groups based on the presence of keys, locks, or chests. 5:21a: “All other graves” and “All graves with key/lock/chest”; 5:21b: “All other graves”, “All graves with key”, “All graves with lock”, and “All graves with chest”.</i>	224
Table 5:22. <i>The find categories in the Birka graves that show the most difference when comparing the relative frequencies in the grave groups “All other graves” and “All graves with key/lock/chest”.</i>	232
Table 5:23. <i>The Birka graves sorted into four groups based on inner grave type and the relative frequency in percent of the various find categories in each grave group.</i>	237
Table 6:1. <i>The number of padlocks, lock-springs, and keys found within Building Group 2, sorted into their respective types and the different terraces where they were uncovered.</i>	276
Table 6:2. <i>The thirty-four keys found within Building Group 2, sorted into key-types.</i>	277
Table 6:3. <i>The locks and lock-parts from Building Group 1, sorted into types.</i>	281
Table 6:4. <i>The keys from Building Group 1, sorted into types.</i>	282
Table 6:5. <i>The keys and locks from Building Group 4, sorted into type/part.</i>	285
Table 6:6. <i>The keys from Building Group 3, sorted into key-types.</i>	291
Table 6:7. <i>The lock-parts from Building Group 3, sorted into lock-types/parts.</i>	292
Table 6:8. <i>The locks found on all the Helgö Building Groups, sorted into types.</i>	299
Table 6:9. <i>The keys found on all the Helgö Building Groups, sorted into types.</i>	300
Table 6:10. <i>The graves with keys, locks, or chests from Helgö, with information on outer and inner grave type, osteologically interpreted sex, date, and which of the three objects the grave contained.</i>	317
Table 6:11. <i>The keys, locks, and chest-parts from the Helgö graves, with type and material listed.</i>	318
Table 6:12. <i>The seven graves with keys, locks, or chests from Helgö with the presence of finds from the various find categories marked with an x.</i>	319
Table 6:13. <i>The percentage of find categories calculated for each of the two groups ‘Vendel/ Viking & Viking Age graves’, and ‘Graves with key, lock, or chest’.</i>	322
Table 7:1. <i>The Lovö graves containing keys, locks, or chests. The table shows information on grave field, inner grave type, osteologically interpreted age and sex, date, and which of the three objects the grave contained.</i>	346

Tables

Table 7:2. <i>The excavated Lovö graves divided into two groups based on chronological period: Migration/Vendel and Viking Age. The table shows the number of excavated graves, and the number of graves that contained a key, a lock, a chest, and key/lock/chest-graves taken together.</i>	348
Table 7:3. <i>The keys, locks, and chest-parts from the Lovö graves.</i>	349
Table 7:4. <i>The six Lovö graves with keys, locks, and chests from the Migration and Vendel Periods with the presence of finds from the various find categories marked with an x.</i>	351
Table 7:5. <i>The seven Lovö graves with keys, locks, and chests from the Viking Age and one Vendel/Viking Age grave, with the presence of finds from the various find categories marked with an x.</i>	352
Table 8:1. <i>The keys found on the settlement sites, divided into types.</i>	384
Table 8:2. <i>The locks found on the settlement sites, divided into types.</i>	386
Table 8:3. <i>The number of chests/chest-parts found on the settlement sites.</i>	387
Table 8:4. <i>The number of keys from the excavated graves from Birka, Helgö, and Lovö, divided into types.</i>	389
Table 8:5. <i>The number of locks from the excavated graves at Birka, Helgö, and Lovö, divided into types.</i>	389
Table 8:6. <i>The number of chests from the excavated graves from Birka, Helgö, and Lovö.</i>	390
Table 8:7. <i>The cremation graves from Birka, Helgö, and Lovö containing keys, locks, or chests, sorted into four groups based on site and period. The relative frequency in percent of the various find categories is displayed for each grave group with the absolute number in brackets.</i>	393
Table 8:8. <i>The graves from Birka, Helgö, and Lovö containing keys, locks, or chests, sorted into four groups based on inner grave type. The relative frequency in percent of the various find categories is displayed for each grave group with the absolute number in brackets.</i>	399
Appendix 1: <i>The keys from Birka with information on location, id-numbers, material, type, and year of excavation/finding.</i>	493
Appendix 2: <i>The locks and chests/chest-parts from Birka with information on location, id-numbers, material, type, and year of excavation/finding.</i>	503
Appendix 3: <i>The Birka graves with keys, locks, and chests, sorted by grave field and inner grave type.</i>	515
Appendix 4: <i>Twenty-three Birka inhumation burials with items found next to a key, in a location on or right next to the body of the deceased.</i>	520
Appendix 5: <i>List of Birka graves with remains of chests, along with short descriptions of the best preserved ones.</i>	521
Appendix 6: <i>Table with number of cremation graves in each find category, divided into graves without key, lock, or chest (“All other”); graves with key; graves with lock; graves with chest; and graves with key, lock, and/or chest.</i>	525

Tables

Appendix 7: <i>Table with number of coffin graves in each find category, divided into graves without key, lock, or chest (“All other”); graves with key; graves with lock; graves with chest; and graves with key, lock, and/or chest.</i>	526
Appendix 8: <i>Table with number of inhumation graves without coffin in each find category, divided into graves without key, lock, or chest (“All other”); graves with key; graves with lock; graves with chest; and graves with key, lock, and/or chest.</i>	527
Appendix 9: <i>Table with number of chamber graves in each find category, divided into graves without key, lock, or chest (“All other”); graves with key; graves with lock; graves with chest; and graves with key, lock, and/or chest.</i>	528
Appendix 10: <i>The keys from Helgö with information on location, id-numbers, material, and type.</i>	529
Appendix 11: <i>The locks and chests from Helgö with information on location, id-numbers, material, type, and year of excavation/finding.</i>	532
Appendix 12: <i>The find categories present on the various terraces at Building Group 2 on Helgö.</i>	539
Appendix 13: <i>The find categories present in the various building groups on Helgö.</i>	540
Appendix 14: <i>The keys from Lovö, Sanda, and Vallbagar with information on location, id-numbers, material, type, and year of excavation.</i>	541
Appendix 15: <i>The locks and chests from Lovö, Sanda, and Vallbagar with information on location, id-numbers, material, type, and year of excavation.</i>	542

Part One

Background

The first part of this thesis gives an introduction to the subject and explains the aims, questions, and methods of the study. It also presents the material that has been analysed, and the theoretical framework used.

Included is also a presentation of previous research on keys, locks, and chests, and a section dealing with technical and historical aspects of these objects.

Introduction

The first keys, locks, and chests started to appear in Scandinavia during the Roman Iron Age (c. CE-375 CE). They are found both in graves and on settlement sites, and their numbers increased over time: by the Middle Ages they were quite common (Roesdahl 1993: 217; Arwill-Nordbladh 1990: 255-256). It has primarily been the keys that have attracted the attention of researchers, and since the late 1800s Iron Age keys have been associated with the housewife and her administrative role on the farm. Although a few scholars have included other interpretations in more recent works, the association with the housewife can still be found today.

Other early research on Iron Age keys, locks, and chests mostly focused on the technology, typology, and chronology of the objects (e.g., Pitt-Rivers 1883; Arne 1914; Engelstad 1944; Erixon 1946; Almgren 1955; Tomtlund 1970). Following the general trends in archaeological research, scholars have gradually brought up some of the more societal aspects of keys, and what they might have meant or symbolised (e.g., Andrén & Nilsson 1976; Arwill-Nordbladh 1990; Roesdal 1993; Edgren 1997; Aannestad 2004; Kristoffersen 2004a). However, these were either shorter studies of keys or the main focus was on other issues. Most of them left out the locks and chests, and also neglected the keys, locks, and chests found on settlement sites, focusing on the finds from the graves.

Additionally, when keys were discussed, they were nearly always connected to the housewife: a married woman in charge of and administering the household's resources. Here the key was often seen as a symbol of her power or marital status. Other roles or identities

that could be associated with keys were only rarely brought up (e.g., Hedenstierna-Jonson 2006; Lund 2006), with Arwill-Nordbladh (1990) perhaps being the first person to question keys in Iron Age graves as symbols of the housewife.

In more recent studies the association between keys in graves and the housewife has been further questioned in connection with studies focusing on Danish graves (Pantmann 2011; 2014), Norwegian graves (Berg 2013; 2015), and graves from the Swedish Viking Age town Birka (Nordström 2014). These showed that placing a key in a grave was a rare custom, and called for a more nuanced interpretation.

In the present study, the focus has been on locking practices and exploring which social identities or roles were associated with these. This has involved critically assessing and looking beyond the role of the housewife in order to broaden the analysis. Repeating what has almost become a stereotype does nothing to increase our knowledge of Iron Age society. Furthermore, to fully investigate locking practices, both keys and locks have been included in this study, as well as chests since they represent a container onto which a lock could be attached in order to secure its contents.

The present study has also included material from both graves and settlements, looking at both the individuals who were buried with these items, and the type of contexts in which they would have been used in life. The sites chosen as case studies were Birka, Helgö, Lovö, Sanda, and Vallhagar.

Reviewing the studies which connect keys with the housewife made it clear that they relied heavily on a narrow selection of medieval texts, such as a few Old Norse poems and some legal rules from the Scandinavian provincial laws. In order to assess them, but also to give a fuller account of the contexts in which keys, locks, or chests occur in these sources, the present study has included an analysis of a number of medieval texts.

Aims and research questions

The thesis aims to investigate and analyse locking practices in Iron Age eastern Sweden through studying keys, locks, chests, their contexts, and what their presence could imply in terms of control, access, private property, responsibility, accountability, trust, mobility, and social status.

It also aims to explore which social identities or roles in Iron Age society can be connected with keys, locks, and chests; essentially analysing who had access or control over the locks, and what it could entail to be the holder of a key. This includes exploring whether this control or access might have played a role in the creation of the identity of the holder.

The underlying purpose is to broaden the analysis of keys, locks, and chests, in particular the keys, which has previously nearly always focused on their assumed connections with the so called “Lady of the House”, or “Housewife” – the preferred term used in the present thesis.

Since Iron Age keys and locks are strongly connected with chests, which in many cases were fitted with locks or fittings for the attachment of a padlock, these objects will also be included even though they are not part of the actual locking device. Together, the key, lock, and chest provided secure storage for property and goods: chests are therefore essential to the analysis of how keys and locks were used. Doors to various buildings and rooms could also be fitted with locks, but as a find category these are much more elusive in the archaeological material, and will only be included in the general discussions.

In this study, keys, locks, and chests are seen as mainly practical objects, but some of their more symbolic meanings will also be touched upon, particularly those concerning keys. The key can be seen as the more active part in the act of locking, and is essentially the object that grants control over the lock. It is therefore likely to have been given more symbolic value than the more passive locks and chests. The key could also be carried on display attached to a person’s clothing, and as such be used to signify a certain status or identity. The practical use of keys found in graves is also less clear in cases where no matching chest with a lock was present, and it is here that the more symbolic explanations seem possible.

In order to analyse locking practices in Iron Age society – including questions concerning how, and by whom, keys, locks, and chests were

Chapter One

used, what was locked away, why, and under which circumstances it was considered necessary or appropriate to lock – material from both graves and settlement sites will be investigated. Medieval texts including the Icelandic sagas, the Poetic and the Prose Edda, and the Scandinavian provincial laws will also be looked at in comparison with the archaeological material to serve as interpretive inspiration. Some of the included texts were used extensively in earlier research regarding keys, but they will here be extended to include more examples than the narrow selection which has previously been studied.

When investigating graves and settlements, some of the general questions will be similar and deal with: the number of finds, type and material, how and where they were placed, whether a key, lock, and chest were found in connection, what other objects were found in the context, whether the key or lock belonged to a chest or a door, or whether they were loose in the form of a padlock.

The study of the graves with keys, locks, or chests will focus on what can be deduced from the grave goods regarding the deceased's status and social identity or role in society. More symbolic meanings behind placing keys, locks, or chests in the grave will also be explored, although this will mostly be applied to the keys.

Graves from three different sites will be investigated and compared. The percentage of graves with keys, locks, or chests in their respective grave fields will also be calculated to see how common or rare the practice of placing these objects in the grave was, providing further clues into, for example, the status of these individuals.

The settlement contexts will be studied to determine whether any of the keys, locks, or chests can be associated with a particular building or activity area that could shed light on what was kept locked up, and what types of locks were used or produced. This will also help determine whether they were deliberately placed, discarded, or unintentionally left or forgotten. The sites chosen represent rather different contexts which will be investigated and compared to see if there are any differences or similarities between them regarding locking practices.

The medieval text analysis will focus on how and in what contexts keys, locks, and chests are mentioned, who had control over these, and what this can tell us about their different uses and meanings.

By not just looking at keys but also including locks and chests, by including both graves and settlement sites as well as a wider selection of texts, and by re-evaluating old interpretations and stereotypes based on new questions relating to locking practices, the hope is that the present study can produce new knowledge and insight into Iron Age society.

Theoretical framework

In this thesis, material culture is seen as polysemous; its meanings can vary through time depending on its particular social history, the position of specific social agents, and the contexts in which it is being used (Jones 1997: 118). It is not just a collection of accumulated meanings inscribed within it through its production and use in various social contexts and by differently positioned social agents: material culture is seen as playing an active role in the structuring of cultural practices. The culturally specific meanings it carries, as a result of former practices, influence successive practices and interpretations (Jones 1997: 118).

With this as a background to how material culture can be understood or interpreted, the approach in the present thesis is based on practice theory – emphasising what people do (see e.g., Cipolla 2014), with a focus on identity. It is believed that through the use of a particular object in everyday practice, or ritual, the meanings that are attributed to the object play an active role in the construction of an individual's identity (Jones 1997: 118). In this study, it is generally not the more individually perceived identity that is in focus, but rather social identity at a group level, and it is the connection with locking practices that will be the main line of inquiry throughout.

In this chapter, some of the main theoretical points that are regarded as applicable to the material and research questions in the present thesis are explained in more detail. It is not the purpose of this chapter to give full accounts of any particular theory or school of thought, nor is it believed that any one theory alone could provide an adequate model or explanation of concepts such as identity.

The theoretical chapter ends with a section on ownership and property, something that certainly relates to locking practices. The keys and locks can almost be seen as physical manifestations of controlled access to property, and the chests as the containers for this property. In this context it is interesting to consider the potentially growing inequality that private property or limited access to certain things might bring with it. As can be seen in the earliest Scandinavian laws, which were written down in the medieval period but may have older roots, a lot of effort was put into protecting those in possession of property. This protection seems to have been particularly strong when the property was kept under lock and key.

Similarity and difference, structure, agency, and practice

When studying identities, the concepts of similarities and differences as discussed by sociologist Richard Jenkins (2008 [1996]), are helpful both in formulating a theoretical framework, and as part of a method to study archaeological materials by actually looking at similarities and differences between different contexts. According to Jenkins "... the notion of identity involves two criteria of comparison between persons or things: *similarity* and *difference*." (Jenkins 2008: 17). These are the dynamic principles of identification, and neither makes sense without the other. One cannot establish one's own or another's identity by simply listing all possible things this person is not (Jenkins 2008: 18, 21-22). Similarly, exclusively listing all the things that make up a certain individual or group does nothing to distinguish this person or group in relation to others.

Identity must always be established; it is not simply just there. It involves classifying things or persons, and associating with or attaching oneself to something or someone else. Since these things comprise what people *do*, it places identity in practice (Jenkins 2008: 17). Put in another way "Identity denotes the ways in which individuals and collectives are distinguished in their relations with other individuals and collectives". Identification is the systematic establishment and signification of relationships of similarity and difference between individuals, between collectives, and between individuals and collectives. These similarities

and differences are of course not objectively real, but created by people engaging in the identification of self and others (Jenkins 2008: 18, 23). According to Jenkins, all human identities are *social* identities since they need interaction to acquire meaning. This interaction includes agreement and disagreement, convention and innovation, communication and negotiation. Therefore, identity is a process of 'being' or 'becoming' which is never final or fixed (Jenkins 2008: 17-18).

Archaeologists Howard Williams and Duncan Sayer (2009) express very similar ideas regarding identity, although without mentioning similarity or difference. They consider social identity as referring to personal perceptions of the self, and the external categorisation of individuals and groups. Therefore, they see social identities as a connection of interpersonal and inter-group relationships (Williams & Sayer 2009: 1). They view social identities as created through interaction between the existing structures of society and the agency of groups and individuals (possibly inspired by Anthony Giddens; see below), and as changing depending on context. In addition, they operate on multiple scales and are multi-vocal: they have different meanings for different people (Williams & Sayer 2009: 1-2). These meanings are mediated by the senses and vary depending on context and perceptions. This means that identities are inherently social, complex, and multi-faceted, and according to Williams and Sayer they belong more in the fields of interaction and the boundaries between, rather than within, individuals and groups (Williams & Sayer 2009: 2). Similar to Jenkins, Williams and Sayer view identities as rooted in practice, and in accordance with Jones (1997) they believe that all forms of material culture can be used in the construction, communication, and transformation of identities, as well as to convey them through time from generation to generation (Williams & Sayer 2009: 2). Further, material culture is central and active in the negotiation and performance of identity (Williams & Sayer 2009: 2). If applied to the use of keys, locks, and chests; these objects can be seen to affect the identity of the person handling them, and to help communicate this identity to others.

Williams and Sayer mention structures of society and the agency of groups and individuals in connection with the creation of identities, and there are other archaeologists that also connect identity, agency, and structure. One example is Andrew Gardner, who even views the

concepts of agency and identity as fundamental elements of the human condition (Gardner 2007: 18).

Agency, as described by sociologist Anthony Giddens, can be said to be a capability that people have of doing things, and it concerns events where an individual is the agent. What happened would not have happened if that individual had not acted, and the individual could at any point in a given sequence of conduct have acted differently (Giddens 1984: 9). The same can be applicable to groups as well. Giddens sees action as a continuous process, in which the individual maintains a reflexive monitoring that is fundamental to the control of the body, which actors normally sustain throughout their daily lives (Giddens 1984: 9). This reflexive monitoring or control can be seen as a cultural product. Sociologist Marcel Mauss (2006 [1923] [1973]) pointed out that each society has its own special habits regarding the attitude and techniques of the body, where education could be superimposed on imitation, and where a person imitates successfully performed actions by others who are viewed as reliable or authoritative (prestigious imitation). Therefore, the *habitus* is of a social nature. These 'habits' vary between individuals, societies, educations, proprieties, fashions, and prestige, showing the techniques and work of collective and individual practical reason (Mauss 2006 [1923] [1973]70-73, see also Connerton 1989).

Gardner (2007), following Giddens, sees agency as an individual capacity for action that only develops through an ongoing relationship with the wider world. This wider world, both physical and social, can be described as 'structure'. Through Giddens theory of "the duality of structure" (1984: 25-27), agency and structure are mutually constitutive; agents affect and shape the world whilst being constructed by it. Social structures are continually created and maintained through people's interactions.¹ According to Gardner, identity can here be seen as an important symbolic medium through which agency and structure interrelate (Gardner 2007: 18).

Giddens perceives structure as the rules and resources that are drawn upon by actors in the production of interaction, and they are thereby also reconstituted through such interaction (Giddens 1979: 63-64, 71). These rules and resources both constrain and enable the

1. For critique regarding Giddens' 'duality of structure' theory see e.g., Archer 1982, 1995; Callinicos 1989; Held & Thompson (eds.) 1989; Le Boutillier 2008; Loyal 2003; Mouzelis 1995; Pleasant 1998.

practices of the actors (Gardner 2007: 43). At the same time, actors can think and act at different levels of awareness; Giddens divides this into discursive consciousness, practical consciousness, and the unconscious. This means there is room for both repetitive actions as well as some level of 'free will', and these different levels of awareness can be interchangeable as different practices are learned, habituated, and questioned. However, according to Gardner's reading of Giddens, it is the routinisation of rules and resources in practical consciousness that is vital to their (re)production as structural properties through the unintended consequences of practices (Gardner 2007: 44-45). Further, the specific context of activity determines the range of rules and resources that actors draw upon routinely and reproduce, and those that the actor considers as problematic and questioned. Therefore, in order to interpret the meaning of actions, one needs to understand the context (Gardner 2007: 49).

Gardner also follows Jenkins in saying that actors deal with the world in terms of similarity and difference. According to Gardner it is mainly in these terms that structure 'acts back' on the actor. Identities are a part in the shaping of different agents and different structures are formed through their actions or practices (Gardner 2007: 18-19). In his work on soldiers and society in Late Roman Britain (2007), he pointed to the small-scale actions, traces of which are abundant in the archaeological record, and how they were shaped by the concerns of the people performing them, which simultaneously had an effect on the broader trajectory of society through time. His study puts an emphasis on practice, together with ideas concerning agency, and the belief that it is possible to understand what people are, based on what they do (Gardner 2007: 18-19).

In the present study, Gardner's approach and focus on practice is believed to be a good way to get a better general understanding of the individuals who were in some way connected with keys, locks, and chests.

To further support the idea that what people do affects their identity, archaeologist Patrick Fazioli argues that technological choices, for instance during pottery production, can reflect aspects of group identities, and at the same time create them (Fazioli 2014: 29). Based on Mauss (2006 [1973]) and Warnier (2001) he stated that learning a highly skilled activity, such as potting, individuals must continually (re)enact a certain sequence of bodily gestures and motor habits that have been shown to deeply

shape a person's sense of 'being-in-the-world'. The continual repetition of particular physio-motor habits is enacted at a non-discursive, preconscious level, becoming part of the very core of a person's identity (Fazioli 2014: 29; see also Budden & Sofaer 2009). Perhaps this is also applicable to the technological choices of the locksmith. It is likewise possible that repeated locking and unlocking, requiring particular knowledge, could have similar effects.

Following a similar line, archaeologist Chris Fowler stressed that identities are produced through the ongoing interactions between people and things, not just different groups of people (Fowler 2010: 360). Things embody cultural ideas, and people's identities; and bodies are shaped as they produce, experience, exchange, and consume things. The practices by which people make things, live with them, and use them also make those people, so this process of objectification is also a process of personification, according to Fowler (2010: 360). Material culture is also polysemous; similar forms, sometimes even the same artefact, can communicate multiple, different, and contextually dependent identities (Casella & Fowler 2005: 4).

Like Jenkins and Gardner, Fowler also used similarities and differences to define identity. He pointed out that since identities can only be understood in relation to other identities with which they articulate in specific contexts, they can only be glimpsed temporarily and partially (Fowler 2010: 362). People attempt to attain and maintain specific aspects of identity in the eyes of others and self, and here the study of specific contexts of action is important. Archaeological remains do not represent complete past identities, but the remains of media manipulated in the processes and strategies by which identities were negotiated within specific contexts (Fowler 2010: 363).

Taken together, the thoughts and views presented above which may be helpful in the present study include the idea that relational comparisons between different variables to see similarities and differences are important in the creation of identity. The creation of identity is also an ongoing process where agency, practice, and the contexts of the acts are in a mutual relationship. Importantly, what an individual does can affect their identity, and in this process the material world plays an active role. For this study, this means that looking at similarities and differences in the archaeological material might give some insight into the identities of

individuals connected with keys, locks, and chests, and how they relate to others. These ideas are also interesting to develop in connection with traces of past activities and how keys, locks, and chests could be used in the creation and display of identity. This is particularly relevant for keys, since they were the part of the locking mechanism that would be used more actively, and which could also be attached visibly to the dress.

Multiple categories of identity

In archaeology, the study of identity is often divided into analytical categories such as ethnicity, culture, religion, gender, status, age, and personhood (e.g., Jones 1997; Díaz-Andreu et al. 2005; Fowler 2004, Sofaer Derevenski 1997). A problem with this approach, however, is that it tends to isolate the different aspects of identity rather than studying identity from a more holistic view. It also creates a static picture of the past where the agency of an individual or a group is often not considered as an important aspect of everyday life in the past (Foulds 2014: 223-224). An individual might have an identity as part of a social grouping which could be very broad, for instance based on gender or ethnicity, and within that grouping the individuals each have nuanced self-identities. At any time, an individual has a range of identities available to them, and in the presentation of identities the visual and immediate messages of dress is suggested to play an important role. Dress can also be manipulated in order to create a number of associations which will communicate to the viewer how an individual wants to be regarded (Harlow 2012: 1). Homogeneously formed material culture that shapes people's outer appearance, like their dress and dress accessories, can also be seen as important in communicating social identity to people outside their own social/ethnic/linguistic group (Gustin 2004a: 207). The applicability of these ideas on the archaeological material can be seen especially in burial contexts where part of an individual's dress can sometimes be identified. Here the key is of special interest as it can be attached to the dress via a belt or similar, although it certainly should not be regarded as simply a dress accessory. Interpreting these fragments is not a straightforward matter, as will be discussed further below. In a burial context it is more likely the wishes of the family or kin group that

are communicated regarding the deceased's identity, rather than those of the deceased themselves.

Fowler also believes that identity should be considered holistically, including the relationships between different aspects such as gender, ethnicity, or personhood (Fowler 2010: 366). Similar ideas are shared by archaeologist Timothy Insoll who stated that although there are different identity categories, the overall construction of identity is usually not defined by singular, but rather by multiple elements, even though one could be ascribed precedence. This in turn is dependent on context and audience. Further, parts of multiple identities could be suppressed for political or other reasons, and more effort could also be put into upholding one aspect of identity depending on who is expressing and reading it (Insoll 2007a: 6; Insoll 2007b: 311).² Additionally, even though identities are changeable and not always fixed or stable, it could also be irrelevant to emphasise the transient moments of identity in relation to what are often more permanent categories, for example those related to ethnic or religious identities (Insoll 2007a: 5).

Another important concern regarding identity is the way that our own society influences the way we interpret past identities. Timothy Insoll made the very interesting point that identities are not necessarily chosen by free will, for example the caste system in India, where identities can be ascribed to a person. He pointed out that the foundations on which many archaeologists tend to interpret past identities are largely based on secular Western democracy where there is a freedom of expression, however, in much of the contemporary world this is not the case and would not have been the case in the past either (Insoll 2007a: 4). Insoll believes that the identity categories archaeologists use should be continuously evaluated in order to avoid them being merely mirror images of categories familiar to us, or categories that we think ought to have existed in the past (Insoll 2007a: 5). He also pointed out that archaeologists studying identity tend to forget that our bodies are not purely socially constituted, and that biology also plays a large part (Insoll 2007a: 4).

Following the line of biology, age is a category that is of great significance, since no one is born with their identity complete. Age can also be of great importance in dictating what we might know through

2. The concept of intersectionality provides another fairly similar perspective on multiple categories of identity (see e.g., Davis 2008).

experience, or what we might be allowed to know through age sets or grades, secret societies, initiation groups and so on. However, insight into this part of identity is sometimes limited via archaeology (Insoll 2007a: 5). Restricted knowledge, often in relation with age, is an important variable that has the potential to influence the manifestation of identities; age can restrict what other identity variables can be manifest, for example religion or the exercise of sexuality (Insoll 2007a: 6). In the present study, the material unfortunately provides very little detail into the age of individuals, although there are a few graves which were identified as children's graves and human bones have occasionally had their age estimated through osteological analysis. The majority of individuals in the material are simply classified as adults, but the perspectives above still provide food for thought when analysing the individual's social identity.

Another important aspect of identity is that of gender, which has received a lot of attention in recent years. It can be defined as "an individual's self-identification by others to a specific gender category on grounds of their culturally perceived sexual difference", and according to archaeologist Margarita Diaz-Andreu, it is related, but not equivalent to that of sex (Díaz-Andreu 2005: 14). Following a social constructionist position, gender is seen as socially created, culturally specific, and distinct from the fixed biological categories of sex (Gilchrist 2009: 4). Based on Judith Butler's theory of performance (1990) it is suggested that gender identities are continually produced through social performances. During gaps in these series of imitative repetition, there is however potential for agency as the subjects may be able to subtly transform these performances through subversive practices (Voss 2005: 59-60).

It is important to keep in mind, however, that neither gender nor biological or physiological definitions of sex can be accepted as absolute binaries. There is for instance overlap in the production of sex hormones in males and females, and factors such as stress and age can affect their production. Also, in terms of genetic sex there are up to eleven categories of chromosomal variation (Gilchrist 2009: 5-6, 10). As proposed by archaeologists Jarl Nordbladh and Timothy Yates, male and female should be assessed as two extremes on the same spectrum with sex a relative, not fixed, status (Nordbladh & Yates 1990). Through ethnographic studies, it has also been challenged that gender is universally binary. There are examples of 'intersex' individuals who

hold a distinct status between male and female, and more commonly, the social conditions of gender can create a third gender role (Gilchrist 2009: 10; see also Weglian 2001).

Combining age and gender, archaeologist Joanna Sofaer Derevenski (1997) has discussed the engendering of children, based on developmental psychology and gender theory. According to her, a child gradually develops an awareness of gender identity, gender roles, and gender ideology. As the individual child absorbs, learns, and complies with culturally defined gender rules, these evolve and change, and at the same time society's gendered perceptions of that individual may change in line with the child's development (Sofaer Derevenski 1997: 194). Even if a child is assigned to a gender based on sex at birth, it must still learn and accept gender appropriate behaviours (Sofaer Derevenski 1997: 194). Based on social learning theory, it is suggested that children behave in ways that will be favourably received or rewarded, and differential reinforcement can act on individuals to produce different genders. Children learn the symbolic behaviour that is appropriate for their future adult gender, and since they are rewarded for it, they begin to want to act in the prescribed ways. Therefore, gender status is reproduced in daily activity (Sofaer Derevenski 1997: 197). These ideas are in line with Mauss, Giddens, and Jenkins as described above, and are applicable to other categories of identity as well, such as ethnic or religious identity, where the child gradually learns appropriate behaviours.

To sum up the above thoughts regarding multiple categories of identities; an individual is a complex mixture of different identity categories that can change according to context and also over time. These are socially and culturally specific, although biology also plays a part, and can be continually produced or altered through social performances/practice. Sometimes parts of an identity can be suppressed or elevated to fit the situation. The identity can be both part of a larger social group or a more personal self-identity or personhood, but as pointed out, an identity is not necessarily chosen freely. Furthermore, identity changes throughout a person's lifetime and different aspects of identity become available with age. From childhood a person gradually develops a reflective awareness of appropriate behaviours for specific aspects of identity, such as gender.

In the material chosen for the present study, it is mainly the graves that provide clues regarding the identity of individuals since these are

the only contexts in which material culture can be connected with one person (although occasionally with more than one). Unfortunately, due to poor preservation and the common practice of cremation, categories such as age and sex are not possible to determine for many burials. Several buried individuals can however be classified generally to be either adults or children. When it comes to sex/gender, it has often been interpreted through the objects in the grave – what could be referred to as *archaeological sex* – and only rarely through osteology or DNA. As mentioned earlier, keys are traditionally viewed as female objects which leads to the risk of circular arguments if using the archaeological sex specified in the archaeological reports. Consequently, to move away from such traditional interpretations, the approach in the present study is not focused on archaeological sex/gender, but instead more on finding clues to past activities or roles in society, keeping in mind the ideas concerning how practice and material culture affect an individual's identity.

Identity and burials

In the present study, graves and the objects within the grave context form a large part of the material and consequently play an important role. For this reason, it is significant to present some of the current discussions concerning graves in relation to identity and how burials and the objects within can be used to create, alter, or manifest identity.

The interpretations of objects found in a grave together with the deceased, here referred to as grave goods, have occupied a vast number of archaeologists throughout the history of the subject. Grave goods denote any object found in a grave from remains of the dress to deliberate depositions of objects and sacrificial offerings (Härke 2013: 41). Conventional archaeological interpretations of the meaning behind these objects include grave goods as equipment for the dead, inalienable property (further discussed in the next section), indicators of rank, status, and identity, gifts to the dead or to a deity, remains of the funeral feast, or polluted objects that needed to be disposed of (Härke 2013).

Within processual archaeology, many scholars interpreted the grave goods as directly representing the deceased's socio-political status where,

for example, weapons indicated a warrior's grave. The objects in the grave were seen as directly associated with the deceased and his/her identity. Any symbolic meaning behind the grave goods was downplayed and there were rarely any discussion regarding the meaning behind various archaeologically observable activities performed at the grave site (Ekengren 2013: 175-176). These views have since been criticised, primarily because they fail to reflect on why a given set of objects or actions were used in the representation of the deceased's identity and rank (Ekengren 2013: 176). It has instead been construed that the ways in which death was dealt with were historically situated, and that they depended on factors such as ideology and social relationships among the bereaved, as well as the social intentions of individual actors. According to this understanding, grave goods constitute social relationships rather than representing them (Ekengren 2013: 176). The post-processual view on grave goods is generally that the meaning of the objects is not static, but depends on their context. The burial rituals through which the grave was created are seen as practices open to both innovation and change, and many post-processual scholars have taken inspiration from the theories of practice and structuration developed by anthropologist Pierre Bourdieu and the previously mentioned Anthony Giddens in the late 1970s (Ekengren 2013: 176).

Consequently, according to more recent theories regarding grave goods, items buried with the deceased are not an exact equivalent of either status or material goods owned or used in life. Further, it is the living who create the burials and use them to express and influence their relationships with others who are still alive, as much as to symbolise or serve the dead. However, there is often a relationship between the role and status of the deceased in life and the way the remains are disposed of and accompanied by artefacts (Renfrew & Bahn 2003: 193). Grave goods are also seen as a form of communication, or even agents, which influence the people who experience them (Ekengren 2013: 177). However, since there are no contemporary textual sources for the Swedish Iron Age, there is a lack of tools to interpret the messages communicated through the grave goods.

Studies of early medieval burials on the other hand, using both textual and archaeological evidence, suggest that there could be several possible motives behind the placement of grave goods during any one funeral, and that these could change over time. Even the meaning

behind particular items could vary across time and region, and hence the deposition of objects in early medieval graves can be seen as conveying multiple messages and variability in meaning (Härke 2013). This could be the case for other time periods as well, and it points to the challenges involved in interpreting the remains of burials.

Burial practices have been regarded by many archaeologists as contexts for the display and constitution of identities. However, they do not passively reflect identities, but can be manipulated to make ideological ‘masking’ or ‘naturalizing’ statements about identity and social order (Fowler 2010: 360). Burial practices can also be seen as arenas of identity shifts where both the living and the dead undergo ontological, social, and cosmological realignments as they cope with, and selectively remember or forget aspects of the deceased (Williams & Sayer 2009: 3). Furthermore, it has been suggested that when people participate together in a specific ritual, such as for instance a burial ceremony, a link is formed between them, and in this way the ritual performance defines the membership to certain social groups (Kyriakidis 2007: 295-297). This is also interesting to consider regarding the creation of social identities.

To summarise the above ideas applicable to the present study; it is the living who created the burials, and they used them to express and influence their relationships with others who were still alive, as much as to symbolise or serve the dead. Burial practices or rituals are commonly regarded as contexts for the display, constitution, and alteration of identities of both the living and the deceased, where the grave goods played an active part.

Items buried with the deceased were not an exact equivalent of either status or material goods owned in life, although there often seems to have been a connection. The meaning behind the various grave goods was also dependent on the context, and may have conveyed multiple messages and variability in meaning, even in regard to the same type of object. A key, lock, or chest placed in one grave could consequently have a different meaning placed in another grave, pointing to the difficulties in interpretation and importance of understanding the context. Here, looking for similarities and differences between the contexts may, however, provide some clues. In this study grave goods are cautiously seen as connected with the identity of the individual in the grave,

but chosen for various reasons by the family, kin group, or whoever conducted the burial. This would suggest that the grave goods probably displayed an ideal or suitably altered version of this person's identity where certain aspects may have been highlighted and some suppressed.

Regarding ownership and property

Keys, locks, and chests have a strong association with ownership and property. The physical control that the locking device provides gives the means to regulate access to things, in a sense keeping them in the possession of the individual holding the key. Access in the form of a key could however also be delegated to someone other than the owner. Understood in this way, keys, locks, and (lockable) chests can be regarded as physical manifestations of property and ownership, and consequently it is of interest to discuss these concepts further.

Unlike the theories and thoughts concerning identity, agency, practice, etc., discussed above, which are relatively modern and often included in various archaeological studies, discussions concerning ownership and property are less commonly found within archaeology and will therefore be given a little more background here.

Discussions regarding property, including its origin, how to relate to it, and whether or not private property is something positive or negative also have a long history, going back at least to Antiquity and philosophers such as Plato, who suggested in his *Republic* that the unity and well-being of the polis could only be secured if the ruling class were denied having their own property or family (to which private wealth could be passed down to). Nevertheless, many theologians, jurists, and philosophers have for centuries worked on elevating the status and reputation of private property (Garnsey 2007: 108, 233-235).

On the origin of property, 17th century philosopher John Locke proposed that when a person uses his or her labour to modify a previously un-owned thing, he or she establishes ownership of it (Busse & Strang 2011: 3). Locke did however propose some limitations to the right to property; there must be enough left for everybody else to sustain their own life, and no one has the right to more than one or one's dependants can personally make use of or consume before it spoils. The situation

changes however when money (which does not spoil) was introduced, making it possible to appropriate larger possessions, and driving people to possess more than they need. Therefore, the agreement to use money brought with it an agreement on unequal possessions (Gronow 2015 [1986]: 226-227, 232-233). In an Iron Age setting, items of precious metals and textiles for example, could be seen to work in the same way as they do not spoil.

Locke's ideas were further developed by philosopher and economist Adam Smith in the 18th century. He saw the social benefits associated with labour and property as a result of the increasing division of labour and increasing exchange of commodities (Gronow 2015 [1986]: 235). Contemporary theorists such as Hume, Rousseau, and Kant suggested that it was possession or occupation rather than labour that was the basis for property (Busse & Strang 2011: 3).

In the 19th century, the philosopher/sociologist/economist/historian Karl Marx had several ideas concerning property and ownership, but it is beyond the scope of this thesis to describe these fully or in any detail. It is important to note however that Marx viewed property as a social relationship. According to his materialist conception of history, property can only be correctly defined within the context of production, by which he means the appropriation of nature on the part of the individual within and through a specific form of society (Keyes 1981: 1). The isolated appropriation of an object does not make it an individual's property, the consent of the community is also necessary. There are also two types of property relations. Property as a relation of production signifies the individual's power to use, possess, manage, and exploit it, as well as to prevent others from doing so. On the other hand, property as a juridical relation ensures the right to use, possess, etc. These two types relate to Marx's model of base/superstructure, and in most cases, they coincide since those holding the property usually establish a corresponding right to it (Keyes 1981: 10, 12). Marx also distinguished between historically different forms of property which coincide with distinct socio-economic periods: tribal, ancient, feudal, modern bourgeois or capitalist, and the later added Slavonic and Asiatic. He did point out however that these should not be taken as a recipe or schema, since different geographical areas would evolve in different ways depending on their particular physical and social condition (Keyes 1981: 14).

Marx was very critical towards ‘capitalist private property’, generally referring to an economic system which included capital, wage-labour, commodity production, division of labour, competition, exploitation, etc. Marx’s critique was primarily that this system allowed and even encouraged an individual to subjugate and exploit the labour of others for personal gain, and also that it led to alienation. The latter was the result of private ownership of the means of production, which alienated the worker from the products of his labour (Keyes 1981: 20, 22, 53). In describing communism, he stated that the distinguishing feature of communism was not the abolition of property generally, but the abolition of bourgeois property. In fact, Marx believed that (non-capitalist) private property had positive outcomes, for example regarding talent and personal development, and that it was essential for institutions such as marriage and family. It involved the more or less exclusive rights in the possession, use, and disposal of the means of consumption needed for self-fulfilment (Keyes 1981: 21-23).

More recently, in the 20th century, a definition of property and ownership within anthropology, first published in the early 1950s, was that “Ownership is best defined as the sum total of rights which various persons or groups of persons have over things; the things thus owned are property” (Busse & Strang 2011: 2). There has however been some critique against thinking of property in terms of rights, and most contemporary anthropologists instead define property as “a social relationship between persons with respect to things, which includes, for example, rights to exclude others” (Busse & Strang 2011: 2), bearing similarities to Marx’s ideas. According to a recent anthropological publication (Busse & Strang, eds. 2011) the definition of ownership is “a culturally and historically specific system of symbolic communication through which people act and through which they negotiate social and political relations. This perspective highlights ownership as a set of processes through which people assert and contest rights rather than a static bundle or structure of rights.” (Busse & Strang 2011: 4).

Researchers within anthropology have had an interest in ownership and property for a long time. In 1877, Lewis Henry Morgan associated ideas of property with social evolution in his book on *Ancient Society*, suggesting that dominance of property marks the beginning of civilisation (Busse & Strang 2011: 1). Bronislaw Malinowski, in 1920,

forwarded the theory that reciprocity was the basis for social relations in so called primitive societies, based on exchange events that he witnessed while conducting studies in Eastern New Guinea which he classed as “gifts” and “counter-gifts”. The belief within anthropology that it was the expectation of the return gift that motivated exchange in “primitive” society, has since been strong (Weiner 1992: 1-2, 149).

Marcel Mauss’s influential essay *The Gift* (2002 [1925]) (*Essai sur le don*) from 1925 studied changes in how people relate to one another through things (Busse & Strang 2011: 1). Mauss made a distinction between goods that can be received and owned without there being an obligation for reciprocation – *alienable* objects, and gifts that represent the enduring need for reciprocation – *inalienable* objects (Gilchrist 2013: 2).

During her ethnographic studies in Polynesia, Annette Weiner (1992) developed the ideas of reciprocity further in her often-referenced work on inalienable possessions and what she called the paradox of “keeping-while-giving”; that is, how to keep things out of circulation despite pressure to give things to others. Weiner saw this as the source of social practice. While some things are easily given away, other possessions are imbued with the identities of the owner and are not so easy to give away. Personal possessions can invoke an intimate connection with their owners, and they can symbolise personal experience that adds value to the person’s social identity (Weiner 1992: ix-x, 6, 36). These inalienable possessions are kept by the owners within the family, descent group, or dynasty from one generation to the next, and they assume a subjective value beyond exchange value. However, sometimes these inalienable possessions get separated from the owner, for instance through theft, physical decay, the failure of memory, or political manoeuvres. Such a loss of an inalienable possession diminishes the self, and also the group to which the person belongs (Weiner 1992: 6). Studying the types of possessions people try to keep out of circulation, Weiner argued, is more theoretically meaningful than assuming that exchange simply involves the reciprocity of gift giving. It is not the idea of a return gift that generates exchange, but the power of keeping inalienable possessions out of exchange. Even in the simplest exchanges, the social identities of the participants, and what they have that makes them different from each other, affects the styles, actions, and meanings that create the exchange (Weiner 1992: x, 150).

Archaeologists have to a large extent turned to anthropology for inspiration and theories on ownership and property, but it is questionable whether conditions in 20th century Polynesia, for instance, can be applied to Scandinavian pre-history. When studying ownership and property within archaeology, and in the present study more specifically late Iron Age Scandinavia, the sources are rather few and uncertain. Contemporary written sources are basically non-existent, except for some runic inscriptions. However, these inscriptions do give some information on property and ownership, some in the form of land ownership claims, and some by showing lines of inheritance. Interestingly, historian Birgit Sawyer's thorough study of Swedish runic inscriptions found two parallel systems of inheritance following either the *Gradual* or the *Parentela* principles (Sawyer 2014). That some form of system regarding ownership and property existed in the late Iron Age is therefore rather clear.

The other written sources available include legal texts, but these are either from the continent, such as for instance the Frankish laws, or are later medieval laws. Many of these laws are focused on rules regarding property rights and the various punishments if they are violated (see chapter 4 for examples and discussion).

The way in which archaeologists should study ownership and property was discussed by Timothy Earle (2000): besides a rather lengthy review of theories of property with applications to archaeology (mostly from a processualist/New archaeology viewpoint), many of which took an evolutionary perspective discussing tribe, chiefdom, and state, he also proposed some techniques for archaeologists to identify property rights. These included patterns of labour investment, warfare, settlement distributions, and physical marking (Earle 2000). He also identified common questions on property which he then analysed, including how landed property rights might become more clearly established with the intensification of agriculture, and how social stratification might emerge via property rights progressively being defended by local groups, chiefly warriors, military, and legal code (Earle 2000: 40, 54).

The archaeologist's view on property, according to Earle, is that it "encompasses material use, allocation, and transfer that do not require a jural definition." (Earle 2000: 40). In regard to movable property, the type of property that this thesis is mainly concerned with, Earle brought up the alienability of objects, based on Weiner's (1992) theories (also e.g., Gilchrist 2013 and Klevnäs 2015b, 2016 take inspiration from Weiner),

and how objects within exchange suggested individual ownership with rights of transfer based on social anthropologist Alfred Gell's work (1992) (Earle 2000: 44-45). Earle also brought up prestige goods exchange and displays of wealth in burial ceremonies as indicators of differentially owned wealth, and that ownership of wealth could provide a symbolic/social capital for political control (Earle 2000: 45).

Earle seems to have favoured a processualist and rather evolutionary perspective on property, and his paper was met with some critique (e.g., Gosden 2015; Klevnäs 2015a). In a recent edited volume on ownership and possession (Klevnäs & Hedenstierna-Jonson (eds.) 2015), it was even stated that its authors took a diametrically opposed view on property than what was proposed in Earle's article (2000) where he relates property to different levels of social organisation. This economist approach has been criticised especially for its propagation of modernist ideas of owning and exploiting resources. The main aim of the more recent work was rather to show how much variety there is in forms of owning (Klevnäs 2015a: 2-3). The majority of the articles in the volume were however inspired by the concept of 'inalienable possessions' in their definitions of possession (Klevnäs 2015a: 11; Klevnäs & Hedenstierna-Jonson 2015), something that Earle (2000) also discussed in his work.

The focus in the more recent archaeological discussions has been on the non-economic values associated with property, for instance what is meant in human and practical terms by control, monopolisation, or ownership. Although objects are still described as bearing a value, this value is related to cultural value or prestige, endowed by appearance, symbolism, and the objects' biographies rather than to their materials, labour input, etc. (Klevnäs 2015a: 4-5). It was also pointed out that the concepts of ownership should be seen as entwined with different social relations, particularly relating to control, power, and the possibilities for action (Klevnäs 2015a: 14), which might also be referred to as agency.

In the present study, the ideas concerning inalienable property are seen as applicable, including how personal possessions can invoke an intimate connection with the owner and, for instance, symbolise personal experience, adding value to an individual's social identity and making it difficult to dispose of. This has significance for the interpretations of grave goods and may in some cases explain why certain items were buried along with the deceased and not kept amongst the living.

Thoughts regarding laws on property, inheritance, and the potentially growing inequality that private property could bring with it are also very much of interest. Marx's ideas regarding private ownership of the means of production are also important, especially in regard to how tools may be kept under lock and key. His view that property is a social relationship, and that the consent of the community is necessary in order for the appropriation of an object to become an individual's property is interesting. To some extent, the locking device may be a way to counter the need for consent, since it provides a physical barrier (and concealment) that requires force to be broken. This is more in line with Hume, Rousseau, and Kant who suggested that possession or occupation, rather than labour, was the basis for property.

Material and method

The material of the present study can generally be divided into three types: Iron Age grave contexts, Iron Age settlement contexts, and transcripts of medieval texts. Expressed in a different way, it is represented by material culture and text. How these two types of sources relate to one another and how they have been used in historical research was discussed by medieval archaeologist Anders Andrén (1998 [1997]). Although Andrén mainly referred to archaeology connected to historical periods where there are both artifacts and texts from the same period, some of the points he brought up are also worth considering for the present study and its pre-historic material and medieval texts.

Within historical archaeology, material culture and written sources have generally either been regarded as fundamentally different or as basically the same. For instance, both can be seen as simultaneously "remains" and "signs" from the past. Some believe that both should be investigated together, but also in relation to the social and symbolic contexts of the times when each were produced (Andrén 1998: 24, 34-35). However, a difference between the two is that writing can be seen as a technologizing of the spoken word, and consequently it records a somewhat different version of the past than the one preserved through material culture. Texts can also be seen as conscious while artefacts are less conscious (Andrén 1998: 4, 34-35). It is important to note, however,

that graves/burial acts can be seen as very conscious, communicating with an audience of funeral participants. Additionally, just as texts can tell a deliberately adjusted version of events or people, so can a burial regarding the deceased and their family. Consequently, both need to be looked at source-critically.

Within archaeology, which can be seen as dependent on analogies to translate material culture into text, written sources can be very valuable. Here a basic similarity between the two sources is assumed since the analogies must build on correspondence between artefact and text. However, texts can also hamper the archaeological analysis by leaving it little scope. At the same time, material culture can serve as a vital complement and background to texts. This is especially the case for areas or aspects not covered by written sources such as technology, agriculture, economy, social conditions, and every-day life (Andrén 1998: 3, 6, 30, 32, 34, 116-117, 121, 124, 131, 135).

Some scholars find it important to deliberately look for contradictions between written sources and material culture with the motivation that there is no definite truth in studies of the past. Finding contrast between artefacts and texts can also be a way to problematise written statements on the basis of material culture, and in doing so obtain new knowledge. However, because material culture and texts are different cultural expressions and differ in character, it is difficult to determine whether observed discrepancies are due to a lack of information, a lack of comparability, or “actual” differences in the past (Andrén 1998: 35, 171-172).

In the present study, the medieval text sources could never be seen as equal or the same as the material culture from the Iron Age sites chosen, even though some of these texts may have older roots (more on this in chapters 3 and 4). While comparisons between the two sources are made in this thesis, the archaeological material should always be regarded as having precedence in the interpretations because of the more direct link to the time and place. When/if contradictions between the two occur, it is the archaeological material that will be regarded as more accurate. Any discrepancy may be the result of the difference in time and place and not necessarily pointing to different accounts of the same occurrence. Both could then be accurate, but not describing the same phenomenon, possibly highlighting a change over time or a regional difference.

Another important point regarding material culture and texts is that in the present study the archaeological material has already been translated into text via archaeological excavation reports and publications. This means that initial interpretations and selections of what has been considered important information have already been made. To this it can be added that some of these interpretations were already made in the late 1800s and are almost in themselves historical documents. The other documentation spans the period between the early 1900s and the early 2000s. During this long period, methods, perspectives, and research questions have varied, which means that in some regards they are not fully comparable. For these reasons, it has been an important part of the present study to look closely at the excavation reports and the interpretations, and to describe some of the contexts involved.

Additionally, both medieval/historical texts and the archaeological material are fragments of what was once present, and the texts might furthermore have been part of a larger corpus of narratives within an earlier oral tradition where only some were written down. What remains of the texts is also dependent on which documents have physically survived, but also to a large degree on which older texts have historically been (repeatedly) copied and therefore preserved (although probably somewhat altered in the process). It is consequently a case of both a conscious selection from a larger whole and random preservation. For the archaeological material, what remains is perhaps more due to what has been persevered or destroyed due to natural processes, but there is also the question of what was left behind on a settlement site to begin with, or which items were deliberately placed in a grave. Both the excavation methods and the priorities of the archaeologists furthermore result in a selection of the material. The fragmentary nature of the texts and the archaeological material, as well as the inherent bias they have, are consequently something that these two sources have in common and which needs to be taken into consideration.

Looking more closely at the archaeological material as a source, an important idea in the present study is that the material culture can be seen as traces of former events or practices (see e.g., Foxhall 2000, Gansum 2004, Lucas 2008, and Tagesson 2000). This idea should be seen in connection with the principles of archaeological stratigraphy as presented by archaeologist Edward Harris (1979), and further developed within the

method of contextual archaeology (also referred to as the single-context method) where each stratigraphical unit or context can be seen as an event (see e.g., Harris, Brown & Brown 1993; Museum of London 1994). A good example of this is a study by archaeologist Terje Gansum who combined practice theory and contextual archaeology in his research involving grave mounds. He focused on the action and activities involved in their construction and stressed that the stratigraphical units should be regarded as representations of events (Gansum 2004: 205-206, 223).

The outcome of any attempts to trace past activities and practices through material culture and its stratigraphy is dependent on the condition of the sources, however. Harris (1979) sees the archaeological excavation methods used as important in determining the validity of the results, and he distinguished between the arbitrary and the stratigraphical method. The first method often consists of excavating the soil in arbitrary levels or spits with a predetermined thickness. The latter is described as a process where the layers are removed according to their individual shapes and contours (Harris 1979: 16, 19). Only the latter makes it possible to follow sequences of events and therefore fully interpret the activities that took place. Furthermore, as discussed by Gansum (2004), it is during the actual fieldwork that the stratigraphical layers are documented and their extent determined, and it is in this process that any finds are assigned to the contexts. He emphasized their importance since the interpretations made in the field have decisive consequences for all future interpretations (Gansum 2004: 221). In the present study, both the arbitrary and the stratigraphical methods were utilised to various degrees when the sites were excavated. In order to try to assess and account for their validity as sources and attempt to interpret past activities and practices, it has been important to study and include details regarding how the different sites were excavated and give descriptions of the contexts.

The state of the material culture before excavation is also important. Archaeologist Gavin Lucas (2008) argued that archaeologists often do not consider the residuality of the material. Rather than looking at the individual objects, he suggested that the concepts of context and assemblage come closer to characterising the remains of events. He also pointed out that most events do not leave material traces, and the ones that do may have been part of a long succession of events before they were deposited (Lucas 2008: 62).

A related concept that has been used within archaeology is that of the palimpsest. It refers to the superimposition of successive events whose material traces have partly been destroyed or changed through overlapping. In some cases, this can lead to the total eradication of all but the last event, but it could also lead to accumulation and transformation of successive and partly preserved events (Bailey 2007: 203). An example of the former, referred to as a true palimpsest, could be a floor in a building which has been swept clean, meaning that the material from this context would only represent the last activities that took place before the house was abandoned or collapsed. These activities would however not necessarily be representative of all of the activities that usually took place in the building. The sweeping of the floor may also not have been complete, and some objects from former activities could have remained. Still, the resolution of a context of this kind is regarded as high (Bailey 2007: 203-204). More commonly found is the so-called cumulative palimpsest. It comprises successive depositions or traces of events that remain superimposed without the disappearance of older layers. However, the layers are so reworked and mixed that it is hard or even impossible to separate out the different layers or events. Only rarely can traces of more individual events be identified. This context has a lower resolution, but it contains traces of more events (Bailey 2007: 204-205). These two different types of contexts, or palimpsests, clearly affect which types of questions are possible to ask, and to which level of detail it is possible to trace past activities and practices on a site.

Based on the above discussions about the material and its source value, including different research questions and excavation methods used, comparability, bias, residuality, palimpsests, and so on, for the present study this has meant that it has been important to thoroughly study the details in the excavation reports. This is especially true for the contexts in which keys, locks, or chests were found. Here, evaluating the available material inspired by the idea of palimpsests as described by Bailey (2007) has helped to interpret these contexts and determine whether they reflect several mixed events and actions (cumulative palimpsests) which have low resolution, are harder to read, and have limited possibilities of answering detailed questions, or single/fewer events that may connect more closely with the key, lock, or chest (more like true palimpsests) and could provide clearer answers regarding locking practices. The latter is

particularly true in those few cases where the keys, locks, or chests were found inside buildings and might be possible to connect with a specific floor layer. Thinking about the material in terms of stratigraphical events and traces of actions and practices, influenced by Harris (1979) and Gansum (2004), and issues involving residuality as highlighted by Lucas (2008), also greatly helped interpret the layers described in the reports. In some cases, this has also led to the identification of previously formed conclusions that do not seem to follow a logical sequence of events, are based on several separate events interpreted as one, or that do not take into consideration what sort of remains are even likely to remain or leave traces.

This detailed review of the documentation and the previous interpretations has primarily been undertaken in order to try to find traces of past activities and practices, and to assess the reliability and resolution of the different sources. In some cases, it was also necessary to question and evaluate earlier interpretations of the material. In order to show transparency regarding what the conclusions and re-interpretations in the present study were based on, and to facilitate the reader forming their own opinion, this thesis sometimes includes rather detailed descriptions of contexts.

Looking in more detail at the material used in the present study, five archaeological case studies or sites from eastern central Sweden were chosen, limiting the size of the study to match the scope of a doctoral thesis. The hope is that other studies may elaborate and build upon the findings in the future.

The chosen sites are Birka (grave³ and settlement contexts), Helgö (grave and settlement contexts), Lovö (grave contexts), Sanda (settlement context), and Vallhagar (settlement context).

3. The graves are sometimes referred to as graves from Björkö – referring to the island on which they are located, but more often they are for simplicity called Birka graves. However, not all these graves are necessarily connected with the town as remains of settlements have been found outside the town-area and may have contributed to some of the burials.

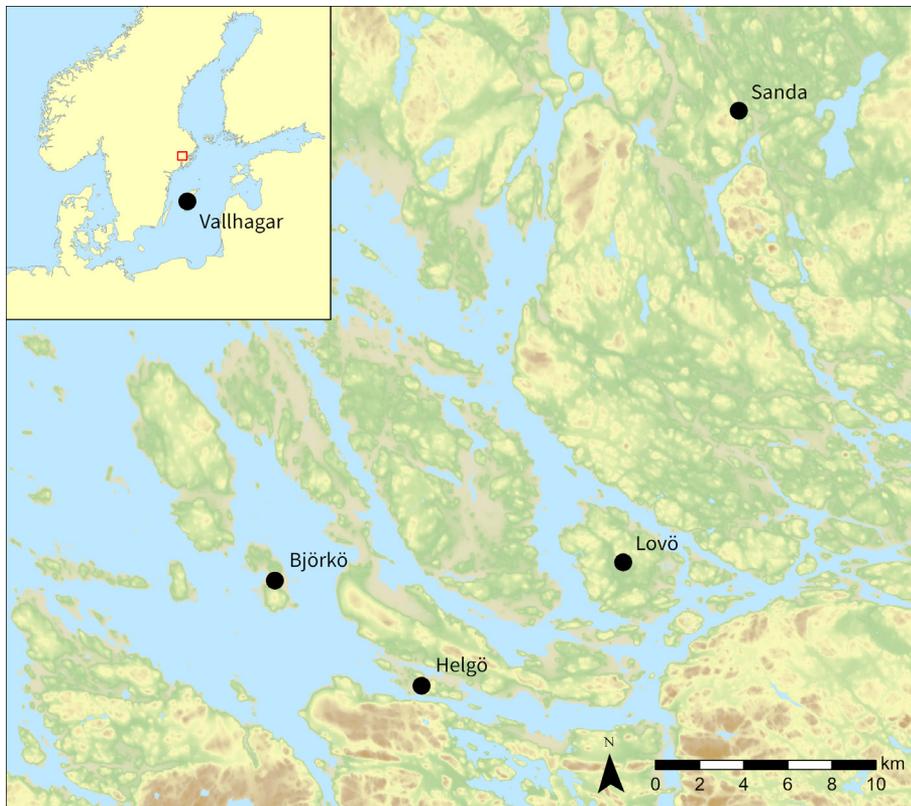


Figure 1:1. Map showing the locations of the five sites included in the present study: Birka on the island of Björkö, Helgö, Lovö, Sanda, and Vallhagar. The red square shows the area of the larger map.

Birka was a Viking Age urban crafts and trading settlement or proto-town on the island Björkö in Lake Mälaren, with one of the highest known concentrations of keys and locks in Sweden. This site was picked as a good starting point, although it differs greatly from its contemporary rural sites.

Another site chosen for its high inclusion of keys and particularly padlocks was Helgö, an island also situated in Lake Mälaren close to Birka, and strongly associated with crafting activities. The Iron Age settlements on Helgö pre-date Birka, but continue into the Viking Age.

Lövö, also an island in Lake Mälaren near Birka and Helgö, has additionally been included. This was a more rural site, only represented by graves as no proper settlement has yet been investigated here. The graves included in this study date from the Migration Period to the Viking Age.

Sanda was chosen to represent a more rural Iron Age settlement. It is located roughly 20 km north of Stockholm and exhibits long settlement continuity with evidence of locking practices in several phases.

Vallhagar, a site on the Baltic island of Gotland, was chosen to illustrate a Roman Iron Age – Migration Period settlement site; partly coinciding with some of the Helgö remains. It contained unusually well preserved remains where many objects were left more or less *in situ*. It could possibly be seen as a true palimpsest. Furthermore, since the buildings at Vallhagar had stone foundations, some of which partly still stand, any objects left within are less likely to have been scattered by ploughing in later times, and objects from the outside are less likely to have moved within the buildings. This building technique also differs from the house foundations on built-up terraces found on Helgö and partly also Birka and Sanda, where older occupation materials were reused in levelling work, resulting in very complicated stratigraphies. Consequently, although this site is located some distance away from the other case studies, it represents a unique opportunity to study the location of keys, locks, and chests within buildings, and is too valuable a source to leave out.

The present study is primarily based on field reports and previous research regarding the selected sites, but also descriptions and illustrations of the objects found, and online databases listing the finds.⁴ The main focus has been on the contexts rather than the keys, locks, and chests themselves, but some keys from the Birka graves where there were some uncertainties were studied first-hand in the central depository at the Swedish Historical Museum. Due to the focus on context, time constraints, and also because access to some of the Historical museum's collections was made impossible due to renovations starting in 2016,⁵ the other objects included in this study were not studied first-hand.

The material making up the medieval texts in this study includes both Old Norse literature and medieval laws. Specifically, it is the *Icelandic Sagas*,

4. It is mainly the Swedish National Historical Museum's online database "*Sök i samlingarna*" ("Search the collections" in English) that has been used. It contains information and pictures of the digitised parts of the museum's collections and can be accessed at <http://mis.historiska.se/mis/sok/start.asp>. Another online database used for the Birka material is "*Birkaportalen*". It can be accessed via <http://historiska.se/birka/digitala-resurser/sok-i-vara-databaser/>.

5. <http://shm.se/historiska-bygger-om-centralmagasinet>

the *Poetic Edda*, the *Prose Edda*, and the *Legendary sagas*, as well as one Frankish and a number of Anglo-Saxon laws (see chapter 4 for detailed list), the Scandinavian provincial laws, and the Icelandic law compilation *Grágás*. It was not the original texts that were studied, but rather translations and versions with more modern language since the present author's language skills are limited to English and the Scandinavian languages. The medieval sources and issues concerning their use and source value for studies of Iron Age material culture are discussed in chapters 3 and 4.

The archaeological grave contexts, archaeological settlement contexts, and the medieval texts used in this thesis are, as previously discussed, rather different in nature and require somewhat different methods of study. Common to all of them is that a general description of the contexts was included as a basis for the discussion regarding locking practices. Based on the theoretical framework laid out, the overall method was to identify similarities and differences in the material in order to find any potential distinctive characteristics. Regarding the graves with keys, locks, or chests, these were also compared with graves that did not contain any of these objects to see if they differed in any way.

It is important to note that the material group under study is small, especially if only considering the graves that contained keys, locks, or chests, and that the various groups compared are unequal in size. This means that there is a higher risk of error and that certain results could be given a disproportionate strength. It also limits the kinds of statistical methods that can be applied. As a way to handle this, a straightforward and clear approach has been chosen, where comparisons are made by calculating relative frequencies in percent, and importantly, by also including the actual numbers that the calculations were based on in order to show transparency. No claims are made that the results should be regarded as representative of all graves with keys, locks, or chests.

Concerning the grave material, each object from the graves was assigned to a find category based on their interpreted function or use. This was done to make the material easier to compare and to make it easier to associate the person buried with keys, locks, or chests to specific types of objects or activities, and therefore to help interpret the identity or role of this person. As discussed in the theoretical framework above, the objects in the grave do not directly mirror the person in the grave, however the assumption is that there is some form of connection with the individual

or his/her family and that this can be used in comparison with other graves. This was done for all graves with keys, locks, or chests from the chosen sites, as well as for all other excavated graves from Birka and Helgö to serve as a comparative material. It was unfortunately not possible to include all other graves from Lovö within the scope of this thesis.

The focus was on the presence or absence of objects from the various find categories, and not on quantity or quality (such as for instance type of material or craftsmanship). Therefore, even when more than one object from a specific category was present, the find category was only noted once. The main reason for this focus was to get a larger, general picture, but also to counter any skewing resulting from preservation conditions and different burial practices, such as cremation versus inhumation where the former leaves a much more fragmented material. In the documentation on which this study builds, it is sometimes also the case that fragments of the same objects were given separate id-numbers and there is therefore a risk of counting a specific object more than once. Nevertheless, in order to get more detailed information on social differentiation, for instance in terms of 'rich' and 'poor' where a larger number of objects and more exclusive materials probably indicate more wealth, such information could certainly be useful in another study.

The graves were arranged into different groups in order to make comparisons. These were based, where applicable, on either inner grave type, site, time period, and/or presence or absence of keys, locks, or chests. Various tables were used to visualise and compare how common or rare each find category was in each grave group.

The find categories were roughly based on those used in The National Historical Museum's online database *Sök i samlingarna* or *SiS*.⁶ Translated into English, these are: *Construction details and monuments*, *Crafts and tools*, *Dress and personal equipment*, *Entertainment and vices*, *Trade and measures of value*, *Utensils and foodstuff*, and *Weapons, armour, and trapping gear*. However, since some of these categories are rather broad, further divisions were made in order to find indications of, for instance, more specific types of activities, and the names were sometimes also changed to better reflect the items associated with them. The find categories were furthermore based on the objects present in the Birka graves, by far the largest grave material included in the current study. The categories and examples of the types of objects assigned to these can be found in table 1:1 below.

6. *Sök i samlingarna* will be referred to as *SiS* from now on.

Chapter One

Table 1:1. *The find categories used in the present study and examples of the various objects belonging to each of these.*

Find categories	Example of objects
Agricultural tools	Plough head, Sickle
Animal bone	Animal bone
Bag/purse	Bag, Purse
Beads	Bead, Bead necklace, Bead pendant
Ceramics	Ceramic vessel
Chest	Chest, Box
Cutting tools	Knife, Scissors, Shears
Dress and personal equipment	Bell, Belt clasp, Belt tip, Button, Chain, Gold/silver ribbon, Ring, Silver thread, Strap divider, Strap mount
Equestrian gear	Bridle, Ice spike for horse, Harness, Saddle, Spur, Stirrup, Whip
Fire making tools	Fire steel, Flint strike-a-light
Fishing tools	Fishing hook
Flint	Flint flake, Flint piece
Foodstuff	Bread, Hazelnut, Kernel
Gaming boards and pieces	Gaming-board, Gaming-piece
Ice spikes and skates	Bone skates, Ice spike for shoe
Jewellery	Arm bangle, Bead spreader, Bracelet, Brooch, Dress pin, Finger ring, Neck ring, Ring pin, Pendant
Key	Key
Lock	Lock
Materials	Amber, Bark, Burnt clay, Resin, Stone, Tar
Metal working	Crucible, Mould
Nails, mounts, etc.	Clinker nail, Hank, Hinge, Hook, Mount, Nail, Rivet, Rod, Sheet metal, Spring, Sprint, Staple
Other objects and figures	Animal shaped figurine, Antler disc, Wooden animal's head
Personal grooming	Brush, Comb, Ear pick, Glass mirror, Tweezers
Sharpening tools	Whetstone
Slag	Slag

Find categories	Example of objects
Staff	Measuring rod/staff
Textile working tools	Loom weight, Spindle whorl, Needle, Needle housing
Thor's hammers and amulets	Thor's hammer amulet, Thor's hammer pendant, Thor's hammer ring
Tools	Awl, Axe, Chisel, Drill/Auger, Hammer, Rasp, Tang, Wedge
Trade	Coin, Hack silver, Scales, Weight
Utensils	Beaker, Bucket, Bowl, Drinking horn, Fork, Plate, Pot, Spoon, Vessel
Weapons and armor	Arrowhead, Quiver, Scabbard, Shield, Spearhead, Sword, Weapon axe, Weapon knife
Writing equipment	Stylus

The objects under investigation in this thesis – keys, locks, and chests,⁷ – were given their own separate categories. Other find categories that were added include *Agricultural tools*, *Cutting tools*, *Fire making tools*, *Sharpening tools*, and *Textile working tools* (See Table 1). It is worth noting that shears were assigned to the category *Cutting tools*. They could alternatively have been assigned to *Textile working tools*, but since shears could have been used on various materials such as leather or hair in addition to wool or textiles, this did not seem accurate.

The more general category *Tools* includes tools with a function that is harder to specify, which could be multifunctional, or handles with the working end missing. Some of these were probably related to, for instance, antler/bone-, leather-, metal-, or woodworking.

Additional added or split find categories include *Metalworking*, *Slag*, *Flint*, *Nails*, *mounts, etc.*, *Jewellery*, *Beads*, *Personal grooming*, *Thor's hammers and amulets*, *Staff*, *Utensils*, *Foodstuff*, *Equestrian gear* and *Ice spikes and skates* (See Table 1).

Equestrian gear includes ice spikes for horses, and whenever it was not possible to establish if an ice spike was intended for humans or horses,

7. The objects referred to as chests here are in Swedish called both “skrin” (box) and “kista” (chest) in *Sis*, but the distinction between them is not made clear. For the purpose and scope of this thesis, chest will generally be used as a blanket term, although in some cases where appropriate, the term box has also been used.

they were assigned to *Ice spikes and skates*. This category might therefore contain some equestrian gear, but the overall function of ice spikes – to facilitate travelling in winter – is nonetheless the same for all ice spikes.

Another category that requires some clarification is *Bag/purse*. It is a category of finds that could have fitted into the *Trade* category since bags and purses are sometimes associated with merchants (Gräslund 1980, Kyhlberg 1980, Ringstedt 1997). However, since this remains uncertain, they were given their own find category consisting of rather exclusive objects.

It should also be noted that animal bone, assigned its own find category, could have several different meanings including food offerings during the burial, items of food included amongst the deceased's grave goods, or animal sacrifices. It was not possible to study the animal bones further within the scope of the present thesis, and information regarding species, burnt or un-burnt condition, etc., was not available for all graves, making the material hard to compare.

Furthermore, it is important to note that the category *Weapons and armour* includes items used for archery which could have involved warfare/combat, hunting, and sport (see table 1).

Ceramic vessels were assigned their own category, *Ceramics*, but burial vessels were not separated out as a distinct category since it was not always clear, and some cremation burials contained sherds from more than one vessel. Generally, however, most ceramic vessels in the cremation graves could probably be interpreted as burial vessels.

Other objects that are difficult to interpret the use of, such as wooden figures, unspecified bone objects, an antler disc, an animal figurine, a bronze miniature vane, etc., were assigned to the category *Other objects and figures*.

As described above, some of the objects from the graves could fit into more than one category and could have been used for many different things, and others could be interpreted differently. Furthermore, not all objects are included: items that were too fragmented or unidentifiable were left out. Textiles were also excluded because of the problems with preservation and representativeness. Coffin nails were likewise omitted since they are part of the grave rather than the grave goods that followed the deceased.

Introduction

The selections and categorisations made here obviously affect the outcome of the study, something which is important to bear in mind. The level of detail chosen for the analysis also greatly affects the results. In the present study, a broader, less detailed approach was applied where individual objects, such as types of brooches or a particular decorative style, were not specifically analysed. It is very possible that the details in some objects were used to signal some specific aspect of identity, but within the scope of the present study it was not possible to include this, not least since such a study would likely require examining all the objects first-hand. Adding more individual details would also increase the number of differences the material would show, making it harder to find any potential similarities in such a small material group. Instead, focusing on broader categories of finds and potential associations with different activities or ways of life, as well as incorporating a larger number of graves in the analysis was favoured in order to make broader comparisons. In doing this, the present study has the potential to demonstrate some general patterns that can be further built upon in the future.

When it comes to the settlement contexts, the same find categories were used, but only to a limited extent. The aim was to get a general understanding of the types of events or activities that once took place on the sites as deduced from both finds and structures. However, the location and presence of objects found on settlements sites are of course not a straightforward matter, as indicated by the previously discussed fragmentary and palimpsest nature of the material culture on a site. The material remains could be a mix of several types of activities and phases, a cumulative palimpsest, but the last use of a building/area probably leaves the clearest trace in the material. It is important to note that since chests were built from wood, normally only the metal fittings such as mounts, nails, rivets, and sometimes parts of mounted locks remain. Locks and keys could also be made of wood, which would not have left any traces. Consequently, there will be some hidden statistics.

Important to consider is also that when people abandoned a building or site, anything still of use or value would most likely have been taken with them unless they were forced to leave urgently or under duress. This means that under normal conditions items left behind are a combination of discarded objects, and perhaps a few accidentally forgotten or

purposefully deposited things. The best chance of finding objects in their original context is probably in the instances where a building burnt down and was left more or less undisturbed, potentially resulting in what could be referred to as a true palimpsest. If possible, people would however most likely return after a fire to look for belongings or items that might still be of use in the ashes, although rubble from the collapsed building may have made such a search difficult and less complete.

The situation described above puts clear limitations on what kind of information the settlement material can provide, and consequently the present study has primarily focused on trying to answer if and how many keys, locks, or chests were found on the sites, their type, roughly which period they were from, whether the objects can be connected to a building or other feature, whether the keys and locks found belonged to a door or a chest, whether it is possible to connect any objects with the remains of a chest in which they may have been stored, and whether there were mobile locks in the form of padlocks. Focus was also placed on the type of objects that were found in the same context, but without paying too much attention to the exact location following the reasoning above. Similarities and differences between the four settlement sites were also explored. Despite the limitations of the material, the study of the settlement sites provides examples and illustrations of some general contexts for locking practices that can hopefully be expanded upon with further research in the future.

The method used to study the medieval texts has been to firstly identify occurrences where keys, locks, or chests were mentioned, and then analyse information regarding the contexts and the types of individuals involved. This was done using transcripts of the texts in English or Scandinavian languages as described previously. In some cases where there were uncertainties, sections in Icelandic, Anglo-Saxon, or Latin versions were consulted with the help of lexica. In some cases, the texts were available in digital form where a 'word-search' was possible. In these cases, a search for mentions of keys, locks, and chests (in the appropriate language for each case) could be considered more or less complete. Where the texts were only available in paper form, it is possible that some occurrences were missed due to human error (more on this in chapters 3 and 4) and therefore, no claim for a total coverage is made. Since some of the sources, especially the Scandinavian provincial

Introduction

laws, contain a rather large number of such mentions – many of them very similar in nature or with a context directly involving the church and priesthood – not all of them were included. The aim was to incorporate as many different contexts as possible.

The material from the settlement sites, the burial contexts, and the medieval texts were also studied together to try to establish the contexts in which keys, locks, and chests might have been used, and by whom. Here some more symbolic meanings were also considered. An attempt has therefore been made to analyse locking practices and which social identities or roles in society can be connected with these.

Keys, locks, and chests in the Iron Age

In this chapter, some of the previous research on keys, locks, and chests is presented in short, followed by a section dealing with the more technical aspects of locking devices and the different types of locks and keys. More focus has been placed on the keys and locks since these constitute the actual locking device and relate more directly with locking practices. The technology behind keys and locks requires more explanation than the rather simple constructions that chests represent, which is why the latter is not included in the last section. Descriptions of some of the more well-preserved chests from Birka can be found in Appendix 5.

Previous research on keys, locks, and chests

The study of keys and locks has a rather long history, with a number of scholars writing about these objects around the middle to late 19th century either as the main subject or as part of a more comprehensive work. They dealt with both ancient and more contemporary keys and locks; for the ancient keys and locks, it was often those of ancient Assyria, Egypt, Greece, and Rome that were focused upon. These studies were largely based on old texts (some on the Bible), but also on ancient depictions and objects found during excavations, for example those in Niniveh, Dur-Sargon (the palace Khorsabad), Pompeii, and Herculaneum, as well as some from Britain and continental Europe. The focus was on the objects themselves, such as the technology, development, and

origin of the objects (e.g., Bonomi 1853; Tomlinson 1853; Liger 1875; Wilkinson 1878). In 1883 Augustus Pitt-Rivers published his work *On the development and distribution of primitive locks and keys*, which took a more European perspective and built more on archaeological examples rather than old texts. It dealt with precisely what the title suggests, and also gave detailed descriptions of the mechanics of the different types of locks. The perspective was clearly evolutionist, following the general research interest in evolution that was characteristic of the mid-19th century, and the strong ethnological interest in cultural development towards the end of the century⁸ (Trigger 1993: 125). Interestingly, Pitt-Rivers commented on some of the Anglo-Saxon graves at Sarr, in Kent, where keys were found in female graves, and drew parallels to graves on Björkö. He referred to an old Scandinavian custom where they were “the badges of the lady of the house, who was said to be married to lock and keys” (Pitt-Rivers 1883: 15). He further wrote that according to “some law texts of the Middle Ages”, it appeared that two of them were suspended from the girdle (Pitt-Rivers 1883: 15). This idea seems to have been taken from Swedish archaeologist Hans Hildebrand who earlier in the same year published his work *The industrial arts of Scandinavia in the Pagan times*. Here, Hildebrand made an almost identical statement where keys were said to be entrusted to the lady of the house who according to “a very old law-formula”,⁹ was “married to lock and keys” (Hildebrand 1883: 128-129). He also referred to “sundry law-texts”¹⁰ from the early medieval period mentioning two keys hanging down from the girdle of the housewife. Hildebrand further referred to Hjalmar Stolpe’s excavations on Björkö where Stolpe is said to have generally found a pair of keys in the female graves (Hildebrand 1883: 129). This shows that the association of the key with female graves and the idea of the Lady of the House or Housewife have a long tradition. In the following chapters the aforementioned sources will be looked at, and these claims critically evaluated.

8. Pitt-Rivers also authored *The evolution of culture and other essays* in 1906.

9. This most likely refers to the Swedish provincial law of Uppland, *Upplandslagen*, from 1296 (see chapter 4 for further details and discussion on this subject.)

10. These “law-texts” most likely rather refer to two, in this context, commonly referenced poems from the poetic Edda; *Rígsthula* and *Thrymskvida* (see chapter 3), and although the keys are mentioned in plural here, it is never specified that they would be two in number.

Within Scandinavian research, keys, locks, and sometimes chests, continued to occasionally be the subject of archaeological studies in the first half of the 20th century. In 1911, Viking Age padlocks were briefly discussed by Ture J. Arne, with an emphasis on their similarities in form to Finnish, Latvian, and Russian padlocks. The focus here was on form/style, as well as on Swedish connections with the East (Arne 1911: 57-58). This work was continued and expanded in his doctoral thesis published in 1914 (Arne 1914). In an article on Gotlandic grave-finds published in 1919, Birger Nerman provided detailed descriptions of keys found in graves. He claimed that they seemed to be exclusively found in female graves, sometimes in pairs of two (Nerman 1919: 80-81), seemingly following the beliefs of Pitt-Rivers and Hildebrand. In 1921, Sune Lindqvist discussed rivets found in Viking Age graves and suggested that many of these were probably the remains of chests rather than boats, as sources such as Ibn Fadhlān indicated, and which seems to have been the favoured interpretation at the time. He furthermore stated that, based on the importance that the chest had amongst both the peasantry and high-status households in later times, it was natural that the chest should be the first to follow the deceased onto the funeral pyre or into the grave (Lindqvist 1921: 106-111)

In 1942 Bertil Almgren focused more on interpretation than technology and typology in an article concerning bronze keys. He proposed that some keys were used as symbols of St. Peter's key, which according to *Matthew 16: 19* were given to him by Jesus. Almgren believed that it was possible that certain bronze keys could have been used as amulets for protection and as proof of belonging to the Christian faith, or in pre-Christian Scandinavia simply as amulets (Almgren 1942). In the same year, historian Lizzie Carlsson¹¹ published an article which also focused on the interpretations of keys. Her study (Carlsson 1942) focused on the key as a legal symbol, giving many different examples, but dealing mostly with medieval and historical times. She did however also try to trace some customs back to the Viking Age, particularly the key as a symbol for the housewife, referring to a section in the law of the Swedish province of Uppland where: "He should give the woman to the man in marriage to honour and as housewife and to half the bed, to locks and keys /.../" (*Ärvdabalken*, III), as well as the Eddic poems *Rígsthula*

11. Lizzie Carlsson, together with her husband Gottfrid, were active in the society *Riksföreningen Sverige-Tyskland*, and they were both Nazi-sympathisers (Åmark 2011).

and *Thrymskvida*. All three of these texts were previously referred to by Pitt-Rivers, Hildebrand, and Arne, but they never specified their sources.

In 1944 a short paper on the oldest Norwegian chests was published by Eivind S. Engelstad. He discussed the construction and dating of the Norwegian chests and included some other Scandinavian and European examples. He dated a few of the chests to the Viking Age, but he otherwise mostly described medieval chests (Engelstad 1944: 223-229).

In 1946, another work dealing primarily with the technology of locks and keys was published by Sigurd Erixon, who wrote about the development of different types of locks from prehistory to the 1900s (Erixon 1946). Jan Petersen's work from 1951 on Viking Age tools typologically dealt with keys, locks, and chests from Norway. Following the same research focus, in 1955 Bertil Almgren published his doctoral thesis on bronze keys and animal ornamentation from the Vendel and Viking Age. It mostly dealt with typologies, dating, and geographical distribution in Europe and included an extensive catalogue of bronze keys.

Chests were described in a 1963 encyclopaedia for the Nordic Middle Ages, *Kulturbistoriskt lexikon för nordisk medeltid*. Similar to Engelstad's text, it mostly dealt with descriptions of medieval chests, but also included a few examples from the Viking Age. It also discussed various uses of chests in the medieval period (Anker & Topelius 1963). The previous year, an article in the same encyclopaedia discussed the housewife (Wallén 1962, see also Virtanen, Iuul, and Frimannslund in the same volume for similar discussions regarding Finnish, Danish, and Norwegian conditions), and in 1967 Lizzie Carlsson wrote an article in the same encyclopaedia about the key-holder (Sw. *Nyckelbärare*). These were both very similar to Carlsson's previous (1942) article regarding keys, and it was the main source for Wallén. In the same volume (1967) Frimannslund and Virtanen discussed the key-holder based on Norwegian and Finnish materials, respectively. It was however the medieval housewife and key-holder that were discussed in these articles, based on medieval texts. In *Kulturbistoriskt lexikon för nordisk medeltid* there were also two rather lengthy descriptions of various locks published in 1966 which included several descriptive drawings of the mechanisms. These included examples of both Viking Age and medieval locks (Berg, Christensen Jr & Liestol 1966; Homman 1966).

In the 1970s the padlocks from Helgö were the focus of the work of archaeologist Jan-Erik Tomtlund (1970, 1978). The work was mostly descriptive and dealt with the construction and mechanism of the locks as well as their dating and possible connection with the East (following Arne 1911, 1914). His later study (1978) also included a short passage about the function of padlocks found in some of the Birka graves being more symbolic than practical, since they were worn out, mostly broken apart, and those that were undamaged did not have a matching key. He also generally mentioned keys that lack a functional shape and were therefore probably purely symbolic. Some small, decorated padlocks might also, according to Tomtlund, have been used as seals rather than purely for security due to their lack of strength (Tomtlund 1978: 13). He otherwise interpreted the purpose of padlocks as most often being used as fastenings for boxes and chests (Tomtlund 1978: 13).

In the 1970s keys, locks, and chests were also described in publications from, for example, the excavations in Århus (Crabb 1971) and Fyrkat (Roesdahl 1977), both in Denmark. Smaller chests (Sw. *skrin*) were also described in *Kulturbistoriskt lexikon för nordisk medeltid* in 1970. These consisted of mainly medieval chests; however, a few Viking Age examples were also included (Anker; Benediktsson; Andersson; Behrend, 1970).

In an article from 1976 archaeologists Anders Andrén and Thorvald Nilsson wrote about locks and keys found during excavations undertaken in Lund, Sweden. They mentioned their primary use in securing storage spaces and houses which they suggested points to the existence of private property. Their other interpretations seem to mirror Lizzie Carlsson's article (1942), for example they mention how keys symbolise power and responsibility, and that the key was a symbol of the married woman based on medieval laws and *Rigsthula*. The interpretative text only covered one page, and the rest was dedicated to pictures and descriptions of locks and keys.

The same year, a very short text by archaeologist Else Roesdahl on Queen Thyre's chest was published. Here, in the absence of skeletal remains and with a disturbed context, the presence of three gilded bronze fittings for a small chest in the famous Jelling mound in Denmark were used as evidence of the queen actually having been buried in the grave. This was based on the interpretation that small chests like these were typical female grave goods (Roesdahl 1976: 28-29).

In the 1980s, keys were again in focus. An often-cited work is that of German archaeologist Heiko Steuer (1982) whose study largely dealt with pairs of non-functional keys or amulets, also known as girdle-hangers. Despite this, his ideas concerning the symbolism of keys are often used when analysing real functional keys. He believed that keys in ancient traditions probably symbolised the fertility of younger women, and that at the same time they could also be understood as an indication of the 'domestic power' of the woman, or her sphere in general (Steuer 1982: 221-222). In his study he discussed the 'key-power' of the housewife, and the key as a symbol for marriage and birth. He also brought up the key as a sign of the Norse goddess associated with fertility, Freya, referencing *Thrymskvida*, and he mentioned keys associated with the classical ancient gods Hekate, Persephone, Kronos, and Epona. He further discussed the key as a Christian symbol, partly referencing Almgren 1942, as a symbol of St Peter's keys, and as a symbol for Christ as master of the realm of death (Steuer 1982: 203-206, 207-221).

In 1983 a book concerning a tool-chest found in Mästermyr on Gotland was published (Arwidsson & Berg 1983). It mainly focused on the tools for blacksmithing and carpentry found inside the chest, as well as the blacksmith and various blacksmithing techniques. It also gave some examples of graves with tools, and briefly discussed chests as a storage place for tools. There were also some descriptions and attempts to date the keys, padlocks, and lock-parts included amongst the tools. The padlocks were furthermore said to be similar to some of the padlocks from Birka.

Other research on keys from the 1980s includes two studies by archaeologist Anna Ulfhielm (1986, 1989). After an attempt using seriation to date Gotlandic keys found together with animal-head shaped brooches (1986), she formed a new typology for keys from Birka (1989). Her focus was mainly on the objects and their find circumstances, but she included some interpretations mainly referencing Steuer (1982) and Almgren (1942), and saw keys as mainly female objects (Ulfhielm 1986: 36, 38).

In addition, archaeologist Bo Petré (1984a), writing about the graves from Lovö, also regarded keys as female objects. He counted keys amongst items such as ear scoops, tweezers, tongue scrapers, needles, and knives, comprising a female 'toiletory set' or 'spoon-implements' (Sw. skeddon). He interpreted all these items as part of the female dress

(Petré 1984a: 54), and overlooked the key as a functional object in favour of an interpretation as a dress accessory.

There are also some studies on keys and locks from the 1990s. In 1990 archaeologist Elisabeth Arwill-Nordbladh wrote a paper discussing the symbolism of keys in Iron Age women's graves where she argued that, although most keys are found in female graves, they cannot be used as indisputable sex indicators, pointing out that keys are also found in graves of men and children. She also suggested that when a housewife died, her place would be filled by another woman and any symbolic key would have been passed over to her, not placed in the grave. She also argued that a key placed in a grave is to be seen more as a marking of personal integrity than a symbol for the domain of the housewife (Arwill-Nordbladh 1990: 255-260). This paper appears to be the first to critically discuss the by now rather established connection between keys and the housewife within archaeology and Viking studies.

In her continued work on gender constructions in the Viking Age (1998) Arwill-Nordbladh further evaluated the image of the powerful Viking Age housewife in archaeological literature, showing that it has roots in the 1880's Neo-Gothic movement where there was a strong interest in the Norse Viking Age. With women in the 1880s being very suppressed, living under the guardianship of their husbands and not being allowed to vote, she furthermore suggests that the associations with the authoritative key-bearing housewife with control over the larder and the household's chests helped to conceal these real power relations. At a time of increasing demands for gender equality, this was done by promoting an image of women, both past and present, at the centre of the family holding a powerful position within the patriarchal system. Arwill-Nordbladh also showed how this image of the powerful housewife, attached to the household sphere, came to live on as a stereotype. In the 1970s the way the domain of the housewife was viewed was changed, however, influenced by gynocentric feminism, with female characteristics and experiences regarded as something positive with its own specific significance (Arwill-Nordbladh 1998: 25-52, 253).

Keys were again the focus in an article from 1993, *On keys*, by Else Roesdahl. She gave a brief history of Scandinavian keys, and also connected keys and locks with the beginning of the act to demonstrate

private ownership of moveable wealth. She furthermore acknowledged that the keys had both a practical function as well as symbolic meaning, and that decorated key-handles indicated that some keys were meant to be displayed (Roesdahl 1993: 22, 217-218). She followed the common view and saw Viking Age and Early Medieval keys as symbols of the responsible housewife. She also briefly discussed keys found on farms, potential threats of theft, and keys as part of a “Scandinavian lifestyle” (Roesdahl 1993: 218, 222).

In 1997 archaeologist Torsten Edgren wrote a short article on Viking Age keys and locks, giving a general historical background on the objects and details regarding their construction. He also discussed them in connection with an increase in living standards which led to an increase in private property and an increased need for protection. He pointed out that the Viking Age padlocks were however not always very secure. Inspired by Arwill-Nordbladh (1990), he suggested that keys and chests could also be seen as indicating some form of independence or integrity, having a social rather than an economic character. He also interpreted keys as symbolising the responsible housewife, however, referring to medieval texts and keys in women’s graves, but he mentioned keys and padlocks in men’s graves and interpreted those men as also having had responsibility over the farm’s assets (Edgren 1997: 46-47).

There are also some studies from the 1990s where keys, locks, and chests are mentioned more in passing. In 1991, Judith Jesch, professor of Viking Studies with a focus on Old Norse language and literature, described a Danish grave from Dråby as “the burial of a housewife (identified by her keys) ...” in her book on *Women in the Viking Age* (Jesch 1991: 25). A key found at the Roman Iron Age/Migration Period farm Gene in northern Sweden was by archaeologists Anna-Karin Lindqvist and Per Ramqvist described as a female attribute, and a symbol of her power to control and organise the farm’s production and consumption (Lindqvist & Ramqvist 1993: 84).

In 1995, historian Jenny Jochens mentioned keys, locks, and chests in her work on *Women in Old Norse society*. With some examples from the Icelandic sagas and the Sturlunga saga, the latter dealing with power struggles in Iceland in the 12th and 13th centuries, she discussed storage rooms and how some were locked. Interestingly, she also discussed who may have had access to these locked spaces and furthermore

commented that few passages in these texts confirm the traditional notions of housewives in charge of supplies and with rings of keys at their belt (Jochens 1995: 131-134). This is something that will be built upon further in the present study.

In a similar study from 1997, which instead mainly used medieval provincial laws as a source, historian Annette Hoff also mentioned keys, locks, and chests in her analysis of the development of the late Viking Age and early medieval Danish agricultural landscape. They are mentioned in a section dealing with various houses on the farm and whether some of them may have been locked. She also mentioned a few Viking Age graves with keys, locks, or chests. In contrast to Jochens, she followed the traditional interpretation of keys, and claimed that they were often found in Viking women's graves where they appear to have been a symbol of her status and power (Hoff 1997: 48-56). Similarly, Carolyne Larrington, professor of Medieval European literature, stated in her comments on *Thrymskvida* in her 1996 translation of the Poetic Edda, that keys to the pantry, storehouses, and chests were the housewife's responsibility, and that a bunch of keys was a mark of her status as a married woman (Larrington 2014 [1996]: 296).

In the 21st century, keys, locks, and sometimes also chests continued to be studied and analysed. Archaeologist Siv Kristoffersen further developed the idea of keys being symbols of the housewife (also based on medieval laws and the Edda poems) in her doctoral thesis (2000 [1997]), although the study's main focus was on animal ornamentation. In a paper from 2004, she also discussed social identities and mentioned keys as one of the objects that could be part of forming these (Kristoffersen 2004a: 292; see also Kristoffersen 2004b).

In the same year, archaeologist Hanne Lovise Aannestad (2004) analysed the symbolic aspects of keys found in graves. She brought up the importance of including the symbolism of the ornamentation on the key when discussing and interpreting their capacity as bearers of immaterial or symbolic messages. She recognised two categories of keys in the late Iron Age/Viking Age: plain iron keys and bronze keys. These bronze keys are said to be symbols of the role of the housewife and the marriage-ritual, and linked almost exclusively to female graves. She also mentioned iron keys in male graves, but stated that these were less elaborate and were probably not used in the same way. She also claimed

that chests in the male Birka graves were often not lockable, something that she interprets as men not having the same need to lock up their private possessions (Aannestad 2004:75). This is however a theory where the sex/gender was based on grave goods, and which does not take into account that half of the chests from Birka did not have remains of locks, probably related to preservation conditions and fragmentation.

Archaeologist Bergljot Solberg, based on Steuer (1982) and Kristoffersen (2000), also connected keys with women and marriage, referring to Nordic sagas (Solberg 2006: 229). Additionally, in her work on Old Norse religion, historian of religion Gro Steinsland described keys as the symbol of the housewife and her authority within the house, with the keys also giving her sole access to rooms and storage buildings where food and clothes were kept (Steinsland 2005: 372-373).

Taking a different angle, archaeologist Julie Lund (2006) in an article on Viking tool-chests, discussed the connection between the blacksmith, keys, locks, and chests. Further, Charlotte Hedenstierna-Jonson (2006, 2015) discussed padlocks and keys found in a building in the Garrison area at Birka where chests, locked with padlocks, which are said to have been placed along the inside walls. She discussed these in connection with the warriors that are believed to have resided there, and in terms of ownership.

The production and use of the padlocks from Birka was also studied by Ny-Björn Gustavsson (2005), both from a technical perspective, but also from a more interpretative standpoint. He discussed their potential use as seals, following Tomtlund (1978), and how common social codes relating to seals could have worked to restrict access. He mentioned that most of the padlocks found in the Garrison area had a notably weak construction that would not provide much resistance if someone tried to break them open. He suggested that they could have been seen as being more symbolic, and that the lock was not as important as the act of sealing (Gustavsson 2005: 22).

In some other more recent studies, the association between keys in graves and the housewife has begun to be questioned again, partly following Arwill-Nordbladh (1990). Pernille Pantmann (2011, 2014) studied Danish graves, and Heidi Lund Berg studied graves from eastern Norway along with a critical review of how the image of the key-bearing housewife has been reproduced (Berg 2013; 2015), similar to Arwill-Nordbladh's study (1998), but with more focus on the keys. The present

author has also previously studied keys in graves from Birka (Nordström 2014), as well as keys, locks, and chests from a few Iron Age farms in eastern Sweden (Nordström 2016). The grave-studies all showed that placing a key in a grave was a rare custom which was not exclusive to women, and called for a more nuanced interpretation of keys. Pantmann (2014) for instance suggested a connection between keys and wise women.

Nevertheless, the traditional interpretation can still be found in more recent publications, such as in a study on the settlement development in late Viking Age/early medieval Halland where keys were again said to be worn by the housewife, and keys in Viking graves were interpreted as symbols of her power and status (Håkansson 2017: 69). In another example, the housewife was again connected with the keys to the farm and control over supplies and valuables (Dommasnes 2018: 43).

To sum up; this is not a complete list of all research ever done on keys, locks, and chests, but it includes the most commonly referenced works within Scandinavian research along with other examples. The general picture, which can be said to follow the general trends in archaeological thought, is that many of them, especially the larger works, were written a long time ago and most of them dealt with technical details, typologies, distribution, and dating. More interpretive studies have gradually emerged, but they tend to be short, and the keys, locks, or chests are usually not the main focus. When interpreting Iron Age keys, they are very often associated with the housewife, although some also see a connection with property and its protection. The more recent studies include new interpretations that connect keys, locks, and chests with for instance the blacksmith and the warrior. However, it is clear that the housewife stereotype still lives on.

Technical and historical aspects of locks and keys

In order to give a background and basic understanding of the locking mechanisms used during the late Iron Age in Sweden or Scandinavia, a short description of some of the most common early lock and key types are presented here, including the earliest known door locks, and

examples of Greek and Roman locks. This is followed by the types of keys and locks included in the present study, which build on the same techniques as their forerunners. To facilitate reading, a diagram showing the terminology used for different parts of a key is displayed in figure 2:1 below.

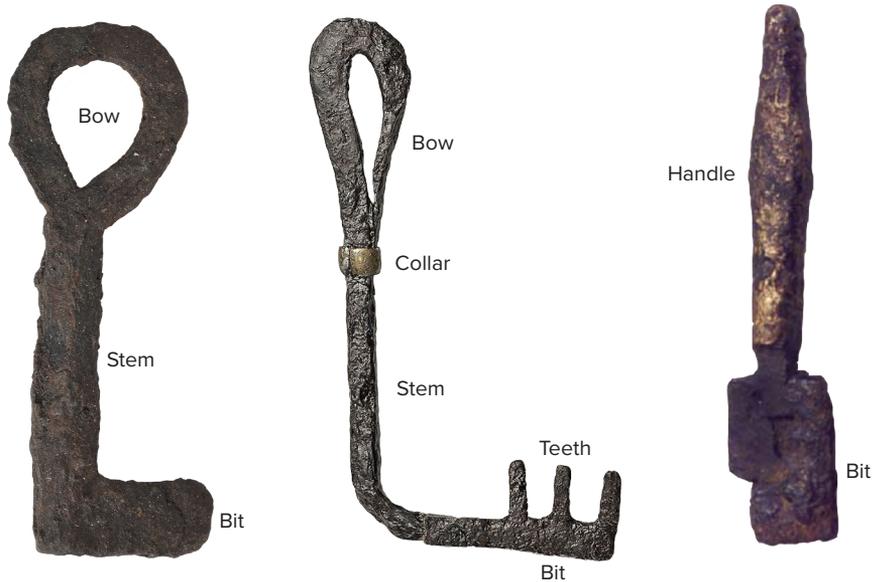


Figure 2:1. The names of various parts on three of the types of keys occurring in the present study. Photographs of the keys by Gabriel Hildebrand, SHM, 2015-12-07; Gabriel Hildebrand, SHM, 2013-07-01; Yliali Asp, SHM, 2001-05-22. (CC BY 2.5).

Where the invention of locks and keys originated is debated, and both Iraq and Egypt have been suggested (Proffitt 2018: 44). Some of the earliest locks and keys were found in ancient Mesopotamia during excavations at for instance the Neo-Assyrian (10th to 7th century BCE) palaces at Kalḫu (Nimrud), Dur-Šarrukin (Khorsabad) and Nineveh, where they were used to lock gates and doors. These Assyrian locks, referred to as *sikkatu* locks, were of a type very similar to what is referred to as the *Egyptian lock*, or as the Greco-Roman *balanos* lock (Radner 2010: 269-271; Potts 1990: 188). These appear to have been made primarily of wood, although a copper item found at Kalḫu was identified as a lock-part (Radner 2010: 270).

The locking mechanism of the Assyrian *sikkatu* lock consists of a heavy transverse bar, a holding bar, bolt-pins, and a key. In order to lock the gate, the smaller holding bar is pushed through a hole in the transverse bar. The holding bar is in turn kept in place by means of one or several bolt-pins. These pins are lodged in hollows within the transverse bar. To open the lock, these bolt-pins have to be removed from the holding bar with the help of a wooden key (Radner 2010: 271). In a similar variant the pins are instead housed in an assembly on a vertical beam (see figure 2:2) (Potts 1990: 189-190). The keys to these locks would have to have teeth that corresponded with the number and position of the pin holes in the bolt (Proffitt 2018: 44).

In some Egyptian examples, with the lock mounted on the inside of the door, a hole in the wall next to the door could be incorporated into the locking device. This would allow a person to insert their arm so that the key could be properly lined up with the holes in the bolt. The teeth on the key would then push up the pins from the bolt, allowing it to slide into an unlocked position. This is known as a one-handed locking system. There was also another system where two hands were necessary; one hand to operate the key and the other to move the bolt (Proffitt 2018: 44-45).

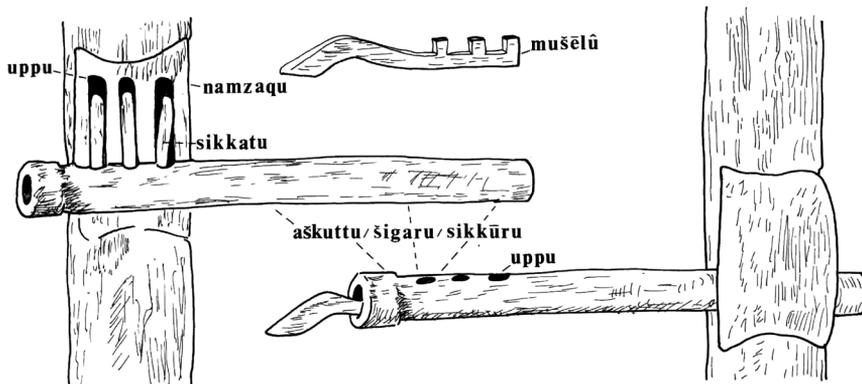


Figure 2:2. *A construction suggestion of an ancient Mesopotamian locking system. From Potts 1990: figure A, used with permission.*

The locks described above can all be classified as *tumbler locks*, using pins that *tumble* down into the holes when the lock is closed (Pitt-Rivers 1883: 6).

Another lock-type, used in ancient Greece, is the so-called *Homeric lock*. Its name stems from it being mentioned in Homer's *Odyssey* which dates it to at least the 8th century BCE. It operates by using a bolt on the inside of the door, a rope attached under the bolt passed through a hole to the outside, and a key. From the outside, the key was inserted through another hole and used to manoeuvre the bolt to an unlocked position. To lock it, the string could be pulled to move the bar. The keys to these locks were long bronze or iron rods, twice bent to form a shorter handle and a longer bit which was sometimes slightly curved (Haddad 2016: 56-57). This type of key is also known as a *latch-lifter* (see e.g., Wardle 1990: 147-148).

Problems with the security and reliability of the wooden tumbler locks led to the need for improvements. The Romans corrected some of the issues by using locks, keys, and pins made of metal, although the wooden variants were still kept in use. This meant that smaller, sturdier locks with an increase in pin variation and smaller keys could be manufactured. Another Roman improvement of the tumbler lock was the introduction of a metal spring that forced the metal pins down into the wooden bolt, ensuring a consistently functioning lock (see figure 2:3). The smaller locks also meant that they could be installed on furniture like cupboards and chests as well as on doors (Proffitt 2018: 46-47, 49).

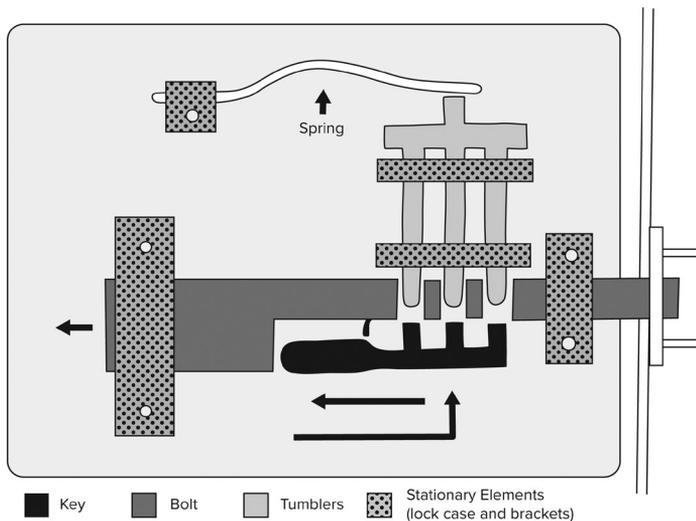


Figure 2:3. Roman tumbler lock with spring. Based on Allen 1997: figure 8.

The types of keys used with these roman tumbler-locks had two main types: *tumbler lock lift-keys* and *tumbler lock slide-keys* (see figure 2:4 and 2:5). The lift-keys, usually made of iron, lifted the tumblers to free the passage of the bolt which was then pulled manually. The slide-keys, made of copper alloy or iron, both lifted the tumblers and moved the bolt. The lift-keys can be found in two main forms: T-shaped and L-shaped. The T-shaped lift-keys have a simple bit with a single upstanding tooth, sometimes two, on each side. The L-shaped lift-key, which is the most common type, usually have two or more teeth on one side (Mould 2011: 177; Wardle 1990: 146).



Figure 2:4. Examples of Roman T- and L-shaped lift-keys. Left: Photograph by Robert Webley, 2011-08-17, Winchester Museum Service, The Portable Antiquities Scheme/ The Trustees of the British Museum (CC BY-SA 2.0). Right: Photograph by Robert Webley, 2006-11-15, Winchester Museum Service, Portable Antiquities Scheme/ The Trustees of the British Museum (CC BY-SA 2.0).



Figure 2.5. Examples of Roman tumbler lock slide-keys. Left: Photograph by Garry Crace, 2012-09-08. *The Portable Antiquities Scheme/ The Trustees of the British Museum* (CC BY-SA 2.0). Right: Photograph by Wendy Scott, 2016-02-15, *Leicestershire County Council* (CC BY-SA 2.0).

The slide-keys have a more robust form with a thick shouldered strap handle. The bit can take two forms with the teeth either arranged in a single row on an L-shaped, Z-shaped, or curved bit, or arranged in more complex patterns on a straight bit (Mould 2011: 177; Wardle 1990: 148).

Besides lift-keys and slide-keys, two other main types of keys were in use in the Roman period: *latch-lifters* and *rotary keys*. The latch-lifter (see figure 2:6) was used to raise a single bolt or tumbler, as in the aforementioned *Homeric lock*. These are more of an unfastening device than a proper key, and are not specific to one bolt, making them less secure (Mould 2011: 177; Swift 2017: 114).

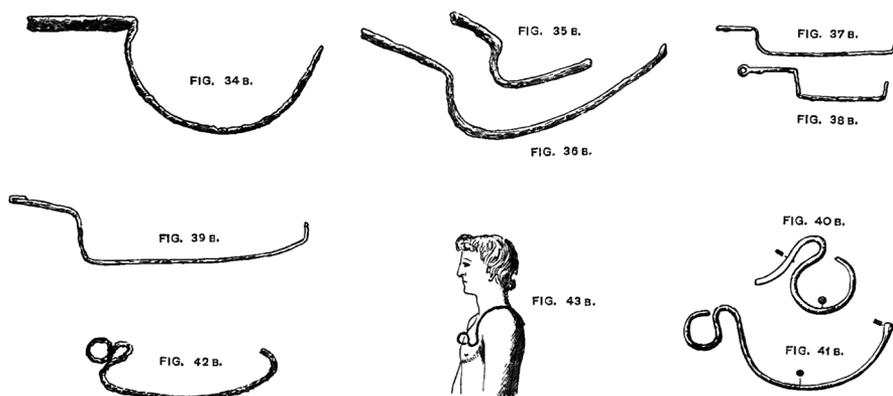


Figure 2.6. *Examples of latch lifters. Detail from Pitt-Rivers 1883: Plate IV.*

The rotary key (see figure 2:7), also known as a lever lock key, appeared in the 2nd century CE. It has a bit with ward-cuts and grooves instead of teeth, set at a straight angle from the stem which ends either in a pin projecting beyond the bit or a piped (hollow) stem to be fitted over a pin in the lock. The key was normally inserted vertically, bypassing the internal protection wards preventing the insertion of an incorrect key, and was then turned until it engaged the bolt and pushed it to a locked or unlocked position. These locks were used both on doors and chests, where the larger keys are generally believed to belong to door-locks and smaller keys to chest-locks (Proffitt 2018: 51; Mould 2011: 177).



Figure 2.7. *Examples of Roman rotary keys. Left: Photograph by, Arwen Wood, 2018-01-23, The Portable Antiquities Scheme (CC BY-SA 2.0). Middle: Finder, Kate Orr, 2010-06-02, The Portable Antiquities Scheme/ The Trustees of the British Museum (CC BY-SA 4.0). Right: Photograph by Martin Foreman, 2015-06-03, North Lincolnshire Museum (CC BY-SA 2.0).*

Rotary keys and lever locks, but in slightly different forms, also began to appear in Scandinavia around the first century CE, during the Roman Iron Age, where finds suggest they were used to secure chests, although doors cannot be ruled out (Some padlocks were also operated with rotary keys as will be described further below). Here, the key is turned only so much as to lift a spring, enabling the bolt to be pushed to the side (see figure 2:8) (Almgren 1955:33).

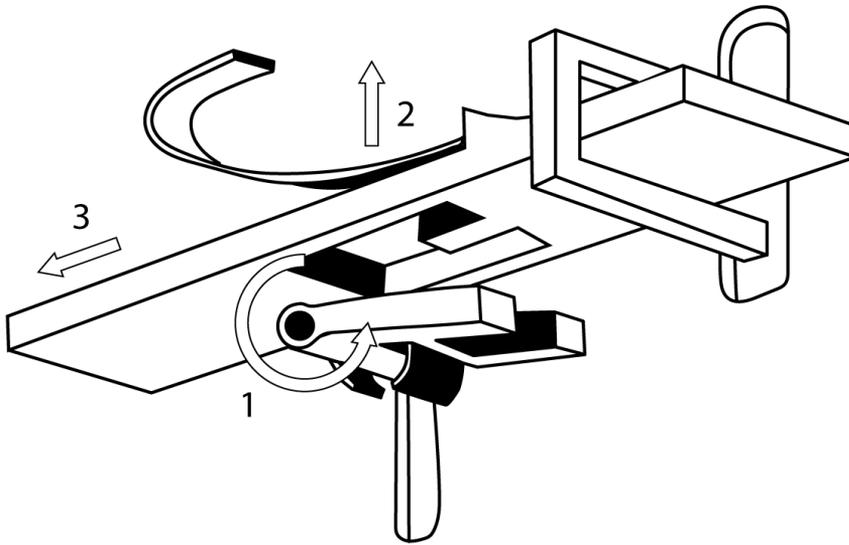


Figure 2:8. Example of lever lock operated with a rotary key. Based on Almgren 1955: figure 60.

These mounted locks and their keys come in a few different variations, but are all essentially locks with a sliding bolt.¹² As in the roman examples, the keys have either a hollow stem or a solid stem ending in a pin; when inserted this makes the key engage with either a pin or a hole on the lock-bolt. Furthermore, the bits on the keys which are all flat have either ward cuts, apertures, pins, or one or more teeth in order to pass through internal obstacles or holes in the lock and lift the lock-spring to release the bolt (see figure 2:9 and 2:10). In one variant there are pins

12. Corresponding keys found in Britain are sometimes referred to as ‘slide-keys’ because of the sliding action of the bolt but are not the same as the Roman slide-keys (see e.g., Ottaway et al. 2009: 188-193; Ottaway & Rogers 2002: 2867).

inside the lock that mediate the contact between the key and the lock-spring, combining the tumbler and lever lock. The lock-springs also vary in shape; they can be split into two or three tabs, corresponding to the number of teeth or pins on the key (Almgren 1955: 33-39).



Figure 2.9. Example of rotary keys (5208:413; 35000: F78242; 35000: F74570; 34000: Bj 968). Four keys are from the Black Earth, and one is from Birka grave Bj 968. Photographs by Sara Kusmin, SHM, 2008-04-14, Sanna Stahre, SHM, 2011-10-26, Kerstin Näversköld, SHM, 2012-07-30, and Gabriel Hildebrand, SHM, 2015-12-07 (CC BY 2.5).

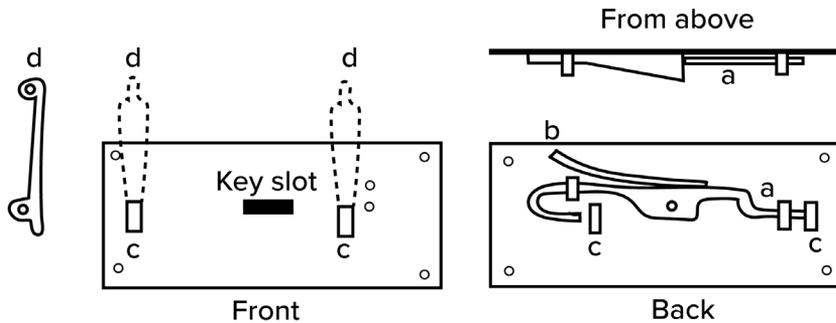


Figure 2:10. Example of chest lock from Birka to be operated by a rotary key, similarly to the example in figure 2:8. The bolt (a) is pushed through hoops at the lower end of two drop-forks (d); attached on the other ends to the lid of the chest. When the key is turned it lifts the spring (b), and makes it possible to move the bolt sideways and out from the hoops on the drop-forks (c), thus releasing the drop-forks and enabling the lid to be opened. Based on Erixon 1946: figure 30.

Other keys intended for mounted locks used during the Scandinavian Iron Age (from the Roman Iron Age to the Viking Age, c. 1st - 11th century) are shaped like the Roman L-shaped and T-shaped lift-keys (see figure 2:11 and 2:12). The locking devices may however have been different, and it is not certain that they incorporated tumblers. Based on reconstructions of locks from the 13th century and later, as presented by Erixon (1946), some seem to be based on a sliding bolt placed on the inside of the door. By inserting the key into a slot through the door and either below or through the bolt (depending on if the key is L- or T-shaped), twisting the key 90 degrees so that the teeth could engage with holes on the bolt and possibly also push down a spring, the bolt could be pulled sideways to allow the door to be opened.



Figure 2:11. Example of an L-shaped lift-key with three teeth (35000: F25072,) a T-shaped lift-key with a single tooth on each side of the stem (5208:409), a T-shaped lift-key with two teeth on each side of the stem (5208:410), and an 'S-shaped' lift-key (9993:1) that probably functioned in a similar way. All four were found in Birka's Black Earth. Photographs by Gabriel Hildebrand, SHM, 2013-07-01, Yliali Asp, SHM, 2001-05-22, and Christer Åblin, SHM, 2011-11-24 (CC BY 2.5).

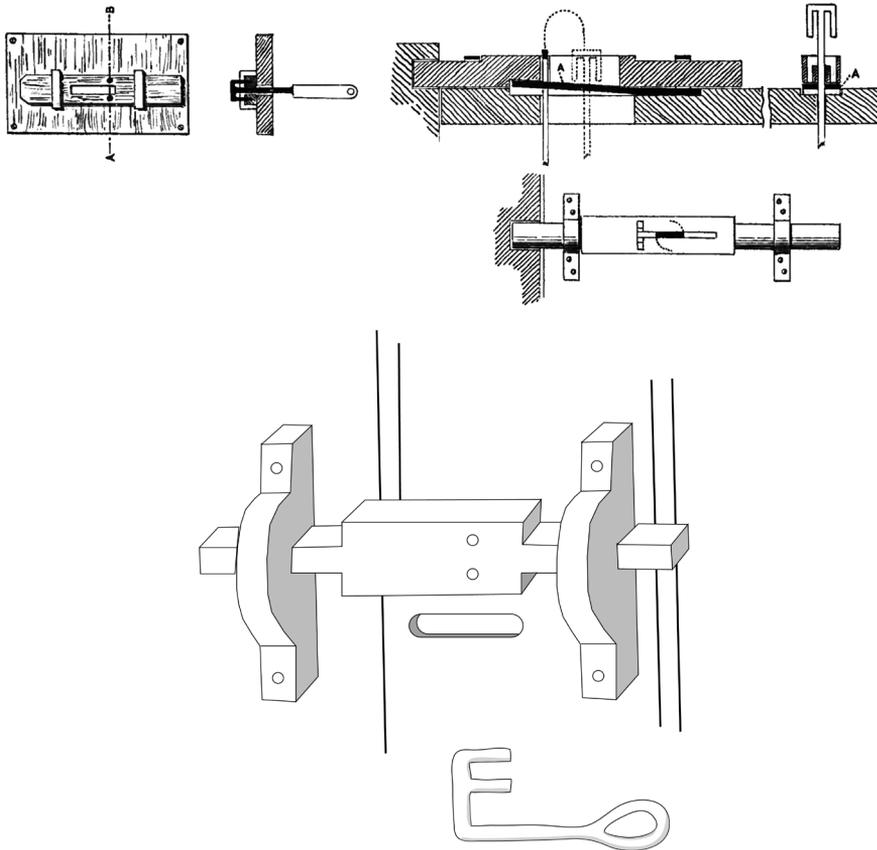


Figure 2.12. Bottom: Construction suggestion of a door lock with a sliding bolt and L-shaped lift-key (Based on Erixon 1946: figure 12). Top: Construction suggestion of a door lock with a sliding bolt and T-shaped lift-key (Detail from Pitt-Rivers 1883: Plate IV).

Other construction suggestions using an L- or T-shaped key do however include tumblers (see Erixon 1946: 61, figure 6 and Felder 2014: 37, figure 3.3), both requiring a two-handed operation. Even though there are uncertainties regarding which type of locking mechanism such Scandinavian L- and T-shaped keys belong to, they will nevertheless be referred to as lift-keys¹³ in the present study, following the Roman key-definitions.¹⁴ The present material also includes a T-shaped lift-key with

13. In Swedish the L-shaped lift-key is commonly referred to as a *kroknyckel* or *klonyckel*, and the T-shaped one as an *ankarnyckel*, *kroknyckel* or *klonyckel*.

14. No keys resembling the roman slide-keys have been identified in the material of the present study.

two teeth on each side of the stem and a few ‘S-shaped’ lift-keys which probably functioned in a similar way (see figure 2:11).

It is furthermore likely that some wooden tumbler locks and keys for doors were also in use in Scandinavia during the Iron Age, but no examples have survived. However, a few similarly constructed, still existing, wooden locks have been found on outbuildings in Sweden and other parts of northern Europe, possibly suggesting a long-lived locking tradition (Erixon 1946; see also Cinthio 1998: 238).

Another type of key found in Iron Age Scandinavia, including the sites covered in the present study, is what has here been termed an *angular L-shaped lift-key*.¹⁵ The bit resembles the bit on an L-shaped lift-key, but



Figure 2:13. Example of *angular L-shaped lift-keys*. Bottom: Iron key from Birka grave Bj 24a (34000: Bj24a), Top: Cu-alloy key together with parts from a matching chest-lock, including lock-spring case, lock-spring, and key-plate, from grave 1970, Grötlingbo 1:1, Gotland (34407: F7). Photographs by Lena Androsjtjuk, SHM, 2007-07-30 and Eva Vedin, SHM, 2008-04-29 (CC BY 2.5).

15. In Swedish this type of key is usually referred to as a *klonyckel* or a *kroknnyckel*.

the stem has been twice bent, similar to a latch-lifter. The shape of the key is also similar to that of a modern toothbrush, angled for better precision (see figure 2:13). For keys where only the bit with its teeth remains, and where it is not possible to distinguish which type of lift-key it originally was, they are simply referred to as a *lift-key*.

These keys are believed to belong to mounted locks on chests, although it cannot be ruled out that such a lock could also be fitted to for instance a cupboard door. They are generally dated from the Roman Iron Age to the Viking Age (Cinthio 1998: 241). Some construction suggestions of these locking mechanisms can be seen in Erixon 1942: figure 18 and 19, but the basic principle is the same as in the other contemporary locks; a key is inserted in a hole from the outside, and the teeth on the bit engage with a spring, releasing a lock-bolt which enables the lid or door to be opened. Lock casings with two holes corresponding to a key bit with two teeth were found on, for instance, Vallhagar and Sanda, included in the present study.

Another type of lock usually associated with chests appears to be a combination of the previously described mounted locks and the technique used in some of the Roman padlocks (see below). They occur in Norwegian contexts (Roesdahl 1977; Arbman 1955: 57), but it cannot be assumed that they could not be found in Swedish contexts too, although there are no such lock-parts identified in the present material. The key is used to compress a spring-bolt so that it can be moved sideways and release the drop-forks holding the lid (see figure 2:14). Since the key-type is identical to those used in a barb-spring or barrel padlock (see below), they are not possible to distinguish if not found in a context together with this type of mounted lock. Therefore, any such keys in the present study have been classified as possible padlock keys, even though this is a possible source of error and will be kept in mind in the analysis.

Padlocks

During the Roman period, around the 1st century CE, padlocks make their appearance. Around the same time they also appeared in East Asia, perhaps invented independently. Based on archaeological finds, padlocks were used throughout northern Europe during the later part of the 1st millennium (Pace 2014: 84; Gustafsson 2005: 19-20).

The most common Roman padlock type is the so-called barb-spring or barrel padlock (see figures 2:15 and 2:16). These comprise cylindrical or angular metal cases into which a spring-bolt was inserted through a hole in one end. The bolt has a central spine with one or two springs attached to its tip; splaying out from the spine like flexible barbs. When the bolt is pushed in through the bolt-hole the barb is compressed, and it is then sprung out again once inside the case, preventing the bolt from being withdrawn. Only by inserting a key at the other end could it be pulled out. The barb-spring padlock keys has a few different basic forms; one type has a rectangular or round bit with a central aperture fitting the shape of the spring, set at a 45-degree angle to the stem, making the profile of the key L-shaped. When inserted, the key is slid over the end of the spring and pulled along to compress the spring, allowing the bolt to be withdrawn. Another form has a bit consisting of two prongs which would have released the spring with a levering rather than sliding action (Manning 2019: 349; Ottaway et al. 2009: 189; Ottaway & Rogers 2002: 2861-2872; Mould 2011: 177-178).

Another version of barrel shaped padlock has an elongated T-shaped slot cut into the cylinder (see figure 2:16). Here the bit of the matching key is set at a 90-degree angle from the stem, making the profile of the key straight rather than L-shaped. It too has a central aperture matching the shape of the spring-bolt. It is inserted into the T-shaped slot and slid along the side, compressing the spring (Ottaway & Rogers 2002: 2861).



Figure 2:15. *Incomplete Roman padlock. Photograph by Richard Henry, 2014-07-24, Salisbury and South Wiltshire Museum, The Portable Antiquities Scheme/ The Trustees of the British Museum (CC BY-SA 2.0).*

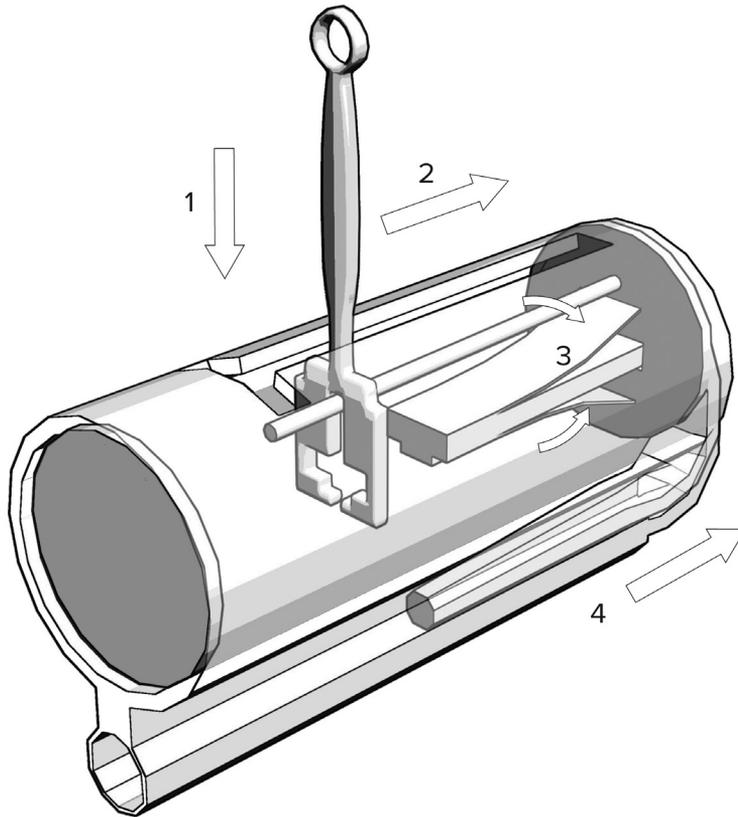


Figure 2:16. *Example of barb-spring padlock construction with T-shaped slot for the key. Based on Ottaway & Rogers 2002: figure 1444 and 1445.*

From the Roman provinces there are examples of padlocks operated with rotary keys and those with T-shaped slots. In Scandinavia there are examples of box-shaped padlocks which could be seen as a later, simplified development of the provincial Roman ones (Tomtlund 1977: 12). Box-shaped padlocks have also been found on the British Isles where they may have survived in use until the end of the 11th century CE (Ottaway & Rogers 2002: 2877).

The padlocks included in the present study, which are complete enough to assess, can be sorted into three main types based on Tomtlund (1970; 1977). The first type is a box shaped padlock operated by a rotary key with flat bit and bent teeth and an L-shaped keyhole. The second type is also box-shaped, but operated by a barb-spring padlock key with

flat bit and apertures that fit the spring-bolt (what Tomtlund refers to as a 'sliding key'); the keyhole is shaped like an upside-down T. The third type, less well defined due to few and poorly preserved examples, is barrel-shaped and is likewise operated by a barb-spring padlock key. It, along with its key, are likely to have resembled the Roman cylindrical barb-spring padlock and key (see figures 2:17 and 2:18).

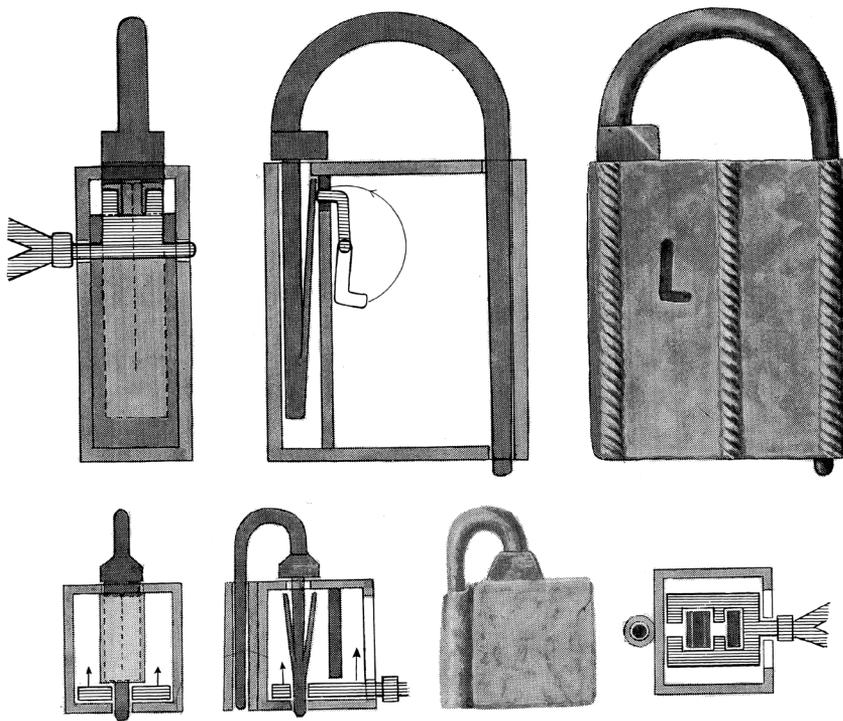


Figure 2:17. Example of box-shaped padlock with L-shape slot (bottom) and T-shaped slot (top) from Helgö. Construction drawing by Harald Faith-Ell. From Holmqvist et al. 1961: figure 25, used with permission.



Figure 2:18. *Examples of padlock keys from Birka and Helgö: Black Earth 14563:16; Black Earth 14563:17; Black Earth 15731:18; Garrison 21064:80; Birka grave 34000:Bj562; Birka grave 34000:Bj557; Helgö 25075:F1417; Helgö 26481:F6223. Photos by Ny Björn Gustafsson, SHM, 2006-09-21, Gabriel Hildebrand, SHM, 2013-11-28, Yliali Asp, SHM, 2001-05-22, Pavel Voronin, SHM, 2016-05-16, and Sara Kusmin, SHM, 2017-03-02 (CC BY 2.5). Key marked with a * is not to scale.*

Since many of the padlock-keys included in the present study are rather poorly preserved, more detailed classifications have not been attempted here. Furthermore, since rotary keys were also used to operate mounted locks, they are simply classed as such unless specifically recorded as padlock keys in the excavation reports. Another possible error in classification is the key used with the type 2 padlock since it can also be used to operate a chest-lock with sliding bolt.

Medieval Texts

This part of the thesis discusses several examples of contexts in which keys, locks, and chests are mentioned in texts written down in the medieval period. The examples chosen are in the form of fiction, poetry, and normative text (laws). As such they cannot be used as sources of normal “everyday life”, but might give some clues to mentalities or ideologies connected with these objects and the general contexts in which they could be used, as well as by whom. In most cases, they seem to be associated primarily with people of higher status/greater wealth, mostly leaving out people of lower classes; thralls/servants are mentioned, but they still fall within a high-status context. Their original dating is also very uncertain and while it is possible that some parts are based on orally communicated accounts that might have their origin in the Viking or Iron Age, there is no real evidence to confirm this. Accordingly, this has been much debated amongst scholars (see below).

Despite these source critical issues, these medieval text sources have often been used in discussions about the meaning and symbolism of keys, as presented earlier.

Consequently, it is hard to evaluate these interpretations without a more thorough study of the sources, which appear to have been rather selectively chosen to show the connection between married women (housewives) and keys. Therefore, the following sections present a more complete and hopefully more accurate account of the contexts in which keys, as well as locks and chests to which the keys are closely linked, were mentioned in text. The hope has also been to gain some new ideas about possible ways to interpret the meaning and function of keys, locks, and

chests from a period less distant from the Iron/Viking Age than our own modern society. That at least a few keys, and therefore also locks and presumably some chests, existed in Iceland in the Viking Age has been shown in a study of Icelandic keys (Friðriksdóttir 2015).

The specific texts chosen for this study include sagas and poems from the *Icelandic sagas*, the *Poetic Edda*, the *Prose Edda*, the *Legendary sagas*, and legal rules from early Frankish and Anglo-Saxon laws, and from the Scandinavian provincial laws including the Icelandic law compilation *Grágás*. These sources are further described in the sections below.

Keys, locks, and chests in Old Norse literature

Keys, locks, and chests in the Icelandic Sagas

With virtually no written sources from the Scandinavian Iron Age, except for some runic inscriptions, some of the chronologically closest written sources that exist are the Icelandic sagas, or family sagas. They allegedly describe the first century of the Icelandic Commonwealth c. 930-1030 on Iceland, but also have introductory sections dealing with events in Norway and Iceland during the main period of settlement in Iceland, c. 870-930 (Ólason 2005: 101).

There are a few text fragments of the sagas that can be dated to the second half of the 13th century. The rest are preserved in vellum manuscripts from the 14th, 15th, and 16th centuries, or in even later paper manuscripts. These are all copies, although none of them can be considered as an author's original copy (Ólason 2005: 102). Even so, the majority of the sagas, including most of the major works, are believed to have been composed during the 13th century with the remaining texts composed in the 14th century or even later (Ólason 2005: 102).

The sagas can generally be said to describe conflicts that centre on property, social influence, or relationships between a man and a woman. Within the stories there is a strong connection with the concept of honour, society's laws, and traditional methods for resolving conflicts. As such, the sagas can be said to be influenced by the society and its ideology; at least society as it was portrayed by the author (Ólason 2005: 102).

The sagas depict the history and historical legends of the founding families of Norwegian farmers who settled on Iceland in a specific time in the recent past. However, many scholars question their historical value and whether they are just fiction or contain historical facts (Hedeager 2011: 27).

From having been regarded as orally communicated true accounts of events in early research, they began to be questioned in the early 20th century and the role, influence, and motives of the author were highlighted. In more recent research the view of the Icelandic sagas as unreliable has begun to change, but it is still debated whether it is Iceland's early period or the authors own time that is actually depicted (Magnúsdóttir 2001: 41-42).

The Old Norse philologist Gísli Sigurðsson believes that the Icelandic sagas should primarily be read and understood as sources about the time when they were written, but points out that one should not ignore the fact that these texts might also contain important information and can be informative about their own pasts. He makes an analogy with the present generation's grandparents who can recall and mediate information about the recent past that they claim is historically correct, but at the same time, they mediate that information for reasons that are relevant in the present (Sigurðsson 2013: 400-401). Similarly, medievalist Chris Callow argues that it is unlikely that the authors of the Icelandic sagas wrote down fictional accounts of the past, but rather that they recorded something that was close to contemporary views of their own recent past (Callow 2006: 324).

Archaeologist Julie Lund points to a change in Viking Age archaeology since the early 2000s towards what she refers to as a historical archaeological approach, with a highly text-dependant archaeology where the interplay of objects and texts are in focus. In particular it is the Old Norse sources such as the Icelandic sagas, as well as the eddic and skaldic poetry, that are included in these studies (see chapter 2). These texts are used analogically with the archaeological record, with the understanding that the texts were written down in the high medieval period, but that the narratives likely took place in Viking Age Scandinavia, and that parts of the narratives may have been preserved in oral form (Lund 2017: 91). Lund believes that it is possible for archaeologists, while maintaining a source-critical position, to use these written sources with content that can be argued as being older than the time they were written down (Lund 2017: 92).

Similarly, medieval and Old Norse historian Auður Magnúsdóttir points out that few researchers today deny that at least parts of the Icelandic Sagas are based on an oral tradition of stories that were passed on from generation to generation until they were written down (2014: 62). She further argues that historically, some social arrangements such as gender structures, kinship systems, territorial organisation, conflict resolution, household size, as well as friendship- and kin relationships appear to have been persistent despite revolutionary societal changes. Furthermore, the 13th century authors of the Sagas, giving similar accounts of Viking Age society, probably had some knowledge of the past, and also had the ambition to give a credible account. Therefore, the Icelandic Sagas, together with other material, could be used to shed some light on Viking Age society. When it comes to attempts to reconstruct the aforementioned social structures, the Icelandic Sagas are currently preferred over the medieval laws as sources (Magnúsdóttir 2001: 42; 2014: 63, 79).

It has also been suggested that the sagas can be used as sources concerning farm life and everyday customs in Old Norse society, since this had not changed very much in Iceland between the Viking Age and the time the sagas were written down, except where religion is concerned (Lönnroth 2008: 309). However, since the farms and people described in the sagas are mainly of higher status, it is not the life of “ordinary” people that is portrayed here.

Archaeologist Liv Helga Dommasnes argues that medieval sources cannot automatically be cited in support of much earlier times, but she believes that they can encourage us to wonder where and when certain customs originated (Dommasnes 2008: 93). Here the customs concerning locking are of course of special interest in this study. Similarly, archaeologist Ann-Mari Hållans Stenholm suggests that the Icelandic sagas, because of the source critical problems, should be read in an associative way; by which she means that they can inspire new questions. By creating a dialogue between the sagas and the archaeological record she believes that it is possible for the saga society to say something about the Viking society and vice versa (Hållans Stenholm 2013: 61, 63).

Since the present study deals mostly with questions concerning non-religious customs on the farmstead or in the early town, and based on the viewpoints above, the sagas are appropriate to use. Inspired

by Dommasnes and Hållans Stenholm, they will be used in a more associative way where the “saga society” is used in comparison with the archaeological record: the primary source material for the Scandinavian Iron Age.

The sites described and analysed in this thesis range from the Migration Period to the Viking Age. The older sites are of course more distant to the times allegedly described in the sagas, but it is not unthinkable that customs concerning locking could have roots going back even this far.

Besides the problems with distance in time, there is also the geographical distance between Iceland and eastern Sweden to consider, even though some of the sagas take place outside of Iceland. Just as there must have been differences in how people lived their lives in various places throughout Scandinavia, life in Iceland probably differed from that in what is today Norway, Denmark, and Sweden. It is however believed that overall, the Viking societies were fairly similar, and that they shared a similar material culture. It might even be possible to speak of a common Norse cultural complex that was part of a wider North Germanic cultural sphere, even though regional differences existed (Hedeager 1994; 2003).

The Norwegian settlers would probably have adapted their locking practices to the new conditions in Iceland, but since the primary function of locks and keys would have been the same, it is believed that the locking practices in Iceland can be compared with those at the Swedish sites discussed in this thesis.

In the following text, some examples from the Icelandic sagas will be presented. The aim has been to investigate how and in what contexts keys, locks, and chests are mentioned in the stories, as well as what was locked up, and not least who was in control of the locks. It is however not to be viewed as a complete list of occurrences and it should also be noted that the study is based on English translations in comparison with published transcripts of the Icelandic texts, either in book form or available through *The Icelandic Saga Database* found online (<http://sagadb.org>). This is acknowledged as a possible source of errors or misinterpretations.

The examples are later used in an analysis together with the archaeological material from the chosen sites.

Locked doors in the sagas

There are some references to locked doors in the Icelandic sagas, but there are many instances where it is unclear whether the locking of a door (or chest) refers to securing it with a bolt, or if it refers to an actual lock to be operated with a key. In the following quote from *Eyrbyggja saga*, describing a house-search in order to locate the man Odd, it is quite clear that the door has a proper lock:

[Katla] asked the cook to carry a light for them, and to **unlock** the storeroom, “That is the only **locked** room on the farm.”

[Katla] bað matselju bera ljós fyrir þeim og **lúka upp** búi “það eitt er hús **læst** á bænum.”

(The saga of the people of Eyri 1997: 153; *Eyrbyggja saga*, Ch. 20, The Icelandic Saga Database¹⁶)

Lúka upp in fact means to *open up* (Einarsson 2003: 243) and does not necessarily imply that there was a lock on the door, but *læst* means *locked* (Einarsson 2003: 243). The fact that someone needs to come and open the lock in this example further implies that the storage house¹⁷ was not simply locked with a bolt on the door but required a key to be opened.

This quote is very interesting because it also tells us that the storage house was the only building that was locked on this farm, and it seems that Katla – the housewife – had delegated the responsibility of holding the key to a housekeeper. She was unable to go herself as she was magically hiding her son, Odd, the subject of the house-search (The saga of the people of Eyri 1997: 152-153).

The quote is of course a work of fiction, but it is not impossible that some of it is based on realistic conditions. The part regarding the lock does not seem to have been included in the saga in order to add excitement or drama; it is just background information to the story. There are also strong similarities here with a medieval legal rule regulating house-searches (see chapter 4).

16. Text highlighted in bold in this chapter of the thesis is by the present author.

17. *bús* actually means *house* or *building* (Einarsson 2003: 228).

Other sagas where doors are being locked or unlocked include *Brennu-Njáls saga* (Ch. 3), where Hrúti has left Iceland to go claim an inheritance in Norway. He is invited to *Kungahella* where the Norwegian King Harald Grey-Cloak and his mother Gunnhildur had their seat. After arriving at *Kungahella*, Gunnhildur invites (tells) Hrúti to sleep with her in the upstairs room, where she quickly locks, or bolts, the door when they have entered the room (*Njal's saga* 1997: 3-6). An older English translation has here chosen “locks” (Dasent 1900 [1861]: *The Story of Burnt Njal*), whilst a more recent one has chosen “bolts” (*Njal's saga* 1997: 6). The Icelandic version is as follows: Síðan gengu þau til svefnis og læsti hún þegar loftinu... (*Brennu-Njáls saga*, Ch. 3, *The Icelandic Saga Database*).

Since *laesti* means locks (Einarsson 2003: 243), the older version seems more accurate, however, the locking device could still be a simple bolt or latch on the inside of the door. This would be the most cost-effective way to lock a room that only needed securing when someone was inside seeking privacy or security.

There are a few instances when doors were locked in order to retain people. One example can be found in *Egils saga Skallagrímssonar*, where Egil and his men are taken prisoner on a farm in Courland (western Latvia) whilst out raiding in the Baltics. There, they are thrown into a building that is “locked up firmly” (húsið læst rammlega) (*Egil's saga* 1997: 85; *Egils saga Skalla-Grímssonar*, Ch. 46, *The Icelandic Saga Database*). There is no description of the locking device, but since the men are being locked up inside, it would most likely have been either a bolt on the outside of the door, or a proper lock. If the house was normally intended for storing things safely, the more practical choice of lock would be one that was operated with a key, since anyone could open a simple bolt on the outside. Such a lock could be either attached to the door or it could be in the form of a padlock.

A similar kind of story can be found in *Grettis saga*. It takes place in Norway on the farm of a man called Þorfinnur. In the story a group of twelve berserkers come to seek revenge on Þorfinnur, only to find he is not home. Left on the farm are his wife, daughter, and Grettir. In a clever plan to save the women and himself, Grettir lures the berserkers into an outbuilding where Þorfinnur kept his clothes. The outbuilding is described as solidly built with a strong lock on the door:

Þar voru á útidyr og sterkur **lás** fyrir. Það var allsterkt hús (The saga of Grettir the strong 1997: 76-81; *Grettis saga*, Ch. 19, The Icelandic Saga Database).

When they are all inside the outbuilding, Grettir manages to rush out of the building, grab the latch, close the door, and lock it:

Hann fór undan í flæmingi og er þeim var minnst von hljóp hann út úr húsinu og **greip í hespuna** og rekur aftur húsið og **setur lás fyrir** (The saga of Grettir the strong, 1997: 79; *Grettis saga*, Ch. 19, The Icelandic Saga Database).

The lock was accordingly placed on the outside of the door and is described as having a latch; however, it is not likely that it was simply a bolt on the outside since the outbuilding was used to store valuable clothing. It is therefore only logical that the lock on the outbuilding would have operated with a key, although no key is mentioned. The context suggests a wooden door-lock of a pin tumbler type (see chapter 2) where perhaps the key remained in the lock when it was initially opened. The latch that Grettir grabbed before closing the door could be the one that would have been drawn out from the lock during opening, and which would subsequently have been re-inserted after the door was closed. When it was drawn out of the lock the key would at the same time lift the tumblers inside the lock to give the latch free passage. The key would then be removed, and the tumblers would have fallen down and secured the latch.

Both buildings in *Egils saga Skallagrímssonar* and *Grettis saga* appear to have the capacity to securely lock things or people inside, and they appear to be outbuildings separate from the dwelling house on the farm. The main function of the first building is not known, but the outbuilding in *Grettis saga* was said to be used to store, presumably rather expensive, clothes. Although no keys are ever mentioned, it seems more logical that the locks would have been proper locks, operated with a key, either attached on the outside of the door or loose in the form of padlocks.

A study of Medieval and Viking Age houses (Vidal 2013), including both archaeological material from mainly Iceland and Norway and the Icelandic sagas, also came to the conclusion that the locking of doors seems to have been particularly important when it came to securing

storage spaces and outbuildings, while dwellings are usually unlocked (Vidal 2013: 45).

There is also a story in *Kormáks saga* where a man named Þorkell locks (*lykur*) his daughter Steingerd into one of the storage sheds to prevent her from seeing Kormák, worried that his daughter would come to dishonour. The building is later forced open by Kormák, suggesting it could not have been a bolt on the outside but a proper lock (Kormak's saga 1997: 185-186; *Kormáks saga*, Ch. 5, The Icelandic Saga Database). Another story in *Laxdæla saga*, features a man called Þórður who seeks refuge and is temporarily placed in an outbuilding that Vigdís, the housewife, puts a lock on (Setur hún þar **lás** fyrir) while it is discussed whether he should be allowed to stay (The saga of the people of Laxardal 1997: 15; *Laxdæla saga*, Ch. 14, The Icelandic Saga Database).

Again, no keys are mentioned. It is the capacity of the buildings to function as a place to retain people for various reasons that appears to be significant. Exactly how this is done or what type of lock the doors have seems unimportant in the stories.

Doors to the main dwelling house were also opened or closed in several sagas. One example of this can be found in *Brennu-Njáls saga* where Höskuldi and some of his men go to see Hrút at his farm and knock on the door. A man is said to come and “unlock” it: “... en maður gekk út og **lauk upp** hurðinni” (Njal's saga 1997: 28; *Brennu-Njáls saga*, Ch. 23, The Icelandic Saga Database).

However, since “*lauk upp*” simply means *open*, it could refer to either the door being opened, perhaps by lifting a bolt on the inside, or a lock being opened/unlocked. There are several more instances like this one, where someone simply opens (*lauk upp*) a door. Again, it suggests that the locks themselves were not an important part of the stories, or perhaps that the type of lock that would normally be used on various doors was common knowledge and therefore superfluous information.

Sometimes it appears more clearly that some doors were locked with a bolt or latch, as in *Gisli Súrsson's saga* where Gisli intended to kill his brother-in-law þorgrímur. He comes up with a plan to sneak into his house at night, but making sure it looks as if no one could ever have entered the house from the outside. He calls in a debt from a member of þorgrímur's household who will “unbolt three of the doors” (**létir lokur frá hurðum** þremur) (*Gisli Súrsson's saga* 1997: 15-19; *Gísli saga Súrssonar*,

Ch. 15, The Icelandic Saga Database). The plan also involves Gisli's wife closing the bolt on the door to his own house after he has left, and then opening it as he returns: "...**lát loku fyrir hurð** og vaki á meðan eg geng í brott og **lát frá loku** er eg kem aftur." (Gisli Sursson's saga 1997: 19; *Gísli saga Súrssonar*, Ch. 16, The Icelandic Saga Database).

Interestingly, the bolts or locks on the doors had a rather prominent role in this story since they were an intricate part of Gisli's plan; however, none of them seem to be operated with a key, and no key is ever mentioned.

There are also a few doors to stables in the sagas which were opened or closed/locked. In *Grettis saga*, there is a story where Grettir opens (*lýkur upp*) and later closes (*byrgir*) the door to a stable (The saga of Grettir the strong 1997: 66; *Grettis saga*, Ch. 14, The Icelandic Saga Database). Later in the same saga, Grettir's horse is said to be "locked up in a strong house" (Morris & Magnusson 1900: Grettir's saga, Ch 35), alternatively "firmly locked indoors" (The saga of Grettir the strong 1997: 105): "Var hestur Grettis **læstur** í húsi sterklega." (*Grettis saga*, Ch. 35, The Icelandic Saga Database).

Whilst the first example with the stable does not reveal anything about how it was opened or closed, the latter example seems to actually indicate that it was locked, either with a proper lock or a bolt on the door. Since horses must have been considered valuable, keeping them safe would have been important, and here a proper lock would give the best protection if one could be afforded. However, as in the previous instances, no keys were mentioned in connection with the stables.

In several sagas, lock-beds or bed-closets are mentioned: *lokrekkeja* or *lokhvíla* in Icelandic. These were private sleeping areas, partitioned off from the rest of the house, and used by the wealthier people. These lock-beds could be secured from the inside (Hreinsson et al. 1997: 406). This would probably have been done with a bolt on the inside of the door, and no keys are ever mentioned in relation to these.

To sum up, there are several cases in the Icelandic sagas where doors are mentioned as either closed/opened or locked/unlocked, but it is often difficult to determine which. Outbuildings in several of the sagas do seem to be locked with proper locks, however. When specified, they were used for storage, in one case the storage of clothes. The dwelling houses in the examples above were probably shut with a bolt on the

inside of the door. An upper room in a house is similarly mentioned as having its door closed or locked, but it seems more likely that it also had a bolt on the inside of the door. The same seems to be true for the bed-closets inside the house. A few stables are also mentioned, and in one case it seems likely that it did have a proper lock.

When it comes to who had control over the locks, i.e., access to the buildings, it seems both men and women are represented, including the householder, housewife, and the housekeeper.

Sagas where chests are mentioned

Chests occasionally appear in various circumstances in some of the Icelandic sagas. As is the situation with the doors, in most cases it is unclear whether the chests are being closed/opened or locked/unlocked: “open” (*lauk upp*) could refer to the opening of a lock on the chest, or more indirectly that a locked chest was opened.

Chests could for instance be used to hide secret lovers, as in *Grettis saga*. In this particular story, which takes place in Constantinople, the noble lady Spes is sitting in the upstairs rooms with her lover Þorstein with the door shut (presumably bolted). She has opened a large chest (**lokið upp** einni stórrí kistu), in which she stored her valuables in order to show him her possessions. When her husband comes to check on her, she hides Þorstein in the chest. She pushes a lock or bolt for the chest (Hún rak **lás** fyrir kistuna) and sits down on top of it, just as her husband’s men break down the door and enter (The saga of Grettir the strong 1997, 184; *Grettis saga*, Ch. 88, The Icelandic Saga Database).

Here it seems rather clear that the chest in the saga has a lock of the type that can be found in, for example, Birka grave Bj 639, with a mechanism that pushes a bolt sideways to lock the chest. Bolting a chest in some other fashion would not appear to make sense. Similar to the story in *Njáls saga* (Ch. 3) with the lovers Gunnhildur and Hrúti, the door to the upstairs room also here seems to have been shut or bolted to provide some privacy.

Whilst hiding lovers in chests makes for a good story, it probably does not reflect typical everyday uses of chests. Most other chests mentioned in the sagas were generally a place where valuable or private belongings

could be stored. Nevertheless, in real life a chest could certainly facilitate secrecy as a secure storage place for items one did not wish others to know about.

In *Eyrbyggja saga*, we are told about a ship from Dublin bringing some people to Snaefellnes on Iceland. Amongst them was the Hebridean woman Þórgunna. Whilst waiting for good winds to sail east, she was invited to stay at the farm Froda:

Þorgunna's belongings were then carried off the ship. She owned **a very heavy chest** as well as a **portable chest**, which were both taken over to Froda. /.../ She then **opened up her chest** and took out of it some beautifully worked bedclothes. She spread fine English sheets and a silken quilt over the bed. She also took from the **chest** bed-curtains and a canopy to go all around the bed.

Váru þá föng Þórgunnu borin af skipi. Þat var **örk mikil læst**, er hún alli, ok **sviptikista**. Var þat þá fært heim til Fróðár. /.../ Þá **lauk hon upp örkina** ok tók þar upp ór rekkjuklæði, ok váru þau öll mjök vönduð. Breiddi hon yfir rekkjuna enskar blæjur ok silkikult. Hún tók ok ór örkinni rekkjurefil ok allan ársalinn með.

(The saga of the people of Eyri 1997: 196; *Eyrbyggja saga*, Ch. 50, The Icelandic Saga Database)

In an older translation (Morris & Magnusson 1892) the larger chest, or ark, was described as locked, and it was later unlocked rather than just opened. This older translation is more correct in describing the chest as being locked since the Icelandic version *reads* “...**örk mikil læst...**”, however the chest was later opened “...**lauk hún upp örkina...**” (*Eyrbyggja saga*, Ch. 50, The Icelandic Saga Database).

Here we have an example of a woman travelling with (some of) her belongings in two chests, at least one of which appears to have been locked. From the story we know that it contained fine textiles.

In *Brennu-Njáls saga* there is a story where a man called Egil has taken in two Norwegian guests, Þórir and Þorgrím, who are visiting Iceland for the first time. Þórir, who has slept with Egil's daughter, feels obliged to join his now father-in-law Egil and some other men to ambush and kill a

man called Gunnar, knowing that he will most likely die on this mission. As he is getting ready to leave, he turns to his companion Þorgrím and says:

Take the **keys** to my **chests** since
I won't be **unlocking** them any
more. I want you to take as much
of our property as you wish.

Tak þú við **kistulyklum** mínum
því að eg mun þeim eigi **lúka**
oftar. Bið eg að þú eignist slíkt af
fé okkru sem þú vilt.

(Njal's saga 1997, 73; *Brennu-Njáls saga*, Ch. 61,
The Icelandic Saga Database)

This appears to be the only mention of keys in the Icelandic sagas; no other instance has been found in this study, although a thorough search of other transcripts of the texts might perhaps come up with some other examples. What is very interesting here is that the only keys mentioned in the Icelandic sagas belong to a man who hands them to another man. This stands in contrast to the traditional view mainly associating women with keys. This is also an additional example of property stored in chests taken along on journeys, in this case seemingly shared property.

In another chapter of *Brennu-Njáls saga*, a woman called Hallgerðr is also getting ready to leave. She has had her husband killed and now wants to ride home to her father. She goes to her chests and opens (*lauk upp*) them, and then calls together her household and provides them with gifts (Njal's saga 1997: 16; *Brennu-Njáls saga*, Ch. 12, The Icelandic Saga Database). The story does not mention if there was a lock on the chest, nor exactly what the chest contained. It does however indicate that she had private possessions stored in it that she could give away as she pleased.

Hallgerðr is also involved in a situation which is highly interesting in relation to keys and the role of the housewife. When arriving to her new husband Thorarin's farm she is asked if she would like to take charge of running of the household, essentially taking the role as a housewife, something which she declines (Njal's saga 1997: 9). No key is ever mentioned in this scenario, and the same is true when another woman, Unn, enters marriage with Hrut, but in this case "Hrut placed in her hands full authority over matters inside the house" (Njal's saga 1997: 20). Although handed full authority, no key was handed over. That

no keys are mentioned in these and other situations regarding marriage arrangements in the Icelandic sagas speaks against keys being the symbol of the housewife.

There are also chests in the sagas that contain weapons, for instance in *Gísla saga Súrssonar* (Ch. 16), where Gisli takes the sword Grásiðu from a chest. This is a very special sword which has a spell on it, assuring victory to anyone who fights with it. The saga does not however describe how the chest is opened, or if it has a lock (Gisli Súrsson's saga 1997: 2, 18). In *Laxdæla saga* (Ch. 46) Kjartan places his sword in a chest (The saga of the people of Laxardal 1997: 72), and in *Hávarðar saga Ísfirðings* (Ch. 9), Hávarður opens (*lauk upp*) a large chest full of weapons and puts on a helmet and coat of mail (The saga of Havard of Isafjord 1997: 328).

Objects related to murders were occasionally stored or hidden in chests, as in *Brennu-Njáls saga* (Ch. 112 and 116) where the bloody cloak of the slain man Höskuldi was placed in a chest by Hildigunnur. When later intending to show it to someone, she goes to the hall where her chest is standing and opens (*lauk upp*) it (Dasent 1900 [1861]: The Story of Burnt Njal; Njal's saga 1997: 133, 137; *Brennu-Njáls saga*, Ch. 116, The Icelandic Saga Database). In *Gísla saga Súrssonar*, Gisli takes a spear from the torso of a slain man called Véstein and puts it, still covered in blood, in a chest in order to hide it (Gisli Súrsson's saga 1997: 14; *Gísla saga Súrssonar* Ch. 13, The Icelandic Saga Database).

From the above, there are therefore examples of swords, a helmet, a coat of mail, a cloak, and a spear placed in a chest.

There are also chests containing clothes or textiles, as in the example with Þórgunna in *Eyrbyggja saga* (Ch. 50) above. Another instance can be found in *Laxdæla saga* where Höskuldi opens (*lauk upp*) a chest and takes out some fine women's clothing and gives them to a slave woman he just bought (The saga of the people of Laxardal 1997: 11; *Laxdæla saga*, Ch. 12, The Icelandic Saga Database). In *Egils saga Skallagrímssonar*, Egil's wife Ásgerður takes a silk cloak from Egil's chest, without him knowing, to give to their son Þorsteinn when he goes to the *þing*.¹⁸ Much later Egil opens the chest (*lauk upp*) and discovers the cloak ruined (Egil's saga 1997: 164; *Egils saga Skalla-Grímssonar*, Ch. 82, The Icelandic

18. Viking Age *þings* were assemblies of the free men, and they functioned as parliaments and courts. They were arenas for conflict resolution, marriage alliances, power display, honour and inheritance settlements, etc. (Sanmark 2009: 205)

Saga Database). Here, either the chest had no lock or was unlocked, or Ásgerður could get hold of or had access to the key to her husband's chest.

In *Laxdala saga*, Kjartan and Kálfur return to Iceland after a trip and are greeted by their respective sisters. Kálfur opens up (*hjúkur upp*) a chest they brought with them and their sisters are offered to choose from the contents. From the context it would appear that the chest contained valuable things, but the only object described is a beautiful head-dress (The saga of the people of Laxardal 1997, 68; *Laxdala saga*, Ch. 44, in The Icelandic Saga Database). Later in the saga this head-dress is placed in a chest that stood in an outbuilding used for storage of fine possessions (The saga of the people of Laxardal, Ch. 46, 1997: 72). This story is yet another example of a chest used to transport belongings on a journey.

In some sagas chests containing silver and occasionally gold are mentioned. In *Egils saga Skallagrímssonar* (Ch. 55), Egil receives two chests full of silver from King Athelstan. These chests appear again later in the saga (Ch. 58, 61), but are never opened or closed in the story and there is therefore no mention of any locks or keys. Eventually (Ch. 88), Egil ends up hiding the chests (Egil's saga 1997: 100, 108-109, 114-115, 176). In the same saga, Egil's father is also said to have a chest full of silver in his possession, (Ch. 61), which he hides in a marsh before he dies (Egil's saga 1997: 114-115). Interestingly, in the medieval Icelandic law compilation *Grágás*, there is actually a legal rule against burying treasure, where the penalty for doing so is lesser outlawry (Dennis, Foote & Perkins 2000: 95). That burying treasure was considered wrong can be hinted at in another story where a chest was hidden. In *Eiríks saga rauða* (Ch. 5), Eirík hides a small chest containing gold and silver in preparations before a journey. After riding only a short distance he falls off his horse and injures himself; concluding that he is being punished for hiding the chest and therefore sends word to his wife to recover it (Eirik the Red's saga 1997: 9).

Another chest containing silver is mentioned in *Grettis saga* (Ch. 18). It was found by Grettir when he breaks into Kárs's grave mound. The body of Kárs is sitting on a chair in the chamber of the mound with a small chest under his feet (The saga of Grettir the strong 1997:187). A parallel to this chest in the grave can actually be found in one of the Birka graves, as will be described in chapter 5.

To sum up, most of the chests in the Icelandic sagas contain things of value. It could be textiles, precious metal, or weapons. Sometimes things (and occasionally people) are locked in the chests to hide them. In some stories people own more than one chest, and, importantly, both men and women were in the possession of these chests. Seemingly in only one of these examples does a person open up a chest that does not belong to them, and in two of the examples the chest seems to contain property shared between two individuals travelling together.

Some chests are to be found in the hall, sometimes in an upstairs room, and sometimes in a storehouse. They can also be taken along on (boat) journeys. In a few cases they are even hidden or buried in the ground, and in one example a chest is found in a grave mound.

Occasionally it seems clear that a chest had a lock, but most of the time they are only described as being opened, or it is not commented on at all.

Keys, locks, and chests in the Poetic and Prose Edda

The Poetic Edda

The Poetic Edda is a body of stanzaic, alliterative poetry on heroic and mythological subjects, and concerns itself with the distant past (Donoghue 2004: 62). It is distinct from the Icelandic sagas, since they are written in prose and include stories of historical figures (Larrington 2014 [1996]: ix).

The Poetic Edda is preserved in the manuscript *Codex Regius*; most of its mythological and heroic poems survive only in this manuscript. An unknown writer in Iceland copied these poems down in the 1270s, and because of that this major source of information about Old Norse myth and legend is still available today (Larrington 2014 [1996]: x). It has been suggested that the *Codex Regius* should not be seen as a proper work, but rather as a compilation of poems. Some additional poems in eddic meter were later incorporated in the canon of the Poetic Edda, including e.g., *Rígsthula* (Males 2017: 47; Larrington 2014 [1996]: x). This poem is preserved in manuscripts of Snorri's Prose Edda (see next section), but for unknown reasons it is not to be found in the *Codex*

Regius (Donoghue 2004: 68). The poem could therefore be younger than most of the poems in *Codex Regius* (Steinsland 2012: 70). However, since Snorri, whose work predates the *Codex Regius* by half a century, bases his account of Norse mythology of creation on the poem *Völuspá* – which is the first poem in the *Codex Regius* – this could suggest that the poem might have existed previously (Donoghue 2004: 68). Nevertheless, the uncertain dating of this poem and subsequently its use as a source to a pre-Christian society is problematic. It has also been noted by Old Norse philologist Mikael Males (2017) that besides *Völuspá* there are three additional poems, *Hávamál*, *Vafþrúðnismál*, and *Grímnismál*, found in the beginning of both *Codex Regius* and Snorri's Prose Edda.¹⁹ Males argues that this overlapping suggests that it is likely that *Codex Regius* was created under the influence of the Prose Edda, possibly compiled as a supplement to it. This suggests that Snorri's influence on our understanding of Old Norse mythology may go well beyond what is obvious from his own known authorship (Males 2017: 60-61).

There is no editorial information in the *Codex Regius*, which means there is no contextual information, and therefore there is little to infer about the date, authorship, provenance, or milieu of the poems. Some copying errors suggest that this was not the first written version, but otherwise they stand with no historical or cultural context. Since the poems use a loose alliterative metre which easily accommodates changes in language over time, it is also not possible to date them on linguistic grounds. The general consensus amongst scholars is nevertheless that the various poems date from between 850 to around 1150 (O'Donoghue 2004: 67).

When it comes to using the Poetic Edda as a source of information about Viking Age or Late Iron Age society, its inclusion of heroic and mythological subjects makes it more problematic to use than the Icelandic sagas which deal with more realistic people and conditions. However, there are several scholars who include eddic poems when writing about the Viking or Late Iron Age (e.g., Jesch 1991; Kristoffersen 1997; Price 2002; Zachrisson 2004; Ljungkvist 2006; Lund 2006; Gardela 2008; Hedeager 2011). *Rígsthula* is an often referred to text when it comes

19. *Gylfaginning*, the first part of the Prose Edda is based mainly on the first three poems, and the last poem can be found as a frame around which the story is told (Males 2017: 60).

to discussions about keys. It is a poem that tells how the god Heimdall set out to create the structures of human society with three classes; the lowest labourers (thralls), the farmers, and the lords (Larrington 2014: 238). Specifically, it is the connection between keys and the Housewife, or the married woman, which is focused upon (e.g., Carlsson 1942; Roesdahl 1993; Andrén & Nilsson 1976; Kristoffersen 2000; Annestad 2004), with the following stanza:

23.

Then they drove home the woman
with the keys at her belt,
In a goatskin kirtle, married her to
Farmer,
Daughter-in-law she was called,
she sat down in her bridal veil;
The couple settled down,
exchanged rings,
Spread the bed-coverlets, made a
household together.

Heim óku þá
hanginluklu,
geitakyrtlu,
giftu Karli;
Snör heitir sú,
settisk und rifti;
bjuggu hjón,
bauga deildu,
breiddu blæjur
ok bú gerðu.

(Larrington 2014 [1996]: 241; Jónsson 1949)

Interestingly, in an earlier stanza in *Rígsthula* there is also a reference to a chest that is placed in the house of the farmers:

15.

His beard was trimmed,
his hair above his brows,
his shirt close-fitting,
a **chest** was on the floor.

Maðr teglði þar
meið til rifjar;
var skegg skapat,
skör var fyrir enni,
skyrtu þröngva,
skokkr var á golfi.

(Larrington 2014 [1996]: 240; Jónsson 1949)

This stanza is never mentioned in any analysis on keys or locks, and indeed the chest is not specified as having a lock. There is however generally a strong connection between the two as will be seen in the following

chapters. This example is interesting since it seems to suggest, first of all that the man, the owner of the house referred to as Grandfather (Larrington 2014 [1996]: 240), was in possession of a chest, but also that it seems to refer to him as having some wealth or property. The stanza appears to be describing how an ideal free man/farmer should be: handy, well-groomed, physically fit, and with what today might be referred to as financial stability.

Another commonly cited poem in this context from the Poetic Edda is *Thrymskvida*. It is a comedy where Thor and Freyja are compelled to act against their reputations. Freyja is asked to marry the giant Thrym in order for Thor to get back his hammer that was stolen by the giant. Freyja does not comply, and Thor therefore dresses up as her to trick Thrym:

15.

Then Heimdall said, the whitest
of the gods –
He knows the future as do the
Vanir too:
‘Let’s tie on Thor a bridal head-
dress,
Let him wear the great necklace of
the Brisings.

Þá kvað þat Heimdallr,
hvítastr ása,
vissi vel framm
sem vanir aðrir:
bindum Þór þá
brúðar líni,
hafi hann hit mikla
men Brísinga.

16.

‘Let keys jingle by his side
And women’s clothing
fall down over his knees,
On his breast display jewels,
And we’ll put a pointed head-dress
properly on his head!’

Lótum und hǫnum
hrynja lukla
ok kvenváðir
of kné falla,
en á brjósti
bręiða steina
ok hagliga
of hǫfuð typpum.

(Larrington 2014 [1996]: 95; Jónsson 1949).

Similar to the previous poem, the keys are believed to symbolise or identify the woman in the context of marriage, and the keys are also said to have an important role in the transformation of the young woman into a (house)wife (Carlsson 1942: 85; Kristoffersen 2000: 130-131; Annestad 2004: 77-78; see also Roesdahl 1993: 218). Steuer furthermore connected the keys in *Thrymskvida* with fertility (Steuer 1982: 205-206, 221-222). Arwill-Nordbladh also commented on this poem in her paper concerning the symbolism of keys (1990). She pointed out that here Freyja (Thor) comes as a bride already wearing keys, and suggests that the keys might instead represent Freyja herself, wearing the keys to her own farm, *Folkvang* (Arwill-Nordbladh 1990: 257).

Looking closely at the *Rígsthula* poem, it becomes clear that the woman also in this poem was wearing keys before she was married. This would suggest that the keys were not given at, or after, the wedding, but that the keys already belonged to the woman. Perhaps they are instead a symbol of the dowry that was given to the wife-to-be by her family.

The dowry can be regarded as a form of inheritance in advance, and financial security should she outlive her husband. Based on the Icelandic law compilation *Grágás* (see chapter 4), the dowry became the property of the betrothed woman along with the bride-price (*mundur*) paid by the groom (Magnúsdóttir 2001: 184). Even so, she was not given authority to freely decide over her property; it went straight from her legal guardian (usually her father) to her new husband on the day of the wedding (Magnúsdóttir 2001: 184; Korpiola 2009: 184). On this day, the husband took over the guardianship of his wife (Sawyer 1992: 45). If, however he should mismanage her property, she could transfer the care of her assets to another man, and in cases of divorce, the woman kept the dowry. If the divorce was caused by the husband, she also got to keep the *mundur* (Magnúsdóttir 2001: 184, 197). Consequently, the keys in this context can, rather than representing the responsibilities of the housewife, be viewed as representing the woman's property and inheritance -although it was not hers to manage throughout the marriage.

Another poem that mentions chests is *Fafnismál*, where the young hero Sigurðr kills the dragon Fáfnir, who was previously a man, but now guards a cursed hoard of gold. At the very end of the story, Sigurðr traces the dragon's tracks back to his lair:

Chapter Three

...There Sigurd found a huge amount of gold and filled **two chests** with it. Then he took the helmet of terror and a gold mail-shirt and the sword Hrotti and many other treasures, and loaded Grani with it, but the horse would not proceed until Sigurd climbed onto his back.

... Þar fann Sigurðr stórmikit gull ok fyllði þar **tvær kistur**. Þar tók hann ægishjálmm ok gullbrynju ok sverðit Hrotta ok marga dýrgripa ok klyfjaði þar með Grana, en hestrinn vildi eigi fram ganga, fyrr en Sigurðr steig á bak hánnum.

(Larrington 2014 [1996]: 161; Jónsson 1949)

In this stanza Sigurðr filled two chests with gold, but it is not clear if they had any locks or where the chests came from. He then loaded them on to his horse Grani, showing a way of transporting chests practiced in the medieval period and most likely also during the late Iron Age. A runestone from Ramsund near Eskilstuna in Södermanland, Sweden, depicts this story, and it shows Grani with a chest on his back (see figure 3:1). The carving is known as *Sigurdristningen* or *Ramsundsristningen*, (Raä Jäder 39:1, Sö 101) and has been dated to around 1010-1040, probably towards the later part of this interval (Lindqvist 1914: 14; Norberg 2017: 12). This shows that transporting chests on horseback was indeed practiced during the Viking Age, and the location of the runestone in the Lake Mälaren area places this practice near Birka, Helgö, and Sanda.



Figure 3.1. The Ramsund runestone, Eskilstuna, Södermanland (Raä Jäder 39:1, Sö 101), depicting the story of Sigurðr slaying Fáfnir. In the centre of the picture is the horse Grani with a treasure chest on his back. Photograph: Bengt A. Lundberg, 1998-08-12, The National Heritage Board, Stockholm. (CC BY 2.5).

A poem that does mention locks is *Grímnismál*, where Óðin, under the false name Grímnir (the masked one), tells of the world of the Gods and describes Valhalla, the great hall of Óðin where half of the men who die in battle go, and the ancient gate Valgrind that stands in front of it (Larrington 2014 [1996]: 47-56). From the passage below, it would appear that Valgrind was closed with some type of lock, although it is very uncertain what type of lock it refers to:

22.

Valgrind it's called. Standing on
the plain,
Sacred before the sacred door:
Ancient is that gate, but few men
know
How it is **closed up with a lock.**

Valgrind heitir,
er stendr velli á
heilög fyr helgum dyrum;
forn er sú grind,
en þat fáir vitu,
hvé hon **er í lás of lokin.**

(Larrington 2014 [1996]: 51; Jónsson 1949)

Vǫlundarkviða is a poem that connects locked chests and keys with the blacksmith. Vǫlundr, one of three sons of the Lappish king, and also referred to as the ‘prince of elves’,²⁰ gets captured by the Swedish king Níðuðr, who had heard of Vǫlundr’s excellent blacksmithing skills. Níðuðr cuts Vǫlundr’s hamstrings so he cannot escape and places him on the island *Saevarstad* where he is to work in the king’s smithy (*Vǫlundarkviða*, Larrington 2014 [1996]: 98-104).

Vǫlundr is however planning his revenge and the story tells:

20.

He sat, nor did he sleep, ceaselessly
he struck with his hammer,
subtle things he shaped quite
quickly for Nidud.
The two young men came to see
precious things,
the sons of Nidud, to Saevarstad.

Sat hann, né hann svaf, ávallt
ok hann sló hamri;
vél gerði hann heldr
hvatt Níðaði.
Drifu ungir tveir
á dýr séa
synir Níðaðar,
í Saevarstöð.

21.

They came to the **chest**, demanded
the **keys**;
the evil was patent when they
looked inside;
a multitude of treasures, which
seemed to the boys
to be red gold, and jewellery.

Kómu þeir til **kistu**,
kröfðu **lukla**,
opin var illúð
er þeir í sáu;
fjöld var þar menja,
er þeim mögum sýndisk
at væri gull rautt
ok görsimar.

20. With the referring to Vǫlundr as ‘prince of elvs’, the poet epitomises the demonic nature of the otherwise human smith (Dronke 1997: 256-257). The smith is often regarded as possessing supernatural powers in a wide range of cultures (Larrington 2014 [1996]: 98).

22.

‘Come alone, you two, come
another day!
I shall have that gold given you;
don’t tell the girls, nor the
household,
nor any man, that you’ll visit me!’

“Komið einir tveir,
komið annars dags;
ykkir læt ek þat gull
of gefit verða;
segið-a meyjum
né salþjóðum,
manni engum,
at it mik fyndið.”

23.

Early called one lad to the other,
brother to brother: ‘Let’s go to see
the rings!’
they came to the **chest**, demanded
the **keys**;
the evil was patent when they
looked inside.

Snemma kallaði
seggr annan,
bróðir á bróður:
“Göngum baug séal!”
Kómu til **kistu**,
kröfðu **lukla**,
opin var illúð,
er þeir í litu.

24.

He cut off the heads of those
young cubs,
and under the mud of the forge he
laid their limbs;
and their skulls which were under
the hair,
he chased with silver, gave to
Nidud.

Sneið af höfuð
húna þeira
ok und fen fjöturs
fætr of lagði;
en þær skálar,
er und skörum váru,
sveip hann útan silfri,
seldi Níðaði.

(Larrington 2014 [1996]: 101-102; Jónsson 1949)

As can be read from these stanzas, Vǫlundr had the king’s sons killed and their skulls, eyes, and teeth (as is told in the following stanza, 25), made into jewellery. It would seem like their fate was sealed when they opened Vǫlundr’s locked chest, presumably out of greed or curiosity. Clearly the blacksmith’s chest had a key that Vǫlundr kept and stored

inside were treasure in the form of gold and jewellery, as well as the things crafted by Vǫlundr, and perhaps also some raw materials.

The story of Vǫlundr is also known in England as can be shown in the poem *Deor*, which alludes to the sufferings of ‘Weland’ (Vǫlundr) and the misery of ‘Beadohild’ (Bǫðvildr²¹) (Dronke 1997: 259). This poem only references Weland’s time of imprisonment and has left out the outer circumstances of the story, however, it seems clear that the poet knew the story well (Dronke 1997: 259, 264).

The poem was written down in the *Exeter Book* around AD 1000 (Davidson 1958: 146), and there are other indications of the story of Vǫlundr or Weland having older roots. High quality swords mentioned in Old English/Anglo-Saxon poetry, which can likely be dated before 900, are sometimes referred to as ‘Weland’s work’ (Larrington 2014: 98; Dronke 1997: 270-271). In the Anglo-Saxon poem *Beowulf*²² (lines 450-455), where the hero makes an oral will disposing of his property as he vows to fight Grendel, his armour is referred to as ‘the work of Weland’ (*Welandes geweorc*). Being the work of Weland would be considered the highest praise throughout the pan-Germanic literary corpus (Schubert 2010: 162). Further indications can be seen on a chest with carved whale bone panels, the so-called Franks casket, dated to the 8th century. One of the carvings is believed to depict Weland’s revenge (Davidson 1958: 146).

To sum up, in the Poetic Edda there are a few mentions of keys, locks, and chests. In two of the poems, *Rígsthula* and *Thrymskvida*, keys are described as attached to or hanging from the belt of a woman who is to be married, although in the case of *Thrymskvida* it was Thor dressed up as Freyja. In both cases the keys are already in the possession of the woman and are therefore not given at the wedding, but probably symbolise the dowry that the wife-to-be brought with her into the marriage. The only other poem mentioning keys is *Vǫlundarkviða*, here in the form of a chest-key in the possession of the blacksmith Vǫlundr. His locked chest seems to contain many treasures, probably crafted by Vǫlundr himself, and is central in the killing of two boys in a plot to seek

21. Bǫðvildr was Níðuðr’s daughter and her misery comes from Vǫlundr making her pregnant as part of his revenge (*Vǫlundarkviða*, Larrington 2014 [1996]: 98-104).

22. The dating of *Beowulf* is under debate, but scholars in a rather recent edited volume suggest that it was written sometime in the 7th - 8th century (Neidorf (ed.) 2014).

revenge. Treasure-chests can also be found in *Fafnismál*, where Sigurðr filled two chests with gold from Fáfnir's treasure and loaded them onto the back of his horse, also hinting at a mode of transportation for chests. The third poem that mentions chests is *Rígsthula*, where it was placed in the house and seems to refer to the wealth or property of the ideal free man/farmer. There is also mention of the gate to Valhalla – *Valgrind* – being locked, but it is not clear what type of lock is being referred to. No houses or doors in the Poetic Edda are mentioned as being locked, as far as this study has found. The social identities or roles that can be connected with keys, locks, or chests include the betrothed woman, the blacksmith, the male hero, and the ideal free man/farmer.

The Prose Edda

The Prose Edda can probably be dated to around 1221-1225, and according to the oldest manuscript where it is found – The *Codex Upsalensis* – it was compiled by Snorri Sturluson (1179-1241) who was a member of a powerful Icelandic family heavily involved in both Icelandic and Norwegian politics (Clunies Ross 2005: 157). Snorri was also a mythographer, literary critic, and saga author. His three-part version of the Edda has remained a primary source for Icelandic mythology and poetic tradition (Donoghue 2004: 66). The value of Snorri's work for historians of religion is reduced by the fact that he was a Christian living in a time when the myths had long since ceased to be believed, and his own religious beliefs and education clearly influenced his attitude towards his material (Faulkes 2005: xi).

The first part of the Prose Edda, *Gylfaginning*, tells of the creation and end of the world, and includes many stories of the adventures of the Norse gods. These stories are based on traditional poems (Faulkes 1995: xi), and many of the poems from the *Codex Regius* are quoted in Snorri Sturluson's work (O'Donoghue 2004: 66). The second part is called *Skaldskaparmál* (the language of poetry), and includes stories about human heroes and is mainly based on early poems. It contains the most complete and systematic account of Norse mythology and legend found in the medieval period (Faulkes 1995: xi). The last part of the Prose Edda, *Háttatal*, is a poem written by Snorri that contains praise

of the Norwegian king Hákon Hákonarson (reign 1217-1263) and his co-regent Earl Skúli (reign 1188/9-1240), written in traditional skaldic verse (Faulkes 2007: vii).

Much of Snorri's skaldic verse can, with reasonable certainty, be attached to an actual historical context. Many of the stanzas are preserved in narratives attributing individual strophes to named poets, and the name of the patron to whom a poem is dedicated is sometimes also preserved (O'Donoghue 2004: 63). However, the stanzas in the Edda are full of word puzzles in the form of so-called *kennings* – a distinctive feature of skaldic poetry (O'Donoghue 2004: 65). Since the word order in the skaldic stanzas is usually disrupted, and because many of the kennings rely on mythological references, the meaning of the stanzas is often disputed (O'Donoghue 2004: 66). This can of course lead to problems when interpreting the contexts of the poems.

In the Prose Edda, only the first two parts, *Gylfaginning* and *Skaldskaparmál*, contain any mention of locks or chests, and there is no mention of any keys.

In *Gylfaginning*, there are two stanzas that mention chests. The first is found in verse 20, “How one should pray to the Áss and of Bragi and Heimdallr”:

Bragi's wife is called Iðunn. She keeps in her **casket** the apples that the gods have to feed on when they age. And then they all become young, and so it will go on until the twilight of the gods.' Then says Gangleri: 'It seems to me that the gods are staking a great deal on Iðunn's care and trustworthiness.

Kona Braga heitir Iðunn. Hon varðveitir í **eski** sínu epli þau er guðin skulu á bíta, þá er þau eldast. Ok verða þá allir ungir, ok svá mun verða til Ragnarökkrs. Þá segir Gangleri: Allmikit þikki mér guðin eiga undir gæzlu Iðunnar eða trúnaði.”

(The Uppsala Edda: DG 11 4to: 44-45)

The second reference can be found in verse 23, “Of the Ásynjur”:

Fylla; she is a virgin and her hair flows free and there is a gold band round her head, and she carries Frigg’s **casket** and looks after her footwear and shares hidden counsels with her.

Fylla; hon er mæR ok ferr laust hár hennar ok gullband um höfuð ok berr **eski** Friggjar ok gætir skóklæða hennar ok veit leynd ráð með henni.

(The Uppsala Edda: DG 11 4to: 52-53)

The examples above both show a woman in charge of a small chest (*eski*), the contents of which did not belong to them, placing a great responsibility on the holder, as shown in the first example above. The first one contained the apples that keep the gods young and the second seems to refer to Frigg’s valuables. Neither of these chests are referred to as locked.

In *Skaldskaparmál*, verse 36, “On the giant Geirröðr and Þórr”, where Loki gets captured as he flies around in the shape of a falcon, there is a reference to a chest that seems to have a lock:

Then **he locked Loki in his chest** and starved him for three months. But when he took him out of the **chest** and demanded that he speak and asked who he was, he told him.

Þá læsti hann Loka í kistu sinni ok sveltí hann þrjá mánuðr. En þá er hann tók hann ór **kistunni** ok beiddi hann orða ok spurði hverr hann væri, hann sagði.

(The Uppsala Edda: DG 11 4to: 94-95)

In this story, the chest is used to imprison Loki. There is no mention of a key being used, but it seems to be a proper lock on the chest.

To sum up, the three instances in the Prose Edda described above all include chests; the first two are referred to as *eski* and are most likely smaller chests, the third one is probably larger and referred to as *kistu*. The first two, in the hands of two women, were used to safely store valuable things

owned by others, involving a relationship based on trust. The third chest was owned by a giant who used it for incarceration; not really applicable to any real-life situation, but nevertheless an indication of their existence at the time the poem was written down, possibly going further back.

Keys, locks, and chests in The Legendary sagas

Fornaldarsögur Norðurlanda, sometimes referred to as ‘Sagas of Icelandic prehistory’ or ‘Legendary sagas’ in English (McTurk 2010: v), is a group of about thirty sagas that are very different from the Icelandic sagas. They are believed to have been written sometime during the second half of the 13th century up to around 1400 (Sawyer 1992: 20). They take place at an unspecific period in Scandinavian history, before the colonisation of Iceland, in locations all over Scandinavia and throughout legendary Europe, including Greece, Novgorod, Russia, and Antioch (O’Donoghue 2004: 100; Finch 1965: viii). In the sagas there is a nostalgic looking back to glories of a distant and mostly imaginary past (Finch 1965: viii). The hero undertakes a number of exciting, but improbable adventures which involve raiding, conquering and killing, and the supernatural plays an important part in the form of monsters and giants (O’Donoghue 2004: 100). The Legendary sagas are believed to have been composed after the Icelandic sagas and, as such, have been regarded “as an inexplicable falling off of literary taste and skill” (O’Donoghue 2004: 102). They are included here, certainly not as sources for any historical events or accounts of everyday life, but as sources to identify some of the kinds of ideas or fantasies medieval Icelanders might have associated keys, locks, and chests with, and perhaps some general contexts of use that at least the medieval Icelanders believed fitted into their pre-historic past. The following is not a complete account since there is a rather large number of references to locks and chests, and some to keys. Many of these references lack available translations from Old Icelandic, but the hope is to provide as many different contexts as possible.

A common theme is chests in connection with treasure such as gold and silver. One example of this can be found in *Ragnars saga loðbrókar ok sona hans*, chapter 2, where the Jarl Herruðr of Gautlandi gives his daughter

Þóra a small snake as a gift. She places the snake in a small chest (*eski*) where it rests on top of some gold. As the pile of gold in the chest grew larger, so did the snake, and eventually it no longer fit inside the chest and instead curled up around it. The snake and the pile of gold keeps growing and after some time it no longer fits in Þóra's bower (*skemmu*). The snake has now become so dangerous that the Jarl wants it killed. He proclaims that whoever slays the snake will get to marry Þóra, and the gold will become her dowry (*heimanfylgja*) (Jónsson & Vilhjálmsson 1944; Kröningssvärd 1834: (Ch. 1) 5-6). There are no keys or locks mentioned in this story, but with a snake guarding the gold, it would have been secure either way. The context connects the chest with a high-status woman who seems to have had her own building on the farm, as well as some wealth. There is also a connection here to marriage; the treasure is to be transformed into her dowry.

Another example of a treasure-chest can be found in chapter 18 of *Örvar-Odds saga* where Odd helps a giant, who in return gives him a kettle full of silver and two chests full of gold (Jónsson & Vilhjálmsson 1944; Liljegren 1819: (Ch. 33) 105-141). A very similar story to that in *Fafnismál*, where Sigurd slays Fafnir and takes his gold, can be found in chapter 18-19 of the *Völsunga saga*. Here Sigurd again puts the gold into two chests and loads them on to his horse (Jónsson & Vilhjálmsson 1944; Finch 1965: 34). In *Hrólfs saga kraka ok kappá hans*, chapter 8: *Helga Þáttr*, King Helgi uses two chests filled with silver and gold as bait to lure Queen Ólöf to the forest in a plot to take revenge on her (Jónsson & Vilhjálmsson 1944; Winkel Horn 1876: 238-239). In these examples the chests are used as containers for reward, loot, and bait.

Other valuable items besides gold and silver can also be found stored in chests. In *Göngu-Hrólfs saga*, chapter 4, a large chest belonging to Queen Ásu in Norway is also said to be the storage place for some very special robes that have protective powers making them impenetrable. She opens the chest (**lauk upp kistu**) and gives two of them to her son Hrólfr (Jónsson & Vilhjálmsson 1944; Liljegren 1818: (Ch. 5) 22).

In *Bósa saga ok Herrauds*, chapter 4, there is a story relating chests with treasure, but also with theft. Here a storehouse is broken into and two chests of gold along with other treasure including weapons and clothes are stolen (Jónsson & Vilhjálmsson 1944; Pálsson & Edwards 1985: 202). There is no mention of either the chests or the storehouse being locked, however, this is indicated for the storehouse by the act of breaking in.

Another story involving a break-in can be found in chapters 1-2 of *Sörla þátrr eða Hedins saga ok Högna*, which is the story of how Loke stole Freyja's necklace. To do this, Loke has to break into her bower (*skemmu*), which is described as both beautiful and strong, and said to be impossible for anyone to enter against Freyja's will when the doors are locked (ef hurðin var aptr ok **læst**, at engi maðr mætti koma í skemmuna án vilja Freyju). By turning himself into a fly and flying around to all the locks (Hann flökti þá um alla **lása**) and along all the wall cracks, he finally finds a tiny hole and gets inside where he finds everyone asleep. He takes the necklace, unlocks the bower (**lýkr** þá upp skemmuni), and goes to Óðinn with his loot (Jónsson & Vilhjálmsson 1944; Kröningssværd 1834: 67-70). There is no mention of Loke using a key to unlock the bower, so it is possible that the lock, or locks (since the story seems to suggest more than one lock or more than one door), were bolts on the inside of the door.

Since Freyja is sometimes described as wearing keys from her belt, as in *Thrymskvida*, it is not unthinkable that her bower needed a key to be opened. There is another saga where a key is used to lock a bower; in *Göngu-Hrólfs saga*, chapter 24, Stefnir takes Ingigerðar by the hand and leads her to his sister's bower, then locks and hides the key himself: "Stefnir tók í hönd Ingigerðar ok leiddi hana til skemmu systur sinnar, **læsti** síðan ok geymdi sjálfr **lykkilinn**". (Jónsson & Vilhjálmsson 1944; Liljegren 1818: 109). Another example, but without a key being mentioned, is *Hálfðanar saga Brönuþóstra*, chapter 17, where a woman locks herself in her bower (hún **læsir** sik í skemmu sinni) in order to avoid a marriage proposal (Jónsson & Vilhjálmsson 1944; Hardman 2011).

A somewhat similar scenario can be found in *Hálfs saga ok Hálfsreka*, chapter 8, where a woman locks an intruder in her wardrobe (Hún **læsti** hann í váðkeri sínu) (Jónsson & Vilhjálmsson 1944; Kröningssværd 1834: 16). The Legendary sagas also provide examples where doors to halls, farmhouses, cabins, and also gates are opened/unlocked or closed/locked,²³ where at least in some cases the context suggests a proper lock.

Keys are not mentioned in as many stories as locks and chests. Nonetheless, one example of a story where the key is rather significant is *Göngu-Hrólfs saga*, chapter 23-25. Here the jarl has lost his belt and goes

23. See e.g., *Hrólfs saga kraka ok kappá hans*, chapter 15 and 18 (Jónsson & Vilhjálmsson 1944; Winkel Horn 1876); *Þorsteins saga Víkingssonar*, chapter 16 (Jónsson & Vilhjálmsson 1944; Anderson & Bjarneson 1877); *Ans saga bogsvægis*, chapter 5 (Jónsson & Vilhjálmsson 1944; Kröningssværd 1834).

looking for it. He conducts a house-search²⁴ on the farm outside his castle, belonging to a man called Björn, inside of which there is an old chest. Björn is asked what is kept inside, whereupon he answers “ship’s nails”. The jarl demands that the chest is opened, but Björn cannot find the key for it (Jarl bað **upp lúka**. Björn leitaði at **lyklinum** ok fann ekki), so instead it is broken open. Inside lies the belt and Björn is arrested as a thief. It later turns out that a sinister dwarf had planted the belt there and hidden the key so that it would appear as if Björn really had stolen it (Jónsson & Vilhjálmsson 1944; Liljegren 1818: (Ch. 29-31) 101-103, 112-113). In this saga the key is significant to the story, and it is mentioned, unlike in the other cases where it would appear to be indirectly presumed to be used to lock/unlock.

To sum up, chests in the Legendary sagas were frequently used to store gold or silver, and they were often related to treasure in the form of rewards or loot, but chests also got stolen and were used in plans of revenge and deceit. They belonged to both men and women, but seemingly more frequently to men. It would appear that it was generally not important to mention if they were locked or not. Only in one of the examples above is a chest-key mentioned, and here it plays a rather important part in the story. Nevertheless, it seems to be one of comparatively few keys referred to in these sagas, and the examples above only mention keys in the hands of men, although also indirectly some women who were able to lock doors in the texts must have had access and control of keys as well. Another key mentioned belongs to the lock on a woman’s bower (*skemmu*), and there are further examples of bowers being locked. These buildings occur in high-status milieus and seem to constitute a private sleeping quarter and/or retreat for young unmarried women (and their maids) still living at home with their family; Freyja also had one. Interestingly, if keys are seen as representing access to a bower, then based on these examples it would be the unmarried women who held keys. This would then be in contrast with the traditional view linking keys to married women.

Other structures that could be locked include a hall, a farmhouse, a cabin, and also the gate to a courtyard, which seems to have had a lock of some sort. A wardrobe (*váðkeri*) is also locked in one of the

24. Several of the medieval provincial laws include rules regarding such house-searches for stolen goods, as will be described in the next chapter.

sagas, and seemingly also a storehouse. It is not unlikely that either of these structures would have had a proper lock, although it is more likely that the hall and farmhouse were locked with a bolt on the inside. It probably reflects the locking practices in a high-status milieu in medieval Scandinavia. The contexts in which they are locked or unlocked are more fictional however, as seen above.

Concluding remarks on the keys, locks, and chests in Old Norse literature

In the sagas and poems described in this chapter, there are various contexts in which keys, locks, or chests are included. In the Icelandic sagas, there is one case where a storage room is to be unlocked during a house-search in the pursuit of a man, and there are a number of cases where people are locked inside outbuildings/storage houses in contexts involving raiding and violence, temporarily housing a refugee, and safeguarding the honour of a young woman (probably referring to her virginity). No keys are ever mentioned in these situations. Neither the Poetic Edda nor the Prose Edda mentions any locked buildings. In the Legendary sagas, however, there are several references to buildings, particularly women's bowers, being locked. The contexts involve break-ins to steal property, and the protection of young women from suitors. There is also a wardrobe being used to lock up an intruder. In only one of these cases is a key mentioned.

Buildings are therefore mostly mentioned as locked in connection with the confinement of people, something that probably does not reflect everyday life in the medieval period or the Viking/Iron Age. There are however several cases where doors to houses in the sagas are either opened/unlocked and closed/locked, though it is not possible to say which, in situations mostly concerning visitors. A few stables are also described as locked or closed.

Chests are also mentioned in various contexts. In the Icelandic sagas they are used as containers for property taken on journeys, and in one of these cases keys are mentioned as something handed to a man by his companion before a battle he knew he would not survive. One chest is also mentioned in a context where the owner is about to leave and

hands out items stored in the chest as gifts. Chests are also used to store weapons and armour, and these are mentioned in situations where a character is getting ready to fight. Some chests also contained items relating to murders where they are used to hide evidence of these acts. One chest is used to hide a secret lover. Otherwise, chests are used to store valuables, including fine textiles and clothes, and some treasure-chests are also hidden or buried in the sagas.

Chests are also mentioned in the Poetic Edda. One such chest and its key belong to a blacksmith and are central in his revenge in a story that possibly also warns against greed. In another poem two treasure-chests are taken as loot and are transported on horseback. There is also a chest placed in the house of a free man/farmer, probably representing his assets and as such his financial stability.

In the Prose Edda there are two instances where a small chest containing things of value is in the hands of a guardian whom the owners seem to have placed their trust in. Another chest mentioned is owned by a giant who uses it for incarceration.

In the Legendary sagas chests are used to store silver and gold, and are often related to treasure in the form of rewards or loot. The chests also get stolen and are used in plans of revenge and deceit. In one of these stories, a key is central in wrongfully placing blame for a theft on an innocent man.

Otherwise, few keys are mentioned in the sagas and poems. Besides the instances mentioned above, there are two examples in the Poetic Edda where keys are referred to in a context before a woman is about to be married, probably symbolising the dowry that the wife-to-be brought with her into the marriage. The keys in these poems are however said to symbolise the status and role of the housewife (Kristoffersen 2000: 130-132; Annestad 2004: 78), an idea that this study, based on the above, does not agree with. Furthermore, in the Icelandic sagas, no women or indeed housewives are ever portrayed with a key as a status marker or symbol, and no keys are given or even mentioned in association with a marriage or when the running of the household is discussed. The same is true for the Legendary sagas.

Historian Jenny Jochens, in her study on women in Old Norse society, also mentioned the traditional view of the housewife with keys in her belt, but concluded that few passages in the Old Norse literature can confirm such an impression (Jochens 1995: 132).

Chapter Three

When it comes to who had access and control over the locks, it seems both men and women are represented. In the Icelandic sagas these include the householder, housewife, and the housekeeper, as well as various high-status men and women – some of whom were travelling. In the Poetic Edda the social identities or roles that can be connected with keys, locks, or chests include the betrothed woman, the blacksmith, the male hero, and the ideal free man/farmer. The individuals in the Prose Edda which can be associated with chests include two trusted women, and a male giant. In the Legendary sagas it is both men and women of high status who have access to locked things and spaces, but more frequently men. It seems to be primarily unmarried women who are associated with access to a locked space in the form of a bower.

Keys, locks, and chests in medieval law

This chapter focuses on the earliest surviving laws in Scandinavia, the medieval provincial laws (Sw. *Landskapslagar*), and in which contexts they mention keys, locks, and chests. Some even older continental laws will also be looked at since the Scandinavian laws are considered to have been heavily influenced by these, as will be discussed below. The aim was to gain some information about the use of keys, locks, and chests during the medieval period, and perhaps to some extent also earlier times if one accepts the idea that some laws could have older roots.

One of the purposes of studying these laws was to investigate the traditionally referred to association between the housewife, locks and keys. Here a wedding formula from the Swedish Uppland Law (Sw. *Upplandslagen*) of 1296 is often quoted in support of this connection:

Han a kono manni giptä til heþär ok til **husfru** ok til siäng halfä, **til lasä ok til nyklä** ok til laghä þriþiunx, ok til alz þäs han a j lösörum ok han afflä fa, utän gull ok hemä hjon, ok til allän þän rät, är uplänzk lagh äru ok hin hælghi Erikär kunungär gaff, j namn fapurs ok sons ok þäs hælghä andä. (Holmbäck & Wessén 1979: 81).

Translated into English it roughly reads: “He should give the woman to the man in marriage to honour and as **housewife** and to half the bed, **to locks and keys** and to a legal third, and to all that he owns and may acquire in chattel, except for gold and household servants, and to all the

right that is the Uppland law and given by the holy King Erik, in the name of the Father and Son and the Holy Ghost.”

“He” refers to the legal guardian of the woman, usually her father. This rule, which ends in a blessing, is very clearly situated within a Christian medieval context, so its applicability to Late Iron Age or Viking Age conditions is debatable and would certainly benefit from being backed up with more evidence if interpreted as based on older traditions.

In order to get a fuller, more inclusive, view of the contexts in which keys, locks, and also chests were mentioned in medieval laws, the Swedish provincial laws, the Norwegian *Gulapingslög* and *Frostupingslög*, the Danish provincial laws, and the Icelandic law compilation *Grágás* were investigated. Since these sources were only available in paper form and this was a rather quick review, it is possible that some occurrences were missed, so this should not be seen as a complete reference to all mentions of keys, locks, and chests in the laws.

The same has been done with the Frankish law *Lex Salica*, and also several Anglo-Saxon laws.²⁵ Similar to the Scandinavian laws, the Frankish *Lex Salica* was studied through a rather quick reading of the law text in paper form. The Anglo-Saxon laws, which are available in digital form online, have through ‘word-search’ been thoroughly searched for mentions of keys, locks, and chests.

The Frankish laws were based on or strongly influenced by Roman laws, while the secular parts of the Anglo-Saxon laws are considered to be closer to a more “pure” Germanic custom (Fischer Drew 1993: 25, 52; Hoff 1997: 37, 392). It is therefore interesting to see if they differ in regard to the contexts mentioning keys, locks and chests.

25. The laws that have been searched for any mention of keys, locks, or chests are: The Laws of King Æthelberht, The Laws of Kings Hlothhere and Eadric, The Laws of King Wihtred, The Laws of King Ine, The Laws of King Alfred, The Treaty of Alfred and Guthrum, The Laws of Edward and Guthrum, The Laws of King Edward, and The laws of King Æthelstan I-VI, translated by F. L. Attenborough (1922) and available in a digital version through *The Internet Archive* (<https://archive.org>). The same search has also been done in the digital version of Benjamin Thorp’s translations in *Ancient Laws and Institutes of England; Comprising Laws Enacted under the Anglo-Saxon Kings from Aethelbirht to Cnut* from 1840, which also includes The Laws of King Edmund and The Laws of King Edgar, The Laws of King Ethelred, The Laws of King Cnut, Rectitudines Singularum Personarum, Leges Regis Edwardi Confessoris, The Laws of King William the Conqueror, and Leges Regis Henrici Primi.

Although Roman law does refer to keys, for instance in the 451-450 BCE law codes the Twelve Tables or *Duodecim Tabularum*, Table IV:3, where keys are mentioned in connection with divorce²⁶ (Chester Johnson et al. 1961), these have not been included since it appears as though it was the post-Roman laws that served as an influence to the Scandinavian ones. It seems to be Roman law adapted and altered by the Franks, Anglo-Saxons, etc. that reached Scandinavia.

Below, an attempt is made to present the laws in as much of a chronological order as is possible, but since the dating of most of the laws is very uncertain and there seems to be much inspiration from or copying between them, it is hard to tell which laws came first. Therefore, the examples are primarily based on geographic location.

Concerning the medieval law sources

The earliest written laws in Scandinavia, the provincial laws, date to the high and late medieval period (11th - 14th century). They appear to come from the same tradition as the Continental Germanic laws, for instance the laws of the Franks, the Lombards, the Bavarians, and the Anglo-Saxons (Brink 2008: 24). These were written down earlier than the Scandinavian laws, and whilst most of the Continental laws were written in Latin, the Anglo-Saxon and Scandinavian laws were written down in the vernacular (Brink 2008: 24).

In Europe during the 11th century, there was a vast growth in the knowledge and use of law. New learning centres were established, primarily in Bologna and Paris, with Paris becoming the main centre from which knowledge of the Church's legal traditions reached Scandinavia. It is well known that Scandinavian students were sent abroad to study law already in the late 11th century (Sigurðsson, Pedersen & Berge 2008: 40). In the early 12th century, the principles of Roman jurisprudence (compiled during the 6th century) were rediscovered, and this generated a legal renaissance in Western Europe (Sigurðsson, Pedersen & Berge

26. Table IV. Paternal Power: To repudiate his wife her husband shall order her ... to have her own property for herself, shall take the keys, shall expel her. (Chester Johnson et al. 1961)

2008: 40). The period 1150-1250 is often referred to as the “juridical century” and was characterised by the establishment of a legal profession in universities in Italy and France; it was a time when laws were written down all over Europe (Tamm & Vogt 2016: 10). This is accordingly also around the time when the Scandinavian provincial laws began to be written down.

It has been much discussed if it is possible that the Scandinavian provincial laws might to some extent reflect earlier verbally communicated legal customs, or if they only reflect medieval legal customs generally based on Roman and Canon law (Brink 2008: 24). Older research on old Scandinavian law viewed it as codified oral law that mirrored a pre-historic legal society, but after the 1950s this was met with criticism for being too careless and uncritical (Brink 2008: 25). The general consensus moved towards the stance that the legal systems in the Nordic countries were indeed influenced by Roman-canon law and had many things in common with the contemporary legal systems on the continent, but that they were also a mixture of old customs and new legislation (Ekholst 2007: 193). It has also been queried whether the extensive legal work done in the medieval period was the result of important changes in society and a subsequent need to devise and keep a record of new rules (Tamm & Vogt 2016: 11). In modern legal history there is now a tendency to see the medieval laws as regulating society by laying down new and much more detailed rules, and not necessarily seeing them as transmitting old laws (Tamm & Vogt 2016: 11).

That some laws were older and previously orally communicated is sometimes suggested through the narrative style of the text, with characteristics such as alliteration, rhythmic constructions, and proverb expressions interpreted as mnemonic aids (Sawyer 1992: 16). Alliteration is not very common in the law texts however, and some occur in parts that are clearly newer regulations. Therefore, alliteration could partly be an expression of archaic prose used to give the laws the impression of old age (Sawyer 1992: 17). Further, when some of the law writers make their own references to older customs this should not be taken at face value since they are mostly found in the royal law codes, and were probably used to legitimise new rules. This does not mean that some rules could not be of old age, but that there are no clear criteria for determining which they are (Sawyer 1992: 17).

Philologist Stefan Brink believes that some older roots can be found in the medieval laws. He points out that rules concerning more secular matters, such as regulating interactions between neighbours, the rural system, and maintenance of arable fields, may contain traces of old, domestic customs (Brink 2008: 25). He believes that the Viking society was a legal society, but that it is very difficult to find traces of it or reconstruct it (Brink 2008: 28).

One possible trace of an older legal rule can be found on the so-called *Forsa rune ring*, an iron door ring with runic inscriptions in a similar style to those on the *Rök* runestone dating to c. 800 CE. Accordingly, some believe the *Forsa* rune ring is likely to be from around the 9th century (Brink 2008: 28-29). Its age is under discussion, however (see e.g., Löfving 2010; Brink 2010; Källström 2010). One interpretation of the inscription is that it regulates the maintenance of a *Ví*, a cult and assembly site. If so, it is not likely to be a Christian legal rule (Brink 2008: 28-29, see also Eriksen 2015).

Brink also suggests that there are possible traces of prehistoric legal customs in some of the Icelandic sagas, where descriptions of *þing* assemblies and lawmen were sometimes included, as he found some parallels between details in these sagas and medieval laws (Brink 2008: 25-26). These are however all medieval sources, and whether these accounts can be traced back to the Viking Age remains unclear. Possible *þing* or court sites from the Iron and Viking Age have nevertheless been found through archaeological excavations (see e.g., Grimm & Stylegar 2004; Brink 2004; Pantos & Semple; Sannmark & Semple 2008; Sannmark 2009; Storli 2010). There are also *þing* sites indicated on rune stones and in place names (Brink 2008: 27). Even so, and if these *þing* sites were indeed sites for law assemblies specifically, this does not mean that the medieval provincial law codes as we know them today contain older roots of Viking legal traditions. With so little evidence to go on, the idea of Viking Age roots will unfortunately have to remain very uncertain.

Furthermore, when using law codes as a source to learn more about the society in which they were applied, it is also important to consider what sort of information they actually provide. Normative sources can give a blunt or even distorted picture of dispute settlement and criminality, and several historians have shown that there is a difference between judicial norm and practice (Ekholst 2007: 194). The law codes could be seen as an image of the society as the lawmakers wanted or

imagined it, rather than as an image of society as it was. This, however, makes them very good sources of mentalities and ideologies at the time when they were written down. Since mentalities change very slowly, there is nevertheless the possibility that some of the mentalities found in the laws could have earlier roots (Ekholst 2007: 194). As ideological texts, they can also be said to primarily be characterised by the views of the elite, but not exclusively as they were probably the result of negotiations between different groups with different interests (Ekholst 2014: 10).

Another factor to consider is that while the laws can give some insight into medieval society, normal every day activities would probably not be dealt with as these would not require legislation. It is more likely to find rules regarding problems and issues that diverted from the day-to-day events (Hoff 1997: 44). Things could also be omitted from the written laws because they were too well known to need recording (Fischer Drew 1993: 51).

Keys, locks, and chests in Frankish and Anglo-Saxon law

Frankish and German law sources, or the so-called tribal laws (or *Leges barbarorum*), from the Frankish area were first written down in connection with the fall of the Roman Empire and the creation of independent kingdoms, but seem to build on an older verbally communicated tradition. They were all influenced by the earlier Roman laws in the area, and the earliest date from around the beginning of the 6th century (Hoff 1997: 37, 392).

The Frankish *Lex Salica* (507-511 CE) was the current law in the part of the Merovingian kingdom that covered the northern part of modern France, Belgium, and the western part of northern Germany (Hoff 1997: 38). It is believed to have originally been issued by Clovis, but later “capitularies” and a brief prologue were added later in the 6th century by his sons and later his grandson. This cumulative version is usually referred to as *Pactus Legis Salicae* (Fischer Drew 1993: 52), and it is this version that is used in the present study.

The legal rules in *Lex Salica* that mention keys or locks (no mentions of chests have been found) can all be found in the general context of theft and break-ins. Considering the securing function and purpose of locking, this context is not at all surprising. As a first example, Chapter XI deals with thefts or housebreaking committed by freemen. It states that if a freeman stole from a locked enclosure and got caught, the fine was 35 solidi, and if he cut or duplicated a key and entered a house and stole something, the fine was 45 solidi. If nothing was stolen the fine for just breaking into the house was 30 solidi (Fischer Drew 1993: 76-77).

This suggests that some houses (type not specified) and also some enclosures would have been fitted with locks in this area during the 6th century. It also means that burglars existed who could break in despite the locks.

It tells us that counterfeit keys or duplicates could be made, which indeed is very interesting regarding thieves and how they might have operated. Unfortunately, the laws do not provide any information or clues as to what kinds of locks or keys were being used, or subsequently, how secure they were. Even so, making a copy of a key suggests some preparation and planning.

Besides houses and enclosures there are other things mentioned in connection with keys and locks in *Lex Salica*. Chapter XXVII deals with various kinds of theft and sections 29 and 30 specifically mention break-ins and theft in a locked/unlocked weaving hut/work room, a so called *streonas*.²⁷ The fines if one was caught were 15 solidi if the *streonas* was un-locked, and 45 solidi if it was locked, alternatively 15 solidi if there was only a break-in and nothing was stolen (Hoff 1997: 56; Fischer Drew 1993: 91). Similar rules applied to the theft of boats (chapter XXI) where the fines for getting caught stealing an un-locked boat was 15 solidi, 35 solidi if it was locked, and 45 solidi if it was locked and carefully suspended (Fischer Drew 1993: 84-85). Again, a pig stolen from a locked pigsty led to higher fines than if the pig was in a less secure enclosure (chapter II) (Fischer Drew 1993: 65-66). Stealing a hawk kept under key gave higher fines than one stolen from its perch (chapter VII) (Fischer Drew 1993: 71), and stealing a beehive kept locked under a roof

27. In Charlemagne's revised version of the law (probably in 798 CE), *Lex Salica Karolina*, chapter LVII [XXIX] the work room is referred to as having a key (33) or not having a key (35) (Fischer Drew 1993: 53, 217).

gave higher fines than stealing one that was not²⁸ (chapter VIII) (Fischer Drew 1993: 872-873). It would appear that there is a clear correlation between the amount of security or control that is placed on property and the size of the fines awarded for breaching this control.

These Frankish legal rules give some insight into what types of property or things were considered more valuable, or worthy of and needing more protection, at least from the law-makers point of view. If summed up, these specifically named things were boats, pigs, hawks, and beehives, and when it comes to buildings/structures these could be (unspecified) houses, weaving huts/work rooms, enclosures, and pigsties.

The work room is also mentioned in *Lex Salica* in a section involving abductions by freemen of free women. Chapter XIII, section 5 deals with penalties to be paid if a girl was taken from a locked room or work room. The penalty would be a fine of 62.5 solidi, but the fine would only be 30 solidi if it was not locked (Fischer Drew 1993: 77-78). This section follows the pattern of the previous examples, but here it involves the taking of a woman/girl rather than property,²⁹ and might also have something to do with a person's right to be safe in one's home. That this law protecting women/girls from abduction at all existed is also a rather dark insight into the Frankish society during this period.

Another instance in *Lex Salica* where keys and locks are mentioned is in Book III, under *the decree of King Chlotar*, chapter LXXXV. Here it is stated that if stolen goods were found in another man's house that was under lock and key, the owner of the house shall make composition with his life (Fischer Drew 1993: 139). This legal rule does not specifically say who held the key to the lock; what was important was who owned the house. This person could of course be one and the same, but as the owner it would appear that this entailed ultimate responsibility, and at least from the law text this person would appear to be a male. The legal rule also shows that the punishment for harbouring or hiding stolen goods was very severe.

28. Very similar rules can be found in the Frankish law *Lex Ribuarica* (early 7th century), chapter 46, where anyone who steals pigs, sheep, or bees must compensate threefold if they were kept locked up compared to not being locked up (Rivers 1986: 188). This is furthermore the only chapter in *Lex Ribuarica* where locks are mentioned, and there are no references to keys or chests (Rivers 1986).

29. In a society that practices slavery, people could of course also be considered as property, but here it is specified that this law relates to free women.

The Anglo-Saxon law sources are somewhat younger than the oldest Frankish laws, but still several centuries older than the Scandinavian laws; the oldest of these laws being Æthelberth's Law from 587-616 CE (Hoff 1997: 31). The various Germanic peoples known as the Anglo-Saxons settled in Britain between the middle of the 5th and 6th centuries. They encountered an area that had been under Roman rule at the fringes of the Empire since the mid-1st century, but had been cut off from Roman contact for some time. Many of the Romanised Romano-Britons had also retreated before the Anglo-Saxons arrived. Therefore, Roman influences were weaker here than in other Germanic kingdoms, and there was no need to retain Roman law courts or Roman law (Fischer Drew 1993: 25). This meant that Roman legal ideas, except for those associated with the Church, seem to have had little influence on Anglo-Saxon law. As such, the Anglo-Saxon laws are closer to a "pure" Germanic custom than any of the other early Germanic legislation. The laws were also written in the native Germanic tongue rather than in Latin (Fischer Drew 1993: 25-26).

The Anglo-Saxon laws were all sanctioned by a king and were specifically tied to him and his reign; all of them were influenced by the presence of Christianity, even the older ones (Hoff 1997: 31). Since Britain comprised a number of smaller kingdoms during this time and up to c. 1000 CE, the various laws were only applicable to certain regions; in this way similar to the Scandinavian provincial laws (Hoff 1997: 31).

There are very few instances in the Anglo-Saxon laws where keys, locks, or chests are mentioned; in fact, this study only found mentions of these items in one³⁰ law; namely the Laws of King Cnut,³¹ also referred to as Cnut's Winchester code or *I and II Cnut*. They were most likely written by Wulfstan, Archbishop of York (Whitelock 1948). The date of Cnut's laws is not certain, but they had probably received at least their general shape before Wulfstan died in May 1023 (Whitelock 1948: 450). They are

30. Historian Annette Hoff (1997: 55) used a section in *The Laws of King Alfred* (892-893 CE), Chapter 42, §7, as an example of a lockable door, however the door in question is in fact only described as closed (*betynedum durum*) (see Attenborough 1922: 84-85; Thorpe 1840; Hall 1916: 41). Here there is a somewhat similar ambiguity as with the closed/locked doors in the Icelandic sagas, mentioned in the previous chapter.

31. *King Cnut's Law code of 1018*, (Kennedy 1982) from Cnut's early reign does not contain any such mentions, however.

the last surviving law codes issued in the name of an Anglo-Saxon king, and draw extensively on earlier legislation (Stafford 1981: 173).

There are however three sections whose contents have no precedents in earlier legislation and therefore do not appear to draw on earlier Anglo-Saxon laws; one of these sections includes chapters 69-83 (Stafford 1981: 176), which is where the mention of keys, locks, and chests can be found. Chapters 69-83 have a distinct theme that sets them apart from the rest of the laws, namely ‘mitigation’ and protection from abuses of royal power, but they also share what seems to be a general theme in *I* and *II Cnut*, which is a concern for the Danelaw (Stafford 1981: 176, 178). After invading England with his Danish fleet and being elected king of England in 1016, Cnut appears to have kept a large number of Scandinavian officials at his court. These were probably either part of his retinue or fellow invaders who did not return after Cnut disbanded his fleet in 1018 (Bolton 2009: 15). Perhaps King Cnut and his administration brought with them some legal ideas inspired by more Romanised continental law, and perhaps to some extent Scandinavian customs. At the same time, it is very possible that the reign of King Cnut brought influences from England to the organisation of Danish society (Hill 1994: 104), after he became king of Denmark in 1019 (Rumble 1994: 4).

The section in question is chapter 76 in *II Cnut*³² (the secular part of the code). It is a section dealing with stolen property, and has a rule stating that the wife should not be held responsible for stolen goods found in the house, unless they were held under her lock (under *ðæs wifes cæglocan* gebroht wære) (Hoff 1997: 55). In the following section (76,1a) it is specified that it applies to what is under her *bedd-ernes cæge* (cellar/pantry-key), *cyste cæge* (chest-key), or her *tægan* (Hoff 1997: 55). According to *A Concise Anglo-Saxon dictionary* (Hall 1916: 291) *tægan* means “cord, band, thong, fetter: case, chest: enclosure”. Thorp, in an early translation of the law, suggests that it might refer to a cupboard (1840: 419). Perhaps it more generally can be said to refer to anything under her safeguard.

This section, which concerns stolen goods kept in the house, is similar to *Lex Salica*’s chapter LXXXV, described above. Here, however, an exemption to the house owner’s responsibility over such hidden

32. In Thorp’s translation (1840) this section is instead numbered 77.

property is specified; if it was stored in such a manner that only the wife could have access to it, she would be considered the thief. This section suggests that the wife had keys to certain rooms, chests, etc., which the husband/house owner did not have access to.

To sum up, from the Frankish examples above it was possible to establish that in the area and period in which these laws were in use, certain structures, boats, and animals were sometimes secured with a lock. They are all mentioned in contexts involving theft and break-ins, where securing them with a lock led to harsher punishments for the trespasser/thief. No such legal rules mentioning locks could be found in the Anglo-Saxon laws.

In the Frankish law there was also a correlation between house ownership and accountability over any stolen goods stored under lock and key within, which does not seem to necessarily imply that the person holding the key was liable. Here the Anglo-Saxon example differs in that it specifies that a wife could be accountable for stolen goods found secured with a lock to which she held the key. It is important to note in this last example that it describes an exception to her husband's/the house owner's otherwise total responsibility for the household. Still, it shows that there were items or spaces to which only the wife had access. It was also the only (indirect) reference to a chest in these laws.

The Scandinavian provincial laws and their dating

Only three of the Scandinavian provincial laws were ratified by a king: namely the Danish Law of Jutland (in 1241), the Swedish Uppland Law (in 1296), and the Swedish Södermanna Law (in 1327). For the remaining provincial laws, as well as the Icelandic medieval law collection *Grágás*, the dating is much less certain (Sawyer 1992: 11-12).

The Norwegian Provincial laws correspond to the provincial law-assemblies of *Gulapíng*, *Frostupíng*, *Borgapíng* and *Eiðsivapíng*. They are believed to have been compiled during the first part of the 12th century, but it is assumed that they existed in oral form before being written down (Sigurðsson, Pedersen & Berge 2008: 42). These laws contain a combination of legal customs and precedents reflecting the practices

of the provincial assemblies from the mid-10th century onwards, as well as elements from Roman and canon law (Sigurðsson, Pedersen & Berge 2008: 42). The Gulathing Law (*Gulapingslög*), covering the western part of Norway, is preserved in an edition from the mid-12th century. It is in part attributed to King Óláfr Haraldsson who reigned from 1015 to 1028, and the remainder is attributed to King Magnús Erlingsson who was responsible for the 1163 compilation of the law (Sigurðsson, Pedersen & Berge 2008: 42). The Frostathing Law (*Frostupingslög*), covering the province Trøndelag in the middle of Norway, exists in an early 13th century edition. The provincial laws from the eastern parts of Norway, the Borgathing Law (*Borgapingslög*) and the Eidsivating Law (*Eiðsivapingslög*), only survive in short fragments from the early 12th century (Sigurðsson, Pedersen & Berge 2008: 42) and do not include any secular laws (Schulman 1995: 10). The last two laws have not been included in this study.

Concerning the earliest Icelandic laws, according to the *Islendingabók*,³³ it was a Norwegian called Úlfrjótr who brought laws from Norway to Iceland around the 920s. These laws are supposed to have been modelled on the laws of the *Gulathing*, but modified and augmented (Dennis, Foote & Perkins 2012 [1980]: 1). According to the *Islendingabók*, the existing law practices began to be codified in the winter of 1117-1118, but only two pages of these 12th century records remain today. The Icelandic free-state laws were first codified in a now lost manuscript called *Grágás* (Grey goose) (Sigurðsson, Pedersen & Berge 2008: 43). It survives in two versions; the *Konungsbók* (c. 1250) and *Staðarhólsbók* (c. 1270), and there are several differences between them. Neither should be seen as official law collections, but rather as private collections of Law Council enactments or a collection of rights and legal provisions not necessarily dependent on Law Council decisions (Sigurðsson, Pedersen & Berge 2008: 43). The existence of contradictory articles in them also shows that not all of the laws could have been in force at the same time (Dennis, Foote & Perkins 2012 [1980]: 9-10).

The Danish provincial laws include the Law of Scania (*Skånske Lov*, c. 1202-1216), which is believed to be the oldest and seems to have served

33. A book on the early history of Iceland, written by Ari Þorgilsson around 1125 (Sigurðsson, Pedersen & Berge 2008: 43).

as inspiration to the later laws, Valdemar's Law of Zealand (*Valdemars Sjællandske Lov*, possibly 1220s or 1241), the Law of Jutland (*Jyske Lov*, 1241), and Erik's Law of Zealand (*Kong Eriks Sjællandske Lov*, very uncertain, probably 1248 or later) (Tamm & Vogt 2016: 10-11, 47, 113, 154, 238). The laws were all restricted to their own geographical area and had their own distinct features, but also had many similarities and expressed similar legal order (Tamm & Vogt 2016: 10-11). The Law of Scania covered the eastern parts of the medieval Danish kingdom; the area that is today the Swedish provinces of Scania (Skåne), Halland, and Blekinge in the very south of the country, as well as the Danish island of Bornholm in the south Baltic Sea off the southeast coast of Scania (Holmbäck & Wessén 1979.4: xxxi). Valdemar's Law of Zealand and Erik's Law of Zealand covered the island Zealand (Sjælland) in the centre of medieval Denmark, and the Law of Jutland covered Jutland (Jylland) to the west (Hoff 1997: 14).

None of the Danish law texts exist in any original form, and the surviving manuscript dates to the 1280s or later. There are a few surviving late 13th century manuscripts of the Law of Jutland with a prologue stating that the law was given in 1241, but it should perhaps be dated sometime after that, since even the oldest manuscripts could have been changed and modified since it was first drafted (Tamm & Vogt 2016: 11-12).

The Swedish provincial laws are geographically the laws closest to the case studies of this thesis. They are often divided into the Göta Laws and the Svea Laws. The Göta Laws³⁴ were used in Götaland – the southern and western part of Sweden, and consist of the Older Västgöta Law, the Younger Västgöta Law, the Östgöta Law, and the Småland Law (of which only the Church section survives) (Ekholst 2014: 5). The Svea Laws³⁵ were used in Svealand – the northern and eastern parts of Sweden, and consist of the Uppland Law, the Västmannalagen, the Hälsingelagen, the Dala Law, and the Södermannalagen (Ekholst 2014: 5).

To these should be added the Guta Law (*Gutalagen*) which was in use on Gotland. The island belonged to Sweden, but the ties between them

34. In Swedish: Götalagarna, which include Äldre Västgötalagen, Yngre Västgötalagen, Östgötalagen, and Smålandslagen.

35. In Swedish: Svealagarna, which include Upplandslagen, Västmannalagen, Hälsingelagen, Dalalagen, and Södermannalagen.

were weak at times. There was also the municipal law called *Bjärköarätten*, which is believed to have been originally issued for Stockholm, but only survives in a manuscript version valid in the town of Lödöse, near the west coast of Sweden (Ekholst 2014: 5). This law does not contain any mentions of keys, locks, or chests and will therefore not be further studied.

The age of the provincial laws has been heavily debated. They only exist in manuscripts that are considered to be younger than the actual legislation, and in some cases, there is a considerable gap between manuscripts and assumed law-making (Ekholst 2014: 7). The Older Västgöta Law was probably written down some time during the first half of the 13th century, and is considered to be the oldest and most archaic. It is believed to date from a time when the royal influence was weaker and less effective (Lindkvist 1997: 213; 2014: 91). The Younger Västgöta Law, which is a more extensive version of the first and which shows a relatively great royal influence, survives in a version from the end of the 13th century (Lindkvist 1997: 213; 2014: 92). The other provincial laws can, with more or less certainty, be dated to the end of the 13th century or the first decades of the 14th century. The dating of the Uppland Law and the Södermanna Law, which as stated before were given royal confirmation in 1296 and 1327 respectively, is more precise (Lindkvist 1997: 213).

The Uppland Law became somewhat of a model for the other laws of Svealand, and they are consequently very similar. The Svea Laws and the Östgöta Laws also have a lot in common (Lindkvist 1997: 213-214). The Västgöta Laws differ from the other Swedish provincial laws however, and the inheritance laws, for example, are more similar to the Norwegian and Icelandic laws. Otherwise, the law codes that differ the most are those in the Guta Law, reflecting the Swedish state's weak influence on its legal tradition (Lindkvist 1997: 213; 2014: 95). These variances that can be seen between the Swedish laws could depend on different social, political, and economic factors in the different provinces, and are not necessarily due to chronological differences (Lindkvist 1997: 214).

Keys, locks, and chests in the Scandinavian provincial laws

With the dating of the Scandinavian provincial laws being very uncertain in most cases, the following section is primarily organised by geographical location/country, following the order in the previous section.

Norway

In the Norwegian Gulathing Law and Frostathing Law, there are only a total of three sections where keys, locks, or chests were mentioned.

In the Gulathing Law, the only section relevant to this study was “The merchant law”, section 61: “If a man liberates a thrall”. Here it is stated that:

If a man takes a thrall to church or seats him on his chest and gives him his freedom, and if he gives it free from all debts or dues, he [the freedman] need not give his freedom ale any more than a man who is born to freedom. (Larson 1935: 81)

In this section, the chest seems to have a rather symbolic function in the liberation procedure of a thrall, who was to be seated on the owner’s chest. This symbolism could relate to the chest’s association with property, in its capacity as a secure storage container. The liberated thrall can therefore be seen as seated on top of the other confined possessions in the chest, having risen in status. The chest might also symbolise the focal point of the owner’s power and authority. It is nevertheless interesting that there are two different ways of setting the thrall free presented in this legal rule, where the first alternative -bringing the thrall to church, is countered by the alternative to set the thrall free at what can be assumed to be the home of the owner. Perhaps there is a glimpse of an older, pre-Christian custom here in the latter case, which involves the householder’s chest.

In the Frostathing Law, in chapter XV “The law as to theft - continued”, section 8: “The second sixfold oath”, it is stated that if a man’s goods

have been taken away, he should demand a search of the house where it seems most likely that they were kept. The farmer/householder should then call his neighbours to be present at the search, with no one allowed to enter before having been searched themselves. If they made a search, they should ask the householder:

“Does anyone carry keys except you and your wife?” If he then replies, “My thrall and my bond-woman,” and if the windows in the storehouse are so [placed] that materials can be shoved in from the outside, the fivefold oath shall be required. But if one cannot throw anything in from the outside, the thrall is the thief, if the [stolen] goods are for a man’s use; but if they are for women, the bondwoman is the thief. But if neither the thrall nor the bondwoman have access [to the storehouse] and one cannot throw anything in from the outside, the sixfold oath shall be required. And even though the stolen goods be found in a chest or in a locked coffer, the demands [of the law] go no further. (Larson 1935: 400-401)

This legal rule is similar to the previously mentioned laws on stolen goods in *Lex Salica* chapter LXXXV and *II Cnut*, chapter 76, but there is no exception made specifically for what is under the wife’s lock as in *II Cnut*. It even states that it has no impact on the demands of the law if the goods are kept in a chest or locked coffer. The search in this case was directed towards the storehouse, and it seems that it was primarily the householder and his wife who held the key to its lock, but that it could also be thralls/servants.

In the Frostathing Law there is also a section in chapter VII “The law of the coast defence”, where it is described how a ship should be made ready to be used for coastal defence, and chests are mentioned as storing provisions to be taken on-board (Section 8: “Concerning a muster thing”, Larson 1935: 316-317).

This provides a clue as to how chests could be used, and a clear association with travelling and seafaring.

Iceland

In the early Icelandic law-collection *Grágás*, there are two laws mentioning keys and locks, but there are no references to chests. In the Betrothal section, K §144, there is reference to locked, or possibly closed doors where it is said that:

/.../ If the man who gave a woman in betrothal has second thoughts ... he is forbidden to harbour her or to lock her up (Dennis, Foote & Perkins 2000: 57)

The alliterative formula used is more accurately “shut door-leaf and door-hinge on her” (Dennis, Foote & Perkins 2000: 57). It is hard to determine if this refers to a key-operated lock, but if one were to lock up another person, practical circumstances suggest a proper lock with a key.

The other example can be found in the Searches section, K §230. It deals with stolen property kept in a house, and is again similar to the previously described laws on the subject. There are several instructions as to how the search should be conducted in order to be lawful, but these will not be included here. The part that is of interest for this study is where it is said that:

/.../ everyone who is inside the house should come out, except the one who is to carry a light for them and unlock locks... He is to carry a light for them and unlock locks. ... If they will not let them have keys to unlock locks, then their locks have no immunity in case of damage. /.../ (Dennis, Foote & Perkins 2000: 181)

To carry a light might simply refer to showing, and although it is never specified, it would appear that the locks in this section would be inside the house since the designated “guide” was to remain inside. Since the other people were asked to first vacate the house it seems likely to be a dwelling house. This section also indirectly shows that breaking/damaging someone else’s lock in other situations could lead to penalties. What is particularly interesting with this example, however, is that it is so similar to the search described in the *Eyrbyggja saga* (Ch. 20), discussed in

the previous chapter, where the housekeeper was to carry a light for the men conducting a search and to unlock the storehouse. There was also a house-search in the previously mentioned *Göngu-Hrólfs saga*, chapter 23-25, where not producing the key to the locked chest leads to the chest's owner being named a thief. This strongly suggests that the authors of the Icelandic sagas and the Legendary sagas knew this law on house-searches, but it nevertheless provides no evidence that this practice pre-dates the medieval period since both the saga and law texts are medieval.

Denmark

In the Danish provincial laws, there are several mentions of keys, locks, and chests. One particular context in which they frequently occur is the house-search for stolen goods, familiar from the previous examples above; in fact, all of the Danish provincial laws have some version of this theme.

Beginning with what is assumed to be the oldest of the Danish provincial laws; the first example is from the Law of Scania, (Ch. 141), where it is stated that in connection with the house-search:

“/.../ If something is found behind the second or third lock in the possession of the mistress of the house, she shall also be taken with all of her capital lot. /.../ “(Tamm & Vogt 2016: 79)

This means that the wife would then be taken as the thief, and she would lose her share in the household property. The “second lock” mentioned here may refer to a private room, and the “third lock” to a locked shrine or chest (Tamm & Vogt 2016: 79). This section has a lot in common with *II Cnut*, chapter 76, and likewise provides an exception to the farmer's/householder's accountability in cases of theft.

A very similar legal rule can be found in Valdemar's Law of Zealand, chapter 87,³⁶ where the wife was only to be considered a thief if the stolen goods were “found under her inner lock, that is, either the inner

36. This is the only chapter where keys, locks, or chest are mentioned in Valdemar's Law of Zealand.

room or her chest” (Tamm & Vogt 2016: 150). In Erik’s Zealand Law, Book III, chapter 52, another very similar rule can be found, exempting the wife from punishment unless stolen goods were found “beneath her inner lock” (Tamm & Vogt 2016: 224-225). The municipal law of Scania, *Bjärkerätten*, also contained a comparable legal rule, although no keys or locks were mentioned here (Holmbäck & Wessén 1979.4: 19).

The house-search theme was also present and explained at length in the Law of Jutland in the “Second book” of the law, chapters 96-99. It was described that if stolen goods were found “under the householder’s or the wife’s lock”, the children or wives would not lose their capital lot, unless what was stolen was found “beyond their locks or keys, or the children are so hardened that they can conceal and hide.” (Tamm & Vogt 2016: 275). If stolen goods were found in the householder’s barn, dwelling house, or in other houses where there were *no locks*, the householder must give oath that he was not the thief, but that the stolen goods were brought to him out of ill will (Tamm & Vogt 2016: 275). This seems to suggest that neither the barn nor dwelling house had locks. Additionally, if any stolen goods were found in the house, it was the householder alone who was responsible since he was the guardian of the house. The exception was if something stolen was found behind the lock of his tenant or the tenant’s wife’s lock, such as in their chest or their shed (Tamm & Vogt 2016: 275). There was also another exception: during a search the householder’s son could be charged as a thief if stolen goods were found in a chest he held the key to, or in his chamber for which he had a special lock (Tamm & Vogt 2016: 275).

In the Law of Jutland it was therefore both the householder and his wife who are described as being in control of locks, along with tenants and tenant’s wives, and the householder’s son.

In Erik’s Zealand Law, Book III, Ch. 19 (Tamm & Vogt 2016: 208), searching for stolen goods was also described. If during a house-search only the servants were at home, then only that which was under the servant’s guard may be searched. Locked rooms or chests belonging to the householder, the housewife, the bailiff, or the housekeeper were not allowed to be searched. The housewife, if present, was similarly not allowed to let them search rooms or chests that only the householder had the key to, and if the bailiff and housekeeper were at home, and the householder or housewife had separate keys for locked buildings or

chests, they should only give access to what was under their safeguard (Tamm & Vogt 2016: 208).

This section gives some very valuable insight into how different people within a medieval household had different access to – and subsequent responsibility for – things and spaces. The household in question here is of course not an ordinary one, but must be a larger, wealthier farm that could maintain several servants. Interestingly, and just as in the Law of Jutland, it was not just the housewife who was described as having access to these locked buildings, rooms, or chests. It is not however possible to determine from this passage whether the locked away contents refer to various household member's private property or goods intended for the whole household. It is nevertheless feasible that at least some of the things under the bailiff's and housekeeper's safeguard were meant for the whole household, but administered by the two top servants.

In Erik's Zealand Law, there is also a section (Book III, Ch. 44) stating that if someone placed a chest or something else under his own lock in someone else's house and it was stolen, the householder was not responsible. This was unless the householder, or someone he answers for, was accused of stealing it (Tamm & Vogt 2016: 221). Here it would again appear that sole access (holding the key to the lock) was important when it came to accountability. It also quite clearly suggests that the chest in this case had a lock.

Another context in the Danish provincial laws that includes keys and locks, concerns the status of concubines. In the Law of Jutland, Book I, chapter 27, it is written that:

“If someone has a concubine with him in his house and openly [seeks] her bed, and she disposes over lock and key, and he eats and drinks with her openly for three winters, she shall be his lawful wife and rightful mistress.” (Tamm & Vogt 2016: 250).

The same law can be found in an amendment to the Law of Scania (VIII, 2) (Holmbäck & Wessén 1979.4: 153), only worded slightly differently.³⁷

37. In the Norwegian 14th century *Ældre Borgarthings Christenret*, II:10, (the Church section) there is also a similar legal rule, but in this case the woman needs to prove that she has carried the keys for thirty years. However, here the context seems to be one of

This legal rule is very interesting as it seems to connect the marital status of women with disposing over locks and keys. Since the Church wished for all relationships to be sanctified by the church (marriage), the context of this legal rule is however clearly Christian medieval as it seems to work towards eliminating the concubinage (see e.g., Magnúsdóttir 2001).

Another rule that suggests a similar link between a married woman and keys can be found in Erik's Law of Zealand, Book I, chapter 31. Here it was defined that a housewife was regarded as ill if she was not able to "get about with her keys and attend to her servants" (Tamm & Vogt 2016: 163). What is important to note here however, is that this legal rule concerns the situation where a woman was to enter a monastery, but if she was ill then she may not enter with more than half of her capital lot. The same goes for a householder who wanted to enter a monastery, and in his case, he was considered ill if he was unable to ride to the assembly or to other meetings (Tamm & Vogt 2016: 163). The motivation behind this legal rule seems to be the kin group's concern that family property would wrongfully end up in the hands of the Church if the man or woman entering the monastery was unfit to make clearheaded decisions. This legal rule is firmly set within a Christian medieval context, and here we clearly see the expected roles and spheres of action of the woman and the man of the house respectively. If this was followed in real life, or to what degree, is of course not possible to tell. Nevertheless, the context of this legal rule makes any of its content very dubious to try to trace back to the Viking or Iron Age.

Following the theme of illness, in Erik's Law of Zealand there is a legal rule (Book III, Ch. 36) (Tamm & Vogt 2016: 217-218) describing how to deal with a man who becomes insane, and how to lawfully lock him up as a safety measure. This section provides an example of how locks could be used to retain people, and hints at a perhaps not so gentle treatment of people with mental illness.

In a few of the Danish provincial laws, chests are specifically mentioned. In the Law of Jutland, Book III, chapter 62, chests are mentioned in connection with "wrecks", referring to things washed ashore. The law describes how that which has been in another man's possession, including chests, is considered as wreck, and if no one comes after to

confirming the marital status when all the witnesses to the actual marriage act are dead (Carlsson 1942: 91-92).

claim it, it belongs to the king (Tamm & Vogt 2016: 291). This rule indirectly connects chests with shipment on boats, similar to the legal rule in the Frostathing Law regarding the stocking-up of a ship. It also provides some insight into the contexts in which they would have been used, at least during the medieval period.

Another legal rule that is of interest here, but that does not actually mention keys, locks, or chests can be found in the Law of Jutland, Book I, chapter 26. It concerns the situation of a man dying with heavy debts. After thirty days the heirs gained control over the estate and could then decide if they wished to accept the estate with all its assets and obligations (Tamm & Vogt 2016: 249-250). If they did not accept the inheritance, one way of showing this could be to throw the keys to the farm into the grave of the deceased (Tamm & Jørgensen 1978: 99). Historian Lizzy Carlsson mentioned a very similar custom where a widow could free herself of her dead husband's debts if she threw her keys on to the husband's grave on the day of the funeral, or hung them on his bier. According to Carlsson this was a widespread custom in Europe in the medieval period and during the 16th and 17th centuries (Carlsson 1942: 93-95). Even though these customs are medieval and even 16th-17th century, they nevertheless provide a very interesting alternative interpretation to keys in graves that is certainly worth investigating further. Perhaps something similar could also be applied to keys in some Viking/Iron Age graves. Keys in graves in relation to inheritance are discussed further in chapter 9.

Sweden

There are ten Swedish provincial laws,³⁸ and providing detailed descriptions of all of the legal rules concerning keys, locks, and chests was not possible within the scope of this thesis. Instead, focus was placed on the different contexts in which these were mentioned. As such, many details have been excluded in favour of the parts that were considered

38. This study is based on the translations of the provincial laws into modern Swedish by Åke Holmbäck and Elias Wessén (1940; 1979), and for the Guta Law an English translation by Christine Peel (2015) has been used. Except for the Guta Law, any quotes in the present section have been translated into English by the present author.

important in relation to the questions of this thesis.³⁹ Comments will also be focused on the more relevant legal rules. The most common context was once again that of the house-search for stolen goods, and except for the Småland Law (of which only the church section remains), all of the Swedish provincial laws contain some version of this.

In the Older Västgöta Law, in the Section concerning Theft / *Tjuvabalken*, 5, it is written that during a house-search for stolen goods, if the householder was at home he may not refute the search and must give access to his storehouses and outbuildings. If any stolen good were found therein “under lock or latch, or hidden under straw”, then the householder was the thief. If, however, the stolen goods were found in “a closed or locked crate, in box or chest, which the housewife has the keys to, then the housewife is the thief” (Holmbäck & Wessén 1979.5: 159-160). This legal rule seems to follow the pattern of the corresponding legal rules in the other Scandinavian provincial laws described above, and the same legal rule can be found in the Younger Västgöta Law, with only some minor differences (Holmbäck & Wessén 1979.5: 310).

The equivalent legal rule in the Östgöta Law differs more, and the part where it describes the house-search does not actually mention keys, locks, or chests. The section in question (Cases of Accident and Cases of Wounds, Adultery, Rapine and Theft / *Vådamålsbalken*, XXXII) also contains rules on other thefts, mainly concerning animals. It describes that if someone stole from a locked house and was caught in the act, then the stolen goods should be tied to his back and he should be taken to the *ping*. If the stolen goods were found not in the thief’s hands but in a locked house, then he needed the oath of twelve men to prove he was not a thief. It is also said that in cases where someone stole a horse in fetters “he must answer for locks outdoors as well as indoors” (Holmbäck & Wessén 1979.1: 88-89). If someone was accused of stealing meat, and the stolen goods were found in his house where he rules over the locks, then he cannot defend himself with an oath. If, however the goods were found in un-locked houses he can defend himself with an oath of twelve men (Holmbäck & Wessén 1979.1: 89). It is further stated that if something was found under “such a lock, that a thrall or unfree

39. In the Swedish provincial laws, there are also several references to keys and locks in connection with the church and the priest. As these legal rules clearly cannot be applied to Iron/Viking Age conditions they have not been included.

servant rules over”, then the householder can defend himself and the free household members that he was responsible for with the oath of twelve men (Holmbäck & Wessén 1979.1: 89). The (house)wife is not mentioned in this legal rule, only the householder and thralls/servants, which sets it apart from many of the other provincial laws. These legal rules in the Östgöta Law appear to be more similar to those regarding theft in *Lex Salica*, with varying penalties for locked up or un-locked goods being stolen, and the focus on stolen animals.

In the Uppland Law (The Personal Peace Section / *Manbelgdsbalken*, XLVII), the description of the house-search for stolen goods is quite detailed and there are several references to locked and un-locked houses. The question of guilt and the corresponding judgement appears to depend on access, and whether someone other than the householder could have had access to plant or store stolen goods. It is also said that for any stolen goods found under the householder’s lock or on his farm, both he and his wife should pay a fine (Holmbäck & Wessén 1979.1: 111-112). It would consequently seem that the wife was not exempt from crimes possibly committed by her husband, going against the legal rules that seem to follow *II Cnut*.

Another regulation that is of interest here is if there were tenants on the farm, then whomever had the key to the house answered for any stolen goods that might be found within; it did not matter who owned the house (Holmbäck & Wessén 1979.1: 112).

The equivalent legal rule in the Södermanna Law (Holmbäck & Wessén 1940: 206-207) is very similar to that in the Uppland Law, and the same is true for the Hälsinge Law (Holmbäck & Wessén 1940: 335), only it is shorter and worded a bit differently. The Västmannanna Law is the same, but with the addition that besides the householder and his wife, all those of mature age who had a share in the household and had enjoyed the stolen goods also had to pay a fine if it was found under the householder’s lock or on his farm (Holmbäck & Wessén 1979.2: 84-85).

In the Dala Law, the legal rule on house-searches is also similar but much shorter. Additionally, it mentions that if the thief or the stolen goods were found in locked houses, the householder had to pay (Holmbäck & Wessén 1979.2: 92-93). Here, harbouring a thief in a locked house is specified as an offence.

In the Guta Law there is also a section describing a house-search for stolen goods (Chapter 37) which has both similarities and differences compared with the other similar rules in the Scandinavian provincial laws. It is worth noting that there is no mention of anyone besides the householder in regard to accountability. It is also said that:

“If someone carries stolen goods to a man’s farm and house, which has a **lock**, and means in that way to betray him, then he is to forfeit everything that he carried in. And then he is to pay wergild to him ...” (Peel 2015: 73-74).

This last section is the only reference to locks in the legal rule, and the context is that of betrayal, not profit or want. It is interesting that the law makers believed this to be a situation in need of regulating by law, and it is worth recalling the story in *Göngu-Hrólfs saga*, chapter 30, where a stolen belt was placed in Björn’s locked chest to betray him.⁴⁰

There are also other legal rules relating to crime or theft where keys or locks are mentioned. One such legal rule can be found in the Västmanna Law (The Personal Peace Section / *Manbelgdsbalken*, XXVI, §9). Here it is said that if a man seized a thief along with the stolen goods and the thief was a vagrant, then the man must go to the farm where the thief resided. If the householder at the farm had the key to the thief’s home, and the thief paid his fine, then the person who answered for the lock should pay a fine of 3 marks. In the same section, §6, it is also stated that the fine for binding or locking up an innocent person was 40 marks (Holmbäck & Wessén 1979.2: 81).

In the Östgöta Law (The Settlement Section / *Byggningsbalken* XIII) there is another legal rule concerning vagrants. If a vagrant who was in someone’s service committed some ill deed and ran away, and if the vagrant was married and the wife resided elsewhere, then he should be tried at his wife’s residence where she “rules over locks and keys” (Holmbäck & Wessén 1979.1: 208). This seems to suggest a rather different marriage/living arrangement with the wife seemingly residing alone, while the husband has taken up work elsewhere, possibly out of necessity.

40. See also the Law of Jutland, Book II, Chapter 97.

In the Södermanna Law (The Section concerning Theft / *Tjuvnadsbalken*, X), it is specified that if someone accuses another of house-theft and says that “he went under locks and keys, and lured the people in the household” then he needs to defend himself with an oath or pay a fine (Holmbäck & Wessén 1940: 206).

In the Uppland Law (The Legal Process Section / *Rättegångsbalken*, VIII, §4), there is an account of how to conduct a confiscation to call in a fine for a crime. If a householder locked up his property in his house when it was about to be foreclosed, then the bailiff should foreclose the house and break up the door and seize the appropriate worth of goods (Holmbäck & Wessén 1979.1: 202). Here the locks were being used to obstruct a penalty, and to protect one’s property.

In an addition in the Guta Law, it is written that if someone’s thrall stole and not all of the stolen goods were returned, then the person who lost the goods should verify with an oath how much was lost, but only if the house or lock was broken up. If it was not taken from under lock and the house was not broken up, then the injured party should take the thrall and torture him, and not pay any compensation (Peel 2015: 86). Consequently, for goods that were not locked up or secured in a house, the owner could not always count on full compensation if they were stolen.

There are also two legal rules that connect thralls with carrying the householder’s keys. In the Younger Västgöta Law (The section concerning Matrimony / *Giftermålsbalken*, 11⁴¹) there is a rule stating that if an un-free thrall-woman born on the farm carried the householder’s keys and a man slept with her, he should pay a fine of 3 marks. For other thrall-women the fine was 6 örar (Holmbäck & Wessén 1979.5: 284). Consequently, the fines were higher for sleeping with those who carried the master’s keys. In the Västmannalaw (The Personal Peace Section / *Manhelgdsbalken*, XXIV, §8), it is stated that if a free man killed a thrall, the fines were 3.5 marks. If he carried the householder’s keys and ruled over all the locks and was killed at the farm, the fine was 7 marks (Holmbäck & Wessén 1979.2: 77). Here we have an equivalent rule for male thralls, and again the fines were higher if he carried the master’s keys. These examples also clearly indicate that some thralls were considered more valuable (and trustworthy) than others.

41. See also Amendment 12, §2.

There are three Swedish provincial laws that mention ships in relation to keys, locks, and theft. In the Östgöta Law (The Settlement Section / *Byggningsbalken*, XLIII, §1) it is written that if someone breaks the lock for a ship, and he was accused, he should defend himself with the oath of twelve men, and if this failed, he must pay 3 marks (Holmbäck & Wessén 1979.1: 225). A very similar legal rule can be found in the Södermanna Law (Holmbäck & Wessén 1940: 126). Here it would seem that, at least in the provinces of Östergötland and *Södermanland*, ships were sometimes kept under lock.

Additionally, in the Guta Law (Chapter 36) there is a section on the care of ships where it is described that:

“... a cargo vessel shall be fastened through a bollard or rib or through a plank to a house in which people are sleeping. There must be **a padlock and a key**, which the housewife or householder carries. The chain is to be no more than three links in length and the fourth shall be an iron crosspiece.”
(Peel 2015: 72-73)

In this example, both housewife and householder could hold the key that secured the ship. In the same provincial law there is a rule that deals with a situation where a thrall had escaped and taken a ship. Here it is written that the person who owned the ship was to redeem the thrall unless it was lawfully secured. If it was lawfully secured or locked up, then the thrall's owner was to redeem the ship. If the thrall flees in a ship which was not secured, or drowns in the sea, meaning that the owner loses his thrall, then the owner of the ship was to pay for the thrall (Peel 2015: 87). This legal rule again shows the vast responsibility owners had over their property and keeping it secured.

Locks are mentioned in some of the provincial laws in relation to murder and the hiding of bodies. In the Uppland Law (The Personal Peace Section / *Manhelgdsbalken*, VIII) it is written that if a dead body was found in a locked house, then murder-fines were to be paid (Holmbäck & Wessén 1979.1: 91). Very similar versions of this legal rule can be found in the Södermanna Law and in the Hälsinge Law, and in the latter it is clearly stated that it was the owner of the locked house who had to pay the murder-fines if the killer was not found

(Holmbäck & Wessén 1940: 173-174, 327). Consequently, with the key comes great responsibility.

Another legal rule connecting murder and locks can be found in the Östgöta Law (*Dråpsbalken*, II) where it was described how to legally restrain a killer, where locking them in a house was included (Holmbäck & Wessén 1979.1: 53).

A very different context in which keys, locks, and chests are mentioned in the Swedish provincial laws is that of marriage and inheritance. All but four of the provincial laws included such legal rules in connection with keys, locks, or chests: the Småland Law, the Dala Law, the Södermanna Law, and the Guta Law.

In the Older Västgöta Law (The Inheritance Section / *Ärvdabalken*, 4, §2), it is written that if the householder was dead and the wife married away from her children, then if the children owned a thrall-woman or a thrall, these should take care of the home. However, “The mother should rule over chest-keys and collect debts and pay debts” (Holmbäck & Wessén 1979.5: 76). In the Younger Västgöta Law the corresponding legal rule is very similar, but in this later version there is no mention of thralls (Holmbäck & Wessén 1979.5: 269-270).

In the Östgöta Law (The section concerning Matrimony / *Giftermålsbalken*, XVIII), it is instead written that if the householder died, the mother may take care of her children’s property if the householder’s kin allow this and she does not re-marry, but “The father’s kin should take care of their costly things and keep them in their care, and they should rule over that which is under lock, and the mother that which is not under lock” (Holmbäck & Wessén 1979.1: 109). This makes it quite the opposite to the Västgöta laws, and also seems to go against the traditional idea of the housewife as ruling over locks and keys. The woman in this situation was however a widow.

In the Uppland Law (The Inheritance Section / *Ärvdabalken*, III), there is a legal rule that is sometimes used to demonstrate the link between the married woman/housewife and keys, as was already mentioned at the beginning of this chapter. The relevant section, parts of which seem to have been meant to be read out loud at the wedding, reads:

“...He should give the woman to the man in marriage to honour and as housewife and to half the bed, **to locks and keys** and to a legal third /.../” (Holmbäck & Wessén 1979.1: 65, 81, translation by the present author)

More or less identical versions of this legal rule can be found in the Hälsinge Law (Holmbäck & Wessén 1940: 303) and in the Västmannalaw (Holmbäck & Wessén 1979.2: 45). The locks and keys in this context were probably metaphorical rather than real locks and keys, and seem to refer to the rights and obligations of the housewife. The traditional interpretation, however, is that they symbolise that the bride was given access to administer the household's property in her new role as housewife. It has also been pointed out that in this legal rule the keys were given to the woman by the legal guardian, and this is interpreted as though it is the woman's family that gives her “the rights to locks and keys” (Wallén 1962: 134; see also Kristoffersen 2000: 132). Both the Uppland Law and the Hälsinge Law end in a blessing, making this legal rule firmly situated within a Christian medieval context. Additionally, this legal rule is present in what was to become the first national law of Sweden: *Magnus Erikssons Landslag* (Holmbäck & Wessén 1962: 41) and in the municipal law *Magnus Erikssons Stadslag* (Holmbäck & Wessén 1966: 40) that began to be used around the middle of the 14th century (Holmbäck & Wessén 1962: XIII). This suggests that when this national law was written down, this custom must have still been considered relevant. If it were to be traced back to the Viking Age, this would certainly give it a very long lifespan, and it would have had to withstand the rather extensive changes in regard to marriage brought in by the church. While this is not impossible, it is also not very likely. That all the provincial laws containing this legal rule are amongst the very latest, 1296 and later, also speaks in favour of this particular custom being a medieval one. This makes it a rather poor choice as a reference to Iron/Viking Age conditions.

In the Uppland Law (The Inheritance Section / *Ärvdabalken*, VI, §3), there is a related legal rule stating that if a householder drove away his lawful wife and took someone else in his bed, then he robbed his wife of locks and keys. If she and her kin complained that the other woman had “put bride's chair on bride's chair and robbed her of her locks and keys” – what is known as “*brudstolsinkrätning*” (bride's chair intrusion) –

then the fine was 40 marks (Holmbäck & Wessén 1979.1: 66). Again, an almost identical legal rule can be found in the Hälsinge Law (Holmbäck & Wessén 1940: 304) and in the Västmannalaw (Holmbäck & Wessén 1979.2: 46).

The Uppland Law also contains a legal rule regulating the inheritance after a spouse had died if there were no children born within the marriage (The Inheritance Section / *Ärvdabalken*, X, §1). In one of the described scenarios the householder had died and one of his kin came to divide the property and take charge. The wife tells him that as soon as she gets her rightful share “*I wish to leave the locks and keys to you*” (Holmbäck & Wessén 1979.1: 68-69). This legal rule is repeated in the Västmannalaw (Holmbäck & Wessén 1979.2: 48-49). Again, there is a connection between marital status, keys, and locks. It is somewhat similar to the legal rule in the Östgöta Law described previously, where a (house)wife loses her right to rule over the locks when she becomes a widow. This leads to the question of what would have happened to this control over locks, which if they were not just a metaphor would have come in the shape of a key, when the housewife died and the marriage ended. If the key was handed back to the husband or his family, it would consequently not end up in the woman’s grave. It would therefore go against the traditional interpretation of keys in Viking/Iron Age female graves as symbols of the housewife, if these laws were to be used as interpretive inspiration.

Another legal rule that is very interesting in connection with the rules described above can be found in the Östgöta Law (The Land Section / *Jordabalken*, IV). This rule states that if someone regretted selling land and remains on the land, “*ruling over locks and keys and lives there with fire and hearth*”, he had the right to cancel the purchase on certain conditions (Holmbäck & Wessén 1979.1: 141). According to Holmbäck & Wessén, the quote above is an expression used in the province of Östergötland to refer to someone’s right of occupancy of a certain landed property (Holmbäck & Wessén 1979.1: 155, note 12). In section V it is mentioned again when the buyer has already moved in “*ruling over locks and keys...*” and the seller regretted the sale. In this case the situation was to the buyer’s advantage (Holmbäck & Wessén 1979.1: 142). Here the locks and keys again seem more likely to be metaphorical than real objects, and they are connected with the right of occupancy.

It is tempting to test this association with occupancy on the locks and keys in the law sections above concerning marriage. Perhaps these could also, at least partly, refer to the woman's right to stay at her new husband's farm; a right that would disappear if she were to become a widow and re-marry, or which could be challenged if her husband found a new woman, as in the legal rule concerning the wife being "robbed of her locks and keys". The situation where a widow leaves her former home and symbolically says she wishes to pass on the locks and keys could also fit this interpretation. The legal rule described previously where a vagrant was to be tried at his wife's residence where she "rules over locks and keys", could also be interpreted as indicating a right of occupancy, rather than her having the role of a housewife at this location. The laws never actually clarify what "ruling over locks and keys" refers to, probably because it would have been common knowledge when they were written down. However, based on the various laws described above it is likely that there were different meanings in different contexts.

Concluding remarks on the keys, locks, and chests in the medieval laws

From the laws presented above, it is possible to see some patterns regarding the contexts in which keys, locks, and chests are mentioned. In some of the laws it is clear that the accounts relate to real, physical keys, locks, and chests. These occur in contexts mainly involving securing and managing property, theft and break-ins, and house-searches for stolen goods. In a few cases this is also in association with ships and transportation by sea. On the other hand, in some of the Danish and Swedish laws keys and locks seem to be more metaphorical. In these cases, the contexts involve inheritance and marriage – seemingly associated with the rights and obligations of the housewife, but also the right of occupancy in regard to landed property. The often-cited wedding-formula from the Uppland Law where the housewife was given to the man in marriage "...to lock and key" could fit both of these. Although the lock and key in this scenario are clearly metaphorical, it has nevertheless been suggested that "based on medieval laws", the woman was handed the keys at the wedding when she was given the status of

housewife (Kristoffersen 2000: 131). This would also go against the poems *Ríghstbula* and *Thrymskvida* discussed in the previous chapter where the wife-to-be was in possession of keys before the wedding, probably symbolising her dowry. As discussed, the Uppland Law and the later copied law versions are amongst the youngest, and none of the older laws contain any similar rules, making them unlikely to reflect older Viking/Iron Age traditions.

In the Danish examples keys and locks are found in contexts dealing with the changing status of concubines into lawful wives, and deciding whether a wife entering a monastery was in good enough health – suggesting concern over family property being given to the Church; both cases clearly situated within a Christian medieval context. These would also be unlikely to reflect Viking/Iron Age traditions.

Additionally, one of the Norwegian laws featured a chest that may have been used more symbolically, and was associated with the householder's property or authority in connection with the liberation of a thrall. Since this method of liberating the thrall was contrasted with the option to take the thrall to church, this custom may have pre-Christian roots.

Regarding theft, in some of the laws it is clearly specified that the more safety measures that were put in place to protect one's property, the higher the fines or penalties were for stealing or trespassing. In many laws it is also clear that with ownership came great responsibilities, and if proper security measures were not taken there could be negative consequences such as no/less compensation in case of theft, and possibly having to answer for another person's crimes.

Concerning the house-search for stolen goods, in most of the laws, access (in the form of a key) was crucial in regard to accountability, but in some examples, ownership seems to have been the most important factor. This theme is also the most common regarding keys, locks, and chests. It being present in so many of the medieval laws could point to this procedure being a very risky undertaking, where demanding to search someone's house brought with it the risk of animosity and violence. It is likely that this was the reason for the sometimes very detailed instructions and regulations concerning this activity.

In connection with house-searches for stolen goods, the various laws also give important insight into who could hold the key to the locks. It is clear that it was primarily the householder, although in a few cases it was together with his wife. Otherwise, the wife/housewife was included in

several laws as an exception to the householder's otherwise total control. Other specified exceptions include various servants and thralls, but also tenants and tenant's wives, and the householder's son.

Furthermore, the medieval laws do not really mention any children in possession of keys, locks, or chests. They can be found in the context regarding the management of their inheritance after the death of a parent (father), but here they are without agency. It is interesting to note that in regard to taking care of the children's property, the Västgöta laws state that the mother may rule over that which is under lock and key, while the Östgöta Law takes the opposite stance only allowing the mother to be in charge of that which is not under lock, suggesting a different attitude towards the role of the widowed housewife.

Finally, another social identity or role, although perhaps fleeting, which can be connected with keys, locks, and chests in the medieval laws, is that of the thief. Indirectly, the thief is actually the main character in most of the laws above.

The archaeological material

In this part of the thesis, the archaeological material from the five chosen sites – Birka, Helgö, Lovö, Sanda, and Vallhagar – is described. The focus was placed mainly on the contexts in which keys, locks, or chests were found, but in order to assess the source material some comments regarding site preservation and complexity, excavation methods, etc., was also included. In some cases, where previous interpretations were questioned, a rather detailed description of the contexts was necessary.

In order to put the focus on the contexts, and to facilitate reading, not all finds have been listed in the descriptions; for instance, objects such as pottery, burnt clay/daub, animal bone, nails, and rivets were generally grouped together as indicators of ordinary domestic activities or contexts, and objects such as moulds, crucibles, slag, metal scrap, etc., were grouped together as indicating a metal working context. The same was done with most of the finds, where it was the type of context or activity the finds point to that was noted, not the individual objects. Here the previously described find categories were also sometimes used. Specific details can be found in the excavation reports and publications as referenced in the texts below.

Part three ends with a chapter comparing the findings from the settlements and graves from the different sites.

Birka

In this chapter, some of the findings from many years of Birka research will be presented, with a focus on the keys, locks, and chests that were found there. As will be further described in the following sections, they were present in the settlement and workshop layers of the town, in an area with a military presence near the town's hillfort, and also in some of the graves. This is also the order in which the material is presented in this chapter.

For the present study, a detailed chronology of the Birka material was not of importance since many of the keys, locks, and chests lack a closer date, and also because the locking technology and locking practices were not likely to have changed much in the c. 200 years of Birka's existence. Any heirlooms buried in the graves could also easily disrupt chronological patterns. Generally regarding the finds from Birka as Viking Age in date also facilitated comparisons with the other sites included in this study.

The Viking Age town of Birka

Birka is situated on the island of Björkö in Lake Mälaren, 30 km west of Stockholm, in the parish of Adelsö (see figure 1:1). The area of the island today is roughly 4 x 1.5 km, but due to postglacial rebound the shoreline is currently around 5 meters lower than in the Viking Age, so the area would have been smaller in the past. The southern part

of Björkö, Grönsö, was a separate island until the later middle ages (Ambrosiani 1992a: 11, 18).

Birka, together with Hedeby and Ribe, was mentioned in text for the first time in Rimbert's *Vita Ansgarii*, written in the 870s about the life of the Frankish monk St Ansgar. These were places in Scandinavia which Ansgar visited as an emissary and Christian missionary during the 830s and again in the 850s (Ambrosiani 1992a: 11).

The town was placed strategically at the junction of two routes, one south to Gotland, the southern Baltic, Hedeby and beyond; the other through the Gulf of Finland to the Volga. It also had easy access to many parts of central Sweden and the north via the lakes and rivers. The frozen lakes and rivers in winter would also have provided easy transport routes. Birka's strategic location made it possible for it to function as a marketplace for various products. It is believed that it also functioned as a winter market with trade taking place on the ice around the shores and jetties (Ringstedt 1997: 27, 33).

The town is considered to have been one of several trading settlements existing in Northern Europe and around the Baltic Sea including Wolin and Truso in present-day Poland, Riebe in Denmark, Staraja Ladoga, Wiskiauten in Russia, and Hedeby in Germany. These sites, along with Birka, were set up like nodal points in a network between inland and the coast around the middle of the 8th century (Ringstedt 1997: 33; Holmquist 2013: 35). It has been suggested that one of the motivations behind these sites was that it gave the elite an opportunity for trade, with the production of special products taking place to fund their aspirations of power. These sites are sometimes referred to as proto-towns or emporia in order to distinguish them from medieval towns⁴² (Holmquist 2013: 35), but for simplicity, and following the common terminology traditionally used in Birka research, the site will generally be referred to as a town in this study.

The period of Birka's existence is sometimes divided into the Early Birka Period, 775-875 CE, and the Late Birka Period, 875-975 CE (Holmquist Olausson 1993: 30). The finds suggest that contact during the 9th century was mainly with the hinterland, but also with the Frankish Empire and the West-Slavic area. During the 10th century the finds were dominated

42. The subject has been further discussed by for instance Blomkvist 2001; Sindbæk 2007; Bogucki 2010 and Kalmring 2013.

by contact with the east towards Russia and the areas around the Black Sea and the Caspian Sea. This change seems to have occurred sometime during the latter part of the 9th century and probably entailed a change in the weight system, payment, and commodities (Ambrosiani 2013: 18).

Birka is sometimes also seen as a link in a chronological chain in the area around Lake Mälaren, where Helgö seems to have been a forerunner, and Sigtuna a successor even though they co-existed for some periods. This model is probably oversimplified, and other sites, for instance Old Uppsala, should probably be included (Holmquist 2013: 35-36).

The town is believed to have had a minimum of 750 inhabitants, or a few hundred households, living there at the same time. The town population would have made great demands on food, firewood, and other supplies that could not have been met on the island or even the surrounding islands. Much of the supplies would have had to come from both the immediate and regional hinterland (Gräslund 1980: 83; Ringstedt 1997: 33-34). However, a large amount of fish bones were found in the cultural layers of the town, and the fish species were indicative of local fishing (Broberg 1986: 115; Ericson et al. 1988: 86-87).

The town area, located by the north-west shore of Björkö, is today called *Svarta Jorden* or *The Black Earth* (see figure 5:1). The name comes from ashy occupation layers with charcoal being ploughed and mixed into the soil and making it almost black. Excavations have shown that the occupation deposits are up to 2 m thick (Ambrosiani 1992a: 16; 1995: 28). The Black Earth covers an area of about 7 ha within the town rampart. However, the results from phosphate mapping indicate that the area of occupation extends further north, beyond the rampart and across the cemetery *Hemlanden*, all the way to the bay at the northern tip of Björkö, known as *Korsbamn* (Ambrosiani 1992a: 11, 16). A recent geophysical survey in this area has also identified possible house terraces here, and it has been suggested that the structures could date to the Vendel- and/or Viking period (Kalmring et al. 2017: 7, 9, 11). There are also indications of a harbour here, as well as in *Kuggbamn* which is located near the northern end of the town rampart (Ambrosiani 1992a: 16-17).

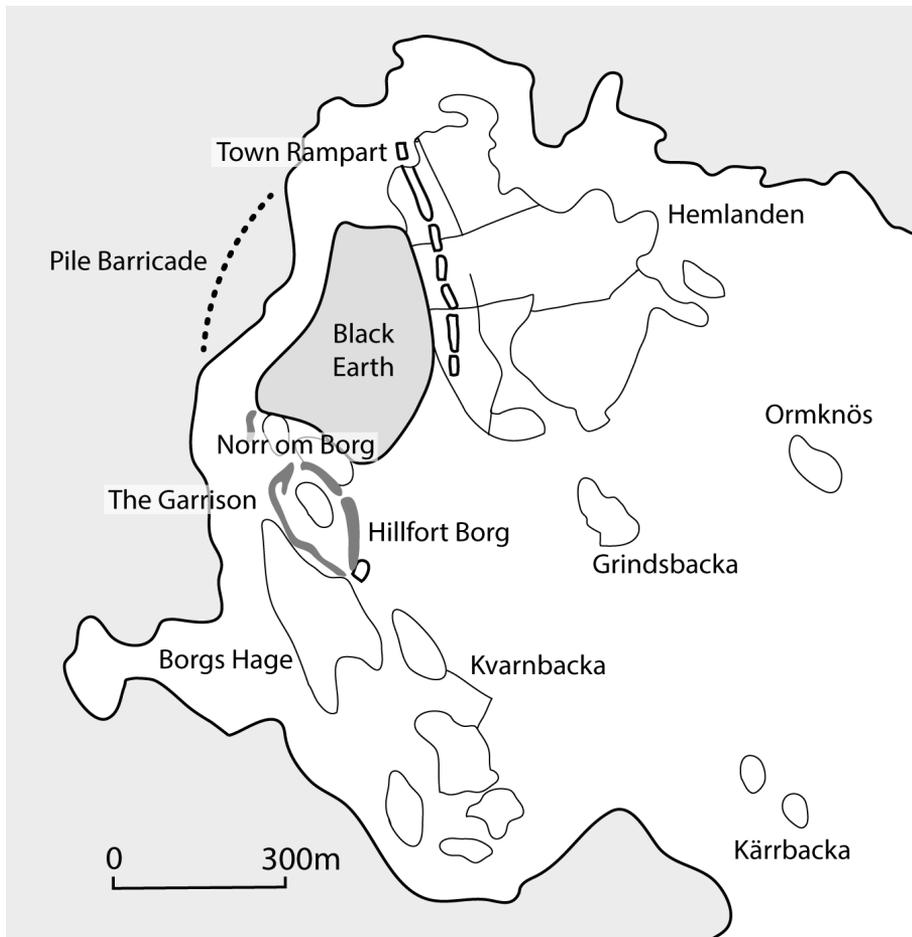


Figure 5:1. Northern Björkö with the Black earth, the town rampart, the pile barricade, the grave fields, the garrison, and the hillfort Borg marked out. Based on map by the Swedish history museum (http://mis.historiska.se/mis/sok/birka.asp?sm=10_7) and Hedenstierna-Jonsson 2006: figure 4.

Birka's strategic position made it vulnerable to attacks. As a result, the town had a strong defence consisting of a town rampart with a connecting pile barricade in the water, and a hillfort (see figure 5:1). Places with similar defences in Northern Europe include Hedeby in Germany, Aarhus in Denmark, and Ipswich in England (Holmquist Olausson 2001: 9). The planning and building of Birka's defences would have required an overall organisation and administration which would have been a substantial investment. It has been suggested that this could only have been accomplished by a royal power (Olausson 2001: 21).

The hillfort was located south of the town area and consists of a rocky hill surrounded by a rampart. There was also an area that has been interpreted as a garrison outside the north-west gate or opening in the rampart (Ambrosiani 1992a: 17-18). Many locks and keys were uncovered in this area, as will be described in more detail in a later section. In the water outside the town there are traces of an at least 300 m long wooden palisade (Ingelman-Sundberg 1972: 130, 134). Additional investigations have shown that it clearly connected with the town rampart, enclosing the whole town. The shape of Birka has thus turned out to be rounder than previously known, and it encompassed a large area of water and a harbour (Olsson 2017: 90).

The palisade construction might have had functions related to activities in the harbour, as well as being part of the defences. Investigations have showed that the palisade was more than a simple row of piles: several of the timbers found had constructional details which suggest they were once used in some form of large wooden construction out in the water (Olsson & Svanberg 2017: 523).

The town rampart ends rather abruptly on the southern side, about halfway around the Black Earth area. However, a magnetometry survey revealed that it did in fact continue all the way to the hillfort. Further surveys using a ground penetrating radar (GPR) resulted in the mapping of roads, paths, and the foundations of houses and property plots, as well as the identification of a second, perhaps earlier, town rampart closer to the shore. It seems to have had a gate and possibly a gate building (Trinks et al. 2007: 245-247).

Excavations of parts of the visible rampart have shown that it was built in several phases, and also that there was an occupation layer underneath indicating a settlement that was older than the town. Right next to the rampart, on the side of the town settlement, there were also several built-up terraces on which buildings or longhouses probably once stood. Only one longhouse has been excavated, but the finds from there suggest long-range trading contacts before the town was established (Holmqvist 2013: 37-38). ¹⁴C-datings from the (outer) rampart are said to suggest that it was built in connection with the town's establishment (Holmqvist 2013: 37), however, if an even earlier rampart existed, as suggested by the GPR-survey, then this needs revising in some way. It is possible that the town had even earlier roots.

It has been proposed that the town rampart might also have served other purposes than defensive. It could also have functioned as an administrative boundary, separating the town and the surrounding countryside. As such it could have facilitated in the monitoring of visitors and maintenance of peace, and also in guaranteeing a safe environment for trading (Holmqvist 2013: 38). An interesting thought is whether the entranceways or gates in the ramparts were locked, and if so, if it was a proper lock with a key or simply a bolt on the inside. If it was locked with a key-operated lock, it raises the question of who held the key. Most likely it would have been a very prestigious job, but also one with great responsibility.

Short overview of the excavations

The first known excavations on Björkö were carried out sometime in the 17th century by Professor Johan Loccenius, followed by field studies conducted by the national antiquarian Johan Hadorpf in the 1680s, the location of which is unknown, though it was probably in the Black Earth (Holmqvist Olausson 1993: 12, Ambrosiani 1992: 14).

In 1807 G.J. Dahlström excavated somewhere in the Black Earth and described finds of stone paved streets. B. Rutström also performed investigations on Björkö in 1811 (Erikson 2015: 31, 42).

The first person to conduct a larger excavation was Alexander Seton who investigated 13 graves between 1825 and 1827; most of which were in the *Hemlanden* grave field. Professor Axel J. Erdman excavated a probable grave (Bj 89) in 1861 (Holmqvist Olausson 1993: 12).

Unauthorised excavations in the Black Earth were conducted in 1883 by Vice-Consul Nils Persson, with the purpose of obtaining bone material for fertilizer production. Persson was acquitted during his trial, but the laws protecting the Black Earth were subsequently strengthened (Erikson 2015: 231-237; Holmqvist Olausson 1993: 13).

In 1871 Hjalmar Stolpe began his excavations on Björkö, initially aiming to find amber in his role as a geologist (Erikson 2015: 40-42). Stolpe started in the Black Earth, but gradually shifted his focus towards the graves. Between 1874 and 1879, and in 1881, he led excavations on several of the grave fields, with smaller excavations following in 1888-

1890 and 1895 (Holmquist Olausson 1993: 13). Stolpe and his team excavated around 1100 graves and investigated approximately 4500 m² of the Black Earth, spread out over several locations (Ambrosiani 2013: 21). The finds from Hjalmar Stolpe's excavations have formed the foundation of Viking Age research in Sweden, despite the fact that Birka cannot be seen as very representative of most Viking Age rural settlements since it was a more urban settlement with many foreigners present (Ambrosiani 1992a: 14).

In 1902 Gunnar Hallström, the brother of archaeologist Gustaf Hallström, investigated a damaged grave situated in a field between *Hemlanden* and *Borgs hage*. Three years later, in 1905, Gustaf Hallström investigated a grave near *Borgs hage*, and a damaged grave in 1910 (Holmquist Olausson 1993: 13).

Between 1932 and 1934, Holger Arbman excavated a few graves in the grave fields *Hemlanden* and *Norr om Borg*. He also dug some trenches in the town rampart and the area north-west of the hillfort, today referred to as *the Garrison* (See later section) (Bergström 2013: 16; Holmquist Olausson 1993: 13).

In the 1930s, Arbman processed the finds from Hjalmar Stolpe's excavations of the Birka graves, which until then had remained in their boxes (Ambrosiani 1992a: 14-15). Arbman's work resulted in the publication of the Birka grave material: *Birka: Untersuchungen und Studien. I, Die Gräber* in 1940 (the catalogue) and 1943 (the text). Furthermore, in 1938 the textile material from the Birka graves was published by Agnes Geijer in *Birka: Untersuchungen und Studien. 3 Die Textilfunde aus den Gräbern*.

Marine archaeological investigations were carried out in 1969 by The Maritime Museum, led by Catharina Ingelman Sundberg, in the waters outside the Black Earth, and outside of *Kugghamn* and *Korshamn*. Between 1969 and 1971 Björn Ambrosiani and Birgit Arrhenius headed excavations in the harbour area of the Black Earth where they found the remains of a jetty (Ingelman-Sundberg 1972; Ambrosiani 1992a: 15).

Birgit Arrhenius, together with archaeology students from Stockholm University, conducted excavations at the grave field *Ormenös* between 1975 and 1980 (Holmquist Olausson 1993: 13).

In 1980 Ann-Sofie Gräslund published her doctoral thesis *The burial customs: a study of the graves on Björkö*. The following year the excavations continued, this time lead by Lena Holmquist, and phosphate mapping

was carried out in areas of Björkö. Parts of the town rampart north of the Black Earth, terraces and settlement remains close to the rampart, and two graves were investigated in 1987 and 1989 (Holmquist Olausson 1993). In 1984, 1986, and 1989, various studies of the finds from the Birka graves were edited by Greta Arwidsson and published in *Birka: Untersuchungen und Studien 2. Systematische Analysen der Gräberfunde*.

Between 1990 and 1995 Björn Ambrosiani headed The National Board of Antiquity's excavations in the Black Earth (Ambrosiani 2012).

The Archaeological Research Laboratory at Stockholm University carried out excavations at the Garrison area between 1996 and 2004 (Bergström 2013; Fennö Muyingo 1998; 2000; Holmquist Olausson & Kitzler Åfeldt 2002). In 2000 Stockholm County Museum investigated and restored a damaged grave in *Hemlanden* (A2000) (Andersson, Werthein & Boije 2000).

In 2005-2006 The National Board of Antiquity held amateur excavations in the form of field courses at Björkö village (Västergården), and in 2007 they continued with settlement remains at *Grindsbacka* (Bäck et al. 2010). In 2011 The National Board of Antiquity excavated an area within Björkö village (Storgården) (Bäck 2012).

Between 2004 and 2014 The Maritime Museum and Södertörn University conducted marine archaeological investigations in the waters mainly outside the Black Earth, but a few trenches were also dug on land (Olsson 2017).

In 2013 and 2014 The Swedish History Museum investigated two graves in Hemlanden, Bj 749 and 750. The central parts of Bj 750 were previously excavated by Hjalmar Stolpe (Andersson, Näversköld, Vedin 2015): this was one of the graves that contained a key (Arbman 1943: 269).

Geophysical surveying was carried out by The National Board of Antiquity in 2006 (Trinks, Neubauer & Hinterleitner 2014) and together with MALÅ Geoscience they carried out geo-radar prospecting in 2008, both times in the Black Earth (Trinks et al. 2010). In 2011 The National Board of Antiquity, together with the Ludwig Boltzmann Institute (LBI ArchPro), carried out geophysical prospecting with ground penetrating radar and magnetometer in parts of the Black Earth and around Birka, and in 2011 airborne laser scanning of the landscape was also carried out (Trinks et al. 2013). Another geophysical survey was carried out in 2016 in the area near Korshamn (Kalmring et al. 2017).

From what has been presented above, the exploration of Birka has a long tradition beginning already in the 17th century which is still ongoing. With such a long time span, the methods used have varied greatly and developed according to the excavation standards at the time. This also means that the documentation is of varying accuracy, and the focus different depending on research questions, which in turn can make comparisons difficult. The acquired knowledge regarding Birka has consequently grown over centuries under different conditions which can pose somewhat of a challenge for future research. However, whilst keeping these circumstances in mind, this vast material provides an invaluable source to build from.

Keys, locks, and chests found in The Black Earth

In this section, the town settlement contexts in which keys, locks, and chest-parts were found are described, along with some information on how these were investigated. Some of the earliest finds derived from the excavations by Stolpe, or were handed in stray finds that lack an exact context. These keys, locks, and chests can only generally be said to derive from activities in the town area, but information on types and materials is still important as it can provide clues about locking practices. The contexts for the keys, locks, and chest-parts that derive from excavations in the early 1970s, and from excavations between 1990 and 1995, are better recorded and many of these can be related to a specific context. As discussed below, there are however some source critical issues regarding the excavation methods used which puts some limitations on the source material. At the same time, the formation of the town's occupation layers and features with several re-builds, truncations, overlapping, waste-disposal, etc., resulted in a complicated stratigraphy and potentially a rather mixed material, which puts limitations on what information is possible to obtain regardless of excavation method.

The aim has been to learn as much as possible from the available source material regarding the location of the objects, and how they ended up where they were discovered; if they were found where they were used, produced, lost, or thrown away, and also which other types

of objects and features were near or in the same context and suggest a possible connection with certain activities.

Stray finds

The keys, locks, and chest-parts (see Appendix 1 and 2) that were collected from the Black Earth derive both from professional excavations, and from individuals living on or visiting Björkö who handed in objects they found to the Swedish History Museum. The earliest acquisition was made in 1827, and the latest in 1982, with a total of twenty-three keys, three locks, and two chest-parts. Most of the finds were handed in during the late 1800s and early 1900s (*SiS*). These are all regarded as stray finds, but are still in the context of the town settlement.

As can be seen in table 5:1, the most common key-type was the padlock key followed by the rotary key, but there were also a few keys with S-shaped bits, an L-shaped lift-key, and a lift-key. Most of the keys were made of iron, with only a few made of bronze, or of both iron and bronze (*SiS*).

The locks comprised a padlock, a lock-spring that belonged to a mounted lock on a chest, door, or cupboard, and a lock-spring that could belong to a mounted lock or a padlock. These were all made of iron (*SiS*).

The chest-parts included an iron chest handle with one end curled up as a spiral and the other broken off, and a possible bronze chest-mount with a ring attached at one end (*SiS*).

Together these finds point to a diversity of key and lock types that would have been available and used at Birka. Both mounted and mobile locks, as well as a few chests which would have been used for storage and/or transport were present.

Table 5:1. *The keys, locks, and chest-parts found as stray finds in the Black Earth, listed according to type.*

Key type	No.	Lock/chest part	No.
Padlock key	8	Padlock	1
Rotart key	7	Lock-spring	2
Uncertain/not specified	4	Chest-handle	1
S-shaped lift-key	2	Chest-mount	1
L-shaped lift-key	1	Total no.	5
Lift-key	1		
Total no.	23		

Hjalmar Stolpe's excavations

While Hjalmar Stolpe's excavations and documentation of the Birka graves seem to have been rather meticulous and reliable (see later section), his excavations in the Black Earth were not as well recorded. Consequently, the information available is not enough to connect specific finds with any specific layer, phase, or structure in any of the areas that Stolpe and his team excavated.

From Stolpe's descriptions of the excavations, the team dug long trenches and left balks between them in order to check the stratigraphy of the layers. He also mentioned the time-consuming checking of each shovel of soil (Stolpe 1873: 12). Stolpe concluded that the objects they found were scattered throughout the soil, varying in depth from the surface down to 6 *foot* (c. 1.78 m) (Stolpe 1873: 9).

The finds from Stolpe's excavations in the Black Earth lay undisturbed until they were unpacked in the 1940s by Erik Sörling at the Swedish History Museum. He began work on an illustrated catalogue, but this remains in manuscript form (Ambrosiani 1992a: 15). He did however compile a catalogue of the finds, which consists of 2 592 numbers or ca 7 000 artefacts. It is important to consider, however, that Stolpe only collected what he considered to be the most important finds (Hyenstrand 1992: 45-46).

Most of the finds were textile working tools, and a small proportion was made up of weapons (2.5 %) and knives (2.1 %). Most iron objects seem to have been very badly preserved however, so the numbers of these objects were most likely originally higher (Hyenstrand 1992: 46-

47). The presence of objects that can indicate trade, such as weights and scales, were relatively few (1.4%), and tools for activities other than textile work only comprised 2%. Many of the objects were grouped together by Stolpe under the category “Manufacturing objects”. Some of these objects indicate bronze casting and finer metalworking as well as bead-making, amber-carving, and antler-working (Hyenstrand 1992: 47).

Locks and keys comprise 1.1% of the total recorded artefacts (Hyenstrand 1992: 47). Counting the finds available through *Sis* there were twenty-four keys and six lock-parts. There were also five chest-handles and a mould for a padlock. For some of these the trench number or find depth were noted, but the exact location was not recorded for any of them, and they are therefore regarded as un-stratified in this study.

The types of keys found during Stolpe’s excavations vary greatly, as can be seen in table 5:2. The most common type was the rotary key, followed by the L-shaped lift-key, but there were also a few T- and S-shaped lift-keys, and an angular L-shaped lift-key. Most of the keys were made of iron, but there was one bronze padlock key, a bronze key handle, and two bronze rotary keys.

Even though there were only a few locks found, they also varied in type; there were two padlocks, one lock-plate, one lock-spring case, and two drop-forks; the last four being from mounted locks on chests, doors, or cupboards.

Table 5:2. *The keys, locks, and chest-parts found during Hjalmar Stolpe’s investigations in the Black Earth, listed according to type.*

Key type	No.	Lock/chest part	No.
Rotary key	9	Padlock	2
L-shaped lift-key	6	Lock-spring case	1
T-shaped lift-key	2	Lock-plate	1
S-shaped lift-key	2	Drop-fork	2
Uncertain/not specified	2	Chest-handle	5
Padlock key	1	Total No.	11
Angular L-shaped lift-key	1		
Lift-key	1		
Total No.	24		

Although these keys, locks, and chest-parts cannot be tied to any specific area, activity, or phase, they do generally point to a varied use of locking within the town settlement. Some were probably made on location (see later section), and it is likely that some were also used there. Both loose and mounted locks were also seemingly utilised, with the loose padlocks providing great flexibility and mobility while the mounted locks would have secured doors, cupboards, or chests that were more stationary, although the chests themselves could certainly have been moved or transported.

Excavations in the harbour area 1969-1971

In 1970 and 1971 excavations were undertaken in the Black Earth (see figure 5:2), following a trial trench, c. 1 x 40 m, dug in 1969. The primary purpose was to attempt to establish the position of the Viking Age shoreline and to locate the remains of a harbour. The area covered approximately 120 m², but only c. 30 m² were excavated down to the full depth of the cultural layers (Ambrosiani 1973a: 7, 10; 1973b: 12; 1992b: 71). Some keys, locks, and chest-fittings were amongst the finds from these excavations.

The structures unearthed included a stone packing (c. 10 x 3 m) which was probably the landward foundation for a pier or jetty, and a c. 1.5 m long row of stones across this foundation. There were also several wooden piles and planks that were probably used for a construction of some sort. In the 1969 excavation, the remains of a house foundation with several phases were also found near the jetty. However, these were only briefly investigated since the focus was placed on the layers around the jetty (Ambrosiani 1992b: 73; 1973b: 12-13, 18, 20, 31-32).

The site was excavated in 1 m squares, with the soil shovelled onto a conveyer belt and transported to a mechanical sieve in order to find as many objects as possible. Finer materials were then hand sieved (Ambrosiani 1973a: 8). This suggests that any exact location was not noted for a large amount of the finds.

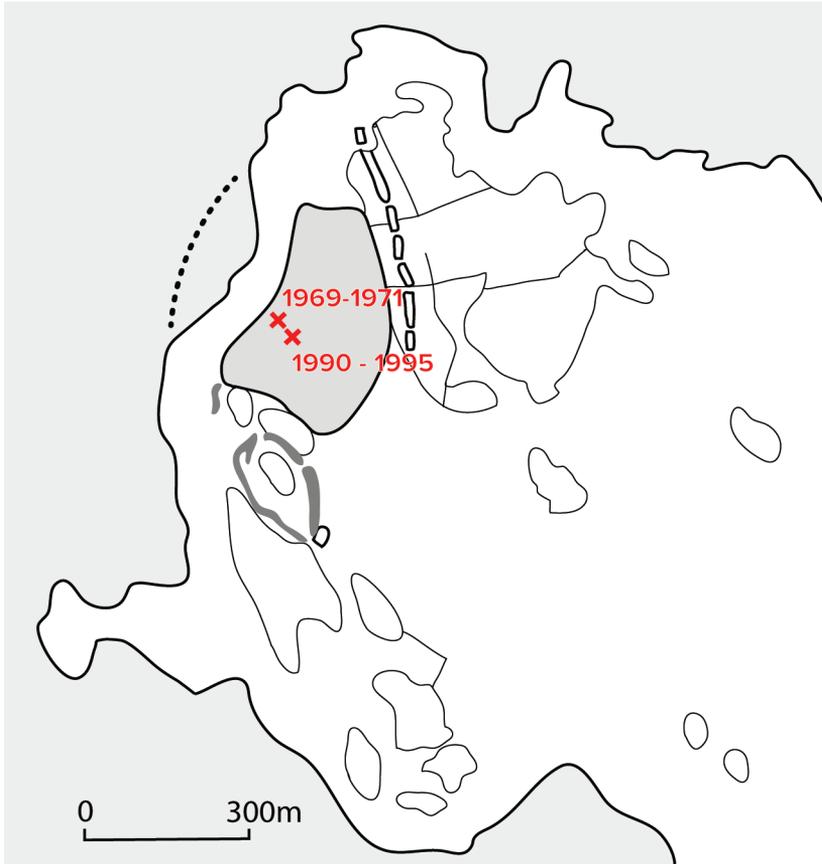


Figure 5:2. The location of the 1969-1971 and the 1990-1995 excavations, marked with an X. Based on information from *Birka Hovgården Webb-Gis*.

The objects recovered included around 7000 complete and fragmentary objects, approximately 10 000 potsherds, c. 100kg of slag and scrap metal, and c. 1500kg of unburnt animal bone (Ambrosiani 1992b: 75-81). A large portion of the finds probably represented waste material from various activities in Birka, including refuse from ordinary occupation activities, as well as waste from different crafts such as metal working, textile production, etc.

The layers, labelled A-H, were recorded in each 1 m square, and were defined by their quantity of objects per unit of volume and the general colour and composition of the soil. Subdivisions were also made, sometimes based on “geological layers”, but sometimes simply on an

arbitrary division of 0.15m spits. In the post-excavation phase the layers were grouped into *Strata* I-XI, characterised by each having different find-profiles (Ambrosiani 1973a: 10; 1973b: 20-24, 32; 1992b: 74). Neither strata nor layers seem to strictly follow a stratigraphical sequence.

The keys, locks, and chest-fittings were assigned to the strata, not to the layers, in the excavation report (Ambrosiani et al. 1993). Two padlocks and one key-bit were assigned to Strata I, which seems to have covered the whole excavated area, and two probably modern rotary keys along with two chest-handles were assigned to Strata II, located outside the jetty (Werner 1973: 88, 89, 91, 93-95). Both strata were interpreted as younger than the jetty, and most of the material in Strata I and II is believed to have eroded down from the Black Earth above through ploughing. They also had inclusions of more recent find materials and must have been disturbed/mixed to some degree. Much of this recent material probably derived from garbage transported from Stockholm and dumped on Björkö in the 19th century to be used as fertiliser (Ambrosiani 1973b: 14-15, 20-22; 1993a: fig 6, 10-11; 1993b: 20-22; 1993c: 241, 243).

Consequently, these keys, locks, and chest-parts would probably have come from “the Black Earth”, deposited outside and on top of the jetty when it was no longer in use, or through later ploughing. The rotary keys may have come from the 19th century waste material.

A padlock key was recovered in Strata X, one of the oldest layers underneath the stone jetty which was seemingly deposited and re-deposited in water (Werner 1973: 89, 91, 94). A padlock key was recovered in Strata VII, a sandy layer with almost no finds outside the jetty. Above this layer was the stone rich Strata VI, to which one padlock and one padlock key were assigned. Both strata are believed to have been water-deposited (Ambrosiani 1973b: 26; Werner 1973: 89-94).

The key and the lock from Strata VI may have been deposited or dropped into the water from the jetty, perhaps as part of waste material being dumped into the lake. The key from Strata X, which was stratigraphically locked below the jetty, may instead have been washed down from higher up in the Black Earth area and into the water when the shoreline was higher up. The key from Strata VII could also have been washed in from further up the shore. Since the water line would have been higher in the past, and then slowly retreated as the land rose up – it is difficult to pinpoint their origin.

The keys, locks, and chests from the Black Earth harbour

Based on the information in the excavation report (Ambrosiani et al. 1993), the excavations in the Black Earth harbour area resulted in the discovery of three padlock keys, a key-bit with two teeth, three padlocks, and two chest-handles. However, while the excavation report mentions three padlocks (Werner 1973: 91, 93), there are nine⁴³ find entries for locks in *Sis* for the harbour area. It is possible that some of these are parts of the same locks, resulting in more find entries. However, there are also two entries for parts of mounted locks: a latch, and a lock-spring case with holes for a key with two teeth (*Sis*). Unfortunately, there is no information on where in the harbour area these were found.

In total there were four keys (plus two modern), five or six padlock parts, two parts for mounted locks, and three chest-parts found (see table 5:3).

Table 5:3. *The types of keys, locks, and chest parts found in each Strata during the excavations in the Black Earth harbour area, 1970-1971.*

Object	Strata I	Strata II	Strata VI	Strata VII	Strata X	Unknown	Total No.
Padlock key			1	1	1		3
Lift-key	1						1
Padlock	2		1			2	5
Padlock?						1	1
Latch for mounted lock						1	1
Lock-spring case						1	1
Hinge-mount						1	1
Chest-handle		2					2

Based on all the circumstances above, and from the layers having been disturbed by water movement, erosion, and later ploughing, it would seem that it is not possible to give a more exact date for the keys, locks, or chest-parts; based on ceramics and coins they could be from between the 8th to 10th centuries (see Ambrosiani & Arrhenius 1973: 148 and Kyhlberg 1973b: 200-201), or even later as with the rotary keys. Some

43. One object (SHM 35855 (F97)) is listed in *Sis* as a padlock, but a study including x-ray, has shown that this interpretation is not likely (Stålhammar 2015: 12-13, 15-16).

were deposited before the jetty was constructed (a date which is not certain), but since the mixed material deposited around and over it could have come from various periods it is not certain that the padlock keys stratigraphically locked by the jetty are older than the others.

The excavation and documentation methods, seemingly focusing more on obtaining finds and calculating find density than on the formation of the layers, also make interpretation harder. It is very likely that the keys, locks, and chest-parts were simply part of waste material or debris from activities in the town, and not used where they were recovered. Since there was a metal workshop situated to the south-east where keys and locks were produced (see next section), it is possible that some of them were waste from the activities taking place there or in a workshop somewhere else near the shore.

Some of the objects could have been used by the town's inhabitants for secure storage, limiting access, etc., or by people conducting trade in the harbour where merchandise could have been transported in locked chests. Boats might also have been secured with a lock. Here, a padlock together with a chain or similar would come in handy. From the earlier mentioned Guta law, Chapter 36 (Holmbäck & Wessén 1979.4: 232-233), it was shown that securing your boat with a lock and chain was indeed practiced (and encouraged) during the medieval period. It is quite possible that this was already practiced in the Birka harbour.

The 1990-1995 excavations

A large part of the information available on the town area of Birka derives from the excavations undertaken between 1990 and 1995 (see figure 5:2), and the subsequent publications (for instance the works published in the series *Birka Studies* vol. 1-9). The material is vast, including ca 70 000 find entries, 15 000 potsherds, and c. 6 000 kg of animal bone (Ambrosiani 2013: 11). There were also several keys and locks, and a few chest-parts.

During the investigations, headed by Björn Ambrosiani, an area of c. 350 m² was excavated representing about half a percent of the town settlement (Ambrosiani 2013: 26). This is important to have in mind when drawing any conclusions about the whole town based on the findings from this small excavation area. More than half of this area was also

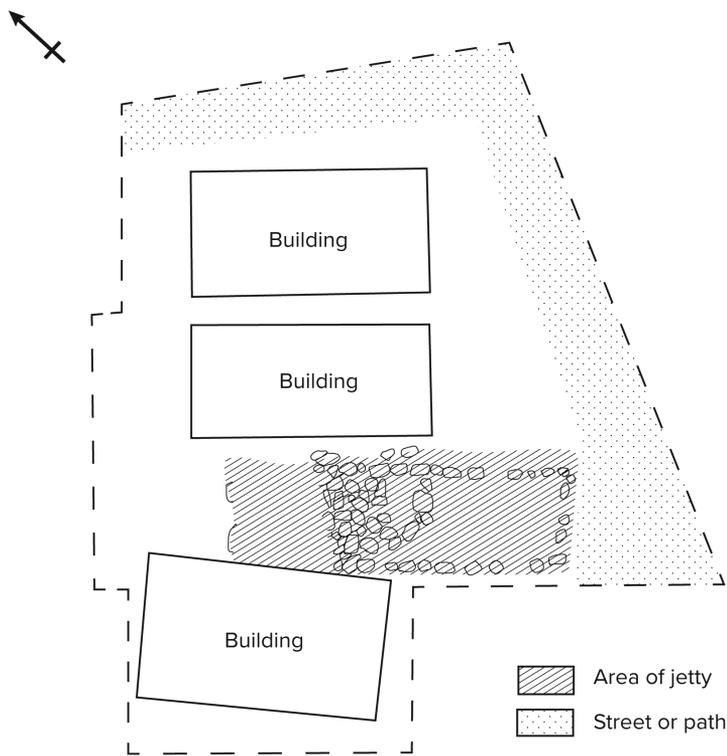
made up of the backfilled trenches from Hjalmar Stolpe's excavations in the 1870s. Stolpe's excavations did not always reach the bottom of the occupation layers; as a result, some of the oldest parts, and the baulks between the trenches, were left to be investigated (Ambrosiani 2013: 15).

Compared to the previous excavations, the methods used were more developed, but at the same time the excavation team faced methodological issues, and several changes seem to have been implemented along the way. When the excavations started, the recording system was based on 1 m square "registration units" that were no more than 0.15 m thick (Ambrosiani 1995: 19, 23). Since the boundaries of the contexts were diverging, this system did not work well. Instead, a system with 2.5 m squares subdivided into "true contexts" was tested, but this did not work with the database software used, so they seem to have reverted to 1 m squares. The shift in method resulted in many contexts having to be re-registered (Ambrosiani 1995: 19, 23). In 1991, the team also began to implement the "single-context" method when excavating and recording (Bäck & Svensson 1996) (see e.g., Harris, Brown & Brown 1993; Museum of London 1994). However, it appears that the 1 m squares were kept in use to some extent, for instance for assigning finds with a better horizontal precision (Bäck & Svensson 1996: 5).

Additionally, during work with phase divisions, several problems were encountered leading to revisions of sequences and re-checking of features, and in the end a thorough revision of the stratigraphical matrix (Ambrosiani 2013: 11-12). The work started in 2000 and the first part was published by Ambrosiani in 2013 (Stratigraphy Vol. 1), including the revision of two thirds of the material. A second volume dealing with the rest of the material is forthcoming (Ambrosiani 2013: 13, 126). According to Ambrosiani, this revision did not affect the basic phase division to any great extent, i.e., the phase division that was used in the analysis of the Black Earth material in *Birka Studies* Vol. 4-8. However, he acknowledged that there might be major changes in the details and points out some source-critical problems as well as the likelihood of there being errors in the material (Ambrosiani 2013: 12, 32, 206). These problems raise the issue of the accuracy of the recordings and analyses of the stratigraphy.

During the excavations, two building plots were uncovered, one to the north and one to the south, with a large ditch or passage in between. The passage turned out to be on top of a large stone jetty from Birka's earliest phase in the first half of the 8th century (Ambrosiani 2012: 9; 2013: 26, 29, 35). This jetty was consequently older than the one investigated in 1969-1971.

There was also a transverse ditch parallel to the shore, possibly a boundary or drainage ditch, and an alley or passage on the north side of the northern plot. Within the excavated area there were parts of at least three buildings; two on the north plot and one on the south plot (see figure 5:3) (Ambrosiani 2013: 29; MacLeod 1998: 13).



BIRKA 1990 - 1995

Figure 5.3. Schematic plan over the buildings found during the 1990-1995 excavations at Birka. Based on MacLeod 1998: figure 2.

The southern building plot was not fully excavated, but three successive building phases were identified. They seem to primarily have had a domestic function, although finds indicate that there might have been some small-scale bead production in the earliest excavated phase. Some of the other finds suggest a relatively high status for the occupants of this building (MacLeod 1998: 16). They seem to have had strong eastern connections, possibly as merchants (Ambrosiani 2012: 9). Ambrosiani's first revision volume (2013) of the stratigraphy does not include this southern plot, and as a result it is at present not possible to tell if any keys, locks, or chest-parts were amongst the finds here.

The northern plot was fully excavated. The first phases consisted of the shore (Phase B0), followed by constructions on the shore (Phase B1): mainly the jetty. At the northern end of the jetty, towards the lake, there was also a layer of sludge (B114), containing many finds indicating ordinary occupation waste, metal working, etc. These were probably dumped and built up over a long period of time. A key-bit was found in this layer of waste-materials (Ambrosiani 2013: 39-41, 48, 54).

Between c. 790 and 860 (phases B2-5) the plot was occupied by a bronze foundry. However, the finds suggest a combination of domestic and manufacturing functions (Ambrosiani 2015: 125, 224; 2012: 9; MacLeod 1998: 16). The metal working seems to have been performed outdoors on the plot as many of the hearths seem to have been placed out in the open air. The workmanship in the bronze foundry is believed to have been at a very high level of technical knowledge, and there seems to have been a varied production. The workshop underwent several changes with buildings being erected and altered, creating a complicated stratigraphy (Ambrosiani 2012: 17; 2013: 72, 218, 238-240).

Evidence of casting activities was recovered in the form of large amounts of mould fragments, and pieces of crucibles and solder packages.⁴⁴ In the latter, parts of iron plates were joined together to make, for instance, padlocks (Ambrosiani 2013: 237). A large number of padlocks were produced in Ambrosiani's phase *B42*, ca 815-840, with c. 170 pieces of solder packages from padlock production scattered throughout context B446, and a large number of similar pieces in B426; both contexts are described as waste material in a yard (Ambrosiani 2013: 134, 141, 145, 225; 2015: 131).

44. Further analysis of the crucibles and solder packages is said to be forthcoming in "Stratigraphy Vol. 2" (Ambrosiani 2013: 238).

The layers to which the moulds were assigned are generally described as waste layers in connection with casting and workshop debris/waste (Ambrosiani 2013), which given the nature of the finds is rather expected. Amongst this material, forty-nine moulds for keys were identified. Eleven of these came from the backfill of Hjalmar Stolpe's trenches (*Sis*), but they should still derive from the nearby area. Although these moulds are not keys, they are still evidence of forty-nine keys that must have been produced here, and it is possible that some of the keys found on Björkö came from one of these moulds. The same can be said of the many solder packages for padlocks found here.

After some time, production in the workshop shifted towards oval brooches, and by the last phase (Ambrosiani's phase B5, c. 850s) production had changed to simpler forms of flat objects such as pendants and keys (Ambrosiani 2015: 131). One might however suspect that if keys were made, then so were the locks to which they belonged, just as the earlier padlocks must have been accompanied by matching keys.

The workshop seems to have ended in a fire, and the next phase (B6) is represented by destruction layers with large amounts of ash covering the whole of the northern plot (Ambrosiani 2015: 131; 2013: 13). This phase was not included in the first Stratigraphy volume, and it is therefore uncertain if any keys, locks, or chest-parts were recovered in these layers. The top layer was represented by the plough soil, indicating the later agricultural activities that took place in the Black Earth since the 11th century (Ambrosiani 2013: 11).

The keys, locks, and chests from the 1990-1995 excavations

The 1990-1995 excavations resulted in thirty keys being found (see table 5:4). Six were padlock keys; four made of iron, one of bronze, and one of iron and bronze. There were also six rotary keys; three made of iron and three made of bronze, two L-shaped lift-keys; one iron and one bronze, and four lift-keys made of iron. There were also twelve keys with an uncertain or unspecified type; ten made of iron and two made of bronze.

Table 5:4. *The keys found in the 1990-1995 excavations in the Black Earth, sorted into types.*

Key type	No.
Padlock key	6
Rotary key	6
L-shaped lift-key	2
Lift-key	4
Uncertain/not specified	12
Total No.	30

Twelve of the keys were recorded as having derived from the plough soil or Stolpe's backfilled trenches, and in eight cases there was no detailed information about find location in *SiS* or published elsewhere. The remaining ten keys were assigned to a layer within Ambrosiani's new stratigraphical sequence (see table 5:5) (Ambrosiani 2013: 54, 110, 117-119, 128, 134, 153, 156, 163, 167, 168, 189, 191).

Table 5:5. *The keys found in the 1990-1995 excavations in the Black Earth, assigned to layers/contexts based on Björn Ambrosiani's (2013) new stratigraphy, with key-type and material also included.*

Context	Key-type	Material
B114: Sludge deposits under jetty	Rotary key	Bronze
B279: Demolition material in drain	Rotary key	Bronze
B323: Casting and fire debris	Lift-key	Iron
B413a: Casting debris	Not specified	Bronze
B426: Waste layers with many solder packages	Key?	Iron
B466a: Casting floor with hearth	Key?	Iron
B505b: Waste material in ditch	L-shaped lift-key	Bronze
B514: Mixed waste layers	Uncertain type	Iron
B517: Waste layer	Key?	Iron
B543b: Remains of forge?	Padlock key	Iron

Twenty locks were also found in the 1990-1995 excavations (see table 5:6). Thirteen of them were padlocks or parts of padlocks; three of which were made of iron and bronze, and the rest of iron. Two iron lock-parts were probably from mounted locks on a chest or a door, and for five lock parts it could not be determined whether they belonged to loose or mounted locks.

Table 5:6. *The locks found in the 1990-1995 excavations in the Black Earth, sorted into types/parts.*

Lock type/part	No.
Padlock	13
Part for mounted lock	2
Uncertain	5
Total No.	20

Ten of the locks were found in the plough soil or Stolpe's backfilled trenches and must be considered as un-stratified, but still as coming from the immediate area. Seven locks were assigned to layers that do not have a description or information regarding find location in *SiS* or published elsewhere. The remaining three locks can however be assigned to Ambrosiani's stratigraphical sequence (see table 5:7) (Ambrosiani 2013: 128, 168, 191). Two of these layers also contained a key.

Table 5:7. *The locks found in the 1990-1995 excavations in the Black Earth, assigned to layers/contexts based on Björn Ambrosiani's (2013) new stratigraphy, with lock type and material also included.*

Context	Lock type	Material
B413a: Casting debris	Padlock	Iron
B517: Waste layer	Padlock	Iron & bronze
B547b: Waste material in passage	Padlock	Iron

To sum up, based on the description of the layers and phases in Ambrosiani 2013, most of the keys and locks were found in layers with waste material and were probably also refuse themselves. They also seem to have a clear connection with the metal working taking place in this area, with the moulds for keys and solder packages for padlocks strongly suggesting that they were produced there. Any closer dating of the objects does not seem possible given the mixed nature of the waste material, but if the dating of the foundry is correct, they were probably produced between 790 and 860.

In the 1990-1995 excavations some chest-fittings were also recovered (see table 5:8); two chest-mounts, one hinge-mount,⁴⁵ and a possible chest-handle. These were assigned to the 1 m-square and “unit” in which they were found, but there is no published information on what types of layers or features these belong to as they were not part of the first Stratigraphy volume (Ambrosiani 2013). It is therefore hard to interpret the chest-parts and how they may have been utilised. They may have been used for storing things in the metal workshop or perhaps in one of the buildings on the southern plot. It is also possible that a few chest-fittings were produced in the workshop: possibly even some chest-locks. It is not unlikely that the locksmith(s) on the northern plot manufacturing padlocks also had the skills to make mounted locks; two of the lock-parts found were for mounted locks, and so were some of the keys.

Table 5:8. *The chest-parts found in the 1990-1995 excavations in the Black Earth.*

Chest part	No.
Chest-mount	2
Hinge-mount	1
Chest-handle	1
Total No.	4

45. There were also two hinge mounts found during these excavations that were interpreted as probably modern (*Siz*), and they will therefore not be included in this study.

The production of keys and locks in the workshop seems to have been rather extensive, and it is possible that the production was meant both for the town population and for trading. Regardless, it points to a need to secure items, possibly rooms and buildings, and perhaps also people such as prisoners, thieves, or thralls. Other indications of securing or restraining people can be seen through two iron shackles found in the Black Earth, fitting the neck of a human, but none of the domestic animal species kept in the Viking Age (Gustafsson 2009). These shackles could have been fastened/secured with a padlock.

Items produced in the workshops and merchandise to be bought and traded with would probably also have needed secure storage and transport, and here the keys and locks, as well as chests, would have been convenient. As mentioned earlier, boats could also have been secured with padlocks together with a chain. Accordingly, considering the focus on manufacturing and trade at Birka, along with the movement of people in and out of the town, it is reasonable that there indeed was such a need for locks and keys, and probably also for chests.

Concluding remarks on the keys, locks, and chests found in the Black Earth

Along with some handed in stray finds, several keys, locks, and chest-parts have been uncovered during excavations conducted in the Black Earth over the years. All of the finds that can be assigned to a more specific context appear to derive from layers full of waste material, suggesting that the keys, locks, and chest-parts were themselves refuse by the time they were deposited. The other finds can only generally be assigned to the occupation layers of the town, where they would have been produced and/or used for secure storing and control of access. There are therefore no *in situ* finds that could give more specific information on how/where or by whom they may have been used, and no keys, locks, or chest-parts were found in, or were possible to connect with a specific building. However, the finds from the plot with the bronze foundry indicate that these were most likely waste from a locksmith operating there.

The locksmith is therefore the only role or social identity that can be firmly connected with keys and locks here. Another likely role is that of the merchant, who could have used a locked chest or padlock and chain to secure merchandise, and perhaps also a boat if travelling. Resident merchants with goods to trade could certainly also benefit from the security provided by a lock, either on a chest or door to a storeroom, for example. The same is true for any craftsperson keeping stock or raw materials. With many strangers presumably coming and going at Birka, keys, locks, and chests may likely also have been used by householders and housewives protecting their home and family, as well as any private or family property.

Besides several moulds and solder packages from the production of keys and locks, there were in total eighty-one keys, thirty-seven lock-parts – twenty-two of which were for padlocks and fifteen for mounted locks, and at least sixteen chest-parts. The most common material used was iron, with a few made from bronze or iron and bronze. As can be expected there were more keys and locks made from bronze from the bronze foundry plot. As described above, there was a variety of key and lock-types used and/or produced at Birka, perhaps hinting at different usage, or that they were produced by different locksmiths, or came via different trading routes. However, these rather significant numbers of keys and locks that survived in the soil all point to a need or demand for locking amongst the population and visitors of Birka.

Keys, locks, and chests found in the Garrison area

In this section, the keys, locks, and chest-parts from the Garrison area, and the contexts in which these were found, are presented along with some information on how they were investigated. The hope has been that these contexts could provide some clues regarding how keys, locks, and chests were used within the Garrison area and perhaps by which types of individuals.

As with the Black Earth material, some of the earliest finds of keys, locks, and chest-parts cannot be tied to a specific context; namely the finds from Hjalmar Stolpe's and Holger Arbman's excavations in the

late 1800s and the 1930s. These can only generally be connected with activities in the area. The more modern excavations performed in the late 1990s and early 2000s provided better opportunities for tying some of the keys, locks, and chest-parts to specific contexts and these are described below. Because of some source critical issues, it has been necessary to sometimes include rather detailed descriptions of these contexts. Furthermore, one of the areas, Terrace I, contained a larger number of keys, locks, and chest-parts than the other areas, and it has been subject to more study and analysis in previous research. The section dealing with Terrace I is consequently more extensive.

The hillfort Borg

The hillfort *Borg* is located south of the Black Earth on the highest point of Northern Björkö, c. 30 meters above sea level (see figure 5:1). It consists of a crescent shaped rampart constructed with soil, stone, and wood. There also appears to have been some form of wooden parapets on top of the rampart. The rampart was roughly 350 meters long, 8-15 meters wide, and 1.5-3 meters high, with three openings. The west side facing the water was left open, but constitutes very steep exposed bedrock (Fennö Muyingo 1998: 3, 5).

Parts of the area within the rampart were investigated in the 1880s by Hjalmar Stolpe, who excavated eight cremation graves. One of these (Bj 462) contained a bronze rotary key (Fennö Muyingo 1998: 3; Arbman 1943: 127-131).

A section through the rampart was excavated in 1996-1997, revealing that the rampart had several phases, and appears to have first been constructed at the same time as the foundation of the town. Integrated into the rampart was an earlier grave, 1997:1 which contained the burial of a man, a horse, and a small box or chest amongst the grave goods (Fennö Muyingo 2000: 3, 8). This grave is described in more detail in a later section.

The oldest phase of the rampart showed evidence of having burned at least once; ¹⁴C-dating shows that the oldest rampart burned down towards the end of the 8th century or at the beginning of the 9th. In a later phase it was rebuilt and made taller and more robust. This rampart was

also burned at least twice and was subsequently never re-built. ¹⁴C-dating has given two main dating intervals; 9th-10th century and 950-1020 CE (Fennö Muyingo 2000: 11).

In 1998-1999 a small excavation was carried out in the northern part of the Borg area, revealing a stone-setting and four cremation layers. There was nothing in the small trench that indicated that the area had been used for settlement, storage, or anything similar (Hedenstierna-Jonson 2000: 2, 5-6, 8). Further investigations would be required to find out more about possible activities within the hillfort.

The Garrison area

On the north-west side of the hillfort there is an area that has become known as *the Garrison* (Adelsö 173, previously Adelsö 35). It was situated outside the NW opening in the hillfort rampart and delimited in the north and north-east by the grave field *Norr om Borg*. The Garrison area consists of three stone-set terraces on a NE-SW slope leading south down to the lakeside – Terrace 0, I and III – and a more level area towards the north – Terrace II (see figure 5:4). The terraces on the slope are enclosed by a rampart or embankment that is believed to have had a wooden structure on top, and it was also protected by rock cliffs to the northeast (Hedenstierna-Jonson 2006: 51; Bergström 2013: 11).

Terrace I is a built-up plateau measuring c. 23.5 x 11 meters. Further down the slope is Terrace 0, which is c. 22 x 12 meters (Holmquist Olausson & Kitzler Åhfeldt 2002: 3). North of/above Terrace I is Terrace II, at least 17 x 22 meters, although its full extent was not established. It was built up with large stones on the south/south-east side, but since it is situated on rather flat land, the northern part is not terraced. East of Terrace I and II, right next to the hillfort, is Terrace III, measuring roughly 7 x 18 meters (Bergström 2013: 11, 21, 58) (see figure 5:4).

On terraces I, II and III, the remains of at least eleven buildings belonging to several phases between the middle of the 9th century and the second half of the 10th century were uncovered. The stone foundation of a possible jetty was also found by the shore (Bergström 2013:75; 2015: 45), probably related to the Garrison area and/or the hillfort.

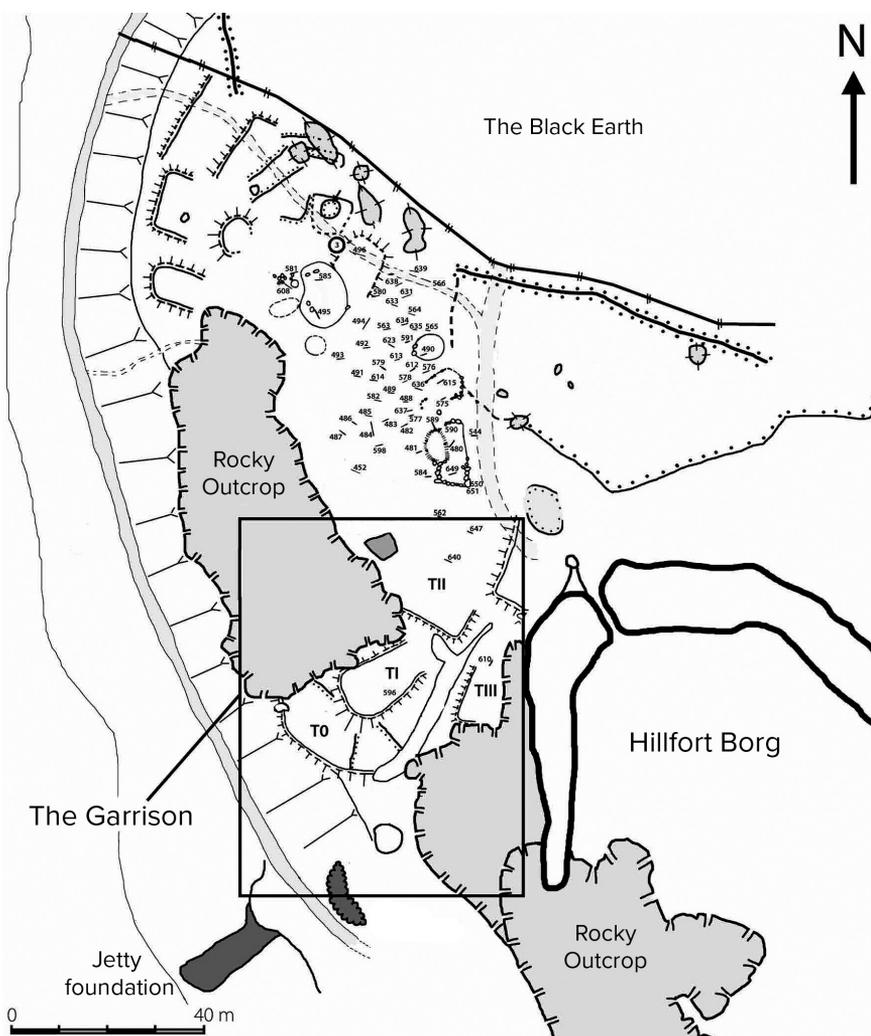


Figure 5:4. Schematic plan over the area south of the Black Earth, by the hillfort Borg, showing the location of the Garrison area and the terraces. After map in Bergström 2013: Figure 3, based on map by Michael Olausson and Laila Kitzler Åhfeldt in Holmquist Olausson & Kitzler Åhfeldt 2002: figure 2, used with permission.

North-west of the grave field *Norr om Borg* there are additional terraces (Adelsö 194, 200, 201) (see figure 5:4). These have not been investigated (see *Fornsök*), but in the future it would be highly interesting to examine if/how they relate to the Garrison, the house terraces up by the town rampart, and the town area below.

The Garrison area has never been utilised for agriculture, and no buildings were constructed there in historic times, providing good preservation conditions for the archaeological remains. It has however been used for pasture at times, and a path was laid out in the slope of the area for tourists visiting Birka, causing some damage to the ground (Bergström 2013: 12, 17).

Parts of the Garrison area were investigated in 1877 by Hjalmar Stolpe and his team as they were searching for graves. Five trenches were dug: Bj 562, Bj 596, Bj 610, Bj 640 and Bj 647. In 1934 Holger Arbman conducted investigations in the area in order to determine its function and possible connection with the hillfort. In 1997, as the damage to the ground caused by tourists utilising the path increased, a part rescue/part research excavation was initiated. Between 1997 and 2004 the Archaeological research laboratory at Stockholm University, led by Lena Holmquist, carried out excavations in the area (Bergström 2013: 9, 14, 16-17).

Some of the results from the aforementioned investigations, and accounts of the keys, locks, and chest-parts uncovered, along with the contexts in which they were found, are further described below, terrace by terrace beginning at the highest elevation and moving downwards. The keys, locks, and chest-parts are listed in Appendix 1 and 2.

Excavations on Terrace II

The first excavations carried out on Terrace II were led by Hjalmar Stolpe, who dug a feature that was interpreted as a grave, Bj 562; this interpretation is however uncertain. Since many of the graves in the area previously dug by Stolpe and his team did not have any visible structures above ground, the excavations were done at somewhat random locations (Bergström 2013: 14). It is not impossible that Bj 562 was just a trench as there was no sign of a burial, and from the grave-plan the walls form a perhaps too perfect rectangle. Additionally, nearly all the finds came from the top layers; including a padlock that was found together with a padlock key (Bergström 2013: 14; *Sis*). In this study, Bj 562 has not been counted amongst the graves.

Stolpe also excavated Bj 640 and Bj 647 on Terrace II. Neither of them seem to have contained any traces of burials. Finds were only recovered from Bj 647, but no keys, locks, or chest-parts were among them (Bergström 2013: 15).

Between 2001 and 2004, an area of approximately 239 m² was excavated on Terrace II. The investigations showed that the terrace was re-built or mended several times making it hard to establish its relationship with the various features and buildings here. From the arrangements of layers, postholes, gullies, and stone concentrations, five definite houses were identified, but there were several more postholes without a clear, interpretable structure (Bergström 2013: 9, 25, 27).

The remains of four of the buildings consisted of postholes, and in two cases also gullies. These were probably the foundations of framework houses similar to other Viking Age houses from urban settlements like Hedeby and Dorestad, as well as those found in the Black Earth. House II:3 was interpreted as a framework house resting on a stone foundation. (Bergström 2013: 29, 32, 35, 40, 41, 135; 2015: 46). Even though the terrace offered sufficient space to build on, unlike Terrace I and III, all of the identified buildings on Terrace II overlaid each other, suggesting a continued use of the layout, even though the alignment of the buildings differed (see figure 5:5). The different floor layers in the successive buildings were also reused throughout the different house phases (Bergström 2013: 33; 2015: 46). This makes it more difficult to determine which finds and features belong to which building phase.

The interpretation of the building phases suggests that House II:5 was the oldest, followed by House II:2, then House II:1, followed by House II:3 and finally House II:4. The building phases, perhaps with the exception of House II:5, were all interpreted as belonging to the later Birka period from around the middle of the 9th century to the second half of the 10th century. This means that the phases were probably around 10-20 years each (Bergström 2013: 148-149).

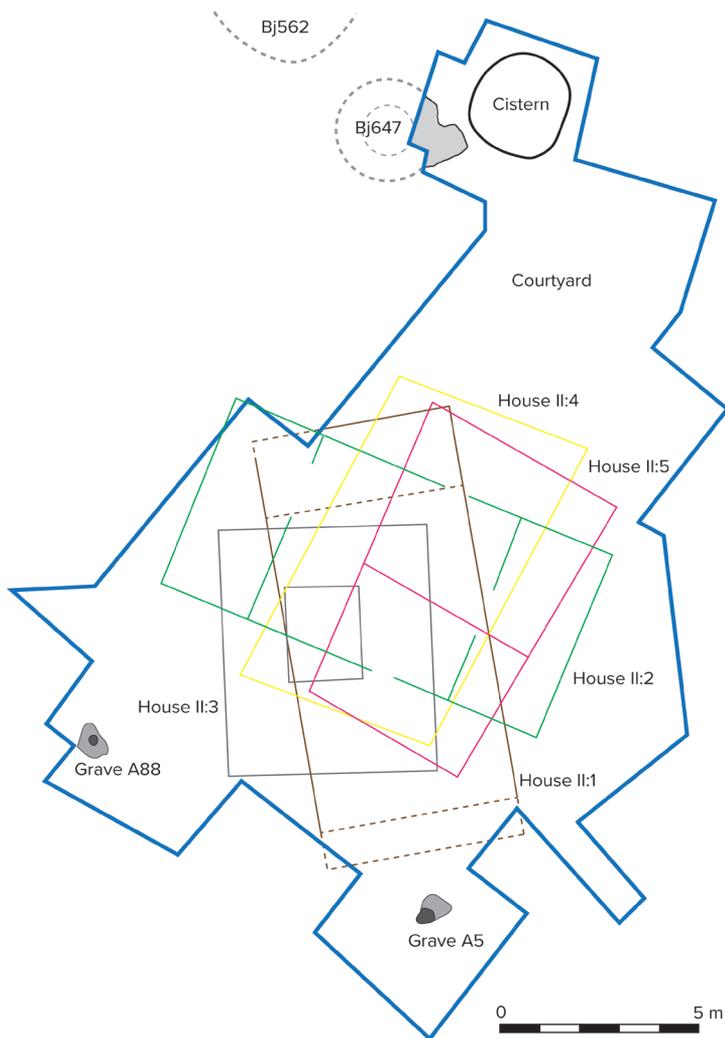


Figure 5.5. Schematic plan of the structures on Terrace II. After Bergström 2013: Figure 141, used with permission.

The function of House II:5 is undetermined, but it does not appear to have had a fireplace. The bowl from a set of scales was uncovered, possibly deliberately deposited in a posthole (Bergström 2013: 42), but either way it suggests possible trading activities or people involved in trade on Terrace II.

House II:2 was interpreted as a dwelling house/workshop. No fireplace could be assigned to this building phase. The finds included an almost complete oriental belt, found in a compacted floor/roof layer (Bergström 2013: 32-34). It suggests that the building may partly have been used for storing dress accessories and possibly also items of clothing.

The majority of all the loom weights found on Terrace II were found in House II:1; indicating that weaving, and possibly other textile related crafts, took place here. A fireplace, located towards the western long wall, was identified in this house phase (Bergström 2013:31).

House II:3 was interpreted as a smithy/workshop. The remains of a hearth platform were found in the centre of the house. Three pits interpreted as the foundations for anvil blocks were also uncovered. The finds include large numbers of waste from blacksmith activities, including solder packages and a few blacksmith tools. The stratigraphy suggests that it was used during the middle or second half of the 10th century (Bergström 2013: 35-39, 138). Some of the solder packages resemble solder packages for padlocks. Two of them (F13313a, and F13313b) had specific imprints that could clearly be connected with the padlock types found in the area. These were found in one of the foundation pits for anvil blocks, and their presence suggests the production of padlocks in the smithy (Bergström 2013: 39, 187; Gustavsson 2005: 21). A further such piece (F13511) was found in the topsoil on Terrace II, north of the building next to what is interpreted as a refuse dump from the smithy (Bergström 2013: 21, 35 (fig. 29), 38, 388; Gustavsson 2005: 21). Consequently, it seems likely that it originated from House II:3.

House II:4 was interpreted as a storage house or larder; however, no finds could be connected to this building phase and no date could be established. No fireplace could be associated to this building (Bergström 2013: 40).

An area with stone packing, interpreted as a courtyard, was uncovered just north of the houses. It connected with the northern long-side of House II:2 at the same level as its floor and was most likely contemporary with this building (Bergström 2013: 43).

North of this courtyard was a well or cistern, 2.5 m deep. In the fill there were several horizons of charcoal that were interpreted as remains of fires in the area. Seemingly after a large fire, the well/cistern

was filled in with large stones and, in a final phase, the remaining hole was filled with material which appears to have come from House II:3 – the smithy (Bergström 2013: 51, 54).

The keys, locks, and chests on Terrace II

There was a key in the top fill of the cistern (L2), and a padlock was found in one of the lower fills (L72). There also appears to have been a key found during the initial cleaning of the feature (Bergström 2013: 461-501). These were most likely part of the waste materials deposited in the cistern, and probably derive from the smithy. A more symbolic interpretation of the padlock was proposed by Hedenstierna-Jonson (Hedenstierna-Jonson 2015: 80), who suggested that the lock was placed on top of the cistern – intentionally destroyed in connection with an attack on the hall-building on Terrace I (see below) – to signal that the cistern was out of use. However, this does not fit the archaeological evidence as presented in the excavation report where the lock was assigned to one of the lower fills.

There were also several other keys and locks found on Terrace II. Fourteen locks or parts of locks were found, all or most of them belonging to padlocks, and all made of iron except for one bronze lock (Bergström 2013: 84, 261-501). To this should be added the previously mentioned padlock in the upper layers of Bj 562, excavated by Stolpe's team. The majority of the locks from Terrace II were found in the upper layers; L1, L2, and L2B. One lock was assigned as generally being from Terrace II (Bergström 2013: 261-501).

L1, which contained three locks, was interpreted as topsoil, covering the whole excavation area and containing most categories of finds (Bergström 2013: 169).

Below L1 was layer L2, interpreted as an upper cultural layer covering most of the western part of the excavation area. Besides four lock-parts, it contained several objects suggesting ordinary occupation activities, crafting, textile working, metal working, trading, personal grooming and adornment, religious/cultic activities, as well as game playing (Bergström 2013: 169). The latter suggests the presence of individuals with time to spend on entertainment. However, gaming boards and pieces from Late Iron Age and Viking Age Scandinavian funerary contexts were

also suggested to be associated with high status, prestige, and/or chiefly intelligence, military skill, and authority (Whittaker 2006). If transferred to a settlement context, the presence of items indicating game playing on Terrace II could point to the existence of high-status individuals here, perhaps in some position of authority, possibly with a military connection. The latter would fit the interpretation of the area as a Garrison.

Layer L2B, containing one possible lock-part, was also interpreted as an upper cultural layer, but covers the northern half of the excavated area. It contained items indicating roughly the same types of activities as L2, but also a gold ring suggesting some wealth or possibly high-status occupants in the area (Bergström 2013: 169, 481).

One lock was found in connection with feature A14, interpreted as part of the hearth platform in House II:3 (Bergström 2013: 39, 183). This is a further indication of lock manufacturing.

Another lock was found in posthole A164, inside a gully which was part of the northern long-wall of House II:2. There was also a possible lock-part from layer L51, interpreted as part of the eastern short end wall in the same building (Bergström 2013: 173, 196). It is difficult to tell if these objects belong to the activities that took place in this building or if they belonged to debris of the previous House II:5, from the destruction of House II:2, or from subsequent building phases.

None of the locks seem to indicate that they were in use where they were uncovered, and should probably be regarded as waste. Some of them could also have been used and discarded or lost, perhaps in connection with one of the fires.

Table 5:9. *The locks from Terrace II and the contexts in which they were found.*

Context	Padlock	Mounted lock	Padlock?	Total No.
Stolpe's Bj 562, upper layers	1			1
Terrace II, not specified			1	1
Cistern A200, L72			1	1
Posthole A164, House II:2			1	1
A14, House II:3/smithy			1	1
L1: top soil	1		2	3
L2: upper cultural layer			4	4
L2B: upper cultural layer			1	1
L51, part of wall, House II:2			1	1
Total No.	2	0	12	14

Additionally, eight keys were found on Terrace II, including those in the cistern and the key in Bj 562. A rotary key and a padlock key were found in Layer L2, described above, and there was also one unspecified key that lacks a precise location (Bergström 2013: 86, 261-501).

One key was found in layer L14, interpreted as trampled down fire debris from the western part, roof, and walls of House II:2. Besides the key, this layer also contained items indicating ordinary occupation activities, crafting, textile working, personal adornment, game playing, and hunting/weaponry. It also contained the previously mentioned oriental belt (Bergström 2013: 34, 196). The key itself was not described so it is unclear which type it is, but the find circumstances suggest that it might be associated with the period of use of House II:2, or possibly House II:1 which was built on top of the debris of House II:2. It is tempting to think that the key could have been attached and hung from the belt, but this can not be proven. The collapse of the house after a fire could, either way, probably explain why the items were not recovered.

One padlock key was found in layer L50. It was interpreted as an upper cultural layer in the north-east corner of the excavation trench. The other finds in the layer included items indicating ordinary occupation activities and some crafting (Bergström 2013: 173).

Except for the key found in layer L14 in House II:2, the keys from Terrace II seem to be discarded objects, some possibly associated with production in the smithy/House II:3.

Table 5:10. *The keys from Terrace II and the contexts in which they were found.*

Context	Padlock key	Rotary key	Unspecified	Total No.
Stolpe's Bj 562, upper layers	1			1
Terrace II, not specified			1	1
Cistern A200: waste from smithy	1		1	2
L2: upper cultural layer	1	1		2
L14, House II:2: building debris			1	1
L50: upper cultural layer	1			1
Total No.	4	1	3	8

There are only a few objects that were identified as chest-parts on Terrace II. One object described as a chest-nail was found in topsoil layer L1 and does not provide much information about how or where it was used (Bergström 2013: 337).

Another object interpreted as a chest-mount was found in connection with a stone packing (A4) that was part of the construction of the hearth platform in the smithy/House II:3. It was described as very rich in finds, including parts of loom-weights, nails, and rivets. There was also a patch in this area said to contain studs and chest-mounts (Bergström 2013: 181-182, 285). It is quite possible that this could be the remains of a burned chest that once stood there, perhaps at one time containing workshop products, materials, and/or tools used in the smithy. It might also itself be a product of the workshop, or at least its metal fittings.

Table 5:11. *The chest parts from Terrace II and the contexts in which they were found.*

Context	Chest part
L1: top soil	Chest-nail
A4, stone packing, House II:3/smithy	Chest-mount
In connection with House II:3/smithy	Studs and chest-mounts

Excavations on Terrace III

Hjalmar Stolpe and his team were the first to conduct any excavations on Terrace III, however, their two pits referred to as Bj 610 contained neither a burial nor finds (Bergström 2013: 15).

An area of approximately 60 m² was excavated on Terrace III in 2001 and 2004. Within the area the remains of three houses were uncovered, but not fully excavated. It was suggested that they were used for storage or lodging, and both House III:1 and House III:3 had construction details indicating that they may have had an upper floor (Bergström 2015: 50, 57, 59).

The latest house, House III:1, was described as a framework house on a stone sill foundation with a centrally placed fireplace. Not many finds could be linked to this house, but it did contain a shield boss and some glass beads (Bergström 2013: 57, 59, 61-64, 135). The structure type for House III:2 was undetermined. The finds from this building included a bead, a weight, and a coin dating to 844-869 CE: the latter

two indicate some connection with trade. House III:3 was interpreted as a framework house, but no finds could be linked to its use (Bergström 2013:65-67, 69). There were no finds of keys, locks, or chest-parts from Terrace III (Bergström 2013).

Excavations on Terrace I and in the Hall-building

The first excavations carried out on Terrace I were led by Hjalmar Stolpe. He and his team dug seven small trenches and pits that were gathered under the name Bj 596. Approximately thirty small stake holes were uncovered at the bottom of a hard-packed layer with traces of fire. Stolpe believed this might be the place where the people of Birka cremated their dead, and it came to be known as the “Corpse-burning site” or *Likebränningsplatsen* in Swedish (Bergström 2013: 14-15).

The finds from Bj 596 included parts of lamellae armour, various weapon parts, dress accessories, mounts, various tools, as well as seven locks or lock-parts, and five keys. There were also two find entries of iron chest-mounts; one mount with rivets, and one described as fragments of two chest-mounts – three chest-mounts in total (Bergström 2013: 15; *Sis*).

During Holger Arbman’s investigations in 1934 a long trench was dug across Terrace I and 0. Two cross-trenches and an extension were also dug on Terrace I. The finds were extensive and included several parts of weapons and armour. From this, Arbman concluded that the area had been populated primarily by men and that these were the remains of a garrison (Bergström 2013: 16). Amongst the finds on Terrace I there were also six locks or parts of locks, as well as four keys (*Sis*). One of the keys was found in a “large pit”, later interpreted as a posthole (see below).

Excavations by the Archaeological research laboratory at Stockholm University, with researchers and students led by Lena Holmquist, were carried out on Terrace I in the summer months of 1998-2000, beginning with a trench across the middle of the terrace in 1998. The excavation methods seem to have been more systematic than the previous excavations conducted by Stolpe and Arbman. The soil was excavated layer by layer with a trowel, except for the top layer (L2) which

was excavated in spits. The layers were excavated as units and features, and the finds were assigned to these. The majority of the identifiable finds were measured in with a total station, while other finds such as burnt clay and bone were collected in 1 m squares for each layer or feature (Hedenstierna-Jonson et al. 1998; Holmquist Olausson & Kitzler Åhfeldt 2002: 5, 7, 35). It would therefore seem that the area was largely dug in 1m squares.

On Terrace I the remains of three building phases were uncovered, amongst which were some of Stolpe's pits and parts of Arbman's trenches from the previous investigations. Underneath the terrace there was also a phase with building remains earlier than the construction of the terrace (Bergström 2013: 13, 17; 2015: 45-46). The two oldest buildings on the terrace were interpreted as framework houses, and the last phase was represented by a three-aisled longhouse, approximately 10 x 20 meters, covering an area of about 170m² (Bergström 2015: 45; Holmquist Olausson & Kitzler Åhfeldt 2002: 9). This later building was interpreted as a hall or gathering place of the warriors protecting Birka due to the many parts of weapons and armour found in the building (Hedenstierna-Jonson 2006: 51; Holmquist Olausson & Kitzler Åhfeldt 2002: 23). Several keys, locks, and a few chest-parts were also found, as will be further described below.

The three-aisled building or hall on Terrace I had a strategic location blocking the path from the water up towards the hillfort (Hedenstierna-Jonson 2006: 51). It was placed at the narrowest location between the rock and the hillfort. The structures on the slope were interpreted as part of the fortification, as a form of barbican or *förborg* in Swedish (Bergström 2015: 55), perhaps with the three-aisled building functioning as a gatehouse. The building might also have served as an armoury and/or a place where weapons could be handed in before armed visitors were granted entry to the town.

The building is said to have been placed high up making it visible for anyone travelling by ship near Björkö (Holmquist 2001: 13), however its location on the slope between the rock and the hillfort, and the parapets on Terrace 0, made it somewhat hidden (as well as protected). Further, it was the short end of the building that faced the water. Perhaps the monumentality of the building was rather meant to be manifested as people came up the slope towards the hillfort and Garrison area.

The two successive framework houses underneath the three-ailed building were not identified in the initial excavation report (Holmquist Olausson & Kitzler Åhfeldt 2002), but only in a later re-analysis of the documentation (Bergström 2015). They appear to have been in use for about 10-20 years each and follow the pattern of other Viking Age one-ailed houses as well as those found in the Black Earth (Bergström 2015: 46-47). Since they were not included in the excavation report the descriptions of the layers and finds do not take these into account. Consequently, based on the available information it is not possible to tell if any of the keys, locks, or chest-parts belonged to activities in any of the framework houses, and as such they are not further described here.

The three-ailed building (see figure 5:6) was aligned NE-SW and had arched convex walls. It had an underbalanced construction with three pairs of roof bearing posts, and the walls were constructed with closely placed posts with a stone-lined gully running around the building. The gully also contained postholes on the western side. These were probably the remains of an outer stave-built wall on the eastern long-wall. The double walls, as well as double posts in the corners of the building, suggest that the weight of the roof was primarily placed on the walls (Bergström 2015: 50; Holmquist Olausson & Kitzler Åhfeldt 2002: 21-22, 48).

The building is said to have had two entrances on the southern long-side that each led in to a separate section of the house (Holmquist Olausson & Kitzler Åhfeldt 2002: 21). However, the southernmost entrance was located exactly where one of Arbmans's trenches was dug across the wall of the house. This makes the interpretation of a second entrance here somewhat uncertain (see figure 5:6).

The two sections in the house were only identified through the spread and composition of the finds within the house, and through phosphate-mapping which showed lower values in the western part and high values in the north-east corner. There were no remains of any structural divisions such as a wall (Holmquist Olausson & Kitzler Åhfeldt 2002: 21; Bengtson 2001: 23). Stolpe's and Arbman's excavations did however make it more difficult to interpret the inner structure of the house.⁴⁶

46. The rather extensive disturbances caused by the previous exvavations generally seem to be overlooked when interpreting find-distribution, phosphate mapping, and the interpreted plan of the building.

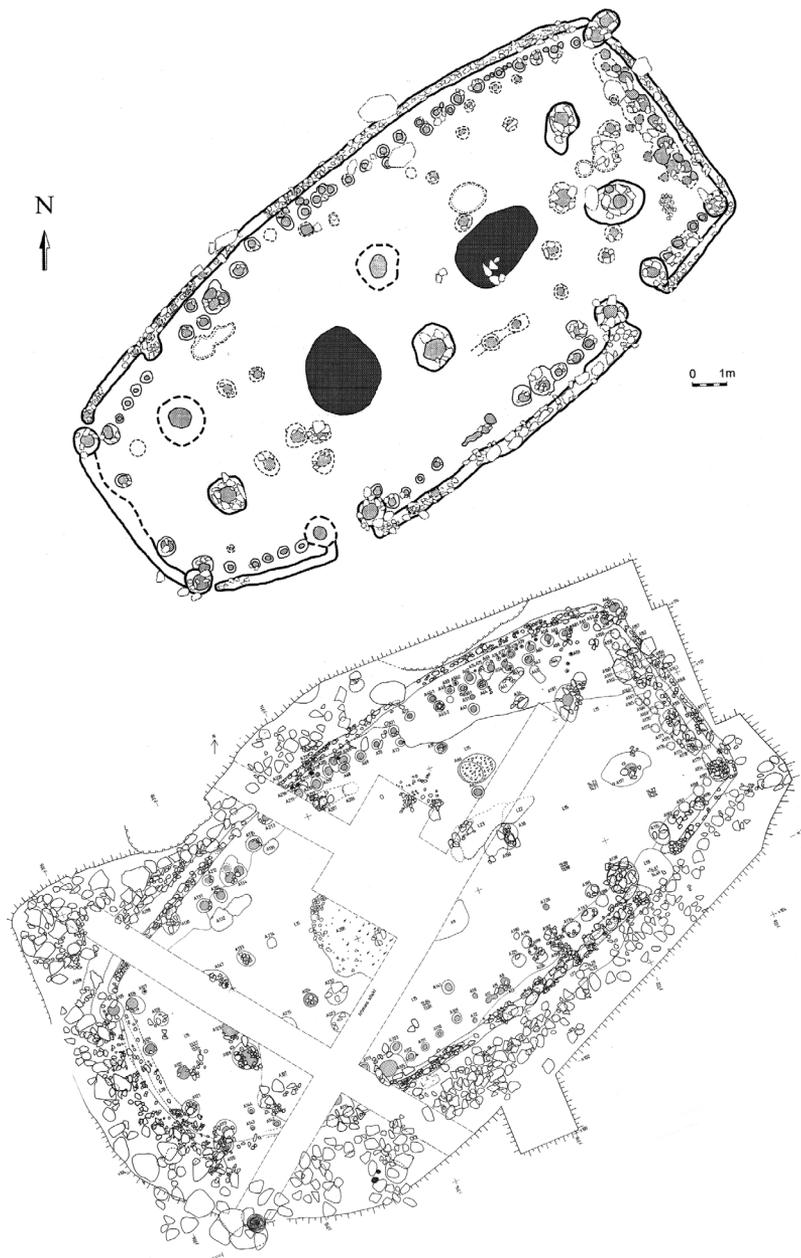


Figure 5.6. *Top: Interpreted plan of the hall building, drawing by Franciska Sieurin-Lönnqvist, based on plan by Michael Olausson (from Holmquist Olausson & Kitzler Åbfeldt 2002: Figure 7). Bottom: Excavation plan, re-drawn by Laila Kitzler Åbfeldt (from Holmquist Olausson & Kitzler Åbfeldt 2002: Plan 3). Used with permission.*

Each section of the house is described as having had a fireplace; the one in the western part was interpreted as having been used only as a source of light and heat, while the one in the eastern part contained a lot of bone and is believed to have been used for cooking and eating (Holmquist Olausson & Kitzler Åhfeldt 2002: 21). Unfortunately, both hearths seem to have been disturbed by the previous investigations by Stolpe and Arbman, and only the lowest part remained of the westernmost hearth. The fill did contain some burned and un-burned bone, but seemingly not as much as in the eastern hearth (Holmquist Olausson & Kitzler Åhfeldt 2002: 13, 38, 72). Even so, based on the above it is problematic to suggest that it was only used for light and heat. Further, it is not made clear if the two hearths were contemporary, or to which of the building phases they belonged.

Fireplaces used solely for light and heat are sometimes associated with hall buildings, together with having a limited number of large roof-supporting posts to create a larger space inside. Based on the main building characteristics, the Garrison building was also said to have similarities with older Migration and Vendel Period hall-buildings in the Swedish provinces Uppland and Södermanland. The Garrison building is therefore considered to have some construction details that are usually associated with hall-buildings (Holmquist Olausson & Kitzler Åhfeldt 2002: 22), perhaps with some reservation concerning the fireplaces.

The building was dated through the finds to the second half of the 10th century and is said to have been in use for about fifty years (Holmquist Olausson & Kitzler Åhfeldt 2002: 23). However, this interpretation does not take into account the earlier framework houses and consequently that some finds probably belong to the use of these. Nevertheless, the activities seem to have come to an end in the late 10th century. It has been suggested that this was the result of an attack; the charcoal and soot rich layers in and around the last building on Terrace I are said to suggest that it was burnt down, and the nature and distribution of the finds are said to show that there was fierce fighting in the area (Holmquist 2010: 200; Hedenstierna-Jonson 2006: 69). The battlements of the rampart on Terrace 0 (see below) were furthermore burnt down at least twice and perhaps one of these instances corresponds with the same incident (Hedenstierna-Jonson et al. 1998: 8-9; Hedenstierna-Jonson 2006: 69).

If there was an attack, then it is curious that so much of the material was left on the site and not scavenged after the battle. One theory is

that the battleground was transformed into a sacred ground and that there was a taboo against disturbing it (Hedenstierna-Jonson 2006: 69). Lena Holmquist believes that the site was left “frozen in time” after its destruction (Holmquist 2010: 200). Charlotte Hedenstierna-Jonson on the other hand believes that the site was indeed scavenged to some extent and that only a small part was left, consisting of broken bits and objects that were too small to find in the debris. The casualties must have been removed and buried elsewhere since no skeletal remains were found. The weapons that were left behind could have belonged to either the warriors from the Garrison or to the attackers, according to this scenario (Hedenstierna-Jonson 2006: 69).

Nevertheless, a situation where the building was left almost intact after an attack does not seem likely if looking at the rest of the Garrison area and the activities taking place after the building was destroyed/taken out of use. One building on Terrace II (House II:4) and one on Terrace III (House III:1) were constructed after this event. The hillfort rampart, with ¹⁴C dates indicating 950-1020 CE also suggests a rebuilding phase around that time (Bergström 2015: 46; Fennö Muyingo 2000: 11). If people were still active within the Garrison area, it is not likely that the remains of the hall were left untouched; especially if the path down to the jetty was still in use. As will be described further below, material that likely came from Terrace II covered parts of the north-east end of Terrace I, and a layer interpreted as a demolition layer covered the whole terrace surface, indicating that some levelling of the surface could have taken place.

Further, one cannot rule out that the fire that destroyed the building was an accident. As such it might still have caused some trauma. The site could also have been deliberately destroyed by residents who for some reason did not wish to, or could not, continue their activities there. Burning the building down might also have been a way to prevent others using it, or a way to bring closure. Objects left behind might still be due to a taboo of disturbing the site after the fire, or perhaps because the objects were so tightly linked to the activities there that they simply could not be removed for use elsewhere. They may also have been considered too damaged or out of date to be worth recovering in the debris. The presence of weapons cannot be used as evidence of an attack since it appears as though weapons were stored or kept in the building. There seems to be several possible scenarios, and hopefully future studies can shed some more light.

The location of the keys, locks, and chests

In this section, the features and layers containing keys, locks, or chest-parts from Terrace I are described in short. Further details and information on the other features and layers can be found in the excavation report (Holmquist Olausson & Kitzler Åhfeldt 2002). Unfortunately, the report does not provide a stratigraphical matrix, so there are some uncertainties as to how some of the layers relate to one another. The previously mentioned re-analysis that discovered two framework houses also suggests possible errors in the report.

Beginning with the features; three padlocks were uncovered in the stone-lined gully (A7) running around the building (Holmquist Olausson & Kitzler Åhfeldt 2002: 145, 168; Karlsson 2008: 80). There were also several other kinds of finds including pieces of weapons and armour, objects indicating ordinary occupation activities, crafting, metal working, and trade uncovered here (Holmquist Olausson & Kitzler Åhfeldt 2002: 50). On the outside of this gully, on the northern side of the building, there was another gully (A11a) (probably part of the stone-lined drainage ditch A298) that also contained a lock-part (Hedenstierna-Jonson et al. 1998: 31; Holmquist Olausson & Kitzler Åhfeldt 2002: 13).

Another gully, or possibly a waste gutter (A33:1) was discovered outside the southern longwall. Amongst several finds were a padlock and a key. It also contained a gold ring (Holmquist Olausson & Kitzler Åhfeldt 2002: 13, 52-53). In a small trench across the gutter (A294), a bit further up on the terrace near the eastern entrance of the house, another lock was found in the lower fills, along with an iron bell, a gilded book mount, and some ordinary occupation waste (Bergström 2013: 72). The two gold items suggest the presence of high-status individuals in the Garrison area. The book-mount might also point to the presence of literate individuals.

One of the holes for a roof bearing post (A14), identified as the “large pit” excavated by Arbman, contained a key. The other posthole in this pair, A9, contained a possible lock-part. These two made up the central posthole pair of the building (Holmquist Olausson & Kitzler Åhfeldt 2002: 13, 96; *SiS*).

Posthole A9 was interpreted as containing a ritual deposit consisting of fragments from approximately forty empty antler/bone comb-cases

and two spearheads, it also contained a lock-part and some other items (Holmquist Olausson & Kitzler Åhfeldt 2002: 97; Kitzler 2000: 15). It was suggested that the comb-cases could represent the individual warriors residing in the Garrison area, while the spearheads might represent the warrior group. The spearheads could be interpreted as symbols of Odin, the warrior god, and the comb-cases were said to be part of the warrior's equipment where each warrior wore a decorated belt from which several objects were hung, including a comb (Kitzler 2000: 15; Holmquist-Olausson 2001: 15; Stjerna 2001:39; Hedenstierna-Jonson 2006: 64, see also Hedenstierna-Jonson 2013: 77). The interpretation of the other objects in the deposit remains unclear, including the possible meaning of the lock in this context. Like many of the objects in the deposit it was broken, perhaps symbolising something being opened for good, or the end to someone's exclusive access. It could also be that many of these objects were just waste or debris; part of the material used to fill the pit and support the post, or material filled in if/when the post was removed.

Within the building there was also a small area with a group of objects that was interpreted as objects that were once stored inside a chest. The objects lay within a shallow depression (A36), c. 0.3 x 0.4 m, filled with what is described as darker material against the surrounding sand. The objects consisted of a spearhead, a weapon knife, two knives, burnt bone, daub, a rivet, and a padlock (Holmquist Olausson & Kitzler Åhfeldt 2002: 53, 953, 107; Karlsson 2008: 38 (fig. 49)). The location places it in the wall line near the north-east corner of the house, making it unlikely to be the *in situ* location of a chest. There were also no chest fittings found in association with the feature. It would therefore seem more likely that the shallow depression was the base of a posthole, and the objects were either intentionally placed within it – similarly to posthole A9 – or used as packing material. It is also possible that the objects were part of the collapsed wall material and finds in layer L10 which were present in this area, a theory that is strengthened by the presence of daub (Holmquist Olausson & Kitzler Åhfeldt 2002: 8 (fig. 5), 33 (Plan 2), 34 (Plan 3), 53).

Continuing with the layers; the top layer on Terrace I, L1, was described as mainly topsoil, followed by layer L2, which was interpreted as a demolition layer. Layer L2 contained two padlocks and three keys. The other finds in this layer were of various kinds, indicating ordinary

occupation activities, crafting, metal working, textile working, trade, winter travelling, personal grooming, and adornment, as well as warfare/combat. There were also a few fragments from bronze and glass vessels suggesting some high-status drinking/banqueting (Holmquist Olausson & Kitzler Åhfeldt 2002: 108, 121, 91-176).

A concentration of stones was uncovered underneath layer L2, in the northeast corner of the terrace. These were interpreted as having fallen down from Terrace II (Holmquist Olausson & Kitzler Åhfeldt 2002: 9-10). If Layer L2 was indeed a demolition layer on top of these stones, and the stones did come from Terrace II, it suggests that some of the demolition material and finds might also have come from the terrace above. For the present study this is important because of the locks and keys found in L2.

In general, L2 was very rich in finds, primarily along the walls of the building, and particularly in the eastern part of the terrace. There was also a distinct concentration of finds by the northern long-wall in the north-east corner (Holmquist Olausson & Kitzler Åhfeldt 2002: 15; 35). This was near the stones from Terrace II, and consequently many of these finds could have come from the terrace above.

Between these stones there was a dark humus rich layer (L6) which was also covered by L2, but seems to have been partly disturbed by Arbman's trench. One ornate bronze key handle was listed as possibly having come from this layer. However, according to the find catalogue it was matched with a key bit found in layer L2. Amongst the other finds from layer L6 were items indicating finer textile work, and forging/metal working (Holmquist Olausson & Kitzler Åhfeldt 2002: 10, 36, 108). With one of the houses from Terrace II interpreted as a smithy, the finds indicating metal working in layer L6 strengthen the interpretation of the top layers in the north-east corner of Terrace I having derived from the terrace above. Arbman never dug on Terrace II so his investigation should not have resulted in material from Terrace II ending up on Terrace I.

Underneath Layer L2 there was also a layer interpreted as a floorlayer (L5) covering most of the building. It contained several finds, including one padlock, six keys, and a lock-plate from a chest (Holmquist Olausson & Kitzler Åhfeldt 2002: 10, 35, 91-176, Karlsson 2008: 80). The categories of finds correspond well to those in layer L2, but also included the occasional dress accessories, a few gaming pieces, and a rune bone (Holmquist Olausson & Kitzler Åhfeldt 2002: 91-176)

which could indicate that some of the individuals residing in the area might have been literate. As mentioned earlier, there is also a possible connection between playing board games and high status, authority, chiefly intelligence, and military skill (Whittaker 2006).

Surrounding this floorlayer, except for the eastern end of the building, was layer L10. It was also covered by layer L2 but followed the terrace edges and could be found in the stone packing of the wall in the southern and northern parts of the house. This layer was rich in daub and was likely in part the remains of the collapsed/demolished walls and roof. It contained several finds, corresponding to the find categories in floorlayer L5. The finds also included two keys (Holmquist Olausson & Kitzler Åhfeldt 2002: 10, 36, 134, 141).

L9 was another layer on this floor level which contained a key. However, this layer seems to be the backfill of one of Stolpe's trenches and does not provide any contextual information (Holmquist Olausson & Kitzler Åhfeldt 2002: 10).

Below L5 there was another floorlayer (L12). The finds from this layer are said to be fewer than in L5, but otherwise they belong to the same find categories. They also include two locks, one key, and one possible key. There was also an object that could be the handle and stem of a key with the bit missing, assigned to either L12 or to Arbman's backfill (Holmquist Olausson & Kitzler Åhfeldt 2002: 11, 37, 91-176).

There were no finds of keys, locks, or chest-parts in the oldest identified floor-layer (L15), however, when digging deeper below the terrace in a smaller test-trench, a possible chest-mount was found in layer L30; a dark sooty and charcoal rich cultural layer dated generally to the Viking Age (Holmquist Olausson & Kitzler Åhfeldt 2002: 11, 18, 20, 37, 91-176).

Keys, locks, and chests from Terrace I

To sum up, there were in total twenty-seven locks or lock-parts recovered from Terrace I (see table 5:12), although some parts may have come from the same lock. Thirteen of them were found during Stolpe's and Arbman's investigations and lack a more precise context. Since it appears that they did not always dig all the way to the bottom of the cultural layers, it is quite possible that they came from somewhere in the upper layers.

There were two padlocks assigned to layer L2, the layer with debris covering the whole terrace, and two locks each from the two upper floorlayers L5 and L12. These are all padlocks, except the lock-plate for a mounted lock in layer L5 which suggests the presence of a chest with a lock. There was also a padlock in the supposed chest or deposit A36, but it is more likely that it simply belonged amongst the other finds and wall debris in layer L10 since no chest-fittings were found in this context. The feature might also have been the base of a posthole.

The other locks or lock-parts were found in the fills of various features. Three locks were found in the stone lined wall/drainage-gully A7. These would either be part of a constructional packing material related to the postholes in the ditch, or part of the material from when the wall collapsed. There was also a possible lock in posthole A9, potentially in connection with a deposit of comb-cases and other objects, or perhaps part of the packing material in the posthole. The drainage gully A11a, the waste-gully A33, and A294 all contained one padlock each. These should probably be regarded as refuse or debris secondarily ending up in the gullies, or part of a deliberate backfill.

When it comes to lock type, the padlock clearly dominates. Only one part from a mounted chest-lock has been identified. Except for one bronze padlock, all the locks and lock-parts were made of iron (Holmquist Olausson & Kitzler Åhfeldt 2002: 91-176; *SiS*).

Table 5:12. *The locks from Terrace I and the contexts in which they were found.*

Context	Padlock	Mounted lock	Uncertain	Total No.
L2: demolition layer	2			2
L5: floor layer	1	1		2
L12: floor layer	2			2
A7: wall gully			3	3
A9: posthole			1	1
A11A: drainage gully	1			1
A33: waste/drainage gully	1			1
A36: posthole/wall debris	1			1
A294: waste/drainage gully	1			1
Stolpe's excavations	7			7
Arbman's excavations	6			6
Total No.	22	1	4	27

On Terrace I there were twenty-seven keys (see table 5:13) (Holmquist Olausson & Kitzler Åhfeldt 2002: 91-176; *Sis*). There were eight keys from Stolpe's and Arbman's excavations that lack a precise context. Four of these were padlock keys, one was a rotary key, one was an L-shaped lift-key, and two were of uncertain type since only the handles remained. One padlock key from Arbman's excavations can be tied to posthole A14. To this may be added a padlock key found in the backfill from Stolpe's excavations (L9).

From the more recent excavations, the keys listed in the excavation report (Bergström 2013) were not further described, and they were not included in *Sis*, so information on key-type is not available. Some of the keys were described or depicted in a master's thesis dealing with keys and locks from the hall-building (Karlsson 2008). There are however still ten keys remaining that were either not described or were too fragmentary to be determined; all of which are listed under "uncertain" in table 5:13 below. Several of these were probably padlock keys, based on the many padlocks found on Terrace I.

Two padlock keys and one uncertain key were found in layer L2. Six keys were found in the upper floorlevel L5; one was a padlock key, two were keys for a sliding lock mechanism – either for padlocks or mounted locks, and three were unspecified.

One padlock key and one uncertain key were recovered amongst the wall debris in layer L10. Three keys; one padlock key and two uncertain, were found in the second floorlayer, L12. There was also a key of an unspecified type found in the waste-gully A33, probably ending up there secondarily or as backfill.

Many of the keys were padlock keys, and there were also two keys for sliding mechanisms that could be for either padlocks or mounted locks. The same is true for the single rotary key that was found. Only one L-shaped lift-key was uncovered, which would have belonged to a mounted lock on a chest, cupboard, or door.

In total eight keys were made of bronze or iron and bronze, while fifteen were made of iron (Holmquist Olausson & Kitzler Åhfeldt 2002: 91-176; *Sis*).

Table 5:13. *The keys from Terrace I and the contexts in which they were found.*

Context	Padlock key	Rotary key	Lift-key	For sliding mech.	Unspecified	Total No.
L2: demolition layer	2				1	3
L5: floor layer	1			2	3	6
L6: demolition layer?	1					1
L9: Stolpe's backfill	1					1
L10: wall debris	1				1	2
L12: floor layer	1				1	2
L12 or Arbman's backfill					1	1
A33: waste/drainage gully					1	1
A14: posthole	1					1
Stolpe's excavations	3	1			1	5
Arbman's excavations	1		1		1	3
Unspecified	1					1
Total No.	13	1	1	2	10	27

There were also a few possible chest-parts found on Terrace I (see table 5:14). Two chest-mounts were found during Stolpe's excavations (*Sis*), and there was a chest lock-plate in floorlayer L5. In layer L30, belonging to the phase before the terrace was constructed, there was also a possible chest-mount (Holmquist Olausson & Kitzler Åhfeldt 2002: 133, 91-176; Karlsson 2008: 80).

Table 5:14. *The chest-parts from Terrace I and the contexts in which they were found.*

Context	Chest-mount	Chest lock-plate	Total No.
L5: floor layer		1	1
L30: sooty layer pre-dating the terrace	1		1
Stolpe's excavations	2		2
Total No.	3	1	4

There were also other potential chest-parts. In a student thesis (Bäckheden 2006), twenty-five flat metal objects were studied in order to interpret their function. Many of these were interpreted as being either chest-fittings or parts of shield bosses, and most of them were found in the western part of the building (Bäckheden 2006: 15, 26). Five were found in layer L2, five in floorlayer L5, eight in floorlayer L12, two in layer L13, and one in floorlayer L15. There was also one in the wall gully A7, one in drainage gully A11a, one in posthole A108, and one in posthole A134 (Holmquist Olausson & Kitzler Åhfeldt 2002: 91-176). Unfortunately, it does not appear to be possible to determine how many, if any, of these flat objects actually were chest-parts.

Excavations on Terrace 0 and Area A

During Holger Arbman's excavations, a long trench (48 m) was dug across Terrace I and Terrace 0, down towards the lake and the Viking Age shoreline. Postholes and a possible floor layer, as well as traces of some activity involving fire were uncovered and Arbman concluded that there had been activity there during several phases. The finds included weapons, armour, and six knives. Amongst the finds were eight locks/lock-parts and five keys, the exact contexts in which they were found were not noted however (Bergström 2013: 16; *Sis*).

During excavations in 1997 and 1998, a trench was dug across the edge of Terrace 0 and down towards the lake, an area later referred to as Area A, which seemingly corresponded to the southern part of Arbman's trench furthest down the slope. In Area A, a couple of hearths ¹⁴C-dated to the Vendel Period were found along with traces of crafting activities. There were two chest-mounts amongst the finds in the upper layer (Bergström 2013: 17; Kitzler 1997: 7-9).

The stones of the terrace were in a thick homogenous layer (L2) which continued down the slope below the terrace and was full of soot, charcoal, and burnt bone. Most of the finds came from this layer, particularly near the terrace (Kitzler 1997: 6, 14). Since the terrace stones were found to be both in and over L2, the layer appears to have been deposited in two phases, without a clear division in the stratigraphy. Most of the finds seem to belong to the younger phase, although the

find composition was similar in both phases (Hedenstierna-Jonson et al. 1998: 9). The terrace and a stone rampart with wooden parapets were constructed in the older phase. Layer L2 was interpreted as fire debris from when the constructions on the terrace were burned down. In the later phase the rampart was repaired and improved, but this construction also appears to have burned down resulting in a layer of burned materials; the younger phase of layer L2 (Hedenstierna-Jonson et al. 1998: 8-9).

The finds included some normal occupation debris along with finds indicating crafting, metal working, trade, warfare/combat, as well as personal adornment and grooming. Four locks, two keys, and one chest-mount were also uncovered (Kitzler 1997: 7-9; Hedenstierna-Jonson et al. 1998: 9, 20, 44-47).

The keys, locks, and chests from Terrace 0 and Area A

Together, the finds of keys, locks, and chests from Terrace 0 and Area A consisted of seven keys, twelve locks or lock-parts, and three chest-mounts.

The keys (see table 5:15) were all found in fire debris layer L2 (Kitzler 1997: 7-9, 14), and were not found in a context where they would have been in use, but ended up there secondarily. Two were padlock keys; one had a bronze over-cast handle with a falcon motive and a rectangular iron bit, the other one was made of iron and had a square bit and flat handle. Two were iron rotary keys that could fit either a padlock or a mounted lock, and one was an iron key with loop-shaped handle and double-sided bit fitting a lock with a sliding mechanism; either a padlock or a mounted lock (*Sis*)

Table 5:15. *The keys from Terrace 0 and the contexts in which they were found.*

Context	Padlock key	Rotary key	For sliding mech.	Unspecified	Total No.
T0, Arbman's excavations	2	2	1		5
T0, L2: fire debris		1		1	2
Total No.	2	3	1	1	7

There were also eight locks or lock parts found on Terrace 0/Area A; five of which were padlocks, one was described as the mechanism of either a padlock or a chest-lock, another was described as part of a sliding lock mechanism, and one was described as a bolt from a smaller mounted lock, for instance for a chest (see table 5:16) (*Sis*). The locks were also found in the fire debris layer L2 (Kitzler 1997: 7-9, 14).

Table 5:16. *The locks from Terrace 0 and the contexts in which they were found.*

Context	Padlock	Mounted lock	Sliding mechanism	Unspecified	Total No.
T0, Arbman's excavations	5	1	1	1	8
T0, L2: fire debris	2	2	0	0	4
Total No.	7	3	1	1	12

The chest-parts found consisted of three chest-mounts (see table 5:17). All but one found in layer L5 (described as a layer rich in soot at the lower part of the slope, underneath the topsoil), were recovered from the younger phase of fire debris layer L2 (Kitzler 1997: 7-9; Hedenstierna-Jonson et al. 1998: 9).

Table 5:17. *The chest-parts from Terrace 0 and the contexts in which they were found.*

Context	Chest-mount	Total No.
Area A, L2: fire debris	1	1
Area A, L5: fire debris	1	1
T0, L2: fire debris	1	1
Total No.	3	3

Consequently, all of the keys, locks, and chest-parts from Terrace 0 and Area A were seemingly part of the fire debris from the burnt down structures on the terrace, raked or silted/eroded down the slope and therefore not found *in situ*. It is also possible that some of the material came from the terraces even further up the slope.

Concluding remarks on the keys, locks, and chests found in the Garrison area

Several keys, locks, and a few chest-parts were found on Terrace 0, Terrace I, and Terrace II within the Garrison area at Birka. Despite excavations that were conducted far apart in time and with different methods and aims, sometimes with lost stratigraphical relationships and finds with no contexts, some conclusions can still be drawn. On Terrace II, situated furthest up and partly on flat ground, the objects mainly derived from either the upper cultural layer where they cannot be tied to any specific building, feature, or area, or in contexts associated with the smithy and waste material therefrom. Solder packages from the smithy further suggest production of padlocks on Terrace II. One object, a key, was found in a context within a building where it may once have been attached to an oriental belt that was found in the same compacted floor/roof layer. These objects, perhaps stored in the building together with items of clothing, were probably left remaining there after the building was destroyed/collapsed.

On Terrace I, below Terrace II, most of the keys, locks, and chest-parts were found either in the upper demolition layer covering the whole terrace, in layers with wall and roof debris and/or waste material in wall and drainage gullies, or in postholes. Some of the objects in the wall gullies and postholes may have been deposited during a rebuilding phase of the hall or the previous framework houses on the terrace. Some of the objects in the upper layers likely came from the terrace above.

On Terrace 0, including Area A, the keys, locks, and chest-parts were all found in the upper layers in the slope down towards the lake. The layers contained fire debris, probably from burnt down structures on the terrace and perhaps also from the terraces further up.

If seeking to connect the keys, locks, and chests from the Garrison area with specific social identities or roles in society, the strongest association, based on the evidence of padlock production on Terrace II, is with the blacksmith. Remains of a chest in connection with the smithy also suggest that a chest may have been used, for example, to store tools, raw materials and/or workshop products.

Otherwise, based on more circumstantial evidence from the garrison area in general, a connection between keys, locks, chests, and the warrior can be made (more on this in chapter 9). However, there are also

indications of individuals conducting trade residing in or visiting the area, along with individuals of high social status; some possibly literate and perhaps performing an administrative function.

Keys, locks, and chests found in the Birka graves

In the following chapter, the grave fields on Björkö and the graves containing keys, locks, or chests, are described. In order to put focus on interpreting and presenting an image of the buried individuals connected with these objects and their potential status, role, or identity based on the grave goods, not all the finds in the graves have been individually listed. This has also been done to make a vast material more readable. The finds, or rather the find categories into which they have been sorted, are however included in various tables below. Any further details regarding the graves can be found in Arbman's Birka publications (1940; 1943) or in *SiS*.⁴⁷ The find categories have also been used to compare the graves with keys, locks, and chests, with the graves that had none. This was done with the aim of finding similarities and differences that could further provide clues regarding the individuals buried with keys, locks, or chests.

The preservation of bone on Björkö was unfortunately poor, and only a few skeletal remains from the graves were analysed by an osteologist (see Kjellström 2016). Additionally, the ones that were analysed could generally not be tied to a specific grave due to various mix-ups related to how the bones were stored and recorded after they were excavated (Kjellström 2016: 197-198). Because of this, biological sex has not been

47. Regarding these two sources there are sometimes some discrepancies. In some cases, objects included in Arbman's description are missing from *SiS*, and in a few cases, it is the reversed. This could be explained by some objects perhaps falling apart over time and becoming unidentifiable, or objects being lost. It could also be a case of later reinterpretations. Since Holger Arbman worked very closely with the whole material and was very familiar with it, and because the objects were probably in a better condition then, the accounts from *Birka 1* have generally been considered as more reliable in the present study. Further, much of the documentation and data entry into the *SiS* database was done via a project helping unemployed individuals in the culture sector in Sweden; the so called *Access project* (<http://mis.historiska.se/mis/sok/invite.asp>), so a similar familiarity with the material cannot be expected.

possible to include in this study. In a few graves the deceased were interpreted as a child based on grave size (see Gräslund 1980: 82), but otherwise the age of specific individuals was not possible to ascertain.

Sex/gender based on the grave goods is also generally not included in the following sections. This is to avoid any presumptions or circular arguments, not least since keys are sometimes used as indicators of female sex/gender (see for instance Jankavs 1987: 26; Melin & Sigvallius 2001: 99; Petré 1984: 54; 2010: 381). Instead, the grave goods were studied based on what clues the various find categories can provide regarding possible past activities, way of life, status, etc.

The graves on Björkö

There are eight grave fields on Björkö; *Hemlanden*, *Norr om Borg*, *Borg*, *Borgs hage*, *Grindsbacka*, *Kärrbacka*, and *Ormknös* (see figure 5:1). Today these grave fields contain at least 2300 graves, but parts of them were destroyed by cultivation and they would originally have been even more extensive (Gräslund 1980: 4; see Trinks et al. 2013). The grave fields developed gradually as the town grew (Gräslund 1980: 73).

The majority of the graves consist of low mounds lying in close proximity. This was the most common type at both *Hemlanden* and *Norr om Borg*. At *Grindsbacka* and *Kärrbacka* stone-settings predominated; mainly rectangular, but sometimes circular, triangular, and boat-shaped. Flat graves with no external structure occurred mainly in the cemetery *Norr om Borg* and in parts of *Hemlanden* near the town ramparts where they were most commonly found inside and underneath the ramparts, and sometimes outside them (Gräslund 1980: 63).

When it comes to the spatial distribution of the graves with keys, locks, or chests on the different grave fields, there were no discernible patterns or clusters, and the varying degree of graves that were excavated makes comparisons between grave fields problematic. The only grave fields without any graves with keys, locks, or chests were *Kärrbacka* and *Ormknös*.

There are roughly 1140 excavated and recorded graves from Birka, but since some ninety of these graves contained more than one burial, the

actual number of burials is higher (*SiS*; Arbman 1943). In some cases, it was not possible to separate the grave goods between the individuals in these graves, and they were consequently regarded as one burial context. Some of the Birka graves were excluded from this study; these include graves with no or only the occasional find and no trace of a burial, or graves that turned out to not be graves at all.

The remaining 1159 burials, for simplicity hereafter generally referred to as graves, were divided into four categories based on the inner grave type: *Cremation graves*, *Coffin graves*, *Inhumation graves*, and *Chamber graves*. These categories are those used by The Swedish History Museum (translated into English). For clarification, when *Inhumation graves* are referred to, it is not referring to all graves containing inhumation burials, but specifically those with no traces of a coffin or chamber. When inhumations in general are mentioned, they are referred to as inhumation burials.

The majority of the graves were *Cremation graves* (c. 54%), which was the dominant burial practice in Sweden during the Viking Age (e.g., Price 2010: 124). The inhumation burials were nearly equal in number between those buried in a coffin and those without, and with fewer buried in the rather exclusive *Chamber graves* (see table 5:18). It is possible that some of the *Inhumation graves* once had a coffin, but that all traces of it have disintegrated. When taken together, the inhumations make up c. 46% of the Birka graves. This is not a small part and accordingly, the Birka graves stand out in this respect when compared to its hinterland.

Table 5:18. *The number and percentage of all the Birka graves, divided into the four inner grave types: Cremation graves, Coffin graves, Inhumation graves, and Chamber graves.*

All Birka graves	Cremation graves	Coffin graves	Inhumation graves	Chamber graves
1159	620	212	213	114
100%	53.5%	18.3%	18.4%	9.8%

The custom of burying people in chamber graves has been suggested to be associated with members of the town's highest social stratum, possibly also in connection with the international character of Birka and its merchants (Gräslund 1980: 77, 86). They have also been suggested to be leaders or followers of the king, belonging to the hird or retinue, or with important functions as advisors (Ringstedt 1997: 115). Many of these graves contained rich grave goods, but several of them had only a few objects, and some none at all. This difference in the extent of the grave goods could be due to several factors, for instance inheritance rules and Christian influences (Gräslund 1980: 77, 86), or it might also be the result of later disturbance or varying degrees of preservation. However, Nils Ringstedt's study of the Birka chamber graves has showed that the graves with few grave goods still stood out in regards to area and cubic capacity, and he believes that if this is included amongst the signs of wealth, complexity, and social status, then all of the Birka chamber graves fulfil these conditions (Ringstedt 1997: 108). It is also worth considering, as discussed by archaeologist Alison Klevnäs (2016), that some Viking Age graves showed signs of having been re-opened sometime after the burial and objects removed. Other than the re-openings that must have occurred in connection with secondary burials, this has not been noted in any of the Birka graves, although Stolpe and his team were probably not looking for signs of any intrusions in the grave.

That many objects normally associated with the upper social stratum were found in cremation burials at Birka (Gräslund 1980: 78) also shows that the chamber graves are not the only graves that can be associated with individuals with more wealth or a higher social standing. Cremation graves and simple inhumation graves without any grave goods were interpreted as either Christian burials, burials of the poor, or even thralls (Gräslund 1980: 80). Again, different preservation conditions could also have played a role here.

Very little is known about the practice of Old Norse religion. Archaeologist Neil Price suggested that within the Old Norse 'belief system', spirituality existed alongside people's other thoughts, mixed with all aspects of their lives. According to him, there was probably never a consistent orthodoxy, and the Viking beliefs may never have been systematically understood by its practitioners (Price 2002: 54-55). Further, Viking mythology was not static, but changed both regionally and over time. It may have been influenced or affected by both

Christianity and Islam, as well as by the Sámi religions. The Vikings also encountered the beliefs of other peoples as they travelled, for instance the Balts and the Slavs (Price 2002: 55). This variation can be seen in the archaeological material culture such as amulets and charms, but also in the mortuary evidence. When it comes to the burial rituals, there is variation on both a regional scale and between individual communities, with differing opinions on how to properly conduct a burial (Price 2002: 55). This variation is certainly seen in the Birka graves.

Concerning grave orientation, an east-west alignment (with the head to the west) is often suggested to be proof of Christian beliefs. Amongst all the Birka inhumation burials, 85% were oriented east-west $\pm 45^\circ$ (Gräslund 1980: 84). However, this large number of graves, which also includes the rather lavishly furnished chamber graves, can hardly all be seen as Christian graves. Ann-Sofie Gräslund believes that whilst it is possible to view both the custom of inhumation burials and an east-west orientation as Christian customs, at Birka these were probably the result of cultural influences (Gräslund 1980: 84). Influences from the Islamic world can be found in some Birka graves, and for instance, recent re-examinations have resulted in the identification of an inscription on a finger ring found in one of the graves reading “For/to Allah” (Wärmländer et al. 2015). Inhumation is also the only allowable form of burial for Muslims; hence, influences behind the practice of inhumation burials could also come from the Islamic world. Perhaps inspiration was found in both Christian and Muslim customs.

Furthermore, both cremation and inhumation burials can be found in most regions in Scandinavia during the Viking Age, but with very variable proportions. While cremation burials generally dominated in Sweden and Norway, inhumation burials were more common in Denmark (Skre 2007: 19). Perhaps some of the inhumation burials at Birka can be seen as influence from Denmark, possibly through contact with, for instance, Ribe and Hedeby.

The excavations of the graves

The majority of the graves with keys, locks, or chests in this study were excavated between 1876 and 1888, but some were also excavated in

1934, 1975, 1988-1989, 1997 and 2002 (*Sis*). Accordingly, most of the graves were excavated by Hjalmar Stolpe and his team. Although they sometimes seem to have excavated and recorded only parts of the graves, as modern re-excavations of two graves have shown (see Andersson et al. 2016; Andersson 2016), their documentation and methods were very thorough. It is worth noting that this was before any modern archaeological methods had been developed (Ambrosiani 1992a: 21).

Gräslund described Stolpe as a gifted and remarkably observant field archaeologist who knew to record the grave structures, the position of the finds and skeletal remains, and so on. According to her, the excavations were performed with a clear scholarly orientation and awareness, and she believes that there should be no reason to distrust Stolpe's statements, although some information was sometimes left out; in some cases, even the external structure of the grave is omitted in the documentation (Gräslund 1980: 1).

Concerning the cremation burials, Stolpe considered the construction of the graves as well as the relative position of more important finds. He also drew up a memorandum for the investigation of cremation burials in 1874, probably as guidelines for his work team. This demonstrates that Stolpe had fairly high demands for accuracy even in the recording of cremation burials (Gräslund 1980: 50). However, the first cremation graves Stolpe encountered were recorded with less precision, and there were basically no work sketches or grave plans for the first 464 graves (Erikson 2015: 119-120).

The finds from Hjalmar Stolpe's excavations were, as mentioned earlier, processed in the 1930s by Holger Arbman (Ambrosiani 1992a: 14-15). His subsequent publications (1940; 1943) form part of the basis of the present study on keys, locks, and chests from the Birka graves. Arbman's work was based on Stolpe's notes and plans, as well as the objects he recovered. It is therefore, to a large extent, a secondary source, which is important to bear in mind as there could be some errors or misinterpretations.

Birka graves with keys, locks, or chests and inner grave types

In order to see if the graves with keys, locks, or chests (123 graves in total, or 10.6% of all excavated Birka graves) differed from the rest of the Birka graves, a comparison was made in regard to inner grave type.

An interesting result, as can be seen in table 5:19 below, is that burials with keys, locks, or chests were much more frequently found in chamber graves than those without keys, locks, or a chest (35% versus 7%), and the cremation graves were quite a bit less frequent amongst the burials with keys, locks, or chests (33% versus 56%). At the same time, within this group of graves there were an almost equal amount of cremation graves and chamber graves. There was not much difference in distribution concerning the coffin graves and inhumation graves, with only slightly fewer inhumation graves.

Table 5:19. *The percentage of graves within each of the four inner grave type categories (number of graves within brackets) for graves grouped into: 'Graves without key/lock/chest', 'Graves with key/lock/chest', 'Graves with key', 'Graves with lock', and 'Graves with chest'. The highest value on each row is in bold to highlight the most common inner grave type for each of the grave groups. Based on Arbman (1940, 1943) and SiS: Birkagravar. The numbers are rounded off to the closest whole number.*

Grave group	Cremation graves	Coffin graves	Inhumation graves	Chamber graves	Total No.
Graves without key/lock/chest	56% (580)	18% (189)	19% (197)	7% (70)	1036
Graves with key/lock/chest	33% (40)	19% (23)	13% (16)	35% (44)	123
Graves with key	30% (23)	25% (19)	13% (10)	32% (25)	77
Graves with lock	32% (12)	10% (4)	5% (2)	53% (20)	38
Graves with chest	27% (17)	8% (5)	11% (7)	53% (33)	62

When looking at the groups of graves containing keys, locks, or chests separately, it is also clear that the chamber grave was the most common inner grave type for each of these groups of graves, with over half of the graves with locks and graves with chests belonging to this type. The graves with keys differed somewhat in that the distribution between the inner grave types is was more even, with almost equal amounts of cremation and chamber graves; the percentage of coffin graves was also relatively high.

That graves with locks and chests were so similar can partly be explained by the fact that half of the chests were fitted with locks. The other chests either did not have locks or perhaps the locks did not survive or could not be identified due to fragmentation. There were also a few graves without chests, but with padlocks that could not be linked to chests with any certainty, though some chests had a closing device intended to be secured with a padlock.

The strong association between graves with locks, chests, and keys with chamber graves is also interesting in relation to social identity, as this form of inner grave type is generally seen, as noted earlier, as a burial form associated with a socially prominent group in society, perhaps with an international character, and possibly related to merchants (Gräslund 1980: 77-78, 86). If this is taken as true, then many of the individuals buried with keys, locks, or chests were amongst these.

In Ringstedt's study on the Birka chamber graves, he ranked the grave's supposed richness and complexity according to various methods (See Ringstedt 1997 for more details on the study). In one of these rankings, based on area and cubic capacity, fifteen of the top twenty high-ranking graves were graves with keys, locks, or chests. Using a method based on number of artefact types, seventeen of the top twenty high-ranking graves were graves with keys, locks, or chests (Ringstedt 1997: 91-92, 99, 148, 162). This further strengthens the idea that the individuals buried in chamber graves and accompanied by keys, locks, or chests were indeed wealthy and at the top of the social scale.

The keys from the graves

There were altogether seventy-seven graves containing one or more keys, with a total of ninety-three keys (see Appendix 3). Twenty-three were cremation graves, nineteen were coffin graves, ten were inhumation graves, and twenty-five were chamber graves. Together they constitute 6.6% of all the excavated Birka graves.

Of the graves containing more than one key; six graves contained two keys,⁴⁸ three graves contained three keys,⁴⁹ and one grave contained four keys⁵⁰ (Arbman 1940; 1943; *SiS*).

In total there were therefore only ten graves from Birka that contained more than one key. This situation is in contrast to the often referred to image given by the previously mentioned passages in *Rigsthula* and *Thrymskvida*, where keys in plural were mentioned as being attached to a belt or jingling by the side (see chapter 3). This discrepancy was previously noted by Arwill-Nordbladh (1990: 257). Most of the key combinations include keys of different types, pointing to a varied use with both loose and mounted locking devices, and to the large range of keys and locks available at Birka.

As can be seen in table 5:20 below, the most common type of key in the Birka graves was the rotary key, followed by the padlock key, and then the angular L-shaped lift-key. Less common was the L-shaped lift-key, of which only only four examples were found/identified. There were also eleven keys where the type of key was not possible to determine due to fragmentation. These also included a few objects that were somewhat uncertain as keys.

Iron was by far the most common material used to make the keys. Only eleven keys were made from bronze, and twelve keys were made from both iron and bronze. These bronze and iron/bronze keys were either padlock keys or rotary keys, and one was of an uncertain type. All the L-shaped lift-keys and angular L-shaped lift-keys were made of iron.

Amongst the keys, there does not appear to have been any that would not have functioned practically, such as girdle-hangers, and the predominance of iron keys also points to a more practical use. This of course does not mean that they could not have carried some symbolic meaning as well.

48. Bj 557, Bj 708, Bj 733, Bj 758, Bj 968, and Bj 983.

49. Bj 526, Bj 759, and Bj 950.

50. Bj 1083.

Table 5:20. *The keys from the Birka graves sorted according to material and type.*

Material	Padlock key	Rotary key	L-shaped lift-key	Angular L-shaped lift-key	Uncertain	Total No.
Iron	17	22	4	17	10	70
Bronze	0	11				11
Iron & bronze	9	2			1	12
Total No.	26	35	4	17	11	93

In the graves with inhumation burials where the location of the key was marked on the grave plan, two main patterns can be seen: they were either located on or very close to the body of the deceased, or by the side of the grave. In the position near the body, it is reasonable to interpret the keys as part of /attached to the dress or inside a pocket, and possibly as part of a personal “tool-kit”.

In the coffin graves, most of the keys were found on or near the body, which seems logical since the coffin was a confined space, but in two graves (Bj 733 and 758) the keys were instead placed somewhat away from the body next to or possibly once inside a pail. There were in fact two keys in Bj 758, and an additional key on or next to the body in Bj 733 (Arbman 1943: 256, 276).

The same pattern can be seen amongst the inhumation graves without a coffin. Here, one of the graves (Bj 800) had a key placed next to or inside a pail.

Amongst the chamber graves, seventeen graves had a key on or next to the body of the deceased. In six graves the key seems to have been found in, on, or next to a chest and might have belonged to the chest. In one grave (Bj 585) the key was located on a fragmentary lock-plate on top of a small oak box. In two graves (Bj 708 and 739) the key was found next to a chest and a pail; in Bj 708 there were two keys placed in the same way.

If the placement of the keys next to pails and chests in these graves was not simply coincidental, these might have been regarded as containers suitable for holding the keys, and perhaps – if some keys indeed belonged to locks on the chests placed in the graves – it might follow naturally that the key stayed with the chest. They would have had little use in the living world and might also have been needed to lock or unlock the chest in connection with the burial or possibly in a supposed afterlife.

On the other hand, if the pails and chests are interpreted as containers for supplies of some sort (for instance food, drink, fabrics, utensils, tools, etc.), then one possible interpretation of the keys in these contexts is that they symbolised access to various resources – either once held in life or gained in death.

There were twenty-nine inhumation burials where the key – in the position near or on the body – was located right next to, or very close to other objects. In ten of these the key was close to beads and/or items of jewellery such as brooches, pendants, finger rings, and in one case a bracelet. The latter two suggest the arm or hand of the deceased was located there, and the other pieces were most likely attached to the dress or hanging around the neck. In the graves with brooches, it is possible that the key was attached to or hanging from them via a string or similar.

In twenty-three of the graves, items suggesting a personal tool and/or grooming kit were found next to the keys. These included knives, shears, whetstones, weights (seen as tools for trade), needle-cases, strike-a-lights, tweezers, and awls, with knives being by far the most common tool; in eighteen of these graves a knife was found next to the key.

The most commonly occurring combination of tools found next to the key was a knife and shears (six graves), followed by a knife and a whetstone (five graves), a knife and a needle-case (three graves), and a knife and one or two weights (three graves) (see Appendix 4).

As seen here, these combinations do not occur often, and in the majority of the graves there was no discernible pattern to which combination of tools or implements were found next to the keys. In this regard it was not a uniform expression that was being created in these burials, indicating that there was no “standard” toolkit for the key bearer.

Nonetheless, the tools and implements could still provide some information that can be associated with the burial of and possibly the social identity or role of the key bearers. If one interprets the tools

and implements seemingly attached to or worn on the dress – where the physical closeness might indicate a stronger connection with the individual – as actually having been used by the deceased (for practical use and/or as symbols), then some of these individuals were associated with or involved in trade, textile working, activities involving/requiring lighting fires, personal grooming, or crafting of some sort. Activities where cutting tools were needed seem to have been common. This could however entail a large variety of activities including for instance textile/leather working, carpentry, preparing and consuming food, and grooming. It should also be noted that a knife could also have been used as a weapon and, consequently, wearing a knife might partly have been for personal protection. If holding a key also entailed safeguarding things of value, then this protection might have been desired.

There were also a few items found next to keys that were not tools, each found in only one grave. These include a Thor's hammer ring, a sherd from a glass vessel, a gaming piece, a bronze bell, a bronze figurine, two ice spikes, and two coins.

Furthermore, there were several additional objects in many of these graves that were not found next to the keys. These are instead discussed in the following analyses where all of the grave goods are included.

In the cremation graves, most of the keys were found in the cremation layer. One key was found in a small, elongated pit (Bj 462) together with burnt bone and some other fire damaged objects, and the key was found in the cremation urn in three graves (Bj 714, Bj 935 and A88) (Arbman 1943, Bergström 2013: 47-49). It is not possible to tell if the keys were attached to the dress of the deceased or placed loose on the pyre or in the grave. For most of the keys it was not noted if they were damaged by fire; however, the location in the cremation layer suggests that most were probably present during the cremation process. If it was important to display the presence of a key during the burial ceremony, it is possible that placing it separately from the body was more effective than it already being attached to the dress worn by the deceased. However, virtually nothing is known about these ceremonies and there is also the possibility that dressing up the deceased before the cremation was an important part, and here the key could have been displayed and noticed. Using the inhumation burials as a guide, it is also possible that the keys found in the cremation graves included both items once attached to the dress and items placed loose or in some type of container separate from the body.

These would then potentially also have had different meanings, although no longer possible to tell apart.

The chests and boxes – with and without locks – from the graves

This section deals with the chests and objects identified as boxes. As mentioned previously, the term chest is generally used for these containers since the distinction between chest and box is seldom made clear, and the remains are often very fragmentary making it very hard to estimate the size and shape of the objects. Generally, however, a box is here seen as smaller in size compared to a chest. In four of the Birka graves there were smaller containers that were different in shape and size for which the term box has been used (see below). The chests and boxes are described in more detail in Appendix 5.

Chests occur in both cremation and inhumation burials, but were more common in the latter. This is not at all surprising considering the destructive force of the fire in connection with the cremations. Despite this, remains of chests were identified in seventeen cremation graves. In two cases the location of the objects was not specified, and in one grave (Bj 104) there were chest parts in both the cremation layer and in a ceramic vessel. Otherwise, all the chests-parts were found in the cremation layers of the graves. It is not possible to say if the chests contained anything when they were placed on the pyre.

Of the inhumation burials with chests and boxes, thirty-three were chamber graves, five were coffin graves, and seven were inhumation graves without any traces of a coffin or chamber; in total forty-five graves. This makes the total number of graves with chests and boxes sixty-two, constituting 5.3% of the excavated Birka graves.

Since there were three chamber graves with a chest and a box, and one cremation grave and chamber grave with two chests each, the total number of chests and boxes was sixty-seven.⁵¹

51. There are also the remains of a chest with a lock (SHM 24000, 458651) that is supposed to have come from a grave at *Hemlanden*, but which is not assigned to a specific grave (*SiS*; Arbman 1940: Taf. 262). This chest has not been included in this

In some of the graves⁵² only parts of mounted locks survived, and in these cases, it was inferred that there must have been a chest in the grave for them to have been mounted to.

Out of the four boxes, three were found in chamber graves (Bj 542, Bj 585 and Bj 644), and one was found in a coffin grave (Bj 577) (See Arbman 1943: 167-168, 188, 191-192, 221-226). All the boxes were round, varying in diameter between 0.3 and 0.12 m., and they were all placed at the foot-end of the graves. Three of the boxes were made of wood with bronze and/or iron fittings, however the box in Bj 542 was made of iron and was stood on three short feet made of bronze (see figure 5:7). This box was also the only one with remains of a locking device in the form of a locking hook on the overlapping lid. This would have been possible to secure with a padlock.



Figure 5:7. *The box from grave Bj 542. Photograph by Nils Lagergren, (Arbman 1940: Taf 213:1a).*

study since it is without context.

52. Bj 104, Bj 334, Bj 399, Bj 679, Bj 878, Bj 943 and Bj 968.

The box in Bj 542 contained traces of linen fabric into which something, now gone, had been wrapped. The box in Bj 644 contained a bronze bell.

These boxes represent a smaller type of container than most of the chests, and any objects kept in them would naturally be rather small, such as the bronze bell in Bj 644. Furthermore, because of the small size, the boxes were less secure than the larger chests as the whole box could potentially be seized to be opened later at a safer location. This raises the question of where these boxes might have been kept in life before they were placed in the graves. It is possible that some were stored in chests; as mentioned earlier, on top of the lid of the box in Bj 585 there were pieces from a chest lock-plate, and on top of these were an iron rotary key, an iron ring, and an iron fragment. This could suggest that this box was once placed inside a chest.

There were also two early Birka graves with small wooden boxes or chests that differed from the rest of the Birka graves regarding burial composition.

The first one, A129, was found below the threshold of a three-aisled building⁵³ on one of the terraces by the town rampart. It was an inhumation grave containing two male individuals. An older man (aged 40-50) was buried with weapons and armour, and a moose antler had been placed close to his head. He also had a wooden box or chest with him containing twenty-two pieces of flint, three pieces of amber, and six glass beads (Holmquist Olausson 1993: 98, 100, 116, 119, 135). The many pieces of flint are hard to interpret; perhaps some were to be used as strike-a-lights. The amber pieces and glass beads may have been intended to be used as payment or adornment. Only an iron staple remained of the box itself; on the excavation plan it was drawn on top of the older man's spine, suggesting the box was placed on top of his chest or mid-section. It is said to have measured roughly 0.1 x 0.1m (Holmquist Olausson 1990: 119, 180).

To his right side, partly on top of him, was the body of a younger man lying with his head separated from his body, interpreted as a human

53. Whether or not the building was intentionally placed on top of this grave is difficult to tell. Deliberately placing a house on top of a grave was a very rare practice in the lake Mälaren region during the Iron Age, and generally people seem to have avoided it (Hällans Stenholm 2012: 204-205).

sacrifice. This, and the moose antler make this grave unusual. It has been dated to the transition from the Vendel period to the Viking Age and was therefore amongst the earliest Birka graves (Holmquist Olausson 1990: 181; 1993: 113, 116). Although the box in this grave had no remains of a lock, it is an example of a burial where an individual of high or special social status buried with weapons and armour was also in possession of a box or chest; in turn possibly hinting at private belongings.

The other grave, 1997:1, was a chamber or shaft grave discovered underneath or incorporated into the hillfort rampart. The grave was for a male individual, over 50 years of age, buried with a horse at the foot-end (Fennö Muyingo 2000: 7-9, 11). With him in the grave were a knife and a pair of tweezers, and he was wearing a belt to which a pouch or leather bag with silver mounts was attached. Placed on top of his mid-section was a small box or chest of which only the nails and some rivets with traces of wood still remained. They covered an area of 0.5 x 0.3 m which could give some indication of the size. There was nothing remaining of any of its contents (Fennö Muyingo 2000: 7-8). The grave has been dated to the 8th century, making it one of the oldest chamber graves on Björkö. One interpretation of the individual in the grave is that he belonged to one of the founding families of Birka (Holmquist Olausson & Götherström 1998: 107).

All that has survived of the chests in the other Birka graves were the nails, rivets, metal fittings, and sometimes parts of locks. In some cases, these had wooden remains attached; the chest in Bj 639 even had some pieces of wood showing traces of yellow, red, and black or blue paint (Arbman 1943: 216, 218). The poor state of preservation makes it hard to reconstruct how the chests once looked, but Hjalmar Stolpe attempted to reconstruct a few of the best-preserved chests. The bronze fittings from the larger chest in Bj 639 were even mounted on a wooden chest replica (see figure 5:8).



Figure 5:8. A reconstruction of the larger chest from Bj 639 where the original bronze fittings were mounted on a wooden chest replica. Photograph by Gabriel Hildebrand, SHM, 2013-11-20 (CC BY 2.5).

According to the reconstruction, the chest was 0.46 m long, 0.2 m wide, and 0.17 m tall. It had band-shaped bronze mounts and five hinges. On top of the lid, in the middle, there was a bronze handle that curled up on both sides and ended with animal heads. On the front it had a bronze lock plate, 25.8 x 5.6 cm (see figure 5:9). The lock plate had two elongated vertical holes for the angled locking cramps, ending in stylized, bronze, animal heads, and a damaged keyhole. On the back it had an iron bolt, attached by small iron staples, and an iron spring. The bolt could be shifted sideways by the key. The chest was unlocked when it was found in the grave and the key appears to have been placed on top of the chest.



Figure 5:9. The back of the lock plate from the chest in Bj 639. Photograph by Nils Lagergren, in *Arbman 1940: Taf 260:4a*.

Another chest that was reconstructed was from grave Bj 845 (see figure 5:10). It had an arched lid and appeared to have been completely covered with iron mounts, attached with decorative rivets that formed quadrangles (Arbman 1940, Taf. 263:1a). The handle on top of the lid was sharply angular with curled up ends. The chest had three iron locking cramps with three longitudinal furrows, ending in stylised bronze animal heads. Only fragments of the lock remained, but according to Arbman (1943: 320) it was similar to the lock in grave Bj 739 which had a wide flat bolt and a double spring. According to the grave plan (Arbman 1943, Abb. 268) the chest was rectangular, approximately 0.54 x 0.22 m.

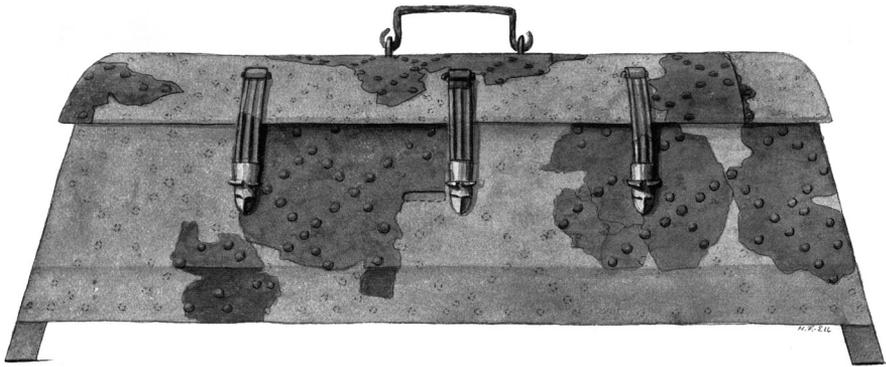


Figure 5:10. A reconstruction drawing of the chest from Bj 845, drawing by Harald Faith-Ell (Arbman 1940, Taf 263:1a). Used with permission.

Descriptions of the size and shape of other chests can be found in Appendix 5, although for some the remains were too fragmentary to provide any such information. Several of the chests seem to have had some traits in common, such as the handles with curled up ends and locking cramps with animal head-shaped end bits. Another common trait seems to have been decorative rivets.

The majority (eighteen) of the chests were placed at the foot-end of the graves or by the feet of the deceased. Nine of them were instead placed at the head end, and five were placed along the wall on the right side of the body. In three graves the location was not specified. In seven graves the chest appeared to be placed on top of or very close to the body,

most of them around the mid-section.⁵⁴ In one coffin grave (Bj 847) the chest was placed either on top of the legs of the deceased or on top of the coffin. There was another coffin grave (Bj 559) where chest fittings were found in the fill above the burial and might suggest a chest placed on top of the coffin (Arbman 1943: 180).

For chamber grave Bj 823 it is evident from Stolpe's grave plan (Arbman 1943: 296, Abb. 245) that some of the nails, rivets, and mounts from the chest were found on top of the skeleton. Gräslund believes that despite this, it was unlikely that such a large chest would have been placed on top of the deceased, and proposes that the corpse was seated leaning up against the chest. She believes that when the grave collapsed, fragments from the chest ended up on top of the body (Gräslund 1980: 38). However, from the rectangular arrangement of the nails and other fittings on the grave plan, the chest seems to have been intact and does not appear to have collapsed in over the body. The body also does not appear to have been seated. It is more consistent with other graves where the body is lying on its back or side with the knees slightly bent or drawn up to one side (e.g., Bj 607 or Bj 986).

If the nails and other fittings were indeed drawn *in situ* on the grave plan, this suggests that the chest was actually placed on top of the deceased's legs. Since this was a large chamber grave with plenty of space where a chest could have been placed; it would seem that placing it on top of the body must have had a special meaning. Along the western end of the grave there was a human skull and some weapons, interpreted to be the remains of an older burial in the chamber (Arbman 1943: 296). Perhaps the chest was therefore placed in this way to clearly demonstrate that it belonged to the new burial.

Another grave containing a chest where a seated position is likely is Bj 967. Comparing the grave with Bj 823 as they were drawn by Stolpe (see figure 5:11), the legs were pulled up higher towards the upper body in Bj 967, more consistent with a sitting position, and the body appears to have slumped forward towards its right side, breaking the spine. Here, a small chest had been placed at the feet of the deceased. Interestingly, the placement of the chest mirrors the chest in *Grettis saga* (Ch. 18), found in a grave by the feet of Kárs's sitting corpse (The saga of Grettir the strong 1997:187). However, while this chest was full of silver (see chapter 3), nothing remained of any contents in the chest from Bj 967.

54. This was also the case with the boxes/chests in graves A129 and 1997:1.

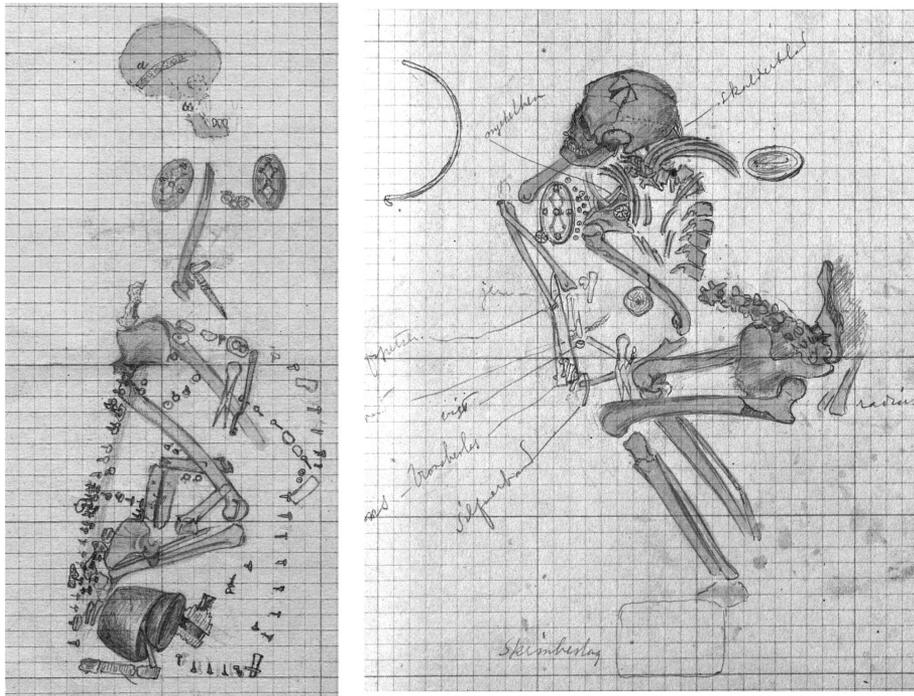


Figure 5:11. Details from Hjalmar Stolpe's grave plans, depicting chamber grave Bj 823 (left) with a chest probably on top of the lower limbs and chamber grave Bj 967 (right) where the deceased was probably placed seated in the chamber with a small chest by the feet (original drawings stored at ATA).

Only rarely were the contents of the chests preserved, if indeed they all had any to begin with. In grave Bj 854 the chest contained a large antler comb and a green glass smoothing stone (see figure 5:12) (Arbman 1943: 327-330). Hjalmar Stolpe's grave plan clearly shows the objects within the chest, underneath the band-shaped chest fittings and the handle that would have been attached to the lid. These items suggest a chest with objects related to textile working – where the comb would have been used during weaving and the glass smoothing stone to straighten out fabrics (see Arwidsson 1984: 200). It is not unthinkable that there could also once have been some textiles in the chest that have now perished.

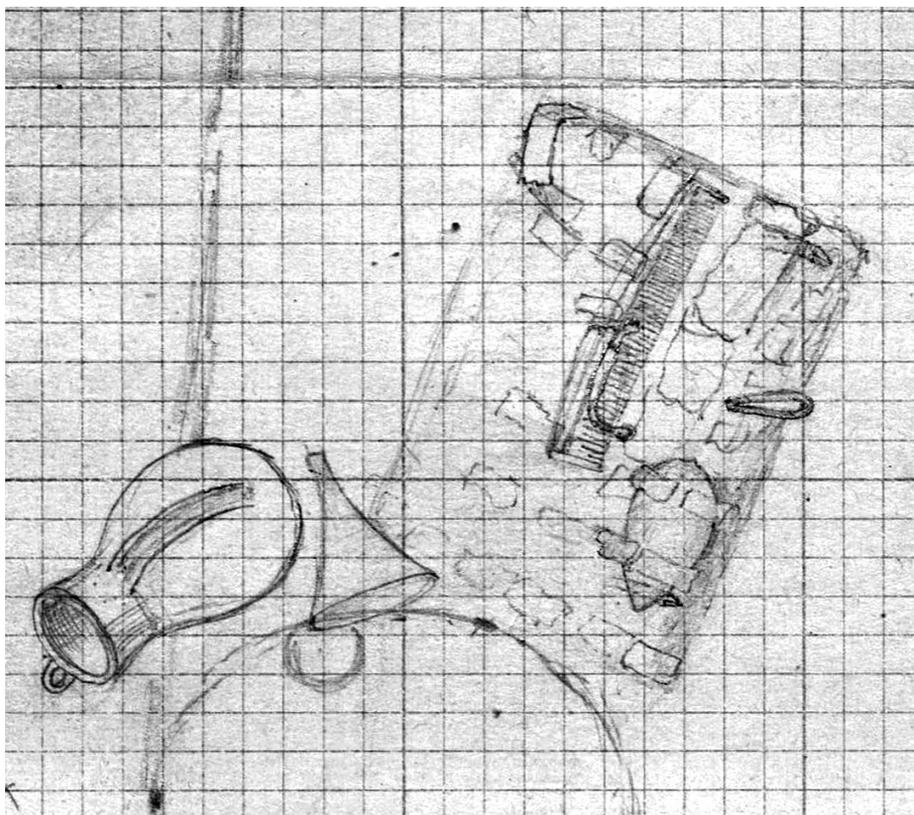


Figure 5:12. *The chest in chamber grave Bj 854 with an antler comb and a green glass smoothing stone placed within, and a key placed on top of the lid or possibly in the lock. Detail from grave plan drawn by Hjalmar Stolpe (original drawing stored at ATA).*

A few more chests had objects that were described as being inside them (Arbman 1943). The chest in Bj 963 also contained a glass smoothing stone and an antler comb, as well as a piece of amber. The chest in Bj 513 contained only a glass smoothing stone. The contents of these two chests could therefore also be related to textile working and/or to the storing of textiles.

The chest in Bj 850 contained a small cylindrical ceramic vessel and two sherds from a coarser ceramic vessel: perhaps suggesting storage of some type of foodstuff or simply the storage of vessels.

The chest in Bj 739 contained half a bead, a silver object, a wooden figure, and a wooden animal's head. These objects give the impression of being the remnants of what might once have been stored inside, or

perhaps items forgotten at the bottom of the chest, possibly underneath some textiles or clothes. It is also possible that the wooden items were part of the decoration on the chest.

In some graves there were objects found amongst the chest-fittings that could have been placed either in or on top of the chests, for instance in grave Bj 823 (see figure 5:11 above) there was a whetstone, two beads, four band-shaped ice spikes, an antler comb, a ceramic vessel, a bronze vessel, and an antler spoon. Animal bones were also found amongst the chest parts. Some of these items could well have been stored inside the chest.

Furthermore, in four graves (Bj 639, 708, 854, and 965), keys were placed near or on the chests which seems to fit with the type of locks on the chests. In Bj 708 there were two keys in connection with the chest, as mentioned earlier.

Three graves were interpreted as having a chest amongst the grave goods based on a cluster of objects in the grave, where the close positioning of the objects could indicate that they were once stored inside a chest. These were chamber graves Bj 644, Bj 750, and coffin grave Bj 759. The cluster in Bj 644, located in the northwest corner (head end) of the chamber, included twenty-two gaming pieces, three dice, a pair of scissors, a knife, a whetstone, a hammer, a fire steel, four flint strike-a-lights, a possible horse bridle, an iron ring with a staple attached, and a weaving comb. These objects can be associated with a variety of activities including game playing, textile working, crafting, horse riding, and lighting fires.

In Bj 750, a cluster of tools were found on the western side, at the head end of the chamber towards the south. These included a flint strike-a-light, a possible fire steel, a hammer, two rasps, a wedge, a pair of scissors, a knife, an axe, a possible drill, and an awl. There was also an angular L-shaped lift-key (Arbman 1943: 268, 272), possibly indicating a lock on the presumed chest that the key fitted. Together the objects indicate a potential chest with a lock containing tools, including those for woodworking. Some of the tools were of the same types as in Bj 644.

In Bj 759 the cluster was found towards the western side/head end of the coffin, suggesting a chest on top of what would have been the mid-section of the deceased. The objects are said to have been lying in a pile and included a bird-shaped bronze pendant, a wheel-shaped bronze pendant, a whetstone, a knife, shears, an iron rod, and an iron

fragment. There were also no less than three keys amongst the objects (Arbman 1943: 277). Since these are the types of objects that appear to be accessories/tools attached to the dress of the deceased in several of the Birka graves, it is less certain that this cluster was stored in a chest than in the two graves mentioned above. Since Bj 759 was a coffin grave, and supposing these clustered objects were indeed found *in situ* and were not displaced somehow, then they might suggest that it was less important to lay out the dress with all the accessories and tools since it would not have shown after the lid of the coffin was attached. Instead, they might have been kept in a small chest that followed the deceased to the grave.

It is possible that that some chests were the storage place for more valuable and delicate items in life, perhaps along with finer items of clothing not worn on a daily basis, but suitable for special events and occasions such as burial. If so, it could partly explain some of the empty or near empty chests found in the graves: their contents were worn by the deceased.

The padlocks from the graves

The locks found in the Birka graves can all, except for seven padlocks, be presumed to have been attached to chests. Four of the padlocks were found in cremation graves (Bj 26, Bj 187, Bj 305, and Bj 1001) where the exact location does not provide much information. It is further not possible to say whether the padlocks would have been attached to a box or chest, or what function they may have had, since their mobility makes a variety of uses possible that could also change depending on need.

Two of the padlocks were found in coffin graves Bj 110A and Bj 948. The latter being a child's grave. In Bj 110A, the lock was situated to the northeast, at what was possibly the head end, although no skeleton survived. This appears to be the only find in the grave (Arbman 1943: 50). In Bj 948 the padlock was located on the right side of the deceased at chest or waist height, next to a knife and a bronze bell. The other finds consisted of a bead necklace with a pendant and a round brooch (Arbman 1943: 373-374). Again, it is not possible to tell if these locks were once attached to a box/chest or placed loose in the grave. Without

any traces of boxes/chests and with the confined space inside the coffin, the latter might be more likely.

There was also a chamber grave that contained a padlock, Bj 523. Here the padlock was located towards the northwest part of the chamber at the head end, some distance away from the deceased. Next to the padlock there was a fragment of a silver ribbon (Arbman 1943: 158-159). It is possible that these were the remains of a chest, secured with a padlock and containing perhaps some fabric or clothing with a silver ribbon, but it could also be a padlock placed on its own. Otherwise, the grave was very well furnished with wooden and bronze vessels, a drinking horn, gaming pieces, jewellery, and a needle-case (*Sis*).

If the padlocks in these graves were attached to boxes or chests, their function and meaning would be very similar to the other chests with locks in the Birka graves. If on the other hand they were placed on their own in the grave, a practical function is less likely. Here a symbolic interpretation might be preferred, probably relating to locking or unlocking in some way. In Jan-Erik Tomtlund's study on locks and keys (1977), he looked at the padlocks from the Birka graves and concluded that none of them seem to have been placed in the graves while being used as a lock, although some of them were worn from daily use. According to Tomtlund, most of them were broken open and those that were undamaged did not come with a key; their use in the graves therefore appears more symbolic than practical (Tomtlund 1977: 13). He drew a parallel with the western Urals where there was a custom to bury a padlock with the deceased: where families suffered frequent child deaths, a padlock could be placed on the chest of the child's corpse in an attempt to prevent death extracting further toll (Tomtlund 1977: 13). At least one of the Birka graves with a padlock was a child's grave (Bj 948), and perhaps there was a similar meaning behind the inclusion of the lock in this grave.

The find categories in the Birka graves with and without keys, locks, or chests – similarities and differences

In this section, the grave goods from the Birka graves are presented, sorted into categories based on their interpreted function or use, as described in chapter 1. Some of these categories will not always be included in the present analysis since some of them include very few objects, some do not provide much interpretable information, and others could be suspected to be part of the grave fill rather than deliberately placed in the grave.

Studying and comparing the categories of finds that were present in the graves, both with and without keys, locks, or chests, there might be some clues as to who the people in the key/lock/chest graves were, or what aspects of these individuals the kin group/family wanted to portray. Looking at objects that might for instance reflect a “profession”, activities, or way of living is a good place to start. Relating to the much-discussed issues regarding how to interpret grave goods mentioned in chapter 1, the meaning behind certain objects is rarely unambiguous, quite probably multivocal, and it should not be assumed that there was a clear-cut relationship between the buried individual and the objects in the grave. However, as a way forward, it is here assumed that there would still have been some form of meaningful relationship between the grave goods and the deceased, and that making comparisons between different groups of graves could help identify aspects of social identities or different roles in society.

Since the material includes a large number of graves, it has not been possible to describe each grave separately, but this information can easily be obtained in Holger Arbman’s *Birka. Undersøgelser og Studier 1: Die Gräber* (1940; 1943), and in *SiS*. The information about the Birka graves and the objects in the following sections is based on these sources.

To identify any similarities and differences between the graves containing keys, locks, or chests with the ones that do not, the material was first sorted into five groups: “All other graves”, “All graves with key/lock/chest”, “All graves with key”, “All graves with lock”, and “All graves with chest”. This division also made it possible to make comparisons between graves with keys, graves with locks, and graves with chests. In table 5:21a and table 5:21b below, the objects from the five grave groups

have been sorted into the various find categories. Here, all the thirty-three categories have been included to show the full picture.

It should be noted that the five grave groups were very unequal in size, with “All other graves” being much larger than the other groups. To counter this, relative frequencies in percentage have been used, though this means that each grave in the smaller groups gets a higher ‘weight’ than the graves in the much larger group. For clarity, the absolute numbers have therefore also been included, written in brackets in the table.

In order to make the percentage numbers in the resulting tables below easier to read and to use for comparisons between the grave groups, a classification system using greyscales in the tables was also used (see below). It was based on how common each find category was in the different grave groups and includes five classes: *Very common* (100-76%), *Common* (75-51%), *Less common* (50-26%), *Uncommon* (25-11%), and *Rare* (10-0%). The first three classes cover twenty-five percent each, but in order to highlight any rarer categories that might point to a more unique characteristic, the last two classes cover fifteen and ten percent respectively.

Table 5:21a and 5:21b. *The Birka graves sorted into five grave groups based on the presence of keys, locks, or chests. 5:21a: “All other graves” and “All graves with key/lock/chest”; 5:21b: “All other graves”, “All graves with key”, “All graves with lock”, and “All graves with chest”. The columns display the relative frequency in percent of the various find categories in each grave group; the absolute number is in brackets. The find categories have been sorted in an order with the most commonly occurring category first, when counting all the Birka graves together. The highest relative number has been highlighted in bold. Five classes, based on how common a category is, have been displayed using a greyscale as shown by the key at the bottom.*

Table 5:21a.

Find category	All other graves (1036)	All graves with key/lock/chest (123)
Nails, mounts, etc.	50% (519)	64% (79)
Ceramics	45% (461)	52% (64)
Cutting tools	35% (367)	70% (86)
Jewellery	28% (288)	63% (77)
Beads	24% (253)	63% (78)
Personal grooming	26% (271)	41% (50)
Dress and personal equipment	20% (202)	54% (66)
Animal bone	16% (162)	19% (23)
Trade	14% (141)	35% (43)
Sharpening tools	13% (135)	31% (38)
Weapons and armour	14% (140)	22% (27)
Utensils	9% (92)	34% (42)
Ice spikes and skates	10% (101)	18% (22)
Materials	10% (105)	13% (16)
Textile working tools	7% (68)	22% (27)
Tools	5% (52)	23% (28)
Key	0	63% (77)
Equestrian gear	5% (53)	15% (19)
Foodstuff	6% (60)	2% (3)
Chest	0	50% (62)
Flint	4% (46)	6% (7)
Fire making tools	4% (46)	11% (14)
Thor's hammers and amulets	5% (48)	10% (12)
Bag/purse	3% (31)	14% (17)
Lock	0	31% (38)
Slag	2% (23)	4% (5)
Other objects and figures	1% (9)	5% (6)
Metal working	0,5% (5)	2% (3)
Writing equipment	0,3% (3)	1% (1)
Staff	0	2% (3)
Agricultural tools	0,1% (1)	0
Fishing tools	0	1% (1)

Very common (100-76%)	Common (75-51%)	Less common (50-26%)	Uncommon (25-11%)	Rare (10-0%)
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Table 5:21b.

Find category	All other graves (1036)	All graves with key (77)	All graves with lock (38)	All graves with chest (62)
Nails, mounts, etc.	50% (519)	57% (44)	68% (26)	74% (46)
Ceramics	45% (461)	52% (40)	53% (20)	55% (34)
Cutting tools	35% (367)	73% (56)	74% (28)	74% (46)
Jewellery	28% (288)	64% (49)	68% (26)	74% (46)
Beads	24% (253)	66% (51)	66% (25)	69% (43)
Personal grooming	26% (271)	32% (25)	53% (20)	55% (34)
Dress and personal equipment	20% (202)	49% (38)	61% (23)	66% (41)
Animal bone	16% (162)	17% (13)	28% (11)	24% (15)
Trade	14% (141)	35% (27)	47% (18)	42% (26)
Sharpening tools	13% (135)	34% (26)	29% (11)	34% (21)
Weapons and armour	14% (140)	12% (9)	18% (8)	35% (22)
Utensils	9% (92)	32% (25)	47% (18)	45% (28)
Ice spikes and skates	10% (101)	21% (16)	18% (7)	21% (13)
Materials	10% (105)	9% (7)	21% (8)	11% (7)
Textile working tools	7% (68)	22% (17)	26% (10)	27% (17)
Tools	5% (52)	22% (17)	32% (12)	35% (22)
Key	0	100% (77)	34% (13)	32% (20)
Equestrian gear	5% (53)	14% (11)	16% (6)	19% (12)
Foodstuff	6% (60)	3% (2)	3% (1)	0
Chest	0	26% (20)	82% (31)	100% (62)
Flint	4% (46)	5% (4)	3% (1)	5% (3)
Fire making tools	4% (46)	13% (10)	5% (2)	11% (7)
Thor's hammers and amulets	5% (48)	8% (6)	13% (5)	16% (10)
Bag/purse	3% (31)	10% (8)	18% (7)	21% (13)
Lock	0	17% (13)	100% (38)	50% (31)
Slag	2% (23)	3 (2%)	5% (2)	3% (2)
Other objects and figures	1% (9)	4% (3)	8% (3)	5% (3)
Metal working	0,5% (5)	3% (2)	5% (2)	3% (2)
Writing equipment	0,3% (3)	0	0	1,6% (1)
Staff	0	0	5% (2)	5% (3)
Agricultural tools	0,1% (1)	0	0	0
Fishing tools	0	0	3% (1)	0

Very common
(100-76%)

Common
(75-51%)

Less common
(50-26%)

Uncommon
(25-11%)

Rare
(10-0%)

As shown in table 5:21a and 5:21b above, some categories were equally common in all of the grave groups. This was particularly true for the *Rare* categories, and it shows that *Foodstuff*, *Flint*, *Gaming boards and pieces*, *Slag*, *Other objects and figures*, *Metal working*, *Writing equipment*, *Staff*, *Agricultural tools*, and *Fishing tools* were not often placed in the Birka graves. At the same time, their presence points to variation among the graves. Amongst these *Rare* categories, there were a few that were absent in some of the grave groups. Besides *Key*, *Lock*, and *Chest*, the group with “All other graves” was also missing finds from the categories *Staff* and *Fishing tools*. At the same time, “All graves with key/lock/chest” was missing finds from *Agricultural tools*.

In the category *Staff*, the objects were only found in three chamber graves;⁵⁵ two of these were found in a grave with a lock and chest (Bj 660 and Bj 845), and one was found in a grave with a chest (Bj 834). Early interpretations of staffs suggest that they were parts of lampstands or used as meat roasting spits (Price 2002: 186-187). They have also been interpreted as measuring rods (e.g., Arbman 1943: 278, 305, 320), both to be used to measure up cloth (Gustin 2004b: 286-288), to measure volume, and also to create or measure the inner dimensions/volume of vessels such as pails (Kyhllberg 1980: 275). More recently the staff and a possible connection with seiðr, sorcery, and shamanism has been discussed (e.g., Lundström & Adolfsson 1995; Price 2002; Gardela 2008; 2009). With the exception of the earlier interpretations as lampstands and roasting-spits, these interpretations seem to imply a special and important role for the deceased, and it is interesting that all of the Birka staffs were found in graves with chests (two of them with locks). With so few cases it is however not possible to suggest that there is a real association between staffs and chests; more examples would need to be included.

There is also some similarity in form between certain types of staffs, such as those present in the three Birka graves, and a certain type of

55. There are some uncertainties and possibly mix-ups regarding the staff in grave Bj 660. According to Arbman and Stolpe's grave plan, there was a staff in Bj 660. The staff is said to now be lost, but there is a reference to the staff in Bj 760 (Arbman 1943: 232). The staff in Bj 760, a cremation grave, is however without an exact location in the grave and is said to possibly belong to Bj 660 (Arbman 1943: 278). In a depiction of the staff, and in *SzS*, it is assigned to Bj 760, but it is likely to actually belong to Bj 660. This is also how Price (2002) appears to have interpreted the situation as he attributes the staff to Bj 660 and never mentions Bj 760.

key; they all have a ‘basket’-like handle/end formed with iron rods bowing out around the central stem, and polyhedral bronze knobs with circle-and-dot decoration (the same form as many Viking Age weights) (Arbman 1943: 278, 305, 320, 1940: Taf. 125; Price 2002: 181-183, 188-189). From Birka there were no such keys found, however (Arbman 1943; *Sis*). In the previously mentioned Mästermyr-chest there was one key with a ‘basket-handle’, and the same form can also be found on the attachment-end of a hook belonging to a steelyard, which was also in the chest.⁵⁶ The ‘basket’-end of the staff in Bj 660 was in fact nearly identical to the Mästermyr steelyard hook (see Arwidsson & Berg 1983: 9, Pl. 2, 4, 16, and Arbman 1940: Taf 125).

Since the latter is a type of measuring tool, this might add validity to the idea that some of the staffs were used for measuring, assuming this form carried some mutual meaning. The steelyard also has a connection with trade which could suggest a context of use for a possible measuring-staff.⁵⁷ Furthermore, all of the graves containing a staff also included trade indicating items.

Another object with a very similar form is the distaff, and it has been argued that the staffs with ‘basket’-handles were in fact symbolic or cultic distaffs (Heide 2006: 167). Since the distaff and weaving in Old Norse mythology can be associated with seiðr (Heide 2006), this speaks in favour of the connection between staffs and seiðr/sorcery, but also with textile production. If the ‘basket-handle’-form used on the staffs, steelyards, distaffs, and keys was not simply coincidental, then there might be some association between these types of objects and textile production, trade, measuring/weighing and – based on the keys – controlled access. To this could also be added the chests, based on the previously described association with the staffs, meaning that the individuals in the three graves with a chest and staff potentially had an important, perhaps administrative, role in connection with these types of activities. The seiðr is harder to fit into this mix, but perhaps there was also some cultic element to these activities. With so few cases

56. There are additional steelyard-hooks with ‘basket’-shaped attachment-ends found on Gotland, e.g., Hallfreda, Follingbo parish (SHM 13214: 413694), Broa, Halla parish (SHM 12936: 413762), and one with unknown provenance (SHM 10416: 864458).

57. From Birka, one steelyard-hook (SHM 5208: 269130) was uncovered in the Black Earth, but the attachment-end is missing. There were also three steelyard weights from the Black Earth (SHM 5208: 221, 222, 224).

this reasoning will have to remain tentative, but perhaps a future study including a larger material could help to strengthen or disprove the above.

Continuing with the *Rare* find categories, *Gaming boards and pieces* was almost equally rare in all the grave groups, but had the highest frequency in the chest-graves. As mentioned previously, these objects have been suggested to be associated with high status, prestige, and/or chiefly intelligence, military skill, and authority (Whittaker 2006). That these objects rarely occurred in the graves could further support a more exclusive context.

Writing equipment was found in three of the “All other graves”, and a stylus was found in a chest-grave (Bj 367). This find category suggests that the deceased might have been literate and perhaps performed some kind of activity involving writing, potentially in an administrative function.

Flint, Slag, and Metal working were fairly equally rare in all the grave groups, but had the highest frequencies in the graves with keys, locks, or chests. They included pieces of flint, metal slag, and a few moulds and crucibles. It is possible that some of these objects did have a particular meaning and were intentionally included in the grave; perhaps associating the deceased with, for example, metal working activities, however some of these are suspected to instead be part of the grave fill. Since there is little or no information of the exact finds location in the graves, it is perhaps more likely that they were secondary components. The same is true for the category *Materials*, consisting of items such as stones, burnt clay, etc., that were listed amongst the finds in the grave but are more likely to have been part of the grave fill. These were slightly more common in the key/lock/chest-graves. The previously mentioned re-excavation of Bj 749 in 2014 showed that the fill of this grave derived from a settlement context and was full of finds originating from the settlement, rather than being part of the grave goods (Anderson et al. 2016). This might very well be the case in several, perhaps even most, of the Birka graves, indicating that there is always a risk that some of the finds assigned to a burial were actually part of the grave construction material. It is worth considering here that taking soil from a settlement might have a special meaning in itself, perhaps linking the deceased and the living in some way (see Heimdahl 2016: 53).

The category *Other objects and figures* was also *Rare* in all of the grave groups. It was present in six of the key/lock/chest-graves and comprised two wooden figures (Bj 523 and Bj 739), an antler disc (Bj 462), three unspecified antler/bone objects (in Bj 334), a bone/antler figurine (Bj 1079) and an unworked elk antler (A129). The objects might be the remains of larger objects or perhaps furniture; in the case of the elk antler a more symbolic meaning has been suggested (Holmquist Olausson 1993). These objects are difficult to interpret and compare in any meaningful way.

There were also some find categories that were equally common between “All other graves” and “All graves with key/lock/chest”, but which show some variation between the graves with keys, with locks, and with chests when looked at separately. These include *Thor’s hammers and amulets*, possibly hinting at a religious or cultic expression, which were *Rare* in “All other graves”, “All graves with key/lock/chest”, and “All graves with key”, but *Uncommon* in the graves with a lock and graves with a chest. The difference here was small, however. Looking at *Animal bone*, a category which could for instance represent food offerings, animal sacrifices, or companions to join the deceased in the grave and/or afterlife, this category was *Uncommon* amongst all grave groups, except for the graves with a lock where it was *Less common*. Again, the difference was small with a percentage point difference of only three.

Personal grooming, mostly consisting of combs which could relate to personal appearance and hygiene (accordingly a very personal item), but perhaps also with a warrior identity as discussed previously, was *Less common* in “All other graves”, “All graves with key/lock/chest”, and “All graves with key”, but *Common* amongst the graves with a lock and graves with a chest. Over half of the graves from the latter two groups contained objects from this category, and there is therefore a noticeable difference here (see table 5:21a and 5:21b).

A category that might also relate to the warrior or perhaps an aristocratic elite or armed upper class (Hillerdal 2009: 259) is *Weapons and armour*. This category was *Uncommon* in all grave groups, except for the graves with a chest where it was *Less common*. It was present in 35%, or just over one third of the chest-graves. This points to a fairly strong association between chests, weapons, and armour which could fit with some of the interpretations put forward regarding the warriors in the

Garrison area, although not many chests were actually identified there. The higher frequencies of combs in the lock-graves and the chest-graves could also to some extent fit in this context if the warrior connection is correct. However, if the comb is seen as more of a personal item, a (locked) chest would be a suitable container to store it in, and this might consequently be the reason behind the higher frequencies in the graves with a lock and a chest.

Amongst the find categories that were not equally common in the graves with and graves without a key, lock, or chest (not counting these three), the category displaying the greatest difference was *Beads* (see tables 5:21a&b and 5:22). This category was *Common* amongst the key/lock/chest-graves but *Uncommon* amongst “All other graves”. There was a thirty-nine percentage point difference between the two grave groups. This category, comprising what would presumably have been costly beads and bead pendants in varying numbers in the graves, points to some wealth amongst the deceased and/or their families. Similar categories of presumably costly items that were also noticeably more common amongst the key/lock/chest-graves were *Jewellery* and *Dress and personal equipment*. These were both *Common* amongst “All graves with key/lock/chest” but *Less common* and *Uncommon* in “All other graves”, with a difference of thirty-five and thirty-four percentage points respectively (see tables 5:21a&b and 5:22). Consequently, the individuals buried with keys, locks, or chests were seemingly generally more affluent.

Table 5:22. *The find categories in the Birka graves that show the most difference when comparing the relative frequencies in the grave groups “All other graves” and “All graves with key/lock/chest”. The column furthest to the right shows the percentage difference between the two groups. In all cases the difference is in favour of the group “All graves with key/lock/chest”, which has the highest relative number of graves containing items from all these categories.*

Find category	All other graves (1036)	All graves with key/lock/chest (123)	Percentage point difference
Beads	24% (253)	63% (78)	39
Cutting tools	35% (367)	70% (86)	35
Jewellery	28% (288)	63% (77)	35
Dress and personal equipment	20% (202)	54% (66)	34
Utensils	9% (92)	34% (42)	25
Trade	14% (141)	35% (43)	21
Sharpening tools	13% (135)	31% (38)	18
Tools	5% (52)	23% (28)	18
Personal grooming	26% (271)	41% (50)	15
Textile working tools	7% (68)	22% (27)	15
Nails, mounts, etc.	50% (519)	64% (79)	14
Bag/purse	3% (31)	14% (17)	11
Equestrian gear	5% (53)	15% (19)	10
Weapons and armour	14% (140)	22% (27)	8
Ice spikes and skates	10% (101)	18% (22)	8
Ceramics	45% (461)	52% (64)	7
Fire making tools	4% (46)	11% (14)	7

Yet another find category that could point to affluence, and which was more common in the key/lock/chest-graves, is *Utensils*. This category comprised of costly items such as glass and bronze vessels, including some drinking vessels suggesting a high-status lifestyle, possibly with banqueting. This category was *Less common* in the key/lock/chest-graves, but *Rare* amongst “All other graves”, with a difference of twenty-five percentage points.

The category *Cutting tools*, which mostly consisted of knives,⁵⁸ was also markedly higher in the key/lock/chest-graves where it was *Common* as opposed to *Less common*, with a difference of thirty-five percentage points. The knife as a defensive weapon was discussed above in relation with keys, and perhaps this situation speaks in favour of the idea of individuals safeguarding things of value more often having or feeling the need to protect themselves. Cutting tools could however also be seen as multi-purpose tools that could be used for cutting cloth, string, leather, metal wire, hair, food, etc. This would suggest that many of the individuals buried in the key/lock/chest-graves might have been involved in various crafting activities and/or daily chores.

The frequencies for the other types of tools were also higher in the graves with keys, locks, or chests (see table 5:21a&b). *Sharpening tools* were *Less common* in the key/lock/chest-graves and *Uncommon* in “All other graves”, with a difference of eighteen percentage points (see table 5:22). This category, consisting of whetstones, is related to *Cutting tools* as these would have been used to sharpen the knives or shears. This association suggests that many or most of the *Cutting tools* were actually used or intended for use, with the need for sharpening tools at hand.

A difference of eighteen percentage points can also be seen in the broader category *Tools*, which was *Uncommon* amongst the key/lock/chest-graves and *Rare* amongst “All other graves” (see tables 5:21a&b and 5:22).

Textile working tools was also a bit more common in the key/lock/chest-graves where it was *Uncommon* as opposed to *Rare* in “All other graves” with a percentage point difference of fifteen (see tables 5:21a&b and 5:22). *Textile working tools* is a category which could fit the traditionally presumed role of women in general or specifically the housewife; archaeologist Siv Kristoffersen associated highly developed textile production with the housewife, based on tools such as spindle-whorls, hook-mounts for distaffs, and iron weaving battens found in some Norwegian graves containing bundles of keys (Kristoffersen 2004: 295-296). In the Birka graves with keys, locks, or chests, nearly all of the *Textile working tools* consisted of needles and needle-cases, indicating sewing and embroidery rather than spinning and weaving.

58. Within this find category, in the grave group “All graves with key/lock/chest”, eighty-two graves out of eighty-six contained a knife, forty-one contained shears, and three graves contained a pair of scissors. Some graves contained more than one of these object types.

Only one grave, A88, contained a spindle whorl and one grave, Bj 644, contained a weaving comb. In three graves, Bj 854, 963, and 513, there was a glass smoothing stone; the first grave also containing a smoothing board. To this could be added some of the *Cutting tools* that may have been used in textile working. It has been stated that needles were related to the production of garments rather than the production of textiles (Andersson Strand & Mannering 2014: 306-307), and accordingly, with few exceptions, the individuals in the key/lock/chest-graves with *Textile working tools* seem to have been involved in embroidery and/or the production of garments.

Besides *Cutting tools*, there was no specific type of tool that stood out as being markedly more frequent in the key/lock/chest-graves. This does not point to any one specific activity that could be associated with the deceased in these graves at this level of comparison. It does however suggest that these individuals or their family/kin could have been associated with various forms of crafting; either as practitioners themselves, or for instance in some administrative role.

Control over or access to trading networks and contacts may also have played a part, and the category *Trade*, with objects which could relate to trading activities or the role of the merchant, was higher amongst the key/lock/chest-graves. Here it was *Less common* as opposed to *Uncommon* in “All other graves” with a percentage point difference of twenty-one (see tables 5:21a&b and 5:22). The highest frequency was found amongst the graves with locks where nearly half of the graves had trade-indicating objects, followed closely by the graves with chests. Consequently, there appears to be a fairly strong association with trading activities and the individuals buried in the key/lock/chest-graves and/or their families, particularly those buried with locks and chests.

A somewhat related find category suggesting a connection with winter travelling (or a winter burial), *Ice spikes and skates*, was also higher in the key/lock/chest-graves where it was *Uncommon* as opposed to *Rare* in “All other graves” with a percentage point difference of eight. The difference was therefore rather small and could equally be the result of the difference in size between the grave-groups. The same situation can be found looking at *Equestrian gear* (see tables 5:21a&b and 5:22), suggesting travelling and/or a high social status. This category was also *Uncommon* in the key/lock/chest-graves and *Rare* in “All other graves”, with a percentage point difference of ten.

The category *Bag/purse* may also have had an association with trade, as mentioned earlier, or it may also be seen as a rather exclusive item, part of the dress accessories. In the key/locks/chest-graves it was *Uncommon*, and in “All other graves” it was *Rare*, with a percentage point difference of eleven. There was however a noticeable difference amongst the key/lock/chest graves where the highest frequency was found in the chest-graves. Here it was present in 21% of the graves, but it was only found in 10% of the key-graves. In the lock-graves the frequency was almost equal that in the chest-graves.

Other categories where there was only a rather small difference between “All graves with key/lock/chest” and “All other graves”, as shown in table 5:22 above, include *Nails, mounts, etc.*, and *Ceramics*. *Nails, mounts, etc.*, was *Common* amongst the key/lock/chest-graves and *Less common* amongst “All other graves” with a percentage point difference of fourteen. The same was true for *Ceramics*, but with a percentage point difference of only seven. These categories do not provide much to go on in interpreting the buried individuals as they were amongst the most common finds in all of the Birka graves (see tables 5:21a&b and 5:22).

For the category *Fire making tools*, the difference between “All graves with key/lock/chest” and “All other graves” was also rather small. It was *Uncommon* in the key/lock/chest-graves and *Rare* in “All other graves”, with a percentage point difference of seven. This category may indicate that the deceased was involved in various activities requiring fire, such as for instance food preparation, metal working, pottery production, etc., or perhaps cultic activities, and some in the cremation graves may even have been used in lighting the funeral pyre.

Finally, comparing the graves with keys, locks, and chests separately (see table 5:21b), it is clear that the graves with keys had a somewhat lower frequency for the majority of the find categories than the graves with locks and graves with chests. The graves with locks and chests were also very similar, which to a large extent can be explained by the fact that half of the chest-graves contained a lock, and 82% of the lock-graves contained a chest; indeed, many of the graves were actually the same grave containing both a lock and a chest. There was therefore a difference between the key-graves and the chest/lock-graves in both the distribution between inner grave types and in find distribution, with the key-graves comprising fewer chamber graves and having lower

frequencies of finds from most categories. However, since it was the chamber graves that generally contained the most grave goods (see next section), perhaps this difference was actually due to there being fewer chamber graves with keys than with locks and chests.

It is also interesting to note that only 26% or twenty graves out of the seventy-seven key-graves contained a chest, and only 17% (thirteen graves) contained a lock (see table 5:21b). This could point to there being a different meaning or message behind keys placed without a chest with a lock to which they might have belonged; perhaps a more symbolic one. This will be further discussed in chapter 9.

Similarities and differences between inner grave types regarding find categories

To avoid the risk of skewed results from the different types of burials; not least cremation compared to inhumation, the material has here been sorted based on inner grave type. This was also done to see if there were any differences between these types regarding the find categories. As a first step, all of the Birka graves were looked at together, but sorted into cremation graves, inhumation graves, coffin graves, and chamber graves.

To make the material more manageable, not all find categories have been included here. The categories that contain finds that were suspected to rather be part of the grave fill have been excluded. These are: *Flint*, *Materials*, *Metal working* and *Slag*.

A category that is hard to interpret or compare in any meaningful way between the graves is *Other objects and figures* and it was therefore omitted. Four categories were additionally excluded since they were very rare and therefore not suited for comparisons. These were *Agricultural tools*, *Fishing tools*, *Writing equipment*, and *Staff*. The latter, exclusively found in chamber graves, was already discussed in the previous section.

The remaining twenty-four find categories are presented in table 5:23, showing all the Birka graves (1159), separated into cremation graves (620), coffin graves (212), inhumation graves (213) and chamber graves (114). The numbers in the table represent the percentages of graves containing finds from each find category for each inner grave type. The absolute number has also been included (in brackets) for clarity. The

previously applied system using greyscales, to show how common each find category is within each grave group, was also used.

Table 5:23. *The Birka graves sorted into four groups based on inner grave type and the relative frequency in percent of the various find categories in each grave group; the absolute number is in brackets. The find categories were sorted in an order with the most commonly occurring category first, when counting all the Birka graves together. The highest relative number has been highlighted in bold. Five classes based on how common a category was, have been displayed using a grey-scale as shown by the key at the bottom.*

Find category	All cremation graves (620)	All coffin graves (212)	All inhumation graves (213)	All chamber graves (114)
Nails, mounts, etc.	72% (449)	19% (41)	22% (46)	56% (64)
Ceramics	70% (431)	13% (28)	15% (32)	32% (36)
Cutting tools	15% (95)	73% (154)	53% (113)	81% (91)
Jewellery	16% (100)	51% (108)	34% (73)	75% (84)
Beads	26% (159)	33% (69)	24% (51)	47% (53)
Personal grooming	38% (234)	14% (29)	8% (17)	37% (41)
Dress and personal equipment	19% (118)	24% (50)	19% (40)	54% (61)
Animal bone	22% (136)	5% (11)	7% (14)	22% (25)
Trade	9% (56)	23% (48)	12% (26)	48% (54)
Sharpening tools	14% (85)	12% (26)	8% (16)	41% (46)
Weapons and armour	11% (69)	8% (18)	9% (19)	54% (61)
Utensils	8% (49)	8% (16)	5% (10)	52% (59)
Ice spikes and skates	11% (66)	9% (20)	5% (10)	24% (27)
Textile working tools	6% (35)	11% (23)	5% (11)	23% (26)
Tools	5% (31)	4% (9)	4% (8)	29% (32)
Key	4% (23)	9% (19)	5% (10)	22% (25)
Equestrian gear	6% (36)	2% (4)	1% (3)	26% (29)
Foodstuff	9% (55)	1% (2)	2% (5)	1% (1)
Chest	3% (17)	2% (5)	3% (7)	29% (33)
Fire making tools	5% (30)	5% (10)	3% (6)	13% (14)
Thor's hammers and amulets	7% (45)	0,5% (1)	1% (3)	10% (11)
Bag/purse	0,3% (2)	8% (16)	3% (6)	21% (24)
Lock	2% (12)	2% (4)	1% (2)	18% (20)
Gaming boards and pieces	3% (18)	0,5% (1)	0	9% (10)

Very common (100-76%)	Common (75-51%)	Less common (50-26%)	Uncommon (25-11%)	Rare (10-0%)
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Studying table 5:23, it becomes very clear that the chamber graves were generally much better equipped than the other graves, particularly the coffin graves and inhumation graves; these two grave groups generally appear to be very similar in regard to find category frequencies. Except for the categories *Nails, mounts, etc., Ceramics, Personal grooming, Animal bone,* and *Foodstuff* which had the highest frequencies amongst the cremation graves, the chamber graves had the highest frequencies in all other find categories. Some of this could be explained by the fact that the chamber graves constituted the smallest grave group, with each grave therefore having a higher “weight”, however the percentage point difference was still rather large for most find categories.

In common amongst all Birka graves was that *Gaming boards and pieces, Thor’s hammers and amulets,* and *Foodstuff* were *Rare*. Additionally, in all grave groups except for the chamber graves, *Lock, Bag/purse, Fire making tools, Chest, Equestrian gear, Key, Tools, Textile working tools,* and *Utensils* were also *Rare*. In common amongst these three grave groups was that *Dress and personal equipment* was *Uncommon*. The remaining find categories showed more variation in how commonly they occurred in the four grave groups.

Continuing the study of the find categories in the Birka graves, the material was also sorted within each of the four inner grave types separately. It is again worth noting that the size of the groups varies with those containing keys, locks, or chests generally being much smaller, and each grave had a larger impact when calculating relative frequencies. For clarity, the actual number of graves in the tables (in brackets) has again been included. The resulting tables can be found in Appendix 6-9. Here, the focus will primarily be on the find categories that show the most difference between the graves with and graves without keys, locks, or chests, which might consequently be able to give some information on what potentially set the individuals buried with keys, locks, or chests apart from the rest of the Birka population. This in turn could help the interpretation of the social identity or role of these individuals.

Cremation graves

Regarding the cremation graves (see Appendix 6), those with a key/lock/chest (constituting 6.5% of all cremation graves) had higher frequencies of finds compared to “All other cremation graves” from all but two find categories; *Bag/purse* and *Gaming boards and pieces*. These two categories were however *Rare* amongst all the cremation graves at Birka. For many of the find categories the difference was nevertheless quite small and could be due to the smaller size of this grave group (40 graves vs. 580 graves).

A rather large difference was found amongst the find categories *Dress and personal equipment*, *Beads*, *Nails*, *mounts*, *etc.*, and *Cutting tools* with a percentage point difference of thirty-three, twenty-four, twenty-two, and twenty-one, respectively. The higher frequency of finds from the first two categories could, as discussed in the previous section, suggest that these individuals were generally in possession of more wealth, since these categories would have included some costly items.

That *Nails*, *mounts*, *etc.* constituted the most common finds amongst the Birka cremation graves could indicate the remains of a structure used in connection with the funeral pyre, or reused wood with remaining nails being used as fuel. It could however also suggest that items such as chests were included amongst the grave goods, something that would fit the higher frequency amongst the key/lock/chest graves well. Here, a more thorough study of the items in the future might shed some new light.

The higher frequency of *Cutting tools* could, as discussed above, suggest a stronger connection with crafting activities or perhaps personal protection. This find category was *Less common* in the key/lock/chest-graves as opposed to *Uncommon* in the group with “All other cremation graves”. The highest frequency, 42%, can be found amongst the lock-graves. *Textile working tools* were also more frequent in the key/lock/chest graves where they were *Uncommon* as opposed to *Rare* in “All other cremation graves”, with a percentage point difference of eighteen. This indicates a stronger connection with textile working amongst the individuals in the key/lock/chest-graves. The highest frequency, 24%, was found amongst the chest-graves, perhaps indicating that some of these tools were once stored in the chests. Looking in detail at the *Cutting tools*, since these include shears which could also be used for textile

related work, only three graves had this particular tool;⁵⁹ the remaining *Cutting tools* were knives.

Regarding *Tools* in general, this find category was only a bit more frequent amongst the key/lock/chest graves, with a percentage point difference of nine. The highest frequency was found amongst the key-graves.

Another find category that was a bit more common amongst the cremation graves with keys, locks, or chests was *Personal grooming*; the percentage point difference here was thirteen. This category was however markedly higher amongst the chest-graves (followed by the lock-graves), and therefore in line with the strong association between *Personal grooming* (mostly combs) and all Birka graves with chests, discussed in the previous section. This in turn could point to chests being used to store combs, amongst other things. The previously mentioned connection between combs and a warrior identity could possibly also play a part; however, *Weapons and armour* were *Rare* or *Uncommon* in all the cremation graves. They did occur in all five grave groups, however.

Other find categories that were a bit more frequent in the key/lock/chest-graves, but which were still *Uncommon*, include *Jewellery* and *Utensils*, with a percentage point difference of nine and eight, respectively. These categories, which included some costly items, point to affluence, but the difference between the graves with and graves without key, locks, and chests was rather small.

Ceramics were also somewhat more common in the key/lock/chest-graves, where it was *Very common* as opposed to *Common* amongst “All other cremation graves”. The percentage point difference was eleven. This category largely constitutes the burial vessel, and the higher frequency amongst the key/lock/chest-graves could suggest better preservation conditions in these graves or that a larger number of the other graves might have included burials without a ceramic burial vessel.

Trade was also only slightly more common amongst the key/lock/chest-graves where it was *Uncommon* as opposed to *Rare* amongst “All other cremation graves” with a percentage point difference of only six. The highest frequency was found amongst the lock-graves where 25% of the graves contained items from this category. The actual number of graves was nonetheless very small, and there was therefore little evidence

59. Bj 24A, Bj 902 and A88. A88 and Bj 24A had a knife each as well (*Sis*).

to suggest a stronger association with trading activities amongst the individuals buried in these graves.

To sum up, from the above observations it can be inferred that several of the individuals, or the families of the individuals, buried in cremation graves with keys, locks, or chests were probably a bit more affluent and/or of higher status than those without if seen as a whole – though there are certainly individual differences within both groups. Many of them seem to have had a somewhat stronger connection with various crafts based on the tools found in the graves, particularly *Cutting tools* (mostly knives, which might also relate to personal protection), and to some extent also with textile working. There was also a stronger connection with *Personal grooming*, particularly amongst the chest-graves, and it is possible that such personal items were indeed suitably stored in a chest.

A few of the individuals in the key/lock/chest-graves also had items indicating trading activities, perhaps some of them once merchants. A few of them had items from the *Weapons and armour* category which might relate in some way to the role or status of the warrior or armed upper class. These two activities or roles were not common however, and there was not much difference in frequency compared to the other cremation graves.

Coffin graves

Amongst the coffin graves (see Appendix 7), approximately 11% contained a key, lock, and/or chest. These made up a rather small group (23 graves vs. 189 graves), and as such, each grave had a rather high ‘weight’ when calculating relative frequencies, which is important to keep in mind. Nevertheless, these graves displayed a rather different picture. There were five find categories that were absent amongst the key/lock/chest-graves but present amongst “All other coffin graves”: *Equestrian gear*, *Foodstuff*, *Gaming boards and pieces*, *Thor’s hammers and amulets*, and *Weapons and armour*. These were however all *Rare* amongst these graves, although *Weapons and armour* was present in 10% of them and therefore represents a somewhat noticeable difference compared to the key/lock/chest-graves.

A further two categories were more common amongst “All other coffin graves”: *Animal bone* and *Textile working tools*. For both the difference was small, however. *Textile working tools* were absent in the lock-graves and chest-graves, and present in 11% of the key-graves, matching the frequency in “All other coffin graves”. It was accordingly the lock – and chest-graves that differed from the rest of the Birka coffin graves.

The largest difference can be found looking at the category *Beads* which were *Common* amongst the key/lock/chest-graves, but *Uncommon* amongst “All other coffin graves”. The percentage point difference was forty-six.

Of the other find categories containing more expensive items, *Jewellery*, *Utensils*, and *Dress and personal equipment*, the first two were quite a bit more common amongst the key/lock/chest-graves; each with a percentage point difference of sixteen. The category *Dress and personal equipment* was only slightly more common amongst the key/lock/chest-graves, with a percentage point difference of three.

Bag/purse, a generally rare category which could be seen as an exclusive dress accessory and/or perhaps connected with trading activities, was slightly more common in the key/lock/chest-graves, with a percentage point difference of eleven. Related to *Utensils* is *Ceramics*, which was also more common amongst the key/lock/chest-graves where it was *Less Common* as opposed to *Uncommon* in “All other coffin graves”, with a percentage point difference of nineteen.

Another category that displayed a large difference between the graves with and graves without keys, locks, or chests was *Ice spikes and skates*. It was *Uncommon* amongst the key/lock/chest-graves but *Rare* amongst “All other coffin graves”, with a percentage point difference of twenty-three. This category could be seen to indicate either winter travelling or a winter burial.

Tools were *Rare* amongst both the key/lock/chest-graves and “All other coffin graves”, and *Fire making tools* were only slightly more common amongst the key/lock/chest-graves, with a percentage point difference of eleven. *Cutting tools* were generally common in the coffin graves, but slightly more so in the key/lock/chest graves, with a percentage point difference of six. There was consequently not as clear a difference here as there was regarding all key/lock/chest-graves taken together. *Sharpening tools*, on the other hand, were a fair bit more common amongst the key/lock/chest-graves, with a percentage point difference of fifteen.

The category *Trade*, which could indicate trading activities or a role as a merchant, was *Uncommon* in both grave groups, with only a one percentage point difference in favour of the key/lock/chest-graves. Interestingly it was absent in the graves with locks and with chests, contrary to the situation when studying all the Birka key/lock/chest graves together, where these graves in particular had the highest frequency of trade indicating objects.

Personal grooming was also *Uncommon* in both grave groups, with a percentage point difference of nine in favour of the key/lock/chest-graves. This category was therefore less common than in the cremation graves. There was similarly a higher frequency in the key/lock/chest-graves, particularly for the chest-graves, although the difference was not as pronounced amongst the coffin graves.

To sum up, the above suggests that the individuals in the coffin graves with keys, locks, and/or chests were generally buried with somewhat more and presumably more valuable grave goods, and that they and/or their families were in possession of a bit more wealth than the other coffin graves as a whole. However, as with the previously discussed cremation graves, there are individual differences amongst the graves.

There were only a few tools in the coffin graves, and only slightly more amongst the key/lock/chest-graves. Consequently, there were not many indications of the individuals in these graves being involved in crafting activities, if indeed the presence of tools is to be seen as an indicator of the deceased's past activities. It might also be the case that tools were generally not considered as appropriate grave goods in coffin graves. Furthermore, there were no finds from the *Weapons and armour* category amongst the coffin graves with keys, locks, or chests and therefore there was no indication of any association with the warrior or armed upper class. There were also no *Textile working tools* or *Trade* items amongst the coffin graves with locks or chests, only amongst the key-graves and "All other coffin graves". There were no graves that could be related to horses/riding through finds of *Equestrian gear*, but a fairly high percentage of graves had items from *Ice spikes and skates* and might therefore have been involved in winter travel or they perhaps simply died in winter.

Interestingly, and perhaps partly the reason for the rather different find patterns in these graves, seven of the sixteen coffin graves with keys,

locks, or chests (44%) were actually children's graves, based on Arbman's (1943) and Gräslund's (1980) studies of the Birka graves. These were based on the size of the graves/coffins since so few osteological analyses were carried out. Six of the graves contained a key and one contained a padlock. Two of the graves even had two keys each (Bj 733⁶⁰ and Bj 758). The types of keys include angular L-shaped lift-keys, rotary keys, and padlock keys.

They all had *Cutting tools* (knives) and one grave contained *Sharpening tools*. Besides these, all other types of tools were absent; possibly corresponding with these children still being too young to be involved in any crafts, but since tools were generally scarce in the coffin graves, they might simply be following this burial tradition.

Two graves did have objects from the *Trade* category however: Bj 758 contained a silver coin and Bj 807 contained a bronzed iron weight. These children being involved in trading activities themselves is perhaps not so likely, but it is possible that these items reflect the activities of the family group and/or what might have been the future activities and roles of these children. They could also be seen as indicators of wealth or status, or as amulets.

Inhumation graves

The inhumation graves with keys, locks, or chests (see Appendix 8) constituted 7.5% of all the excavated Birka inhumation graves. They had the highest frequencies of graves in most of the categories, but since this group was small (16 graves vs. 197 graves), each grave had a higher 'weight' when calculating relative frequencies, as with the cremation and coffin graves. Consequently, the categories that were only slightly more common amongst the key/locks/chest-graves, including *Sharpening tools*, *Equestrian gear*, *Thor's hammers and amulets*, *Fire making tools*, *Personal grooming*, *Animal bone*, and *Ice spikes and skates*, should be regarded as more or less equally common amongst all inhumation graves, along with *Gaming boards and pieces* which were absent in all of the inhumation graves.

60. Bj 733 was not identified as a child's grave by either Arbman or Gräslund, but following the same criteria – a smaller grave/coffin size – this grave with a 1.2 m long coffin (Arbman 1943: 255-256) should likely also be that of a child.

Furthermore, there were three find categories that were *Rare* amongst “All other inhumation graves” but absent in the key/lock/chest-graves: *Bag/purse*, *Foodstuff*, and *Textile working tools*.

The category that displayed the most difference was *Beads*, just as in the coffin graves. They were *Common* amongst the key/lock/chest-graves, but *Uncommon* in “All other inhumation graves”, with a percentage point difference of forty-two. The key/lock/chest-graves also had a markedly higher frequency of graves with finds from the categories *Jewellery*, and *Dress and personal equipment*, with a percentage point difference of thirty-one and twenty-two respectively. Furthermore, the find category *Utensils* was also higher amongst the key/lock/chest-graves, with a percentage point difference of fifteen. *Ceramics*, related to *Utensils*, was also a bit more frequent in the key/lock/chest-graves, with a percentage point difference of eleven. As discussed above, these find categories presumably included some costly items, and the higher proportion in the key/lock/chest-graves could suggest that the individuals in these graves and/or their families were in possession of more wealth.

Another category that displayed a large difference was *Cutting tools*, *Common* amongst “All inhumation graves” but *Very common* amongst the key/lock/chest-graves, with a percentage point difference of thirty. This might, as discussed previously, suggest a stronger association with crafting and/or everyday household activities, or personal protection, for the individuals buried with keys, locks, or chests. *Tools* were also more common, with a percentage point difference of sixteen. These were however *Uncommon* in this group, but still suggest a possible association with various crafting activities in a few of these graves. As already mentioned, there were no *Textile working tools* in these graves.

The category *Nails, mounts, etc.*, was also noticeably higher amongst the key/lock/chest-graves, with a percentage point difference of twenty-four. These might have been the remains of items such as chests, but some of the nails within this category could also have been coffin nails that were not classified as such. If so, some of these graves were actually coffin graves; these groups of graves were similar in terms of the presence of the various find categories.

Regarding *Trade*, and a possible association with trading activities, this category was also more frequent in the key/lock/chest-graves, although *Uncommon* in this group as well as in “All other inhumation graves”. The percentage point difference was fourteen.

The category *Weapons and armour* also had a higher frequency amongst the key/lock/chest-graves, with a percentage point difference of eleven, but within this group the category was only present in the chest-graves. Here 43% of the graves had items from this category and there was therefore a noticeable difference. However, when looking at the absolute frequency, it was only a matter of three chest-graves (see Appendix 8 and table 5:23). Nevertheless, it follows the general pattern observed in the present study of *Weapons and armour* having a strong association with chests.

To sum up, the above observations suggest that the individuals buried in inhumation graves with keys, locks, or chests, or their families, were presumably a bit wealthier than the rest of the individuals buried in inhumation graves when taken together. Again, there are of course individual differences. A few seem to have been associated with some form of crafts other than textile working, along with trading activities and perhaps winter travel. *Weapons and armour*, and a possible connection with a warrior role or armed upper class, were only present in some of the chest-graves, which at the same time lacked items from the *Trade* category. Trade indicating items were only found in a few of the key – and lock-graves and suggest a possible association with trade or the role of the merchant.

Two of the inhumation graves with keys, locks, and chests were children's graves, Bj 1044 and Bj 1102. Bj 1044 only contained a padlock key, and Bj 1102 contained a padlock key and an iron mount.⁶¹

Chamber graves

The chamber graves (see Appendix 9) were generally very rich in grave goods, although some individual graves were not. The graves with keys, locks, or chests as a group had higher frequencies in all find categories, except for *Weapons and armour* and *Ice spikes and skates*. Since the key/lock/chest-graves constitute almost 39% of all excavated chamber

61. The iron mount has remains of wood on it and could, according to Arbman (1943: 459), be from a chest. This remains uncertain, however, and it has not been counted amongst the chest-graves in this study.

graves (44 key/lock/chest-graves vs. 70 “All other chamber graves”), the frequency calculations were less affected by a smaller group size resulting in a higher ‘weight’ for the individual graves in this group. This in turn suggests that even the lower percentage point differences shown in Appendix 9 may represent actual differences.

The category displaying the most difference was *Beads*, just as amongst the coffin and inhumation graves, making this a strong pattern. This category was *Common* amongst the key/lock/chest-graves but *Less common* amongst “All other chamber graves”, with a percentage point difference of forty-two. The other find categories containing presumably costly objects; *Dress and personal equipment* and *Jewellery*, were also noticeably more common amongst the key/lock/chest-graves compared to “All other chamber graves”, with a percentage point difference of thirty-seven and thirty-three respectively. These were both *Very common* amongst the key/lock/chest graves and *Common* amongst “All other chamber graves”. As discussed earlier, this suggests more wealth amongst the individuals in the key/lock/chest-graves if seen as a group, and quite possibly a higher or special social status.

Two other categories indicating that the key/lock/chest-graves were generally a bit better equipped include *Ceramics* and *Utensils*. These were both more common in this grave group, with a percentage point difference of twenty-seven and seventeen, respectively.

Another category displaying a large difference was *Personal grooming*, with a percentage point difference of thirty. As with all the other key/lock/chest-graves, the highest frequency was found amongst the chest-graves. This suggests a rather strong association.

The previously discussed connection between combs and a warrior identity could also play a part here in some of the graves. Regarding *Weapons and armour*, this category was more common in “All other chamber graves”, where it was *Common* as opposed to *Less common* amongst the key/lock/chest-graves. The percentage point difference was seventeen. Nevertheless, items from this category were present in 45% of the key/lock/chest-graves, and they were noticeably more frequent in the chest-graves – in line with the previously discussed idea where a warrior might have had a personal chest.

The find category *Trade* was also more common amongst the key/lock/chest-graves where it was *Common* as opposed to *Less common* in “All other chamber graves”. The percentage point difference was twenty-

six. It was particularly the lock-graves, followed by the chest-graves, which had the highest frequency. Many of the individuals in the key/lock/chest-graves may therefore have had some connection with trading activities and some were possibly merchants. The stronger association with the chest- and lock-graves supports the idea that chests (with locks) were used during trading activities.

Regarding the various tools, these were all more common amongst the key/lock/chest-graves. *Tools* were *Less common* in the key/lock/chest-graves and *Uncommon* in “All other chamber graves” with a percentage point difference of twenty-four. The same was true for *Textile working tools* and *Sharpening tools*, but with a percentage point difference of twenty-one and eighteen respectively. *Cutting tools* were *Very common* in the key/lock/chest-graves, but *Common* in “All other chamber graves”, with a percentage point difference of nineteen. There was therefore a rather large difference here, where individuals in the key/lock/chest-graves may have been involved in some way in various crafts, including textile production, to a higher degree than “All other chamber graves”. Perhaps some of the cutting tools also indicate a real or perceived need for personal protection, as discussed previously.

Amongst the categories that were moderately more common in the key/lock/chest-graves compared to “All other chamber graves” are *Nails, mounts, etc.*, perhaps once part of furniture or chests placed in the chambers; *Bag/purse* which may be seen as an exclusive dress accessory or perhaps associated with trading activities; *Thor’s hammers and amulets* which could be an expression of cult or religious beliefs; *Equestrian gear* which could relate to travelling/riding and point to a high social status, and *Animal bone* which could constitute food offerings, sacrifices, or perhaps animal companions.

To sum up, from the above it would appear that the individuals buried with keys, locks, or chests were generally accompanied with more and costlier grave goods when compared to “All other chamber graves” as a whole, suggesting affluence and/or high social status. Many of them were buried with trade indicating objects which could point to several of these individuals and/or their families being involved in some way in trade, and some of them were perhaps merchants. Many of them also seem to have had a connection with the role of the warrior or armed

upper class, although this connection was even stronger amongst “All other chamber graves”.

The key/lock/chest-graves also stand out from “All other chamber graves” in that the frequency of various tools was generally much higher, suggesting that many of the buried individuals or their families were once involved in various crafts, including textile production.

Concluding remarks on the keys, locks, and chests in the Birka graves

Placing keys, locks, and/or chests in the graves at Birka was a rare practice. These graves together constituted 10.6% of all the excavated graves: calculated separately, the key-graves constituted 6.6%, the lock-graves 3.3%, and the chest-graves 5.3%.

Regarding inner grave types, there was a much larger proportion of key/lock/chest burials in chamber graves compared to the other Birka graves. It was in fact the most common inner grave type for the key-graves, the lock-graves, and the chest-graves – followed by cremation as the second most common. The richly furnished chamber graves were likely the burials for high-status individuals and/or families, and it has also been suggested that they had an international character, perhaps related to merchants. This, together with the above, suggests that many of the individuals in the key/lock/chest graves were amongst these families, and that there was a rather strong association with trading activities and/or far-reaching contacts. This is further supported when studying the find categories present in the graves, as presented above.

Looking at the find categories in the key/lock/chest-graves compared to the other Birka graves, it is clear that the key/lock/chest-graves had higher frequencies of finds from most of the categories; this is especially true for the graves containing chests. Consequently, they generally appear to have been better equipped than most other Birka graves, although there were some key/lock/chest-graves with only a few grave goods and certainly several richly furnished graves amongst the other Birka graves.

The find categories containing presumably more valuable objects, such as *Beads*, *Jewellery*, *Dress and personal equipment*, and *Utensils*, were also

generally much higher in the key/lock/chest-graves, particularly the *Beads*. This suggests that the individuals in these graves and/or their families were generally in possession of more wealth. This appears to be a trait that all the key/lock/chest-graves as a group have in common, even within each inner grave type. Still, there are of course individual differences, and this pattern is less pronounced in the coffin and inhumation graves.

Regarding clues to possible past activities, roles in society, and social identities, all of the grave groups contain some tools, but it is mostly the cremation and chamber graves that include these objects, particularly the chamber graves. They were furthermore more common in the graves containing chests. The tools suggest that the individuals in these graves may have been involved in some way in various crafting activities, either as practitioners themselves, or perhaps in a more administrative or supervisory function.

A stronger association with textile working, an activity suggested to be connected with the role of the housewife, only seems to fit the cremation and chamber graves. In the other two grave groups such items were more common amongst the other Birka graves, and the inhumation graves totally lack such finds. Furthermore, the often referred to and previously described image from *Rigsthula* and *Thrymskvida* where keys in plural were mentioned, does not fit the evidence from the Birka graves. Here, only ten graves contained more than one key, and at least two of these were children's graves. Moreover, there does not appear to have been any keys used solely as symbols with no practical function, such as girdle-hangers, and the predominance of iron keys also points to a more practical use. This of course does not mean that the keys could not have carried some symbolic meaning as well, but this was seemingly not their primary purpose.

Regarding trading activities and a possible connection with the role or identity of the merchant, it is clear that the chamber graves stand out, but some can also be found in the cremation graves, and a few in the coffin and inhumation graves. Here, the practical use of lockable chests in trade may, at least in part, be behind this connection. Trading activities may also have resulted in more wealth and personal property, some of which may have been stored in chests.

Birka

An association with the role of the warrior or armed upper class can be found in all except the coffin graves, and again it was particularly the chamber graves and the graves with chests that stood out. Generally, these graves were rather few, but they do point to a connection between armed individuals and keys, locks, and chests.

Helgö

Not far from Björkö, only c. 10 km in a straight line south-east from the Black Earth, is the small island known as *Lillön* on which Iron Age graves and settlements with metal workshops were once situated (see figure 1:1). In the past the island was known as *Helgö*, which can be translated as ‘Holy Island’, or as ‘The island where there is sanctuary’. This name indicates that the island might once have had a sacred element, or that it might once have provided some form of sanctuary or peace (Holmqvist et al. 1961a: 22-23; Franzén 2010: 6-7; Arrhenius 2011: 11). The first record of the name Helgö is from 1287, but by the 17th century this name was forgotten and Lillön was used instead. In connection with excavations on the island the old name was brought back into use (Franzén 2010: 6-7).

Helgö belongs to Ekerö parish in the county of Uppland. It is located in south-eastern Lake Mälaren, at what was most likely a very strategic point between two narrow straits: the Norr-strait (Sw. *Norr Sund*) to the north and the Bockholm-strait (Sw. *Bockholms Sund*) to the south. These two straits almost form a barrier in one of the waterways leading from the Baltic Sea in to the inner and western parts of Lake Mälaren, and via further waterways to districts further north or south. This places Helgö in the cross point between waterways going north-south and east-west (Holmqvist et al. 1961a: 22; Lundström 1971: 1-2; Arrhenius 2011: 11).

The two straits lead past Helgö into the widest open part of Lake Mälaren, *Södra Björköfjärden*, which is known to be very windy and difficult to navigate. It was suggested by archaeologist Birgit Arrhenius

that this could be one reason for a holy place to have been located on Helgö, since it could provide a stopping point where travellers could pray for a safe journey. She further proposed that the possible existence of a freshwater lake, near the middle of the island in an area today called *Vettersjö*, could have been a reason for ships to stop here and refill their supply of fresh water before entering Lake Mälaren, which at that time had brackish water (Arrhenius 2011: 13).

The island is today approximately 4.7 x 1.5 km, extending roughly east-west. The topography is undulating with several forest-clad hills, up to 50 m above sea level, between which there are lower-lying areas with arable land. The southern shoreline is steeper than the northern, which in part is rather marshy. Although the Norr-strait is today silted up, it was navigable when the Iron Age settlements were established (Lundström 1971: 1-2; Franzén 2010: 4). The modern settlement on Helgö consists of *Kaggeholms slott*, some older houses, a stable, and five large summer house areas with cabins built in the 1930s and 50s (Franzén 2010: 4). It would appear that the majority of these were built without any prior archaeological investigations.

The first traces of human activity on Helgö dates to the later Bronze Age or possibly the early Iron Age, when more continuous areas of land emerged as the sea levels receded. The first more extensive settlement remains that were found can be dated to the 4th century, and a population expansion seems to have started around 450-500 CE (Franzén 2010: 17). In particular, the eastern parts of the island seem to have been used for settlements, workshops, and burials, and there was also a possible cult site there. Although the specialised workshop activities seem to have ended towards the end of the Iron Age, house foundations and graves show that the area was still inhabited during the 11th century (Franzén 2010: 17).

In an area in the middle part of the island, near *Helgöbol*, there was some form of habitation during the Iron Age. In this area, a treasure depot with 47 solidi and an armlet was found in 1960. More recently, slag and a cultural layer were discovered indicating 6th century activity. There were also possible house terraces in the area near the depot (Franzén 2010: 18; Arrhenius 2011: 12).

The Iron Age settlements and their location

The main Iron Age settlement remains that have been identified to date consist of eight Building Groups (BG in short). These are all located on eastern Helgö. This part of the island has larger hill formations on the south side towards the Bockholm-strait, and there are also some less steep hills on the northern side towards the Norr-strait. Between the southern and the northern hill formations there is some flatter ground, today partly occupied by houses and their gardens, and some smaller roads.

Building Groups 1-4 were built on the north or northeast-facing slopes of the southern hill-formation. Building Groups 5-8 were located towards the northern side of the island; BG6 partly on a north-facing slope, BG5 on an east-facing slope and BG8 on a south-facing slope. The remains of BG7 are located on top of a small hill, towards the north-east side (see figure 6:1).

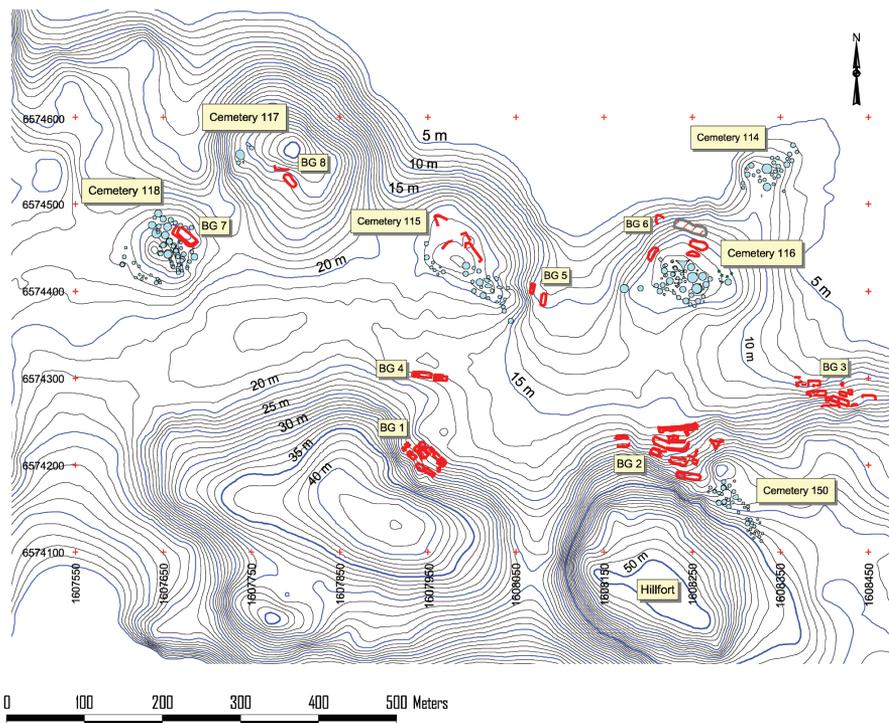


Figure 6:1. Elevation map of eastern Helgö with the Building Groups and grave fields marked out. From Kitzler *Ähfeldt* 2008: figure 1, used with permission.

Birgit Arrhenius points out that it was unusual to locate settlements on a north-facing slope and believes that it could have something to do with how the sunrise and sunset would be very sudden and dynamic here because of the hills (Arrhenius 2011: 14). This interpretation does not really give a full, satisfactory explanation, although it could have played some part in why such a location was favoured.

Similarly, archaeologist Torun Zachrisson (2004) noted that Building Group 2 on the northern hillslope appears darker, colder, and less hospitable than the other hillsides and the flatter ground, while the grave fields were located on sunnier dryer locations on the northern side. She sees this as a paradox that can be explained by looking at the importance of the hill itself, and how this location must have had such a significance that people chose to stay there, building houses on the same spots from the Roman Iron Age until the end of the Viking Age (Zachrisson 2004: 344-345). The specific hill in question had a Bronze Age/Early Iron Age hillfort or enclosure with two stone settings within (Ekerö 119:1-5). There is also a smaller hillock below this hill where she suggests some form of ritual activities took place (Zachrisson 2004: 343-388).

While a special ritual/holy meaning might have been one motive behind the continuous occupation at Building Group 2 on the darker north-facing slope, there were probably also practical reasons. In any case, the southern sunny side of the southern hill-formation is too steep to have been possible to use for occupation (see figure 6:1). In other contexts, such as Iron Age Britain, atypical building orientations have been associated with pyrotechnical production. This may be because lower light conditions allow subtle colour changes in the flame and metal to be visible. Experimental work has also shown it is considerably safer as hot debris is visible (Pitman, pers. com, 2018). Since metalworking activities took place at several of the Helgö Building Groups, these conditions are comparable. Further, it is noted in the report for Building Group 2 that a certain concentration of hearths were constructed in a specific way in order to utilise the air current moving up the slope so as to reach higher temperatures, and practical experiments on the site showed that the draught was extremely effective in doing so (Holmqvist et al. 1961a: 96-97). Accordingly, this would be a good motive behind the placement.

A further reason for placing the workshops up on the slope could be to avoid the spread of fire and smoke to the lower lying areas between

the northern and southern hill-formations, where it is quite reasonable to assume that some form of settlement and/or human activities and farming would have taken place. Similarly, the reason for building up on the slopes could be because the flatter land was better used for other purposes. Recent investigations have uncovered traces of prehistoric activity here in the form of two hearths and two locations with cultural layers (Franzén 2010: 14; Fornsök: Ekerö 73:1, 119:6, 310, 318).

Traces of what is interpreted as sacrifices or ritual/cultic activity have only been identified in Building Group 2 (see Zachrisson 2004). The location of BG1 on a northeast-facing slope, BG3 on a north-facing slope, and BG6 on a north-facing slope on the northern side of the island, probably have motivations for their placement which were not cultic/ritual. Based on the advantages relating to metalworking mentioned above, the clear focus on metalworking on the excavated parts of the island's settlement remains, and optimal land use, the more practical reasons for the unusual placement of the Helgö Building Groups on north/northeast facing slopes are favoured in this thesis.

It should also be taken into account that perhaps the southern Building Groups were deliberately placed so that they faced the flatter ground below with its possible settlement or activity areas/farmland. The only traces of a harbour so far identified were also located on the northern side, between the grave fields Ekerö 115 and 116 (Franzén 2010: 10), and also between BG5 and BG6. There is also a possible harbour location next to BG3, and it has been suggested that a marketplace associated with the harbours may have been located on the flatter ground (Lamm 1982: 2-3). Consequently, the Building Groups could be oriented in the best logistical way in relation to the harbour(s). Since the tall southern hills behind BG 1-4 block access to the southern shore, it is more likely that these Building Groups reached Lake Mälaren via the northern and possibly northeast shore, and that any visitors/traders would come from this direction.

Short overview of the excavations

The excavations on Helgö were mainly carried out as research projects, and a large part of the ancient remains were restored after the investigations. The excavations included graves and settlement sites, as well as workshop areas and a possible cultic site, spanning in time from 300 CE to 1100 CE (Franzén 2010: 8). Within the investigated area that were six grave fields with c. 160 visible graves in total, c. 75% of which were excavated. Around fifty house foundations were investigated (Franzén 2010: 8-9).

The first proper excavations on Helgö, led by Wilhelm Holmqvist, took place in 1954 following a smaller investigation after a bronze ladle turned up during the digging of a pit for a flagpole in 1950. From that year on, excavations were carried out for roughly three months every year until 1978 (Holmqvist et al. 1961a: 55; Franzén 2010: 9). The excavation started out quite modestly, in what was to be named Building Group 2, but yielded such rich finds that they were soon extended. In 1955 the Swedish government provided funding after the approval of a five-year excavation plan, drawn up by the Central Office of National Antiquities. The site turned out to be better preserved and more complex than was first anticipated, so the investigations were slower than first calculated (Holmqvist et al. 1961a: 55-56).

The excavations of House Foundation I and II (1954-1956, published in *Excavations at Helgö I*) were carried out using a one-meter square grid. The position of the finds were then assigned to the appropriate square, with the precise position given in cm, or in some cases the finds were just included under the description of the square. Some “less important” finds were only given a position in relation to a larger area. The majority of the finds were placed in relation to a fixed point that had been set out (Holmqvist et al. 1961a: 59).

Although the cultural layer was very thin, the excavation was mostly done layer by layer, all details were measured, drawn, and photographed in plan and profile, and features such as postholes, hearths, and stone rows were then fully excavated. Some profile lines were also dug at certain important locations (Holmqvist et al. 1961a: 59-60).

While the excavations started out in this fairly meticulous way, there seems to have been methodological changes along the way. In 1962, after the excavations at Building Group 2 were finished, work started at

Building Group 1. Here the occupation layers were excavated in artificial spits as deep as 20 cm at the time. The excavations were carried out between 1962 and 1971, with a break between 1965 and 1967 when Building Group 4 was discovered. In 1973, the eastern part of BG4 was also investigated (Reisborg 1994: 17, 20, 71).

In 1966 excavations began at Building Group 3, and here spits of up to 40-50 cm were excavated (Wigren 1984: 3; Blidmo 1982: 63).

A very small part of Building Group 5 was excavated in 1960 (Reisborg 1994: 77-78), and the settlement remains from Building Group 6 were identified and partly excavated when grave field 116 was investigated between 1962 and 1976 (Sander 1997: 9). Between 1976 and 1978 a very small portion of Building Group 7 and Grave field 118 were excavated before the Helgö Project came to an end in 1978 (Melin 2001: 9). Building Group 8 has not been excavated at all.

After the large Helgö project ended in 1978, no major investigations have been undertaken; only a few minor rescue excavations in connection with, for instance, roadworks have taken place. These were mainly adjacent to the already registered and investigated sites, unearthing a few hearths, cultural layers, and finds. Smaller research excavations have also been carried out near the location of the metal depot (Franzén 2010: 9). In 2009-2010 a special survey of the island's ancient and historic remains was carried out in order to give the county a better background for future planning, resulting in the identification of twenty-five more sites, including a new Iron Age grave field (Ekerö 270:1), located just south of BG3 (Franzén 2010: 3, 10; Fornsök: Ekerö 270:1).

Keys, locks, and chests from the Building Groups on Helgö

In the following section, the excavated settlement remains from Helgö are described, with a focus on the contexts in which keys, locks, or chests were found. This was done with the aim of understanding the purpose or use of the objects on the different Building Groups, and to examine what clues these sites with a long occupation continuity, excavated in the 50s, 60s, and 70s, can provide. As in the Birka chapter, individual finds are generally not specified. Instead, it is the type of context or activity the finds point to that is noted.

Building group 2

In Building Group 2 there were the remains of several terraces, originally termed “Building Foundations”, numbered I to IX (Holmqvist et al. 1970). These were all aligned approximately east-west (see figure 6:2). Most of the finds uncovered here came from the Migration and Vendel periods, but there were also finds from the Roman Iron Age and Viking Age (Holmqvist et al. 1970: 144). In later publications the Building Foundations are referred to as terraces, as in a recent study based on the old field documentation where the building remains on Building Foundations/Terraces I, III, V and VI were re-interpreted (Frörlund & Göthberg 2011; Göthberg 2015). In the present thesis, the term terrace will be used since it better reflects the construction of the majority of the foundations.

There have also been other re-interpretations of the original descriptions, for instance by archaeologist Frands Herschend who focused specifically on the structural elements on Terrace I where he believes a hall-building once stood (Herschend 1995). Birgit Arrhenius has also re-interpreted BG2 from a ritual perspective (see Arrhenius 2011 for details).

Several locks and keys were uncovered in BG2, more than on any of the other Building Groups (see list of keys and locks in Appendix 10 and 11). These are also the most thoroughly excavated terraces on Helgö, and therefore the ones with the most research potential. Consequently, the following section is longer and more detailed than for the other Building Groups.

Below, the terraces are described in short. The focus is mainly on the presence of any keys, locks, or chest-parts and their location, as well as which types of structures were present and what types of activities left traces in the archaeological material. The descriptions begin with the terrace furthest up the slope and then move downwards.

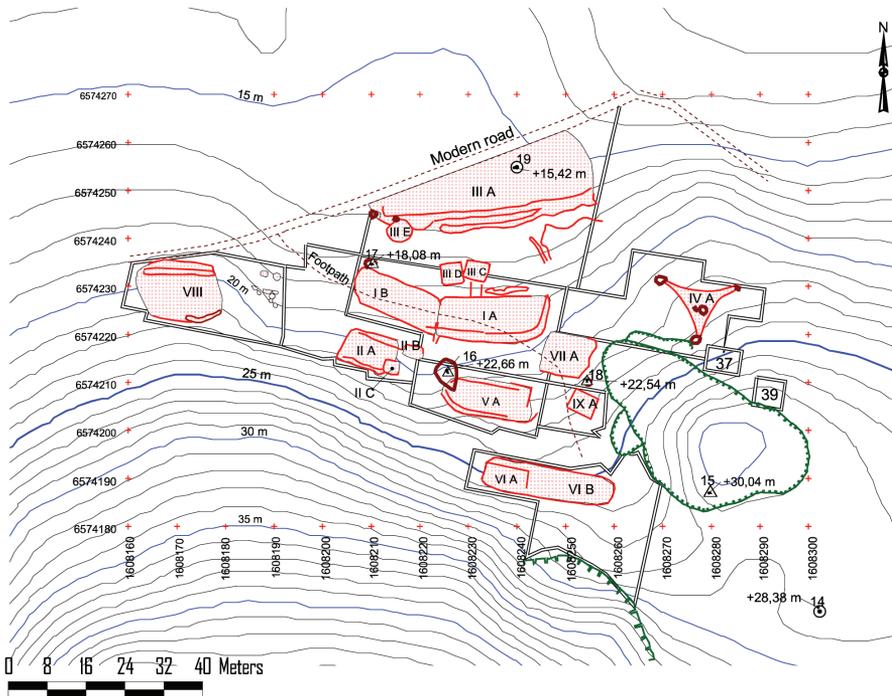


Figure 6.2. Schematic plan of Building Group 2. From Kitzler Åhfeldt 2008: figure 4, used with permission.

Terrace VI

The terrace located furthest up the hillslope, Terrace VI, is approximately 26 x 6 m. Behind the terrace (to the south) the hillslope continues steeply up to 50 m above sea level. Towards the eastern side is a small hillock, rising to 30 m above sea level (Kitzler Åhfeldt 2008, figure 4; Holmqvist et al. 1970: 20). This is the previously mentioned hillock below which Zachrisson (2004) and also Arrhenius (2011) suggest some form of ritual activities took place.

The terrace was intentionally levelled and built up, and there were several postholes and hearths, some intercutting. Amongst these, two buildings were identified: one was a three-aisled building, and one was built with corner posts. These were relatively small, possibly constituting auxiliary buildings to dwelling houses on Terrace I and III which were used for storage or workshop activities (Holmqvist et al. 1970: 20-21; Göthberg 2015: 9, 15-18, 26).

A distinctive feature of Terrace VI is said to be a large number of small hearth-pits, sometimes gathered in more extensive conglomerations. These, together with numerous findings of slag, indicate metalworking took place there (Holmqvist et al. 1970: 21). Otherwise, the finds from this terrace were very few, especially compared with some of the other terraces. This was the only terrace in BG2 that did not have any keys, locks, or chest-fittings amongst the finds (Holmqvist et al. 1970: 21, Lundström et al. 1970: 49-125). The other finds, dating from the Roman Iron Age to the Migration Period, suggest ordinary domestic activities and some crafting. Interestingly, some pieces of charred bread were also uncovered (Holmqvist et al. 1970: 81, 144). The only other terrace where bread was found was Terrace IV, and here there were several pieces (see below). Ice spikes uncovered on the terrace could be workshop products, or suggest winter travelling and/or equestrian gear as the ice spikes seem to include types meant both for people and for horses. These were found in various quantities on all the terraces except for Terrace IX (Holmqvist et al. 1961b: 157-158; Lundström et al. 1964: 83-85; Holmqvist et al. 1970; 61).

Terrace IX

Terrace IX is described as an accumulation of stones in an irregular square shape, approximately 5.5 x 4.5 m, with a deep hearth-like pit in the middle. It is also said to resemble the square stone settings 37 and 39 on the opposite side of the hillock (see figure 6:2) (Holmqvist et al. 1970: 28; Kitzler Åhfeldt 2008, figure 4). These showed no signs of a burial and were filled with a cultural layer containing finds of normal habitation-site character. Holmqvist interpreted the three constructions as small timber structures, or fire houses, with a hearth in the middle of the floor (Holmqvist et al. 1964: 57-58; 1970: 127).

In the centre of the stone structure, several fragments of a 6th century blue claw beaker were found (Holmqvist et al. 1970: 28), perhaps raw material for bead making, or possibly indicating a vessel used in banqueting. Another rather special object uncovered was a small kettle-shaped “amulet capsule” made of bronze, containing a piece of wood (Lundström et al. 1970: 54). Otherwise, the rather few finds from this location date from the Migration and Vendel Periods, and suggest refuse

from ordinary domestic activities, crafting, as well as bronze and iron metalworking. The finds also included so-called “clay-discs”, which were probably loom weights (Lundström et al. 1970: 49-125; Holmqvist et al. 1970: 146) indicating textile production. It has however been suggested that some loom weights were reused as tuyeres or spouts for bellows mouthpieces (Holmqvist et al. 1961b: 229; Brinch Madsen 1981: 95-97). This type of loom-weight tuyere was not very common at Helgö and was only found in Building Groups 1 and 2 (Brinch Madsen 1981: 96-96). Of special interest amongst the finds was a decorated bronze sheet belonging to a padlock case (Lundström et al. 1970: 54).

It is uncertain if any of the finds relate to the structure, or if they were general waste material, perhaps from activities on Terrace VI above.

Terrace V

Terrace V was damaged by a modern path; the remaining part is approximately 20 x 8 m (Holmqvist et al. 1970: 3). The identified features include several postholes and hearths, many of which intercut and indicate long-term use. Amongst these, the remains of four houses have been identified: three three-aisled buildings, and one un-aisled building.⁶² As on Terrace VI, the buildings were rather small, pointing to functions other than dwelling (Göthberg 2015: 9, 26). Based on finds and the construction and orientation of the buildings, it has been suggested that one of the three-aisled buildings can be dated to somewhere in the Migration-Vendel period, and the remaining buildings to the Vendel-Viking period (Göthberg 2015: 21-24).

The finds from the terrace indicate ordinary domestic activities, crafting, and metalworking, but there were also some more special finds such as a figural gold-foil. There were also several glass fragments and a fragment from a bronze vessel: both imported objects. Glass beads and a few brooches/fibulas were also uncovered (Lundström et al.

62. This building (House 23) has also been interpreted as a platform that was part of one of the three-aisled buildings (House 21) (Arrhenius 2011: 18), but this interpretation was later contradicted by Göthberg’s investigation (See Göthberg 2015: 218 and Arrhenius 2011 for details).

1970: 49-125; Holmqvist et al. 1970: 143-144) These could be lost or discarded personal adornment, or possibly products of the workshop suggesting the imported glass and bronze vessel fragments could have been intended as raw material.

Importantly, five padlocks and one key were also found on Terrace V. A spiral shaped-object, interpreted as a possible key-handle, was also uncovered (Lundström et al. 1970: 53, 56). However, this seems very uncertain, and as such it has not been included in the present study (more on this below). Three of the padlocks were more complete and had L-shaped keyholes and included both iron and bronze parts. Of the other two, only iron fragments remain. The key was made of iron and had a one-sided bit with bent tooth and a loop-shaped handle (Lundström et al. 1970: 53, 56). It would fit a padlock with an L-shaped keyhole and could therefore have belonged to one of the padlocks found here.

The later disturbance and the long-term occupation made it difficult to establish to which buildings the finds from Terrace V were associated with, or the function of the houses. Material found here could also have come from some of the other terraces.

Terrace VII

Terrace VII featured a c. 5 m long stone row, extending north-south, and a number of postholes to the west of it which suggest some form of structure. The cultural layer on the terrace covering the stone row was relatively deep, but also very similar to the surrounding soils. Much of the material here may have come down from higher up the steep slope over the course of centuries (Holmqvist et al. 1970: 27-28).

The finds were mainly found in the lower parts of the cultural layer and can be dated to the Migration, Vendel, and Viking Periods (Holmqvist et al. 1970: 28, 145). They indicate general household activities, crafting, textile production, hunting/presence of archers, and metalworking. Fragments of a glass beaker, a ring-shaped gold rod, a bronze belt-mount, and a few glass beads were also amongst the finds, as well as several iron rings and Thor's hammer-amulets, representing valuable/high-status and possibly cultic objects used or produced on the site (Lundström et al. 1970: 49-125; Holmqvist et al. 1970: 144-145).

Significant to the present study are the four padlocks, a lock-spring, and an object interpreted as a possible key handle found here. The latter was made from a rod with one end bent as a spiral, which was actually similar to the “key-handle”-spiral from Terrace V (Lundström et al. 1970: 53-54, 56). While most likely not keys, it is possible that these were parts of chest-handles. Strengthening this idea is an object that was also interpreted as a key-handle, found at Terrace VIII (see below). It was very similar to, for example, a chest-handle in Birka grave Bj 212 (Arbman 1940: Taf 272:2) (see figure 6:3). This and the lock-spring might suggest the presence of a lockable chest, or at least a mounted lock.



Figure 6.3. The “key-handles”, perhaps more likely to be parts of chest-handles, from Terrace V, VII, IV and VIII (Photographs by Nils Lagergren, published in Holmqvist et al. 1970, Pl 9), and the chest-handle from Birka grave Bj 212 (Drawing by Harald Faith-Ell, SHM, 2013-11-06, CC BY 2.5).

Neither of the finds can be associated with any structure on Terrace VII and appear to be part of a general mixed waste material. They could further belong to any of the time periods leaving a material trace on the site.

Terrace II

Terrace II is approximately 25 x 9 m, with the eastern part damaged by a summer cottage, and both the east and west sides somewhat disturbed by a bridle path (Kitzler Åhfeldt 2008, figure 4; Holmqvist et al. 1961a: 89). The identified features include several postholes, hearths, and pits. A deep, complicated, stratigraphy due to the long-term occupation on the terrace, as well as the modern disturbances, made interpretations of the structures difficult. Nevertheless, four different buildings were identified: IIA, B, C, and D (Holmqvist et al. 1961a: 89-90, 94-96).

IIA was interpreted as a post-built structure in the central part of the terrace, IIB as a pit-house, and IIC and IID simply as “small structures” (Holmqvist et al. 1970: 136-138). Perhaps these were used for storage and/or workshop activities, as suggested for the other smaller buildings in BG2.

The western part of the terrace was dominated by a large number of hearths or hearth-pits found close together, sometimes intercutting. These are the previously mentioned hearth-pits constructed to utilise the air current flowing up the slope in order to reach higher temperatures (Holmqvist et al. 1961a: 96-97). Numerous fragments from crucibles and slag were found near these structures, making it very likely that they were once used in connection with bronze and iron metalworking. There was also an extensive layer of brittle burnt stones near the hearths, and a large pit on their western side. It was filled with brittle-burnt stones, and a bronze padlock was found in one of the upper layers (Holmqvist et al. 1961a: 91-92, 97).

The finds from Terrace II (Lundström et al. 1970: 49-125) point to general household waste along with debris from metalworking and crafting, including some textile production, and perhaps also hunting/archery. Some Thor's hammer amulets found point either to cultic/ritual practices and beliefs, or the production of amulets. Some jewellery and glass beads suggest either products of the workshop, or some personal adornment lost or discarded on the site. The finds provide dates from the Migration period up to and including the Viking Age. The majority of them were not found within any structures, but in the areas adjoining them (Holmqvist et al. 1970: 137-138).

Amongst the finds there were also thirteen padlocks (two uncertain), three lock-springs (two uncertain), and nine keys (one uncertain)

(Holmqvist et al. 1961b: 116, 130-131). The lock-spring(s) could suggest the presence of a mounted lock, perhaps on a chest or a door. Otherwise, there were no identified remains of any chests. The keys and locks appear scattered over the terrace and none of them can with any certainty be connected to a particular structure or feature; the padlock in the pit probably ended up there with other materials as a secondary fill. As can be seen on the plan, Terrace II is in close proximity to Terrace I, and it was noted in the excavation report that since many of the objects were found in the area between Terrace II and I, and between Terrace II and VIII to the west, that it was sometimes difficult to determine which terrace the finds originally belonged to (Holmqvist et al. 1970: 137).

Terrace I

Terrace I measures approximately 41 x 9 m and has not been disturbed, except for the pit dug for a flag post in 1950 and a bridle path running across the western part. The features on the terrace consisted of stone rows, ditches, several postholes, pits, hearths, and hearth-pits (Kitzler Åhfeldt 2008, figure 4; Holmqvist et al. 1961a: 61, 74-88). The cultural layers on the terrace were not very deep, and it was noted that finds from different periods were found close to each other in the same layer; probably due to the long duration of the occupation, resulting in numerous alterations and disturbances (Holmqvist et al. 1961a: 70).

The excavation report only provides a preliminary interpretation of the building remains, suggesting at least three more or less distinct phases (Holmqvist et al. 1961a: 73). Attempts have since been made to interpret the structural elements on the terrace, for example Herschend (1995) who interpreted the eastern part (IA) as holding the remains of a hall-building.

Archaeologists Per Frölund and Hans Göthberg (2011) identified six buildings on Terrace I; four three-aisled, one un-aisled, and one built on a sill (Frölund & Göthberg 2011: 43). They suggested that the terrace began to be used at the latest during the Migration Period, perhaps starting out as a working area with some hearths. During the Vendel period there were buildings on the terrace. Based on the house construction and finds, such as for instance figural gold-foils, they suggested some of

the buildings could have functioned as hall-buildings. During the Viking Age there was also occupation on the terrace, but it was less intense than before (Frölund & Göthberg 2011: 43).

The finds date from the Migration Period, Vendel Period, and the Viking Age, but a Roman situla and glass vessel were also found. There were many imported objects such as glass, bronze vessels, turned pottery, a Merovingian gold bracteates, etc. (Holmqvist et al. 1970: 132-133, 136). Some very special finds included a bronze Buddha statuette, the bronze head of a crozier, and a silver bowl. There were also twenty figural gold-foils, as mentioned above, as well as jewellery and beads. It is these and other high-quality items that are suggested to indicate that some of the buildings might have had a special function, possibly as banqueting halls (Holmqvist et al. 1970: 132-133). It is also possible that some of these were raw materials or were products of the workshops.

The finds also included items indicating more normal habitation activities, textile working, crafting, trade, hunting/archery, as well as metalworking. A pair of tweezers and some Thor's hammer amulets that were found might suggest items of a more personal nature, the latter also relating to cultic/ritual practices or beliefs (Holmqvist et al. 1961b: 108-241; Holmqvist et al. 1970: 133).

Several locks and keys were also amongst the finds from Terrace I. There were thirty-four padlocks (two uncertain), three lock-springs, and twelve keys (four uncertain) (Holmqvist et al. 1961b: 115-116, 128-130). This was by far the largest concentration of this type of objects at BG2.

None of the locks or keys appears to have come from the fill of any feature, and from the rough locations noted, most of them were not found within the outline of the buildings (Holmqvist et al. 1961a: 61-88, Pl. 74). They instead appear to be part of a general cultural layer, possibly containing objects from many years of occupation and activities mixed together as a result of continuous use of the site, as noted generally for the finds on Terrace I.

It has nevertheless been suggested that eight of the padlocks, together with several glass sherds, including some sherds from two reticella beakers, were found *in situ* on a floor layer because of the concentration of the finds and since they were found "on largely the same level" (Lamm 2004: 53). They were found within a 3 x 3 m area near a hearth and by the middle of the southern long wall of building IA, on the eastern side of the terrace. This was also where the largest part

(twelve) of the figural gold-foils were found, within a 3 x 4 m area. One suggestion put forth is that the padlocks might indicate the position of chests, placed along the wall (Lamm 2004: 51, 53). The reticella beakers, and perhaps some of the gold-foils, were further suggested to have been stored in the chests, locked with the padlocks (Arrhenius 2011: 23). No chest-fittings were identified on Terrace I, although the three lock-springs could suggest the presence of mounted locks attached to either a chest or door somewhere within Terrace I. That eight chests with valuable items stored inside (assuming they each had one padlock), were simply left standing in the building after it was no longer in use seems highly unlikely, unless the site suffered a disaster which made it impossible to recover the chests. No such scenario has been suggested in any of the excavation reports and the theory regarding the chests must be considered as very uncertain.

Terrace III

Terrace III is situated furthest down the hill slope where the occupation area was almost completely flat (Holmqvist et al. 1964: 3; Kitzler Åhfeldt 2008, figure 4). The area is delimited by a modern road to the north and north-west, and a cottage to the east. Its true extent is not known. The features on the site include postholes, pits, ditches, and hearths. Two of the hearths were cut into the slope in a similar fashion to some of the hearths on Terrace II suggesting metalworking activities, and in the south-east part a large system of intercutting pits was located, probably constituting hearths or fire-pits (Holmqvist et al. 1964: 3, 6-10).

Only a simplified interpretation of the structural elements was presented in the excavation report, identifying three building phases (Holmqvist et al. 1964: 17). However, in the re-investigation by Frölund and Göthberg (2011), eight buildings were identified: seven three-aisled buildings, and one un-aisled building. In the area between Terrace III and Terrace I there were also five smaller structures including corner-post buildings, small three-aisled buildings, and one sunken featured building (SFB) (Frölund & Göthberg 2011: 43).

The occupation on Terrace III, and the area between Terrace III and I, seem to have begun in the Roman Iron Age with rather ordinary

buildings based on their shape and size. During the late Roman Iron Age - Migration Period and possibly also in the early Vendel Period, the site was occupied by four large buildings up to 30-35 m in length. The eastern part of these buildings had a larger open room, possibly functioning as a hall (Frörlund & Göthberg 2011: 43). During the Vendel period, when possible hall-buildings were occupying Terrace I, the occupation on Terrace III changed character to smaller buildings or ceased to exist. During the Viking Age there was occupation here, as on Terrace I, but it was less intense than before (Frörlund & Göthberg 2011: 43).

The finds from Terrace III, spanning the period from the late Roman Iron Age to the Viking Age, included items representing normal occupation activities, crafting, bronze and iron metalworking, textile working, and trade. There were furthermore finds suggesting workshop products and/or personal adornment and cultic/ritual practices. Weapons and/or hunting gear in the form of a sword blade and some arrowheads were also found. Some more special finds included four figural gold-foils, as well as some imported objects (Lundström et al. 1964: 59-242; Holmqvist et al. 1970: 138-139; Lamm 2004:56).

The finds from Terrace III also included some locks and keys; fourteen padlocks (three uncertain), two lock-springs (one uncertain), and four keys (Lundström et al. 1964: 66, 72-73). The lock-spring(s) indicate the presence of a mounted lock for a chest or door. None of them seem to be possible to connect with a specific building or phase as they appear to be part of a more general mixed fill, similar to the conditions on the other terraces.

Terrace IV

Terrace IV is situated at the eastern end of Building Group 2, near the base of the small hillock (Kitzler Åhfeldt 2008, figure 4). These remains are very different from the rest of BG2 and the only structural remain found was a posthole. There were however deep cultural layers, much thicker than on the other terraces, and several hearths, some of them overlapping. Six layers or building phases were identified, interpreted as possible floor levels in a building. The posthole was assigned to a layer with several hearths and plenty of red-burnt clay. Large quantities of

brittle-burnt stones were also uncovered, probably deriving from the hearths (Holmqvist et al. 1964: 40, 56-57).

The finds, ranging in date from the Roman Iron Age to the Viking Age, included large quantities of various objects (Holmqvist et al. 1970: 141, 143). They indicated ordinary occupation activities, crafting, textile working, bronze and iron metalworking, personal adornment/workshop products, hunting/archery, and cultic/ritual practices or beliefs. A rare category of finds on BG2, *Personal grooming*, was here represented by antler combs and a few tweezers, two of which were each attached to a holding ring. One of these also held an ear scoop (Lundström et al. 1964: 59-242): this is the sort of find that is more commonly found in graves. Other special objects included implements interpreted as surgical instruments, and several pieces of charred bread. A few imported objects were uncovered as well, including an Arabian silver coin (Holmqvist et al. 1970: 141-143; Lundström et al. 1964: 79-82, 141-143), suggesting trading activities.

Significant for the present study are the finds of twelve padlocks (two uncertain). All but one were assigned to the upper layers I or II with the remaining padlock assigned to layer III (Lundström et al. 1964: 66-67, 73). This suggests either a rather late phase for the objects, or that older occupation/waste layers were mixed in with the later layers due to the long-term occupation on the site and other disturbances.

There were also five keys and three uncertain key-handles; two of these having one end bent into a spiral. As discussed earlier, these were more likely parts of chest-handles. The keys were also found in the top two layers (Lundström et al. 1964: 73), possibly suggesting a later phase.

On the eastern part of the terrace, a triangular stone setting with concave sides (No. 35 or IVA) was located (Kitzler Åhfeldt 2008, figure 4). It seems to have been constructed towards the end of the settlement activities since it overlaid the occupation layers. However, the fill inside the stone setting, which contained several artefacts, is said to be the same cultural layer which covered the whole of Terrace IV (Holmqvist et al. 1964: 57). This suggests material from the previous phase was used as infill, or there were still some activities at the site – or at least soil movement, after the construction of the stone setting.

Five padlocks (two uncertain) and one lock-spring were also found here. The lock-spring was found in layer I, one padlock was found in layer II, three in layer III, and one in layer IV (Holmqvist et al. 1964:

46-47). This does not quite correlate with the description of the cultural layer overlaying the feature, the padlock from layer IV in particular seems to come from rather deep down. It is perhaps more likely that it belonged to the occupation layers beneath the stone setting. The other locks also seem to be part of the fill rather than belonging to the actual stone setting or any potential burial. The stone setting was described as having no indication of a grave structure, although a fire layer and a small circular “fire ditch” were located near the centre (Holmqvist et al. 1964: 45). These could theoretically still have something to do with a burial, even though no bones seem to have been recovered.

The function of this structure remains to be further analysed, and Zachrisson (2004) and Arrhenius (2011) have discussed this feature and the deep cultural layers on Terrace IV from a ritual perspective, also involving the small hillock, the Thor’s hammer amulets, and bread-making/offering. According to Arrhenius, Terrace IV was a place for sacrifices for many centuries, causing an accumulation of cultural soil, but no buildings (Arrhenius 2011: 13). The absence of identified buildings could however point to an outdoor activity area involving the many hearths found, but this discussion lies outside the scope of the present study. The majority of the finds, including the keys, locks, and lock-spring (potentially indicating a mounted lock on a door or chest) found on Terrace IV seem to have belonged to mixed cultural layers containing waste material and debris from ordinary habitation, craft, and metalworking activities.

Terrace VIII

Terrace VIII is located at the western end of BG2 and appears to be a continuation of the workshop area in the western part of Terrace II. No clear demarcations of the area were found, but it is cut by a modern road towards the north. The extent of the investigated area was c. 40 x 15 m, but the site was probably larger, extending further towards the west (Holmqvist et al. 1970: 30-31, 34). The terrace was also disturbed by a modern shed, destroying much of the eastern part. No traces of house foundations were found, but there were several hearth-pits, possible melting-pits, and extensive ground levelling work undertaken at the site (Holmqvist et al. 1970: 31-32).

Terrace VIII contained vast quantities of crucibles, moulds, slag, and scrap iron which clearly indicate metalworking activities involving iron, bronze, and also other precious metals. Many of the moulds were for brooches, dress-pins, and clasp buttons, but also for sword pommels and hilts. The finds also included items indicating ordinary occupation activities, textile working, crafting, hunting/archery, personal adornment/workshop products, trade, and cultic/ritual practices. There were also some more rare, imported objects; some of them Roman. In all, the finds spanned the Roman Iron Age to the Viking Age (Holmqvist et al. 1970: 145-146; Lundström et al. 1970: 49-125).

Importantly, amongst the finds from Terrace VIII were also a number of locks and keys, all made from iron. These included two fragmentary padlocks, two uncertain lock-springs – possibly indicating mounted locks for chests or doors, two padlock keys fitting a T-shaped keyhole, and two uncertain key handles of the type with a spiral in one end (Lundström et al. 1970: 56) as previously described, possibly constituting parts of chest-handles. None of them appear to be connected to any specific structure and must be regarded as part of the general occupation layers, probably constituting refuse.

Summary of Building Group 2

Based on the descriptions above, the buildings on Terrace II, V, VI, and VII were rather small and do not appear to have been used for habitation. Perhaps these were used as work-huts or storage houses. Terrace IX, along with “stone settings” 37 and 39 might have been the remains of small “fire houses” or kitchens. This interpretation is interesting in relation to finds of burnt bread from Terrace VI and IV. Further, there were no identified buildings on either Terrace IV or VIII. The only two terraces that appear to have been used as dwellings are Terrace I and III, located centrally towards the base of the slope where the ground becomes flatter. There is no real delimitation towards the north where the site is cut off by a modern road, and it is possible that the occupation continued further in this direction.

The traceable activities that once took place within Building Group 2 seem to have revolved around iron and bronze metalworking, based on the large quantities of crucibles, moulds, slag, scrap iron, etc., as well as the many hearths and hearth-pits. These activities appear to have started already in the (late) Roman Iron Age, as can be seen for instance on Terrace VI furthest up the hill slope, but they continued over time in various and probably shifting locations on the site. Other activities seem to have included textile working, trading, food procurement and preparation, and possibly banqueting. The number of various tools found within BG2 also point to other crafts, and some objects have even been interpreted as surgical instruments. The objects that seem to have been produced here include brooches, dress-pins, and also sword pommels and hilts. Some of the many tools found could also have been crafted here. Other groups of finds that might have been crafted here include ice spikes; most of them for horses but also some for people, arrowheads, and Thor's hammer amulets, since they were found in rather large numbers across the site. It cannot be excluded however that some of these items were discarded after use, or in the case of the amulets that they could have had some ritual function on the site. The ice spikes for horses could indicate that horses were kept somewhere on Helgö, perhaps down on the flatter area.

There are a lot of similarities between the categories of finds present at each of the terraces in BG2 (see Appendix 12). This could partly be the result of the cultural layers containing occupation/workshop waste being used and dispersed in the build-up and levelling of the terraces. It could of course also be partly because of similar activities taking place throughout the site. The terrace that had the fewest categories of finds present was Terrace IX located high up the hillslope, and the terraces with the most categories were those towards the lower parts of the hillslope, following the pattern of find quantity and depth of the cultural layers.

It is not obvious how to best interpret the presence of locks and keys on BG2. They could be products from the metal workshops. However, no evidence of lock-making was identified, although the technical ceramics from BG2 has not yet been studied. The keys and locks could also have been used for secure storage, possibly of craft-products, raw materials, or other valuable items, perhaps in locked chests or storage houses. The

majority of the objects were located on Terrace I, but they were also quite numerous on Terrace II, III and IV (see table 6:1). This is also where many of the finds in general were located. This could partly be the result of soil-movement down the slope, both through natural forces and through human activity as the terraces were cleared off or built up to create more level surfaces. The top-most Terrace VI is also the only one that did not contain keys or locks. This could however also have something to do with the activities on this terrace belonging to the Roman Iron Age and Migration Period, suggesting that keys and locks were perhaps not in use/being produced at this time. That many of the keys and locks on the other terraces were found rather high up in the cultural layers might also suggest a later phase, although they could still have come from re-deposited older layers.

No fewer than seventy-nine certain and eleven possible padlocks or parts of padlocks were found – a very high number, although it should be considered that some parts might be from the same lock. The majority of the padlocks from Helgö were studied by Jan Erik Tomtlund (1970; 1977). He described them as having iron lock-mechanisms and shackles, but lock-cases of either bronze or iron (Tomtlund 1977: 5). Amongst the padlocks from Terrace II were thirteen bronze lock-cases/parts, nineteen padlocks/parts with both iron and bronze parts, and forty-seven iron padlocks/padlock-parts. Thirteen of the lock-cases had decorations in the form of either a punched circle-and-dots or engraved rocked lines (Holmqvist et al. 1961b: 116, 130-131; Tomtlund 1977: 5; *S&S*). Thirty-five of the padlocks were described as “case-like”, or box-shaped, and had keyholes that were either T- or L-shaped. The locks with L-shaped keyholes (at least fifteen locks) were operated by a rotary key and belong to Tomtlund’s *Group 1*. Those with T-shaped keyholes (at least nine locks) were operated by a sliding key and belong to Tomtlund’s *Group 2*. There were also seven padlocks described as cylindrical; by Tomtlund referred to as barrel padlocks and part of his *Group 3*. Some of these seem to have rectangular keyholes (Holmqvist et al. 1961b: 116, 130-131; Tomtlund 1977: 5). Concluding that the dating evidence for the Helgö locks was rather poor, Tomtlund suggested the box-shaped padlocks belonged to the Viking Age, a few possibly from the late Vendel Period, and that the barrel-shaped locks dated from somewhere between 500 CE and 800 CE (Tomtlund 1977: 9, 12). Consequently, the locks

from BG2 included both the earlier and the later type suggesting long-standing use. The predominance of box-shaped padlocks suggests that they became more common in the Viking Age.

In contrast to the many padlocks, only seven lock-springs, twelve including the uncertain ones, were found within BG2 (see table 6:1). Most of these had rivets or rivet-holes and would have belonged to attached locks, possibly on chests. However, no chest-fittings were identified, although some of the objects interpreted as key handles with one end terminating in a spiral could actually be parts of chest-handles, as previously discussed. That they appear to be rather few might speak against at least the majority of the padlocks found on BG2 having been used for secure storage on site in locked chests. However, since chests are movable it is very unlikely that they would have been left standing when the buildings were taken out of use, and one should only expect the occasional broken chest to remain in the archaeological material.

Table 6:1. *The number of padlocks, lock-springs, and keys found within Building Group 2, sorted into their respective types and the different terraces where they were uncovered.*

Terrace	Padlock	Padlock?	Lockspring	Lockspring?	Key	Key?
I	32	2	3	0	8	4
II	11	2	1	2	8	1
III	11	3	1	1	4	0
IV	13	4	1	0	5	1
V	5	0	0	0	1	0
VI	0	0	0	0	0	0
VII	4	0	1	0	0	0
VIII	2	0	0	2	2	0
IX	1	0	0	0	0	0
Total No.	79	11	7	5	28	6

Twenty-eight keys (see table 6:1 and 6:2) and six objects that might be parts of keys were found within BG2. Of the keys that were complete enough to have their type identified, fifteen were probably padlock keys fitting a box-shaped padlock either with a T-shaped (sliding key) or an L-shaped (rotary key) keyhole, although the rotary keys may alternatively have belonged to fitted locks. Nine keys were L-shaped or angular L-shaped lift-keys with 1-3 teeth; some possibly simpler latch

lifters (Holmqvist et al. 1961b: 130). These would have been for attached locks, probably for chests, but perhaps also for doors. Only one of the keys was made of bronze, and it was described as unfinished, with too little bronze used in the casting (Tomtlund 1977: 5). Unless this key was brought in as scrap metal, it may actually suggest the presence of a locksmith at BG2. There was also a key with a bronze bit and iron loop-shaped handle. The rest of the keys were made of iron (Holmqvist et al. 1961b: 130). As with the locks, it is unclear whether they were meant to be used on the site and/or produced for trade.

Table 6:2. *The thirty-four keys found within Building Group 2, sorted into key-types.*

Key type	No.
Padlock key	6
Padlock key?	4
Rotary key	5
L-shaped lift-key	5
Angular L-shaped lift-key	3
Lift-key	1
Uncertain/not specified	10
Total No.	34

Building Groups 1 and 4

In 1962, after the excavations at Building Group 2 were finished, work started at Building Group 1, c. 200 meters to the west. It turned out to have the same type of terraces as BG2. In 1965 Building Group 4 was discovered and investigations were subsequently carried out there as well. BG 1 and 4 may have been two adjacent farms, or perhaps part of the same farm. It was not possible to determine due to the c. 50 m wide unexcavated strip between the two, but they are generally interpreted as part of the same occupation area (Reisborg 1994: 17, 71, 76). Building Group 1 is situated on the lower part of a moraine slope, facing north-east while BG4, facing north, is located at a lower elevation than BG1 and on flatter ground (see figure 6:1) (Reisborg 1994: 17, Kitzler Åhfeldt 2008: 16, 19).

It has been suggested that BG4 was the workshop area for a farmstead located on BG1, and that the finds indicating metalworking activities found on BG1 actually derive from activities on BG4 (Reisborg 1994: 76). This theory seems unlikely, however, since both sites had various hearths and pits that could indicate metalworking, although they were more frequent on BG4.

Building Group 1 – Structures and finds

Within the excavated area of BG1 (c. 19000 m²) there were occupation layers between 0.15 and 0.8 m thick. The thinnest part was furthest up the slope and the thickest was furthest down due to soil movement and the build-up of the terraces (Reisborg 1994: 20). The cultural soil was excavated in arbitrary levels 0.2 m deep, and the finds were recorded horizontally within 1 m squares (Reisborg 1994: 20).

The excavations unearthed eleven or twelve longhouses with straight or slightly convex long-walls, six or seven sunken featured buildings as well as three stone-lined so called 'huts': possibly activity areas without a roof. The alignment of all the buildings was roughly NW-SE. Twelve hearths were found, both inside and outside the building foundations, and three of the SFBs had small stone-built ovens, one of which contained a stone-built hearth. There were also several other postholes, pits, and a few possible foundation ditches (see figure 6:4) (Reisborg 1994: 20; Kitzler Åhfeldt 2008: 16).

The character of many of the buildings in BG1 could not be established, but Building 1a was interpreted as a dwelling house, possibly with Buildings 4, 10 and 11 as its outbuildings. The finds suggest a time span between the late Migration Period and the early Viking Age (Reisborg 1994: 71, 76).

Taking into account the long duration of occupation in the area, with several re-builds and repairs resulting in overlapping buildings and floor layers, plus the soil movement and terracing, it was not possible to connect any of the finds with a specific building or activity area. Yet another concern was the method of excavation, which did not follow the stratigraphy of the site.

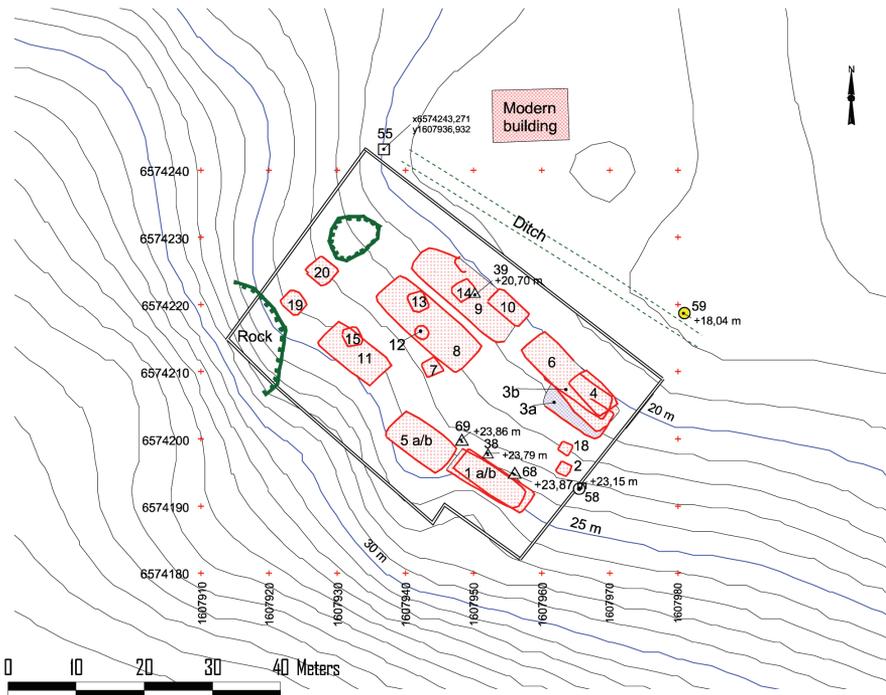


Figure 6.4. Schematic plan of Building Group 1. From Kitzler Åbfeldt 2008: figure 3, used with permission.

Overall, the situation suggests a very mixed material and low-resolution documentation where the locations of the finds cannot be expected to reflect where the objects were originally used, placed, lost, or discarded. Instead, the whole Building Group will here be considered as one large context. Within this context, the finds suggest a variety of possible activities that took place between the late Migration Period and the early Viking Age.

The finds from BG1, many of them concentrating towards the bottom of the slope, included a large number of finds indicating ordinary occupation activities, but also hunting/archery, trade, crafting, textile production, woodworking, possibly amber working, and metalworking: including iron, bronze, and silver working (Reisborg 1994: 45-48, 50-52, 71). Finds of several glass beads and glass sherds, some from various types of beakers dating to the Migration Period, Vendel Period, and the early Viking Age, point to glass bead production and/or high-status drinking/banqueting. There were also several items suggesting personal

adornment and/or workshop-products since a number of moulds for different brooches and pins were amongst the finds (Lundström 1981: 19-20; Reisborg 1994: 48, 50).

Items indicating cultic/religious activities or beliefs, and/or workshop products, were also found which probably date from the Viking Age. There were also a few items suggesting game playing as a pastime (*Sis*; Reisborg 1994: 46, 52).

There were several indications of equestrian gear being either used or produced on site and, interestingly, an unusually large amount of horse bone was found at BG1 with seventeen individual animals identified. Bones from both young and mature individuals were found, and many had signs of butchering (Reisborg 1994: 47, 52-53). It would therefore seem as though horses might have been reared or kept on/near the site, and were both eaten and used for transport.

No evidence of key or lock production has been identified, but there were some keys and locks amongst the finds which are described below. No object has been identified as belonging to a chest, although there were three possible parts from mounted locks that may have been attached to a chest, cupboard, or door.

The keys and locks from Building Group 1

Some of the locks and keys within Building Group 1 were assigned to buildings, namely 1a/b, 3a/b, 4, 8, 9, and 10. In the report, the horizontal location of the keys and locks, or rather the SE corner of the 1 m squares in which they were found, were plotted onto a schematic plan of BG1 (Reisborg 1994: 21-23, 25-26, figure 34). The plan shows that most of the locks, and all the keys, were found near the bottom of the hill slope where the cultural layers were thicker. It further shows that in these locations there were overlaying buildings and it is consequently not certain to which of the building phases the objects may once have belonged. The keys and locks rather appear to be part of mixed cultural layer containing waste materials and debris from both ordinary occupation activities and various crafts. Their presence does however still point to some form of controlled access on the site, or alternatively lock-production despite no evidence of this having been identified.

Perhaps it was the workshop products and raw materials that were kept under lock and key, or other supplies needed on the farm. Since no certain chest-parts were identified, it was perhaps storage-houses that were kept locked, although chests would probably have been taken along when the farm was abandoned leaving no traces behind.

When it comes to the objects themselves, details in the report (Reisborg 1994: 21-23, 25-26, 46) are few and the information is not entirely consistent with the data found in *Sis* or the documentation found in the archives at ATA (ATA 1959-1965; 1965-1971). However, taking these sources together, there were sixteen locks or lock-parts and nine keys from Building Group 1.

Not all locks were given a description or they were too fragmentary to determine, but nine, if not most, appear to be padlocks (See table 6:3). The majority of the locks/lock-parts were made of iron, but there was one bronze lock-case, and one lock with both iron and bronze parts (Reisborg 1994: 21-23, 25-26; *Sis*). Five were described as box-shaped, and one as cylindrical. Out of the box-shaped locks, one had a T-shaped keyhole, and one had an L-shaped keyhole (ATA 1959-1965; 1965-1971). There were therefore both locks with turning and with sliding mechanisms. As previously mentioned, the box-shaped padlocks probably date from the late Vendel Period or Viking Age, and the cylindrical locks to the 6th to 9th centuries (Tomtlund 1977: 12). There were also three possible parts from mounted locks; a two-pronged lock-spring, a lock-plate,⁶³ and a key-plate⁶⁴ (ATA 1959-1965; 1965-1971). These could have been attached to a chest, cupboard, or a door.

Table 6:3. *The locks and lock-parts from Building Group 1, sorted into types.*

Lock type/part	No.
Padlock	9
Padlock?	2
Lock-spring	1
Lock-plate	1
Key-plate	1
Lock/lock fragment	2
Total No.	16

63. In *Sis* the lock-plate (id 7252) is incorrectly described as a key.

64. In the excavation report the key-plate (id 10240) is incorrectly described as a key (Reisborg 1994: 23).

All of the nine keys that were found were made of iron. One key was for a lock with a T-shaped keyhole and a sliding mechanism, probably a padlock. There was also an angular L-shaped lift-key, indicating the presence of a mounted lock, and two more keys that might be either L-shaped or angular L-shaped lift-keys, but this is somewhat uncertain. The remaining keys were too fragmentary to sort into a type or lack a proper description (see table 6:4) (ATA 1959-1965; 1965-1971; *SiS*).

Table 6:4. *The keys from Building Group 1, sorted into types.*

Key type	No.
Key for sliding mechanism	1
Angular L-shaped lift-key	1
Lift-key	2
Key-handle	2
Uncertain	3
Total No.	9

Building Group 4 – Structures and finds

During the excavations at Building Group 4, an area of about 600 m² was investigated on an elongated terrace, with cultural layers excavated in 1 m squares. The site was disturbed by recent ploughing, and constructions appear to have been ploughed away in the southern part. The top 40 cm of soil below the turf was badly disturbed and no layers could be distinguished. Below this the soil was excavated in two 20 cm deep spits (Reisborg 1994: 35).

Five buildings were identified within BG4: Building 1, 2, 3, 4a, and 4b. The interpreted construction of these buildings seems rather uncertain and there appears to have been several building phases making interpretation difficult. There were also several hearths and pits (see figure 6:5) (Reisborg 1994: 35-39).

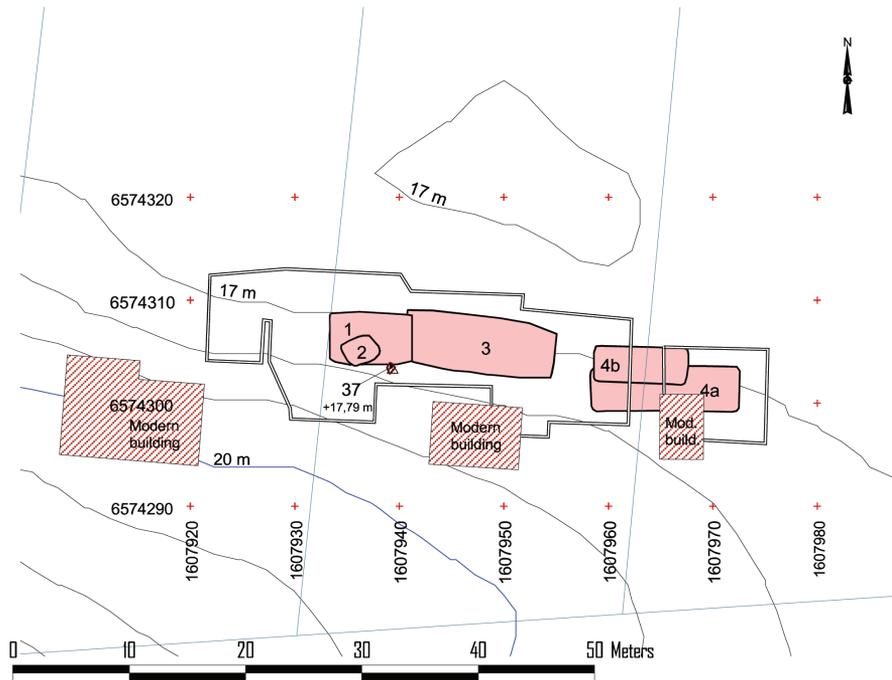


Figure 6.5. Schematic plan of Building Group 4. From Kitzler *Åbfeldt* 2008: figure 6, used with permission.

Building 1 was only identified as a rectangular concentration of finds and is very uncertain. Below or above (not specified) this was Building 2, a sunken featured building with a small oven in the NW corner (Reisborg 1994: 36-38). South of these there was an area with scattered groups of stones, hearths, and pits. It seems to have been used as an outdoor working place where jewellery was cast; one crucible found even held traces of gold. It is also possible that pottery and loom weights were fired here (Reisborg 1994: 39).

Building 3 was in the centre of the building group, just east of Building 1 and SFB 2. Its structural elements included postholes and two stone rows. There were also eight hearths in this area, one of which may have been an oven. Some of these were intercutting, and there were also several occupation layers (Reisborg 1994: 37). Clearly there must have been several building phases at this location, but these do not appear to have been identified properly. A key found here was consequently not possible to assign to any specific building phase, but even so, it was most likely part of a mixed layer.

Buildings 4a and 4b were located on the eastern side of BG4. Only part of this area was excavated, leaving a 3 m wide strip across the buildings. The structural features identified included a stone row, some postholes, three hearths, and three pits. The postholes suggested at least two superimposed buildings – 4a and b – with 4a interpreted as a longhouse (Reisborg 1994: 37-38).

The finds were very similar in composition across the site and suggest ordinary occupation activities, trading, crafting, textile working, metal working, and hunting/archery or the production of arrowheads. There were also items indicating cultic/religious activities or beliefs, personal adornment and/or workshop products. Glass beaker sherds found could indicate banqueting, or raw material for e.g., glass beads – a number of which were also amongst the finds. Items suggesting winter travelling and/or equestrian gear were also uncovered. As with BG1, there was also a rather high quantity of horse bone present with ten animals identified (Reisborg 1994: 36-38, 53). It therefore seems that horses were also eaten and/or used for transport at this site.

The keys and locks from Building Group 4

There were also locks and keys amongst the finds from Building Group 4. As with BG1, these were marked out on a schematic plan over BG4, and it was again the horizontal location of the SE corner of the 1 m square in which the objects were found that was noted. One bronze lock was marked as being inside SFB 2, and one iron lock was located near the north-east corner of Building 1. Another iron lock was marked as being just north of Building 4b, and there was a key inside Building 3 near some hearths (Reisborg 1994: figure 34). Because of the disturbances caused by later ploughing, the excavation methods used, as well as the long-term occupation, none of the keys or locks could be tied to any of the buildings or activity areas with any certainty. They instead appear to be part of the general mixed cultural layer.

The iron key⁶⁵ in connection with Building 3 was most likely an angular L-shaped lift-key with two teeth (Reisborg 1994: 37; ATA 1965-

65. In the excavation report and in the find catalogue at ATA it is listed under id-nr. 9060, but in *Sis* it is listed as 9067 (Reisborg 1994: 46; ATA 1965-1971; *Sis*).

1971). This key would have belonged to a mounted lock. There was also an object listed as a key in *SiS*, but not in the excavation report. It was described as a loop and could therefore be the loop-shaped handle of a key. In the present study it has been included as an uncertain key-handle, type unknown (see table 6:5).

Table 6:5. *The keys and locks from Building Group 4, sorted into type/part.*

Object	No.
Angular L-shaped lift-key	1
Key-handle?	1
Padlock	2
Padlock?	1

There were also three locks from BG4, although one was a bit uncertain (see table 6:5). One was represented by a bronze lock-case for a box-shaped padlock with L-shaped keyhole, and there were also one or two iron fragments of a cylindrical padlock (ATA 1965-1971; *SiS*). It is possible that the last two were fragments of the same objects since they have the same find-number in *SiS*, and in the present study they are regarded as part of the same lock. There was also a further iron fragment that might be from a box-shaped padlock (ATA 1965-1971). The box-shaped and cylindrical padlocks present at BG4 date to the late Vendel Period or Viking Age, and somewhere in the period between 500-800 CE (Tomtlund 1977: 12).

There were no identified traces of lock-production within Building Group 4, although a thorough study of the technical ceramics might potentially change this situation. As it stands, it would appear that the locks and the key(s) were once used on the site, indicating some form of controlled access. Like BG1, it could have been items such as workshop products and raw materials that were kept safe, possibly in storage-houses since no objects have so far been identified as chest-fittings.

The periods of use on BG1 and BG4

Since BG4 and BG1 are situated close together and date to the same periods they are believed to belong to the same settlement, only separated by the unexcavated 50 m strip in between. Based on the finds, two chronological phases were identified. The earlier phase lasted between the late Migration Period and early Vendel Period. The later phase is believed to have lasted from the late Vendel Period to the early Viking Age (Reisborg 1994: 71). According to the excavation report, there seems to be a period of about a hundred years around 700 where there is no datable evidence of occupation, but since the whole area was not excavated there could be structures from this period that simply have not been found (Reisborg 1994: 77). It could also be that the dating based on finds is not very precise, and there could be more overlap between periods of use/production.

In the early phase there is evidence of production of dress-pins, clasp buttons, relief brooches, small oval and animal-decorated brooches, and fish-tail pendants. All of the moulds and crucibles can be dated to this phase. Many of the other finds from this period were interpreted as being of general Iron Age farm character. There therefore seems to have been both farming and workshop activity at the building groups during this period, but the exact character of the individual buildings could not be established (Reisborg 1994: 71, 76).

Most of the finds from the later phase were interpreted as ordinary Iron Age types, although a few items stood out from finds from other contemporary sites. Some of the buildings from this period may have served as dwelling houses and some as storehouses and outbuildings, but again, the exact character of the buildings was not possible to establish (Reisborg 1994: 76).

To sum up, throughout the occupation on the two sites there seems to have been an ordinary farm settlement, but the workshop activities in the early phase differentiate the sites from contemporary average farms. The large number of horses also stands out. Where the keys and locks fit in here is difficult to interpret from the available information. With both box-shaped and cylindrical/barrel-shaped padlocks on both sites, their presence could span from the 6th century up to the Viking Age, covering both the early and late phase on BG1 and BG4. The keys are harder to

date, but presumably follow the same pattern as the locks. As previously suggested, they could have been used to secure workshop products and raw materials, but it is also possible that they were used to secure resources and supplies used in the more ordinary occupation activities. Since no chest-parts were identified, it is possible that it was storerooms or storage-houses that were kept under lock and key. Chests cannot be completely ruled out however, since these very transportable objects were less likely to be left behind on a site when moving or rebuilding.

Building Group 3

In 1966 excavations began at Building Group 3, situated c. 150 m east of Building Group 2. The area covers at least 4500 m², and of this approximately 1930 m² was excavated. This was done over several years and ended in 1977 (Wigren & Lamm 1984: 3; Blidmo 1982: 62). Similar to Building Groups 1 and 2, BG3 is placed on a north facing slope which had been terraced, and the remains of at least twenty-three buildings, simple constructions or wind/rain-shelters, were identified⁶⁶ (see figure 6:1 and 6:6) (Wigren & Lamm 1984: 3, 87). The location of the site on the darker northern slope was explained in part in the excavation report by its proximity to water being important due to the fire risk involved in metalworking. The shoreline was 6 m higher at the time of occupation, and BG3 would have been located close to the shore. Making use of the prevailing wind up the slope to reach higher temperatures in the hearths and metalworking pits was also mentioned in this context (Wigren & Lamm 1984: 5). The latter was consequently a circumstance BG2 and BG3, and perhaps also BG1 and some of the other building groups, seem to have had in common.

The excavation and documentation techniques used when investigating BG3 have been criticised, for instance by Roger Blidmo who conducted a chorological study of BG3 in his PhD-thesis (1982). He mentioned a very varying degree of documentation precision where the finds were generally assigned to 1 m squares, but a large part of the finds were

66. Just to the south of the Building Group is the unexcavated grave field Raä 270 with seven known stone settings (Fornsök: Ekerö 270).

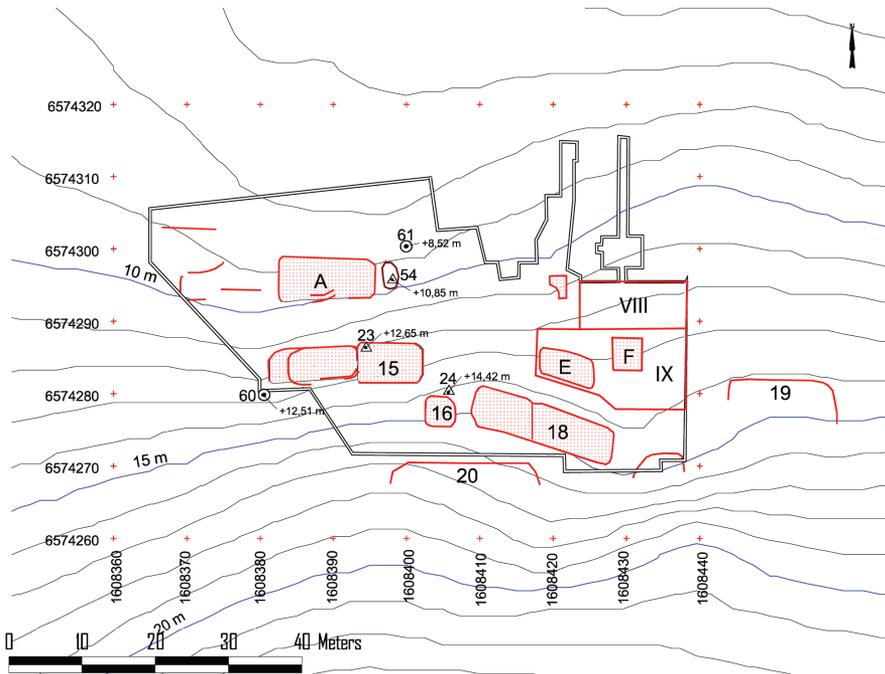


Figure 6.6. Schematic plan of Building Group 3, including Area VIII and IX. From Kitzler *Äbfeldt* 2008: figure 5, used with permission. Modified based on Wigren 1984: figure 4.

assigned to squares as large as 16 m², and there was an area of 1900 m² where the finds lacked stratigraphical reference points (Blidmo 1982: 63). For some find-id-numbers there were also a very large number of finds assigned to each one, making it hard to analyse the spread of the objects across the occupation area. Some of the deeper cultural layers were assigned to artificial layers as thick as 0.5 m (Blidmo 1982: 63). This critique is to some extent addressed in the published report where it was acknowledged that the documentation and fieldwork could have been better organised, and that it was associated with a lack of experience excavating a complicated site of this kind (Wigren & Lamm 1984: 1). Holmqvist, with experience from the previous excavations on Helgö was, however, involved in the excavations of BG3.

With this as a background, any analysis of the location or spread of the keys and locks uncovered on this site or attempts to associate them with any specific building seems meaningless, and BG3 will generally only be regarded as one large context in which keys and locks were found.

The character and finds of Building Group 3

The finds from Building Group 3 indicate that many different crafts were once carried out here. These included bronze-casting, gold-smithing, iron-smithing, and bead production, and there were indications of stone carving and stone-polishing being carried out. At the same time, there were also finds suggesting ordinary occupation activities (Wigren & Lamm 1984: 5; Lamm 2012). The finds were interpreted as mostly waste products, and the rather few tools that were found were either worn out or probably lost. Some of the waste material seems to have been used deliberately to build up the terraces (Wigren & Lamm 1984: 5).

Sorted into find categories (see Appendix 13), the finds from BG3 show that the material was identical to that of BG1, 2, and 4, although the quantity of many of these object types was much higher in BG3. Nevertheless, the same types and variety of objects were present, suggesting similar kinds of activities.

The workshops seem to have been active for approximately a hundred years, during the Migration Period and early Vendel Period. There were thirty-two calibrated ¹⁴C values from the area showing that the main period was between c. 460 and 660. The site was then believed to have been re-occupied during the Viking Age, but now with a markedly agricultural character (Hjärthner-Holdar et al. 2008: 247). The workshop site was classified as permanent because of the large quantity of manufacturing debris and the highly experimental level of craftsmanship demonstrated by the finds. By permanent, it was meant that the site was used for manufacturing over a considerable length of time, but not necessarily every day, or even every year (Hjärthner-Holdar et al. 2008: 247-248). The other building groups, especially BG2, BG1, and BG4, also showed evidence of metal-workshops, and many workshops were apparently in use at roughly the same time (Hjärthner-Holdar et al. 2008: 248). It could be that a finer chronological study would be able to show that the workshop moved around between sites, or perhaps there were two separate farms on Helgö with their own workshops. It has been suggested that BG2 would be one dominant farm with BG3 as its workshop, and that BG1 could have been a separate farm with BG4 as its workshop (Hjärthner-Holdar et al. 2008: 248). On all of these Building Groups, however, there was evidence of metal-working activities taking place so such a clear divide cannot be made. Further, it is possible that

there were one or more farms located in the flatter area between the hill-formations. Since this part was not investigated, and with this piece of the puzzle missing, it is unfortunately impossible to fully interpret the settlements and workshops on Helgö.

Only two areas within Building Group 3 – Area VIII and IX (see figure 6:6) – were assigned any finds of keys and locks. The mixed waste materials from these locations seem to be the closest to a context as one can get to connect the objects with. These areas are described in short below. Neither of them were interpreted as having contained any proper buildings (Wigren & Lamm 1984: 86, 88).

Within Area VIII, located at the north-east end of the site, there was an area with four postholes and an occupation deposit containing large amounts of finds in an area around a hearth. The finds clearly indicate metalworking activities, bead production, and possibly other crafts. Furthermore, the finds indicate trade and also ordinary occupation activities. Some of the finds were interpreted as waste material thrown out from the unexcavated Terrace 19 further to the east (Wigren & Lamm 1984: 66).

Of special interest was the presence here of fragments of locks and keys (Wigren & Lamm 1984: 66, 70). Furthermore, the workshop activities that took place here included the production of locks and keys. A study of the technical ceramics from BG3 showed that some pieces derived from ceramic packages used in various metallurgical processes, such as brazing and case hardening (Söderberg 2008: 159). Some of the pieces found came from the production of padlocks, where parts of the casings were soldered together with the help of the packages. These pieces were found in the same area as the keys and locks and may have come from the unexcavated Terrace 19. The fragments indicate that box-shaped padlocks were being made, suggesting that this rather sparse lock-production took place during the Vendel Period or Viking Age (Söderberg 2008: 159-163).

In Area IX, just south of Area VIII, further up the slope, there were also finds and features relating to metalworking activities; mainly iron working but also some bronze-casting. There were also several finds suggesting crafting as well as ordinary occupation activities, and – importantly – there were also some fragments of locks and keys (Wigren & Lamm 1984: 82).

The keys and locks from Building Group 3

The finds from Building Group 3 included ten keys (one uncertain as a key), all made from iron (see table 6:6 and Appendix 10). Three of these were identified as padlock keys, although one was uncertain as the bit was missing. There was also a rotary key that would have belonged to either a mounted lock or a padlock. There were also three different lift-keys that would have belonged to mounted locks. Some of the keys were not described in detail or were too fragmentary to sort into type. What was clear however was that there were keys for both padlocks and mounted locks, and there was great variety amongst the few keys found.

Table 6:6. *The keys from Building Group 3, sorted into key-types.*

Key type	No.
Padlock key	2
Padlock key?	1
Rotary key	1
L-shaped lift-key	1
Angular L-shaped lift-key	1
Lift-key	1
Uncertain	3
Total No.	10

There were twenty identified locks from BG3, some were a bit uncertain however (see table 6:7 and Appendix 11). It was also not clear if some of them were part of padlocks or mounted locks. One lock-spring was said to come from a rim lock, i.e., a mounted lock. Six of the locks were definitely padlocks; one of them was described as box-shaped and one as barrel-shaped (Junker 1981: 94). For the items listed as key-plates it was hard to tell from the descriptions which type of lock they came from. The same was true for the lock-springs found on BG3 (Junker 1981: 94). The presence of keys for mounted locks suggests that some of them could also have been for this type of lock.

Table 6:7. *The lock-parts from Building Group 3, sorted into lock-types/parts.*

Lock type/part	No.
Padlock	6
Padlock?	1
Key-plate	4
Key-plate?	3
Lock-spring	2
Lock-spring?	2
Lock-spring, mounted lock	1
Uncertain/fragment	1
Total No.	20

The box-shaped padlock was probably from the Viking Age, or possibly the Vendel Period, and the barrel-shaped padlock from somewhere between the 6th and 9th centuries (Tomtlund 1978: 9, 12). This suggests that perhaps locks and keys were made, or used, throughout different periods on BG3. It also shows how mixed the material in this area was and/or how rough the recording of the layers was.

There were no identified chest-fittings from BG3, although a more thorough study of the many metal fragments might well change this picture. There was also at least one lock-spring that was part of a mounted lock, and some of the items described as key-plates were also potentially meant for mounted locks, possibly for a chest, cupboard, or door.

Building Group 5

Building Group 5, with two house foundations (Fornsök, Ekerö 256:1), was excavated in 1960 after the building of a summer house exposed archaeological remains. The excavated area was only 28m² and revealed part of a rectangular stone paving (see figure 6:1). Above and between the stones there was a fill containing considerable amounts of charcoal. Beneath the stone paving there was a layer of gravel and charcoal in which two hearths were also found. There were not many finds, but they included a bronze strap-end datable to the Migration Period. No

keys, locks, or chest-parts were found. The remains in Building Group 5 suggests some type of Iron Age occupation, but the findings were too limited to indicate its extent or character (Reisborg 1994: 77-78). The finds did however include objects indicating metalworking, such as scrap iron and blacksmithing waste, as well as a few tools (*Sis*).

Building Group 6

The settlement remains from Building Group 6 were identified when grave field 116 was investigated between 1962 and 1976. They were mainly located beneath the northwest part of the grave field, but also extended down the slope on the north side of the hill on which the graves were situated (see figure 6:1). The only excavation conducted on the slope was a narrow trench, where a feature interpreted as a possible rubbish heap was uncovered (Sander 1997: 9, 84).

The clearest traces of the settlement were located on a plateau-like area in the NNW part of the grave field, and in the southwest where a sunken featured building with an oven in one corner was uncovered. The SFB was in part covered by a later Viking Age grave (Sander 1997: 84). The area with settlement remains in the NNW covered c. 300m² and was delimited in the north by a row of stones that formed a terrace-edge. The remains were very fragmentary due to the later graves, but six postholes (three uncertain), three hearths, four pits, and a stone row could be discerned. The stone row may possibly have been part of a building foundation (Sander 1976a: 42; Sander 1997: 84).

In the southeast corner of the grave field there was a flatter area without any graves, c.12 x 12 m, ending towards the east in an N-S oriented terrace-edge. Here, scattered over a 3.5 x 4 m area, a small silver hoard was uncovered, containing twenty-four Arabic silver coins (minted between 698 and 857), two pieces of silver wire, a glass weight (possibly early 8th century, Egyptian), and a gold-foliated bead (Sander 1976a: 42-43). There was also an occupation layer to the ESE side of the flat area. Underneath this lay a packing of small stones, apparently on the terrace-edge. Most of the coins lay above and between the stones in the stone-packing, in the occupation layer, and next to a large stone (Sander 1997: 78-79). In the occupation layer there were also other objects indicating

ordinary occupation activities and metalworking. Interestingly, there was also a chest-mount, two fragments of a padlock, and a possible key-handle, all made of iron. The latter three were however all un-stratified, presumably found during sieving, and their exact location is therefore unknown (Sander 1976a: 43-44, 87-88; Sander 1997: 79).

It has been suggested that the chest-mount, lock, and key indicate that a wooden chest with a lock was used to store the silver hoard, weight, and the gold-foliated bead (Sander 1997: 79). This is certainly an interesting interpretation, but it is important to keep in mind that the finds were scattered over a large area and that other finds were also present. The find circumstances do not indicate an *in situ* find, but rather an occupation layer which seemingly contained various waste materials. If the stone packing was once part of a floor in a building, it would most likely have been cleaned out and perhaps eventually levelled after the presumed building was taken out of use. There was also no indication of a pit to hide a chest in, and it is unlikely that it was just left standing here. Nevertheless, the presence of the chest-mount, padlock, and key does show that these objects would once have been kept and/or used on the site, and that some form of controlled access was practiced.

Since such a small part of BG6 was investigated, it is difficult to gain an understanding of what type of settlement site this once was. The activities that can however be deduced from the various objects uncovered (Sander 1976b: 50, 54; 1997: 81-83) suggest some normal habitation activities as well as metalworking and bronze casting.

The objects that were dated, besides the already mentioned coins minted between 698 and 857, and the early 8th century glass weight, included glass beads potentially from the middle of the 7th century, and a two-segmented gold-foliated beads indicating a Viking Age date (Sander 1997: 84). If these finds indeed derived from occupation activities and not from damaged graves, this gives a possible period of occupation from the Vendel period up to the Viking Age. Radiocarbon analysis provided dates from the beginning of the 6th century to the middle of the 7th century (Sander 1997: 11).

The graves, which partly overlaid the settlement remains, were dated through grave goods to the Migration Period, Vendel Period, and the Viking Age (Sander 1997: 61-74; Melin & Sigvallius 2001: 125). This would suggest partly coinciding or intermittent burial and settlement activities.

The keys, locks, and chests from Building Group 6

The lock from Building Group 6 was a padlock, and only the handle of the potential key survived (see figure 6:7). It is not certain that this object was a key, and it is not possible to tell what type it may have been. Since the handle resembles some of the other padlock keys from Helgö, it is however not unlikely that this object was also of this kind. The chest-part was described as a mount or hinge with one end curled up (Sander 1976a: 43-44, 87-88; Sander 1997: 79). These were the only such objects found at Building Group 6.



Figure 6:7. *The possible key handle and the fragmentary padlock. Photographs by Jenny Nyberg, SHM, 2006-12-20 (CC BY 2.5).*

Building group 7

Building Group 7 is part of RAÄ 118, which comprised both a grave field and settlement remains with terraces (see figure 6:8). Excavations were conducted here from 1976 to 1978, but only a very limited part of Building Group 7 was investigated before the Helgö Project came to an end in 1978 (Melin & Sigvallius 2001: 9).

The site is located near the centre of Helgö, on a small hill roughly 20-30 m above sea level (see figure 6:1). The settlement remains consisted of at least three terraces, located in the northern part of the grave field. Terrace I, aligned SE-NW, was the largest and measured c. 11 x 27 m. It was the only settlement remain in BG7 that was intentionally investigated; the others were found by chance when excavating the graves. It was also the only one not disturbed by later graves (Melin & Sigvallius 2001: 9, 81, 92).

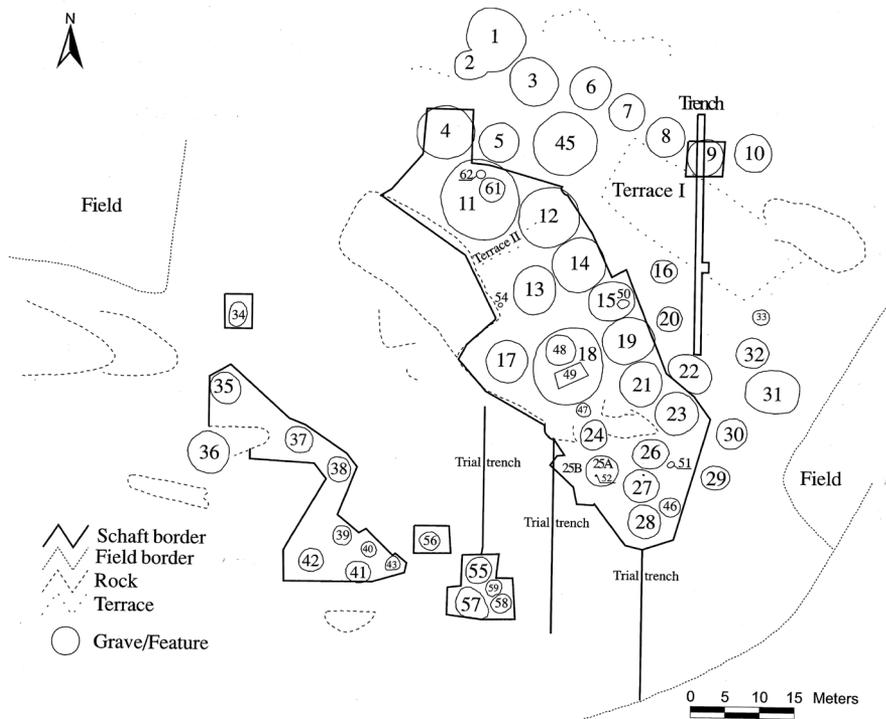


Figure 6:8. Schematic plan over the area covering grave field 118 and the remains from Building Group 7, including Terrace I and II. Part of the documentation stored at ATA, published in Melin & Sigvallius 2001 (figure 2).

During the investigations a N-S oriented trench, 31 m long and 1 m wide, was dug across Terrace I and beyond in order to establish the relationship between the graves and the settlement remains, as well as their date and character. No definite traces of any building could be found in the trench; however, a stone paving was uncovered, with a layer above. These contained only a few finds, including items suggesting ordinary occupation activities, crafting, and metalworking. Underneath the stone paving was an occupation layer up to 0.1 m thick (Layer A) which continued south of the terrace. Between the stone paving towards the southern edge and Layer A there was also the bottom of a hearth (Melin & Sigvallius 2001: 81, 84).

Two or three phases could be identified with Layer A as the first, the hearth possibly as a second, and the stone paving as the third phase. There was also another occupation layer (Layer B) just south of the

terrace edge that showed up as “a bowl-shaped depression” containing dark soil, a concentration of brittle-burnt stones, and a “soot pit” (Melin & Sigvallius 2001: 84-85). From this description together with a drawing of the section, it would appear that Layer B was the fill of a pit or hearth.

An iron rotary key was found somewhere between 5 and 11 meters from the southern end of the trench, south of Terrace I (see figure 6:8). This is where Layer B and the “soot pit” were identified, as well as part of Layer A (Melin & Sigvallius 2001: 87). From a section drawing (profile 6) found in the unpublished report (Kyhllberg 1978), the key appears to have been found just outside the soot pit, near the bottom of the terrace slope, and was assigned to what was referred to as ‘settlement material A’, probably the same as Layer A.

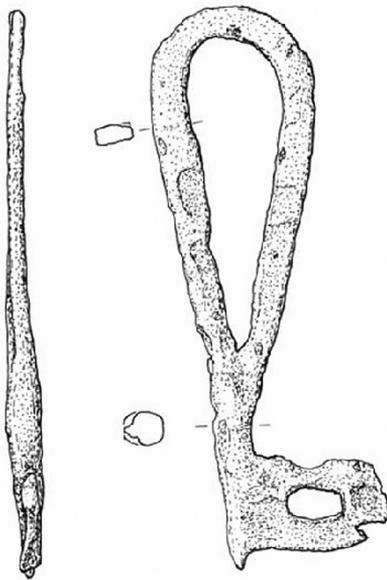


Figure 6:9. *The rotary key from Building Group 7. Drawing prepared by Cecilia Bonnevier, SHM, 2004-12-30 (CC-BY-NO-ND 2.5).*

The finds within “Settlement material A”, which was supposed to represent the first phase dated to the Vendel Period/Viking Age, seem to generally indicate ordinary Iron Age farm activities, but also some textile working, crafting, metalworking, and winter travelling. This was the phase to which the key was assigned (Kyhllberg 1978: 8-9). The key, along with the other finds, appears to be debris and waste material within the occupation layer, and cannot be assigned to any specific feature.

The very limited excavations also make any further interpretations impossible. The key, which was said to resemble the key in Birka grave Bj 854, is believed to date to the early Viking Age at the latest (Kyhllberg 1978: 9), and its presence suggests that there would have been some form of controlled access on the site around this time.

The finds from Building Group 7 do not include any of the high-quality items known elsewhere on Helgö, and there were almost no bronze or other precious metals (Kyhllberg 1978: 18). The lack of certain find categories could of course also be the result of the small size of the investigated area and damage done by the graves on the site. If the dates suggested for the settlement remains are correct, some of the graves, which can be dated from the late Vendel Period to the middle Viking Age (Melin & Sigvallius 2001:79), would have been contemporary with some of the activities on/near Terrace I. This situation is similar to that on Building Group 6. It is clear that additional investigations are needed if the relationship between the graves and the settlement remains are to be understood.

Concluding remarks on the finds from the Building Groups on Helgö

From all the descriptions above, it is clear that all of the building groups had traces of some form of metalworking activity, involving both iron and bronze, and in some cases gold and silver. Some also had evidence of glass-bead production. There seems to have been some textile work and/or production of loom weights as well, and various tools could suggest some wood and antler/bone working. At BG2 there were also indications of bread making. All the sites, perhaps with the exception of the scarcely excavated BG5, show some indication of dwelling and more “ordinary” Iron Age farm activities. This seems to mostly be towards the later occupation phases in the Building Groups.

The four Building Groups 1, 2, 3, and 4 were nearly identical when comparing which find categories were represented (see Appendix 13), but when it came to quantities, they were quite different with BG3 and BG2 containing higher numbers of many of the finds. BG2 also stood out with its hall building(s), special imported objects, and figural gold-foils.

Building Groups 6 and 7 were quite similar to each other and both contained fewer find categories. This was probably related to both of the settlements having been disturbed by later graves, and also due to the small size of the excavations there. They seem to have lacked some of the perhaps more high-status objects such as glass beakers, gaming pieces, and jewellery, although BG6 did contain a silver hoard. Naturally, it is a bit problematic to compare sites with such a difference in excavated volume. Furthermore, and as previously touched upon, the flatter area between the hill-formations has not been investigated, and so a large piece is missing from the pre-history of Helgö.

The building group with the most locks and keys was BG2, followed by BG3 (see table 6:8 and 6:9) where there were also indications of padlock production. The unfinished or faulty bronze key from BG2, cast with not enough bronze, may indicate possible locksmithing here as well, unless the object was brought in as scrap metal. BG5 was the only building group with no keys, locks, or chests, and BG7 only contained a key. BG6 was the only building group that had an object identified as a chest-fitting, but some of the other building groups might also have had chests based on finds of lock-springs, and keys that could fit chest-locks. Some of the rods with spiral shaped ends found on BG2, originally interpreted as key-handles, could potentially also be parts of chest-handles.

Table 6:8. *The locks found on all the Helgö Building Groups, sorted into types.*

Area	Padlock	Padlock?	Mounted lock	Uncertain/fragment	Total No.
BG1	9	2	3	2	16
BG2	79	11	7	5	102
BG3	6	1	1	12	20
BG4	2	1			3
BG5					0
BG6	1				1
BG7					0
Total No.	97	15	11	19	142

Table 6:9. *The keys found on all the Helgö Building Groups, sorted into types.*

Area	Padlock key	Padlock key?	Rotary key	L-shaped lift-key	Angular L-shaped lift-key	Lift-key	Uncertain/fragment	Total No.
BG1		1			1	2	5	9
BG2	6	4	5	5	3	1	10	34
BG3	2	1	1	1	1	1	3	10
BG4					1		1	2
BG5								0
BG6							1	1
BG7			1					1
Total No.	8	6	7	6	6	4	20	57

It is the case for all the sites that modern disturbances, the excavation methods used in the 50s, 60s and 70s, and long-term occupation with several intercutting events and terracing made it very difficult to connect any of the keys, locks, or chests with specific structures or activity areas. It would however appear from the dating of the locks as though they were present for more than one period. As with nearly all the finds from the Building Groups, it is hard to know if the keys, locks, and chests found there were used and/or produced on site. They were found in contexts usually containing both ordinary household waste, metalworking waste, and debris which could indicate that they were either broken after use and discarded, or that they were production waste.

It should be noted that since the occupation layers where the keys, locks, and chest-parts were found were so mixed due to the long-term occupation and terracing, it is possible that even with modern excavation methods focusing more on the stratigraphy, the objects may not have been possible to connect with specific buildings, areas, or phases. This is perhaps the case with most long-standing terraced settlement sites. By focusing on the larger contexts, it was nevertheless possible to gain some understanding of how the keys, locks, and chests could have been used on Helgö.

The idea of padlocks (or mounted locks) used to store valuable raw materials and workshop products securely in chests is a possibility, and as such they would be similar to the fictitious locked chest belonging to the smith *Völundr*, discussed in chapter 3. That *Helgö* is an island is an additional parallel to *Völundr*, as he was kept captive in a smithy on an island (*Völundarkviða*, Larrington 2014 [1996]: 98-104), and furthermore, the *Helgö* locks were found in contexts associated with metalworking. The above suggests a connection between the *Helgö* keys, locks, and chests and the social identity of the smith. There were even indications of a locksmith at Building Group 3 and perhaps also at Building Group 2.

Another similar social identity or role that could be connected with the *Helgö* keys, locks, and chests is the craftsperson who could store tools in a locked chest, as suggested by for instance the previously mentioned *Mästermyr* tool-chest.

However, neither of these suggestions can explain how the objects, and in particular the padlocks, ended up in rather large quantities in the occupation layers as waste, unless they perhaps wore out quickly from frequent opening and closing. There were also few indications of chests in the material, but as previously discussed these transportable objects were not likely to have been left on site, and they would also have been more durable than the padlocks.

Perhaps the padlocks were to be used to secure other products as they were shipped off to trade, and some of them could have come to *Helgö* in this manner together with traded goods. It is possible that a padlock may also have been used as some form of seal during the transport of goods, and perhaps even that both parts in a trade transaction held a key to this lock; providing there was already an established trading arrangement. It is also possible that some padlocks were themselves the product to be traded. The above suggests a possible connection between keys, locks, chests, and merchants, who might also have used padlocks to secure a boat, which must have been involved considering the location of *Helgö*. That boats could be secured with a padlock and chain, at least during the medieval period, is suggested by a previously mentioned section in the *Guta Law* (Chapter 36) Holmbäck & Wessén 1979.4: 232-233).

Since mounted locks and the corresponding keys could not be used in quite the same manner as the mobile padlock, unless the lock was on a transportable chest, these might to a larger extent have been intended for

use on the farms, perhaps to secure storerooms or storage-houses. Here it might have been the householder, the housewife, and/or some trusted servant who was responsible for the key. Items that might have been kept under lock and key could have included food and other resources, clothes, tools, weapons, etc., perhaps also some workshop products. On Building Groups 1 and 4, some of the horses that might have been reared nearby could also have been kept locked in a stable.

Keys, locks, and chests from the grave fields on Helgö

There are seven identified Iron Age grave fields on Helgö; all situated on the eastern half of the island (see figure 6:1). Grave field Ekerö 114:1 has not been excavated, but consists of approximately forty graves. The same is true for Ekerö 117:1 which consists of c. ten graves (Fornsök: Ekerö 114:1; 117:1). On grave field Ekerö 115:1, only one grave has been archaeologically investigated after it was first subject to unauthorised digging/grave robbing in 1965. This stone setting, which dates from the early Vendel Period, did not contain any keys, locks, or chests (Fornsök: Ekerö 115:1; Melin & Sigvallius 2001: 101). The recently discovered grave field Ekerö 270:1 near Building Group 3, consists of seven identified graves, none of which have been excavated (Fornsök: Ekerö 270:1).

Three of the grave fields have been investigated: Ekerö 150:1, 116:1, and 118:1. All of the grave fields except Ekerö 150:1 had graves containing keys, locks, or chests (see appendix 10 and 11).

In the following sections, the grave fields and the graves containing keys, locks, or chests, are described in some detail. As in the chapter dealing with the Birka graves, not all of the finds in the graves have been individually listed, but they are all included in tables displaying the find categories that were present in the graves. Any further details regarding the graves can be found in the excavation reports or in the archives at ATA. As with the Birka graves, the focus is on trying to present an image of the buried individuals and their potential status, role, or identity based on the grave goods. The find categories were used to compare the graves with keys, locks, and chests with the graves that did not. This was done in the hope of finding similarities and differences that could further provide clues regarding the individuals buried with keys, locks, or chests.

Although grave field Ekerö 150:1 did not contain any of these objects, the graves were nevertheless included in the find-category comparisons in order to get more material to analyse.

Many of the bones in the Helgö graves were analysed by an osteologist, and in some cases the biological sex of the deceased were established. In those cases, the sex of the individual has been included in the descriptions below, but sex/gender based on the grave goods (archaeological sex) was not. This was to avoid any presuppositions or circular arguments since keys have previously been used as indicators of female sex/gender. This was the case in the report for grave field Ekerö 116:1, where keys were said to indicate female gender, with some exceptions for men and children. Keys are in fact the first item on the list of female gender indicative objects in the report, followed by brooches, dress-pins, beads, needle-cases and needles, and possibly combs (Melin & Sigvallius 2001: 99, see also Jankavs 1987: 26; Petré 2010: 381).

Grave field Ekerö 150:1

Grave field 150 was fully excavated between 1960 and 1961. Forty-one graves, all stone settings containing cremations, were investigated (Waller & Hallinder 1970: 218). The grave field was situated just southeast of Building Group 2, and the northernmost grave was only 13 m from Terrace VI and 3 m higher up on the slope (see figure 6:1). Some of the graves were damaged by modern construction and levelling work (Lamm 1970: 218), and some of these were rather close to the slope down towards BG2. Accordingly, one might wonder whether some of the material from the graves might have been shoved down the slope, and if any additional graves might have suffered similar treatment and are now gone. This could perhaps explain some of the finds from the deep cultural layers in the area near the small hillock, previously described. Some of the finds seemed more like the finds that tend to come from graves, such as for instance the previously mentioned tweezer and ear scoop attached to a holding ring. These seem to be personal items possibly worn/attached to the dress and do not resemble general occupation waste.

Based on the grave goods, the earliest graves date from around 500 CE or somewhat earlier, and the youngest graves seem to date from the beginning or the middle of the 9th century (Lamm 1970: 221). For comparison, the grave goods have been sorted into the find categories used in the present thesis and are presented together with the find categories from the other excavated grave fields in table 6:13. As already mentioned, none of the graves on grave field 150 contained any keys, locks, or chests.

Grave field Ekerö 116:1

Grave field Ekerö 116:1 is situated on a small hill, c. 15 m above sea level, on the northern side of eastern Helgö (see figure 6:1). It covers an area of about 5000 m², and comprises mounds, circular stone settings, a triangular stone setting with concave sides (Sw. *treudd*), and a rectangular stone setting (Sander 1997: 10-11).

The grave field was investigated between 1962 and 1976, along with a few remains of a settlement, the previously described Building Group 6, which the graves partly overlay. In total forty-nine graves were excavated, though some of them were uncertain as graves (Sander 1997: 9, 11, 45). As such, A12, 30A, 72, 73, 76 and 80 have been excluded from the present study. There was more than one burial in a few of the graves, so the total number of burials included here is forty-seven (Sander 1997: 14-44).

Three graves were not excavated since they were covered by large trees, but otherwise the grave field was fully excavated. There was however an area near the southwest edge of the grave field on private property that was never investigated. Here, the edge of a field was very close to the graves, suggesting that some graves may have been destroyed through cultivation (Sander 1997: 45, 74).

Eleven graves were dated through grave goods to the Migration Period, and eight were dated to the Vendel Period. Four graves had objects that placed them either in the Vendel Period or the Viking Age, and twenty-four were dated to the Viking Age (Sander 1997: 61-74; Melin & Sigvallius 2001: 125).

All of the identified burials were cremations, however, at the top of grave mound A30 some finds, including un-burnt human bones, were grouped together as feature 30A. This was not interpreted as a grave, but rather as material derived from older graves and settlement layers that were destroyed when grave A30 was constructed (Sander 1997: 49, 52; Melin & Sigvallius 2001: 124). No other traces of inhumation burials were identified on the grave field, so these bones stood out. The osteological analysis showed that they belonged to a female, and it has been speculated that perhaps she could have been some sort of sacrifice. Amongst the many objects found in the fill was an iron object interpreted as a possible key (Sander 1997: 27-29, 52). Because of the mixed nature of the fill it was not possible to tell if this object came from a grave or from the settlement remains. Furthermore, the shape of the object (SHM 30249: 452057) was not typical of a key and this interpretation is therefore very uncertain.⁶⁷ One could theorise that perhaps the unburnt bones that were identified as a female individual had some influence on the interpretation since keys were sometimes used as indicators of female sex/gender, as mentioned earlier. In this study, the object has not been counted amongst the keys from Helgö.

Graves with keys, locks, and chests

On grave field Ekerö 116:1 there was one grave that contained a key (A48), one grave which contained a possible key (A26), and another grave that contained a chest-part (A28) (see figure 6:10 and table 6:10). Based on the grave goods, these were all dated to the Viking Age (Sander 1997: 68-74). No locks were found in any of the graves.

The three graves made up 12.5% of all Viking Age graves, or 11% if the Vendel/Viking Age graves are included.

67. The object can be viewed at <http://mis.historiska.se/mis/sok/fid.asp?fid=452057>.

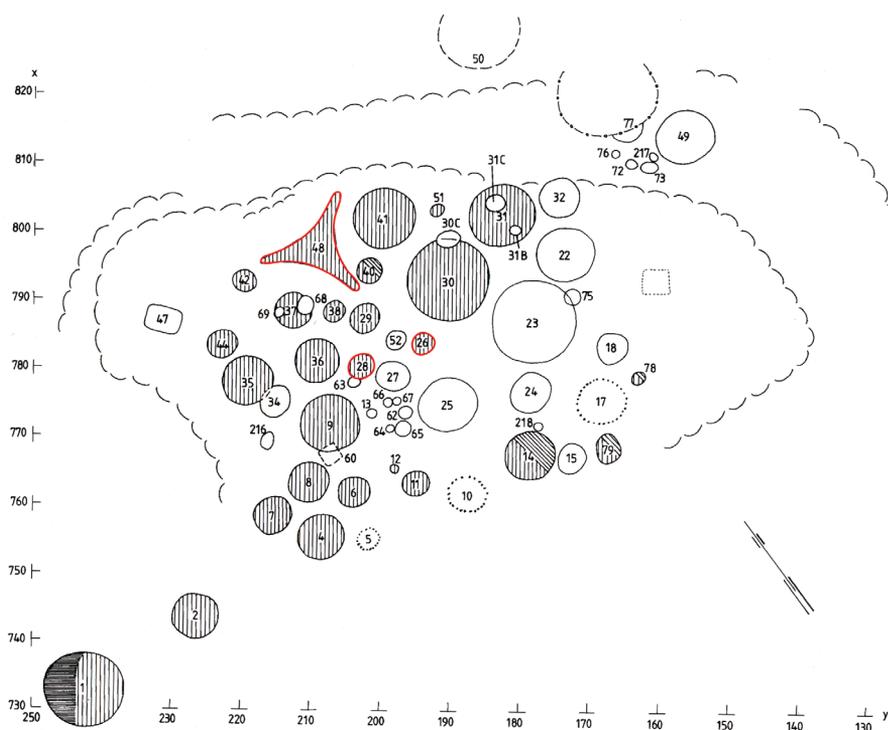


Figure 6:10. Schematic plan over grave field Ekerö 116:1 with the graves containing keys or chests marked out in red. Based on map from the documentation stored at ATA, published in Sander 1997 (figure 2:1).

Grave A26 was an oval stone setting with a cremation layer and a pottery vessel containing cremated bone. There were several objects in the cremation layer, including a large amount of beads, several bronze items, and some fragments of silver, suggesting a costly burial. There was also animal bone present from dog, sheep/goat, and chicken (Sander 1997: 25-25; Melin & Sigvallius 2001: 125).

There was also an item interpreted as a bronze key handle or shank in the cremation layer (see figure 6:11) (Sander 1997: 25, 73).

The human bones in the grave were osteologically analysed and it was determined to belong to an adult (18-89 years of age), but the biological sex could not be determined (Melin & Sigvallius 2001: 125).



Figure 6:11. Possible key handle from Helgö grave A26. Length 3.5 cm. Photographs by Jenny Nyberg, SHM, 2006-12-20 (CC BY 2.5).

Attempting to interpret the social identity or role of the individual in grave A25 based on the other grave goods is rather challenging. There were no tools that might provide clues, only various dress accessories and jewellery. These on the other hand suggest a wealthy individual, or a wealthy family/kin-group. No chest-fittings to which the key could have belonged were identified, although large amounts of nails, rivets, mounts, etc. were present in the grave. This suggests that the key might have been used more as a symbol, or that it could have belonged to a lock still in the world of the living.

Grave A28 was an irregular stone setting, c. 3.5 x 3.5 m and 0.2 m high, with a cremation layer with a pottery vessel containing cremated bone placed in the centre. There were also some finds and cremated bones in the cremation layer, as well as outside of it. Amongst the human bones were dog, horse, cattle, and sheep/goat bones (Sander 1997: 25-26; Melin & Sigvallius 2001: 125). The finds included a comb, a knife, an iron buckle, a bronze ring-buckle, and some ice spikes for horse, possibly also for shoes. Amongst the finds there were also various fragments of a loom-weight, a mould, and some burnt clay (Sander 1997: 25-26, 28). It is however likely that some of these finds belonged to the previous occupation on the site rather than the grave.

Fragments of two chest hinges were found in the cremation layer (see figure 6:12) (Sander 1997: 25). They looked similar in shape to hinges found in Birka graves Bj 708, Bj 639, and a grave context without number (Arbman 1940: Taf. 269:2, 261:1a, 262).



Figure 6:12. Chest hinges from grave A28. Photograph by Jenny Nyberg, SHM, 2006-12-20 (CC BY 2.5). The drawing in the excavation report suggests that the fragments in this picture are actually fragments of two separate chest-hinges (Sander 1997: figure 2:24).

The osteological analysis of the bones suggested a possible male, between 18 and 44 years of age (Melin & Sigvallius 2001: 125).

Based on the ice spikes and horse bones, this possibly male individual may have been associated with travelling or horse riding. The horse and for instance the bronze ring-buckle suggests that this individual may also have been more affluent than most.

Which, if any, of the grave goods were stored inside the chest is not possible to ascertain. It is also not known if it contained anything of value or something more personal.

Grave A48 was the only triangular stone-setting with concave sides on Ekerö 116:1, and one of only three on Helgö (Sander 1997: 39-41; Fornsök: Ekerö 115:1, 116:1, 119:7). The only traces of a cremation layer, a small layer of soot, were found in the centre of the grave together with a potsherd, burnt clay, and a few cremated bones (Sander 1997: 41).

At the western “tip” of the grave, an iron angular L-shaped lift-key with a circular holding ring (see figure 6:13) was found in the bottom

layer which also contained a silver coin, an arrowhead, and various iron fragments (Sander 1997: 41). Whether these objects belonged to the burial is not absolutely certain. The bottom layer of the southern end contained occupation debris and a hearth, probably from the former settlement (Sander 1997: 41). That only the southern tip was described as containing occupation debris, the key being found within the grave structure and not in the grave fill, and above all, the fact that the object was more or less intact, speaks against the key being part of the occupation debris. It is therefore interpreted here as belonging to the burial.



Figure 6:13. *The angular L-shaped lift key and a holding ring from grave A48. Photograph by Victoria Dabir, SHM, 2006-12-20 (CC BY 2.5).*

The osteological analysis of the cremated bones could not determine either the biological sex or age of the individual. The animal bone present in the grave came from sheep/goat and pig (Melin & Sigvallius 2001: 125).

As suggested by the rather unique grave construction, the individual in this grave or his/her family or kin-group may have had a special position in society. None of the grave goods indicated any great wealth however, but there was perhaps no need to display this in the grave, or this position was based on something other than wealth. The silver coin may suggest a connection with trade, and the arrowhead perhaps a connection with hunting, archery, or possibly with the role as warrior.

Since no other weaponry was found in the grave, the latter is less likely, however. No chest was identified in the grave, so the key, which would have belonged to a mounted lock, may have matched a lock still on the farm, or it may have been a symbol of some sort.

Grave field Ekerö 118:1

Between 1976 and 1978 grave field Ekerö 118:1 was investigated, together with the settlement remains that lie beneath it (Building Group 7). It is located on a hill in the centre of the island at around 20-30 m above sea level (see figure 6:1). Thirty-five graves were excavated, constituting two-thirds of the total amount of graves identified on the grave field. Thirty of the excavated graves were circular or oval stone settings, one was a triangular stone setting with concave sides, and four were mounds. All of the graves contained a cremation layer, except for graves 55 and 59 which are both uncertain as graves (Melin & Sigvallius 2001: 9, 14).

The grave goods suggest that the grave field was used from the late Vendel period to the middle Viking Age. This rather short period of use (c. 150-200 years) differed from the other investigated grave fields on Helgö, where Ekerö 116:1 seems to have been in use for approximately 500 years, and Ekerö 150:1 seems to have been in use for about 400 years. Since only part of grave field 118 has been excavated, this picture could however be somewhat misleading (Melin & Sigvallius 2001: 79-80).

Graves with keys, locks, and chests

There were two graves from Ekerö 118:1 that contained a key; 12 and 17. One grave, 15, contained a chest, and grave 25A contained lock-parts and a possible padlock. Two of the graves were dated to the Vendel/Viking Age, and two were dated to the early/middle Viking Age (see table 6:10). These were all accordingly rather close together in time, and also fairly contemporary with the graves with keys and chests on grave field 116, dated to the Viking Age. The four graves make up 11% of all the excavated graves on the grave field.

Three of the graves were stone settings and one was a mound. They were all situated on the north-eastern part of the grave field where they were quite evenly spread out (see figure 6:14).

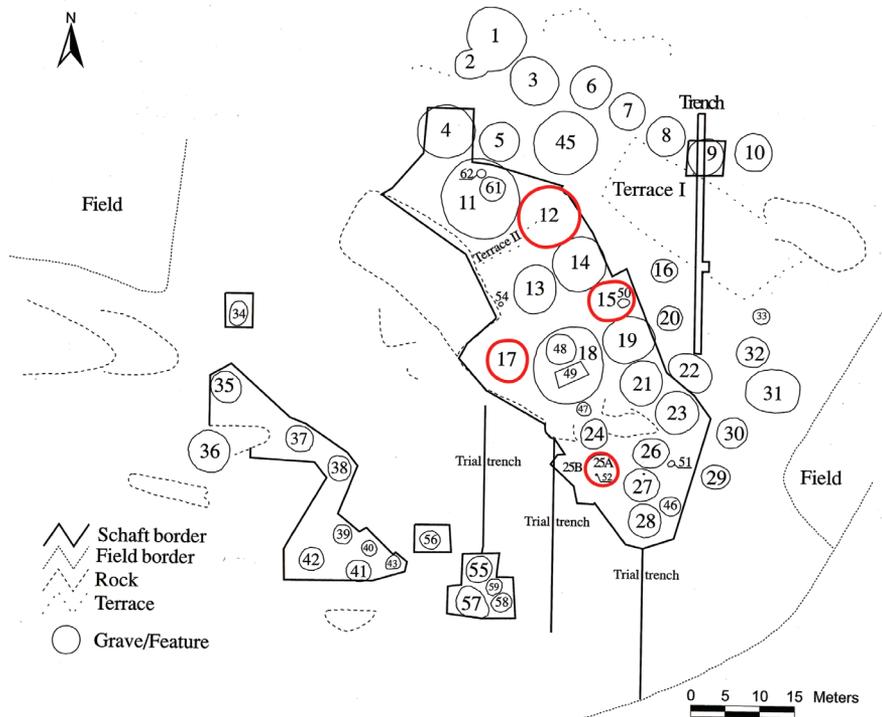


Figure 6:14. Schematic plan of grave field Ekerö 118:1 with the graves containing keys, locks, or chests marked out in red. The plan is part of the documentation stored at ATA, published in Melin & Sigvallius 2001 (figure 2).

Grave 12 was an almost circular stone setting, 6.5 m in diameter and 0.4 m high, with a cremation layer in the centre. The grave contained a pottery urn with cremated human bone and a Thor's hammer amulet. An iron rotary key (see figure 6:15) was described as placed between the urn and a flat stone on which it was stood (Melin & Sigvallius 2001: 14-16). However, a photograph of the grave urn (part of the field documentation stored at ATA) (see figure 6:16) showed that the wall of the urn had collapsed on the side where the key was situated. It is therefore possible that the key was once actually placed inside the urn, which, as mentioned in the previous chapter, was the case for three of the Birka graves. If the

key was indeed deliberately placed underneath the urn, it is probable that this had some special meaning, but it is difficult to understand what this meaning might have been. None of the other graves in this study had a similar placement of the key, so it would probably have been a meaning that was only relevant to this specific burial.



Figure 6:15. *The iron rotary key from Grave 12. Photograph by Jenny Nyberg, SHM, 2006-12-19 (CC-BY 2.5).*

Amongst the other finds in the cremation layer were some beads, and bits of bronze and silver; some of which were just melted lumps. There was also a pendant, part of a needle-case, three chains, and a pin, all of which were made of bronze. It is possible that the chains were used to hold the needle-case, the pin, and the key. Other items included ice spikes (Melin & Sigvallius 2001: 16-18), probably for shoes, indicating winter travelling or a winter burial.

Along with cremated human bones, there were also cremated dog, pig, sheep/goat and fowl bones, and unburnt cattle bone. The human bones were osteologically analysed, but no sex was possible to determine, however, the age was believed to be between 18 and 44 years old (Melin & Sigvallius 2001: 18, 100).

Based on the grave goods, this individual may have been involved in finer textile work such as embroidery or sewing. The bronze and silver items also point to a more affluent individual or family/kin-group.



Figure 6:16. *The grave urn in Grave 12 with the key showing. The photograph (nr 6471) is part of the field documentation from Helgö, stored at ATA. Photographer not named.*

Grave 15 was a circular stone setting, 5.5 m in diameter and 0.5 m high, with a cremation layer containing seven fragments of silver coins, but also a glass bead, a comb, and several fragments of bronze dress accessories, mounts, and decorative studs. Amongst the objects there were also fragments of a punch/awl, a fire-steel, a hook and swivel, and large amounts of nails, rivets, etc. In the cremation layer there was also a fragment of a possible iron chest-fitting (Melin & Sigvallius 2001: 24). This interpretation is a bit uncertain, but is supported by the large number of nails, rivets, mounts, and decorative studs.

There were also cremated human, dog, and bird bones. The human bones were osteologically analysed and interpreted as belonging to a male individual between 35 and 64 years old (Melin & Sigvallius 2001: 24, 100).

The grave goods indicated that this male individual was accompanied by a chest in the grave. Some of the tools, which may suggest he was involved in some sort of craft, were perhaps stored in the chest. He may also have been involved in trade, as suggested by the coin fragments. If the hook and swivel were part of a steelyard or other weighing equipment, this would also be an indication of trading activities. The many bronze items in the grave furthermore suggest that this was a rather wealthy burial.

Grave 17 was a mound, 7 m in diameter and 0.7 m high with a depression in the middle. In the centre and to the north-east in the grave there was a very sooty and charcoal rich cremation layer in which a small bronze rotary key was found (see figure 6:17). There was also a whetstone, a possible knife, and an ice spike probably for shoes; the latter possibly indicating winter travelling or a winter burial. Amongst several iron fragments there was also a fire steel, possibly a hook and swivel, and many nails and rivets. Finds of a more personal nature included a comb, and there were also two glass beads (Melin & Sigvallius 2001: 24-25, 28).



Figure 6:17. *The Bronze key from Grave 17. Photograph by Jenny Nyberg, SHM, 2006-12-20 (CC BY 2.5).*

In the cremation layer there were cremated human, dog, horse, pig, and domestic fowl bones. There was also unburnt pig and bird bone. The human bones were osteologically analysed and are believed to be from a male individual between 18 and 44 years old (Melin & Sigvallius 2001: 28, 100).

This male individual was accompanied by a bronze key in the grave. There were no identified lock or chest-parts in the grave to which the key may have belonged, although there were many nails, rivets, and metal fragments that could potentially have come from one. However, as it stands, there was no identified chest and the key would therefore have been either used as a symbol, or it would have belonged to a lock on a chest or door still in the world of the living. The cutting and sharpening tools may suggest some crafting, but could equally be general multi-purpose tools. There were not many valuable metal items in the grave, but the animal bone, including horse bone, may still suggest a rather costly burial. If there was indeed a hook and swivel in the grave which might have come from a steelyard, as in grave 15, there might also be a link to trading activities.

Grave 25A was an oval stone setting, 2.4 - 3 m in diameter and 0.3 m high, with a cremation layer beneath the stones. Above and between the stones there was also a layer rich in various finds, probably deriving from the previous occupation activities on BG7 (Melin & Sigvallius 2001: 38). The cremation layer contained a pottery urn which held fragments of a decorative iron and bronze pin, fragments of rivets and nails, and cremated bone from human, dog, horse, and cattle. The cremation layer contained fragments of bronze mounts, in *Sis* interpreted as possible lock-parts, but since this interpretation seems rather uncertain they have not been included as such in the present study. There was however a bronze fragment interpreted in the excavation report as the end of a lock-shackle (Melin & Sigvallius 2001: 38-40; *Sis*), probably once part of a padlock. The other finds in the cremation layer included rivets and unidentifiable fragments of bronze, a large amount of iron nails and rivets, and iron mount-fragments with and without rivets (Melin & Sigvallius 2001: 40). It is not unlikely that some of these came from a chest, although none have been identified as chest-parts.

Parts of the same type of decorative pin that was found in the urn were also amongst the finds from the cremation layer, along with a few

beads, fragments from two combs, and cremated human, dog, horse, and cattle bones. There was also a second pottery vessel (Melin & Sigvallius 2001: 40). This second vessel and the presence of two combs might indicate that the grave contained two burials/individuals. The bones were osteologically analysed and the interpretation was that there were possibly two individuals, at least one of which was a possible female aged between 35 and 64 (Melin & Sigvallius 2001: 100).

This possibly female individual may consequently have been accompanied by a padlock in the grave, though it may also have belonged to the other unidentified individual in the grave. The other grave goods did not provide many clues as to her/their roles in life or their social identity. With only a few beads and a decorative pin, the grave does not appear wealthy, although the accompanying animals or animal parts, including horse, were probably costly. The bronze mounts/fittings in themselves also suggest a valuable object of which they were once part, and if it was a chest this may once have contained, for example, costly textiles, or perhaps simply items of a more personal nature.

The Helgö-graves with keys, locks, and chests

To summarise the above, seven of the excavated Helgö graves contained a key, lock, or chest (see table 6:10). They range in date from the late Vendel Period or early Viking Age to the (middle) Viking Age. None of the Migration Period graves contained a key, lock, or chest. They were all cremation graves, and with the exception of a mound and a triangular stone setting with concave sides, they were round or oval stone settings. They were also rather rare, comprising only 11-12.5% of the contemporary graves on their respective grave field. This suggests that the individuals buried with one of these objects may have had a higher or special status, role, or identity, or that there were some specific or unusual circumstances regarding their deaths. Most, if not all of the individuals in these graves were also accompanied with rather costly grave goods, suggesting that they were affluent individuals and/or members of prosperous families.

Table 6:10. *The graves with keys, locks, or chests from Helgö, with information on outer and inner grave type, osteologically interpreted sex (M=Male, M?=possibly male, F?= possibly female, x=unsexed adult), date, and which of the three objects the grave contained. Based on Berit Sigvallius (Melin & Sigvallius 2001: 125-126) and the information presented in the sections above with respective references.*

Grave	Outer grave type	Inner type type	Dating	Sex (ost)	Key	Lock	Chest
A26	Stone setting	Cremation	Viking Age	x	1		
A28	Stone setting	Cremation	Viking Age	M?			1
A48	Triangular stone setting	Cremation	Viking Age	x	1		
12	Stone setting	Cremation	Early/Middle Viking	x	1		
15	Stone setting	Cremation	Early/Middle Viking	M			1
17	Mound	Cremation	Vendel/Viking	M	1		
25A	Stone setting	Cremation	Vendel/Viking	F? + ?		1	

Only one lock in the form of a padlock-part was identified amongst the Helgö graves. It belonged to the burial of a possible female or unsexed adult who appears to have been somewhat wealthy based on the grave goods. There were also horse bones in the grave that, unless it was meant to be a food sacrifice or similar, could indicate travelling or horse-riding.

Four graves contained a key, from which one individual was identified as a male adult who may have been involved in some crafting and perhaps travelling/horse-riding. Amongst the other unsexed adults buried with a key was one individual possibly involved in finer textile work, one who appears to have had some connection with trade and archery; either for hunting or as a weapon, and one was buried with costly jewellery and dress accessories.

Two graves had a chest amongst the grave goods, both without the remains of a lock. In one of these the individual was an adult male, possibly involved in trading and crafting; it is possible that his chest was a tool-chest. In the other grave the deceased was an unsexed adult, associated with travelling/horse-riding.

Regarding the actual keys, locks, and chest-parts, there was some variation in the types present (see table 6:11). The keys comprised both rotary keys

and an angular L-shaped lift-key. The rotary keys could have belonged to either mounted locks or padlocks, and the other would have belonged to a mounted lock. That none of the keys were accompanied by a chest in the grave could suggest that these keys were used as symbols, or that they belonged to some lock still in the world of the living. There is also the possibility that there may have been a chest that did not survive the cremation process and long-term deposition in the ground.

The only lock-part found, as already mentioned, came from a padlock. Like the keys, it does not appear to have been accompanied with a chest in the grave.

There was little left of the two chests to base any interpretation on regarding size or construction. It was also not possible to say what may have been stored inside the chests, but some of the tools, personal items, or dress accessories found in the graves may once have been kept inside. It is not unlikely that clothes or fabrics were also kept in the chests, but if so, they would have been destroyed on the cremation pyre.

Table 6:11. *The keys, locks, and chest-parts from the Helgö graves, with type and material listed.*

Grave	Object	Material
A26	Key-handle	Iron & bronze
A28	Chest-hinges	Iron
A48	Angular L-shaped lift-key	Iron
12	Rotary key	Iron
15	Chest-fitting	Iron
17	Rotery key	Bronze
25A	Padlock shackle	Bronze

The find categories in the Helgö graves with and without keys, locks, or chests – similarities and differences

In order to better visualise the contents of the seven graves described above, and to facilitate comparisons both within the group of graves with keys, locks, or chests, and between these and the other Helgö graves, the grave goods were sorted into find categories as previously

Helgö

described (see table 6:12). Any similarities or differences identified may give some clues into what type of individual was in possession of keys, locks, or chests at Helgö.

Table 6:12. *The seven graves with keys, locks, or chests from Helgö with the presence of finds from the various find categories marked with an x. The total number of graves with finds from each category (with the relative frequency in percent out of all seven graves in brackets) is listed in the column furthest to the right.*

Find category	A26	A28	A48	12	15	17	25A	Total No. of graves
Animal bone	x	x	x	x	x	x	x	7 (100%)
Ceramics	x	x	x	x	x	x	x	7 (100%)
Nails, mounts, etc.	x	x	x	x	x	x	x	7 (100%)
Beads	x			x	x	x	x	5 (71%)
Personal grooming	x	x			x	x	x	5 (71%)
Dress and personal equipment	x	x		x	x			4 (57%)
Key	x		x	x		x		4 (57%)
Flint		x			x	x		3 (43%)
Ice spikes and skates		x		x		x		3 (43%)
Materials		x	x			x		3 (43%)
Chest		x			x			2 (29%)
Cutting tools		x				x		2 (29%)
Jewellery	x			x				2 (29%)
Textile working tools		x		x				2 (29%)
Thor's hammers / amulets				x	x			2 (29%)
Trade			x		x			2 (29%)
Equestrian gear		x						1 (14%)
Fire making tools					x			1 (14%)
Lock							x	1 (14%)
Metal working		x						1 (14%)
Sharpening tools						x		1 (14%)
Slag						x		1 (14%)
Tools					x			1 (14%)
Weapons and armour			x					1 (14%)

In common amongst all seven of the key/lock/chest-graves was that *Animal bone*, *Ceramics*, and *Nails, mounts etc.* were present. These types of finds do not however provide much information about the buried individuals, although some of the accompanying animals were probably of large cost or importance. There were also some find categories absent in all the graves; *Foodstuff*, *Gaming boards and pieces*, *Utensils*, *Other objects and figures*, *Bag/purse*, *Staff*, *Fishing tools*, *Agricultural tools*, and *Writing tools*. Some of these relate to food and food procurement and, similar to the Birka graves, do not appear to have been regarded as suitable grave goods. Some of the animals/animal parts may however have been intended as food. Besides pottery, which was primarily used as burial vessel, there were also no items that may have been used for keeping, serving, or eating food, i.e. *Utensils*.

Frequent amongst the graves were *Personal grooming*, *Beads*, and *Dress and personal equipment*. Although it is very likely that some of these items were used as status or social identity markers, it is not possible to determine at this level of analysis.

There were even more categories that only occurred in one or two of the graves. Since these were rarer, they also had the potential to show more individual expressions in the graves. Amongst these were all the tool categories as well as *Trade*, and *Weapons and armour* which could be seen as indicating various crafting, trading, and hunting/combat.

Taken together the seven graves show variety when it comes to which objects were placed in the graves, and this suggests that this was not a very uniform group of individuals.

To see if the seven graves with keys, locks, or chests stood out in any way from the other graves on Helgö, table 6:13 displays the find categories and how many graves had items from each of these. Since the graves with keys, locks, and chests were so few, they are here grouped together and represent graves assigned to both the Vendel/Viking and the Viking periods. For the other Helgö graves without keys, locks, or chests, the same chronological grouping was made to make them comparable; together making up sixty-three graves.

It is of course problematic to compare a group of seven graves with a much larger group of sixty-three, as has already been pointed out, since this means that each grave in the smaller group gets a higher 'weight' than a grave in the larger group. Nevertheless, to make the two groups easier

to compare the numbers in the table below represent the percentage of each find category within each group, and for clarity, the absolute number of graves has also been included in brackets. Furthermore, as with the Birka graves, a greyscale with five classes has been applied, indicating how common each find category was in the two groups.

Mainly the find categories that are believed to help interpret the status, role, or identity of the individuals in the graves have been brought into the discussion in the following, although they are all listed in the table.

As can be seen in table 6:13, the five most common categories are the same in both groups, only with a difference in order and frequency. The same categories that were totally absent in the seven graves with keys, locks, or chests (*Foodstuff, Gaming boards and pieces, Utensils, Other objects and figures, Bag/purse, Staff, Fishing tools, Agricultural tools, and Writing tools*) were also missing in the other Vendel/Viking & Viking Age graves. The most noticeable difference between the two groups was *Animal bone* which was *Very common* amongst the key/lock/chest-graves but *Less common* amongst the other Helgö graves, with a percentage point difference of fifty-two. If *Animal bone* in the grave was regarded as a valuable item or perhaps offering, then this large difference could consequently point to the key/lock/chest-graves generally being equipped with costlier grave goods.

In general, there seems to have been more types of find categories present in the key/lock/chest-group. Perhaps this is partly a consequence of the smaller size of the group, but it also points to these graves being more richly equipped, and some of the categories differ more in favour of this group; for *Dress and personal equipment* and *Ice spikes and skates* the percentage point difference was thirty-five, for *Nails, mounts, etc.* it was thirty, for *Trade* it was twenty-four, and for *Tools* it was twenty-three. *Textile working tools* and *Cutting tools* were also a bit more common amongst the key/lock/chest-graves where they were *Less common* as opposed to *Uncommon* in the other Helgö graves, with a percentage point difference of eighteen and sixteen respectively.

Categories that may perhaps suggest some wealth, *Beads* and *Jewellery*, were also a bit more common amongst the key/lock/chest-graves; with *Beads* being *Common* in both groups, but with a percentage point difference of eleven in favour of the key/lock/chest-graves. For *Jewellery*, which was *Less common* amongst the key/lock/chest-graves and

Chapter Six

Table 6:13. *The percentage of find categories calculated for each of the two groups 'Vendel/Viking & Viking Age graves', and 'Graves with key, lock, or chest'. The absolute number is written within brackets, and the highest frequency for each category is highlighted in bold. The categories have been sorted based on the total number of graves in each category, starting with the highest number. Five classes, based on how common a category is, have been displayed using a greyscale as shown by the key at the bottom.*

Find category	Vendel/Viking & Viking Age (63)	Key/lock/chest-graves (7)
Ceramics	83% (52)	100% (7)
Nails, mounts, etc.	70% (44)	100% (7)
Beads	60% (38)	71% (5)
Personal grooming	57% (36)	71% (5)
Animal bone	48% (30)	100% (7)
Flint	30% (19)	43% (3)
Thor's hammers / amulets	32% (20)	29% (2)
Materials	27% (17)	43% (3)
Dress and personal equipment	22% (14)	57% (4)
Jewellery	17% (11)	29% (2)
Cutting tools	13% (8)	29% (2)
Sharpening tools	14% (9)	14% (1)
Textile working tools	11% (7)	29% (2)
Ice spikes and skates	8% (5)	43% (3)
Equestrian gear	10% (6)	14% (1)
Foodstuff	11% (7)	0
Tools	6% (4)	29% (2)
Trade	5% (3)	29% (2)
Slag	6% (4)	14% (1)
Key	0	57% (4)
Weapons and armour	5% (3)	14% (1)
Fire making tools	3% (2)	14% (1)
Metal working	3% (2)	14% (1)
Chest	0	29% (2)
Gaming boards and pieces	3% (2)	0
Lock	0	14% (1)

Very common (100-76%)	Common (75-51%)	Less common (50-26%)	Uncommon (25-11%)	Rare (10-0%)
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Uncommon amongst all other graves, the percentage point difference was twelve. The difference was not particularly large but nevertheless suggests that the individuals buried with keys, locks, or chests or their families may have been in possession of a bit more wealth than the average person buried at Helgö.

A find category where the difference between the two groups was rather small was *Weapons and armour*, which was *Rare* amongst the other Helgö graves and *Uncommon* amongst the key/lock/chest-graves, with a percentage point difference of nine in favour of the latter group. Even less difference can be noted regarding the categories *Equestrian gear*, *Sharpening tools*, and *Thor's hammers and amulets*.

Besides *Key*, *Lock*, and *Chest*, there were no find categories that were only present in the key/lock/chest graves, but there were two categories that were only present in the group with all other Vendel/Viking & Viking Age graves: *Foodstuff* and *Gaming boards and pieces*. These were however *Uncommon* and *Rare*.

Similar to the situation amongst the key/lock/chest-graves, some find categories were quite rare amongst the other Vendel/Viking & Viking Age graves as well; these included all the different tool categories that could indicate various kinds of crafting/handiwork, as well as items indicating trade, or hunting/combat. Again, this points to a more individual expression and variation amongst the graves. Besides these find categories being a bit more frequent in the key/lock/chest-graves, there was no real difference in this regard between the two groups.

Concluding remarks on the keys, locks, and chests in the Helgö graves

In conclusion, the above attempts to use the grave goods in order to get clues to which types of individuals were buried with keys, locks, or chests, has resulted in a varied picture. There was clearly no one specific identity or role associated with these, at least not from what can be read from this level of analysis. If the grave-goods actually represented the individuals in the graves and what they may have done in life, some of these people were once involved in various crafting, finer textile work, travelling/horse-riding, trading, or hunting/combat. What they did have

in common, however, was that they all seem to have been buried with rather costly grave goods, which indicates a higher social status and that they were wealthy individuals and/or members of wealthy families. This in turn suggests that they may also have had access to resources and perhaps also personal property, and for some this might have followed them into the grave inside a chest.

The comparisons using the find categories have showed that in general the graves with keys, locks, or chests did not differ much from the graves without these objects. Both groups showed similarities in which categories were absent and which categories were most frequent, and also in the variability in the less frequent find categories. The main difference was that the relative frequencies in the key/lock/chest graves were higher for most of the categories, including those with presumably more expensive items, suggesting that these graves were generally better equipped.

Examples for comparison

In this chapter, two additional settlement sites – Sanda and Vallhagar, and an island with a number of grave fields – Lovö, are presented. The purpose is to show a few contexts where keys, locks, and chest-parts were found, other than the proto-town and workshop areas represented by Birka and Helgö. There were several possible sites in the Lake Mälaren region, and of course elsewhere in Sweden and Scandinavia, that have produced finds of keys, locks, or chests, but it is not within the scope of this thesis to account for all of these. Instead, a few sites were selected to serve as examples. Two of the three comparison sites come from Birka's and Helgö's hinterland, but Vallhagar, a site on Gotland, was also included due to the rather unique find circumstances there (see figure 1:1).

Lovö, the first site included, is an island located immediately west of Stockholm in Lake Mälaren. It is only represented by a number of grave fields since few Iron Age settlement remains have been investigated there so far. These grave fields were chosen due to their geographical and chronological closeness to Birka and Helgö, and because of the extensive investigations which took place here as part of Stockholm University's *Lovö-project*.

The second site is Sanda, 20 km north of Stockholm; a farm site with a long continuity from at least the early Vendel Period up to the medieval period. It was this long continuity that merited this site to serve as an example, but also its farming economy and relative geographical

closeness. It is also the only site in the present thesis that was investigated through commercial archaeology.

The third site presented, Vallhagar, was chosen to show a Roman Iron Age – Migration Period farm site with unusually well-preserved building remains where many objects were left more or less *in situ*. This site partly coincides with some of the Helgö remains. Although Vallhagar is some distance away from the Lake Mälaren region, it represents a unique opportunity to study the location of keys, locks, and chests within buildings, and was too valuable as a source to leave out.

Lovö

Immediately west of Stockholm in Lake Mälaren is an island called *Lovön*, situated in Lovö parish in the county of Uppland. Like Björkö and Helgö, it is part of the Färentuna hundred (Lamm 1972: 3). The island is today roughly 6 x 4 km in size and contains the remains of approximately thirty prehistoric grave fields, most of them from the late Iron Age. There are also some late Bronze Age graves and settlement sites, as well as a few smaller Neolithic settlements (see figure 7:1) (Petré 1984a: 114).

It has been suggested that the island has had more or less permanent settlements since the Neolithic, and that the farms and villages of today have essentially the same locations as in the Iron Age (Petré 2011: 7). Very few remains of Iron Age settlements have so far been uncovered, but if the same locations are used today, then it is possible that Iron Age remains could be found underneath, or that they have been destroyed.

Some of the prehistoric remains on the island were investigated by researchers and students from Stockholm University within the *Lovö-project* that began in 1958 and ended in 2007 (Petré 2011: 7). The investigations, initially led by archaeologist Jan Peder Lamm, started in the north-east part of the island on a grave field in the area called *Viken* (Lovö 57:1) (see figure 7:1). Here two of the graves contained chest-parts (Petré 1978), which will be further described below. Between 1967 and 1969 investigations were carried out on a grave field in the area near *Hemmet* (Lovö 56:1) where ten of the forty graves were excavated (Petré

2011: 7). Since none of these contained keys, locks, or chest-parts they are not included in the present study.

From the beginning of the 1970s it was mainly the south-west part of Lovö in the areas near *Lunda*, *Berga* and *Söderby* that were investigated (Petré 2011: 7), now led by archaeologist Bo Petré. Here, six late Iron Age grave fields were more or less fully excavated, and a small test excavation was carried out on one. Four of the grave fields, Lovö 16:1, 27:1, 28:1, and 34:1 (see figure 7:1), had graves containing some keys, locks, and chest-parts (Petré 1984a; 1999a; 2011). While these are further described in the following sections, the three grave fields without any such objects, Lovö 11:1, 13:1 and 87:1 (Petré 1999b; 2000), were not included. The keys, locks, and chests are listed in Appendix 14 and 15.

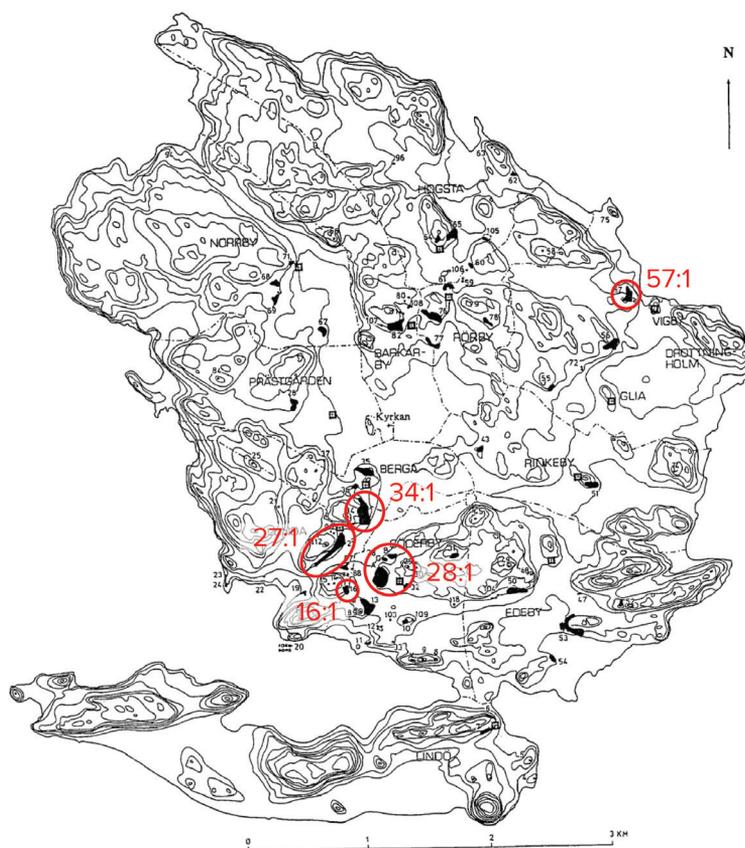


Figure 7:1. Map of Lovö, with the ancient remains following the register of Riksantikvarieämbetet marked in black. Map by Bo Petré (1984b: Figure 1), used with permission. The grave fields containing keys, locks, or chests are circled in red.

Below, the five grave fields and the graves containing keys, locks, or chest-parts are described in some detail. Similar to the Birka and Helgö graves, not every find in the graves has been individually listed; these can be found in the respective excavation reports. The focus here is instead on presenting an image of the individual as deduced from the finds, including status and identity, in order to help answer the questions of what type of individuals can be connected with keys, locks, and chests.

The biological sex, when this has been osteologically determined, was also included, however archaeological sex is not. This was to avoid presumptions and circular arguments since keys are sometimes used as indicators of female sex/gender. Bo Petré, who authored the majority of the Lovö reports, counted the key as a female object (Petré 1984a: 54; 1993: 151; 2010: 381).

Grave field Lovö 57:1

Grave field Lovö 57:1 (see figure 7:2) was investigated by students and teachers from Stockholm University between 1958 and 1966. It is located by Lovön's northern shore in a rather hilly area, so most of the graves were built on small terraces between the rocky outcrops (Lamm 1972: 3, 8). Apart from the areas in between the visible graves, the whole grave field, with thirty-five graves from the Migration Period and Vendel Period, was excavated (Lamm 1972: 3, 8-9; Petré 1984c: 171, 173). Three of the graves (all from the Migration Period) were chamber graves, one was an inhumation grave, and the rest were cremation graves (Lamm 1972: 100, 116). Based on the chamber graves and a relatively large amount of bone from several different animal species in the graves, the population using the grave field has been interpreted as partly belonging to a somewhat higher social stratum than average in the Lake Mälaren region (Petré 1984c: 171).

No keys or locks were found in any of the graves, but two contained the remains of chests: graves number 2 and 3. These constitute c. 6% of the excavated graves on Lovö 57:1, suggesting that this was not a common grave good.

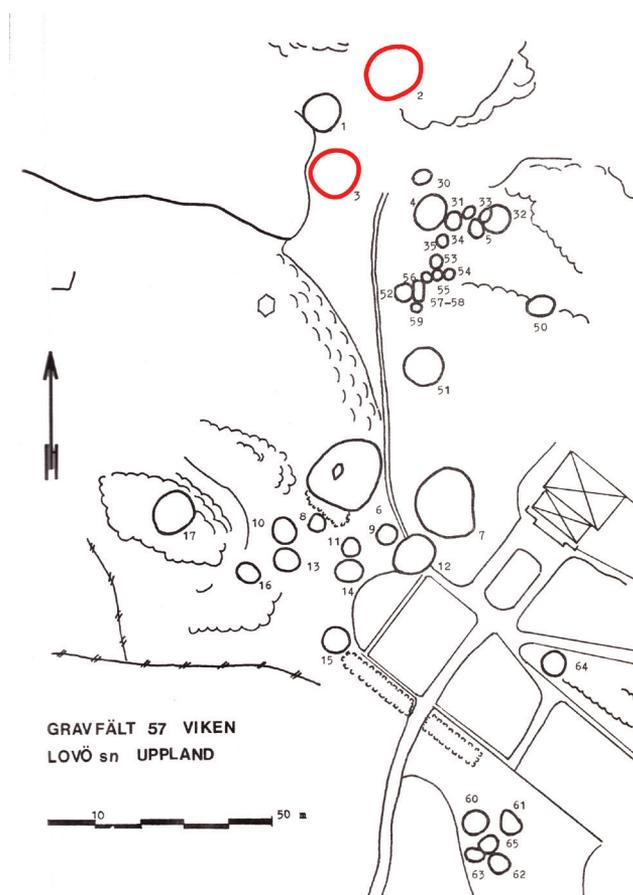


Figure 7:2. Schematic plan over grave field Lovö 57:1. From Lamm (1972: Map 3), used with permission of Stockholm University. The graves containing chest-parts have been marked out in red.

Grave 2 was a round stone setting, c. 6 m in diameter and 0.9 m in height. Underneath the stones there was a cremation layer containing some grave goods with a pit in the centre that contained burnt bone (Lamm 1972: 25). The grave showed signs of having been looted, but still contained several objects including two chest-handles with curled up ends (Lamm 1972: 25-26, 29). These were comparable to chest-handles from some of the Birka graves (e.g., Bj 24A, Bj 212, Bj 367, Bj 739 and Bj 791) where there was one such handle on the lid of the chest. This suggests that there were actually two chests in this grave. Amongst the finds were objects that indicated elaborate dress and activities such as drinking/banqueting and game playing (Lamm 1972: 25-29), suggesting a wealthy individual of high social status, and/or a person belonging to

an affluent/high status family. The bones were analysed by an osteologist and were interpreted as those of an adult male of below the average age of death (set at 40-60 years of age), meaning he was below the age of 40 (Lamm 1972: 104, 117). The grave was dated to the Migration Period, or Birger Nerman's period VI:2 (c. 475-550) (Lamm 1972: 116).

Grave 3 was a round stone setting, c. 10.5 m in diameter and 0.65 m in height, with an inner wooden construction or chamber. It was also dated to the Migration Period / period VI:2 (Lamm 1972: 116).

The grave was disturbed by a ditch and was looted at least once. Most of the remaining grave goods were probably shifted from their original positions. Several objects were also found outside the chamber, most likely as a result of the break-in (Lamm 1972: 30-31).

The grave contained an inhumation burial, and the osteological analysis of the skeleton suggested that the deceased was an older man (Lamm 1972: 137).

Based on the grave goods (Lamm 1972: 30-35), and similar to the man in grave 2, this individual was buried with items indicating a lavish dress and activities such as drinking/banqueting and game playing. However, he was also accompanied by a range of weapons, suggesting he may have had a role as a warrior, or some association with warfare. There was also an iron chest-handle with curled up ends inside the grave, as well as several mounts and rivets that may have belonged to the chest.

Grave field Lovö 16:1

Grave field Lovö 16:1 was excavated between 1978 and 1987, as part of the Lovö-project. It is situated on the eastern slope of a hill with moraine and is roughly 60 x 80 m in size. It contained twenty-eight registered graves dating from approximately 550 to 850 (see figure 7:3). The majority of the other graves were from the Vendel Period, with only two Viking Age graves (Petré 1999a: 114). The burials were all cremations, the majority under stone settings and only two under a mound (Petré 1999a: 10, 15, 162). The grave goods uncovered were similar to the other contemporary grave fields on Lovö, but were suggested to be somewhat less rich, with very few bronze objects found (Petré 1984b: 101). None

Examples for comparison

of the graves contained identified remains of either locks or chests, but two of the Vendel Period graves contained a key: A7 and A38. These two graves constituted c. 8% of the excavated Vendel Period graves, suggesting this was not a common item amongst the grave goods.

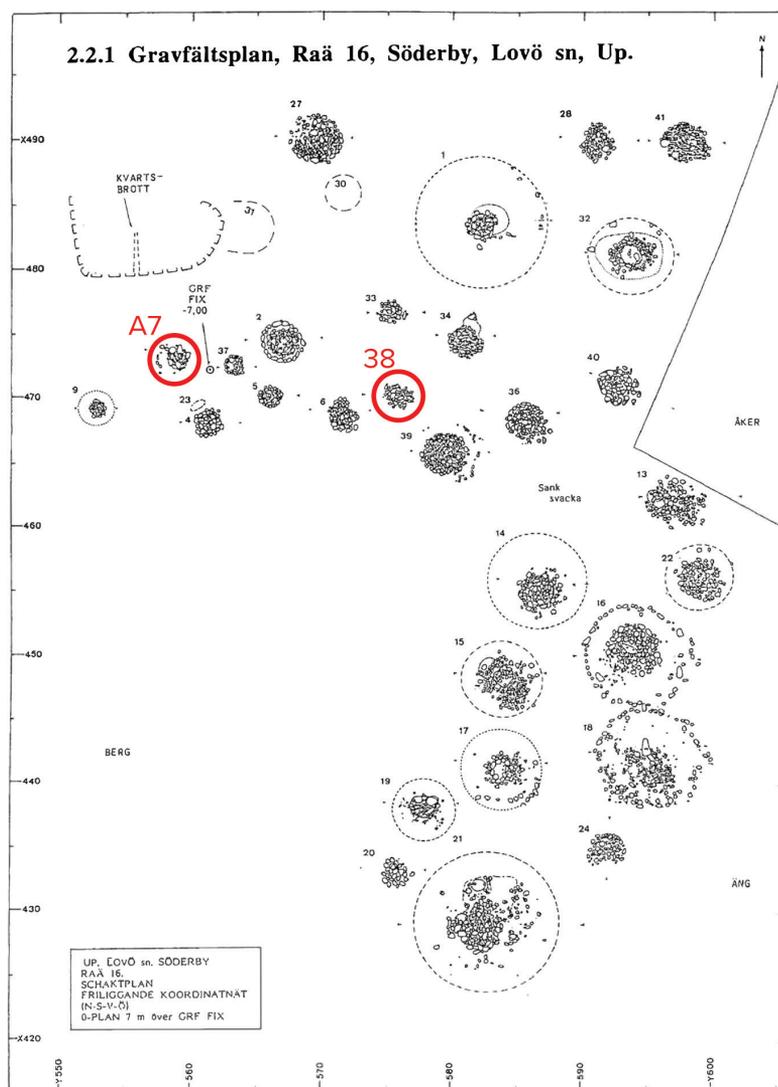


Figure 7.3. Plan over grave field Löövö 16:1, from Petré (1999: Figure 5), used with permission. The graves containing keys have been marked out in red.

Grave A7 was a round stone setting with a ‘grave globe’ in the centre, and with a cremation layer with scattered cremated bones. The key was found in the cremation layer, attached to a small iron ring that also held a broken iron needle/pin – possibly an awl, and a spatula-shaped object referred to as an ‘ear scoop’ (see figure 7:4) (Petré 1999a: 22, 55), although the shape and size does not fit this type of object. In this study the implement is listed as an unspecified tool. The key was made of iron and was a form of latch-lifter or simple angular L-shaped lift-key without teeth.

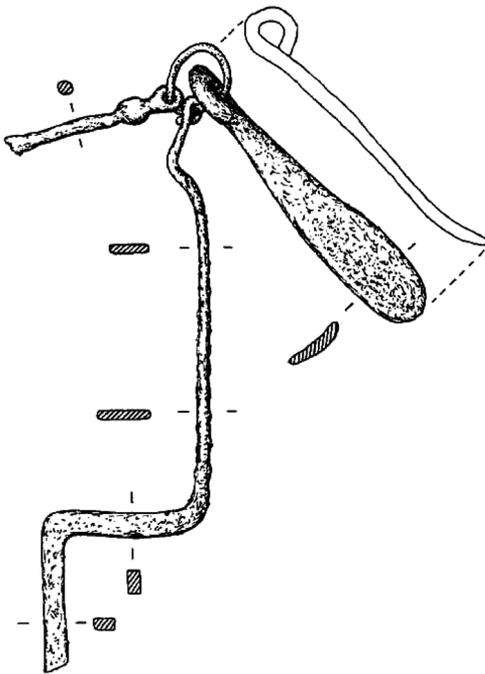


Figure 7:4. *The key from grave A7, along with the possible awl and the unspecified tool. Drawing by Bo Petré (1999: 55), used with permission.*

The other finds in the grave included a rather large amount of glass beads (thirty-one), suggesting some wealth, and a knife – a multi-tool that may have been used in various tasks and also as a (defensive) weapon.

Based on the grave goods this grave dated to the Vendel Period, around 550-600. The bones, which were analysed by an osteologist, seem to come from an individual between 20 and 30 years of age. The sex could not be determined for certain, but the bones had some more feminine traits (Petré 1999a: 101, 114). Based on the above, this

individual seems to have been a fairly well-off adult, perhaps involved in some type of handicraft, as suggested by the tools.

Grave 38 was an oval stone setting with a cremation layer with scattered burnt bone. Amongst the finds was an iron object that appears to be a padlock key with two 'teeth' (see figure 7:5).

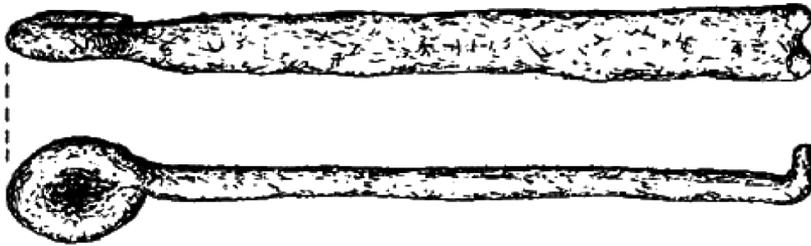


Figure 7:5. *The key from Grave 38. Drawing by Bo Petré (1999: 90), used with permission.*

The finds also included an item referred to as a dress pin (Petré 1999a: 41, 79-80), although this iron pin had a suspension hole at the top and was very similar to the possible awl in A7. It was also similar to items from Birka listed as awls (Arbman 1940: Taf. 170-172). In this study the pin/awl will consequently be counted amongst *Tools*. It may have been used in for instance leather-working or other handicrafts. There was no indication that the key and pin/awl were attached together on a ring as in A7, but since they both had suspension holes this is not impossible. Similar to grave A7, there was also a rather large amount of glass beads (twenty-seven) amongst the finds in A38, indicating some wealth.

Based on the grave goods the grave was dated to the Vendel Period, c. 550-650, so it was more or less contemporary with A7. The bones were analysed by an osteologist, but it could only be established that the deceased was an adult with some of the bones described as robust (Petré 1999a: 104).

The individual in this grave appears to have been a rather well-off adult, which may have been involved in some handicraft.

Grave field Lovö 27:1

The grave field Lovö 27:1 (see figure 7:6), measuring approximately 360 x 20-50 m, was fully excavated between 1971 and 1978. It is located along the south-east slope of a hill with moraine and consists of 155 graves spanning in time from c. 400 to 1050, with the earliest graves in the northern part and the latest graves towards the south-west. The Viking Age graves, only eighteen in number, were spread throughout the northern part of the grave field (Petré 1984a: 11, 15, 114). There were only seven mounds, the rest were round stone settings, and all but three graves were cremations. These three were late Viking Age inhumation graves, possibly with a Christian influence (Petré 1984a: 25, 114).

None of the graves contained any keys, but two graves, A16 and A34, contained what might be parts of lock-mounts, presumably from a chest. Both graves were dated to c. 500-550: the late Migration Period or beginning of the Vendel Period. They constitute c. 7% of all (twenty-eight) excavated graves within this range. If including all the Migration Period and Vendel Period graves (137) the two chest-graves only represent c. 1.5%. In both cases, they were not common as grave goods.

Grave A16 was a round stone setting, c. 2 m in diameter and 0.15 m in height, with a 'centre stone'. Below the stones was a cremation layer containing burnt bone and some grave goods, including two iron mounts interpreted as possibly being part of a lock-mount (see figure 7:7) (Petré 1984a: 51, 53, 124). This lock-mount suggests that a chest with a lock was part of the grave goods.

The bones were analysed by an osteologist and were interpreted as those of a child, 5-10 years of age, sex unknown (Petré 1984a: 93). Based on the grave goods and the grave construction, the date of the grave was set to somewhere around 500-550 (Petré 1984c: 138), the late Migration Period or early Vendel Period.

The grave also included a bronze equal-armed brooch and one glass bead, which together with the chest suggest that this child came from a rather prosperous family.

Examples for comparison

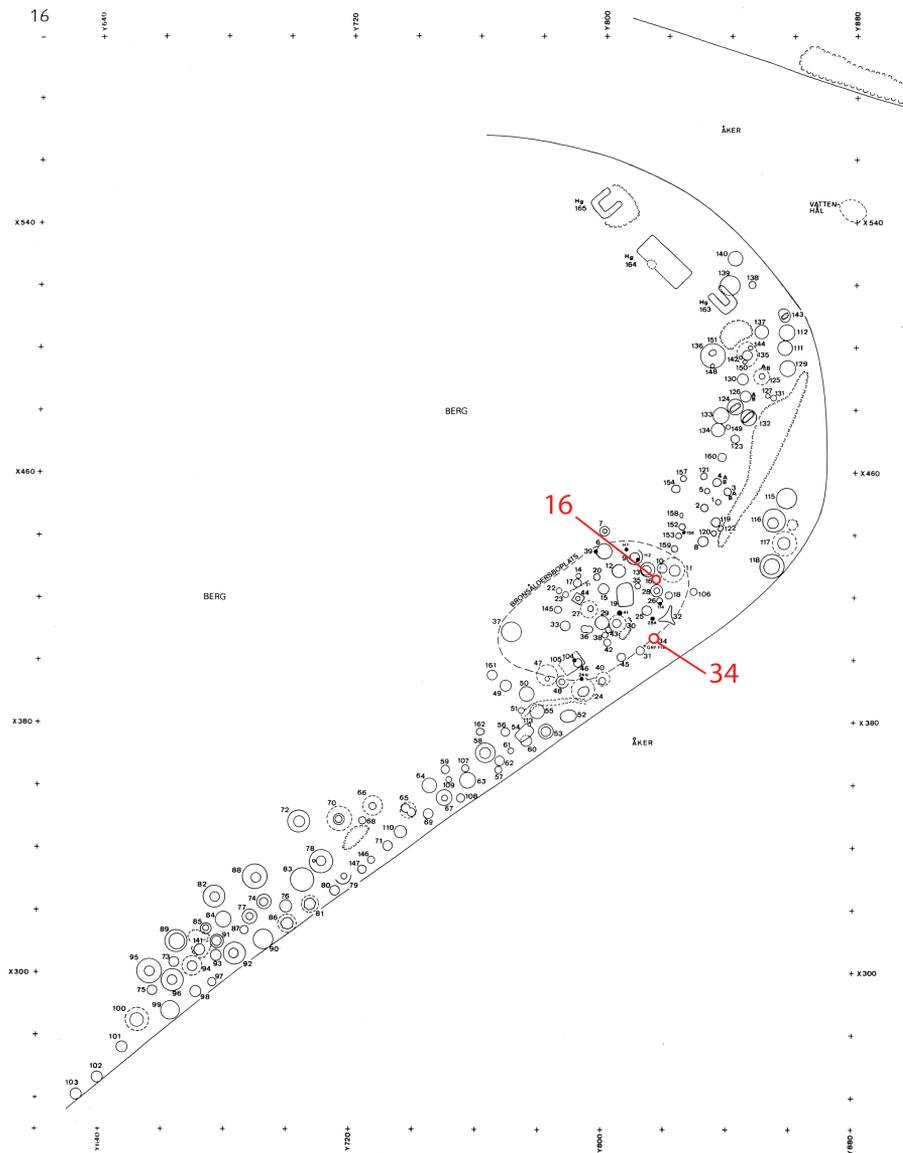


Figure 7:6. Schematic plan over grave field Lövö 27:1, from Petré (1984a: figure 7), used with permission. The graves containing lock-parts have been marked out in red.

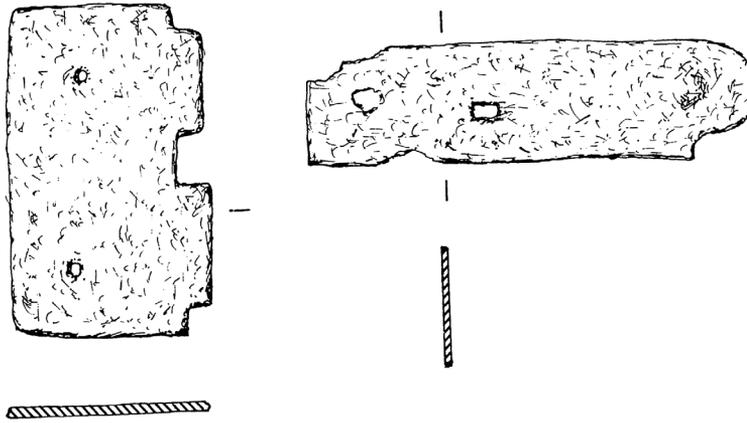


Figure 7.7. The iron mounts from grave A16, possibly part of a lock-mount. Drawing by Bo Petré (1984a: 267), used with permission.

Grave A34 was a rounded stone setting, c. 2.3 m in diameter and 0.25 m in height, with a raised stone. Underneath the stones there was a cremation layer with burnt bone and some grave goods, including a possible bronze lock-mount with iron rivets and a staple (see figure 7:8). If this interpretation is correct, it suggests the presence of a chest. At the north-west edge of the cremation layer there was a stone-lined pit containing burnt bone and comb fragments (Petré 1984a: 51, 128).

The bones were analysed by an osteologist and interpreted as those of a possibly male (M?) adult, between 35 and 64 years of age (Petré 1984a: 88, 95). Like the previously described grave, A34 was dated to c. 500-550 (Petré 1984c: 138).

Besides the presumed chest to which the bronze lock-mount was attached, there were no other costly grave goods in this grave, and no other items that could help in interpreting the status or identity of this possibly male individual.

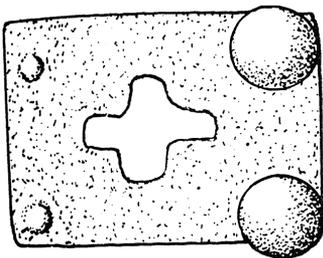


Figure 7.8. The possible lock-mount from grave A34. Drawing by Bo Petré (1984a: 281), used with permission.

Grave field Lovö 28:1

The grave field Lovö 28:1 was roughly 280 x 70 m and located in an area with moraine slightly sloping towards west. It was excavated by students and teachers between 1999 and 2007, and in total sixty-four graves were investigated out of an estimated eighty graves (see figure 7:9) (Petré 2011: 17-18). The graves consisted mainly of round stone settings, but there were also around ten mounds, as well as one triangular stone setting with concave sides (Petré 2011: 10-11). Thirty-two graves were dated to the Vendel Period and thirty to the Viking Age. There was also a grave from the Bronze Age. Six of the Viking Age graves were inhumation graves, but all others were cremations (Petré 2011: 18). Most of the graves displayed a variation in size and the amounts of grave goods that was more or less equivalent to the other investigated grave fields on south-western Lovö, however 28:1 had some of the largest mounds, including A44 which contained a possible key (Petré 2011: 74, 352).

Five of the graves from Lovö 28:1 contained objects interpreted as keys, or parts of locks or chests; A37, 44, 75, 76 and 77.⁶⁸ Except for grave A77 which was dated to either the Vendel Period or the Viking Age, they were all interpreted as Viking Age graves (Petré 2011: 314).

If counted together, these represent 16% of all the Viking Age graves on Lovö 28:1, or if viewed separately, the 'key-graves' and the 'lock-graves' each represent 3%, and the 'chest-graves' represent 13%. This grave field was not fully excavated however, so these numbers do not give a complete picture.

68. In grave A39 there were twenty-two rivets and three bent nails around the burial vessel. These were interpreted as possibly having belonged to a chest in which the vessel was placed (Petré 2011: 65-66). However, since no chest-mounts were present, and they might just as well have been part of e.g., a wooden grave construction, the grave was not counted amongst the key/lock/chest graves in the present study. However, if there indeed was a chest, it points to a different area of use, as a container for a burial vessel.

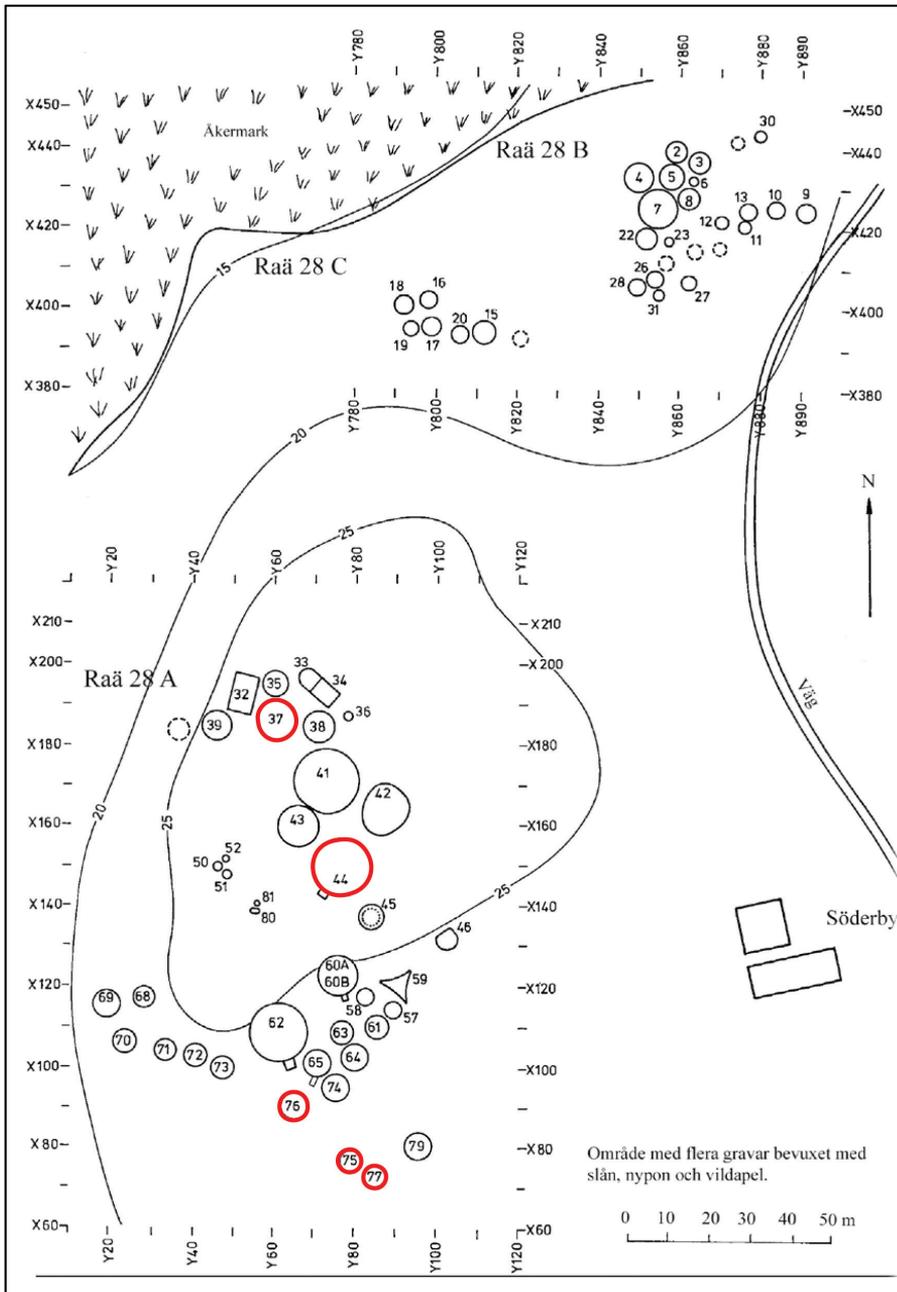


Figure 7:9. Schematic plan over grave field Lövö 28:1, from Petré (2011: Figure 4), used with permission. The graves containing key-, lock- and chest-parts have been marked out in red.

Grave A37 was a rounded cairn-like stone setting, c. 9.5-10.5 m in diameter and 0.8 m in height, with a cremation layer underneath the stones. Based on the grave goods it was dated to the Viking Age, but the grave type was reminiscent of graves from the early Iron Age or late Bronze Age. It also contained three bronze objects: a pin, a neck ring, and three bracelets, all from the Bronze Age, period VI. These were found underneath the stones, but not in the cremation layer (Petré 2011: 59-61). It was not possible to establish if these items were placed in the grave before or after the Viking Age burial (Petré 2011: 61), and therefore whether the grave was a re-used Bronze Age grave. Because of this uncertainty the bronze items were not included amongst the Viking Age grave goods in the present study.

The cremation layer contained burnt bone, and there were remains of a ceramic vessel and burnt bone in the middle. Near this vessel there were fragments of iron mounts and some fragments of charred wood that were interpreted as the remains of a small chest (see figure 7:10) (Petré 2011: 59-60).

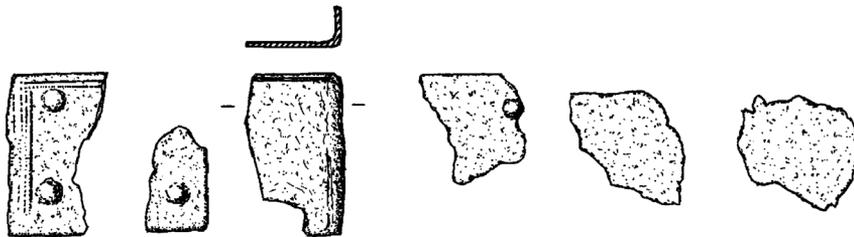


Figure 7:10. *The chest-mounts from grave A37. Drawing by Bo Petré (2011: 173), used with permission.*

Ten bear phalanges in the cremation layer (Petré 2011: 61) suggest the corpse may have been wrapped in or placed on a bear skin. The grave goods also included a rather unique find: a miniature bronze vane. Otherwise, the finds suggest that the individual in the grave may have been involved in trade, and a fragment from a possible scramasax suggests the individual was armed. Equestrian gear and horse bones indicate that the individual was accompanied by a horse, and there was also bone from three dogs, as well as cat, bird, pig, and cattle bones (Petré 2011: 59-60, 276). Together, the finds suggest that the deceased

had been a person of high social status. The grave was amongst a group of six graves from Lovö 28:1 that were interpreted in the report as ‘Aristocratic Viking Age graves’ (Petré 2011: 352-353). The osteological analysis could not determine the sex, but it appears to have been an adult individual between 25 and 55 years of age (Petré 2011: 276).

Grave A44 was a mound, c. 16 x 15 m in diameter and c. 1 m high, with an almost square stone construction on the south-west side, interpreted as a ‘south-west gate’. Due to modern disturbances, only the southern half and the central stone packing were excavated (Petré 2011: 72). Underneath the turf and filling material there was a stone packing with a ‘grave globe’ in the centre. There was also a ceramic burial vessel with cremated bone and a few finds underneath a stone used as a lid (Petré 2011: 68, 72-73). Underneath the stone packing in the western part of the grave there was a cremation layer containing burnt bone and some grave goods. Amongst these were two possible key fragments; a hollow iron rod, 13 mm long and 5 mm in diameter, and a flat, somewhat curved fragment which was possibly part of the handle (see figure 7:11) (Petré 2011: 74, 202). They are said to probably be from a key similar to the rotary key found in Birka grave Bj 825 (see Arbman 1943: Figure 247). Interestingly, there were also one or possibly two silver pendants in the shape of a horse rider in A44 that were very similar to two silver pendants found in Bj 825. Both graves also contained a shield-shaped silver pendant (Petré 2011: 72, 74, 298). Perhaps this hints at a family connection or a similar social role or identity.

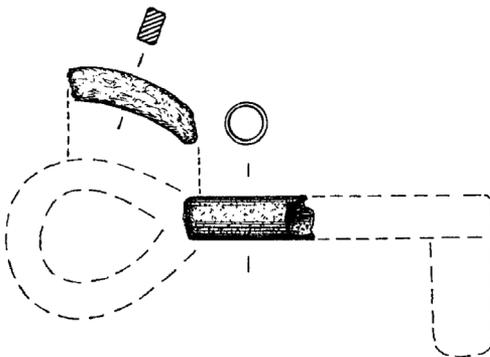


Figure 7:11. *The possible key fragments from grave A44. Drawing by Bo Petré (2011: 202), used with permission.*

The bones from this grave were not osteologically analysed, but it is possible that A44 contained two individuals since the grave contained two Thor's hammer rings and possibly two combs (Petré 2011: 74, 283, 313, 348). Several pieces of silver and bronze jewellery and accessories, as well as a large number of beads in the grave (sixty-eight), point to a wealthy individual, and/or a prosperous family. The grave, like A37, is said to belong to a group of six graves interpreted as 'Aristocratic Viking Age graves' (Petré 2011: 352-353). The other finds do not give any further clues regarding the individual(s) in the grave, but a knife suggests a multi-tool; possible used in handicrafts and/or for personal protection, and an ice spike suggests winter travelling or a winter burial. The similarities with grave Bj 825 further indicate a possible connection with Birka.

Grave A75 was a round stone setting, c. 2.5 m in diameter and 0.4 m high. Underneath the stones there was a cremation layer with a large amount of burnt bone; it was amongst the ten graves with the largest amount of bone on Lovö 28:1 (Petré 2011: 103-104, 353-354).

Amongst the finds in the cremation layer were fragments of an iron lock-plate with a ring/loop, indicating the presence of a chest with lock (see figure 7:12). The lock plate was said to be similar to those in Birka graves Bj 838 and Bj 1081 (Petré 2011: 103-104).

Based on the grave goods this grave dated to between 720 and 800 (Petré 2011: 339), suggesting the early Viking Age. The bones were not osteologically analysed so the age or sex of the deceased is not known (Petré 2011: 280), however the large amount of animal bone points to an individual of high social status, and a possible shield rivet suggests that this grave might have been a 'weapon grave' (Petré 2011: 353-354).

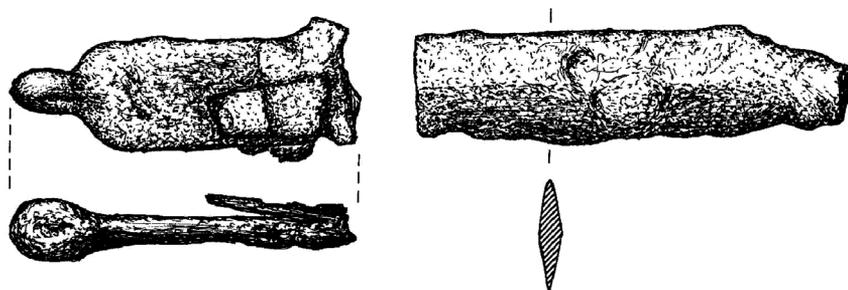


Figure 7:12. *The possible chest/lock fragments from grave A75. Drawing by Bo Petré (2011: 260), used with permission.*

Grave A76 was an irregular, rounded stone setting, c. 5 m in diameter and 0.3 m high, with a 'grave globe'. It was damaged by modern activities. Underneath the stones there was a cremation layer with burnt bone and grave goods (Petré 2011: 104-105). Amongst these was an iron mount with two rivets and a hook that was interpreted as part of a chest/lock-construction (Petré 2011: 104-105, 319), indicating the presence of a chest with lock. There was also an iron hinge-mount and several nails and rivets (Petré 2011: 104-105, 262) that might be part of a chest, although the hinge-mount could also be part of a clasp (Petré 2011: 262). The grave also contained a very large number of beads (156) and some bronze items (Petré 2011: 105), indicating a wealthy individual and/or family.

Based on the grave goods this grave was interpreted as belonging to the early Viking Age, probably no later than c. 850 (Petré 2011: 300, 314). It was also counted amongst a group of graves referred to as 'Rich graves from the 8th century' (Petré 2011: 353). The bones were not osteologically analysed, so the age or sex of the deceased is not known (Petré 2011: 281). The presence of two combs might however indicate two individuals (Petré 2011: 105).

A76, like A75, was counted amongst the ten graves with the largest amount of bone, and a preliminary study suggested that, besides human bone, the grave included dog, sheep, and bird bones (Petré 2011: 281-282, 353-354).

The individual(s) in grave A76 would therefore appear to have been rather wealthy or of high social status, but the grave goods provide no further clues regarding social identity or role in society.

Grave A77 was a round stone setting, c. 5 m in diameter and 0.35 m high. Underneath the stones there was a cremation layer with a very large amount of burnt bone (over 6 kg), and the grave was also part of the group of ten graves containing the most bone (Petré 2011: 106, 353-354). A more precise date for the grave was not provided and it was only referred to as Vendel/Viking in date (Petré 2011: 314).

There was a fragmentary pottery vessel containing burnt bone centrally in the cremation layer (Petré 2011: 106-107). It contained some iron mount-fragments that were interpreted as possible chest-mounts (Petré 2011: 319), and there were also three bent nails and c. fifteen rivets (Petré 2011: 107, 265) that might support this interpretation.

The bones were not analysed so the age and sex of the deceased are not known (Petré 2011: 281), nor are the species of animals that presumably accompanied the deceased in the grave. Nevertheless, the very large amount of bone in this grave suggests a high-status individual (Petré 2011: 353-354). Two horse ice spikes and one for shoes (Petré 2011: 265) suggest both the possible presence of a horse in the grave, and also winter travelling. Otherwise, the grave goods do not give any further clues about the identity or role of the individual in the grave.

Grave field Lovö 34:1

Grave field Lovö 34:1, roughly 230 x 100 m in size, was investigated between 1989 and 2003 by students and teachers from Stockholm University (Petré 2010: 9). It is situated on the eastern side of a hill with moraine (Petré 2010: 9).

In total 116 graves were excavated, from which seventy-four were dated to the Viking Age. These consisted of mounds and round stone settings, two triangular stone settings with concave sides, and a number of rectangular stone settings. Thirty-seven of these were cremation graves and thirty-seven were inhumation graves. There were also thirty-seven graves from the early Iron Age and late Bronze Age (Petré 2010: 9). Except for one grave with an oak tree growing on top of it, the grave field was fully excavated (Petré 2010: 9).

Amongst the graves from Lovö 34:1, one contained a key (A36), and one grave contained a chest (A54) (see figure 7:13). These make up 3% of all the investigated Viking Age graves. No locks were uncovered or identified.

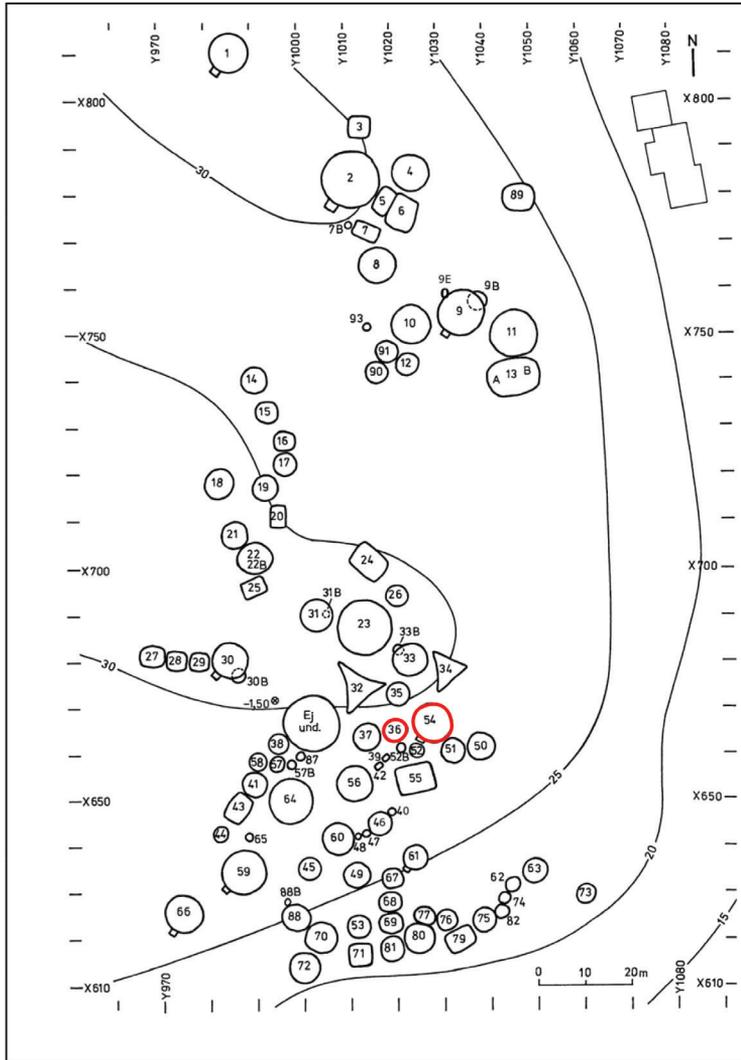


Figure 7:13. Schematic plan over grave field Lövö 34:1, from Petré (2010: figure 5), used with permission. The graves containing the key and the chest have been marked out in red.

Grave A36 was a round stone setting, c. 5 m in diameter and 0.3 m in height, with a ‘grave globe’. Underneath the stones there was a cremation layer with a ceramic vessel containing burnt bone. The cremation layer also contained burnt bones, charcoal, and some grave goods including an iron angular L-shaped lift-key with two teeth (see figure 7:14) (Petré 2010: 90-91, 232).

An uncalibrated ^{14}C date of 960 \pm 60 CE was produced from charcoal in the cremation layer (Petré 2010: 32), and this together with the grave goods suggests a Viking Age date. The bones of the deceased were analysed by an osteologist and interpreted as a possibly female (F?) adult. No animal bones were identified (Petré 1984a: 320, 338).

A needle-case found in the cremation layer (Petré 2010: 91) suggests that this possibly female individual may have been involved in finer textile work such as embroidery or sewing. Some bronze jewellery, one piece possibly gilded, suggests some wealth.

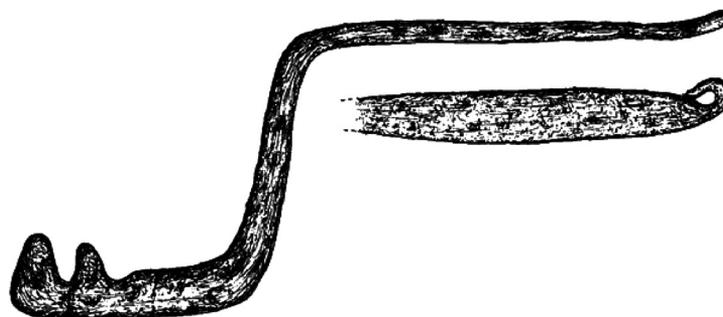


Figure 7:14. *The angular L-shaped lift-key from grave A36. Drawing by Bo Petré (2010: 232), used with permission.*

Grave A54 was a round stone setting, c. 8 m in diameter and 0.5 m in height, with a c. 1 m x 1m 'south-west gate'. It was situated east of A36. Underneath the stones there was a cremation layer and a ceramic burial vessel, both containing burnt bone. Amongst the grave goods in the cremation layer there were six bent nails interpreted as chest nails (Petré 2010: 15, 103-104, 261).

Together with the grave goods and an uncalibrated ^{14}C date of 935 \pm 45 CE from charcoal in the cremation layer (Petré 2010: 32), the grave was dated to the Viking Age. The bones, analysed by an osteologist, suggest that the deceased was possibly a female adult (F?) and was accompanied by a dog and a bird (Petré 1984a: 321). The grave goods were not particularly rich but did contain some bronze items and a melted silver object (Petré 2010: 103-104), indicating a bit of wealth. Two ice spikes found (Petré 2010: 104) suggest winter travelling or a winter burial, but otherwise there were no clues as to a role or social identity.

The Lovö-graves with keys, locks, or chests

Taken together, and as presented in table 7:1 below, all of the Lovö-graves with keys, locks, or chests were cremation graves except for the inhumation burial in Grave 3 on Lovö 57:1, and all but mound A44 on Lovö 28:1 were stone settings.

Four of the graves were dated to the late Migration Period and were located on grave fields 57:1 and 27:1, and two graves from grave field 16:1 were dated to the beginning of the Vendel Period. Six of the graves were dated to the Viking Age and one to either the Vendel Period or the Viking Age. These were located on grave fields 28:1 and 34:1.

Table 7:1. *The Lovö graves containing keys, locks, or chests. The table shows information on grave field, inner grave type, osteologically interpreted age and sex (M=Male, M?=possibly male, F=Female, F?= possibly female), date, and which of the three objects the grave contained.*

Grave field	Grave No.	Inner grave type	Age and ost. sex	Date	Object
Lovö 57:1	Grave 2	Cremation	Adult, M	475-550	Chest
Lovö 57:1	Grave 3	Inhumation	Adult, M	475-550	Chest
Lovö 27:1	A16	Cremation	Child	500-550	Chest with lock
Lovö 27:1	A34	Cremation	Adult, M?	500-550	Chest with lock
Lovö 16:1	A7	Cremation	Adult, F?	550-600?	Key
Lovö 16:1	A38	Cremation	Adult	550-650	Key
Lovö 28:1	A77	Cremation	Not analysed	Vendel/Viking	Chest
Lovö 28:1	A37	Cremation	Adult	Viking Age	Chest
Lovö 28:1	A44	Cremation	Not analysed	Viking Age	Key
Lovö 28:1	A75	Cremation	Not analysed	Viking Age	Chest with lock
Lovö 28:1	A76	Cremation	Not analysed	Viking Age	Chest
Lovö 34:1	A36	Cremation	Adult, F?	Viking Age	Key
Lovö 34:1	A54	Cremation	Adult, F?	Viking Age	Chest

Examples for comparison

There were no keys present in the four late Migration Period graves, but they all contained a chest, two of which had the remains of a lock, or rather; only the lock parts remained and suggest the presence of a chest. Based on osteology, two of the buried individuals were male adults, one was a possible male (M?) adult, and one was a child of unknown sex.

The two early Vendel Period graves both contained a key, but no chests or locks were identified. One of the individuals was interpreted through osteology as a possible female (F?) adult, and the other individual only as an adult.

The Vendel/Viking Age grave contained a chest without the remains of a lock. The bones were not analysed so the sex or age of the deceased is not known.

Amongst the six Viking Age graves there were four that contained a chest, and two of these had the remains of a lock. The bones in two of the graves were analysed and one of the individuals was determined to possibly be a female (F?) adult, while the other could only be recognised as an adult. The other two graves contained a key: the bones of one of the graves was analysed and interpreted as a possible female (F?) adult.

There were in total nine graves with a chest; four of which had a lock, and four graves with keys. Out of the individuals in the graves with chests; two were male adults, one was a possible male (M?) adult, one was an unsexed adult, and one was a child. Two of the four chests with a lock belonged to the burials of the child and the possible male adult. The other two were not analysed. Out of the four keys found, two were from graves with a possible female (F?) adult, and one was from the grave of an unsexed adult.

It can generally be said that the graves with keys, locks, or chests were rather rare, but their frequency varied across the grave fields. The grave field with the most key/lock/chest-graves was Lovö 28:1, although it was not fully excavated. Here the graves represent 16% of all the contemporary graves, whilst on the other grave fields they represent 1,5 %, 3%, 6%, and 8% respectively.

If instead dividing the graves into two groups based on chronological period; Migration/Vendel Period and Viking Age, the key/lock/chest graves in the first group constitute 3%, and the key/lock/chest graves in the second group make up 6% (see table 7:2).

Table 7:2. *The excavated Lovö graves divided into two groups based on chronological period: Migration/Vendel and Viking Age. The table shows the number of excavated graves from each group, and the number of graves that contained a key, a lock, a chest, and key/lock/chest-graves taken together. The percentage of the total number of graves in each period is presented within brackets.*

Period	No. of exc. graves	Key-graves	Lock-graves	Chest-graves	Key/lock/chest-graves
Migration/Vendel	221	2 (1%)	2 (1%)	4 (2%)	6 (3%)
Viking Age	124	2 (2%)	1 (1%)	5 (4%)	7 (6%)

This further strengthens the concept that these objects were not common grave goods, and that the individuals buried in these graves may have had a special status, role, or identity. As described above, these graves were all rather richly furnished. Some of them were even amongst the very richest. In two of the graves there were items indicating drinking/banqueting and game playing. Otherwise, based on the grave goods, a few of these individuals may have been involved in various handicrafts, in one case embroidery or sewing, and one or possibly two of the graves seem to have had some connection with weapons or warfare. One of the individuals appears to have been involved in trade, and he was also accompanied by a horse that could indicate travelling or horse-riding. He also appears to have been armed.

When it comes to the keys, locks, and chests themselves (see table 7:3), there were some similarities with the Birka material, as described above. The chest handles in Graves 2 and 3 were similar to chest handles from Birka graves Bj 24A, Bj 212, Bj 367, Bj 739 and Bj 791 (Arbman 1940: Taf. 265, 267, 269, 272), although they were Migration Period in date. The lock-plate in grave A75 was also said to be similar to those in Birka-graves Bj 838 and Bj 1081. Since the remains of the Lovö chests were so fragmentary, there is not much to say about the construction or size of the chests. It is also not possible to say what, if anything, was stored inside the chests, but it is not impossible that some of the tools or utensils, or perhaps a gaming board and pieces, were kept in these. If they contained items of perishable materials, such as e.g., textiles, these

would likely have decayed or been destroyed in the fire along with the wooden frames of the chests.

The key-fragment from A44 was said to be similar to the key in Birka grave Bj 825, which was a rotary key. The other keys from Lovö included a padlock key from A38, a latch-lifter or simple angular L-shaped lift-key without teeth from A7, and an angular L-shaped lift-key with two teeth from A36. No padlocks were found in any of the Lovö graves, but the key from A38 indicated that some must have been in use and there would therefore have been some variation in the types of locking devices used on Lovö.

Table 7:3. *The keys, locks, and chest-parts from the Lovö graves.*

Grave	Object	Material
Grave 2	Chest-handle	Iron
Grave 3	Chest-handle	Iron
A7	Latch lifter/key with one tooth	Iron
A38	Padlock key	Iron
A16	Lock-mount	Iron
A34	Lock-mount	Iron & bronze
A37	Chest-mount	Iron
A44	Key fragments	Iron
A75	Lock-plate	Iron
A76	Lock-mount	Iron
A77	Chest-mount	Iron
A36	Angular L-shaped lift-key	Iron
A54	Chest-nails	Iron

The find categories in the graves with keys, locks, and chests – similarities and differences

As for the previous graves included in this thesis, the grave goods were sorted into categories to enable comparisons. The graves were arranged into the same two chronological groups as in the previous section; one encompassing the Migration and Vendel Period graves, and one comprising the Viking Age graves and grave A75 which was dated to either the Vendel Period or the Viking Age. This was done to see if any chronological differences could be identified in the Lovö material regarding the individuals buried with keys, locks, or chests. It was unfortunately not possible within the scope of the present thesis to compare these graves with the rest of the Lovö graves. In the future however, such an investigation could probably give some important insights into if/how the graves with keys, locks, or chests differed from the other Lovö graves.

Amongst the six Migration and Vendel Period graves (see table 7:4), the most common grave goods were *Animal bone*, and *Nails, mounts, etc.* (five graves), followed by *Ceramics*, and *Chest* (four graves), and then *Beads*, *Personal grooming*, and *Dress and personal equipment* (three graves). Objects from the categories *Cutting tools*, *Gaming boards and pieces*, *Key*, *Lock*, *Materials*, and *Utensils* were found in two graves each, and objects present in only one grave each were from the categories *Jewellery*, *Slag*, *Tools*, and *Weapons and armour*. Finds from fourteen of the find categories used in the present study were not present (See table 7:4 below).

In the group of seven graves dated to the Vendel/Viking and Viking Age (see table 7:5), the most common find categories were *Ceramics*, *Nails, mounts, etc.*, and *Personal grooming* (seven graves), followed by *Animal bone*, *Beads*, *Chest*, and *Jewellery* (five graves), and then *Dress and personal equipment*, *Foodstuff*, and *Thor's hammers/amulets* (four graves). Three graves had *Ice spikes and skates*, and there were finds from the categories *Equestrian gear*, *Key*, *Sharpening tools*, *Tools*, and *Weapons and armour* in two graves each. Finds from the categories *Cutting tools*, *Fire making tools*, *Flint*, *Lock*, *Other objects and figures*, *Textile working tools*, and *Trade* were present in only one grave each. Finds from eight of the find categories were not present.

Examples for comparison

Table 7:4. The six Lovö graves with keys, locks, and chests from the Migration and Vendel Periods with the presence of finds from the various find categories marked with an x. The total number of graves with finds from each category (with the relative frequency in percent out of all six graves in brackets) is listed in the column furthest to the right.

Find category	Lovö 57:1		Lovö 16:1		Lovö 27:1		Total No. of graves
	Grave 2	Grave 3	A16	A34	A7	A38	
Animal bone	x	x	x	x		x	5 (83%)
Nails, mounts, etc.	x	x		x	x	x	5 (83%)
Ceramics	x		x	x		x	4 (67%)
Chest	x	x	x	x			4 (67%)
Beads			x		x	x	3 (50%)
Dress and personal equipment	x	x			x		3 (50%)
Personal grooming			x	x	x		3 (50%)
Cutting tools		x			x		2 (33%)
Gaming boards and pieces	x	x					2 (33%)
Key					x	x	2 (33%)
Lock			x	x			2 (33%)
Materials	x	x					2 (33%)
Tools					x	x	2 (33%)
Utensils	x	x					2 (33%)
Jewellery			x				1 (17%)
Slag	x						1 (17%)
Weapons and armour		x					1 (17%)
Agricultural tools							0
Equestrian gear							0
Fire making tools							0
Fishing tools							0
Flint							0
Foodstuff							0
Ice spikes and skates							0
Metalworking							0
Other objects and figures							0
Sharpening tools							0
Staff							0
Textile working tools							0
Thor's hammers / amulets							0
Trade							0

Chapter Seven

Table 7:5. The seven Lovö graves with keys, locks, and chests from the Viking Age and one Vendel/Viking Age grave, with the presence of finds from the various find categories marked with an x. The total number of graves with finds from each category (with the relative frequency in percent out of all six graves in brackets) is listed in the column furthest to the right.

Find category	Lovö 28:1					Lovö 34:1		Total No. of graves
	A37	A44	A75	A76	A77	A36	A54	
Ceramics	x	x	x	x	x	x	x	7 (100%)
Nails, mounts, etc.	x	x	x	x	x	x	x	7 (100%)
Personal grooming	x	x	x	x	x	x	x	7 (100%)
Animal bone	x	x		x	x		x	5 (71%)
Beads		x	x	x		x	x	5 (71%)
Chest	x		x	x	x		x	5 (71%)
Jewellery	x	x		x		x	x	5 (71%)
Dress and personal equipment		x		x		x	x	4 (57%)
Foodstuff		x		x	x		x	4 (57%)
Thor's hammers/amulets	x	x				x	x	4 (57%)
Ice spikes and skates		x			x		x	3 (43%)
Equestrian gear	x				x			2 (29%)
Key		x				x		2 (29%)
Sharpening tools	x						x	2 (29%)
Tools			x			x		2 (29%)
Weapons and armour	x		x					2 (29%)
Trade	x							1 (14%)
Cutting tools		x						1 (14%)
Fire making tools			x					1 (14%)
Flint				x				1 (14%)
Lock			x					1 (14%)
Other objects and figures	x							1 (14%)
Textile working tools						x		1 (14%)
Agricultural tools								0
Fishing tools								0
Gaming boards and pieces								0
Materials								0
Metalworking								0
Slag								0
Staff								0
Utensils								0

When comparing the two groups, there was not very much difference looking at the most common find categories, except that *Personal grooming* was quite a bit less frequent in the Migration/Vendel Period graves, where *Ceramics* were also a bit less common. *Animal bone* was a bit less common in the Vendel/Viking graves.

One somewhat larger difference was that there was a higher percentage of *Jewellery* in the Viking Age graves; 71% (five out of seven graves) versus 17% (one out of six graves) in the earlier graves.

Foodstuff and *Thor's hammers/amulets*, which were present in over half of the Viking graves, were totally absent in the Migration and Vendel Period graves.⁶⁹

While these rather commonly occurring find categories do not say very much about the individual in the grave, or at least it does very little to set it apart from the other graves, the more rarely included finds could perhaps hint at more of an individual expression. Amongst these less common find categories were *Cutting tools*, present in both groups, but more common in the Migration/Vendel Period graves. Some of the rarer categories were only present in the Viking Age graves and include *Ice spikes and skates*, *Equestrian gear*, *Sharpening tools*, *Trade*, *Fire making tools*, *Flint*, *Other objects and figures*, and *Textile working tools*. There were also some find categories that were only present in the Migration and Vendel Period graves; these included *Gaming boards and pieces*, *Utensils*, *Slag*, and *Materials*, although the last two do not provide much interpretable information, and may even have derived from occupation materials.

From all the find categories present in the Lovö graves with keys, locks, or chests, it would appear that it was mainly the sort of objects that were part of the burial construction, the dress, and some personal objects that accompanied the deceased. Some of the dress accessories might have been used to signal status or identity, however. There appears to be more tools of various kinds in the Viking Age graves, and textile working tools were only present in these. There were also items that might have a more ritual or religious meaning, such as Thor's hammers. These were also only present in the Viking Age graves, and the same was true for objects that can be associated with travelling and trade. Gaming boards

69. Regarding the Thor's hammers, this was mostly the result of these being used as an indicator of Viking Age date, but there was also a lack of objects identified as amulets or 'cult' objects in the Migration/Vendel Period graves.

and pieces, which could be regarded as high-status objects, and utensils such as beakers, which were common in, for example, the Birka chamber graves, were only present in the Migration/Vendel Period graves.

That there were several categories found only occasionally in the graves with keys, locks, or chests shows that there was great variety in the grave goods within this group. More or less all the graves would count as rich however, and the individuals buried in them, and/or their kin, would most likely have had a high social status.

Sanda

Sanda (Fresta 147:1) is a settlement site in Fresta parish in Uppland; roughly 20 km north of Stockholm (see figure 1:1). It is located approximately 300 m east of the present day Sanda farm and was subject to commercial-archaeological investigations in 1990-1991 prior to a housing development. It had a long, probably continuous, settlement from the later part of the early Iron Age to at least the medieval period (Fornsök; Åqvist 2006; Vinberg 2004: 4, 6). Around the end of the 17th century the site was used for animal pasture, and up until the time of the excavations it was largely unaffected by settlement activities. The remains were consequently in a relatively good state of preservation (Åqvist & Flodin 1992: 313; Åqvist 2006: 56).

The Sanda settlement lies in a narrow rift-valley with comparatively little arable land (Åqvist & Flodin 1992: 313, 331). The historically known farmland was located south of the settlement, and to the north there were meadows (Jakobsson et al. 2013: 26). Near the settlement there is a field system with stone field-walls, which can also be observed at several other places regionally where settlements can be connected with this type of structure. It has been suggested that these were the result of a more intense and complex use of the land near the settlement sites, involving for example the management of livestock. These field-walls are usually dated to the period between 0-600 CE (Grönwall & Höglin 2007: 14-15).

A reconstruction of the water level conditions at around 500 CE shows that the site was then located on the south-west side of a larger waterway. Through what is today the inlets *Norrviken* and *Edsviken* it would have been possible to travel south, and then west towards Lake Mälaren

or east towards the Baltic Sea. The location of the Sanda farm would therefore be advantageous both economically and communicatively during both the early and late Iron Age (Grönwall & Höglin 2007: 15).

Within the immediate area there are three grave fields, probably from the late Iron Age; Fresta 16:1, 18:1 and 19:1 (Fornsök; Åqvist 2006: 7). Three of the graves on Fresta 16:1, located at the southern edge of the settlement, were excavated during the 1990-1991 investigations. They were dated to the Viking Age, indicating that the grave field was at least partly contemporary with the settlement (Vinberg 2004: 6). No keys, locks, or chest-parts were identified amongst the grave goods (Åqvist 2006: Appendix 1a: 29-31).

The area of investigation was approximately 10 000 m². The turf within this area was removed with machines and the visible features were then cleaned by hand. The culture layers in or in direct association with these features were excavated, mainly in arbitrary 0.1 m levels. Clearly visible layers were excavated separately, however (Åqvist 2006: 8). There was no mention in the report of the soil having been sieved, so some smaller finds were probably not recovered.

Work on the report started ten years after the excavations and were published in 2006 (Åqvist 2006: 11). By that time two of the profile drawings of the cross sections were missing, and the finds were not possible to separate horizontally.⁷⁰ This resulted in the majority of the finds not being possible to place within the stratigraphy (Åqvist 2006: 10-11). Faulty coordinate-grids on the site plans in the excavation report also made it impossible to pinpoint the location of specific finds, including the keys and lock-parts found on the site.

There were also some inconsistencies concerning the dating of the buildings found at Sanda, where the descriptions in Appendix 1a and the descriptions in the report text did not always match up (Åqvist 2006). Additionally, the ¹⁴C-dates for building K29 were stated in the Sanda report to indicate a Viking Age date, but the ¹⁴C-dates in question actually give a date of 130-420 CE (Grönwall & Höglin 2007:10; Åqvist 2006: 41), making it one of the earliest structures on the site, if the samples taken actually reflect the occupation of the building.

70. Since all the finds in the finds-list (Åqvist 2006: Appendix 3) have x and y coordinates, perhaps Åqvist means vertically rather than horizontally.

These issues make the report somewhat unreliable in parts, but it is still the main source of information for the site. For the present study, some additional information was gathered from the archive ATA in Stockholm.

A few keys were found and identified on the Sanda settlement, and some lock-parts for mounted locks could also be identified through the field documentation and photographs of the finds kept at ATA. These were simply listed as mounts in the report's find catalogue (Åqvist 2006: Appendix 3). To describe the contexts in which these were found, the site and its structures in various phases are summarised below, based on the information in the report (Åqvist 2006). The keys and lock-parts are listed in Appendix 14 and 15.

According to the excavation report, five main phases could be identified amongst the settlement remains. These were based on the finds, ¹⁴C- and thermoluminescence analysis, and stratigraphy in the cases where structures intercut. Some of the buildings were however dated based solely on structure-type (Åqvist 2006: 45). Since there were several buildings that seem to overlap phases, and the dating of some buildings was rather imprecise (sometimes inconsistent) and lacking for some, Åqvist's phase divisions should not be regarded as definite, but rather as a general interpretation.

The first phase was set in the Vendel Period and began around 550 CE when the settlement was established (Åqvist 2006: 45). There was however a terrace with hearths in the southernmost part which was dated to the Migration Period (Åqvist 2006: 33), indicating earlier activity on the site. The previously mentioned ¹⁴C dates (130-420 CE) from building K29 also suggest some earlier activities. The buildings assigned to this first phase included three dwelling houses: two three-aisled post-built houses and one smaller post-built house. There was also a stone structure interpreted as a 'cult-house', and a metal-workshop area with a forging pit (Åqvist 2006: 27, 33, 45-46).

One of the three-aisled buildings, K33 in the north-east end of the site, possibly had a byre in one end. The finds from this building indicated ordinary occupation activities, but also included a gold finger ring dated to Vendel Period VI:2, and a "glass object" (Åqvist 2006: 41-42).

Otherwise, the activities connected with the settlement in this phase seem to be rather typical for an Iron Age farm and included animal husbandry, food preparation/production, possible hunting, textile production, metalworking, and possibly some ritual/cultic activities (the ‘cult-house’). Some more exclusive items, such as the gold ring, and perhaps the ‘glass object’, indicate that the farm might have been somewhat prosperous, and that K33 may have been the prominent building on the site.

Six three-aisled buildings, all of which were interpreted as dwelling houses, were assigned to the next phase, which was also part of the Vendel Period, but beginning around 650 CE. Two of these, including K33, were believed to have remained in use from the previous phase, as was the metal workshop area and the ‘cult-house’ (Åqvist 2006: 45, 47-48). One of the new buildings, K20, was interpreted similarly to K33 as possibly having a byre in one end (Åqvist 2006: 15). There was also a feature interpreted as a drove way (K66) to the west of K20 (Åqvist 2006: 45, 48). South of K20 was a well that may have been constructed during this phase (see figure 7:15) (Åqvist 2006: 15).

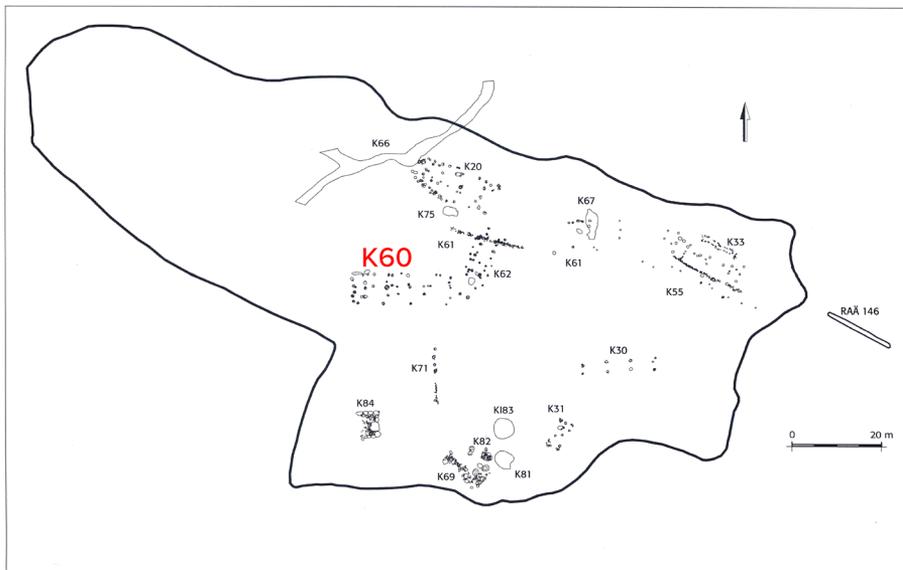


Figure 7:15. Plan over the excavation area in Sanda with the buildings associated with the second Vendel Period phase. K60, the building with a bronze key, is marked out. From Åqvist 2006: figure 3 by Franciska Sieurin-Lönnqvist, *Arkeobild*, used with permission.

Of special interest for the present study was building K60. In this three-aisled building, measuring c. 22 x 7 m, a bronze key was found, the exact location of which, however, was not specified. The other finds in the building indicated ordinary occupation activities including textile production, but there was also an iron fibula that may reflect some prosperity (Åqvist 2006: 26-27, 45, Appendix 3). Based on the finds, ¹⁴C- and TL-analysis, the building was dated to 650-750 CE (Åqvist 2006: 27).

No description or depiction of the key was found in the report or at ATA, but in a conservation report stored at ATA it was noted that the key had ornamentation. Still, the type of key remains unspecified. Since it was made of bronze it is likely that it was not a door key, but rather a key for a chest, cupboard, or for a padlock that may have been used in various ways for securing. If the key truly belonged to the use of this building, it indicates restricted access and that the people residing within had some items or resources in need of safekeeping.

Based on the finds and structures, the activities in this second phase seem to be very similar to the previous phase, and there seems to have been some overlap where a few structures were in use during both periods. It is however unclear when the 'cult-house' lost its function and whether it was still in use in this phase (Åqvist 2006: 27). One possible difference is nevertheless that the key could indicate that access to some items or spaces was now restricted, possibly indicating social inequality and/or private property.

During the following phase, beginning in 750 CE and thus belonging in the early Viking Age, two new longhouses were constructed; one three-aisled and one un-aisled, both interpreted as dwelling houses. Two three-aisled buildings from the previous phase are believed to have been kept in use, including building K20 (see figure 7:16) (Åqvist 2006: 27, 36, 41, 48).

There were also two sunken featured buildings assigned to this phase. One of these, K64, contained an item that may be an iron key. A photograph of the object kept in ATA suggests that it might be a bent and broken L-shaped lift-key or angular L-shaped lift-key (see figure 7:17), but without examining the object it is difficult to be certain. The SFB was dated to 750-850 CE, but based on the finds it was believed to have been filled in during the 10th century (Åqvist 2006: 33; Appendix 4). The possible key, in its broken condition, was probably part of the backfill and could therefore be later than the actual use of the building.

Examples for comparison

The other finds in the backfill (Åqvist 2006: 33) suggested ordinary settlement activities, metalworking, and textile production.

Again, based on the finds and structures, the activities in this phase do not appear to differ from the previous phases. The possible key might belong to a later part of this phase or to the later Viking Age phase. If it is indeed a key, it suggests restricted access to certain things or spaces, and the presence of items or resources worth keeping safe.

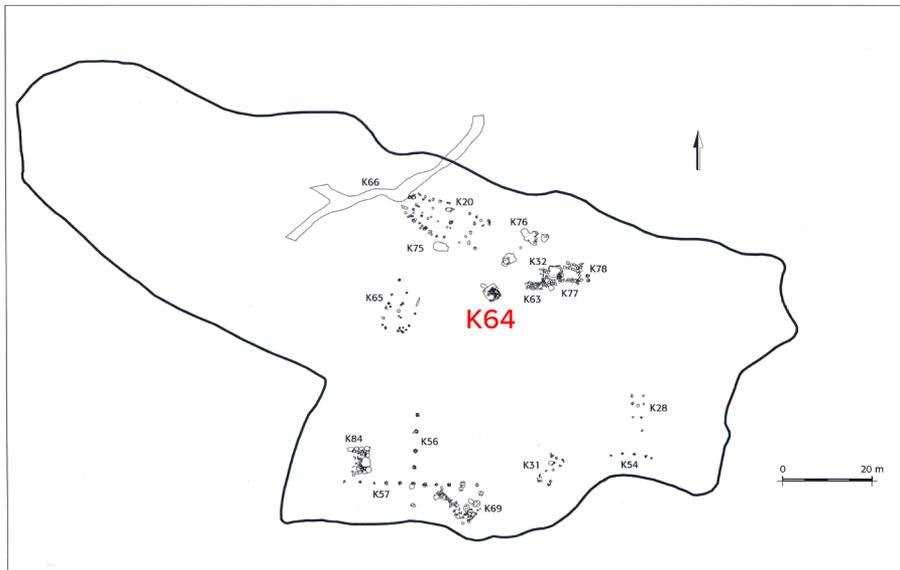


Figure 7:16. Plan over the excavation area in Sanda with the buildings associated with the early Viking Age phase. K64, the sunken featured building with a possible discarded key, is marked out. After Åqvist 2006: figure 39 by Franciska Sieurin-Lönnqvist, *Arkeobild*, used with permission.

In the following late Viking Age phase, beginning in 950 CE, three new SFBs were constructed and the earlier two were backfilled (Åqvist 2006: 48). The new SFBs were interpreted as having been used in connection with textile working, and one was interpreted as also functioning as a possible cooking or brewing house; it had a built-up fireplace with the upper part of a rotary quern-stone as its base (Åqvist 2006: 26-27, 43). The rotary quern suggests the production of flour and possibly bread making at the Sanda farm at some point prior to the construction of the SFB.



Figure 7:17. *Bent and broken potential key from backfill dated to the 10th century in sunken featured building K64. Photograph by Barbro Ejdeholm, kept in ATA.*

The three SFBs were all backfilled in the late 10th century. The finds from the backfill included more costly items such as a glass bead, a silver-foil bead, a bronze chain, part of an iron scale, and an early 10th century silver coin (Åqvist 2006: 26-27, 43; Appendix 1a: 16; Appendix 4); the latter two also indicate trading activities. Otherwise the finds suggest normal settlement activities.

In this later Viking Age phase, the un-ailed dwelling house from the previous phase is interpreted as still being in use, while K20 was replaced by a new three-ailed building, K1, in the same location. It was interpreted as having a byre in one end, a dwelling in the middle, and perhaps a storage area at the other end (see figure 7:18) (Åqvist 2006: 12, 48). The finds from this house were more numerous than in its predecessor (Åqvist 2006: Appendix 1a: 3) and indicate various handicrafts and textile production.



Figure 7:18. Plan over the excavation area in Sanda with the buildings associated with the later Viking Age phase. From Åqvist 2006: figure 40, by Franciska Sieurin-Lönnqvist, *Arkeobild*, used with permission.

Another three-aisled dwelling house was also assigned to this late Viking Age phase, possibly with a byre in one end, and the previously mentioned K29 (Åqvist 2006: 48) with contradicting ¹⁴C-dates. It was interpreted as a three-aisled dwelling house with a byre and storage at one end (Åqvist 2006: 41).

This phase was once again similar to the previous phases, with finds indicating normal settlement activities, animal husbandry, and various crafts including textile production. However, the metal workshop area does not appear to have been kept in use (Åqvist 2006: 48) and there were now finds indicating trading activities, fishing, and perhaps production of flour and bread – although the latter may belong in the previous phase. There were also more finds in general, including more tools, and the finds contained a few items of presumably higher value.

The early medieval phase, beginning in 1050 CE, was characterised by the building of fourteen houses on stone foundations (Sw. *syllstenshus*) (Åqvist 2006: 51-52). There seems to have been some overlap between this and the previously described phase, with several of the stone

foundation houses dating from 950-1050 CE, and the three-aisled building K1 believed to still have been in use (Åqvist 2006: 51-52), although said to date from 850-950 CE (Åqvist 2006: 12). Most of the stone foundation houses had fireplaces and were interpreted as dwelling houses, but two did not and were believed to have been used as byres. In two of the dwelling houses the fireplace had partly been built up with reused grindstones (Åqvist 2006: 51-52). These would presumably have been used some time before the buildings were constructed and points to the production of flour, and perhaps also bread. Additional grindstones were amongst the finds from the other buildings (Åqvist 2006: 22-44).

Otherwise, the finds from this phase indicated ordinary settlement activities, possibly hunting, animal husbandry (including horses), crafting, textile production, metalworking, winter travelling, and trading. Only a few items appear to have been of any higher value, including a glass vessel, a glass bead, and a silver coin (Åqvist 2006: 22-44).

In the next phase, which was also part of the early medieval period but began in 1100 CE, some of the stone foundation houses were replaced by other similar houses and a few were kept in use, with a total of twelve such houses in use during this phase (Åqvist 2006: 51, 53, 56). Two of the houses were interpreted as byres and the rest as dwelling houses. Along with the finds this suggests the same types of activities as in the previous phase (Åqvist 2006: 22-44).

The three-aisled building K1 was replaced by building K21 in the same location (see figure 7:19). This building is of special interest since it was assigned a key and a lock-spring case. The building measured c. 22 x 10 m and had a substantial stone framework all around the outer sides (Åqvist 2006: 15, Appendix 1a: 5-6), as well as a rather unusual wall gully running along the northern long side, turning in towards the centre of the house whilst the wall continued towards west (Åqvist 2006: 53; Appendix 1a: 5). It has been proposed that this house could be of a hybrid type where one part was built with roof bearing posts and the other without. With this interpretation, the house was rectangular in shape with two equal sized rooms, unlike the two previous buildings K20 and K1 which had a more elliptical shape (Jakobsson et al. 2013: 30-31).

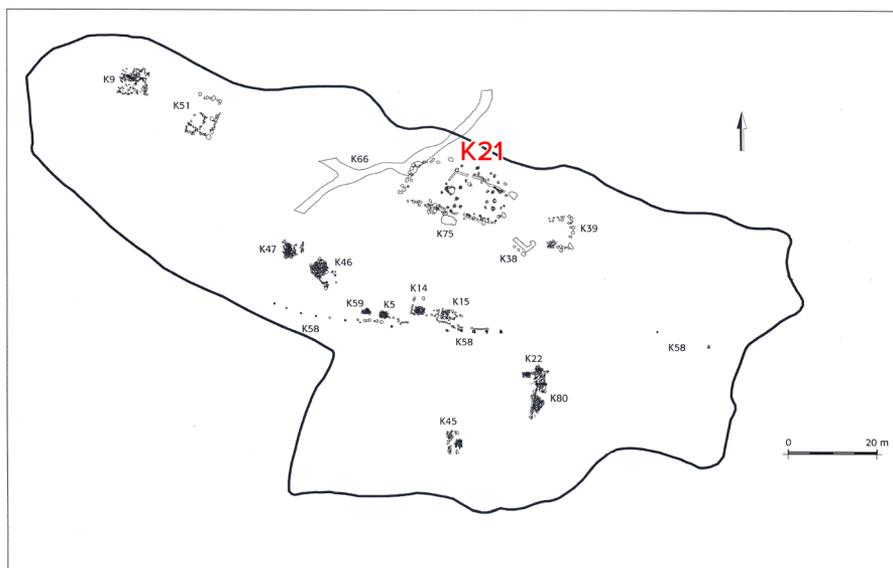


Figure 7:19. Plan over the excavation area in Sanda with the buildings associated with the second early medieval phase. K21, the building with a key and a lock-spring case, has been marked out. From Åqvist 2006: figure 42 by Franciska Sieurin-Lönnqvist, *Arkeobild*, used with permission.

The house has been interpreted as a dwelling house, possibly with a byre in the western part, and based on the finds and the stratigraphy it was dated to 1050-1150 CE (Åqvist 2006: 15), or alternatively 1000-1200 (Åqvist Appendix 1a: 7). This suggests that it may actually have belonged to the later part of the Viking Age or not long after. The finds assigned to the building, besides the key and lock-spring case, indicated ordinary settlement activities, textile production, crafting, metalworking, and fishing (Åqvist 2006: 15; Appendix 1a: 6-7).

The key was made of iron (Åqvist 2006: 15; Appendix 1a: 6-7), but unfortunately no further description or information was possible to attain either in the report or at ATA. This means that it was not possible to tell which type of key it was or if it was from the late Viking Age or the early medieval period. Even with sufficient information this may however still have been impossible to ascertain since some key types spanned both periods. The dating of the house itself was also rather diffuse, and with the three buildings K20, K1, and K21 overlaying each other it is difficult to know for certain to which building phase a specific object belongs. Further, no distinct floor layers were identified; the cultural layer present within the area was described as a 0.1-0.15 m thick

layer of clay with inclusions of humus, said to be homogenous with no visible stratigraphy. This description is the same for all three buildings (Åqvist 2006: Appendix 1a: 3, 4, 6). Presumably, it was excavated in spits since this was the main method used during the excavations (Åqvist 2006: 8).

The lock-part (see figure 7:20) was listed in the excavation report simply as an iron mount, but from a photograph kept in ATA it could be identified as a lock-spring case with two holes for a key with two teeth. It would probably have been attached to a chest, possibly kept in building K21 or in its predecessor K1 or K20. The key that would fit this lock would be an angular L-shaped lift-key. No such key has been definitely identified, but the previously mentioned potential key from the 10th century backfill of SFB K64 could be of this type. Based on the keys included in the present study, this was a type that was in use during the Migration Period, Vendel Period, and the Viking Age, and consequently an Iron Age date is not unlikely for the lock-spring case.

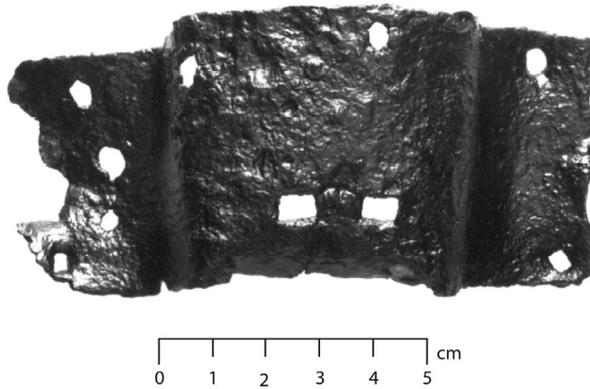


Figure 7:20. Lock-spring case from house K21. Photograph by Barbro Ejdeholm, kept in ATA.

Somewhere on what was interpreted as a courtyard south of building K21 another key was found (Åqvist 2006: 58). It was an iron padlock key with a round perforated bit with some gilding. Based on a black and white drawing found in the excavation report (Åqvist 2006: figure 17) it appears as though it was the half of the key-bit closest to the stem/handle that was gilded.

This type of key was similarly found in the medieval fort Eketorp on Öland, and in Lund in southern Sweden where they were found in cultural layers dated to the 11th to 14th century. They seem to be known in Scandinavia from the first half of the 11th century (Borg 1998: 229-230; Blomqvist & Mårtensson 1963: 138-139). They have also been found in York, Sandnes in Greenland, Trondheim, Copenhagen, and Novgorod where they were dated to between the 11th - 12th centuries (Roesdahl 1993: 220). Many have a handle inlaid with a spiral wire of copper alloy, and some of the Eketorp keys had silver inlays (Roesdahl 1993: 219; Borg 1998: 229-230). The Sanda key seems to be the only one found with a gilded bit. Nevertheless, these keys all appear to be highly decorative and had a hole suggesting they might have been hung from a belt or such, possibly as a status or identity marker.

It has been suggested that the Sanda key, because of its gilding, was not functional as a key and that it instead must have had a symbolic function (Åqvist 2006: 58). However, if indeed only part of the key-bit was gilded, then when used in the lock (a cylindrical padlock with a T-shaped key-hole) it would only be the area inside and directly around the perforations on the bit that would ever be subject to any use-wear; it would be through these perforations that the spring inside the lock would be compressed so the locking mechanism and shackle could be released, and any wards inside the lock would go through (see chapter 2). There is consequently nothing to suggest that the gilding stopped this key from functioning as a key.

It is not possible to establish whether the key was associated with activities in building K21, or one of the nearby smaller stone foundation houses assigned to this phase, or if it perhaps belonged in one of the previous phases, since this type of key can be found both in the very late Viking Age and the early medieval period. Furthermore, the exact find circumstances were not described in the report, but there was nothing to suggest that it was deliberately placed where it was recovered, implying it was most likely discarded or lost.

Activities ceased at the site during the end of the early medieval period, but shortly after, in the phase covering 1200-1550, there were four new houses built in the north-west part of the excavation area. One of these houses, K10, was interpreted as a possible workshop, perhaps for blacksmithing. Two iron rotary keys were found in this house (Åqvist

2006: 58; Appendix 3), perhaps produced in the workshop, or used to secure products and raw materials.

In the last phase, the early modern period 1550-1650, two of the earlier houses were built into one and a large food cellar was constructed. Towards the end of the 17th century the site was instead used for animal pasture (Åqvist 2006: 56).

There were several finds that were not assigned to a building, feature, or settlement phase. One of these was an iron lock-spring case found somewhere in the eastern part of the excavation area. Like the example assigned to building K21, it is simply listed as an iron mount in the report. However, a photograph of the object, available at ATA, shows this was indeed a lock-part (see figure 7:21). It has two holes for a key with two teeth and would therefore have been operated with an angular L-shaped lift-key. The lock would probably have been attached to a chest, and so, indirectly it points to the presence of a chest with lock. It is quite possible that the chest was kept in one of the houses in the eastern part, although it could have come from any of the buildings on the site since waste material might have been disposed of here. It is not possible to say which phase this lock-part belongs to, but both the Vendel Period and Viking Age are certainly possible. Vendel Period building K33, located in the north-east corner of the excavation area, which seems to have had some more affluent residents, is a likely candidate.



Figure 7:21. Lock-spring case from the eastern part of the excavation area. Photograph by Barbro Ejdeholm, kept in ATA.

The farm at Sanda seems to have been rather prosperous, with animal husbandry as one part of the farm's economy, as shown by the drove way, the byres, fences, and the stone field-systems. No analysis of the bone material was available due to a lack of funding (Åqvist 2006: 11), but some equestrian gear amongst the finds does indicate the presence of horses.

A rather interesting circumstance regarding crops at Sanda was shown through microfossil sampling: there was an unusually large proportion of wheat compared to other Iron Age farms -almost 50% (Åqvist 2006: Appendix 6: 3). This is interesting because wheat had a higher status than other grains since it produced finer flour and therefore better bread (Åqvist 2006: 57). What is particularly interesting in this regard is that the majority of the wheat grains came from samples taken in building K60 (Åqvist 2006: 57), the building with the bronze key. Perhaps the key and its matching lock were used to secure a store of wheat, either in a separate room or in a chest. Since the building had a fireplace it is unlikely that it was used solely as a storage house. The presence of the wheat might reflect the resident's wealth and (restricted) access to finer foods.

Since there was not much arable land near Sanda, it has been suggested that the wheat was imported from elsewhere to be ground into flour at the Sanda settlement. This specialisation was proposed as part of the reason behind Sanda's prosperity; the several grindstones and the rotary quern stone found at the site could probably be connected with this activity (Åqvist 2006: 57).

A possible connection between this grinding work and the presence of thralls has also been proposed (e.g., Zachrisson 2014). Buildings, like the many small houses with stone foundations at Sanda, have been suggested to possibly house this category of un-free workers (Zachrisson 2003: 98-99; see also Jakobsson et al. 2013: 58-59). When the multi-functional longhouses during the Viking Age were divided up into several smaller buildings with their own particular function, and animals were separated from the humans etc., as on Sanda, it has been proposed that different categories of people were also separated, such as the farmer and his family from the thralls (Zachrisson 2003: 98-99).⁷¹

71. This has also been further discussed by archaeologist Martin Hansson (2014) in relation with the organisation and running of larger manor farms. However, this discussion lies outside the scope of the present study.

Some of the other things that set the Sanda settlement apart from other contemporary farms and suggest a more ‘aristocratic’ setting, were the finds of for instance a bronze bowl, the gilded padlock key, and a possibly Scythian bronze belt-mount (Jakobsson et al. 2013: 32; Åqvist 2006: 36). Other finds of a more exclusive nature include parts of two sets of scales, a balance scale, a few silver coins, a piece of raw material gold, a bronze ferrule, some beads, and a Vendel Period gold finger ring (Åqvist 2006). The scales and coins further indicate that some of the residents at the Sanda farm took part in trading activities.

Amongst the more noticeable features at Sanda were the three consecutive buildings K20, K1, and K21 in the northern central part of the site. Building K21, to which the iron key and a lock-spring case were assigned, was interpreted as a hall-building; primarily based on its long continuity, but also on the stone framework added towards the end of the Viking Age or beginning of the early medieval period, and its prominent place on the farm (Åqvist 2006: 59). When interpreted as a three-aisled longhouse, K21 is also believed to have symbolically retained an older building tradition which further set it apart from the rest of the farm-buildings. If on the other hand K21 is interpreted as a hybrid with only one part having been built with roof-bearing posts, this interpretation loses some of its applicability. Besides the supposed prominent place on the farm, the earlier buildings K20 and K1 do not appear to differ from other Iron Age houses, although, as discussed above it is possible that the key and lock-part actually belong to one of these rather than K21. In that case it would point to the presence of valuable items or resources and/or private property, and therefore possibly higher status residents.

Amongst the earlier buildings it was K33 and K60 that the finds suggest might have held higher status residents (the gold ring in K33, and the iron fibula, bronze key, and large amount of wheat in K60), although K60 was perhaps also partly used for storage.

To sum up, on Sanda there was a long continuity in the use of keys and presumably also chests with locks, with the earliest key found in the Vendel Period building K60. The type cannot be specified but it was probably not a door key. The next key(?) belonged somewhere in the 10th century, or perhaps earlier, and was part of the backfill of the sunken featured building K64, dated to 750-850 CE. The object appears to be

a bent and broken L-shaped lift-key or angular L-shaped lift-key and would therefore have belonged to a mounted lock.

A lock-spring case that was probably once attached to a chest was found somewhere in the eastern part of the excavation area, but cannot be dated or associated with any particular building. It was however of a type that would have been operated with an angular L-shaped lift-key and most likely belonged to the late Iron Age. The very similar lock-spring case assigned to building K21 could however be from the beginning of the early medieval period, but as discussed, it might also have belonged to one of the earlier Viking Age building phases. Like the other lock-spring case it was probably once attached to a chest. Building K21 also contained an iron key that was not further described, but which likewise belonged either to the late Viking Age or the early medieval period. The partly gilded key for a cylindrical padlock found on a courtyard south of K20/K1/K21, represents a later phase in which keys and locks were used, and also a different type of lock – the mobile padlock. It probably dates from around 1000-1200 CE and was quite possibly contemporary with K21. Its appearance suggests that it was a high-status object, and it might have been used to signal rank or identity. The two most recent keys from the Sanda settlement, both iron rotary keys, came from the workshop building K10 where they may have been produced or used, and were dated to the high or late medieval period.

The keys therefore span from the Vendel Period via the Viking Age, early medieval period, to the high/late medieval period. The recovered lock-parts, which indirectly also suggest the presence of chests, can only be placed more loosely in the late Iron Age and possibly to the beginning of the early medieval period.

There is no clear indication of what might have been kept under lock and key at the Sanda farm, but various resources, including wheat, could have required safekeeping. It is also likely that some more valuable items, possibly private property, were locked up. Although the padlock key and its corresponding lock may have been used to secure doors, there was no definite door-key from Sanda. There was consequently no indication that any of the livestock were kept under lock, although a bolt on the door may still have been used.

Vallhagar

In the late 1940s, excavations were undertaken at the Roman Iron Age – Migration Period farm site Vallhagar (Fröjel 31:1) on the Baltic island of Gotland, in Fröjel parish (see figure 1:1). The site is located approximately 3 km east of Gotland's west coast and 33 km south of Visby. During the investigations, twenty-four building foundations with stone walls were identified and excavated (see figure 7:22). Some of them were damaged by ploughing, and it is likely that there were once more buildings on the site. There was also a system of stone fences connected with the settlement, separating the farms and perhaps keeping animals in (Stenberger & Klindt-Jensen 1955a: 107). Only the buildings and the immediate area around them were excavated during these investigations, but in the 1980s some smaller trial excavations were conducted in the areas between the buildings. These resulted in the discovery of an area directly west of the known settlement with a cultural layer earlier than the house foundations (Carlsson 2011: 10-11).

There were also three grave fields in the nearby area. These are referred to as the Northern, Middle and Southern grave fields (Fröjel 13:1, 178:1, and 40:1 & 93:1). The majority of the graves do not however appear to have been contemporary with the house foundations, but belonged to the periods before and after (Carlsson 2011: 9-10).

The Middle and Southern graves fields were more or less completely excavated and none of the graves contained any keys, locks, or chests (Nylén 1955a; 1955b; Simonsen & Gejvall 1955; Eriksson 2012).

Approximately half of the graves in the Northern grave field were investigated: three of them (14%) contained a key and two of them also had a chest with lock (Graves 59A, 84, and 86B). They were all dated to the 2nd century CE and could therefore be contemporary with the earliest phase of the Vallhagar farm, although the distance from the farm (c. 1 km) suggests they probably belonged to another settlement. These three graves were the two richest cremation burials (84 and 86B) and the richest inhumation burial (59A) on the grave field, linking the keys and the chests with a lock rather clearly with wealth and presumably high social status. All three individuals were probably female, based on osteological analysis (Gejvall 1955a: 719; 1955b: 736; Nielsen 1955: 567, 571, 591, 602-606).

Examples for comparison

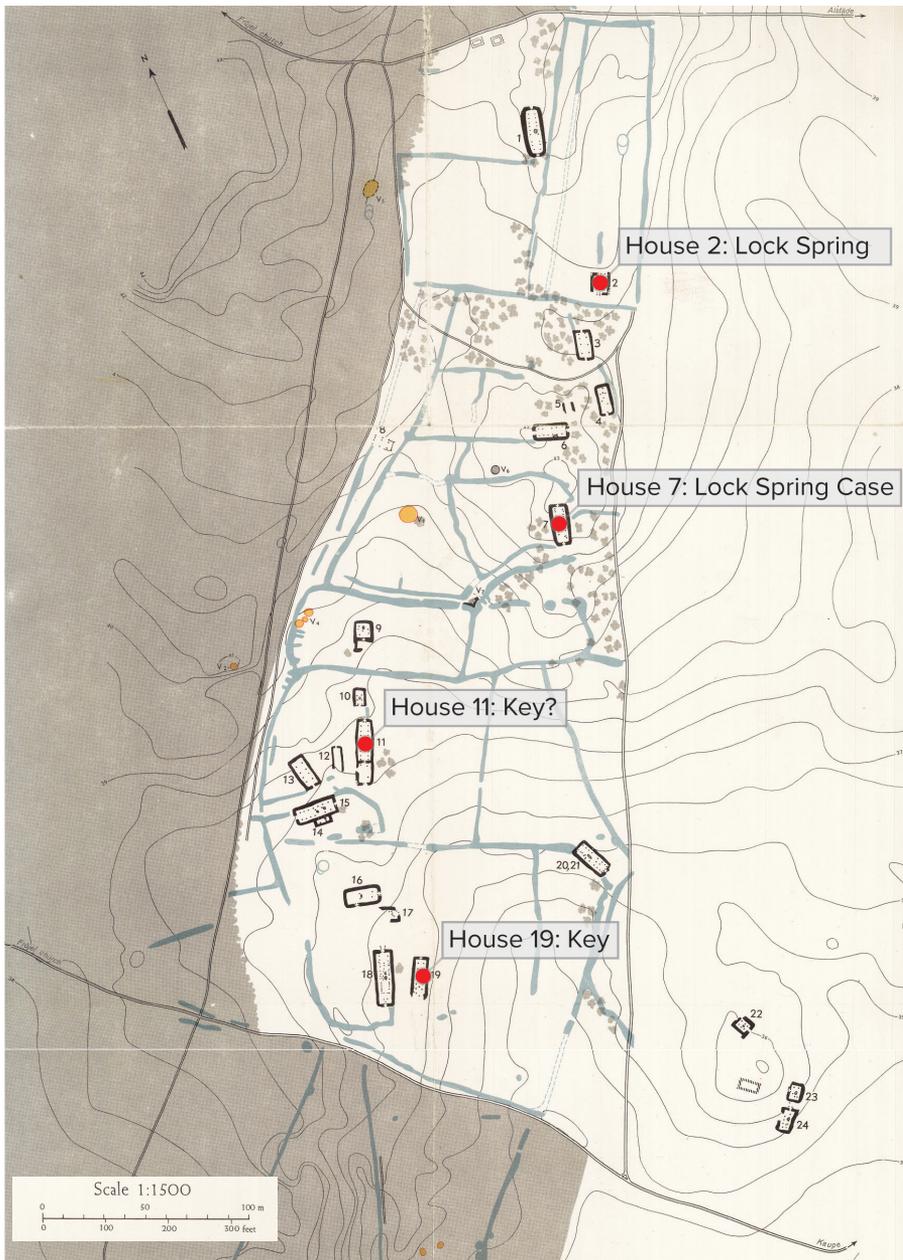


Figure 7:22. Plan showing the farms at Vallbagar with the buildings containing keys or locks marked out. Modified, after Stenberger & Klindt-Jensen 1955a: map 1, by P. Simonsen, used with permission from the publisher Wiley-Blackwell.

The Vallhagar settlement site was interpreted as an early village with five or six farms. The vast majority of the objects found were from the Migration Period. Only seven objects could be dated to the Roman Iron Age and none to the Vendel Period. The site was occupied from the 2nd century CE to around 500-550 CE, a period of about 500 years (Stenberger & Klindt-Jensen 1955b: 1145-1147, 1154). The settlement seems to have been abandoned abruptly, and thirteen of the buildings had terminal finds from the Migration Period; the remaining nine did not have any datable finds. This indicates that at least half of the buildings were occupied at the same time during this period, including all the buildings that were interpreted as dwelling houses (Stenberger & Klindt-Jensen 1955b: 1146)

Several of the buildings showed traces of fire, and parts of the roof had fallen in on top of the floor in some (Stenberger & Klindt-Jensen 1955a: 174). This improved the chances of objects having remained in or near the positions where they were left. It was not possible to determine whether the fire was the result of an attack, an accident, or something done on purpose when the farms were abandoned. However, the burnt skeleton of a man was found along the eastern wall inside Building 11 (Stenberger & Klindt-Jensen 1955a: 175). Him not being buried in a grave points to an event out of the ordinary.

The nature of the settlement and the finds suggest that the site was a settled agricultural community, mainly supported by animal husbandry and agriculture (Stenberger & Klindt-Jensen 1955b: 1149). The objects found on the site consisted of personal dress ornaments and fittings, combs, various crafting tools, farming implements, and plenty of pottery. A few more exclusive objects were recovered including two bone dice, a glass beaker, a bronze ferrule, a gold ring, and two silver coins (Stenberger & Klindt-Jensen 1955b: 1068-1071), the latter possibly indicating some trading activity.

Buildings 2 and 7 contained lock-parts which would have been fitted on a chest or perhaps a door. Building 19 contained a key, possibly for a chest, and Building 11 contained an object that was possibly a simple door key. Unfortunately, the Vallhagar publications (Stenberger & Klindt-Jensen 1955a; 1955b) do not provide any illustrations of these keys. The keys and locks are listed in Appendix 14 and 15.

Buildings 2, 7 and 11 were destroyed by fire, so the objects found there might be *in situ* and have a higher source value. The northern part

of building 19 was also burnt, but later rebuilt, with an extension added to the southern end. The finds from this house seem to be more mixed up (Stenberger & Klindt-Jensen 1955a; 1955b).

Building 2 (see figure 7:23) was a small, almost square house, roughly 11 m long and 9.5 m wide with a doorway in each of the end-walls. Postholes indicated that the house was divided into three isles. The floor consisted of hard-trampled earth, but the occasional remains of a very hard clay floor were observed mainly around the eastern sidewall. In later times Building 2 was badly damaged by ploughing. The floor itself escaped any serious damage, but the occupation layer on top of it was

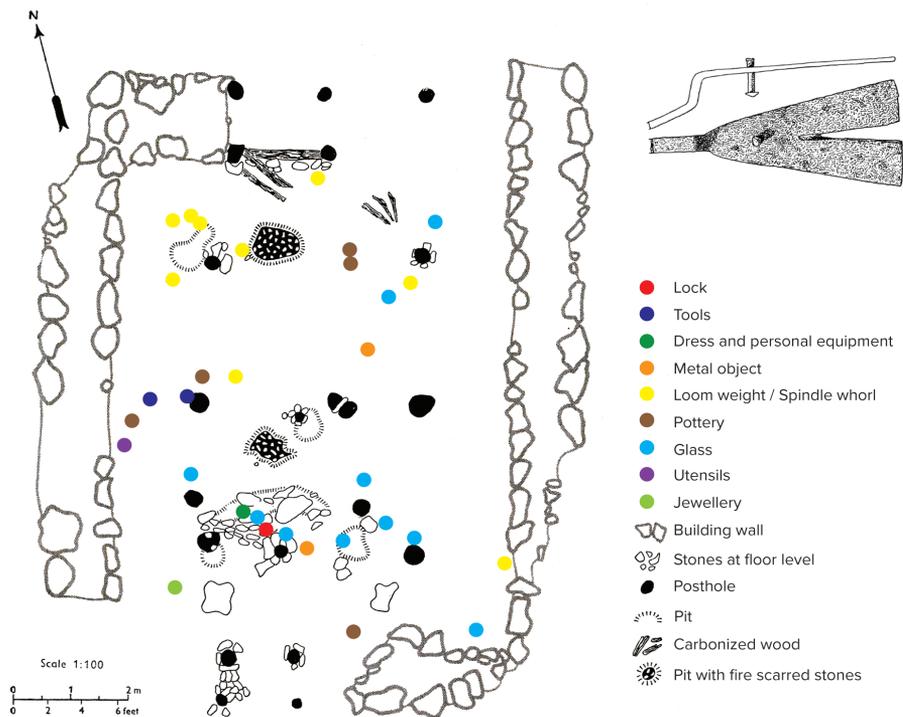


Figure 7:23. Plan over Building 2 at Vallhagar with some categories of finds marked out, and a drawing of the lock-spring found in the building. Modified, after Stenberger & Klindt-Jensen 1955a: figure 28 and 463, used with permission from the publisher Wiley-Blackwell.

disturbed. There was a fireplace, consisting of a fire-pit full of black, ashy earth, in the south-western part of the building, slightly south of its central axis (Stenberger & Klindt-Jensen 1955a: 106-108, 110).

The excavations revealed that Building 2 was built on top of a larger house, looking more like the other long, narrow dwelling houses on the site, and an earlier hearth was found inside the northern entrance under the present floor layer (Stenberger & Klindt-Jensen 1955a: 110, 112).

The house contained a large amount of finds, a lot of which were found near the fire-pit. The finds included several shards from a green glass beaker and most of the iron objects found in the building. One of these iron objects was an iron lock-spring (see figure 7:23) (Stenberger & Klindt-Jensen 1955a: 110). It was unusually large and fit an angular L-shaped lift-key with two teeth, the same type as the key found in Building 19 (Stenberger & Klindt-Jensen 1955b: 1097).

The building was interpreted as a dwelling house, based on findings of common household crockery, as well as finer ceramics, and other household articles and refuse from meals. In the northern part, several loom-weights were found (Stenberger & Klindt-Jensen 1955a: 109-110), possibly indicating the presence of a loom in this end of the building. The green glass beaker, together with another olive-green glass vessel, might suggest that the people living in the house had a high social status. There was also a finger-ring and a strap-end, both made of bronze. The other finds in the building included tools like a spoon-drill and an awl, a whetstone and a grind or hammer stone (Stenberger & Klindt-Jensen 1955a: 115-117) which could suggest that some form of crafting or household work took place inside the building, or that the tools were kept there by the occupants. The loom weights also indicated textile production in Building 2.

The lock-spring found in Building 2 was probably not in its original position because of the later disturbances, but it does indicate the presence of a chest with a lock or perhaps a (cupboard) door somewhere in the house. Since several of the glass-beaker fragments were found very close to the lock-spring, depending on how much the plough moved the objects, it could suggest that the beaker was kept inside a locked chest or perhaps a cupboard.

Building 7 (see figure 7:24) was also interpreted as a dwelling house, measuring approximately 21 by 8 - 9.5 meters. The building contained numerous artefacts in the northern part and hardly any at the southern end. This led to the interpretation that the southern part was used as a stable (Stenberger & Klindt-Jensen 1955a: 140, 152). The construction of the southern part was also described as simpler than the carefully constructed northern part (Stenberger & Klindt-Jensen 1955a: 149). At the northern end of the building there were the remains of a clay floor

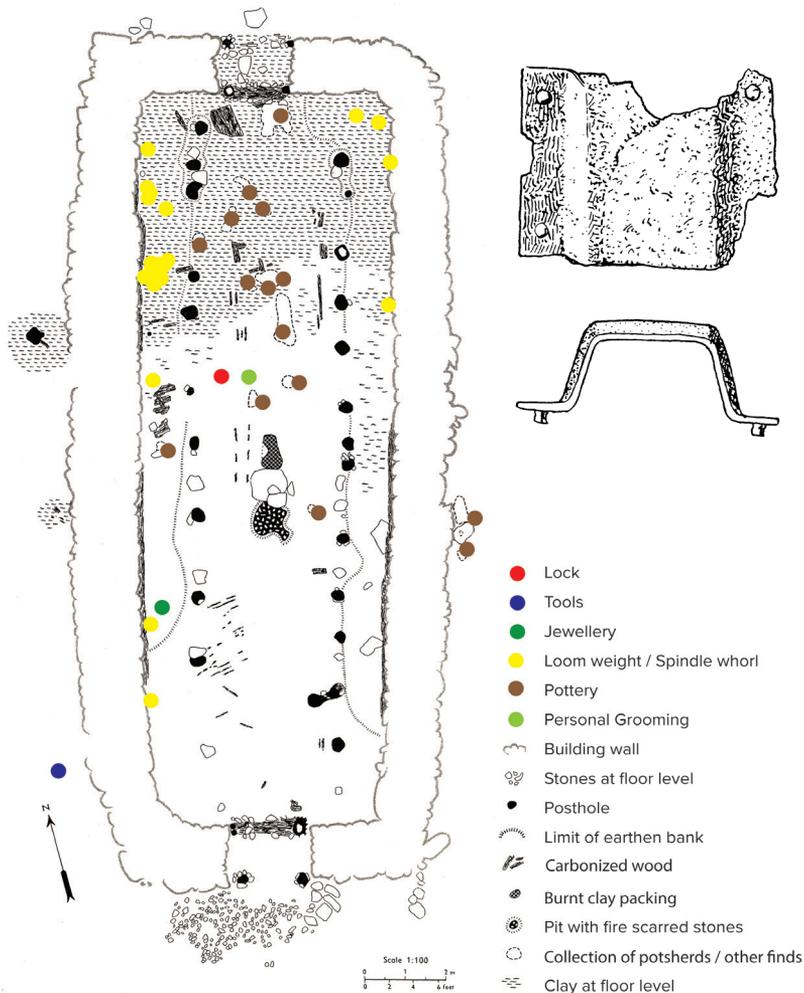


Figure 7:24. Plan over Building 7 at Vallbagar with some categories of finds marked out, and a drawing of the lock-spring case found in the building. Modified, after Stenberger & Klindt-Jensen 1955a: figure 42 and 464, used with permission from the publisher Wiley-Blackwell.

and banks of earth along the walls, possibly the remains of seats or benches; these earthen banks extended southward but were missing at the southern end (Stenberger & Klindt-Jensen 1955b: 1142; 1955a, 152).

Most of the finds lay on the floor itself and included pottery and a large amount of loom weights, some of which seemed to belong to a loom that once stood against the western wall in the northern end. An iron lock-spring case, probably from a chest, was found to the north of the hearth near the centre of the house, next to a decorated bone comb (see figure 7:24) (Stenberger & Klindt-Jensen 1955a: 143, 150-151). It is hypothetical, but the comb was possibly stored in a locked chest, perhaps together with some other personal belongings.

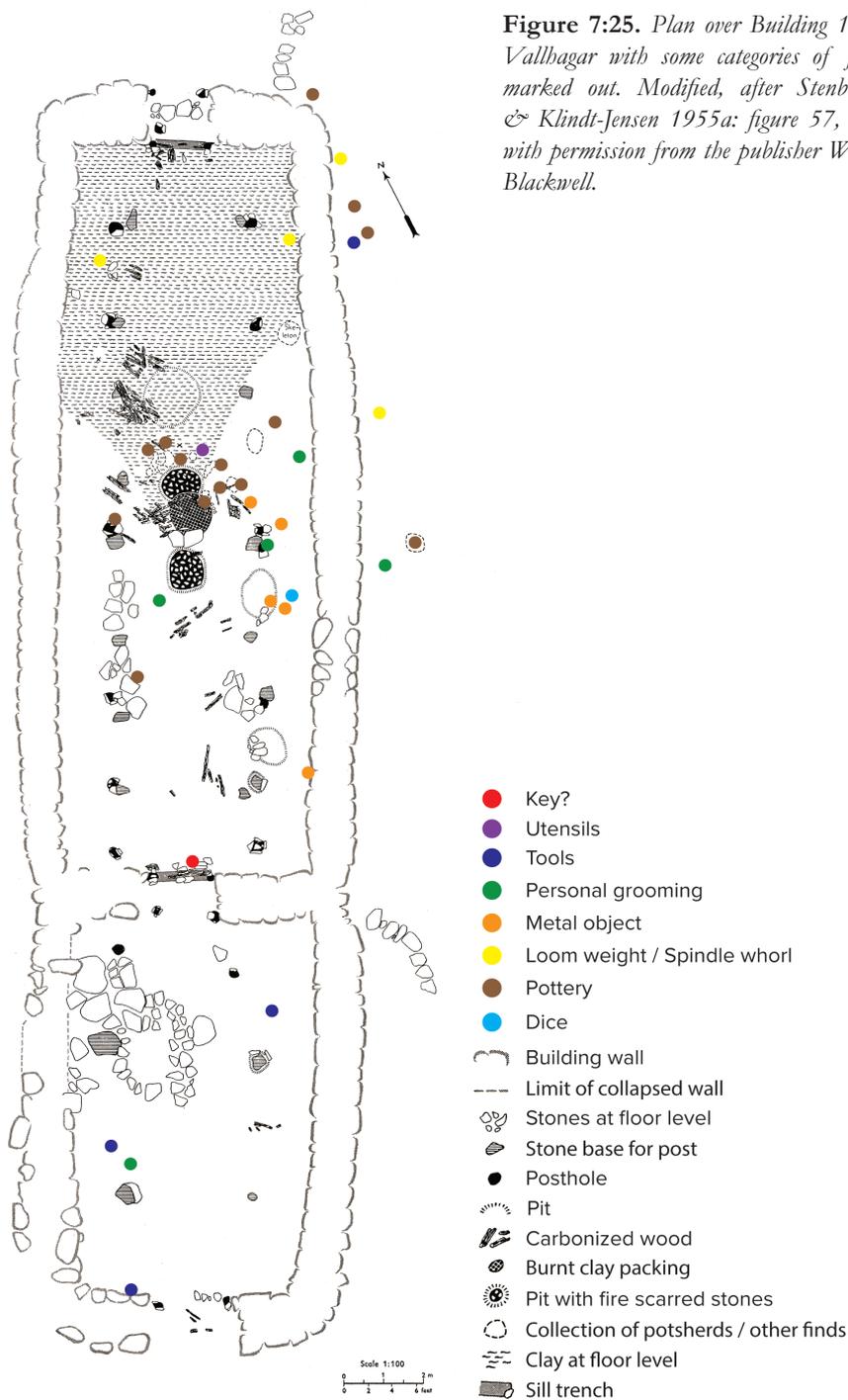
The lock-spring case from Building 7 was of a type that was common on Gotland, which occurred during both the Roman Iron Age and the Migration Period. Since the rest of the finds indicated the Migration Period, this dating is also likely for the Vallhagar lock-spring case (Stenberger & Klindt-Jensen 1955b: 1098).

As well as the comb, another item that could count as a more personal object was a bronze pendant which was found by the western wall in the southern part of the building (Stenberger & Klindt-Jensen 1955a: 142).

The only tool found in connection with Building 7 was an axe found on the outside of the western wall, so the only evidence of activities going on inside the house, apart from food preparation, was textile production.

Building 11 (see figure 7:25) was likewise interpreted as a dwelling house, 32.5 m long and about 8.5 m wide, with a southern extension part that potentially served as a stable. The northern end of the main building had a clay floor while the floor in the rest of the building consisted of natural moraine gravel. The fireplace was located in the centre of the main building. Several almost complete and complete pottery vessels were found around the hearth, covered by bits of the burnt roof (Stenberger & Klindt-Jensen 1955a: 170-172, 174). They were basically standing where they were left when the house was set on fire.

Other finds, most of which were located in the southern two-thirds of the main building, include grind stones and whetstones, fragments of strainers, loom-weights, combs, part of a bronze dress-clasp and a small bone die (Stenberger & Klindt-Jensen 1955a: 173-175).



The few iron objects found included a chisel and a spoon-scraper, the latter found in the southern stable part where a bone point was also found. An iron object interpreted as a possible key, or latch lifter, was located at the threshold of the entrance between the main dwelling part and the stable. It was a 55 cm long curved rod with a large hook at the end. According to Bertil Almgren, who conducted a large study on keys for his doctoral thesis (Almgren 1955), this object was probably used as a key to a lock with a sliding bar (Stenberger & Klindt-Jensen 1955a: 174-175). The key suggests a door with a lock between the two parts, and it was perhaps left in the lock when the house was abandoned. It seems like the abandonment of this house was not planned and perhaps not very peaceful since the burnt skeleton of a man was found against the eastern wall in the northern part of the house (Stenberger & Klindt-Jensen 1955a: 175).

Based on the finds, the activities that would have taken place in the house included some form of crafting, possibly wood working, food preparation, and textile production.

Building 19 (see figure 7:26) was interpreted as an outbuilding or possibly a stable, serving the nearby dwelling house 18 (Stenberger & Klindt-Jensen 1955b: 1148). It was about 20 m long and 8.5 m wide and was unfortunately badly disturbed by later farming activities. The building showed evidence of having been destroyed by fire and later rebuilt with an extension added to the southern end. During the rebuild the northern entrance was also blocked. In the original part of the building, two adjacent fireplaces were found in the centre. The southern extension part was virtually empty of finds, but a few finds were recovered in the northern part, primarily towards the central area. These included some pottery, a loom-weight, a spindle whorl, a whetstone, two hammer stones, a possible chisel, and an iron angular L-shaped lift-key with two teeth (Stenberger & Klindt-Jensen 1955a: 227-231). The key has been interpreted as probably belonging to a chest (Stenberger & Klindt-Jensen 1955b: 1097).

The key was of a type that could be from either the late Roman Iron Age or the Migration Period, but since it was found on the floor of Building 19, and pottery indicated that the building was occupied up to about 500 CE, the Migration Period is more probable (Stenberger & Klindt-Jensen 1955b: 1096-1097). Since the building seems to have

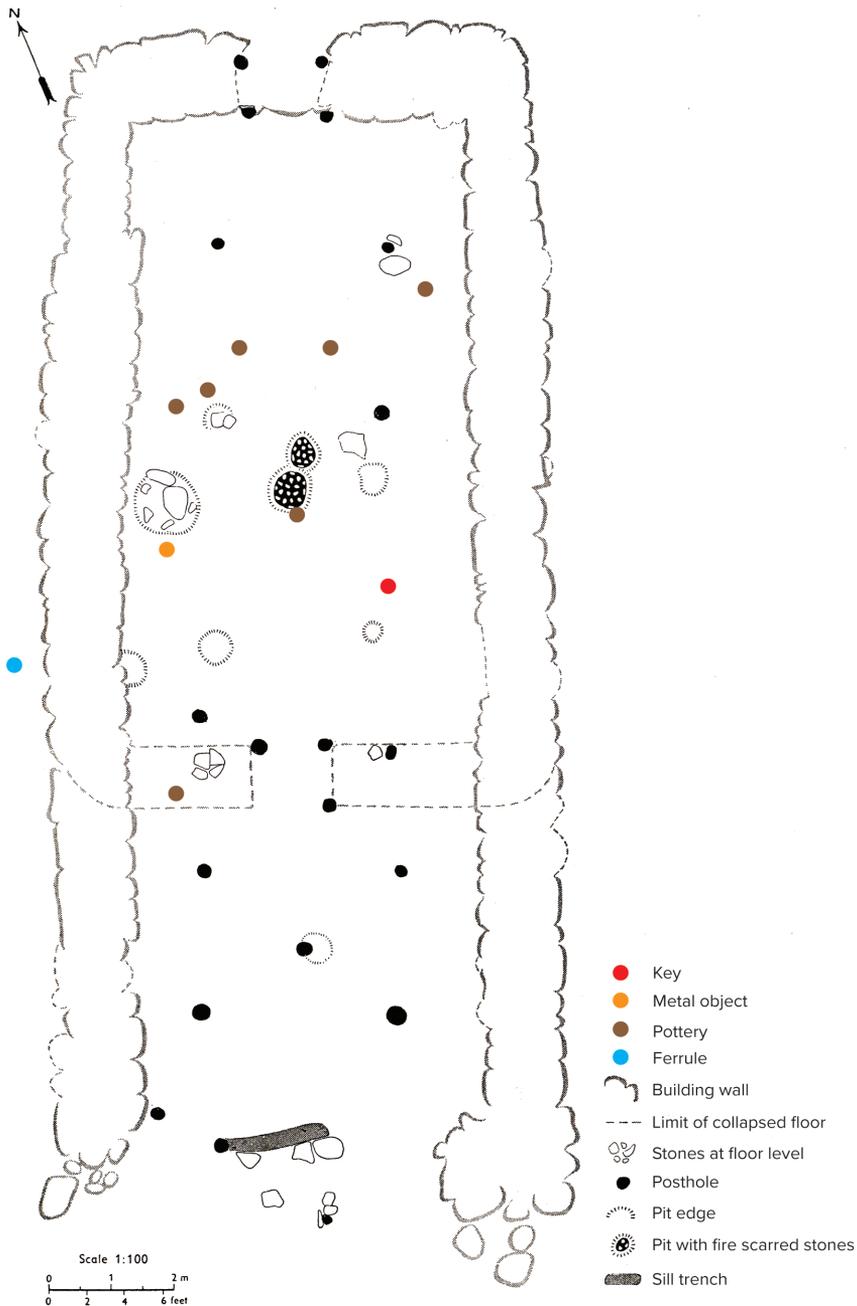


Figure 7:26. Plan over Building 19 at Vallbagar with some categories of finds marked out. Modified, after Stenberger & Klindt-Jensen 1955a: figure 75, used with permission from the publisher Wiley-Blackwell.

been disturbed, the exact location of the key does not provide much information, other than that there would probably have been a chest with a lock in the building or somewhere on the farm; the key would probably not have been kept in the direct vicinity of the chest as this would have cancelled out the security provided by the lock.

The activities that took place in the building as indicated by the finds include food preparation and/or storage, textile production, and some form of crafting. This and the two fireplaces speak against this building being a stable, at least not the northern part. Perhaps it is more likely that it was used as a workshop and/or storage house, possibly also as a dwelling.

To sum up, it seems like three or probably four of the farms at Vallhagar had either a chest or door with lock. The angular L-shaped lift-key in Building 19 probably belonged to a chest, and it is likely that the lock-spring fitting such a key in Building 2 was attached to a chest, stored somewhere in the building. The lock-spring case from Building 7 was probably also part of a chest-lock, whilst the possible key or latch lifter found on the threshold in Building 11 would have belonged to a door-lock. The latter seems to indicate that the door between the stable and the main dwelling part of the house could be locked. Why the inner door to a stable would need to be locked is not clear however, since no one would steal animals from inside the dwelling house. Perhaps it could be locked to make sure no one entered the dwelling section through the stable. Other possibilities could of course be that the key went to a lock on a different door, and was only kept inside the house, or that the southern part was used as a storeroom that needed securing. The presumed chests in the other buildings could have been used to securely store valuable items or resources, or perhaps personal property. The only items in close proximity to the lock-parts, and therefore perhaps stored within a chest, included a comb and a glass beaker; one a personal item and the other a costly high-status drinking vessel.

When stored in a chest inside a dwelling house, which seems to be the case in at least two of the buildings, the threat of unauthorised access to the stored items would probably have come from within the household, or possibly from visiting guests. This could point to social differentiation within the household, where access to certain items or resources was restricted to some. The same would also be partly true for

Examples for comparison

any chests kept in a storage house or workshop, although these would probably have been out of sight at night. Here a threat may also have come from the neighbouring farms or any traveller passing by.

Comparisons of the keys, locks, and chests from Birka, Helgö, Lovö, Sanda, and Vallhagar

In this chapter the keys, locks, and chests found on each of the five sites will be compared in terms of type, number, and context, starting with the settlement sites at Birka, Helgö, Sanda, and Vallhagar, followed by the grave sites at Birka, Helgö, and Lovö. For the settlement sites, the aim was to explore which types of locking devices were common or rare, whether there were any differences or similarities between the sites, and what this could say about locking practices. For the graves, the aim was to explore whether there were any differences or similarities in types of locking devices, how common they were, and whether chests were taken to the grave, perhaps hinting at different locking practices amongst the living, or a different status, social identity, or role of the individuals in the graves, as well as differences in how these were expressed.

This chapter also includes a section exploring the find categories present in the graves and how they compare between sites and inner grave types. Any similarities amongst the graves with keys, locks, or chests beyond those that one can expect to be in common amongst most contemporary graves, could suggest that the individuals buried with these objects may have had a similar status, role, or social identity. Any differences may suggest variations based on the type of location/site, time period, inner grave type, or that these individuals associated with locking practices were perhaps not a homogenous group.

The keys, locks, and chests from the settlement sites

Keys were found on all four settlement sites included in this study – Birka, Helgö, Sanda, and Vallhagar. Birka was by far the site with the most keys, 123 in number, followed by Helgö (58), then Sanda (4) and lastly Vallhagar (2). Below, the number of keys from each site divided into type have been put together into a table (table 8:1). Birka was divided into three areas; The Black Earth (including stray finds, Stolpe’s excavations, and the excavations in the harbour area), the ‘foundry plot’ (excavated in 1990-1995), and the ‘Garrison area’, since these were somewhat different contexts. Helgö was also divided into Building Groups 1-7, although BG5 was omitted since it did not yield any keys, locks, or chests.

Table 8:1. *The keys found on the settlement sites, divided into types. Four uncertain padlock keys from Helgö have here been included amongst the other padlock keys. Rotary keys could be either for padlocks or mounted locks.*

Area	Padlock key	Rotary key	L-shaped lift-key	Angular L-shaped lift-key	Lift-key	T or S-shaped lift-key	Latch lifter	Uncertain	Total No.
Birka's Black Earth	12	16	7	1	3	6		6	51
Birka's foundry plot	6	6	2		4			12	30
Birka's garrison	19	5			1			17	42
Helgö BG1				1	2			6	9
Helgö BG2	10	5	5	3	1			10	34
Helgö BG3	3	1	1	1	1			3	10
Helgö BG4			1					1	2
Helgö BG6								1	1
Helgö BG7		1							1
Sanda	1				1			2	4
Vallhagar				1			1		2
Total No.	51	34	16	7	13	6	1	58	186

As can be seen from the table, when taken together the padlock type clearly dominated, followed by the rotary keys, which could be for either padlocks or mounted locks. The keys that would definitely belong to mounted locks; the L-shaped lift-keys, angular L-shaped lift-keys, fragmentary keys that could be either L-shaped or angular L-shaped lift-keys (Lift-key) as well as the T- and S-shaped lift-keys were not as numerous, but taken together they make up forty-two keys.

From this it could be deduced that keys to mobile locks were generally more widely used. However, it was mainly at Birka and Helgö that these keys were found, and since padlocks were produced at these two sites this may well have affected the distribution. At Vallhagar no padlock keys were found and at Sanda only one padlock key, possibly dating from the end of the Viking Age or beginning of the medieval period, was identified. Furthermore, none of these two sites had any rotary keys (not counting the medieval rotary keys from Sanda or the unspecified keys) which could belong to padlocks.

The keys that were more likely to have belonged to locks mounted on doors; the L-, T-, and S-shaped lift-keys, were also missing on Vallhagar and Sanda and were only found in Birka's Black Earth, 'foundry plot', and Helgö's BG2, BG3 and BG4; in fact, only Birka's Black Earth produced finds of T- and S-shaped lift-keys. The potential latch lifter from Vallhagar would also have belonged to a door-lock. The keys at Sanda and Vallhagar were predominately angular L-shaped lift-keys that most likely belonged to locks on chests. These were also found at Helgö, and one was found in Birka's Black Earth.

Overall, there was more variation amongst the keys from Birka's Black Earth, which is not surprising considering the large number of keys, and also that Birka, besides housing locksmiths, was also a site with a large inflow of various merchandise and people. That more types of keys were available here seems logical. Helgö, also a place with large scale manufacturing and presumably trading activities, likewise had several different types of keys.

All of the settlement sites provided finds of locks or parts of locks (see table 8:2). The largest number were found at Helgö (142 in total), in particular at BG2 (102) followed by Birka (90) where they were more common in the Garrison area, and then Sanda (2) and Vallhagar (2). There were no locks found at BG7. Taken together, by far the most

common type was the padlock, mirroring the situation with the keys. However, at both Sanda and Vallhagar only the remains of mounted locks were found, in the form of a lock-spring and lock-spring cases which most probably belonged to chests.

Table 8:2. *The locks found on the settlement sites, divided into types. Sixteen uncertain padlocks from Helgö have here been included amongst the other padlocks.*

Area	Padlock	Mounted lock	Uncertain	Total No.
Birka's Black Earth	8	8	1	17
Birka's foundry plot	13	2	5	20
Birka's garrison	35	4	14	53
Helgö BG1	11	3	2	16
Helgö BG2	90	7	5	102
Helgö BG3	7	8	5	20
Helgö BG4	2		1	3
Helgö BG6	1			1
Helgö BG7				0
Sanda		2		2
Vallhagar		2		2
Total No.	167	36	33	236

Chests, or rather some of the remaining metal fittings from chests, were identified on all of the sites (see table 8:3). The largest number, twenty-eight, was found at Birka, particularly in the Black Earth, and at least six of these were fitted with locks. Only one chest-mount was identified at Helgö BG6, and it did not provide any indication whether or not the chest once had a lock. There were also some further possible chest-fittings from Helgö, however a more detailed study of these would be necessary to be certain. The remains of chests in the form of the already mentioned lock-parts, two on each site, were found on the Sanda and Vallhagar farms, suggesting the presence of chests with locks.

Comparisons of the keys, locks, and chests

Table 8.3. *The number of chests/chest-parts found on the settlement sites. Lock-parts for mounted locks have been included here since they are likely to have once been attached to a chest.*

Area	Chest-parts
Birka's Black Earth	14
Birka's foundry plot	4
Birka's garrison	10
Helgö BG6	1
Sanda	2
Vallhagar	2
Total No.	33

It is not unlikely that there were once more chests on these sites, but the chest-fittings, often flat and thin, fragment easily leaving few identifiable pieces amongst the settlement remains. Also, as already discussed, chests were generally not likely to have been left behind when a building or settlement was abandoned or taken out of use. Given their capacity to securely transport belongings, they were more likely to have been taken along during a move or reorganisation. Here the Vallhagar site is somewhat of an exception as the farm seems to have been burned down and abandoned quite abruptly. Still, only a lock-spring and a lock-spring case remain of the two chests, perhaps providing some indication of what remained of a chest after a fire and subsequent long-term deposition in the soil, or perhaps suggesting that later ploughing disrupted the floor layers in the buildings.

To sum up, the most common type of locking device amongst the material in the present study was the mobile padlock. However, these were almost exclusively found at the craft and trading sites of Birka and Helgö, where some of them were also manufactured. This suggests a strong association with the sort of activities expected to take place at such sites – trading and travelling – for which the padlock was perfectly adapted. It is consequently unlikely to be a coincidence that padlocks were made there. A different pattern can be seen on the more rural sites, Sanda and Vallhagar, where the most common locking device appears to have been a chest fitted with a lock. Naturally, more sites would need to be studied in order to see if this might be a general pattern that holds true on other sites as well.

Some keys that are likely to belong to locks mounted on doors were also found, primarily at Birka, but there were also a few at Helgö and possibly one at Vallhagar. These indicate that some buildings or rooms were secured with a lock at these sites.

The keys, locks, and chests from the graves

When studying the keys found in the graves at Birka, Helgö, and Lovö (see table 8:4), Birka was by far the site with the largest number with no less than ninety-three keys compared to only four keys on Helgö and four on Lovö. The difference here is considerable; however, the number of excavated Birka graves was also much larger. If instead comparing the percentage of key-graves on each site, also taking time period into account, the Viking Age Birka key-graves constituted 6.6% (total number of excavated graves 1159) while the Vendel/Viking Age key-graves from Helgö constituted 5.7% (total exc. no. 70), and on Lovö the Migration/Vendel Period key-graves constituted 1% (total exc. no. 221) and the Viking Age key-graves 2% (total exc. no. 124). The difference between the Birka and Helgö graves was therefore not so large, but graves with keys were less common on Lovö.

Looking at types, it was the rotary key that was most common, followed by the padlock key, and then the angular L-shaped lift-key. Less common, but still present in four graves, were L-shaped lift-keys, and there was one grave with a latch lifter or angular L-shaped lift-key with a single tooth. The L-shaped lift-keys and the possible latch lifter may have belonged to locks on doors, but it was generally keys to mobile padlocks or chests that were found in graves, rather than door keys.

Comparisons of the keys, locks, and chests

Table 8.4. *The number of keys from the excavated graves from Birka, Helgö, and Lovö, divided into types.*

Area	Padlock key	Rotary key	L-shaped lift-key	Angular L-shaped lift-key	Latch lifter	Uncertain	Total No.
Birka	26	35	4	17		11	93
Helgö		2		1		1	4
Lovö	1			1	1	1	4
Total No.	27	37	4	19	1	13	101

All three sites had at least one grave containing the remains of a lock (see table 8:5). The largest number, thirty-eight, were found at Birka, followed by four found in the graves from Lovö, and a single example from a grave from Helgö. They constituted 3.3% of the Viking Age Birka graves, 1% of the Lovö Migration/Vendel Period graves, 1% of the Lovö Viking Age graves, and 1.4% of the Helgö Vendel/Viking Age graves. Graves with locks were therefore generally very rare on all three sites, but slightly more common at Birka.

Unlike the locks from the settlements, the majority of the locks in the graves were mounted locks, presumably all from chests. The single lock from Helgö, however, was a padlock, and there were also seven padlocks from the Birka graves.

Table 8.5. *The number of locks from the excavated graves at Birka, Helgö, and Lovö, divided into types.*

Area	Padlock	Mounted lock	Total No.
Birka	7	31	38
Helgö	1		1
Lovö		4	4
Total No.	8	35	43

Some chests also followed the deceased into the grave at Birka, Helgö, and Lovö (see table 8:6). The largest number, sixty-seven, was again found amongst the Birka graves although some graves contained more than one. The actual number of chest-graves was sixty-two, constituting 5.3% of all excavated Birka graves. Amongst the graves from Lovö, nine had remains of chests, making up 2% of the Migration/Vendel Period graves and 4% of the Viking Age graves. At Helgö only two graves, or 2.9% of the Viking Age graves, contained chests. Again, these were rare items amongst the grave goods, but they were a bit more common at Birka.

Some of the chests in the graves had the remains of locks; thirty-one chests at Birka had a lock, at Helgö none of the chests did, and at Lovö four of the chests had the remains of locks.

Table 8:6. *The number of chests from the excavated graves from Birka, Helgö, and Lovö.*

Area	Chest
Birka	67
Helgö	2
Lövö	9
Total No.	78

To sum up, keys, locks, and chests were rarely included amongst the grave goods in burials at Birka, Helgö, and Lovö, pointing to a rather exclusive or special expression in these particular graves. Few keys that would have belonged to locks on doors were included in the graves. Instead, it was mainly keys to either padlocks or mounted locks on chests that followed the deceased, along with a few chests.

Whether keys being less common in the Lovö graves than in the Birka and Helgö graves was a result of a different economic situation at the site, different locking practices amongst the living, or differences regarding the (expression of) status, social identity, or the role of the individuals in the graves, is difficult to tell from such a small number of graves. Since no associated settlements were excavated at Lovö, important information that may have helped with the analysis is unfortunately missing. The proportion of graves with locks and chests being more comparable with the other sites still suggests that chests (with locks), perhaps containing personal belongings or supplies, followed the deceased to the grave with roughly the same frequency.

Perhaps the largest difference when comparing the sites is instead the overall larger proportions of keys, locks, and chests in the Birka graves. This may partly be due to the availability of locking devices and chests related to the large focus on trade and crafting, and perhaps also on an international influence at Birka which may have affected locking practices there. It was however also the only site with exclusive chamber graves, as well as other inhumation burials with or without a coffin, where there was no destructive cremation process as there was in the Helgö and Lovö graves. Perhaps this hints at some hidden statistics regarding finds from cremation graves. The occupants of the chamber graves were however also amongst the very richest and potentially to a higher degree in possession of private belongings in need of secure storing.

Find categories in the cremation graves – Similarities and differences between sites

In the following section, all of the cremation graves from Birka, Helgö, and Lovö that contained keys, locks, or chests are compared to see if there were any similarities or differences between the sites. How the Birka and Helgö graves relate to the other contemporary graves on their respective grave fields regarding which find categories were present has also been taken into account. As have some of the findings from the previous chapters regarding the graves from the different sites.

Besides one Migration Period inhumation burial from Lovö (grave 3), it was only the Birka graves that included inhumation burials with keys, locks, or chests. Since cremation generally destroys the grave goods to a higher degree than the more natural decomposition processes in an inhumation burial, it is hard to make direct comparisons between these types of graves. Consequently, as a first step, only the cremation graves were compared, followed later by comparisons with graves from all the other inner grave types.

Since some of the graves with keys, locks, or chests from Lovö were dated to the Migration and early Vendel Period these were sorted into a group, and the Vendel/Viking Age graves into another group. Otherwise, most of the graves in this study were from the Viking Age

or late Vendel/Viking Age. In the following comparisons there are therefore four groups: “Birka Viking Age”, “Helgö Vendel/Viking Age”, “Lovö Vendel/Viking Age”, and “Lovö Migration/Vendel period”. As the graves were so few in number, no finer chronological divisions were included. Furthermore, it should be noted that the Birka grave group was quite a bit larger than the others, and consequently each grave in the three smaller groups will have a higher ‘weight’ when calculating relative frequencies.

In table 8:7 below, the frequency of the find categories present in the cremation graves from the three sites are displayed. As in some of the previous tables, not all find categories were included in order to make the material more manageable and relevant for comparisons.

As can be seen from the table, the Lovö Migration/Vendel period graves stand out compared to the younger graves in that there were several find categories absent in this group, which were present in all or nearly all the other groups. These are *Textile working tools*, *Ice spikes and skates*, *Sharpening tools*, *Thor’s hammers and amulets*⁷², *Trade*, *Weapons and armour*, *Equestrian gear*, *Fire making tools*, and *Foodstuff*. It would therefore appear that there was a difference based on chronological period, but with such a small number of graves it is not possible to suggest that this was a general trend or that it differs from contemporary graves without keys, locks, or chests.

Looking at the table there are also some obvious similarities; *Nails*, *mounts*, *etc.* and *Ceramics* were *Very common* in all grave groups. However, this provides little information and does not set them apart from any other cremation graves since these were generally very common.

Other find categories that were amongst the most common in each grave group (although with some variation when comparing the rate of their occurrence) included *Personal grooming*, *Beads*, and *Dress and personal equipment*. For the Helgö graves and the two Lovö grave groups *Animal bone* was also amongst the most common categories. At Birka *Animal bone* was however noticeably less common compared to the graves from other sites.

72. This is to be expected as Thor’s hammers are generally considered a Viking Age artefact.

Comparisons of the keys, locks, and chests

Table 8:7. The cremation graves from Birka, Helgö, and Lovö containing keys, locks, or chests, sorted into four groups based on site and period. The relative frequency in percent of the various find categories is displayed for each grave group with the absolute number in brackets. The find categories were sorted with the most commonly occurring category first, when counting all the graves together. The highest relative number has been highlighted in bold. Five classes, based on how common a category is, have been displayed using a greyscale as shown by the key at the bottom.

Find category	BIRKA Viking Age (40)	HELGÖ Vendel/ Viking Age (7)	LOVÖ Vendel/ Viking Age (7)	LOVÖ Migration/ Vendel period (5)
Nails, mounts, etc.	93% (37)	100% (7)	100% (7)	80% (4)
Ceramics	80% (32)	100% (7)	100% (7)	80% (4)
Personal grooming	50% (20)	71% (5)	100% (7)	60% (3)
Beads	48% (19)	71% (5)	71% (5)	60% (3)
Key	58% (23)	57% (4)	29% (2)	40% (2)
Dress and personal equipment	50% (20)	57% (4)	57% (4)	40% (2)
Chest	43% (17)	29% (2)	71% (5)	60% (3)
Animal bone	23% (9)	100% (7)	71% (5)	80% (4)
Cutting tools	35% (14)	29% (2)	14% (1)	20% (1)
Jewellery	25% (10)	29% (2)	71% (5)	20% (1)
Lock	30% (12)	14% (1)	14% (1)	40% (2)
Textile working tools	23% (9)	29% (2)	14% (1)	0
Ice spikes and skates	10% (4)	43% (3)	43% (3)	0
Sharpening tools	18% (7)	14% (1)	29% (2)	0
Tools	13% (5)	14% (1)	29% (2)	40% (2)
Thor'shammers and amulets	8% (3)	29% (2)	57% (4)	0
Trade	15% (6)	29% (2)	14% (1)	0
Weapons and armour	13% (5)	14% (1)	29% (2)	0
Equestrian gear	10% (4)	14% (1)	29% (2)	0
Utensils	15% (6)	0	0	20% (1)
Fire making tools	10 % (4)	14% (1)	14% (1)	0
Foodstuff	5% (2)	0	57% (4)	0
Gaming boards and pieces	3% (1)	0	0	20% (1)

Very common (100-76%)	Common (75-51%)	Less common (50-26%)	Uncommon (25-11%)	Rare (10-0%)
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Except for *Personal grooming*, these categories hint at some level of wealth as they include costly items. As seen when comparing the graves with keys, locks, and chests from Birka and from Helgö with contemporary graves from each site (see table 5:21a and 6:13), both show that *Dress*

and personal equipment was noticeably more common amongst the key/lock/chest-graves. *Beads* were more common amongst the key/lock/chest-graves at both sites, but much more so at Birka. Looking at *Animal bone*, for the Helgö graves with keys, locks, or chests this category was considerably more common compared to the other contemporary graves where it was still rather common, but at Birka there was hardly any difference between the key/lock/chest-graves and the others. It would seem that *Animal bone* in cremation burials was generally not as common on Birka compared to Helgö and possibly also Lovö, and that the Birka key/lock/chest-graves did not differ from other Birka graves in this regard. This may consequently be a difference that was dependent on site.⁷³

Another find category that may hint at some level of wealth is *Jewellery*. Here the four grave groups differ somewhat. The Lovö Vendel/Viking Age graves stand out with a much higher frequency of graves containing items from this category; 71% versus 20-29% in the other three groups. For the Birka, Helgö, and the older Lovö graves this does not indicate a very strong association with wealth in jewellery, however, at both Birka and Helgö the key/lock/chest graves with items from this category were a bit more common than in the other contemporary graves on each site. This still suggests an above average wealth for the individuals in the graves with keys, locks, or chests and/or their families, if based on the presence of jewellery. With the Vendel/Viking Age graves from Lovö having a very high rate of graves with items from all the categories *Animal bone*, *Beads*, *Dress and personal equipment*, and *Jewellery*, these graves seem to display a higher level of affluence compared to the key/lock/chest-graves from the other sites. It is worth noting here that the majority of these Lovö graves contained chests, while the key-graves were fewer, suggesting a relatively strong connection between wealth and chests taken to the grave. The situation was the opposite in the contemporary graves from Birka and Helgö, with a larger number of key-graves than chest-graves.

Utensils could also be regarded as an indicator of a well-furnished grave. The occurrence of this find category varied between the four grave groups. It was completely absent amongst all Helgö Vendel/Viking

73. It is also possible that the methods used during the excavations of the Birka cremation graves, and how the bone material was treated and stored afterwards, is partly behind this difference (see chapter 5).

Age and amongst the Lovö Vendel/Viking Age key/lock/chest-graves. In the older Lovö graves it was *Less common*, which is noticeably higher. In the Birka key/lock/chest-graves it was *Uncommon*, but compared to the other Birka cremation graves it was still a bit more frequent.

Gaming boards and pieces could likewise indicate a higher status burial, as game playing could be conceived as a high-status past-time, possibly also related to strategy and intelligence. Amongst the key/lock/chest-graves, this find category was only found in one of the Migration/Vendel period Lovö graves and in one of the Birka graves. Compared to the other Birka and Helgö cremation graves there was very little difference, and generally this find category was rare. It was essentially only the older Lovö graves that stood out with a higher rate of occurrences.

Returning to *Personal grooming*, this category was quite a bit more common amongst the key/lock/chest-graves at both Birka and Helgö compared to the other contemporary graves. As previously pointed out regarding the graves from Birka, there was a stronger connection with *Personal grooming* amongst the graves with a chest, and it is possible that such, perhaps personal, items were indeed stored in a chest. The two graves with a chest from Helgö likewise both contained *Personal Grooming*, as did the five Vendel/Viking Age Lovö graves with chest, and two of the four chests from the Migration/Vendel period Lovö graves. These were not the only graves within each grave group that contained items from the *Personal grooming* category, but there was still a strong association between this category and chests.

If instead looking at the categories that may hint at some association with activities or roles once held in life, the type of find that has been suggested to be associated with the role of the housewife – *Textile working tools* – is a good place to start. This find category, which indicates a possible connection with textile production, was present in all but the Lovö Migration/Vendel period graves. The highest frequency was found amongst the Helgö key/lock/chest-graves where it was *Less common*, but noticeably higher than in the other contemporary Helgö graves. Amongst the Birka key/lock/chest-graves, *Textile working tools* were *Uncommon*, and compared to the other Birka graves they were slightly less frequent. The lowest frequency was found in the Lovö Vendel/Viking Age graves where it was *Uncommon*.

There was consequently a connection between some of the Vendel/Viking Age key/lock/chest-graves and textile production, but it was not very strong. Also, in further response to the suggested association with the housewife, only four of the Birka cremation graves with *Textile working tools* had a key, at Helgö there was one grave, and amongst the Vendel/Viking Age Lovö graves there was also only one such grave. This leaves only six graves in total amongst *all* the cremation graves from Birka, Helgö, and Lovö that could potentially display the burial of a housewife once involved in textile work, if items placed in the grave can indeed be interpreted as indicators of former activities or roles.

Another interesting category to explore is *Weapons and armour*, possibly indicating a connection with warfare, combat, hunting, an armed upper class, or even the role of a warrior. This find category was present in all but the Migration/Vendel period Lovö graves. The highest frequency was found amongst the Vendel/Viking Age graves at Lovö where it was *Less Common*. At Helgö the category was *Uncommon*, but compared to the other Helgö graves the rate was a little higher. At Birka the category was also *Uncommon*, but it was slightly more frequent compared to the other Birka graves without keys, locks, or chests.

Amongst the Vendel/Viking Age cremation graves from Birka, Helgö, and Lovö there were consequently graves that can be associated with warfare, combat, hunting, or an armed upper class, but they were few at all three sites and do not seem to differ much from the contemporary graves without keys, locks, or chests in this regard.

Trade is another find category that is of special interest as it could potentially point to an association with trading activities or perhaps even a role as a merchant. These graves were rather few, however. The highest rate of graves containing items from this category was found amongst the Vendel/Viking Age Helgö graves where it was *Less common*. It was quite a bit higher than the contemporary Helgö graves without keys, locks, or chests, where it was *Rare*. Amongst the Birka graves it was *Uncommon* and only somewhat more frequent compared to the other Birka cremation graves. Looking at the Lovö graves, the category was likewise *Uncommon*.

Two categories that are somewhat related to *Trade* were *Equestrian gear* and *Ice spikes and skates* since they can be related to horses/riding and travelling, or perhaps simply a winter burial in the case of the latter. Both were *Rare* amongst the Birka key/lock/chest-graves with little difference

in comparison with the other Birka cremation graves. *Equestrian gear* amongst the Helgö key/lock/chest-graves was very similar to that of the Birka graves, but amongst the Lovö Vendel/Viking Age graves it was quite a bit more frequent. *Ice spikes and skates* were much more common amongst the Vendel/Viking Age Helgö and Lovö graves, also when compared to the Helgö graves without keys, locks, or chests.

Looking at *Tools*, a find category containing various tools with uncertain or less specific area of use, its presence suggests a possible association with various crafting activities. Items from this find category could be found in all the grave groups with keys, locks, or chests. In both Lovö grave groups it was *Less common*; and it was *Uncommon* in the Birka and Helgö groups. Compared with the other contemporary graves from these two sites they were a bit more common amongst the graves with key/lock/chest-graves.

Cutting tools were also present in all four grave groups with keys, locks, or chests. This category contained mostly knives, but also some shears. Their presence mainly suggests a possible connection with various crafting and household chores, but as discussed previously, knives could also be seen as a (defensive) weapon. The highest frequency was found amongst the Birka graves where it was *Less common*. In the key/lock/chest-graves from Helgö it was also *Less common*. In both these groups the frequency was higher than in their contemporary graves without keys, locks, or chests, but noticeably so in the Birka graves. This could suggest a stronger connection with crafting activities or perhaps personal protection. In both the Lovö grave groups the find category was *Uncommon*.

To sum up, there are several indications that, as a group, the cremation graves with keys, locks, or chests at the three sites were commemorating individuals who were part of affluent families. As a group they generally contained a higher rate of items that would have been costly compared to the other Birka and Helgö cremation graves, although individual exceptions do occur. Additionally, the keys, locks, and chests in themselves should be regarded as costly items.

Some of the individuals buried with keys, locks, or chests also had some form of association with textile production, warfare/combat/hunting, trading activities, travelling, or various crafts, while a few were buried without finds indicating any activity. Few of these stand out as noticeably more or less commonly occurring in the key/lock/

chest-graves compared to the other cremation graves, however, *Cutting tools* in the Birka graves were noticeably more frequent in the key/lock/chest-graves, and the Helgö graves stood out with a higher rate of trade indicating objects.

Nevertheless, there was clearly variation within the group of key/lock/chest-graves. There is no indication of a standard set or combination of grave goods that can be associated with these individuals, and consequently no uniform expression of any specific role or identity. This points to these graves commemorating a varied group of individuals, where the main common trait was that their grave goods indicated that they or their families were rather prosperous, some even amongst the wealthiest. The fact that including a key, lock, or chest in the graves was rare on all three sites also indicates that the individuals buried with one of these objects may have had a higher or special status, or that there were specific or unusual circumstances regarding their deaths. What they also have in common is of course the connection with locking practices, and for some of them, the storing of items in chests. The latter possibly indicating personal possessions or resources taken to the grave.

Find categories – similarities and differences between inner grave types

If comparing the cremation graves containing keys, locks, or chests with those amongst the various inhumation burials from Birka,⁷⁴ as described in chapter 5, both similarities and differences can be found when studying the occurrences of the various find categories in the graves. To help demonstrate these, table 8:8 below shows the key/lock/chest-graves divided into the four different inner grave types, where the rate of occurrence for most of the find categories in each group has been listed. It is worth noting again that the preservation conditions in an inhumation grave are likely better than in a cremation grave, possibly resulting in a somewhat skewed picture.

74. The single Migration Period inhumation burial from Lovö, Grave 3, has not been included here. Its older date and grave composition; being similar to a well-furnished chamber grave but lacking such a grave structure, makes it hard to place in one of the present groups.

Comparisons of the keys, locks, and chests

As earlier described, the Birka coffin graves, inhumation graves, and chamber graves with keys, locks, or chests, display grave goods that, just as for the cremation graves, generally point to greater wealth compared to the other similar graves without keys, locks, or chests. However, there are of course individual differences amongst the graves in all groups.

Table 8:8. *The graves from Birka, Helgö, and Lovö containing keys, locks, or chests, sorted into four groups based on inner grave type. The relative frequency in percent of the various find categories is displayed for each grave group with the absolute number in brackets. The find categories are sorted with the most commonly occurring category first, when counting all the graves together. Five classes, based on how common a category was, have been displayed using a greyscale as shown by the key at the bottom.*

Find category	All cremation graves with key/lock/chest (59)	All coffin graves with key/lock/chest (23)	All inhumation graves with key/lock/chest (16)	All chamber graves with key/lock/chest (44)
Nails, mounts, etc.	93% (55)	0	44% (7)	66% (29)
Beads	54% (32)	74% (17)	63% (10)	73% (32)
Cutting tools	31% (18)	78% (18)	81% (13)	93% (41)
Jewellery	31% (18)	83% (19)	63% (10)	95% (42)
Key	53% (31)	17% (4)	63% (10)	57% (25)
Ceramics	85% (50)	30% (7)	25% (4)	48% (21)
Dress and personal equipment	51% (30)	26% (6)	38% (6)	77% (34)
Chest	46% (27)	22% (5)	44% (7)	75% (33)
Personal grooming	59% (35)	26% (6)	6% (1)	55% (24)
Trade	15% (9)	22% (5)	25% (4)	64% (28)
Utensils	12% (7)	0	19% (3)	61% (27)
Lock	27% (16)	0	13% (2)	45% (20)
Sharpening tools	17% (10)	0	13% (2)	52% (23)
Animal bone	37% (22)	4% (1)	6% (1)	27% (12)
Textile working tools	24% (14)	9% (2)	0	36% (16)
Weapons and armour	14% (8)	0	19% (3)	45% (20)
Tools	14% (8)	22% (5)	19% (3)	43% (19)
Ice spikes and skates	17% (10)	65% (15)	6% (1)	23% (10)
Equestrian gear	12% (7)	0	6% (1)	32% (14)
Thor'shammers and amulets	15% (9)	4% (1)	6% (1)	18% (8)
Bag/purse	0	17% (4)	0	30% (13)
Fire making tools	10% (6)	13% (3)	6% (1)	14% (6)
Gaming boards and pieces	3% (2)	30% (7)	0	11% (5)
Foodstuff	10% (6)	0	0	2% (1)

Very common (100-76%)	Common (75-51%)	Less common (50-26%)	Uncommon (25-11%)	Rare (10-0%)
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It can be seen in table 8:8 that the chamber graves stand out amongst the key/lock/chest-graves as having higher rates of several find categories, not least *Jewellery*, *Dress and personal equipment*, *Utensils*, *Equestrian gear*, *Bag/purse*, *Tools*, *Cutting tools*, *Textile working tools*, *Trade*, and *Weapons and armour*. Similar amongst all key/lock/chest-graves, however, was that they all display individual variation in which types of find categories were present, showing that these individuals were not a homogenous group. Only two find categories were roughly equally frequent in all four grave groups; *Beads* which was *Common*, and *Foodstuff* which was *Rare* amongst all.

A noticeable difference is that *Personal grooming* was much less frequent in the inhumation graves compared to the other key/lock/chest-graves. It can also be seen that the coffin graves and inhumation graves both included fewer find categories, and some categories were present at much lower rates compared to both the chamber graves and the cremation graves.⁷⁵ Perhaps some of these individuals were less well off than those buried in the chamber graves or indeed the cremation graves, or perhaps this hints at a difference in the beliefs for some of the burials, where the question of the existence of Christian graves comes to mind. Some of these graves did however contain Thor's hammer amulets. Furthermore, some of the graves were also identified as children's burials. An interesting difference between the two is that the coffin graves had a much higher rate of *Ice spikes and skates*, also in comparison to the chamber and cremation graves. If this find category were to indicate a winter burial, it could hint at a practice where some of the individuals who died during winter, when the ground was frozen and digging would have been more difficult, may have been placed in coffins and stored somewhere whilst waiting for the ground to get softer. The coffin may alternatively have been an additional cost that not everyone could afford.

Looking at the find categories that may suggest a possible association with specific activities or roles in society as previously discussed, *Trade* occurred at a fairly similar rate amongst the cremation, coffin, and inhumation graves, while being noticeably more common amongst the chamber graves. *Textile working tools* were completely absent from the

75. As previously discussed, it is not unlikely that some of the inhumation graves are actually coffin graves but with all traces of the coffin gone, and that this might partly explain why these two grave groups show some similarities.

Comparisons of the keys, locks, and chests

inhumation graves and *Rare* in the coffin graves, while *Uncommon* and *Less common* in the cremation graves and chamber graves, respectively. *Weapons and armour* were equally common amongst the cremation and inhumation graves but were missing in the coffin graves and noticeably more common in the chamber graves. Furthermore, *Tools* were roughly as frequent in the cremation, coffin, and inhumation graves, but again more common amongst the chamber graves.

Analysis, Conclusions, and Summary

In this final part of this thesis the material from the settlement sites, the burial contexts, and the medieval texts is looked at together and analysed. The first section deals with what the different sources reveal about what was kept under lock and key at the settlement sites and in the chests taken to the grave. This is followed by a discussion and analysis regarding locking practices at the four settlement sites and the social identities that can be connected with these, with a basis in the burial material. After this there follows a section dealing with the symbolism and meanings associated with keys, locks, and chests. The last section concludes and summarises the most important findings of the thesis.

Locking practices and social identities

In this chapter, the five sites – Birka, Helgö, Lovö, Sanda, and Vallhagar – are analysed and compared based on the material and sources in the previous chapters, including the medieval texts. Since Lovö is only represented by grave fields, it will not be part of the discussions concerning locking practices on the settlements. Amongst the four settlement sites, two exemplified sites with a focus on crafts and trading, and the other two showed a more ordinary rural economy.

Kept under lock and key – archaeological contexts and medieval texts

Looking at the archaeological settlement contexts in which the keys, locks, and chest-parts were found, it was essentially only the excavations at Vallhagar (see chapter 7) that resulted in finds of keys and presumably chests with a lock in a position in or near where they would once have been in use or kept. This is related both to the excavation and documentation methods used, and to the condition of the different sites which can all, except for Vallhagar, be generally characterised as cumulative palimpsests (Bailey 2007: 203-205), as described in chapter 1. This has meant a very mixed stratigraphy where no or few individual events could be identified, with finds only rarely being possible to connect to an event, specific structure, or activity area.

At Vallhagar, the locations suggest that in two of the buildings a chest was kept on the floor in a part of the house used for dwelling and textile working, based on the remains of looms. In one of the houses there were also traces of other crafting as well as banqueting: glass sherds from a beaker were found near the chest. In the other house a comb was found near the chest. It is possible that these items were once stored inside the chests, although this cannot be determined with any certainty.

The possible latch lifter in House 11 suggests a potential lock on a door between the dwelling part and the stable or storage section, however it may also have been used elsewhere. The key from House 19 can only be used as an indication of a locked chest somewhere on the farm to which this building belonged.

On the other more rural site, Sanda (see chapter 7), none of the keys, locks, or chests could be tied to a specific building with any certainty, perhaps with the exception of the bronze key in building K60, which may have been used to securely store wheat or some other goods in need of safekeeping. The iron key and lock-spring case assigned to building K21 which were presumably from a chest, may also have been used for secure storage inside this or one of the previous phases of this potential hall-building, but the lack of a clear stratigraphy makes it impossible to be certain. The other keys and chest/lock-part can only more generally be tied to the activities on the farm.

At Birka (see chapter 5), only a few keys, locks, or chests can be placed near where they would once have been kept or in use. One of these was the key found in a floor/roof layer, perhaps in association with an elaborate belt to which it may once have been attached, in what could be a collapsed building on Terrace II in Birka's Garrison area. The remains of a possibly burned chest in the smithy once located there were also found on this terrace. Some of the keys, locks, and chest-parts found in the hall-building on Terrace I, if not deriving from the terrace above, may also have been used in one or more of the building phases, possibly to store some of the many weapons, knives, or combs, etc. found there.

The keys and locks found in refuse layers on the 'foundry plot', interpreted as waste from lock production, were found very close to the activity that created them. The other keys, locks, and chest-parts from Birka can only generally be tied to activities in the town, the harbour, or within the Garrison area.

At Helgö (see chapter 6), all of the keys, locks, and the single identified chest-part could only be tied to layers containing ordinary occupation waste and/or refuse from metal working and various other crafts. At BG3, the keys and locks uncovered were found together with waste from padlock production and, similar to the keys and locks from the ‘foundry plot’ at Birka, may also be close to their place of manufacture. With such a large proportion of the keys and locks being found at BG2, where there were indications of extensive metalworking activities, it would not be surprising if a locksmith operated there as well.

The instances describing what was kept under lock and key or in chests in the medieval texts, as discussed in chapters 3 and 4, showed examples of various items, buildings, and even people being kept locked up. Beginning with the Icelandic sagas (see chapter 3), most of these examples involve chests, at least some of which appear to have been fitted with locks. Items of value such as textiles, precious metals, and weapons were mainly stored in these. When specified, these chests were kept in a hall, an upstairs room, and in a storehouse. For buildings, it was mainly outbuildings that appear to have been locked with proper locks, while doors to dwelling houses were probably secured with a latch on the inside of the door. Stable doors were also secured, and in at least one case a proper lock seems to be referred to.

In the Poetic Edda (Larrington 2014 [1996]; Jónsson 1949, see chapter 3), there are mentions of chests containing treasure or items of value, one of them belonging to the blacksmith, Vǫlundr, which was kept in his smithy (Larrington 2014 [1996]: 101-102). It was also Vǫlundr who held the key to the chest. A parallel to this chest is the possible chest from the smithy at Birka’s Terrace II, although its contents are not known. Another chest was placed in the house of the farmers in the poem *Rígsthula* (Larrington 2014 [1996]: 241). The description of the chest standing on the floor while the man carved wood for a loom-beam fits rather well with the chests found in the houses at Vallhagar, where looms were also present.

Another structure mentioned as being locked in the Poetic Edda is *Valgrind*, the gate to Valhalla (Larrington 2014 [1996]: 51). Here it is interesting to consider a possible parallel with the town wall(s) protecting Birka and the likely existence of a gate or gates, yet to be identified. It is not unlikely that such gates would have been locked at times, possibly

with a proper key operated locking device such as, for instance, a tumbler lock similar to the Assyrian temple locks used to secure gates (see chapter 2). In the Prose Edda (The Uppsala Edda: DG 11 4to, see chapter 3), there are three instances where chests are mentioned. Two of these chests held valuable items, and the third was used for incarceration; not likely to be applicable to real-life situations although such a use cannot be completely ruled out for larger chests.

The Legendary sagas (Jónsson & Vilhjálmsson 1944; Kröningssvärd 1834; Liljegren 1819, see chapter 3) also mention chests containing treasure and valuables -including enchanted things, but also mundane items like ship's nails. The chests were placed inside farmhouses, storehouses, and bowers. Doors to bowers also appear to have locks, as did a cabin and a wardrobe. There was also a gate to a courtyard that appears to have had a lock of some sort.

Moving on to the medieval laws (see chapter 4) and beginning with the Frankish examples from *Lex Salica* (507-511 CE) (Fischer Drew 1993), these indicate that certain structures, boats, and animals were sometimes secured with a lock. Where specifically mentioned, these included pigs, hawks, and beehives. When it comes to buildings/structures these could be unspecified buildings, weaving huts/work rooms, enclosures, and pig sties.

In the Scandinavian provincial laws (see chapter 4), chests, ships, unspecified buildings, storehouses, sheds, and rooms – including the wife's private or inner room and the householder's son's chamber – are mentioned as sometimes being locked. A horse in fetters was also mentioned, referred to as an outdoor lock. Interestingly, a legal rule in the Law of Jutland (Book II, Ch. 96-99) furthermore appears to suggest that the householder's barn and dwelling house did not have locks (Tamm & Vogt 2016: 275).

Returning to the archaeological evidence, all four settlement sites presented in the present study had structures interpreted as outhouses or storehouses, and parts of buildings at Vallhagar and Sanda have been interpreted as byres or stables. At Vallhagar, the possible key/latch lifter found on the threshold may even indicate that the door between the two parts could be locked. There were no archaeological indications that the other buildings were secured with locks, other than the general presence of keys and locks on the sites. If using the medieval texts as inspiration, it is however likely that it was mainly the various outbuildings that were

fitted with proper locks, while dwelling houses may have been secured with a latch on the inside of the door.

Chests taken to the grave

With only two chests from Vallhagar found with potential remains of contents once stored inside, a glass beaker and a comb respectively (see chapter 7), some of the chests found amongst the graves provide additional examples.

Because of the cremation process and the subsequent fragmentation of the grave goods, it was not possible to ascertain if any of the chests found in the cremation graves from Birka, Helgö, and Lovö contained anything since they appear to have been placed on the pyre. There were however a few chests from the various inhumation burials at Birka with the remains of their contents, as previously described in chapter 5. Amongst these, three chests contained items indicating weaving and/or fabric treatment (glass smoothing stones, weaving comb), and one of them also contained a piece of amber and a comb, perhaps indicating some personal items and adornment. Another chest contained one or more ceramic vessels – possibly indicating the storage of utensils or some type of foodstuff. Storing combs and utensils in chests is consequently something that some of the Birka graves may have in common with Vallhagar. One chest contained half a bead, a silver object, a wooden figure, and a wooden animal's head – perhaps the remains of jewellery, and some personal items or wooden remains of decorations on the chest. The box/chest found in the unusual grave A129 contained several pieces of flint, some amber, and glass beads, and one of the small, round boxes contained a bronze bell (see chapter 5).

In her paper on keys in Iron Age female burials, Elisabeth Arwill-Nordbladh (1990) considers the chests as a storage place for personal objects. She points out that there is no indication of what might traditionally be considered valuables inside the Birka chests, although they could have been filled with textiles, food, or other perishable materials (Arwill-Nordbladh 1990: 258). Many of the items in the chests listed above could well be considered personal items without any great value. Textiles that may have been amongst the stored items would

indeed have been considered valuable, however, as would the few pieces of amber, the silver item, and the glass beads to some extent. Perhaps some of these represent parts that fell off items of jewellery that were no longer kept inside the chest.

Nevertheless, the chests in the sagas containing large amounts of silver or treasure are certainly in contrast to the real ones from the Birka graves. Interestingly however, there is a close resemblance between the chest placed at the bottom of the feet of the seated individual in grave Bj 967 (see chapter 5), and the description of a grave in *Grettis saga*, as mentioned earlier (see chapter 3). Here, Grettir broke into Kárs's grave mound and found a chest full of silver by the feet of Kárs's sitting corpse (The saga of Grettir the strong 1997: 187). The contents of the chest in Bj 967 were, however, not preserved.

In three Birka graves there were also clusters of objects that were interpreted as once being stored inside a chest. One such cluster was more uncertain as it contained dress accessories, and cutting and sharpening tools. These are the sort of items that several of the other individuals buried at Birka were wearing when buried. The other two appear to be the remains of tool-chests; one with tools indicating various crafting, weaving, and possibly blacksmithing, and one with tools for carpentry/blacksmithing, and other crafting. One of these also included items associated with game playing and horse riding (see chapter 5).

Possible parallels to these chests can be found in the Viking Age Oseberg ship-burial in Norway where three chests, as well as fragments from approximately seven chests and three smaller chests/boxes, were uncovered. One chest that was still intact contained textile and weaving equipment, as well as two iron lamps, a wooden plate, horse ice spikes, etc. The other two had been looted, but one still contained wild apples and barley, and the other a comb, comb fragments, and remains of leather and cloth. There was also a pail with a lockable lid that contained a lump of yarn or textiles together with three tablets for tablet weaving (Arwill-Nordbladh 1998: 187, 197, 199; Christensen et al. 1993: 58-59). Another interesting example of a Viking Age chest with textile working tools can be found in the Scar boat-burial from Sanday, Orkney (Owen & Dalland 1999), which furthermore hints at Scandinavian settlers on the British Isles making use of chests, perhaps once bringing some of their belongings across the ocean stored in this way.

There are also some parallels to tool-chests elsewhere, although tool-chests in graves are quite rare (Jørgensen 2012: 16). One example is a grave from Ytre Elgsnes in Norway. Here, a male individual was accompanied by a chest with blacksmithing and carpentry tools (Simonsen 1953). The well-preserved *Mästermyr-chest* found on Gotland, containing tools for blacksmithing and carpentry is another example, although it was not found in a grave, but rather at the bottom of a former lake. It also contained two keys, three padlocks, two lock-plates, and three or four lock-springs. The chest itself also had a lock, but none of the keys stored within matched (Arwidsson & Berg 1983).

Locking practices at Birka, Helgö, Sanda, and Vallhagar

Looking at how the keys, locks, and chests may have been used on the four different settlement sites, and by whom, there are both similarities and differences that can be deduced from the finds and features unearthed during the excavations. At the beginning of this thesis some discussion points relating to locking practices were listed: control, access, responsibility, accountability, trust, mobility, and social status. In the following these will be discussed using the archaeological evidence from each of the four sites as well as the medieval texts as presented in the previous chapters. Some of these concepts are closely related and will therefore be discussed together. The situations described and discussed below should furthermore be seen as examples of how material culture in the form of keys, locks, and chests could play an active role in the structuring of cultural practices (see e.g., Jones 1997; Gardner 2007; Williams & Sayer 2009)

On all sites, it can be assumed that some form of restricted access and control was in place as demonstrated by the sheer presence of keys, locks, and chests (with locks). As suggested previously, locks and keys can almost be seen as physical manifestations of controlled access to property, and the chests as the containers for this property. This furthermore indicates that there was some form of social differentiation or inequality on the sites where some had access to things and/or spaces that others did not, and it also suggests the possible presence of private property.

At both Birka and Helgö, the focus on manufacturing and trade suggests a need to safely store products, raw materials, traded goods, and probably also tools under lock. Here it is possible that either the artisans and blacksmiths were themselves in control of access to these by holding the key (like Vǫlundr (Larrington 2014 [1996]: 101-102) from the Poetic Edda, although he was himself incarcerated), or that they had a master who was in control. The latter could point to inequality amongst the residents where some exploited the work of others by controlling the means of production (Keyes 1981: 20). Additionally, food and other resources are likely to have been kept under restricted access, but there is no archaeological evidence of where or under whose control these would have been kept, although the head(s) of the household (the householder and/or housewife) is a likely assumption. Perhaps at Birka, where the needs of the residents could not have been fully met by local food production, there was also a larger store of food and supplies under the control of a governing group or individual making use of locking devices.

Looking to the medieval sources for inspiration (see chapters 3 and 4), there are examples from the Icelandic sagas showing that the person in control of the locks could be the householder and the housewife, as well as a housekeeper. Some high-status men and women were in possession and control over chests; in the Legendary sagas, for example, it was high-status men and sometimes women who had access to locked things and spaces. From the Anglo-Saxon laws there is one example showing that it was the householder who had the main control, with the exception of what was kept under the wife's lock (*II Cnut*, Ch. 76; Thorp 1840: 419). The Scandinavian provincial laws (see chapter 4), particularly the legal rules regarding house-searches, provide further examples of who could be in control over the locks. Here it was mainly the householder, but in some cases also the housewife, the householder's son, tenants and tenant's wives, as well as servants and thralls that were specified as being in control over locks.

Returning to the archaeological material, on the more rural sites at Sanda and Vallhagar (see chapter 7), there were also indications of some crafts and trading, but at a much more modest scale suggesting that it was mainly aimed at household use. Nevertheless, some traded goods, products, raw materials, and tools may still have been kept safe under lock. Depending on how the households may have been arranged and

their size, something which the available material unfortunately provides few clues regarding, it is possible that control over some items were shared, or that only one individual or a smaller group were given access and control over certain things. Food and other supplies needed on the farm were possibly also kept under lock, controlled either by the head(s) of the household or perhaps delegated to some other member. The two chests from Vallhagar that possibly contained a comb and a glass beaker respectively further show that both personal belongings and more costly objects possibly related to banqueting or feasting were stored in this way.

The above discussion can also be related to the concepts of trust, responsibility, and accountability. Firstly, the presence of locking devices on the sites reveals something about trust – or lack thereof – between family members, servants, guests, travellers, and/or neighbours; if there had been complete trust with no risk of unauthorised taking, use, or entry, then no locking device would have been needed. Furthermore, it suggests that ownership could come under question by others; something which is not unlikely to happen in situations where some have more than others (i.e., inequality). As touched upon earlier regarding the origin of property, Marx saw it as a social relationship where the consent of the community is necessary in order for the appropriation of an object to become an individual's property (Keyes 1981: 1, 10, 12). Here the locking device potentially counters out the need for consent and is more in line with the ideas of Hume, Rousseau, and Kant who suggested that possession or occupation was the basis for property (Busse & Strang 2011: 3).

At Birka (see chapter 5), the site with the largest number of keys, locks, and chests, there would have been a large inflow and circulation of people, and many would probably have been considered as strangers by the residents of the town as well as by other visitors. Consequently, there could well have been a lack of trust that may have warranted the use of locks to secure one's home and possessions. Furthermore, the town residents lived close together and may have felt the need to restrict access from their neighbours, some of which may have been itinerant artisans temporarily renting a plot with whom no trust had been built up. Helgö (see chapter 6) may also have seen a rather large inflow and circulation of people in connection with manufacturing and trade, but here one may also consider whether the locking practices and lack

of trust may also have been aimed at the residents of other Building Groups/farms. At Sanda and Vallhagar (see chapters 7), the more rural economies probably meant that fewer strangers came to visit the farms, and perhaps the chests with locks, and the keys found here rather hint at a lack of trust towards neighbouring farms or towards members of the household; possibly servants or lower ranking family members with no or few possessions of their own, suspected of being tempted to commit theft. Such trust issues within the household were of course equally possible at Birka and Helgö.

Additionally, one may consider that hunger may have led to desperation amongst normally trusted household members during a potential famine or shortage, which may have led to food-theft or attempts thereof. Restricting access to the supply via a locking device potentially meant that the food could be distributed in a controlled manner with a higher probability of lasting through winter or some crisis. Keeping guard and the threat of reprimands or punishment may of course also help keeping supplies safe, however, a locking device would take the security to a higher level.

Being in control of access to such a vital resource or indeed other supplies by being the holder of the key would certainly involve trust, but it would also carry with it a great responsibility. However, this would only be the case if it were the whole household's or someone else's resources or belongings that were kept under lock. Looking for examples of similar situations in the Old Norse literature, there is a stanza in *Gylfaginning* in the Prose Edda where it is described that Iðunn keeps in her chest the apples that the gods feed on so that they would not age. It specifically mentions the trustworthiness of Iðunn, but it does not say whether the chest was locked (The Uppsala Edda: DG 11 4to: 44-45). In the same poem, Fylla was also trusted to hold a chest for Frigg (The Uppsala Edda: DG 11 4to: 52-53). Furthermore, some medieval provincial laws describe that if someone sleeps with a female thrall who carries the master's keys (The Younger Västgöta Law: The section concerning Matrimony / *Giftermålsbalken*, 11; Holmbäck & Wessén 1979.5: 284) or kills a male thrall carrying the keys (The Västmannalaw: The Personal Peace Section / *Manhelgdsbalken*, XXIV, §8; Holmbäck & Wessén 1979.2: 77), the fines were higher compared to cases involving other thralls. This suggests that some thralls were more trusted and also valued higher.

On the other hand, if the key held instead belonged to a chest or storage room where the key-bearer kept his/her own belongings, it would involve no trust or responsibility. However, it might come with accountability regarding any potential stolen goods, if using the medieval provincial laws as a guide. As described in chapter 4, several of these laws include rules implying that it was the individual holding the key who was to be regarded as the thief if stolen goods were found behind the lock (e.g., *II Cnut*, Ch. 76; Thorp 1840: 419 and Erik's Zealand Law: Book III, Ch. 44; Tamm & Vogt 2016: 221). There are however also examples where it was still the householder who was accountable in such cases (e.g., the Guta Law, Ch. 37; Peel 2015), suggesting provincial differences.

Holding the key would probably also have been something that increased the social status of an individual; both if the key were delegated by for instance the head(s) of the household where the key may have helped to demonstrate the trusted position appointed to this individual, or if the key belonged to the individual where it may have showed that they had personal property and possibly some wealth. So, holding a key and possibly also having it on display, for instance hanging from a belt or otherwise attached to the dress as suggested by the burial material from Birka (see chapter 5), could be a way to display social status, one's role in society or within the household, or a social identity. This can be seen in relation to the ideas regarding how material culture can be used in the construction, communication, and transformation of identities, but also in regard to how material culture is central and active in the negotiation and performance of identity (Williams & Sayer 2009: 2). The act of locking and unlocking may also have been viewed by others. Since there were different types of locking devices that needed a certain know-how to operate, for instance some required two hands to operate both a key and a bolt and others just one to manoeuvre the key (see chapter 2), this possibly exclusive knowledge may also have helped to set the key-holder apart from others. In this context it is also interesting to reflect on the idea put forward by Patrick Fazioli, that the continual repetition of a particular physio-motor habit, enacted at a non-discursive, preconscious level, can become part of the very core of a person's identity (Fazioli 2014: 29; see also Budden & Sofaer 2009). Perhaps repeated locking and unlocking could have some similar effects. It may also have affected how

others perceived and behaved towards this individual, and likewise it may have affected how this individual perceived him/herself and others who did not have such control of access. This is also in line with Siân Jones's idea that by using a particular object in everyday practice – in this case a key – the meanings that were attributed to the object played an active role in the construction of an individual's identity (Jones 1997: 118).

It is probable that holding the key also had a down-side, as it made this individual a possible target for anyone looking for valuables or resources to steal. This was also hinted at in the medieval laws regarding assaults on a slave carrying the master's keys. As discussed previously in chapter 5, many of the individuals buried with a key at Birka were also accompanied by a knife, and it is possible that this was partly intended as a defensive weapon or a deterrent. No such strong connection could be seen in the grave material from the other sites, which perhaps relates to the type of site that Birka was: a port of trade with people living close together and a large circulation of people travelling from various places. It is conceivable that civilian security was not very strong there.

Regarding mobility, the padlock is perhaps the first thing that comes to mind as it could be moved about freely and used variously to lock doors and chests. Together with a chain or shackle it could be used to secure a large variety of things, including people and livestock (where the lock would be used to restrict mobility). As previously discussed, it was very well suited for individuals involved in trade. That a padlock and chain could be used to secure a ship, at least during the medieval period, can be seen in the previously mentioned rule from the Guta Law (Ch. 36) regarding the care of ships (Peel 2015: 72-73). The Östgöta law (Holmbäck & Wessén 1979.1: 225) and the Södermanna Law (Holmbäck & Wessén 1940: 126) also hint at ships being secured with a lock, although the type of lock was not specified (see chapter 4). Since ships are transportation vehicles, they are also strongly associated with mobility, and there are some examples from the Old Norse sagas of people travelling on ships with some of their belongings or traded goods and merchandise in chests (*Eyrbyggja saga*, Ch. 50; The saga of the people of Eyri 1997: 196 and *Laxdæla saga*, Ch. 44, The saga of the people of Laxardal 1997, 68). If not too heavy, a chest would certainly also have been mobile, and with a lock on it, it would have provided secure storage during the trip. This could potentially mean that the owner of the chest

could leave it more or less unguarded at times during travelling, where perhaps stops along the way meant going ashore and leaving the ship. Likewise, if the chest were taken along during a stop on the way, the lock would provide security during a temporary lodging at a familiar or unfamiliar port. An illustration of a similar scenario can be found in *Eyrbyggja saga* (Ch. 50) (The saga of the people of Eyri 1997: 196), where the travelling Þórgunnu brought her two chests up to the farm Froda whilst waiting for good winds to sail east (see chapter 3).

In a sense, whilst travelling the lock can be said to have provided the freedom to safely leave personal belongings unguarded for periods of time. The same is true also for locks used on doors, cupboards, and chests on the farm, or in the town in the case of Birka. At Birka it is also possible that the home, if locked, could be left unattended for periods of time unless animals were kept on the plot and in need of looking after. This freedom, where the lock took over the role of physically guarding property, can be said to facilitate the mobility of people. This is also interesting in regard to structure, as described by Anthony Giddens, and which could be seen as the rules and resources that are drawn upon by actors in the production of interaction (Giddens 1979: 63-64, 71). These can furthermore both constrain and enable the practice of actors (Gardner 2007: 43). With this as inspiration, the locking device could here be seen as part of the social structure.

The locking device also meant that more valued items that may be attractive to thieves could be safely stored in outbuildings where no people were sleeping at night, which meant that there were no guards and no possibility to secure the door with a latch on the inside, as would be the case in a dwelling house. This could potentially mean that the introduction of locking devices affected the spatial organisation of some farms, and indeed played an active role in the structuring of cultural practices, as discussed by Jones (1997: 118).

As already stated, all four settlement sites had structures interpreted as outbuildings, however, whether they were solely used for storage, sometimes of more valuable items, is not possible to tell from the results of the excavations. The lack of a fireplace in some of the buildings could nevertheless suggest a pure storage purpose.

Returning to the topic of travelling and mobility, there are some examples from the Old Norse literature where chests were transported on horseback, as previously described in chapter 3. One example is

from *Fafnismál* in the Poetic Edda where Sigurðr slayed Fáfnir, filled two chests with gold from the dragon's hoard, and loaded them onto the back of his horse Grani (Larrington 2014 [1996]: 161). This story was also depicted on the late Viking Age runestone *Ramsundsristningen* (see figure 9:1). This places the practice in the Lake Mälaren area during the late Viking Age period, and it is consequently not just a medieval practice.



Figure 9:1. Detail from the Ramsund runestone, Eskilstuna, Södermanland (Raä Jäder 39:1, Sö 101), depicting the horse Grani with a treasure chest on his back. Photograph by Bengt A. Lundberg, 1998-08-12, The National Heritage Board, Stockholm (CC BY 2.5).

Some locking devices were more secure than others, and it is possible that they were intended for different types of supplies, resources, or property depending on value, potential attraction for thieves, and whether they were in a location near people, such as a chest standing inside a dwelling house, or were more secluded, such as an outbuilding. Availability and the technological choices and skill of the local blacksmith/locksmith would naturally also play a part here. In an example from *Grettis saga* (Ch. 19) (The saga of Grettir the strong, 1997: 76-81), previously cited in chapter 3, an outbuilding where clothes were stored is described as having a

strong lock. The type of lock was not described but from the context it appears to have been some type of tumbler lock attached to the door. On the other hand, smaller padlocks such as some of the examples from Birka and Helgö were not very safe as they could rather easily be broken up. Perhaps these were intended for securing more private possessions, not necessarily of any higher value, possibly including items that were intimate or even secret. These may have been stored in chests inside the dwelling house where they would not have been completely out of sight. It is also possible that the smaller padlocks in this context would have functioned similarly to a seal, and as previously discussed, breaking it may have been considered taboo. Further, if it were broken, this would leave a material trace that would raise suspicion and perhaps lead to consequences for the perpetrator.

Keeping private belongings to oneself might not have been easy while living close together on a farm or in the town, and the individuals who had the means of secure storing with a locking device, and indeed any private belongings at all, were probably not the lower ranking members of the household. The locking device could therefore provide access to privacy, for some.

The lock-beds mentioned in several of the Icelandic sagas could similarly provide the higher-ranking members of the household a private space partitioned off from the rest of the house, at least in medieval times. These would however be locked with a bolt on the inside of the door (Hreinsson et al. 1997: 406), so no key would be involved here.

Another type of structure mentioned in the Old Norse literature, not least the Legendary sagas, that did seem to have a proper lock with a key was the private bower that mainly high-status unmarried women seem to have had access to (e.g., *Ragnars saga loðbrókar ok sona hans*, Ch. 2, Jónsson & Vilhjálmsón 1944 and *Göngu-Hrólfs saga*, Ch. 24, Jónsson & Vilhjálmsón 1944). The majority of the keys from the graves included in the present study appear to have been for locks on chests or for padlocks. Only a very few would have fitted locks on doors and potentially symbolised access to such a private space, unless some were secured with padlocks. Furthermore, a private upstairs room was described in some sagas (*Brennu-Njáls saga*, Ch. 3, Njal's saga 1997: 3-6; *Grettis saga*, Ch. 88, The saga of Grettir the strong 1997, 184). Similarly, as referred to in some of the Danish provincial laws, the wife's private or inner room and the householder's son's chamber could be locked

(Valdemar's Law of Zealand, Ch. 87, Tamm & Vogt 2016: 150; the Law of Jutland, Ch. 96-99 Tamm & Vogt 2016: 275).

From the sites in the present study there was no archaeological evidence of any lock-beds or upstairs rooms, and traces of such structures are unlikely to remain. There were also no clear indications of how the outbuildings were once used at the sites. Nevertheless, the medieval texts provide some ideas of how private spaces may have been present on some of the better-off farms, at least during the medieval period, and how locking devices, some operated with a key and others just a bolt on the inside of the door, may have helped secure these. The ones locked with a key would remain secure even when the occupant left.

The bowers in the sagas were sometimes used to safeguard young women from male suitors, not unlikely also referring to protecting her virginity and avoiding unwanted pregnancies; essentially safeguarding future marriage arrangements. While there was nothing in the archaeological material to support such a scenario, there is nevertheless the previously mentioned legal rule from the Frankish *Lex Salica* (Ch. XIII, Fischer Drew 1993: 77-78) that deals with penalties to be paid if a woman/girl was abducted by a man from a locked room or work room. This suggests that in some cases locks may indeed have been used for the protection of women, at least in the Frankish area around the 6th century. There is also a medieval Scandinavian example on a similar subject from the Icelandic *Grágás* (Betrothal section, K §144). It contained a legal rule stating that if a man (the legal guardian) who has given a woman in betrothal has second thoughts, he was forbidden to harbour her or to lock her up (Dennis, Foote & Perkins 2000: 57). Again, the lock was here used to separate a woman from a male suitor.

Unlocking identities

In this section, the findings from the previous chapters, including the settlements, the graves, and the medieval texts, are looked at in order to analyse more specifically which social identities or roles in society can be connected with keys, locks, or chests. This was already touched upon in the previous chapters, however, here the material is looked at

together and additional details are added. Some previous research on related subjects and some further examples are also included.

As mentioned earlier, it was mainly the graves that provided clues regarding the identity of individuals, since these are the only contexts in which material culture can be connected with one person (sometimes more than one). The settlement contexts provide a material which is much more mixed and includes remains from several individuals and events, but it provides a background or social arena for these individuals and their actions.

Some of the ideas in the present study involving identity were inspired by the works of Elizabeth Foulds (2014), Chris Fowler (2010), Timothy Insoll (2007a), Margarita Diaz-Andreu (2005), Joanna Sofaer Derevenski (1997) and Roberta Gilchrist (2009) amongst others, as presented in chapter 1. Here, an individual is seen as a complex mixture of different identity categories that can change according to the context, and over time. These are socially and culturally specific, although biology also plays a part, and can be continually produced or altered through social performances/practice. Sometimes parts of an identity can be suppressed or elevated to fit the situation, and identity also changes throughout a person's lifetime with different aspects of identity becoming available with age.

Importantly, material culture can also play an active role in the construction of an individual's identity (Jones 1997: 118).

The individuals buried with keys, locks, or chests in the present study should be interpreted in light of the above, however, the identity that can be inferred from the burial and the grave goods is very much dependent on how the family, kin-group, or people involved in the actual burial chose to present the deceased. The grave goods do not passively reflect identities or social status, these can be manipulated and altered, however there is often a relationship between the role and status of the deceased in life and the way the remains are disposed of and accompanied by artefacts (Fowler 2010: 360; Renfrew & Bahn 2003: 193). Another important point is that the meaning behind the various grave goods depends on the context, and may convey multiple messages and variability in meaning, even regarding the same type of object (Härke 2013). A key, lock, or chest placed in one grave could consequently have a different meaning placed in another grave.

When attempting to connect keys, locks, and chests with any specific social identities or roles in society, the clearest connection is with the blacksmith and/or locksmith. There is evidence of lock making in the archaeological material from both Birka and Helgö (see chapters 5 and 6): there were two locations at Birka, and if the large quantities of locks and keys from Helgö's Building Group 2 and the unfinished bronze key are taken as indications of a locksmith operation, then there were also two such locations there. At Birka there were also the remains of a burnt chest in the smithy on Terrace II in the Garrison area.

This chest, and indeed the connection between the blacksmith and keys, locks, and chests, has a parallel in *Völundarkviða* in the Poetic Edda (Larrington 2014 [1996]: 101-102, see chapter 3) where Völundr the smith had in his possession a locked chest containing gold and jewellery, items likely crafted by Völundr. He was furthermore the one holding the key to this chest.

The previously mentioned *Mästermyr* tool-chest (Arwidsson & Berg 1983) is another example that can connect a chest with lock with the blacksmith as it contained blacksmithing tools and other implements. It also contained additional keys, padlocks, and lock-parts, perhaps also hinting at locksmithing. This chest, along with an additional eight Viking Age South Scandinavian tool-chests, were studied by archaeologist Julie Lund (2006). She argued that they were deliberately deposited on the banks of rivers and lakes, and connected keys found in some of them with the social role of the smith (the person who made them), with reference to Völundr (Lund 2006).

From the graves with keys, locks, or chests studied in this thesis, there are however few clear signs of blacksmiths. Looking at the tools, there are very few implements that can be said with certainty to have been used for blacksmithing. Hammers were found in two of the Birka graves with keys, locks, or chests. These were the two graves with clusters of objects interpreted as the remains of tool-chests (Bj 644 and Bj 750), and these hammers could have been used in metalworking, however they could also have been used for carpentry. The same is true for a wedge, a drill/auger, and a rasp also found in one of these tool-chests. There were also a few separate tools that may have been used in metalworking; a wedge in Bj 968, a chisel in Bj 954, and a possible chisel in Lovö grave A38.

Looking at the find category *Metalworking*, which includes moulds and crucibles, only three key/lock/chest-graves from Birka and one from Helgö contained such items. Regarding *Slag*, only five Birka-graves and one grave each from Helgö and Lovö contained any. As previously discussed, it is however less certain if these types of finds, which constitute waste from metalworking, actually belonged to the burial, were part of earlier occupation debris, or part of the grave fill.

Consequently, it was mainly in the archaeological traces from metalworking sites at Birka and Helgö, and in the Old Norse literature that one can find a connection between keys, locks, and chests and the blacksmith through the production itself, and through a chest placed in the smithy, possibly for safely storing tools, raw materials, and craft products. Amongst the graves, the strongest indications of a possible association with metalworking and/or a role as a smith were found in the two Birka-graves with tool-chests (see figure 9:2). However, both were double graves interpreted as including a male and a female individual, and it was not possible to tell whom the chests may have belonged to, or whether it belonged to both. Another possibility is that the tool-chests were rather symbolising the couple's or family's control over craft production and blacksmithing at Birka.

As indicated by the archaeological material, there is possibly also a link between keys, locks, and chests and warriors or travelling mercenaries. Specifically, it was the settlement remains from the Garrison area at Birka (see chapter 5) that may suggest such a connection. In previous research, the interpretation of the keys, locks, and chests-parts in the three-aisled building or hall on Terrace I was that chests were placed along the inside walls, and that each warrior in the Garrison had a personal chest in which to keep some of his equipment. It would have been locked with a padlock, and it has been suggested that some of the matching keys, exhibiting a symbol of a falcon, represented the warrior group (Westerholm 2001; Hedenstierna-Jonson 2006: 54). Hedenstierna-Jonson proposed that the standardised character of the weaponry found in the Garrison points to a situation where the individual warriors were provided with most of their weapons; they appear to complement each other for working together according to a strategic plan. She suggested that the weaponry was lent to the warrior on a personal basis by the chieftain, and that the warrior was then responsible for keeping it safe.

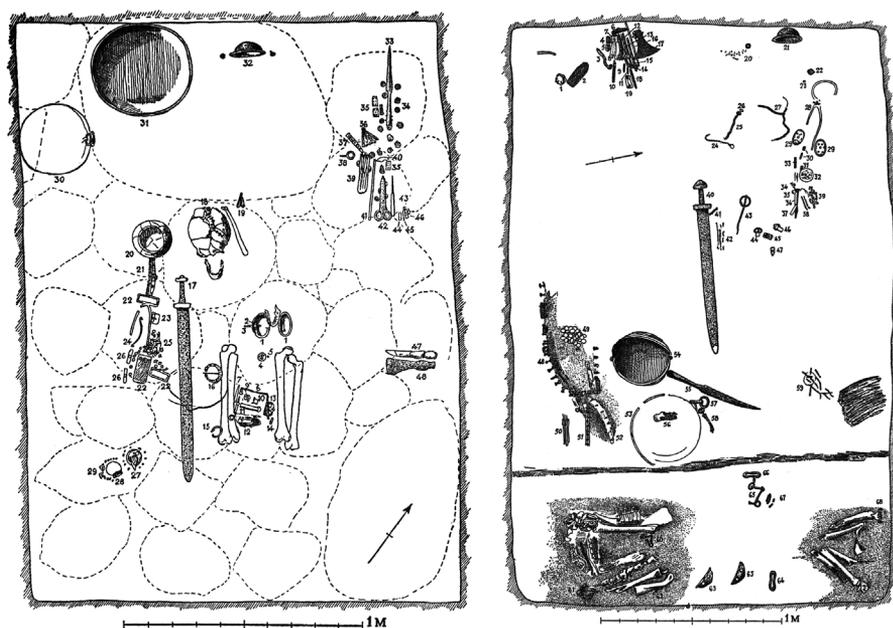


Figure 9.2. Grave plans showing Birka grave Bj 644 (left) with a cluster of tools etc. indicating a tool-chest at the top right corner, and Bj 750 (right) with a tool-cluster at the top left corner. Both were double burials in chamber graves, and both also contained objects indicating trade. Drawings by Harald Olsson after originals by Hjalmar Stolpe (*Arbman* 1943: figure 182 and 217), used with permission.

It is in this context she sees the use of the padlocks: they restricted the use of the weapons to those who were authorised and as such the lock became “a mark of ownership”⁷⁶ (Hedenstierna-Jonson 2015: 78-79).

Following this scenario, and since the padlocks were movable and replaceable, one might conceive that access to the presumed chests and their contents could change hands as new warriors came and went. One can expect that some warriors would have been killed or injured in battle and needed replacing. Perhaps some warriors were more like mercenaries, travelling between different employers/chieftains. It is interesting to look at the padlock production on Terrace II in this context, with a possible demand for new padlocks from warriors coming and going.

The keys with a falcon motif on the handle were few in number in the archaeological material. The most common key handle type on Terrace I

76. In such a scenario, if the weapons were just borrowed, then the ownership would however still have been assigned to the chieftain.

had a flat loop-shaped form, seemingly without decoration. If the falcon motif did have a specific meaning, it would appear to have been reserved for a few individuals. As such it may have signalled a special or higher rank, or perhaps a specific social identity or role. Hedenstierna-Jonson sees them as created to be active bearers of an identity that signalled affiliation to a group and/or a leader (Hedenstierna-Jonson 2015: 82).

The falcon motif can also be found on brooches and sword chapes. The latter display a distribution pattern that reaches from Bretagne to the Ukraine, and the regions along the rivers in Ancient Rus. These are known to have been important routes for trade and war campaigns for the people living in the Lake Mälaren region. Hedenstierna-Jonson suggested that this distribution reflects the activities of trade-networks and that this also implies that the Birka warriors were in the service of trading-associations (Hedenstierna-Jonson 2015: 81, 84-85).

If this were the case, it is likely that some of the warriors would have participated in trading and/or raiding voyages. This would strengthen the idea that some of the Birka warriors could come and go, more like mercenaries, perhaps bringing personal belongings with them on their journeys. This would open up for a slightly different context of use for the padlocks and chests, as they could have been brought with the individual warrior on his travels in order to securely store personal belongings, and perhaps payment and loot.

While the interpretation that chests secured with padlocks were present in the three-ailed building on Terrace I is certainly plausible, the archaeological evidence is however less clear. Firstly, as shown in chapter 5, there is little evidence of chests within the building, and certainly no indication of any being left *in situ*. However, chests are movable objects and if possible, they would have been retrieved or brought along in connection with the destruction or abandonment of the building.

Secondly, the keys, locks, and chest-parts were found in layers and features from different building phases and are not to be interpreted together as one.⁷⁷ Studying each floor level separately, they were only assigned a few of these objects each. For instance, the last floor-level was only assigned one padlock, but also six keys.

As shown in chapter 5, some of the objects also seem to have derived from Terrace II. Considering that there were indications of padlock

77. This is a fact that seems to be frequently overlooked in previous research, also in connection with the spread of the other finds in and near the building.

production in the contemporary smithy on Terrace II, it is therefore possible that discarded keys and locks could have come from there. This suggests that several of the objects may have no direct connection with the three-aisled building, although indirectly some may have been produced for the securing needs of residing warriors/mercenaries. If the building also functioned as a gatehouse, as previously discussed, perhaps armed visitors might have been required to hand in their weapons before entering the town. A padlock or chest with lock could have provided secure storage inside the building, or elsewhere in the Garrison area, during the visit.

Interpreting some of the keys as waste from the smithy could furthermore help explain why so many of them appear to have been found within the building. If they indeed belonged to padlocks or locks on chests stored within, this would have cancelled out the securing function of the lock.

There were also some indications of a connection between keys, locks, and chests and weapons and armour in the graves, and therefore possibly an association with the role/identity as a warrior, or more generally combat, hunting, or an armed upper class. From Birka (see chapter 5) there were twenty-seven graves with keys, locks, or chests that also contained some item/s from the category *Weapons and armour* (see figure 9:3 for two examples). As previously shown, there was however a lot of difference between how common these items were depending on inner grave type, and also whether the graves contained keys, locks, or chests. *Weapons and armour* were more common amongst the graves with chests, particularly in the chamber graves with chests.

From Helgö (see chapter 6), only one grave with a key contained *Weapons and armour* in the form of an arrowhead, and it may consequently relate to either warfare/combat or hunting. At Lovö (see chapter 7) there were three graves with a chest that also contained *Weapons and armour*. Two of the graves were dated to the Viking Age; although the interpretation of the items in question was uncertain due to fragmentation of the objects. One of the chests had the remains of a lock. The third grave was one of the Migration Period graves and contained the burial of an older man. Besides a chest and a range of weapons, he was buried with items indicating elaborate dress, drinking/banqueting, and game playing.

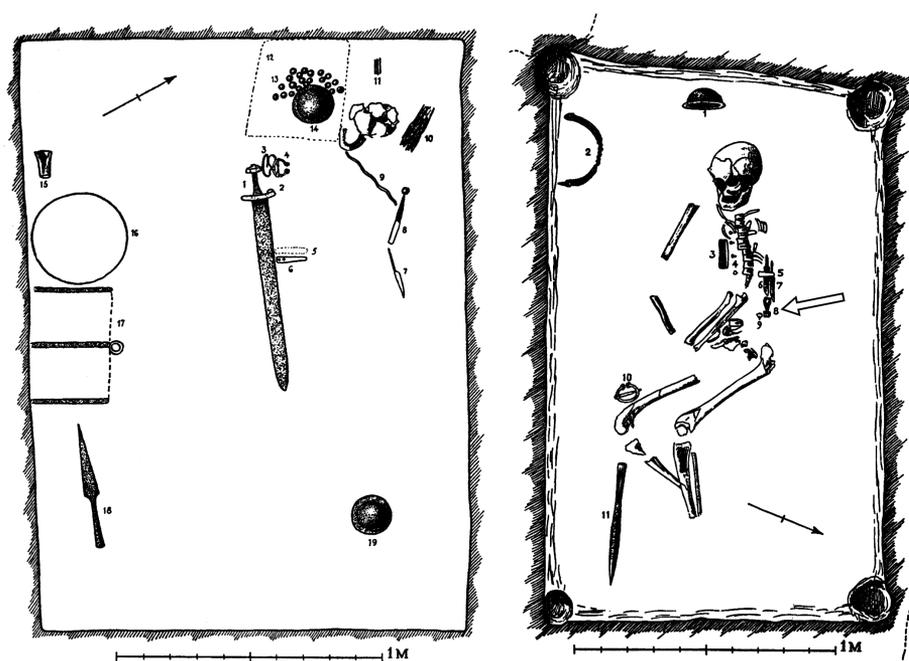


Figure 9.3. Grave plans showing chamber grave Bj 624 (left) with a chest and weapons and armour, and chamber grave Bj 985 (right) with a key and weapons and armour. Drawings by Harald Olsson after originals by Hjalmar Stolpe (*Arbman* 1943: figure 163 and 365), used with permission.

It is consequently foremost, but certainly not exclusively, the graves with chests that may potentially commemorate individuals or families associated with warriors or an armed upper class. Based on the grave plans from the various inhumation burials from Birka (*Arbman* 1943), there is however no indication that the weapons were stored inside the chests, which appear to be too small to contain, for instance, a sword.

In some of the medieval texts there were nevertheless a few references to weapons in chests and to armed heroes, as discussed previously. From the Icelandic sagas there was *Gisla saga Súrssonar* (Ch. 16) where Gisli took a sword from a chest (*Gisli Súrssonar saga* 1997: 2, 18), in *Laxdæla saga* (Ch. 46) where Kjartan placed his sword in a chest (*The saga of the people of Laxardal* 1997: 72), and in *Hávarðar saga Ísfirðings* (Ch. 9) where Hávarður opened a large chest full of weapons and put on a helmet and coat of mail (*The saga of Havard of Isafjord* 1997: 328). From the Poetic Edda there was the already mentioned *Fafnismál* where Sigurður, an armed hero, was in possession of two chests after slaying Fáfnir (*Larrington* 2014 [1996]: 161).

Another possible role or social identity that can be associated with keys, locks, and chests is that of the merchant. Both Birka and Helgö were sites where trading activities were likely to have been very common, and several of the inhabitants may well have been merchants or artisans trading goods and raw materials. Birka and Helgö were also the sites with the largest number of keys, locks, and chests (see chapter 8), in particular padlocks which through their mobility and flexibility, and together with a chain or a chest, were well suited for travelling and trading. Padlocks were also produced at both sites, perhaps simply as a product to trade with, or perhaps as a product that was also used by traders for secure storage and shipping of goods. The association with the merchant is indirect at these sites, but nevertheless, it stands out in comparison with the two more rural sites, Sanda and Vallhagar. Here there were fewer indications of trading activities, and fewer keys, locks, and chests. The most common locking device at these sites appears to have been a chest fitted with a lock.

Looking at the graves, there were further indications of a connection between keys, locks, and chests, and the merchant or trading activities. As previously shown, at both Birka and Helgö (see chapters 5 and 6) the rate of trade indicating objects in the key/lock/chest-graves was noticeably higher than in the other contemporary graves. More specifically, there were forty-three Birka graves with keys, locks, or chests and some trade indicating objects (see figure 9:4 for two examples). Four of these were inhumation graves, five were coffin graves, six were cremation graves, and no less than thirty-two were chamber graves. As previously mentioned, in previous research the chamber graves were suggested to be associated with members of the town's highest social stratum, possibly also in connection with the international character of Birka and its merchants. Amongst the trade indicating objects, weights were the most common, followed by coins, and then a combination of weights and coins. In two graves with weights there was also a pair of scales, and hack silver, respectively.

Amongst the Helgö graves with keys, locks, or chests, there were two Viking Age graves that also contained items indicating trade in the form of silver coins; one key-grave and one chest-grave. The latter, containing the bones from an adult male, also contained a hook and swivel which may have been part of a steelyard that could be a further indication of trading activities.

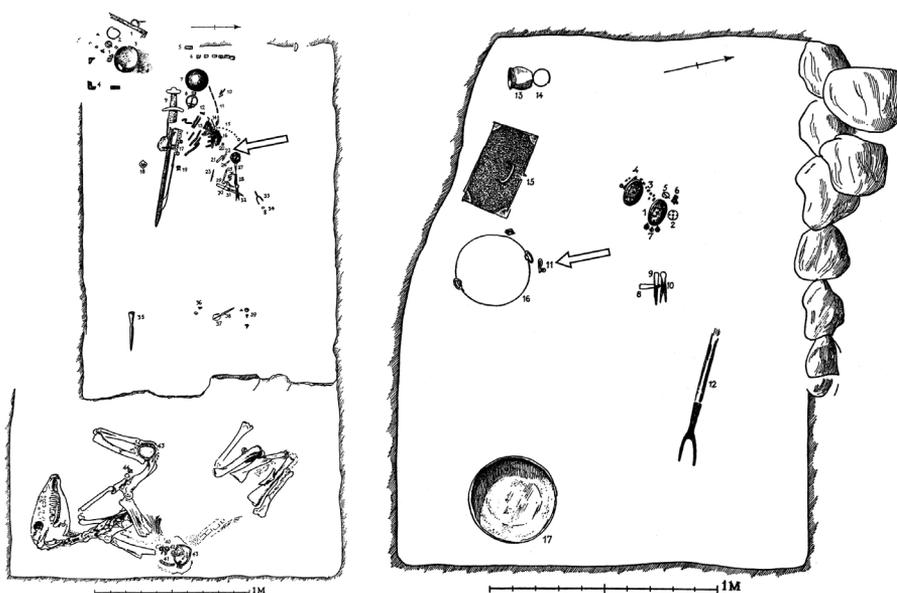


Figure 9:4. Grave plans showing chamber grave Bj 735 (left) (double burial with a horse buried at the foot end) with a chest and a padlock key handle along with two weights and some back-silver indicating trading activities, and chamber grave Bj 739 (right) with two rotary keys (only one marked out on the plan) and a chest with lock along with six weights. Drawings by Harald Olsson after originals by Hjalmar Stolpe (Arbman 1943: figure 208 and 215), used with permission.

From Lovö (see chapter 7), only one key/lock/chest-grave contained any items from the *Trade* category: a silver coin in one of the Viking Age chest-graves containing *Weapons and armour*. It further contained some horse bone and *Equestrian gear*, possibly suggesting the presence of a horse in the grave. If so, this could indicate that the individual in the grave may also have been involved in horse riding/travelling.

The combination of *Trade* and *Weapons and armour* was also seen in fourteen of the Birka key/lock/chest-graves, giving further strength to the idea that some of the Birka warriors may have participated in trading and/or raiding voyages. Furthermore, eight of these also had *Equestrian gear*, six of which even included the burial of a horse, for instance Bj 735 (see figure 9:4).

There were also fifteen Birka key/lock/chest-graves with trade indicating objects and *Tools*, and sixteen with *Textile working tools*, suggesting an association with various crafting activities and trade that fits well with the activities that took place at a site such as Birka. It

should be noted however that some of these graves mentioned above were actually the same graves containing combinations of objects from these find categories, and a few of them were even double burials.

Another interesting circumstance is that all three staffs from Birka were found in chest-graves with items indicating trade (see figure 9:5). As previously suggested, the individuals in these graves may have had some important, perhaps administrative role in trade at Birka where the staffs may even have been used to measure cloth, as proposed by Gustin (2004b: 286-288).

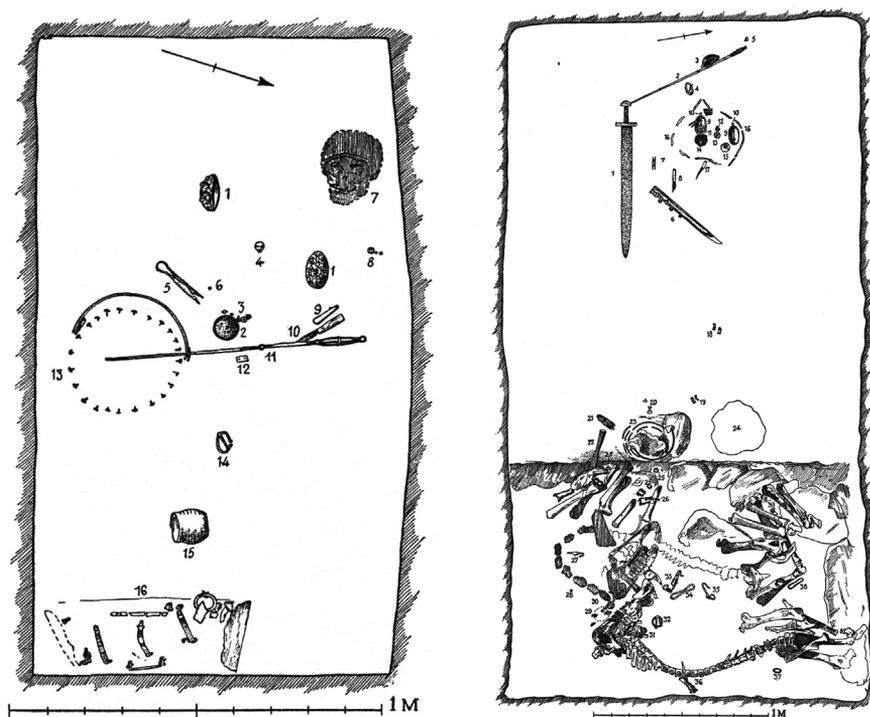


Figure 9:5. Grave plans showing chamber graves Bj 845 (left) and Bj 834 (right). Both contained a chest and a staff. Drawings by Harald Olsson after originals by Hjalmar Stolpe (*Arbman* 1943: figure 189 and 252), used with permission.

There are also a few examples from Old Norse literature connecting chests with trading and travelling, such as the previously mentioned *Laxdæla saga* (Ch. 44) where a chest is brought along and then back from a trading voyage to Norway (The saga of the people of Laxardal 1997, 68). It appears to have contained traded goods shared by the two men Kjartan and Kálfur. There was also the chest in *Brennu-Njáls saga* (Ch. 61) containing shared property belonging to the Norwegians Þórir and Þorgrím who were visiting Iceland (Njal's saga 1997, 73). It is not clear however whether their chest contained traded goods, but it did nevertheless have a lock on it. Another example of chests used for transport during voyages, without a clear connection to trading, is the previously mentioned *Eyrbyggja saga*, where Þórgunnu (Ch. 50) brought two chests on her journey (The saga of the people of Eyri 1997: 196).

From the medieval laws there is furthermore the legal rule regarding care of ships from the Guta Law (Ch. 36), where it was dictated that a cargo vessel must be fastened using a padlock and a chain (Peel 2015: 72-73).

Another possible role or social identity that must be discussed is that of the housewife, central to many of the interpretations involving keys in previous research as seen in chapter 2. With basically only medieval texts as a source regarding this role and what it may have entailed, these texts clearly shape all current interpretations. Even with these sources, the definition of a housewife is nevertheless unclear, but it should at least involve a married female individual. The name, *húsfreyja* – the lady of the house – which is used in the Old Norse texts, has been suggested to demonstrate the married woman's authority over the running of the household. This corresponds to the male *húsbóndi*, meaning the man of the house (Sørensen 1993: 232). The equivalent preferred terms used in the present study are 'housewife' and 'householder'. There is also a runestone in Hassmyra in Fläckebo parish in Västmanland, Sweden (Vs 24) mentioning a housewife. In this case the word used is *hifroya*, but it has been interpreted as having the same meaning (Jansson 1964: 76).

Boandi goðr Holmgautr let ræisa æftir Oðindisu, kunu sina. Kumbr hifroya til Hasumyra æigi bætri, þan byi raðr. Rauð-Ballir risti runir þessar. Sigmundar var [Oðindisa] systir goð. (Vs 24, text in bold by the present author)

The English translation reads:

The good husbandman Holmgautr had (the stone) raised in memory of Óðindísa, his wife. There will come to Høsumýrar no better housewife, who arranges the estate. Red-Balli carved these runes. Óðindísa was a good sister to Sigmundr. (Vs 24)

The carvings on the runestone belong to the rune-style referred to as Pr 4, dated to c. 1070-1100 (Vs 24; Gräslund 2006: 126). This means that the runestone belongs to a period shortly after the Viking Age, and it is therefore an early (however still medieval) example of the housewife (*bifrøya*) in charge of or running the farm (*þan byi raðr*). Nevertheless, it provides no further details about the actual role of the housewife, besides her indeed being married, and with the general context of the runic inscription dedicated to her indicating that she belonged to a wealthy family. There is also no reference to any locks or keys.

From medieval Icelandic texts it would however appear that running the household was optional for a wife, at least on larger farms. A law rule in *Grágás*, Betrothal section, K §152 (Dennis, Foote & Perkins 2000: 66), states that after the wedding, the man was in charge of their property and any buying and selling, but that it was not required for the wife to own a share in the household. If she did, then she was to run the indoor household and dairying – if she wished to. That running the household was optional can also be seen in the previously described section in *Brennu-Njáls saga* where Hallgerðr was asked to take charge, but declines (Njal's saga 1997: 9). As stated before, in the medieval texts no key is ever offered or handed over in these or other situations involving women becoming wives, and no women or housewives are portrayed in any of the Old Norse sagas with a key as a status marker or symbol. This speaks against the key as a symbol of the housewife.

It is however also possible that in some regions or time periods, all women became housewives through the act of marriage, as suggested by, for example, the wedding formula from the Uppland law (The Inheritance Section / *Ärvdabalken*, III, Holmbäck & Wessén 1979: 81). If this were the case, in situations where a new wife was brought to her husband's farm where his parents still resided (as in *Rígsthula*, Larrington 2014 [1996]: 241), one may query if this meant that the husband's mother, who would probably have been the housewife, lost

her position or whether there may have been some form of hierarchy between housewives.

It is highly likely that unmarried couples (and concubines) existed as well, probably occurring more frequently amongst the poorer households, tenants, or servants where the cost of a wedding may not have been possible to afford, or where inheritance matters may not have been so important. This leads to the question of whether the role of the housewife should consequently be regarded as the female head of a wealthy household, where unmarried less well-off women could hold similar roles in their households, but still not qualify to be a housewife.

Similarly, Nanna Løkka, historian of Viking and Medieval religion, pointed out that it was unclear if the role of the housewife referred to the wife of the chieftain or to all free wives. She also pointed out that there are few scholars within Viking Age research who define the concept of the housewife (Løkka 2014: 18). Furthermore, it is important to note that the marriages referred to and described in the medieval texts should be regarded as Christian marriages or at least as seen through a Christian author's eyes, and exactly how couples were set up and arranged in the pre-Christian late Iron Age remains unclear.⁷⁸

It has been suggested, based on Old Norse literature, that the power of a housewife depended on the standing of the householder and on how much responsibility he would give her (Jesch 1991: 187). In the aforementioned section in *Grágás* (Betrothal section, K §152), as well as in the medieval provincial laws, there are also rules regulating how much a housewife was allowed to buy and sell for, and the householder was allowed to cancel purchases if she overstepped the limit (e.g., the Gulathing law: The merchant law, Ch 56, Larson 1935: 76). As the female head of the house, it is nevertheless reasonable to assume that she would still have had a great deal of authority within the household. It has further been pointed out that, based on both sagas and laws, the housewife could take over the entire running of the farm when the householder was travelling. This also included going to the þing assembly (Sørensen 1993: 232).

The activities associated with the role of the housewife in previous research (see chapter 2) include controlling the consumption of resources

78. One may for instance wonder if rings were exchanged during the Viking Age, as suggested in *Rígsthula* (Larrington 2014 [1996]: 241, see chapter 3), or if this is rather an indication that the text has a medieval, Christian origin.

and managing the processing of food, as well as (highly developed) textile production and its organisation. It has been forwarded however that it is a mistake to assume that only women oversaw supplies and the distribution of food. In *Brennu-Njáls saga* men were shown to keep extra stores of dry fish and flour on islands that were brought to the farm only when needed (Jochens 1995: 132). From the sagas and laws, we also know that the housewife was not the only one with access to locked chests and spaces. Here one may also consider that if the housewife were the person in charge of the inner household, she could delegate responsibilities to other household members or servants and may not have needed or wanted to carry (all) keys herself. An example of such a delegation can be seen in the previously mentioned quote from *Eyrbyggja saga* (Ch. 20), where the housekeeper unlocks the storehouse during a house-search instead of the housewife Katla (The saga of the people of Eyri 1997: 153).

When trying to find traces of the housewife in the archaeological material, using keys found on the settlement sites to suggest the presence of housewives would be mere speculations based on a stereotype that was built on medieval texts. It is only within the closed contexts of the graves that any material traces or objects can be connected with a specific individual, and consequently it is the graves that are best suited for this type of study. However, using keys placed in graves to indicate the burial of a housewife is also problematic, even though many scholars believe the key is the very symbol of this role (see chapter 2). As presented in various examples in the present study, there are several things that speak against this idea, besides the fact that no keys were ever handed over in connection with women entering this role in either sagas, poems, or laws. Amongst these issues, none of the keys in the present study were non-functional, like the girdle-hangers which are interpreted as having a purely symbolic purpose. In previous research there seems to be some confusion and mixing of these two separate object categories, with the functionality of the key often being neglected in favour of a symbolic or even decorative purpose. It is also often keys made of bronze that are discussed in these terms. The majority of the keys in this study were made of iron. This suggests that the keys in these graves should generally be seen as practical, functioning objects and not pure symbols, although some may additionally have had a symbolic meaning. It is furthermore bundles or a set of two keys that are usually referred to in connection

with the housewife (inspired by *Rigsthula* (Larrington 2014 [1996]: 241) and *Thrymskvida* (Larrington 2014 [1996]: 95), and as previously shown, in the present study graves with more than one key are very rare (ten graves). Two of these were children's graves, and one was a grave that also contained weapons and armour which would not conform with the traditional image of a housewife. Furthermore, other objects amongst these graves, such as *Equestrian gear*, *Gaming boards and pieces*, and some of the tools, can be associated with activities not usually related with the running of the household. It can also be discussed whether the objects indicating trading activities found in twenty-eight of the eighty-five key-graves (33%) should be associated with the housewife since her authority seems to have been limited concerning purchases, at least according to medieval law. This either speaks against these individuals being housewives, or it shows a discrepancy between the late Iron Age burial material and the medieval sources.

One of the individuals in the key-graves from Helgö was also determined to be an adult male through osteology (see chapter 6), and the key in his possession was one of the few bronze keys. Only two of the key-graves from Lovö were interpreted osteologically as possibly females (F?) (see chapter 7), but there are unfortunately very few such analyses performed on the bone material from the graves included in this study. As previously stated, gender classification based on grave goods has furthermore not been performed here due to the risk of bias and circular arguments, and instead the focus has been on finding traces of activities, status, etc.

Based on the activities that have been associated with the role of a housewife in previous research, one could look for *Textile working tools*. These were present in twenty key-graves, constituting 24%. Looking at the graves with locks or chests the frequency was very similar: 22% and 23% respectively. Amongst the other graves from Birka and Helgö without keys, locks, or chests, there were seventy-five graves with *Textile working tools*, constituting 7%, which was noticeably less common. As seen from the comparisons between all the cremation graves from Birka, Helgö, and Lovö in Part 3, there were however only six cremation graves with keys that contained any of these items, and it is consequently mainly the inhumation burials⁷⁹ from Birka that display this stronger association

79. Only the coffin and chamber graves. *Textile working tools* were absent in the inhumation graves.

with textile working tools. Furthermore, amongst the Birka key/lock/chest-graves it was the graves with chests that had the highest frequency (27%).

It is also possible that those individuals buried with *Textile working tools* but without a key may have been involved in similar activities or held a similar role, and either these were still not regarded as housewives, or there were housewives that were buried without keys. Furthermore, if part of the role of the housewife was to organise the textile production, the only traces that seem to possibly point towards such a position are the staffs found in three of the Birka graves with chests (but without keys). These graves also included items indicating trade. However, if these individuals were indeed holding important administrative positions within textile production and trade at Birka – a crafts and trading site that generally stands out compared to its hinterland – it is questionable whether the role of the housewife fits these three individuals. At Birka the role of a housewife would, nevertheless, most likely have been different to that of a housewife on a rural farm. Still, one may wonder if these individuals who were potentially engaged in administering textile production and trade would also have run the indoor household, or if this was a specialised role. It is possible that they could have delegated traditional household chores to other family members or servants, or perhaps these three individuals were not the female heads of their households (or even female).

In terms of controlling the consumption of resources and managing the processing of food, the other activities usually associated with the housewife, the presence of *Utensils* appears to be the likeliest find category to suggest any such tasks. This category is present in twenty-six of the key-graves, or 31%. Some of the utensils, like the keys themselves, were however found in graves with objects traditionally not compatible with this role, such as weapons and armour, etc. (see e.g., Bj 624 and Bj 985 in figure 9:3), as well as in some children's graves. In fact, they appear to be included in many of the well-furnished graves, especially the chamber graves, and they generally seem to signal affluence rather than management. As suggested previously regarding keys found in or near pails and chests, these might symbolise access to various resources. As such they could point to an administrative role, but they could also point to access that the deceased had for him/herself rather than one for the benefit of the whole household. The grave is nevertheless an

odd context for items meant to serve the living, and this administrative role would have needed to be passed on to someone else. The same is true regarding any keys that would have controlled access to chests, rooms, or buildings on the farm. As suggested by Arwill-Nordbladh, when a housewife died her place would be filled by another woman and any symbolic key would have been passed over to her, not placed in the grave. She also points to the previously mentioned Hassmyra runestone with the phrase “There will come to Høsumýrar no better housewife, who arranges the estate” (Vs 24) which suggests that the role of the housewife was not individual, but transferable, and would be passed on (Arwill-Nordbladh 1990: 257-258). Furthermore, based on one of the previously mentioned provincial legal rules, when the householder/husband died, the housewife/widow could lose the right to rule over what was placed under lock (The Östgöta Law: The section concerning Matrimony / *Giftermålsbalken*, XVIII, Holmbäck & Wessén 1979.1: 109).

Based on the above, there were some graves with keys that could fit the traditional role of the housewife, if indeed *Textile working tools* and/or *Utensils* can be used to indicate activities associated with this role (see figure 9:6 for two possible examples). However, there were graves with keys that also had items that would not fit this role, and at the same time there were graves without keys that would. The same is true if also regarding chests in some of these graves as indicative of a housewife’s administrative role. This suggests that the key cannot be the common denominator for this role. As pointed out previously, there was also variation amongst the key-graves regarding which types of objects were included, and there was no standard set of grave goods in these graves that seems to suggest any particular role or social identity. What most of them have in common is that the burials seem to commemorate individuals who were themselves wealthy, and/or who came from a wealthy family.

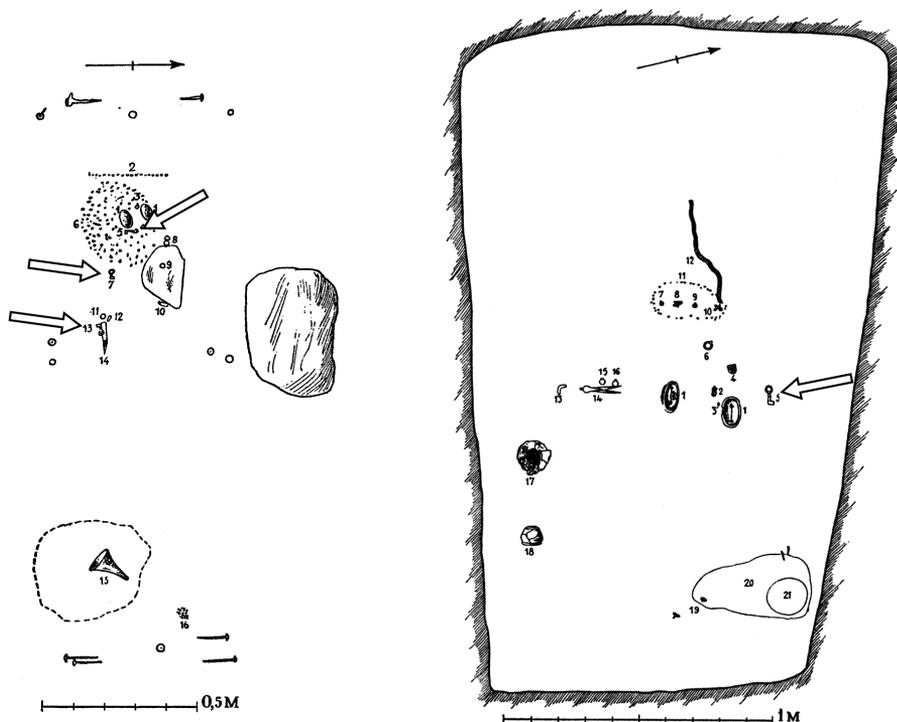


Figure 9.6. Grave plans showing coffin grave Bj 526 (left) and chamber grave Bj 825 (right). These are amongst the graves that would best fit the traditional description of a housewife. Amongst the finds in Bj 526 were three rotary keys, several beads, some jewellery, a needle bousing, and a glass beaker. Amongst the finds in Bj 825 were a rotary key, several pieces of jewellery and beads, and a glass beaker and two ceramic vessels. Drawings by Harald Olsson after originals by Hjalmar Stolpe (*Arbman* 1943: figure 111 and 247), used with permission.

Finally, another role or social identity that has a strong association to (un-)locking practices is that of the thief. To a large extent, the existence of thieves is the very reason for individuals with property using a lock. This role was not likely to have been sought after, however, desperation, greed, or simply an irresistible opportunity could certainly have turned some individuals towards committing theft. For many, this role was probably also a temporary one, but for those who got caught and publicly proclaimed a thief it was likely to have remained with them throughout their lives (although this would have been a very short period if sentenced to death).

The thief appears occasionally in Old Norse literature. In the previously mentioned *Göngu-Hrólfs saga* (Ch. 23-31) a key is central in (wrongfully) pronouncing Björn as a thief, referring to the key giving him sole access to a stolen item hidden in his chest (Liljegren 1818: 101-113). The thief is furthermore one of the main characters in medieval law, through all the regulations and punishments regarding theft and stolen property. From *Lex Saliica* (Ch. XI) we even know of counterfeit keys (Fischer Drew 1993: 76-77).

That the thief was hated and despised can also be read in the medieval laws where stealing was considered more shameful than outright robbery due to its treacherous nature, and was punished much more severely (Beckman 1974 [1924]: 79; Euler 1987: 21-23; Tamm & Vogt 2016: 36).

In the archaeological material it is more difficult to find evidence of thieves or burglary. Looking at the settlement material in the present study, it is conceivable that some of the locks found in a broken state could indicate that a chest, room, or building was broken into at some point, however most objects found in occupation layers were fragmented to various degrees making such a theory unlikely, or at least impossible to verify.

A very interesting find from Hedeby involving a locked chest does however seem to be real evidence of a theft. Here a sea-chest was found in what was once the open water of the harbour. It was found upside-down with the lid sprung open, and the lock gouged out. The only thing inside the chest was a large boulder, suggested to have been a ballast stone used to sink the chest from a boat in order to conceal the crime (Kalmring 2010: 283).

To conclude the above, it is possible to find some connection between keys, locks, and chests, or indeed locking practices, and the roles or social identities of the blacksmith, the warrior/mercenary, the merchant, the thief, and perhaps the housewife, although there are some major concerns regarding this particular role which is so dependent on traditional interpretations of the medieval sources. The connection with textile working should perhaps also be associated with a role of its own, similar to for instance the blacksmith, without the link to the housewife.

The symbolism and meaning behind keys, locks, and chests

In this section various ideas regarding the symbolism of keys, locks, and chests, and the meaning behind their placement in graves, which has been brought up in previous research as well as in the present study, will be summed up and discussed. An important idea here, part of the theoretical framework of this thesis, is that material culture is polysemous, and its meaning can vary depending on the context and the social agents involved, as inspired by Jones (1997: 118). As stated, in the previous research it is mostly the keys that were assigned any symbolic meaning, and therefore this section is more concerned with these. However, some ideas regarding locks and chests are also included, as in the previous chapters.

Generally concerning the symbolism of keys, it was the practical function of the object with its ability to lock and unlock that appears to have formed the foundation. It has been suggested that this opening or closing can for instance be used as a metaphor for birth, death, or the passing from one phase to another (Arwill-Nordbladh 1990: 255). Any symbolism connected with locks would likely also be based on the original function of the object. Since keys, locks, and chests in graves were rare, whatever the meaning behind their placement was, it would only have been valid for a small number of individuals or in a few specific situations. If seen, for example, as a religious symbol, it would not have been widely used.

Furthermore, it is mainly the keys that were placed in graves without an accompanying lock or chest that have been interpreted as symbols, since the practical function of the key was seemingly no longer applicable. It is however possible that in some or perhaps even many of these graves, there may once have been a chest present, but no trace of it has survived. Because of the fragmentary nature of the burial remains, especially the cremation graves, this cannot be ruled out, but nor can it be assumed based only on the presence of a key. In the present study, only one cremation grave contained both a key and a chest. Amongst the inhumation burials fifteen⁸⁰ contained a key and a chest, and eleven of them also had the remains of locks. There was also a cremation grave

80. Eleven of these were chamber graves, two were coffin graves, and one was an inhumation grave.

with a key and a padlock. This shows that in many of the key-graves there was only a key (still) present, particularly in the cremation graves.

As previously described in chapter 5, some of the keys in the inhumation burials were placed either on or very close to the body of the deceased, or by the side of the grave where some were placed either in, on, or next to pails or chests. The latter location has earlier been suggested to perhaps symbolise access to various resources and is therefore an example of possible symbolism even when the key was not placed on its own. Another previously discussed meaning generally regarding chests containing tools is that they may symbolise the buried individual's control over various crafting activities and/or the means of production (Keyes 1981: 20). When the key was found in a position on or near the body it may have been attached to the dress or placed in a pouch or pocket, and as such it may have signified status or identity if placed visibly. It may also have been part of a personal toolkit that included items once used in life and/or perhaps needed in the afterlife. As previously shown in chapter 5, there was no discernible pattern to which tools or implements were found next to the keys, although knives were the most common. In this respect it does not appear to be a uniform expression that was created in these burials, indicating that there was no "standard" toolkit for the key bearer. The variation in the placement of the key within the grave probably also suggests that any symbolism or meaning connected with the key also varied.

In the cremation graves (see chapters 5, 6, and 7) there was also a small bit of variation regarding the placement of the keys, where four graves had a key placed inside a burial vessel⁸¹ while the rest were found in the cremation layer. As with the inhumation burials, this could suggest that there was some different meaning behind the different placement. If using the inhumation burials as a guide, it is furthermore possible that the keys in the cremation graves also included both keys once attached to the dress and keys placed separately from the body, which may hint at different meanings that are no longer possible to tell apart. Another possible symbology regarding keys, locks, and chests in cremation graves is that the fire may have worked to dissolve any control, access, or ownership that these objects may once have represented.

The placement of chests in the inhumation burials may also hint at potentially different meanings. As previously shown in chapter 5,

81. Helgö grave 12, and Birka graves Bj 714, Bj 935 and A88; all Viking Age graves.

most of them were placed at the foot end of the graves or by the feet of the deceased. Others were placed at the head end, and a few along the wall near the middle. A few chests were also placed on top of the body, a placement which may represent a wish to amplify the deceased's ownership of the chest and its contents.

Other indications that chests may symbolise ownership and private property can be seen in *Rígsthula*, where Grandfather, a free farmer, was described as having a chest in his possession (Larrington 2014 [1996]: 240). As argued previously in chapter 3, from the context of the poem it seems to refer to him as having some wealth and property, possibly also signalling his economic stability. Perhaps it was this symbology that was meant to be communicated in some of the burials with chests, boasting both the deceased's and the family's stability and wealth. As such it would have been a display of prestige that probably countered the loss represented by the items placed in the grave. Similarly, since nearly all the graves containing keys, locks, or chests contained costly grave goods, it is possible that these objects simply symbolised affluence and high social status.

Another source that suggests that chests may have had a symbology related to ownership and property is the previously described legal rule instructing how to liberate a thrall by seating the thrall on top of the owner's chest (The Gulathing law: The merchant law, section 61, Larson 1935: 81; see chapter 4). This symbolism could relate to the chest's association with property, in its capacity as a secure storage container. The liberated thrall can therefore be seen as seated on top of the other confined possessions in the chest, having risen in status. The chest might also symbolise the focal point of the owner's power and authority. Since this method was countered by the alternative method of liberating the thrall by bringing him/her to the church, this rule may actually hint at a custom with older, pre-Christian, roots.

In previous research, some of the symbolism regarding keys relates to Christianity, such as the key being a symbol for Christ as master of the realm of death, and St. Peter's keys. There is also a medieval symbolism involving Virgin Mary, where asking her in prayer to lend her keys during childbirth was believed to facilitate delivery. It has also been proposed that some keys could have been used as amulets for protection and as proof of belonging to the Christian belief (Almgren 1942; Steuer 1982;

Arwill-Nordbladh 1990). The graves included in the present study were all pre-Christian however, perhaps with some reservation for the occasional grave from Birka. As previously discussed in chapter 5 however, the roughly east-west alignment seen in many of the graves here, as well as the custom of inhumation burials – both possible to view as Christian traditions – could equally be attributed to cultural influences, perhaps from both Christian, Muslim, and even Danish customs. Nevertheless, with the Christian missionary Ansgar having visited Birka, there are potentially some graves commemorating individuals who had converted to the religion. The vast majority of the Birka coffin, inhumation, and chamber graves with keys were however richly furnished, which would not fit a Christian burial. One inhumation grave, Bj 1044, did however contain only a key, and perhaps this key was a Christian symbol. Still, the key was for a padlock which is not the type generally discussed in connection with such symbology (see e.g., Almgren 1942).

It has furthermore been suggested that in pre-Christian Scandinavia keys could simply also have been used as amulets (Almgren 1942). Examples of this, although in a Christian continental context, have been proposed for a number of Frankish graves where keys without an accompanying chest were found, particularly in the graves of children (Naumann-Steckner 1997: 174). In the present study eight graves with keys and no chest were identified as children's graves, and it is possible the keys in some of these were similarly placed there as amulets.

In the western Urals, padlocks in children's graves have likewise been suggested to have served as amulets. Here it has been proposed that the padlock was placed on the child's chest to prevent further fatalities within families who had suffered frequent child deaths (Tomtlund 1977: 13). It is possible that the padlock in one of the identified children's graves from Birka may have had some similar meaning to the family who had lost their child. The padlock in this coffin-grave was located on the right side of the deceased at chest or waist height, and may once have been located on the chest of the child. As stated above, with such a rare occurrence it would have been very individual or only appropriate in a very few cases.

Most of the padlocks found in the graves included in this study were found without the remains of chests on which they may have been used to secure the contents, and without a matching key with which it would have constituted a practical portable locking device. Unless this is the

result of fragmentation, a symbolic meaning behind their placement seems likely, perhaps as amulets. Maybe they symbolised that something in connection with the burial was locked or un-locked, or that there was a change in ownership. As previously mentioned in chapter 5, Tomtlund (1978) suggested that their use in the graves appears more symbolic than practical, since most of the examples from Birka were broken open and those that were undamaged did not come with a key.

As previously shown, keys were also frequently associated with married women, specifically the housewife, where the key is said to be the symbol of this role and her being in charge of and administering the inner household. This idea was inspired by the eddic poems *Rigsthula* (Larrington 2014 [1996]: 241) and *Thrymskvida* (Larrington 2014 [1996]: 95), and a selection of medieval legal rules, in particular the wedding formula in the Uppland law (The Inheritance Section / *Ärvdabalken*, III, Holmbäck & Wessén 1979: 81). Some scholars even interpret these sources as describing keys being handed over to the newly married wife, however, as discussed in chapters 3 and 4, this is not the case. The keys in *Rigsthula* and *Thrymskvida* were already in the possession of the woman before the wedding, and in the wedding formula the keys and locks mentioned were most likely metaphorical and were not handed over. In the two eddic poems, the keys should rather be seen as symbolising the dowry given to the wife-to-be by her family, and therefore her property and inheritance. However, the keys in *Thrymskvida* have previously also been suggested to symbolise Freyja, wearing the keys to her own farm *Folkevang* (Arwill-Nordbladh 1990: 257). The Uppland wedding formula, including the metaphorical “to locks and keys”, seem to refer to the (unspecified) rights and obligations of the wife, not to the housewife’s administrative role.

Metaphorical locks and keys, or “ruling over locks and keys”, in the medieval laws were also associated with the right of occupancy regarding landed property, as previously shown in chapter 4 (The Östgöta Law: The Land Section / *Jordabalken*, IV & V, Holmbäck & Wessén 1979.1: 141-142, 155, note 12); perhaps some of this meaning could also apply to the locks and keys in the wedding formula. It could refer to the wife’s right to stay at her new husband’s farm and access to the household. As previously mentioned, this right could be challenged and the wife could be “robbed of her locks and keys” and driven away if the husband

placed a new woman in his bed, as indicated by the legal rules concerning “*brudstolsinkräkning*” (bride’s chair intrusion) (e.g., the Uppland Law: The Inheritance Section / *Ärvdabalken*, VI, §3, Holmbäck & Wessén 1979.1: 66). The right to “rule over lock and key” would furthermore disappear if she were to become a widow and re-marry, as can partly be seen in the situation described in the legal rules where the widow leaves her former home and symbolically says she wishes to pass on the locks and keys (e.g., the Uppland Law: The Inheritance Section / *Ärvdabalken*, X, §1, Holmbäck & Wessén 1979.1: 68-69).

There are, as described in chapter 4, further legal rules involving women, marriage, and locks and keys, but none specified what the metaphorical locks and keys actually refer to, and all of these rules were clearly situated within a medieval Christian context. The latter makes it problematic to trace these texts back to the pre-Christian Viking Age, and even further back as some scholars have done. It is also difficult to see how the above symbology fits the keys in the burial contexts. Even if these keys were not metaphorical, they would be tied to a specific farm or property and when the holder of the key died, or the marriage otherwise ended, the key would most likely have been passed on or handed back as seen in the example above. A key symbolising the right of occupancy also seems ill-suited for a burial context as it was so connected with the world of the living.

Nevertheless, such symbology could be tied to actual keys if the item were so connected with the buried individual that they could not be separated from it or it could not be used by anyone else, essentially constituting inalienable property (see Weiner 1992). Perhaps separating the key from the deceased somehow diminished this individual or his/her family. Since this idea is based on anthropology, it would constitute one of few theories not based on medieval texts, but as previously discussed it too comes with source critical issues (see chapter 1). Ideas relating to inalienable property might also explain the presence of some of the locks and chests (including any contents) in the graves.

Another link between keys and the grave is the symbology involving inheritance. As described above, some keys may represent the dowry and therefore the married woman’s property and inheritance. This symbology could also fit some of the chests, as these may have constituted secure containers for the dowry. The association between chests and the dowry

can also be seen in one of the Legendary sagas where Þóra kept gold – her future dowry – together with a snake in a small chest (*Ragnars saga loðbrókar ok sona hans*, Ch. 2, Jónsson & Vilhjálmsón 1944). If for some reason there was no one to whom (what was left of) the dowry/inheritance could be passed onto when the woman died, the key and the dowry may have remained with her and been placed in her grave. It is certainly possible that disease, famine, childlessness, violence, or some accident may have ended a family line. Perhaps some of the graves with keys or chests even represent the burial of women who died during childbirth, in this way ending a family line. Similarly, as suggested by Arwill-Nordbladh (1990: 259), keys, chests, and their contents in female graves may also signify a situation where the joining of two families was never fulfilled due to either childlessness or child death. In this situation the individual in the grave can be seen as representing a potential social and economic line that was broken.

Clearly, (medieval) marriage was firmly associated with inheritance through the creation of legitimate heirs. That inheritance and a concern with what happened to personal belongings after death was something that existed in the Iron Age is furthermore indicated by, for example, the previously mentioned passage in the Anglo-Saxon poem *Beowulf* (lines 450-455). Here Beowulf made an oral will donating his armour (in itself an heirloom) to Hygelac if he were to die fighting Grendel (Garnett 1912). Another example, although from a medieval text, can be found in *Brennu-Njáls saga* (Ch. 61) where Þórir arranged for his companion to take control over their mutually kept property before he, similar to Beowulf, was about to enter a fight which he believed would lead to his death (*Njal's saga* 1997, 73). From Anglo-Saxon Britain there are also a number of written wills disposing of personal property that have survived, most of these dating from the mid-tenth to mid-eleventh centuries, but the earliest are from the first decades of the ninth century (Devlin 2009: 28-33). Making arrangements regarding property after one's death, although probably not in the form of written wills, may also have existed in Scandinavia during the late Iron Age. What was placed in the graves would of course be those items that for some reason were not to be passed on as heirlooms, perhaps comprising items that were needed during the burial ceremony (including how the deceased was to be characterised), in an afterlife, or items that constituted inalienable property (see Weiner 1992).

Another possible connection between keys and inheritance, which also has a connection with burial contexts, can be found in the medieval custom mentioned previously where the heirs could decide whether or not to accept an inheritance from a relative who died with heavy debts (The Law of Jutland, Book I, Ch. 26, Tamm & Vogt 2016: 249-250; Tamm & Jørgensen 1978: 99). If they did not accept, this could be demonstrated by throwing the key to the farm into the grave of the deceased. Similarly, a widespread custom in Europe during the medieval period and the 16th and 17th centuries was that a widow could free herself of her dead husband's debts if she threw her keys on to the husband's grave on the day of the funeral, or hung them on his bier (Carlsson 1942: 93-95).

These examples are of course much later than the Iron Age graves in the present study and belong in a different society, however they provide some additional examples of contexts involving property and inheritance and keys placed in graves that are interesting to consider. The placing of a key in the grave may similarly have signalled an end to a family line, or perhaps an end to a family's right to certain landed property brought on by the death of the last individual with odal rights.

Keys, locks, and chests – beyond the housewife

This chapter concludes and summarises the most important parts of the thesis. The aim has been to investigate and analyse locking practices during the Iron Age through studying keys, locks, and chests and their contexts at five selected previously excavated sites – Birka, Helgö, Lovö, Sanda, and Vallhagar. This has included discussing what their presence could imply in terms control, access, private property, responsibility, accountability, trust, mobility, and social status. It has also involved exploring which social identities or roles in society could be connected with locking practices, with the underlying purpose of broadening the analysis beyond the housewife. More specific questions regarding find circumstances, numbers, types, materials, what was locked up, etc. have also been examined.

The theoretical framework in this thesis was based on ideas involving structure, agency, and practice, and the idea that material culture is polysemous – that its meanings can vary depending on its particular social history, the position of specific social agents, and the contexts in which it is being used. Material culture was also seen as playing an active role in the structuring of cultural practices. The approach in the present thesis has been based on practice theory – emphasising what people do. It thereby follows that through using a particular object in everyday practice, or ritual, the meanings that are attributed to the object can play an active role in the construction of an individual's identity. The creation of identity, which could include a complex mixture of different identity categories, has furthermore been viewed as an ongoing process where agency and practice, and the contexts of the acts were in a

mutual relationship. Relational comparisons between different variables to see similarities and differences have also been viewed as important in its creation. Methodologically this has led to looking at similarities and differences in the archaeological material to find clues regarding the identities of individuals connected with keys, locks, and chests, and how they relate to others without this connection.

An important point in this thesis has been that keys, locks, and chests have a strong association with ownership and property. The physical control that the locking device provides gives the means to regulate access to things, in a sense keeping them in the possession of the individual holding the key. Therefore, ideas concerning these concepts have also been included as part of the theoretical framework. Here, thoughts regarding for instance laws on property, inheritance, and the potentially growing inequality that private property could bring have been of interest. Marx's ideas regarding private ownership of the means of production have also been viewed as important; especially regarding how tools and raw materials may be kept under lock and key. His ideas concerning the need of the community's consent in order for the appropriation of an object to become an individual's property have also been of interest, although the locking device can actually be seen as a way to counter the need for consent. Ideas concerning inalienable property were also considered as relevant, especially regarding some of the grave goods.

When it comes to interpretations of keys in previous research, these have often been seen as symbols of the housewife and her administrative role on the farm. This is an idea that goes back to the late 1800s, but which is still found today. This interpretation heavily depends on a few medieval texts; mainly the Eddaic poems *Rigsthula* and *Thrymskvida*, and a narrow selection of Scandinavian provincial legal rules that deal with marriage and women. To evaluate these interpretations, but also to get a more complete and accurate account of the contexts in which keys, locks, and chests were mentioned in these sources, several medieval texts were studied in this thesis. The hope was to gain new ideas on possible ways to interpret the meaning and use of keys, locks, and chests, from a period less distant from the Iron/Viking Age than our own modern society.

The specific texts chosen for this study included sagas and poems from the *Icelandic sagas*, the *Poetic Edda*, the *Prose Edda*, and *The Legendary sagas*, legal rules from early Frankish and Anglo-Saxon laws, and Scandinavian provincial laws including the Icelandic law compilation *Grágás*.

The study of the sagas and poems resulted in examples describing what was kept under lock and key or in chests. These included various items, buildings, and even people. Amongst the items were treasure/valuables, weapons, and clothes/textiles. It was mainly outbuildings that appear to have been locked with proper locks, including bowers, while doors to dwelling houses were more likely secured with a latch on the inside of the door. When it comes to who had access and control over the locks, it seems both men and women are represented. These include householders and housewives, a housekeeper, betrothed women, the blacksmith, the male hero, the ideal free man/farmer, and various high-status men and women – some of whom were travelling. It was particularly unmarried women who are associated with access to a locked space (bower), often in a context of avoiding a male suitor. An interesting result from studying these sagas and poems was that no keys were ever handed over to a woman, and they were never mentioned in connection with the role of the housewife or married woman. In both *Rígsthula* and *Thrymskvida* the female depicted in the poems, with dangling keys, was already in possession of these keys before her wedding, most likely symbolising her dowry/inheritance and not her coming role as housewife as has often been suggested.

The study of the medieval laws has shown patterns regarding the contexts in which keys, locks, and chests were mentioned. In some of the legal rules the accounts relate to real, physical keys, locks, and chests. These occur in contexts mainly involving securing and managing property, theft and break-ins, house-searches for stolen goods, and in a few cases in association with ships and transportation by sea. On the other hand, in some of the Danish and Swedish laws, keys and locks seem to be more metaphorical. In these cases, the contexts involved inheritance and marriage – seemingly associated with the rights and obligations of the wife/housewife – but also the right of occupancy in regard to landed property.

The various laws related to house-searches for stolen goods also gave important insight into who could hold the key to the locks. It is clear that it was primarily the householder, although it was together with

his wife in a few cases. Otherwise, the wife/housewife was included in several laws as an exception to the householder's otherwise total control. Other specified exceptions included various servants and thralls, tenants and tenant's wives, and the householder's son.

Taken together, the medieval laws studied in this thesis also indicated that certain structures, boats, and animals were sometimes secured with a lock. These include weaving huts/work rooms, enclosures, pig sties, storehouses, sheds, and rooms – including the wife's private or inner room and the householder's son's chamber. Pigs, hawks, and beehives could also be kept under lock, and a horse in fetters was also mentioned, referred to as an outdoor lock.

In the third part of this thesis archaeological material from previously excavated graves and settlement sites dating from the Roman Iron Age to the Viking Age were investigated, providing different types of results. While the settlements mostly gave information related to locking practices, the graves provided clues concerning the individuals who were connected with these practices. All of the chosen sites had the remains of settlements, except for Lovö which was only represented by grave fields, while Sanda and Vallhagar lacked contemporary excavated graves. The latter two furthermore represent sites with a more rural economy, while Birka and Helgö were sites with a focus on crafts and trading.

The study of the settlement sites showed that most of the keys, locks, and chest-parts were found in general occupation layers with waste from many different events and activities, and material from different phases – a site condition which could be referred to as a cumulative palimpsest. This was especially the case at the sites with built-up terraces where several building phases overlapped. Very few of the finds could be tied to a specific building or activity area, or indeed a specific phase. The exceptions were those found at the rather abruptly abandoned farm at Vallhagar, a site condition possibly comparable to a true palimpsest, which indicated chests with locks standing on the floor in a part of the house used for dwelling and textile working/weaving, amongst other things. There were also potential traces of what was once stored inside these chests: a glass beaker and a comb, respectively, indicating that valuable items for feasting/banqueting as well as personal items may have been stored in chests.

No other chest-parts from the settlement sites were found with items that were possible to connect with the chest. As pointed out, chests were unlikely to have remained or been left behind when a site or building was abandoned since they were mobile and ideal for transporting. Therefore, the chest-parts that were found may rather be from discarded chests or the remains from chests that were destroyed in house fires, for example.

A possible latch lifter found at the threshold in one of the Vallhagar buildings may also hint at a locked door between the dwelling and the stable/storage part of the building. The other key from Vallhagar, probably belonging to a chest, was found in a more disturbed layer and could only be generally associated with the farm where it was found.

Some further examples of keys, locks, and chests found near their original place of use, although more uncertain, included what might be the remains of a burned chest in a smithy on Terrace II in Birka's garrison area. There was also a key found near an oriental belt in one of the other buildings on the same terrace, perhaps indicating that the building was (partly) used for storage of dress accessories and clothes. It is possible that the key was once attached to the belt. Roof and wall debris suggest the building may have collapsed/burned, and the rubble could have hidden the objects, explaining why they were not recovered.

Some of the keys, padlocks, and occasional chest-parts found on Terrace I in the garrison area may also have been used in one or more of the identified building phases, the last represented by a possible hall-building. It has been theorised that it was resident warriors, mercenaries, or armed visitors handing in their weapons in order to be allowed entry to the town, who made use of keys, locks, and chests to safely store their belongings in the building, which may also have served as a gatehouse. Several of them may constitute waste from the smithy on the terrace above however, where there was evidence of padlock production.

Another location with evidence of lock-making at Birka was the so-called 'foundry plot'. Here keys and padlocks were found in refuse layers together with moulds and solder packages, and were interpreted as waste from lock production. They were nevertheless found very close to the activity that created them. The other keys, locks, and chest-parts from Birka were only possible to tie to the general activities in the town, the harbour, or within the garrison area.

Evidence of padlock production was also found at Helgö in Building Group 3, but it is also likely that keys and locks were manufactured in

Building Group 2 where the largest number of these objects were found. An unfinished bronze key uncovered here could also be an indication of this. Otherwise, the keys, locks, and the identified chest-part from the Helgö settlements could only be generally tied to layers containing a mix of ordinary occupation waste and/or refuse from metal working and various other crafts. It has furthermore not been possible to tell if these were just products of the workshops and/or items used for control of access and secure storage at the sites.

On the other rural site, Sanda, none of the keys, locks, or chest-parts could be tied with certainty to a specific building or activity area, perhaps with the exception of a bronze key in a building that may have partly been used for storing wheat. There was also an iron key and a lock-spring case from a chest assigned to a building interpreted as a possible hall, but the lack of a clear stratigraphy made it impossible to be certain to which of the building phases it may have belonged. The other keys and chest/lock-part could only be tied more generally to the activities on the farm. In Sanda there seems to have been some continuity in using keys, locks, and chests from the Vendel Period, through the Viking Age and into the medieval period, although the objects recovered were rather few and gaps may of course have existed.

Nevertheless, by looking at the types of keys and locks and the presence of chests, further clues to locking practices have been found. The most common type of locking device amongst the material in the present study was the mobile padlock. However, these were almost exclusively found at the crafts and trading sites of Birka and Helgö, where some of them were also manufactured. This suggests a strong association with the sort of activities expected to take place at such sites – trading and travelling – for which the padlock was perfectly adapted. It is consequently unlikely to be a coincidence that it was padlocks that were made there. A different pattern can be seen on the more rural sites, Sanda and Vallhagar, where the most common locking device appears to have been a chest fitted with a lock. In order to see if this might have been a general pattern, more sites would need to be studied. Some keys that were likely to have belonged to locks mounted on doors were also found, primarily at Birka, but there were also a few at Helgö and possibly one at Vallhagar. These indicate that some buildings or rooms were also secured with a lock at these sites.

As part of the theoretical framework of this thesis it was noted that it was the living who created the burials, and they may have used them to express and influence their relationships with others who were still alive, as much as to symbolise or serve the dead. Burial practices or rituals can also be regarded as contexts for the display, constitution, and alteration of identities of both the living and the deceased, where the grave goods played an active part. Nevertheless, what was buried with the deceased was not an exact equivalent of either status or material goods owned in life, although there often seems to have been some connection.

Another important point is that the meaning behind the various grave goods is dependent on the context, and may convey multiple messages and variability in meaning, even regarding the same type of object. A key, lock, or chest placed in one grave could consequently have a different meaning placed in another grave.

As a way forward, grave goods in the present study have nevertheless cautiously been seen as connected with the identity of the individual in the grave, but chosen for various reasons by the family or kin group, or whoever conducted the burial. This would suggest that the grave goods probably displayed an ideal or suitably altered version of this person's identity, where certain aspects may have been highlighted and some oppressed.

When it comes to sex/gender of the deceased in the graves included in the present study, this has mostly been interpreted in the archaeological reports through the objects in the grave – what could be referred to as *archaeological sex* – and only rarely through osteology or DNA. Since keys are traditionally viewed as female objects, this points to the risk of bias and circular arguments if using these interpretations. To move away from such traditional interpretations, the approach in the present study has been to not focus on sex/gender, but instead to find clues to past activities or roles in society; keeping in mind the ideas concerning how practice and material culture may affect an individual's identity.

Here, the method of looking for similarities and differences between the graves has been seen as a way to provide clues regarding the identities of the deceased, including how they relate to graves without keys, locks, or chests. In order to make the various objects in the graves comparable, these were sorted into find categories, mainly based on the type of activity or way of life that they may indicate.

The study of the graves with keys, locks, or chests resulted in a diverse picture where no one specific identity, role, or activity can be connected with the individuals buried with keys, locks, or chests. If the grave goods actually represent the individuals in the graves and what they may have done in life, some of these people were once involved in various crafting, textile work (some of it finer work such as embroidery/sewing), travelling/horse-riding, trading, drinking/banqueting, game playing, or hunting/combat. Some of these can generally be associated with a high-status way of life. Similar amongst these graves was that they all display significant individual variation in which types of find categories were present; showing that these individuals were not a homogenous group.

What the majority of the graves did have in common, however, was that they included costly grave goods. Compared to the graves without keys, locks, or chests from Birka and Helgö, these graves generally had more find categories present and most find categories occurred at a higher rate. Consequently, the graves with keys, locks, or chests generally appear to be better equipped than most other graves, although there were of course individual differences and exceptions. The selection was also small, which meant it had a larger margin of error.

Nevertheless, for the graves included in the present study, the available material suggests that most of these individuals had a high social status and/or were wealthy individuals or members of wealthy families. This in turn indicates that they may also have had access to resources and perhaps also personal property, some of which might have followed them into the grave inside a chest.

By looking at the types of keys and locks and the presence of chests, some further conclusions regarding these graves were also made. Most importantly, keys, locks, and chests were rarely included amongst the grave goods at Birka, Helgö, and Lovö, pointing to a rather exclusive or special expression in these particular graves. Few keys that would have belonged to locks on doors were included in the graves. Instead, it was mainly keys to either padlocks or mounted locks on chests that followed the deceased, along with some chests. The most common material was iron, and all of the objects appear to have been functioning objects.

When comparing the different sites, the main difference was that a somewhat larger proportion of these objects were in the Birka graves. This could relate to greater availability at Birka since the site was an important port of trade, perhaps with an international influence which

may have affected locking practices. It was however also the only site with chamber graves and other inhumation burials, where there was no destructive cremation process as there was in the Helgö and Lovö graves. Perhaps this hints at some hidden statistics regarding finds from cremation graves. The occupants of the chamber graves were furthermore amongst the very richest, potentially having more access to resources and private belongings.

In the analysis and discussion part of this thesis, the various archaeological and medieval text sources were examined together, along with a few additional examples. This included a discussion regarding what was kept under lock and key on the settlements, and what may have been stored inside the chests taken to the grave. Unfortunately, the archaeological material was not able to give many answers due to fragmentation. It was mainly from the inhumation burials at Birka that a few traces of the contents of the chests were identified, as well as the chests from Vallhagar. Amongst the identified items there were a few combs, utensils, fragments of jewellery/beads, and items used for fabric treatment and weaving. These included both personal and possibly valuable items, as well as items used in textile working. The likelihood of textiles or clothes once stored in chests was also discussed, although no archaeological traces of this have survived.

Locking practices on the settlements were discussed and analysed based on the concepts of control, access, responsibility, accountability, trust, mobility, and social status. Some of the more important points include that the very presence of keys, locks, and chests (with locks) demonstrate that some form of restricted access and control was in place at these sites. This furthermore indicates that there was some form of social differentiation or inequality where some had access to things and/or spaces that others did not, and also suggests the possible presence of private property. Their presence also hints at a need for keeping items safe from others, be it for instance food supplies, raw materials, craft products, traded goods, valuables, or private belongings. Part of the reason for this need was a lack of trust that could be directed at members of the household, servants, neighbours, guests, travellers, etc. At the different sites included in this study there seems to be somewhat different situations and reasons behind this, where for instance the more rural farms may have had different needs compared to the craft and trading sites.

Being the holder of a key has also been discussed. This position may have involved trust and responsibility if it were a delegated control over communal or someone else's property/resources, but not if it involved private property. In such cases it may still however have come with accountability regarding any potential stolen goods if found behind the lock. Holding a key, and potentially having it displayed visibly on the dress or viewed by others when used, could also signal a certain social status or role. If it were a key safeguarding personal property, it may have signalled affluence and high social standing. If the key represented a delegated responsibility, it may have been this position that was shown. That holding the key may also have affected how others perceived and behaved towards this individual, and that it may have affected how this individual perceived him/herself and others is another important point. A down-side was that it may have made this individual a target for thieves and robbers.

Mobility is another important aspect discussed in connection with locking practices. This is not least demonstrated by the padlock, a portable locking device well suited for travelling, but also by chests which, if not too heavy, were very mobile objects which could be used for transporting items, for instance on boats or horseback. When travelling, or at home, the lock could provide the freedom to safely leave personal belongings or goods unguarded for periods of time. This freedom, where the lock took over the role of physically guarding property, can therefore be said to facilitate the mobility of people. This could also mean that things could be safely stored out of sight in outbuildings where no one slept during the night, which in turn suggests that the introduction of locking devices may have affected the spatial organisation of some farms.

Locks may also have been used by some to create a private space, either a room, a lock-bed, or a separate building, as well as for storing personal, perhaps even secret, belongings. This would most likely have been the higher-ranking members of the household and demonstrates another possible source of social differentiation or inequality within the household, where only some had access to this kind of privacy.

These ideas were mainly based on the medieval text sources, however, since such structures are unlikely to remain, and none were found on the sites included in this study.

The archaeological material and the medieval texts were also looked at together in order to analyse more specifically which social identities

or roles in society could be connected with locking practices. In doing so, the archaeological material has been regarded as the primary source with the medieval texts serving as inspiration and something to build analogies from. Here, the clearest association was with the blacksmith or locksmith, based on evidence of lock production at both Birka and Helgö, and a possible chest in the smithy on Terrace II in Birka's garrison area. There was also the connection with the smith Völundr from the Poetic Edda who was in possession of a chest and its key. Tool-chests were also found in a few of the Birka graves, containing tools which may have been used for blacksmithing.

Another possible connection was with the warrior or travelling mercenary. Here the evidence was more circumstantial, but it has previously been suggested that in the hall-building/gatehouse at Terrace I in Birka's garrison area warriors may have kept some of their belongings in chests standing there. It has also been proposed that some of the warriors in the garrison area may have been mercenaries who travelled with their belongings, potential loot, and payment in chests. There were also some graves with keys, locks, or chests containing weapons and armour which could point to the individual in these graves having had the role of a warrior or mercenary, or simply an association with combat, hunting, or an armed upper class. This association was more commonly found in the graves with chests. The medieval saga texts have furthermore provided examples of weapons and armour stored in chests, such as the armed hero Sigurðr who was in possession of two chests after slaying the dragon Fáfnir.

An association between keys, locks, chests and the role of the merchant has also been discussed. Circumstances that point towards this include the suitability of locked chests or padlocks for travelling, along with the generally large number of keys, locks, and some chests at Birka and Helgö where there was a focus on crafts and trading, as well as padlock production. Evidence from several of the graves also suggested a connection between individuals buried with keys, locks, or chests and trading activities or the role of the merchant, based on the presence of trade indicating items. At both Birka and Helgö the rate of trade indicating objects was furthermore noticeably higher in the key/lock/chest-graves than in the other contemporary graves at these sites. There were also a few examples from the Old Norse literature where chests were mentioned in connection with trading and travelling.

The role of the housewife and her connection with keys was also discussed. The key has traditionally been seen as the very symbol for this role. This is however a rather diffuse role that is seldom defined, and mainly inspired by medieval texts such as *Rígsthula* and *Thrymskvida*, and a small selection of legal rules from the Scandinavian provincial laws. It was argued in this thesis that the traditional interpretations of the keys in these texts, claiming that they represent the coming duties of the housewife and her administrative role on the farm, are incorrect. Regarding the poems, it was put forward that the keys depicted here represented her dowry. The “locks and keys” referred to in the legal texts should furthermore be seen as metaphorical, referring to the rights and obligations of the wife/housewife.

Attempts to identify the housewife in the burial material were also made. Based on the activities usually associated with the housewife, which included controlling the consumption of resources, managing the processing of food, and textile production and its organisation, graves with keys and items from the find categories *Textile working tools* and *Utensils* were looked at. It was concluded that there were some graves with keys that could fit the traditional role of the housewife, if indeed these find categories indicated activities associated with this role. However, there were graves with keys that had items that would not fit this role, as well as graves without keys that would. The same was true if also regarding the chests in some of these graves as indicators of a housewife’s administrative role. This suggests that the key cannot be the common denominator for this role.

A final role or identity that has been discussed in relation to locking practices was that of the thief. It has been suggested that this role was one of the very reasons behind using a lock, and it was one of the main characters in medieval law through all the regulations and punishments regarding theft and stolen property. The thief also appears occasionally in the Old Norse literature, and in one instance a key was vital in (falsely) accusing someone of being a thief based on the key granting him sole access. Thieves are much harder to identify in the archaeological material. Looking at the settlement material in the present study, it is conceivable that some of the locks found in a broken state could indicate a break-in, however most objects found in occupation layers were fragmented, making such a theory unlikely and impossible to verify. There was however a sea chest from Hedeby with

evidence of a broken lock, that appears to have been dumped into the harbour to conceal the crime.

In the last section of this thesis, some of the more symbolic meanings behind keys, locks, and chest were discussed, again looking at both the archaeological material and the medieval texts. An important starting point was that material culture is polysemous and its meaning can vary depending on the context and the social agents involved. Additionally, the various ways in which the objects were placed in the graves also points to the likelihood of different meanings. Given that keys, locks, and chests in graves were rare, whatever the meaning behind their placement was would only have been valid for a small number of individuals, or in a few specific situations.

In general, it was the practical function of the objects with their ability to lock and unlock that appears to have formed the foundation of most of the symbology, including, for instance, their use as a metaphor for birth, death, or the passing from one state to another. It was mostly the keys that were assigned symbolic meaning, especially those found in graves without an accompanying lock or chest. The possibility that some or many of these graves once contained chests which have since disintegrated has, however, been noted.

Some of the symbology involving keys in previous research has been associated with Christianity, however few if any of the keys in the present study fit such a meaning. These keys come from pre-Christian contexts, perhaps with the occasional exception for Birka where it is known that the Christian missionary Ansgar visited.

Other meanings that have been discussed include keys and padlocks used as amulets.

Otherwise, much of the symbology seems to have revolved around property and inheritance, or access to resources. For chests – essentially secure containers for property – this could be seen in, for instance *Rigsthula*, where it appears to have signalled wealth, property, and economic stability. It has been suggested that in some graves with chests it was this type of meaning that was signalled. It can also be seen in the custom of liberating a thrall by placing him/her on top of the owner's chest, although here it may also symbolise the focal point of the owner's power and authority.

The key as a symbol for the housewife, countered by the here preferred interpretation that it rather signals the woman's dowry, has also been discussed further along with the metaphorical locks and keys in medieval law symbolising the rights and obligations of the wife, and the right of occupancy regarding landed property. In extension, the latter may also symbolise the wife's right to stay at her new husband's farm and access the household if applied to the section in the Uppland law relating to the wedding.

In connection with the above ideas, it has also been pointed out that these were based on medieval Christian sources, and their applicability on Iron Age keys, locks, and chests can be questioned, even though they do provide some interpretative inspiration. It has also been pointed out that these ideas which are so connected with the world of the living seem ill-suited for the burial context. If these keys were not just metaphorical, then they would likely have been handed over to someone else, not placed in the grave. One way in which such symbology could in some cases be appropriate however, was if the key were so connected with the buried individual that it could not be separated or be used by anyone else, essentially constituting inalienable property.

Another possible symbology regarding keys (and chests) in graves, which also involved inheritance, was that they may symbolise the end of a family line, possibly brought on by for instance childlessness, disease, famine, or violence. Here the key could be used to show that there was no one to which an inheritance could be passed on to. Such symbology could also refer to the end of a family's right to certain landed property brought on by the death of the last individual with odal rights.

To conclude the present study, it is clear that there are so many different aspects of keys, locks, and chests in the Iron Age, and that focusing on the connection with the role of the housewife greatly limits the analysis. This stereotype does nothing to increase our knowledge of Iron Age society, and it furthermore overshadows the implications on the community that locking practices brought with it, not least in terms of inequality, but also regarding mobility. There was variation and complexity in locking practices and the individuals who were involved, and the hope is that this study can lead to more nuanced interpretations of these objects in the future, that go beyond the housewife.

Svensk sammanfattning

Användandet av nycklar, lås och kistor i Skandinavien under järnåldern är ett ämne som överskuggas av den antagna kopplingen mellan nycklar och husfun med sin administrativa roll på gården. Nyckeln ses ibland till och med som själva symbolen för denna roll. I den här avhandlingen har fokus istället legat på själva låsandet, i vilket även lås och kistor utgör naturliga delar. Detta har inneburit att utvärdera kopplingen till husfrurollen, men också att utvidga analysen för att utforska vilka andra roller eller sociala identiteter som kan ha varit kopplade till låsande.

Detta har gjorts genom att studera nycklar, lås och kistor och kontexterna de påträffats i, och genom att överväga vad deras närvaro kan ha inneburit när det gäller till exempel kontroll, tillgång, privat egendom, ansvar, ansvarsskyldighet, förtroende, rörlighet och social status. Studien har också undersökt vilka typer av byggnader eller föremål som låstes in, samt delar av den symbolik som kan kopplas till nycklar, lås och kistor.

Det teoretiska ramverket som använts har baserats på idéer som involverar sociala identiteter, struktur, agency och praxis, samt idén att materiell kultur är mångtydig – att dess betydelse kan variera beroende på dess sociala historia, specifika sociala agents position, och sammanhanget där den används.

Den första delen (kapitel 1 och 2) av avhandlingen ger en bakgrund till ämnet och det teoretiska ramverket, följt av en del (kapitel 3 och 4) som behandlar medeltida källor i form av fornnordisk litteratur och

medeltida lagar där nycklar, lås eller kistor nämns. Eftersom den antagna kopplingen mellan nycklar och husfrun är starkt baserad på ett smalt urval av dessa medeltida texter har det varit nödvändigt att inkludera och utvärdera dessa. Ett större urval av texter har dock tagits med för att ge en mer fullständig redogörelse för de sammanhang där dessa objekt förekommer.

Den tredje delen av avhandlingen (kapitel 5-8) behandlar det tidigare utgrävda arkeologiska materialet från Birka, Helgö, Lovö, Sanda och Vallhagar, som omfattar både bosättningar och gravar. Medan bosättningarna mestadels har gett information som kan relatera till själva låsandet, har gravarna gett ledtrådar om de individer som hade någon koppling till nycklar, lås och kistor.

Några av de viktigaste punkterna i avhandlingen, som diskuteras i den fjärde och sista delen (kapitel 9 och 10), är att själva närvaron av nycklar, lås och kistor på bosättningarna visar att det fanns någon form av begränsad åtkomst och kontroll här. Detta indikerar i sin tur att det fanns någon form av social differentiering eller ojämlikhet där vissa hade tillgång till saker och/eller utrymmen som andra inte hade tillgång till, och det antyder också närvaron av privat egendom. En annan viktig punkt är att låset underlättade rörligheten för människor genom att ta över rollen att fysiskt bevaka egendom. Resultaten pekar också på en koppling till resande och handel samt till arv och besittningsrätt. När det gäller gravarna visar resultaten en varierad bild och att individerna begravda med nycklar, lås eller kistor inte utgjorde en homogen grupp. De flesta av dessa gravar innehöll dock dyrbart gravgods. Dessutom, att placera en nyckel, ett lås eller en kista i graven var också en sällsynt förekomst som pekar på ett ganska exklusivt eller speciellt uttryck.

Denna avhandling visar att det finns variation och komplexitet kopplat till låsandet och de individer som var inblandade. Att fokusera på sambandet med husfru-rollen innebär en kraftig begränsning av analysen och bidrar inte till någon ny kunskap om järnålderssamhället. Förhoppningen är att denna studie kan leda till mer nyanserade tolkningar av nycklar, lås och kistor i framtiden.

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Appendices

Appendix 1: *The keys from Birka with information on location, id-numbers, material, type, and year of excavation/finding.*

Location	Object id	Object No.	Object	Material	Type	Year of excavation
Black Earth	268636	SHM 5208:175	Key	Bronze	Rotary key	1871-1873
Black Earth	106580	SHM 5208:177	Key?	Bronze	Uncertain	1871-1873
Black Earth	268638	SHM 5208:178	Key	Bronze	Rotary key	1871-1873
Black Earth	268639	SHM 5208:179	Key	Bronze	Padlock key	1871-1873
Black Earth	268926	SHM 5208:400	Key	Iron	Uncertain	1871-1873
Black Earth	268927	SHM 5208:401	Key	Iron	L-shaped lift-key	1871-1873
Black Earth	107649	SHM 5208:402	Key	Iron	L-shaped lift-key	1871-1873
Black Earth	268928	SHM 5208:403	Key	Iron	L-shaped lift-key	1871-1873
Black Earth	107650	SHM 5208:404	Key	Iron	L-shaped lift-key	1871-1873
Black Earth	107651	SHM 5208:405	Key	Iron	L-shaped lift-key	1871-1873
Black Earth	268929	SHM 5208:406	Key	Iron	Lift-key	1871-1873
Black Earth	268930	SHM 5208:407	Key	Iron	L-shaped lift-key	1871-1873
Black Earth	268931	SHM 5208:408	Key	Iron	Angular L-shaped lift key	1871-1873
Black Earth	107644	SHM 5208:409	Key	Iron	T-shaped lift-key	1871-1873
Black Earth	107645	SHM 5208:410	Key	Iron	T-shaped lift-key	1871-1873
Black Earth	268932	SHM 5208:411	Key	Iron	S-shaped lift-key	1871-1873
Black Earth	268933	SHM 5208:412	Key	Iron	S-shaped lift-key	1871-1873
Black Earth	268934	SHM 5208:413	Key	Iron	Rotary key	1871-1873
Black Earth	268935	SHM 5208:414	Key	Iron	Rotary key	1871-1873
Black Earth	107656	SHM 5208:415	Key	Iron	Rotary key	1871-1873

Appendices

Black Earth	268936	SHM 5208:416	Key	Iron	Rotary key	1871-1873
Black Earth	268937	SHM 5208:417	Key	Iron	Rotary key	1871-1873
Black Earth	268938	SHM 5208:418	Key	Iron	Rotary key	1871-1873
Black Earth	268939	SHM 5208:419	Key	Iron	Rotary key	1871-1873
Black Earth	422542	SHM 474:41	Key	Iron & bronze	Padlock key	ca 1827
Black Earth	268637	SHM 8700:2	Key	Bronze	Uncertain	ca 1890
Black Earth	419269	SHM 7982:11	Key	Iron	Rotary key	ca 1886
Black Earth	419044	SHM 8799:2	Key	Iron	Rotary key	ca 1890
Black Earth	364172	SHM 8985:4	Key	Iron	Rotary key	ca 1892
Black Earth	415318	SHM 9993:1	Key	Iron	S-shaped lift-key	ca 1895
Black Earth	418767	SHM 13739:4	Key	Iron	Rotary key	ca 1909
Black Earth	718769	SHM 13739:5	Key	Iron	Uncertain	ca 1909
Black Earth	418771	SHM 13739:6	Key	Iron	Uncertain	ca 1909
Black Earth	418856	SHM 13794:18	Key	Iron & bronze	Padlock key	ca 1909
Black Earth	418931	SHM 13838:3	Key	Bronze	Rotary key	ca 1909
Black Earth	418996	SHM 13838:45	Key	Iron	Lift-key	ca 1909
Black Earth	419074	SHM 13921:10	Key	Iron	L-shaped lift-key	ca 1909
Black Earth	419075	SHM 13921:11	Key	Iron	Uncertain	ca 1909
Black Earth	419333	SHM 14293:1	Key	Iron	Rotary key	ca 1911
Black Earth	419657	SHM 14563:16	Key	Iron	Padlock key	ca 1912
Black Earth	419659	SHM 14563:17	Key	Iron	Padlock key	ca 1912
Black Earth	419672	SHM 14563:33	Key	Iron	S-shaped lift-key	ca 1912
Black Earth	415486	SHM 15731:2	Key	Iron & bronze	Padlock key	ca 1916
Black Earth	415487	SHM 15731:3	Key	Bronze	Padlock key	ca 1916
Black Earth	415495	SHM 15731:11	Key	Iron	Rotary key	ca 1916
Black Earth	415508	SHM 15731:18	Key	Iron	Padlock key	ca 1916
Black Earth	40466	SHM 31269:7	Key	Iron	Padlock key	ca 1982
Black Earth, Harbour	1248011	SHM 35418 (F2637)	Key	Iron	Padlock key	1970-1971
Black Earth, Harbour	1249101	SHM 35418 (F3737)	Key	Iron	Padlock key	1970-1971
Black Earth, Harbour	1249103	SHM 35418 (F3739)	Key	Iron	Padlock key	1970-1971
Black Earth, Harbour	no no.	(see Werner 1973: 91)	Key	Iron	Lift-key	1970-1971
Black Earth, Foundry	974892	SHM 35000 (F25072)	Key	Iron	L-shaped lift-key	1990-1995
Black Earth, Foundry	975732	SHM 35000 (F28267)	Key?	Iron	Not specified	1990-1995

Appendices

Black Earth, Foundry	978223	SHM 35000 (F38677)	Key	Iron	Lift-key	1990-1995
Black Earth, Foundry	978303	SHM 35000 (F38840)	Key	Iron	Lift-key	1990-1995
Black Earth, Foundry	978338	SHM 35000 (F38882)	Key	Iron	Padlock key	1990-1995
Black Earth, Foundry	978664	SHM 35000 (F47533)	Key?	Iron	Uncertain	1990-1995
Black Earth, Foundry	979737	SHM 35000 (F50268)	Key	Bronze	Not specified	1990-1995
Black Earth, Foundry	979833	SHM 35000 (F50670)	Key	Iron & bronze	Padlock key	1990-1995
Black Earth, Foundry	980012	SHM 35000 (F51878)	Key	Bronze	Uncertain	1990-1995
Black Earth, Foundry	980246	SHM 35000 (F59317)	Key	Bronze	Padlock key	1990-1995
Black Earth, Foundry	980361	SHM 35000 (F59900)	Key	Bronze	L-shaped lift-key	1990-1995
Black Earth, Foundry	980373	SHM 35000 (F64607)	Key	Iron	Padlock key	1990-1995
Black Earth, Foundry	981119	SHM 35000 (F67852)	Key	Iron	Rotary key	1990-1995
Black Earth, Foundry	981373	SHM 35000 (F68330)	Key	Iron	Uncertain	1990-1995
Black Earth, Foundry	981875	SHM 35000 (F72088)	Key	Bronze	Rotary key	1990-1995
Black Earth, Foundry	982899	SHM 35000 (F74570)	Key	Bronze	Rotary key	1990-1995
Black Earth, Foundry	983602	SHM 35000 (F77620)	Key	Bronze	Rotary key	1990-1995
Black Earth, Foundry	983689	SHM 35000 (F78242)	Key	Iron	Rotary key	1990-1995
Black Earth, Foundry	983691	SHM 35000 (F78244)	Key	Iron	Rotary key	1990-1995
Black Earth, Foundry	984454	SHM 35000 (F86674)	Key	Iron	Lift-key	1990-1995
Black Earth, Foundry	984850	SHM 35000 (F89936)	Key	Iron	Uncertain	1990-1995
Black Earth, Foundry	985012	SHM 35000 (F41064)	Key	Iron	Lift-key	1990-1995
Black Earth, Foundry	985132	SHM 35000 (F41575)	Key	Iron	Padlock key	1990-1995
Black Earth, Foundry	985360	SHM 35000 (F42042)	Key	Iron	Uncertain	1990-1995

Appendices

Black Earth, Foundry	986023	SHM 35000 (F43108)	Key	Iron	Padlock key	1990-1995
Black Earth, Foundry	986247	SHM 35000 (F43371)	Key	Iron	Uncertain	1990-1995
Black Earth, Foundry	982510	SHM 35000 (F73039)	Key?	Iron	Uncertain	1990-1995
Black Earth, Foundry	982551	SHM 35000 (F73090)	Key?	Iron	Uncertain	1990-1995
Black Earth, Foundry	977904	SHM 35000 (F38208)	Key?	Iron	Uncertain	1990-1995
Black Earth, Foundry	975064	SHM 35000 (F22773)	Key?	Iron	Uncertain	1990-1995
Garrison Area, T0	428502	SHM 21064:26	Key	Iron & bronze	Padlock key	1934
Garrison Area, T0	428964	SHM 21064:87	Key	Iron	Padlock key	1934
Garrison Area, T0	429152	SHM 21064:112	Key	Iron	Rotary key	1934
Garrison Area, T0	429160	SHM 21064:113	Key	Iron	Rotary key	1934
Garrison Area, T0	428950	SHM 21064:80	Key	Iron	For sliding mechanism	1934
Garrison Area, T0	no no.	F132	Key	Iron & bronze	Rotary key	1997
Garrison Area, T0	no no.	F259	Key?	Iron	Not specified	1997
Garrison Area TI	449246	SHM 34000:Bj 596 (F40)	Key	Iron & bronze	Padlock key	1877
Garrison Area TI	449459	SHM 34000:Bj 596 (F89)	Key	Iron	Padlock key	1877
Garrison Area TI	461224	SHM 34000:Bj 596	Key	Iron	Padlock key	1877
Garrison Area TI	461135	SHM 34000:Bj 596	Key	Iron	Rotary key	1877
Garrison Area TI	449268	SHM 34000:Bj 596 (F50)	Key	Bronze	Uncertain	1877
Garrison Area TI	430441	SHM 21064:261	Key	Iron	Padlock key	1934
Garrison Area TI	429265	SHM 21064:141	Key	Iron	Lift-key	1934
Garrison Area TI	430449	SHM 21064:262	Key	Iron	Uncertain	1934
Garrison Area TI	431431	SHM 21064:341	Key	Iron & bronze	Padlock key	1934

Appendices

Garrison Area TI	no no.	F3040	Key	Iron	Not specified	1999
Garrison Area TI	no no.	F3236	Key	Iron	Padlock key	1999
Garrison Area TI	no no.	F4056	Key	Iron & bronze	Padlock key	2000
Garrison Area TI	no no.	F4062	Key	Bronze	Uncertain	2000
Garrison Area TI	no no.	F1232	Key	Iron	Not specified	1998
Garrison Area TI	no no.	F4602	Key	Iron	For sliding mechanism	2000
Garrison Area TI	no no.	F4630:1	Key	Iron	For sliding mechanism	2000
Garrison Area TI	no no.	F4757	Key	Iron	Not specified	2000
Garrison Area TI	no no.	F4817	Key	Iron	Not specified	2000
Garrison Area TI	no no.	F4969	Key	Iron & bronze	Padlock key	2000
Garrison Area TI	no no.	F4786	Key	Bronze	Padlock key	2000
Garrison Area TI	no no.	F5155	Key	Bronze	Not specified	2000
Garrison Area TI	no no.	F3238	Key	Bronze	Padlock key	1999
Garrison Area TI	no no.	F5184	Key	Iron & bronze	Padlock key	2000
Garrison Area TI	no no.	F3297	Key	Iron	Padlock key	1999
Garrison Area TI	no no.	F5220	Key?	Iron	Not specified	2000
Garrison Area TI	no no.	F3351	Key	Iron & bronze	Uncertain	1999
Garrison Area TI	no no.	F3362	Key	Iron & silver	Padlock key	1999
Garrison Area III	427491	SHM 34000:Bj 562	Key	Iron & bronze	Padlock key	1877
Garrison Area III	no no.	F16001	Key	Iron & bronze	Padlock key	2004
Garrison Area III	no no.	F12586	Key	Iron	Rotary key	2002
Garrison Area III	no no.	F14208	Key	Iron & bronze	Padlock key	2003

Appendices

Garrison Area TII	no no.	F14317	Key	Unspecified	Not specified	2003
Garrison Area TII	no no.	F14317	Key	Unspecified	Not specified	2003
Garrison Area TII	no no.	F14126	Key	Iron & bronze	Padlock key	2003
Garrison Area TII	no no.	F16110	Key	Unspecified	Not specified	2004
Grave Bj 24A	447692	SHM 34000:Bj 24A	Key	Iron	Angular L-shaped lift-key	1875
Grave Bj 24B	107668	SHM 34000:Bj 24B	Key	Bronze	Rotary key	1875
Grave Bj 55	450733	SHM 34000:Bj 55	Key	Iron	Padlock key	1875
Grave Bj 64	469688	SHM 34000:Bj 64	Key	Iron	Angular L-shaped lift-key	1875
Grave Bj 96	466403	SHM 34000:Bj 96	Key	Iron	Rotary key	1875
Grave Bj 158:1	477301	SHM 34000:Bj 158:1	Key	Iron & bronze	Uncertain	1875
Grave Bj 212	611432	SHM 34000:Bj 212	Key	Iron & bronze	Padlock key	1874
Grave Bj 306B	1140041	SHM 34000:Bj 306B	Key	Iron	Angular L-shaped lift-key	1876
Grave Bj 324	528539	SHM 34000:Bj 324	Key	Iron	Rotary key	1876
Grave Bj 349	534140	SHM 34000:Bj 349	Key	Iron	Angular L-shaped lift-key	1876
Grave Bj 449	451964	SHM 34000:Bj 449	Key	Iron	Padlock key	1876
Grave Bj 462	181394	SHM 34000:Bj 462	Key	Bronze	Rotary key	1876
Grave Bj 504	555746	SHM 34000:Bj 504	Key	Bronze	Rotary key	1877
Grave Bj 526	557138	SHM 34000:Bj 526	Key	Bronze	Rotary key	1877
Grave Bj 526	557138	SHM 34000:Bj 526	Key	Bronze	Rotary key	1877
Grave Bj 526	557137	SHM 34000:Bj 526	Key	Bronze	Rotary key	1877
Grave Bj 557	559179	SHM 34000:Bj 557	Key	Iron	Padlock key	1878
Grave Bj 557	559180	SHM 34000:Bj 557	Key	Iron	Rotary key	1878

Appendices

Grave Bj 559	559468	SHM 34000:Bj 559	Key	Iron	Rotary key	1878
Grave Bj 585	611668	SHM 34000:Bj 585	Key	Iron	Rotary key	1878
Grave Bj 607	574754	SHM 34000:Bj 607	Key	Iron	L-shaped lift-key	1877
Grave Bj 623	555994	SHM 34000:Bj 623	Key	Iron	Angular L-shaped lift-key	1878
Grave Bj 625	559590	SHM 34000:Bj 625	Key?	Iron	Uncertain	1878
Grave Bj 639	560663	SHM 34000:Bj 639	Key	Iron & bronze	Rotary key	1878
Grave Bj 708	467649	SHM 34000:Bj 708	Key	Iron	L-shaped lift-key	1879
Grave Bj 708	467643	SHM 34000:Bj 708	Key	Iron	Rotary key	1879
Grave Bj 714	469260	SHM 34000:Bj 714	Key	Iron	Rotary key	1879
Grave Bj 733	476716	SHM 34000:Bj 733	Key	Iron	Angular L-shaped lift-key	1879
Grave Bj 733	476712	SHM 34000:Bj 733	Key	Iron	Rotary key	1879
Grave Bj 735	476983	SHM 34000:Bj 735	Key?	Iron & bronze	Padlock key	1879
Grave Bj 738	480353	SHM 34000:Bj 738	Key	Iron & bronze	Padlock key	1879
Grave Bj 739	452334	SHM 34000:Bj 739	Key	Bronze	Rotary key	1879
Grave Bj 739	545663	SHM 34000:Bj 739	Key	Iron	Rotary key	1879
Grave Bj 741	545950	SHM 34000:Bj 741	Key	Iron	Rotary key	1879
Grave Bj 746	546138	SHM 34000:Bj 746	Key	Iron	Padlock key	1879
Grave Bj 750	107798	SHM 34000:Bj 750	Key	Iron	Angular L-shaped lift-key	1879
Grave Bj 756	561006	SHM 34000:Bj 756	Key	Iron	Rotary key	1879
Grave Bj 758	561110	SHM 34000:Bj 758	Key	Iron	Padlock key	1879
Grave Bj 758	561112	SHM 34000:Bj 758	Key	Iron	Angular L-shaped lift-key	1879
Grave Bj 759	561200	SHM 34000:Bj 759	Key	Various	Padlock key	1879

Appendices

Grave Bj 759	561182	SHM 34000:Bj 759	Key	Iron & bronze	Padlock key	1879
Grave Bj 759	561204	SHM 34000:Bj 759	Key	Iron	Rotary key	1879
Grave Bj 767	561840	SHM 34000:Bj 767	Key	Iron	Rotary key	1879
Grave Bj 777	563493	SHM 34000:Bj 777	Key	Iron	Padlock key	1879
Grave Bj 783	563709	SHM 34000:Bj 783	Key	Iron	Padlock key	1879
Grave Bj 797	565443	SHM 34000:Bj 797	Key	Iron & bronze	Padlock key	1879
Grave Bj 800	566497	SHM 34000:Bj 800	Key	Iron	Angular L-shaped lift-key	1879
Grave Bj 807	566830	SHM 34000:Bj 807	Key	Iron & bronze	Padlock key	1879
Grave Bj 820	567235	SHM 34000:Bj 820	Key	Bronze	Rotary key	1879
Grave Bj 823	559518	SHM 34000:Bj 823	Key	Iron	Angular L-shaped lift-key	1879
Grave Bj 825	567802	SHM 34000:Bj 825	Key	Iron	Rotary key	1879
Grave Bj 831	568843	SHM 34000:Bj 831	Key	Iron	Rotary key	1879
Grave Bj 835	570053	SHM 34000:Bj 835	Key	Iron	L-shaped lift-key	1879
Grave Bj 847	572778	SHM 34000:Bj 847	Key	Iron	Padlock key	Not spec.
Grave Bj 854	107011	SHM 34000:Bj 854	Key	Iron & bronze	Rotary key	Not spec.
Grave Bj 860A	574867	SHM 34000:Bj 860A	Key	Iron	Rotary key	Not spec.
Grave Bj 893	579999	SHM 34000:Bj 893	Key	Iron & bronze	Padlock key	Not spec.
Grave Bj 895	580579	SHM 34000:Bj 895	Key	Iron	Uncertain	Not spec.
Grave Bj 901	581228	SHM 34000:Bj 901	Key	Iron	Padlock key	Not spec.
Grave Bj 902	581825	SHM 34000:Bj 902	Key	Iron	Angular L-shaped lift-key	Not spec.
Grave Bj 916	446884	SHM 34000:Bj 916	Key	Iron	Angular L-shaped lift-key	Not spec.
Grave Bj 919	535251	SHM 34000:Bj 919	Key	Iron	Rotary key	Not spec.

Appendices

Grave Bj 935	604601	SHM 34000:Bj 935	Key	Iron	Angular L-shaped lift-key	Not spec.
Grave Bj 946	609694	SHM 34000:Bj 946	Key	Iron	Rotary key	1881
Grave Bj 950	609777	SHM 34000:Bj 950	Key	Iron	Uncertain	1881
Grave Bj 950	609775	SHM 34000:Bj 950	Key	Iron & bronze	Padlock key	1881
Grave Bj 950	no no.	(see Arbman 1940;1943)	Key?	iron	Uncertain	1881
Grave Bj 954	610186	SHM 34000:Bj 954	Key	Iron	Angular L-shaped lift-key	1881
Grave Bj 965	611433	SHM 34000:Bj 965	Key	Iron	Rotary key	1881
Grave Bj 967	no no.	(see Arbman 1940;1943)	Key?	Iron	Uncertain	1881
Grave Bj 968	613775	SHM 34000:Bj 968	Key	Iron	Angular L-shaped lift-key	1881
Grave Bj 968	613779	SHM 34000:Bj 968	Key	Iron	Rotary key	1881
Grave Bj 970	613876	SHM 34000:Bj 970	Key	Iron	Uncertain	1881
Grave Bj 971	613883	SHM 34000:Bj 971	Key	Iron	Rotary key	1881
Grave Bj 974	614524	SHM 34000:Bj 974	Key	Iron	Uncertain	1881
Grave Bj 980	614690	SHM 34000:Bj 980	Key	Iron	Uncertain	1881
Grave Bj 983	614626	SHM 34000:Bj 983	Key	Iron	Uncertain	1881
Grave Bj 983	614626	SHM 34000:Bj 983	Key	Iron	Angular L-shaped lift-key	1881
Grave Bj 985	614644	SHM 34000:Bj 985	Key	Iron	Padlock key	1881
Grave Bj 990	613914	SHM 34000:Bj 990	Key	Iron	Padlock key	1881
Grave Bj 997	622505	SHM 34000:Bj 997	Key	Iron	L-shaped lift-key	1881
Grave Bj 1001	622524	SHM 34000:Bj 1001	Key?	Iron	Uncertain	1881
Grave Bj 1044	615115	SHM 34000:Bj 1044	Key	Iron & bronze	Padlock key	1881
Grave Bj 1079	576276	SHM 34000:Bj 1079	Key	Bronze	Rotary key	1881

Appendices

Grave Bj 1081	577442	SHM 34000:Bj 1081	Key	Iron	Rotary key	1881
Grave Bj 1083	577398	SHM 34000:Bj 1083	Key	Bronze	Rotary key	1881
Grave Bj 1083	577958	SHM 34000:Bj 1083	Key	Iron	Padlock key	1881
Grave Bj 1083	578101	SHM 34000:Bj 1083	Key	Iron	Padlock key	1881
Grave Bj 1083	577306	SHM 34000:Bj 1083	Key	Bronze	Rotary key	1881
Grave Bj 1102	579034	SHM 34000:Bj 1102	Key	Iron	Padlock key	1881
Grave Bj 1125B	581258	SHM 34000:Bj 1125B	Key	Iron	Padlock key	1888
Grave Bj 1142B	588406	SHM 34000:Bj 1142B	Key	Iron	Padlock key	1888
Grave A88	no no.	F12731	Key	Iron	Angular L-shaped lift-key	2002

Appendices

Appendix 2: *The locks and chests/chest-parts from Birka with information on location, id-numbers, material, type, and year of excavation/finding.*

Location	Object id	Object No.	Object	Material	Type	Year of excavation
Black Earth	415244	SHM 9009:9	Lock	Iron	Lock-spring	1892
Black Earth	419431	SHM 14515:10	Lock	Iron	Lock-spring	1911
Black Earth	419108	SHM 13921:34	Lock	Iron	Padlock	1909
Black Earth	418631	SHM 13734	Chest	Bronze	Chest-mount?	1909
Black Earth	419300	SHM14052:21	Chest	Iron	Chest-handle	1910
Black Earth	268941	SHM 5208:421	Lock	Iron	Lock-spring case	1871-1873
Black Earth	268940	SHM 5208:420	Lock	Iron	Lock-plate	1871-1873
Black Earth	268640	SHM 5208:180	Lock	Iron & bronze	Padlock	1871-1873
Black Earth	268641	SHM 5208:181	Lock	Iron & bronze	Padlock	1871-1873
Black Earth	107676	SHM 5208:182	Lock	Iron & bronze	Drop-fork	1871-1873
Black Earth	1206490	SHM 35015	Lock	Iron	Drop-fork	1871-1880
Black Earth	268942	SHM 5208:422	Chest	Iron	Chest-handle	1871-1873
Black Earth	268943	SHM 5208:423	Chest	Iron	Chest-handle	1871-1873
Black Earth	268944	SHM 5208:424	Chest	Iron	Chest-handle	1871-1873
Black Earth	268945	SHM 5208:425	Chest		Chest-handle?	1871-1873
Black Earth	269048	SHM 5208:447	Chest	Iron	Chest-handle	1871-1873
Black Earth, Harbour	1248038	SHM 35418 (F2664)	Lock	Iron	Lock-latch	1970-1971
Black Earth, Harbour	1247983	SHM 35418 (F2609)	Lock	Iron	Lock-spring case	1970-1971
Black Earth, Harbour	1246709	SHM 35418 (F1335)	Lock	Iron	Padlock	1970-1971
Black Earth, Harbour	1248910	SHM 35418 (F3545)	Lock	Iron & bronze	Padlock	1970-1971
Black Earth, Harbour	1248917	SHM 35418 (F3552)	Lock	Iron	Padlock	1970-1971
Black Earth, Harbour	1251421	SHM 35418 (F135)	Lock	Iron	Padlock	1970-1971
Black Earth, Harbour	1251938	SHM 35418 (F652)	Lock	Iron	Padlock	1970-1971
Black Earth, Harbour	1251201	SHM 35418 (F5825)	Lock	Iron	Padlock?	1970-1971
Black Earth, Harbour	1249017	SHM 35418 (F3653)	Chest	Iron	Hinge-mount	1970-1971

Appendices

Black Earth, Harbour	no no.	(see Werner 1973: 95)	Chest	Iron	Chest-handle	1970-1971
Black Earth, Harbour	no no.	(see Werner 1973: 95)	Chest	Iron	Chest-handle	1970-1971
Black Earth, Foundry	986233	SHM 35000 (F43357)	Lock	Iron	Lock detail	1990-1995
Black Earth, Foundry	986194	SHM 35000 (F43307)	Lock	Iron	Lock-spring?	1990-1995
Black Earth, Foundry	977358	SHM 35000 (F34606)	Lock	Iron & bronze	Padlock	1990-1995
Black Earth, Foundry	978732	SHM 35000 (F47621)	Lock	Iron & bronze	Padlock	1990-1995
Black Earth, Foundry	979350	SHM 35000 (F49611)	Lock	Iron & bronze	Padlock	1990-1995
Black Earth, Foundry	980125	SHM 35000 (F57947)	Lock	Iron	Padlock	1990-1995
Black Earth, Foundry	985366	SHM 35000 (F42048)	Lock	Iron	Padlock	1990-1995
Black Earth, Foundry	986017	SHM 35000 (F43101)	Lock	Iron	Padlock?	1990-1995
Black Earth, Foundry	980402	SHM 35000 (F67124)	Lock	Iron	Lock	1990-1995
Black Earth, Foundry	983896	SHM 35000 (F78883)	Lock	Iron	Padlock	1990-1995
Black Earth, Foundry	975233	SHM 35000 (F23941)	Lock	Iron	Lock	1990-1995
Black Earth, Foundry	975761	SHM 35000 (F28446)	Lock	Iron	Lock-spring	1990-1995
Black Earth, Foundry	974766	SHM 35000 (F22031)	Lock	Iron	Lock-spring?	1990-1995
Black Earth, Foundry	974392	SHM 35000 (F20581)	Lock	Iron	Lock-part?	1990-1995
Black Earth, Foundry	975347	SHM 35000 (F24418)	Lock	Iron	Padlock	1990-1995
Black Earth, Foundry	977345	SHM 35000 (F34379)	Lock	Iron	Padlock	1990-1995
Black Earth, Foundry	977969	SHM 35000 (F38296)	Lock	Iron	Padlock	1990-1995
Black Earth, Foundry	978435	SHM 35000 (F39095)	Lock	Iron	Padlock	1990-1995
Black Earth, Foundry	984475	SHM 35000 (F87224)	Lock	Iron	Padlock	1990-1995
Black Earth, Foundry	984769	SHM 35000 (F88863)	Lock	Iron	Padlock	1990-1995

Appendices

Black Earth, Foundry	985920	SHM 35000 (F42994)	Chest	Iron	Chest-mount	1990-1995
Black Earth, Foundry	986000	SHM 35000 (F43084)	Chest	Iron	Chest-mount?	1990-1995
Black Earth, Foundry	984882	SHM 35000 (F40374)	Chest	Iron	Hinge-mount	1990-1995
Black Earth, Foundry	977231	SHM 35000 (F38096)	Chest	Iron	Chest-handle?	1990-1995
Garrison Area, T0	428498	SHM 21064:24	Lock	Iron	Padlock	1934
Garrison Area, T0	428500	SHM 21064:25	Lock	Iron	Padlock	1934
Garrison Area, T0	428847	SHM 21064:63	Lock	Iron	Padlock	1934
Garrison Area, T0	428925	SHM 21064:78	Lock	Iron	Padlock	1934
Garrison Area, T0	428946	SHM 21064:79	Lock	Iron	Padlock	1934
Garrison Area, T0	428417	SHM 21064:7	Lock	Iron	Uncertain	1934
Garrison Area, T0	428415	SHM 21064:6	Lock	Iron	Uncertain	1934
Garrison Area, T0	428965	SHM 21064:88	Lock	Iron	Mounted lock-part	1934
Garrison Area, T0	no no.	F345	Lock	Iron	Padlock	1997
Garrison Area, T0	no no.	F505	Lock	Iron	Mounted lock-part	1998
Garrison Area, T0	no no.	F520	Lock	Iron	Padlock	1998
Garrison Area, T0	no no.	F633	Lock	Iron	Mounted lock-part	1998
Garrison Area, T0	no no.	F545	Chest	Iron	Chest-mount	1998
Garrison Area, Area A	no no.	F97	Chest	Iron	Chest-mount	1997
Garrison Area, Area A	no no.	F147	Chest	Iron	Chest-mount	1997
Garrison Area, TI	449462	SHM 34000:Bj 596 (F91)	Lock	Iron	Padlock	1877
Garrison Area, TI	449557	SHM 34000:Bj 596 (F116)	Lock	Iron	Padlock	1877

Appendices

Garrison Area, TI	449558	SHM 34000:Bj 596 (F117)	Lock	Iron	Padlock	1877
Garrison Area, TI	460759	SHM 34000:Bj 596	Lock	Iron	Padlock	1877
Garrison Area, TI	460768	SHM 34000:Bj 596	Lock	Iron	Padlock	1877
Garrison Area, TI	461256	SHM 34000:Bj 596	Lock	Iron	Padlock	1877
Garrison Area, TI	461281	SHM 34000:Bj 596	Lock	Iron	Padlock	1877
Garrison Area, TI	429486	SHM 21064:178:1	Lock	Iron	Padlock	1934
Garrison Area, TI	429733	SHM 21064:221	Lock	Iron	Padlock	1934
Garrison Area, TI	430415	SHM 21064:257	Lock	Iron	Padlock	1934
Garrison Area, TI	430417	SHM 21064:258	Lock	Iron	Padlock	1934
Garrison Area, TI	430419	SHM 21064:259	Lock	Iron	Padlock	1934
Garrison Area, TI	430435	SHM 21064:260	Lock	Iron	Padlock	1934
Garrison Area, TI	no no.	F5390:1	Lock	Iron	Padlock	2000
Garrison Area, TI	no no.	F5390:2	Lock	Iron	Padlock	2000
Garrison Area, TI	no no.	F6629	Lock	Iron	Padlock	2000
Garrison Area, TI	no no.	F3036	Lock	Iron	Padlock	1999
Garrison Area, TI	no no.	F13758	Lock	Iron	Padlock	2001-2002
Garrison Area, TI	no no.	F1306	Lock	Iron	Padlock?	1998
Garrison Area, TI	no no.	F3183	Lock	Bronze	Padlock	1999
Garrison Area, TI	no no.	F3145	Lock	Iron	Padlock	1999
Garrison Area, TI	no no.	F4306	Lock	Iron	Padlock	2000
Garrison Area, TI	no no.	F5782	Lock	Iron	Padlock	2000
Garrison Area, TI	no no.	F1333	Lock	Iron	Padlock	1998

Appendices

Garrison Area, TI	no no.	F5063	Lock	Iron	Padlock	2000
Garrison Area, TI	no no.	F5151	Lock	Iron	Padlock	2000
Garrison Area, TI	no no.	F4630:2	Lock	Iron	Lock-plate	2000
Garrison Area, TI	449188	SHM 34000:Bj 596 (F12)	Chest	Iron	Chest-mount	1877
Garrison Area, TI	449189	SHM 34000:Bj 596 (F13)	Chest	Iron	Chest-mount	1877
Garrison Area, TI	no no.	F7023	Chest	Iron	Chest-mount	2001
Garrison Area, TII	107658	SHM 34000:Bj 562	Lock	Iron	Padlock	1877
Garrison Area, TII	no no.	F16212:1	Lock	Iron	Padlock	2004
Garrison Area, TII	no no.	F10166	Lock	Iron	Not spec., padlock?	2001
Garrison Area, TII	no no.	F10882	Lock	Iron	Not spec., padlock?	2001
Garrison Area, TII	no no.	F12033	Lock	Iron	Not spec., padlock?	2002
Garrison Area, TII	no no.	F12473	Lock	Iron	Not spec., padlock?	2002
Garrison Area, TII	no no.	F14153	Lock	Iron	Not spec., padlock?	2003
Garrison Area, TII	no no.	F14231	Lock	Iron	Not spec., padlock?	2003
Garrison Area, TII	no no.	F14347	Lock	Iron	Not spec., padlock?	2003
Garrison Area, TII	no no.	F16506:5	Lock	Iron	Not spec., padlock?	2004
Garrison Area, TII	no no.	F10575	Lock	Iron	Not spec., padlock?	2001
Garrison Area, TII	no no.	F15519	Lock	Iron	Not spec., padlock?	2003
Garrison Area, TII	no no.	F14158	Lock	Bronze	Not spec., padlock?	2003
Garrison Area, TII	no no.	F14394	Lock?	Iron	Not spec., padlock?	2003
Garrison Area, TII	no no.	F12022	Chest	Iron	Chest-nail	2002
Garrison Area, TII	no no.	F10706	Chest	Iron	Chest-mount	2001

Appendices

Garrison Area, TII	no no.	See Bergström 2013: 181	Chest	Iron	Studs and chest-mount	2001-2002
Grave Bj 24A	447697	SHM 34000:Bj 24A	Chest	Iron	Chest handle	1875
Grave Bj 24A	447861	SHM 34000:Bj 24A	Lock	Iron	Lock mount	1875
Grave Bj 24A	447627	SHM 34000:Bj 24A	Lock	Iron	Lock spring	1875
Grave Bj 26	448524	SHM 34000:Bj 26	Lock	Iron	Padlock	1875
Grave Bj 56	450829	SHM 34000:Bj 56	Chest	Iron	Chest	1875
Grave Bj 56	450841	SHM 34000:Bj 56	Chest	Various	Chest	1875
Grave Bj 67	460818	SHM 34000:Bj 67	Chest	Iron	Chest	1875
Grave Bj 67	460848	SHM 34000:Bj 67	Chest	Iron	Chest	1875
Grave Bj 67	460872	SHM 34000:Bj 67	Chest	Iron	Chest	1875
Grave Bj 104	561754	SHM 34000:Bj 104	Lock	Iron	Lock mount	1875
Grave Bj 104	561754	SHM 34000:Bj 104	Lock	Iron	Lock spring	1875
Grave Bj 104	no no.	No number	Lock	Iron	Lock mount	1875
Grave Bj 110A	471281	SHM 34000:Bj 110A	Lock	Iron	Padlock	1875
Grave Bj 158:1	477306	SHM 34000:Bj 158:1	Chest	Iron	Chest-mount?	1875
Grave Bj 158:1	477300	SHM 34000:Bj 158:1	Chest	Iron	Chest-mount?	1875
Grave Bj 168	476423	SHM 34000:Bj 168	Chest	Iron	Chest	1875
Grave Bj 187	479211	SHM 34000:Bj 187	Lock	Iron	Padlock	1875
Grave Bj 195:1	479661	SHM 34000:Bj 195:1	Chest	Iron	Chest	1874
Grave Bj 212	611430	SHM 34000:Bj 212	Chest	Iron	Chest	1874
Grave Bj 305	524529	SHM 34000:Bj 305	Lock	Iron	Padlock	1876
Grave Bj 334	no no.	No number	Lock	Iron	Lock mount	1876

Appendices

Grave Bj 353	538673	SHM 34000:Bj 353	Chest	Iron	Chest lock	1876
Grave Bj 367	539119	SHM 34000:Bj 367	Chest	Iron	Chest detail	1876
Grave Bj 399	545817	SHM 34000:Bj 399	Lock	Iron	Lock mount	1876
Grave Bj 407	546238	SHM 34000:Bj 407	Chest	Iron	Chest detail	1876
Grave Bj 407	546294	SHM 34000:Bj 407	Chest	Iron	Chest detail	1876
Grave Bj 456	611607	SHM 34000:Bj 456	Chest	Iron	Chest	1876
Grave Bj 510	555899	SHM 34000:Bj 510	Chest	Iron	Chest	1877
Grave Bj 510	555908	SHM 34000:Bj 510	Chest	Various	Chest	1877
Grave Bj 512	556058	SHM 34000: Bj 512	Chest	Iron	Chest details	1877
Grave Bj 513	556068	SHM 34000:Bj 513	Lock	Iron	Lock mount	1877
Grave Bj 513	556081	SHM 34000:Bj 513	Chest	Various	Chest detail	1877
Grave Bj 513	556094	SHM 34000:Bj 513	Chest	Various	Chest detail	1877
Grave Bj 523	556500	SHM 34000:Bj 523	Lock	Iron	Padlock	1877
Grave Bj 539	557836	SHM 34000:Bj 539	Lock	Iron	Lock mount	1878
Grave Bj 542	557917	SHM 34000:Bj 542	Chest	Iron	Box	1878
Grave Bj 542	557918	SHM 34000:Bj 542	Lock	Iron	Lock mount	1878
Grave Bj 559	559466	SHM 34000:Bj 559	Chest	Iron	Chest detail	1878
Grave Bj 559	559478	SHM 34000:Bj 559	Chest	Various	Chest detail	1878
Grave Bj 559	559557	SHM 34000:Bj 559	Chest	Various	Chest detail	1878
Grave Bj 562	107658	SHM 34000:Bj 562	Lock	Iron	Padlock	1878
Grave Bj 573	561015	SHM 34000:Bj 573	Chest	Various	Chest	1878
Grave Bj 573	451936	SHM 34000:Bj 573	Chest	Various	Chest	1878

Appendices

Grave Bj 577	561055	SHM 34000: Bj 577	Chest	Iron	Box mount	1878
Grave Bj 585	574889	SHM 34000:Bj 585	Chest	Various	Box	1878
Grave Bj 585	574900	SHM 34000:Bj 585	Chest	Various	Box	1878
Grave Bj 585	611669	SHM 34000:Bj 585	Lock	Iron	Lock plate	1878
Grave Bj 624	556196	SHM 34000:Bj 624	Chest	Various	Chest	1878
Grave Bj 639	470143	SHM 34000:Bj 639	Chest	Cu-alloy	Chest detail	1878
Grave Bj 639	470154	SHM 34000:Bj 639	Chest	Cu-alloy	Chest detail	1878
Grave Bj 639	470091	SHM 34000:Bj 639	Chest	Iron & Cu-alloy	Chest detail	1878
Grave Bj 639	470112	SHM 34000:Bj 639	Lock	Iron & Cu-alloy	Drop fork	1878
Grave Bj 639	470150	SHM 34000:Bj 639	Chest	Iron & Cu-alloy	Chest detail	1878
Grave Bj 639	470066	SHM 34000:Bj 639	Chest	Various	Chest detail	1878
Grave Bj 639	470158	SHM 34000:Bj 639	Chest	Various	Chest detail	1878
Grave Bj 639	469957	SHM 34000:Bj 639	Chest	Various	Chest detail	1878
Grave Bj 639	470131	SHM 34000:Bj 639	Chest	Various	Chest detail	1878
Grave Bj 639	470141	SHM 34000:Bj 639	Chest	Various	Chest detail	1878
Grave Bj 639	106524	SHM 34000:Bj 639	Chest	Various	Chest lock	1878
Grave Bj 639	470101	SHM 34000:Bj 639	Chest	Various	Chest detail	1878
Grave Bj 639	470121	SHM 34000:Bj 639	Chest	Leather	Chest detail	1878
Grave Bj 639	470236	SHM 34000:Bj 639	Chest	Various	Chest detail	1878
Grave Bj 644	472500	SHM 34000: Bj 644	Chest	Cu-alloy	Box	1878
Grave Bj 660	465454	SHM 34000:Bj 660	Lock	Various	Drop fork	1879
Grave Bj 679	466537	SHM 34000:Bj 679	Lock	Iron	Lock spring	1878

Appendices

Grave Bj 681	466555	SHM 34000:Bj 681	Chest	Iron	Chest detail	1879
Grave Bj 708	467629	SHM 34000:Bj 708	Chest	Iron	Chest lock	1879
Grave Bj 731	476197	SHM 34000:Bj 731	Chest	Various	Chest	1879
Grave Bj 735	477305	SHM 34000:Bj 735	Chest	Various	Chest	1879
Grave Bj 739	545593	SHM 34000:Bj 739	Chest	Various	Chest detail	1879
Grave Bj 739	545612	SHM 34000:Bj 739	Chest	Various	Chest detail	1879
Grave Bj 739	545641	SHM 34000:Bj 739	Chest	Various	Chest detail	1879
Grave Bj 739	545657	SHM 34000:Bj 739	Lock	Various	Lock	1879
Grave Bj 739	545637	SHM 34000:Bj 739	Chest	Various	Chest detail	1879
Grave Bj 739	545640	SHM 34000:Bj 739	Chest	Various	Chest detail	1879
Grave Bj 739	545643	SHM 34000:Bj 739	Chest	Various	Chest detail	1879
Grave Bj 739	545636	SHM 34000:Bj 739	Chest	Various	Chest detail	1879
Grave Bj 739	545661	SHM 34000:Bj 739	Chest	Various	Chest detail	1879
Grave Bj 791	564766	SHM 34000:Bj 791	Chest	Various	Chest detail	1879
Grave Bj 791	564606	SHM 34000:Bj 791	Chest	Various	Chest detail	1879
Grave Bj 791	564651	SHM 34000:Bj 791	Chest	Various	Chest lock	1879
Grave Bj 791	564682	SHM 34000:Bj 791	Chest	Various	Chest detail	1879
Grave Bj 791	564893	SHM 34000:Bj 791	Chest	Various	Chest detail	1879
Grave Bj 791	564635	SHM 34000:Bj 791	Chest	Various	Chest detail	1879
Grave Bj 823	567351	SHM 34000:Bj 823	Chest	Various	Chest lock	1879
Grave Bj 830	568761	SHM 34000: Bj 830	Chest	Iron	Chest detail?	1879
Grave Bj 832	568973	SHM 34000:Bj 832	Chest	Iron	Chest detail?	1879

Appendices

Grave Bj 834	569442	SHM 34000:Bj 834	Chest	Iron	Chest	1879
Grave Bj 838	571002	SHM 34000:Bj 838	Chest	Various	Chest lock	1879
Grave Bj 845	564836	SHM 34000:Bj 845	Lock	Iron & Cu-alloy	Lock	Not Spec.
Grave Bj 845	572602	SHM 34000:Bj 845	Chest	Iron	Chest	Not Spec.
Grave Bj 847	572781	SHM 34000:Bj 847	Chest	Iron	Chest lock	Not Spec.
Grave Bj 847	572786	SHM 34000:Bj 847	Lock	Various	Lock detail?	Not Spec.
Grave Bj 850	528655	SHM 34000:Bj 850	Chest	Iron	Chest detail	Not Spec.
Grave Bj 850	573388	SHM 34000:Bj 850	Lock	Iron	Lock	Not Spec.
Grave Bj 850	573397	SHM 34000:Bj 850	Chest	Iron	Chest detail	Not Spec.
Grave Bj 850	573399	SHM 34000:Bj 850	Chest	Iron	Chest detail	Not Spec.
Grave Bj 850	564840	SHM 34000:Bj 850	Lock	Iron & Cu-alloy	Drop fork	Not Spec.
Grave Bj 850	573309	SHM 34000:Bj 850	Chest	Various	Chest detail	Not Spec.
Grave Bj 850	573312	SHM 34000:Bj 850	Chest	Various	Chest detail	Not Spec.
Grave Bj 850	573313	SHM 34000:Bj 850	Chest	Various	Chest detail	Not Spec.
Grave Bj 850	573340	SHM 34000:Bj 850	Lock	Various	Chest detail	Not Spec.
Grave Bj 850	573361	SHM 34000:Bj 850	Chest	Various	Chest detail	Not Spec.
Grave Bj 850	573381	SHM 34000:Bj 850	Chest	Various	Chest detail	Not Spec.
Grave Bj 854	107012	SHM 34000:Bj 854	Lock	Iron	Lock	Not Spec.
Grave Bj 854	573973	SHM 34000:Bj 854	Chest	Iron	Chest detail	Not Spec.
Grave Bj 854	564879	SHM 34000:Bj 854	Chest	Iron & Cu-alloy	Chest detail	Not Spec.
Grave Bj 854	573965	SHM 34000:Bj 854	Chest	Iron	Chest detail	Not Spec.
Grave Bj 860B	574950	SHM 34000:Bj 860B	Chest	Various	Chest lock	Not Spec.

Appendices

Grave Bj 878	577286	SHM 34000:Bj 878	Lock	Iron	Lock spring	Not Spec.
Grave Bj 901	581213	SHM 34000:Bj 901	Chest	Iron	Chest detail	Not Spec.
Grave Bj 937	604621	SHM 34000:Bj 937	Chest	Iron	Chest lock	Not Spec.
Grave Bj 943	no no.	No number	Lock	Iron	Lock mount	1881
Grave Bj 943	no no.	No number	Lock	Iron	Lock mount	1881
Grave Bj 944	609174	SHM 34000:Bj 944	Lock	Iron	Lock mount	1881
Grave Bj 944	609172	SHM 34000:Bj 944	Chest	Iron	Chest mount	1881
Grave Bj 944	608390	SHM 34000:Bj 944	Chest	Iron	Chest detail	1881
Grave Bj 944	608399	SHM 34000:Bj 944	Chest	Wood	Chest detail	1881
Grave Bj 944	608396	SHM 34000:Bj 944	Chest	Iron	Chest detail	1881
Grave Bj 944	608394	SHM 34000:Bj 944	Chest	Iron	Chest detail	1881
Grave Bj 944	608392	SHM 34000:Bj 944	Chest	Iron	Chest detail	1881
Grave Bj 948	609751	SHM 34000:Bj 948	Lock	Iron	Padlock	1881
Grave Bj 963	611166	SHM 34000:Bj 963	Chest	Various	Chest lock	1881
Grave Bj 965	611427	SHM 34000:Bj 965	Lock	Various	Lock mount	1881
Grave Bj 967	no no.	No number	Chest	Iron	Chest	1881
Grave Bj 968	613783	SHM 34000:Bj 968	Lock	Iron	Lock	1881
Grave Bj 980	614681	SHM 34000:Bj 980	Chest	Iron	Chest detail	1881
Grave Bj 980	614682	SHM 34000:Bj 980	Lock	Iron	Lock	1881
Grave Bj 1001	622532	SHM 34000:Bj 1001	Lock	Cu-alloy	Padlock	1881
Grave Bj 1046	615244	SHM 34000:Bj 1046	Chest	Iron & Cu-alloy	Chest	1881
Grave Bj 1081	577443	SHM 34000:Bj 1081	Lock	Iron	Chest lock	1881

Appendices

Grave Bj 1083	577411	SHM 34000:Bj 1083	Chest	Various	Chest	1881
Grave Bj 1083	577950	SHM 34000:Bj 1083	Chest	Iron	Chest mount	1881
Grave Bj 1098	578919	SHM 34000:Bj 1098	Chest	Iron	Chest	1881
Grave Bj 1125B	no no.	No number	Chest	Iron	Chest	1888

Appendices

Appendix 3: *The Birka graves with keys, locks, and chests, sorted by grave field and inner grave type. The padlocks are underlined and in bold.*

Grave field	Grave	Outer grave type	Inner grave type	Key	Lock	Chest
Hemlanden 1A	Bj 943	Not specified	Chamber grave		1	1
Hemlanden 1A	Bj 944	Not specified	Chamber grave		1	1
Hemlanden 1A	Bj 946	Not specified	Chamber grave	1		
Hemlanden 1A	Bj 950	Flat grave	Chamber grave	3		
Hemlanden 1A	Bj 954	Flat grave	Chamber grave	1		
Hemlanden 1A	Bj 963	Flat grave	Chamber grave		1	1
Hemlanden 1A	Bj 965	Flat grave	Chamber grave	1	1	1
Hemlanden 1A	Bj 967	Flat grave	Chamber grave	1		1
Hemlanden 1A	Bj 968	Flat grave	Chamber grave	2	1	1
Hemlanden 1A	Bj 974	Flat grave	Chamber grave	1		
Hemlanden 1A	Bj 983	Flat grave	Chamber grave	2		
Hemlanden 1A	Bj 985	Mound	Chamber grave	1		
Hemlanden 1A	Bj 1081	Mound	Chamber grave	1	1	1
Hemlanden 1A	Bj 1083	Flat grave	Chamber grave	4		1
Hemlanden 1A	Bj 948	Not specified	Coffin grave		<u>1</u>	
Hemlanden 1A	Bj 970	Flat grave	Coffin grave	1		
Hemlanden 1A	Bj 971	Flat grave	Coffin grave	1		
Hemlanden 1A	Bj 980	Mound	Coffin grave	1	1	1
Hemlanden 1A	Bj 990	Mound	Coffin grave	1		
Hemlanden 1A	Bj 997	Mound	Cremation grave	1		
Hemlanden 1A	Bj 1001	Mound	Cremation grave	1	<u>1</u>	
Hemlanden 1A	Bj 1098	Flat grave	Inhumation grave			1
Hemlanden 1A	Bj 1102	Mound	Inhumation grave	1		
Hemlanden 1B	Bj 845	Mound	Chamber grave		1	1
Hemlanden 1B	Bj 850	Flat grave	Chamber grave		1	1
Hemlanden 1B	Bj 854	Flat grave	Chamber grave	1	1	1
Hemlanden 1B	Bj 901	Mound	Chamber grave	1		1
Hemlanden 1B	Bj 1125B	Not specified	Chamber grave	1		
Hemlanden 1B	Bj 67	Mound	Coffin grave			1
Hemlanden 1B	Bj 847	Not specified	Coffin grave	1	1	1
Hemlanden 1B	Bj 24A	Mound	Cremation grave	1	1	1

Appendices

Hemlanden 1B	Bj 24B	Mound	Cremation grave	1		
Hemlanden 1B	Bj 26	Mound	Cremation grave		1	
Hemlanden 1B	Bj 55	Mound	Cremation grave	1		
Hemlanden 1B	Bj 64	Mound	Cremation grave	1		
Hemlanden 1B	Bj 104	Mound	Cremation grave		2	2
Hemlanden 1B	Bj 158:1	Mound	Cremation grave	1		1
Hemlanden 1B	Bj 168	Mound	Cremation grave			1
Hemlanden 1B	Bj 187	Mound	Cremation grave		1	
Hemlanden 1B	Bj 878	Not specified	Cremation grave		1	1
Hemlanden 1B	Bj 902	Mound	Cremation grave	1		
Hemlanden 1B	Bj 937	Mound	Cremation grave		1	1
Hemlanden 1B	Bj 1142B	Mound	Cremation grave	1		
Hemlanden 1B	A129	Stone setting	Inhumation grave			1
Hemlanden 1B	Bj 56	Mound	Inhumation grave			1
Hemlanden 1B	Bj 893	Mound	Inhumation grave	1		
Hemlanden 1B	Bj 1079	Flat grave	Inhumation grave	1		
Hemlanden 1C	Bj 708	Mound	Chamber grave	2	1	1
Hemlanden 1C	Bj 731	Mound	Chamber grave			1
Hemlanden 1C	Bj 735	Mound	Chamber grave	1		1
Hemlanden 1C	Bj 739	Mound	Chamber grave	2	1	1
Hemlanden 1C	Bj 750	Mound	Chamber grave	1		1
Hemlanden 1C	Bj 791	Flat grave	Chamber grave		1	1
Hemlanden 1C	Bj 823	Mound	Chamber grave	1	1	1
Hemlanden 1C	Bj 825	Not specified	Chamber grave	1		
Hemlanden 1C	Bj 832	Mound	Chamber grave			1
Hemlanden 1C	Bj 834	Mound	Chamber grave			1

Appendices

Hemlanden 1C	Bj 838	Mound	Chamber grave		1	1
Hemlanden 1C	Bj 860A	Flat grave	Chamber grave	1		
Hemlanden 1C	Bj 860B	Flat grave	Chamber grave		1	1
Hemlanden 1C	Bj 733	Mound	Coffin grave	2		
Hemlanden 1C	Bj 738	Mound	Coffin grave	1		
Hemlanden 1C	Bj 746	Mound	Coffin grave	1		
Hemlanden 1C	Bj 756	Mound	Coffin grave	1		
Hemlanden 1C	Bj 758	Mound	Coffin grave	2		
Hemlanden 1C	Bj 759	Mound	Coffin grave	3		1
Hemlanden 1C	Bj 767	Mound	Coffin grave	1		
Hemlanden 1C	Bj 777	Mound	Coffin grave	1		
Hemlanden 1C	Bj 807	Mound	Coffin grave	1		
Hemlanden 1C	Bj 831	Mound	Coffin grave	1		
Hemlanden 1C	Bj 714	Mound	Cremation grave	1		
Hemlanden 1C	Bj 741	Mound	Cremation grave	1		
Hemlanden 1C	Bj 783	Mound	Cremation grave	1		
Hemlanden 1C	Bj 820	Mound	Cremation grave	1		
Hemlanden 1C	Bj 797	Mound	Inhumation grave	1		
Hemlanden 1C	Bj 800	Not specified	Inhumation grave	1		
Hemlanden 1C	Bj 835	Mound	Inhumation grave	1		
Hemlanden 1C	Bj 895	Mound	Inhumation grave	1		
Hemlanden 1D	Bj 1046	Mound	Cremation grave			1
Hemlanden 1D	Bj 1044	Mound	Inhumation grave	1		
Hemlanden 1E	Bj 96	Mound	Cremation grave	1		
Hemlanden 1E	Bj 110A	Mound	Coffin grave		<u>1</u>	
Hemlanden 1E	Bj 919	Mound	Coffin grave	1		
Hemlanden 1E	Bj 916	Mound	Cremation grave	1		
Hemlanden 1E	Bj 935	Mound	Cremation grave	1		

Appendices

Hemlanden 1F	Bj 195:1	Mound	Cremation grave			1
Hemlanden 1F	Bj 212	Mound	Cremation grave	1		1
Norr om Borg 2A	Bj 510	Not specified	Chamber grave			1
Norr om Borg 2A	Bj 523	Mound	Chamber grave		1	
Norr om Borg 2A	Bj 542	Not specified	Chamber grave		1	2
Norr om Borg 2A	Bj 557	Not specified	Chamber grave	2		1
Norr om Borg 2A	Bj 573	Not specified	Chamber grave			1
Norr om Borg 2A	Bj 607	Flat grave	Chamber grave	1		
Norr om Borg 2A	Bj 624	Not specified	Chamber grave			1
Norr om Borg 2A	Bj 644	Not specified	Chamber grave			2
Norr om Borg 2A	Bj 660	Not specified	Chamber grave		1	1
Norr om Borg 2A	Bj 526	Not specified	Coffin grave	3		
Norr om Borg 2A	Bj 577	Not specified	Coffin grave			1
Norr om Borg 2A	Bj 625	Marked w. stone	Coffin grave	1		
Norr om Borg 2A	Bj 504	Flat grave	Inhumation grave	1		
Norr om Borg 2A	Bj 512	Mound	Inhumation grave			1
Norr om Borg 2A	Bj 513	Not specified	Inhumation grave		1	1
Norr om Borg 2A	Bj 539	Not specified	Inhumation grave		1	1
Norr om Borg 2A	Bj 559	Flat grave	Inhumation grave	1		1
Norr om Borg 2B	Bj 585	Not specified	Chamber grave	1	1	2
Norr om Borg 2B	Bj 639	Not specified	Chamber grave	1	1	2
Norr om Borg 2B	Bj 623	Marked w. stone	Coffin grave	1		
Norr om Borg 2B	A88	Flat grave	Cremation grave	1		
Borg	1997:1	Mound	Chamber grave			1
Borg	Bj 456	Not specified	Cremation grave			1
Borg	Bj 462	Flat grave	Cremation grave	1		
Kvarnbacka 4B	Bj 349	Mound	Cremation grave	1		
Kvarnbacka 4B	Bj 353	Stone setting	Cremation grave		1	1

Appendices

Kvarnbacka 4C	Bj 324	Mound	Cremation grave	1		
Kvarnbacka 4C	Bj 334	Mound	Cremation grave		1	1
Kvarnbacka 4D	Bj 305	Mound	Cremation grave		1	
Kvarnbacka 4D	Bj 306B	Mound	Cremation grave	1		
Borgs hage 4A	Bj 367	Mound	Cremation grave			1
Borgs hage 4A	Bj 399	Mound	Cremation grave		1	1
Borgs hage 4A	Bj 407	Mound	Cremation grave			1
Borgs hage 4A	Bj 449	Mound	Cremation grave	1		
Grindsbacka	Bj 679	Stone circle	Cremation grave		1	1
Grindsbacka	Bj 681	Flat grave	Cremation grave			1

Appendices

Appendix 4: *Twenty-three Birka inhumation burials with items (jewellery not included) found next to a key, in a location on or right next to the body of the deceased – possibly indicating a personal “tool-kit”. Only objects occurring in this location and in at least two graves have been included in the table. No. of instances at the bottom of the table refers to the number of graves in which a certain object occurred, not the number of objects (which in some graves was more than one). The numbers in italics refers to items close to, but not right next to the key.*

Grave	Key	Knife	Shears	Whetstone	Weight	Needle-case	Strike-a-light	Tweezers	Awl
504	1							<i>1</i>	
526	1	1				1			
557	2	1							
735	1			1					
746	1	1		2					
756	1	1							
759	3	1	1	1			1		
767	1	1							
777	1	1		<i>1</i>	2	1	<i>1</i>		
797	1				2				
823	1		1		1				
835	1	1	1						
893	1	1	1						
895	1	1							
919	1	1			1				
946	1	1	1					1	
950	1	1	1	1	2				
954	1						1		1
971	1	1							
980	1	<i>1</i>	<i>1</i>					<i>1</i>	1
983	2	1				1			
985	1	2		1					
1079	1	1							
No. of instances	23	18	7	6	5	3	3	3	2

Appendices

Appendix 5: *List of Birka graves with remains of chests, along with short descriptions of the best preserved ones.*

Grave No.	Size and shape of chest
Bj 56	Not possible to determine.
Bj 67	Not possible to determine.
Bj 158:1	Not possible to determine. Uncertain interpretation.
Bj 512	The chest was rectangular, c. 0.9 x 0.35 m. According to the location of the nails, the chest might have been wider towards the center, cf. the Cammin shrine. It is possible that a now completely rusted iron fitting also belonged to the chest.
Bj 513	The remains of the chest include fragments of 1.5 cm wide mounts, fastened with flat iron nails, and a possible rusted drop fork (5.5 cm long, diam. 0.5 x 0.7 cm) with triangular cross-section and an animal-head-shaped end bit, a hinge fragment, and some fragments of the lock plate (width c. 5 cm). Stolpe made a reconstruction (Birka I, Abb. 101) where he estimated that the chest was c. 22.5 cm long, 13.5 cm wide, and 9 cm high, with iron bands on all edges. There were also bands covering the front and back of the chest, and across the lid in two equal bands. No floor fittings were identified.
Bj 539	Acc. to a sketch by Stolpe, (Birka I, Abb. 117), the chest was rectangular and c. 19 cm long, 12 cm wide and 7.5 cm high. It had a lock plate on the front (10.9 x 2.6 cm) with a quadrangular central part with a small round hole and a larger rectangular hole. On the back were two simple hinges, length 9 x 0.8 - 1.2 cm, and on one of the short sides a handle. All of the fittings were very rusty, and the second handle and the hasp were missing already during the excavation.
Bj 542	Box made of iron, stood on three short feet made of bronze. It was round, 15.5 cm in diameter, and the height was approximately 8.5 cm. It had an overlapping lid attached with two hinges, and a locking hook, probably to be secured with a padlock. On the top of the lid there was a bronze ring handle, attached with a staple with a rosette-like décor. The sides of the box had been decorated with ten groups of concentric circles (Arbman 1943: 167-168).
Bj 542	On the grave plan (Birka I, Abb. 118) an area has been marked out around a spear head, where chest parts are said to have been found. It is almost rectangular/oval, c. 0.34 x 0.22 m.
Bj 559	Iron fittings from a chest, including a handle with broken ends (9.2 cm long), some broken band-shaped iron mounts, and twenty-three small ornamental nails with curved heads. The shape or size of the chest was not possible to determine.
Bj 573	According to the grave plan (Birka I, Abb. 140) the chest was rectangular, 0.36 x 0.57 m.
Bj 577	The box was small, only c. 12 cm in diameter according to the grave plan (Arbman 1943: 187, Abb. 142). Only fragments of the iron fittings remain of the wooden box, specifically, two 2.1-2.4 cm wide bands on the top and bottom of the box, and probably six vertical bands between them (Arbman 1943: 188).
Bj 585	Only the round lid of the box remains, which was approximately 22 cm in diameter. It was made of oak wood with four wedge-shaped bronze plates which were fastened to the wood by rows of bronze rivets. The bronze plates were decorated with animal ornamentation (Arbman 1943: 191-192).
Bj 585	Not possible to determine.

Appendices

Bj 624	According to the grave plan (Birka I, Abb. 165) the chest was rectangular, 0.45 x 0.3 m. It had a ring handle and three band-shaped mounts. These were originally coated with white metal, and decorated with rows of embossed dots.
Bj 639	Length: 46 cm, Width: 20 cm, Height: 17. The chest has band-shaped bronze mounts decorated with double lines, and 5 hinges. The bronze lock plate (25.8 x 5.6 cm) has at the front an ornamentation of double lines at the edges, two elongated vertical holes for the angled locking cramps, and a T-shaped keyhole. On the back is an iron bolt, held by small iron cramps, slidable by the key, with a second iron spring on it. The chest was unlocked when found in the grave. The locking-cramps end in stylized, bronze, animal heads. In the middle of the lid, attached with bronze staples, was a bronze handle (length 9.2 cm, width 1.1 cm) with rows of stamped half-circles and curled up ends with animal heads. Between the bronze fittings are faint remnants of paint. Acc. to a sketch by Stolpe, some blue or black dots were surrounded by black or blue parallel lines on the yellow-white ground, some blue or black lines around red dots, and a striped pattern in red and yellow-white on the northern part of the chest. On a preserved piece of wood from an edge, the painting is like lacquer colour, red and black, and where the colours meet there is a red line on a wider white and yellow strip.
Bj 639	A smaller, probably rectangular, chest with bronze fittings enabling a somewhat uncertain reconstruction (Birka I, Abb. 177). Based on the reconstruction sketch the length of the chest was c. 20 cm, and the height c. 9 cm. The partly bent fittings, with embossed circles, comprise two hinges for the back, and a third one with an iron ring attached as handle. Based on the bronze rivets, the wall thickness of the box was c. 1 cm. The lid was c. 4 cm high.
Bj 644	From the grave plan (Arbman 1943: 222, Abb. 182), the box appears to be round, c. 30 cm in diameter, the height not possible to determine. The box was made of wood and the lid was covered with thin, bronze plates with animal ornamentation. (Arbman 1943: 221-226).
Bj 644	From the the plan in Birka I, Abb. 182, and based on the area covered by a cluster of objects, the supposed chest appears to be rectangular, c. 0.38 x 0.13 m . Height not possible to determine.
Bj 660	Not possible to determine.
Bj 708	Not possible to determine.
Bj 731	Not possible to determine.
Bj 735	Not possible to determine.
Bj 739	According to the plan (Birka I, Abb. 215) the chest was rectangular, c. 0.4 x 0.2 m. According to Stolpe the lid and the front were completely covered with iron mounts, the other sides rusted. The lid was covered with decoratively arranged iron rivets, and the lid corners had rounded fittings, and the edges of the sides longitudinal fittings. On the inside of the chest, between the floor and the walls, was an angled fitting. The handle was 10 cm long and had rolled up ends. Also, two tongue-shaped slightly bent iron hasps, and a damaged lock with a wide flat bolt and a double spring, length 32 cm, width 7 cm. The iron key in the grave is said to belong to the lock.
Bj 750	According to the plan (Birka I, Abb. 750) the area covered by the cluster of objects is roughly 0.4 x 0.36 m. Not possible to determine any exact measurements of the presumed chest.

Appendices

Bj 759	Acc. to the plan (Birka I, Abb. 226), the area covered by the cluster of objects that possibly indicate a chest is approx. 0,2 x 0,16 m. The shape or size of the presumed chest is not possible to determine.
Bj 791	The chest is of the same type as the one in Bj 845, but the arched lid seems to have had nine bands about 4 cm wide and narrower edge fittings, all with numerous decorative rivets. It also had a handle, 11.8 cm long with rolled up ends, and three iron hasps with bronze end-bits shaped as highly schematized animal heads. From the plan (Birka I, Abb. 235) the chest appears to be c. 0.68 x 0.22 m, hight not possible to determine.
Bj 823	The chest is c. 0.65 x 0.35 m, and has iron mounts and originally c. 80 small iron nails with quite large, flat heads; band-shaped, 2 cm wide corner fittings; and a square lock plate (6.1 x 6.1 cm) with two holes for a key with two teeth and with a 2-tounged lock-spring.
Bj 832	Not possible to determine.
Bj 834	Not possible to determine.
Bj 838	According to the plan (BirkaI, Abb. 257) the chest fittings and objects associated with the chest cover an area of c. 0.38 x 0.22 m. Otherwise the size and shape of the chest can not be determined. The lock plate has two holes for a key with two teeth.
Bj 845	The whole chest was covered with iron mounts, attached with decorative rivets which form quadrangles, and it had an arched lid (Taf. 263:1a). The handle is sharply angular. There were three iron drop forks with three longitudinal furrows, ending in stylised bronze animal heads. Only fragments of the lock remained, but it is similar to the lock in Bj 739. According to the plan (Birka I, Abb. 268) the chest was rectangular, c. 0.54 x 0.22 m. The hight can not be determined.
Bj 847	Very fragmented iron fitting for a chest, namely a four-sided plate (length not determinable, width 3.1 cm) with a simple elongated keyhole, a lock-spring (which at the same time served as a bar and was equipped with a handle for pulling, hook and latch missing), and also some other undeterminable iron fittings. The shape or size of the chest is not possible to determine.
Bj 850	The chest fittings consist of a number of 3.3-6.2 cm wide bands, fixed to the wood by rivets with large ornamental heads, and simple hinges. Only one hook remained, 10.2 cm long, ending in a stylised animal head of iron. Only fragments remain of the lock, but the construction is similar to the lock in Bj 739. The lock-spring is 3-tounged, and the three holes for the key form a triangle.
Bj 854	Acc. to the plan (Birka I, Abb. 274) the chest was rectangular, c. 0.36 x 0.26 m. The iron chest fittings were very rusty, but there were probably originally 4 band-shaped mounts, 1.2 - 2.1 cm wide, attached with iron rivets with large heads. On the inside were also some narrow angle fittings. The hinges are simple, and the lid probably somewhat arched judging by the shape of the two hasps, made from twisted iron rods and with bronze end fittings in the shape of highly stylised animal heads. The handle survives in just one end fragment which has a faceted end bit. Acc. to Birka I: 327, the lock was attached to one of the short sides and was unlocked when it was found in the grave. The lockplate was 31.8 cm long and 5.9-6 cm wide.

Appendices

Bj 860B	According to the plan (Birka I, Abb 282) the chest was rectangular, c. 0,44 x 0.14 m. The iron fittings from the chest were very rusty and the shapes were no longer establishable. They also included fragments of a lock, similar to the one in grave Bj 739.
Bj 901	Only two holding-rings left of the chest. On the plan (Birka I, Abb. 301) they are c. 0.6 m apart, which could give some indication to the length of the chest. Otherwise it is not possible to determine the shape or size.
Bj 943	Not possible to determine.
Bj 944	Not possible to determine.
Bj 963	Not possible to determine.
Bj 965	Iron fittings for one or two chests, including a lock plate (12.4 cm long) with a spring-loaded bolt which could be moved by a handle on the top; a drop fork with a flat head; and a second lock plate (9.1 cm long) with three holes for the teeth of the key. The end bit is bent at the location of the holes as a barrier for the bolt.
Bj 967	Acc. to the plan (Birka I, Abb. 345) the chest was rather small, rectangular and c. 0.22 x 0.14 m.
Bj 968	Not possible to determine.
Bj 980	The chest fitting include a closure device with unclear construction, a four-sided lock plate (4.6 x 2.6 cm), a fragment of another lock plate, two hinges of simple construction with interlocking loops, two hinge fittings (total length 6.3 cm and 7 cm), two iron rings (4.8 and 2.8 cm in diameter) with staples, and fragments of staples and nails. According to the plan (Birka I, Abb. 360), the chest was c. 0.22 x 0.14 cm.
Bj 1081	Iron chest fittings include two four-sided mounts (6.5 x 5.8 cm). The mount on the outside has an elongated keyhole and rivets with large heads in the corners, and traces of fine linen fabric in the rust. The mount on the inside has one elongated and three roundish holes for the key, and a band-shaped iron spring (10.6 cm long) with three tounges, ending in a ring on which the remains of a band-shaped iron fitting is attached. The shape or size of the chest is not possible to determine.
Bj 1083	The chest fittings include an iron handle with roled up ends, a slightly arched, rhombic bronze mount, and two elongated bronze mounts with double lines along the edges, an elongated iron mount, and some iron fragments from mounts and nails. The shape or size of the chest is not possible to determine.
Bj 1098	Only two holding rings left of the chest. According to the plan (Birka I, Abb. 1098) the distance between the rings is c. 0.3 m, giving some indication to the length of the chest, otherwise it is not possible to determine the shape or size.
A129	Not possible to determine.
1997:1	The nails and rivets cover an area of c. 0.5 x 0.3 m. Otherwise not possible to determine shape or size.

Appendices

Appendix 6: Table with number of cremation graves in each find category, divided into graves without key, lock, or chest (“All other”); graves with key; graves with lock; graves with chest; and graves with key, lock, and/or chest.

Find category	All other cremation graves (580)	Cremation graves with key/lock/chest (40)	Cremation graves with key (22)	Cremation graves with lock (12)	Cremation graves with chest (17)
Nails, mounts, etc.	71% (412)	93% (37)	87% (20)	92% (11)	94% (16)
Ceramics	69% (399)	80% (32)	83% (19)	67% (8)	76% (13)
Personal grooming	37% (214)	50% (20)	35% (8)	67% (8)	71% (12)
Beads	24% (140)	48% (19)	52% (12)	25% (3)	53% (9)
Animal bone	22% (127)	23% (9)	22% (5)	42% (5)	18% (3)
Dress and personal eq.	17% (98)	50% (20)	48% (11)	33% (4)	65% (11)
Jewellery	16% (90)	25% (10)	35% (8)	17% (2)	24% (4)
Cutting tools	14% (81)	35% (14)	35% (8)	42% (5)	35% (6)
Sharpening tools	13% (78)	18% (7)	26% (6)	8% (1)	6% (1)
Weapons and armour	11% (64)	13% (5)	9% (2)	17% (2)	18% (3)
Ice spikes and skates	11% (62)	10% (4)	9% (2)	17% (2)	18% (3)
Trade	9% (50)	15% (6)	17% (4)	25% (3)	12% (2)
Foodstuff	9% (53)	5% (2)	9% (2)	0	0
Utensils	7% (43)	15% (6)	17% (4)	8% (1)	12% (2)
Thor's hammers/amulets	7% (42)	8% (3)	4% (1)	0	18% (3)
Equestrian gear	6% (32)	10% (4)	13% (3)	17% (2)	6% (1)
Textile working tools	5% (26)	23% (9)	17% (4)	17% (2)	24% (4)
Tools	4% (26)	13% (5)	22% (5)	0	6% (1)
Fire making tools	4% (26)	15% (6)	9% (2)	0	12% (2)
Key	0	58% (23)	100% (23)	17% (2)	12% (2)
Gaming boards...	3% (17)	3% (1)	4% (1)	0	0
Chest	0	43% (17)	9% (2)	67% (8)	100% (17)
Lock	0	30% (12)	9% (2)	100% (12)	47% (8)
Bag/purse	0% (2)	0	0	0	0

Very common (100-76%)	Common (75-51%)	Less common (50-26%)	Uncommon (25-11%)	Rare (10-0%)
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Appendices

Appendix 7: Table with number of coffin graves in each find category, divided into graves without key, lock, or chest (“All other”); graves with key; graves with lock; graves with chest; and graves with key, lock, and/or chest.

Find category	All other coffin graves (189)	Coffin graves with key/lock/chest (23)	Coffin graves with key (19)	Coffin graves with lock (4)	Coffin graves with chest (5)
Cutting tools	72% (136)	78% (18)	89% (17)	75% (3)	60% (3)
Jewellery	49% (93)	65% (15)	63% (12)	75% (3)	100% (5)
Beads	28% (52)	74% (17)	74% (14)	75% (3)	100% (5)
Dress and personal eq.	23% (44)	26% (6)	26% (5)	50% (2)	20% (1)
Trade	23% (43)	22% (5)	26% (5)	0	0
Nails, mounts, etc.	19% (35)	26% (6)	26% (5)	25% (1)	60% (3)
Personal grooming	13% (24)	22% (5)	26% (5)	25% (1)	40% (2)
Chest	0	22% (5)	16% (3)	50% (2)	100% (5)
Sharpening tools	11% (20)	26% (6)	32% (6)	0	20% (1)
Textile working tools	11% (21)	9% (2)	11% (2)	0	0
Ice spikes and skates	7% (13)	30% (7)	37% (7)	50% (2)	40% (2)
Key	0	83% (19)	100% (19)	50% (2)	60% (3)
Weapons and armour	10% (18)	0	0	0	0
Bag/purse	6% (12)	17% (4)	21% (4)	0	20% (1)
Utensils	6% (11)	22% (5)	21% (4)	0	20% (1)
Animal bone	5% (10)	4% (1)	5% (1)	0	0
Fire making tools	4% (7)	13% (3)	16% (3)	25% (1)	20% (1)
Tools	4% (8)	4% (1)	5% (1)	25% (1)	20% (1)
Ceramics	11% (21)	30% (7)	37% (7)	25% (1)	20% (1)
Equestrian gear	2% (4)	0	0	0	0
Lock	0	17% (4)	11% (2)	100% (4)	40% (2)
Foodstuff	1% (2)	0	0	0	0
Gaming boards...	1% (1)	0	0	0	0
Thor's hammers/amulets	1% (1)	0	0	0	0

Very common
(100-76%)

Common
(75-51%)

Less common
(50-26%)

Uncommon
(25-11%)

Rare
(10-0%)

Appendices

Appendix 8: Table with number of inhumation graves without coffin in each find category, divided into graves without key, lock, or chest ("All other"); graves with key; graves with lock; graves with chest; and graves with key, lock, and/or chest.

Find category	All other Inhumation graves (197)	Inhumation graves with key/lock/chest (16)	Inhumation graves with key (10)	Inhumation graves with lock (2)	Inhumation graves with chest (7)
Cutting tools	51% (100)	81% (13)	70% (7)	100% (2)	86% (6)
Jewellery	32% (63)	63% (10)	50% (5)	100% (2)	86% (6)
Beads	21% (41)	63% (10)	60% (6)	100% (2)	71% (5)
Nails, mounts, etc.	20% (39)	44% (7)	30% (3)	0	71% (5)
Dress and personal eq.	17% (34)	38% (6)	30% (3)	50% (1)	57% (4)
Ceramics	14% (28)	25% (4)	30% (3)	0	29% (2)
Trade	11% (22)	25% (4)	30% (3)	0	14% (1)
Weapons and armour	8% (16)	19% (3)	0	0	43% (3)
Personal grooming	8% (16)	6% (1)	0	0	14% (1)
Sharpening tools	7% (14)	13% (2)	10% (1)	0	29% (2)
Animal bone	7% (13)	6% (1)	0	0	14% (1)
Textile working tools	6% (11)	0	0	0	0
Ice spikes and skates	5% (9)	6% (1)	10% (1)	0	0
Key	0	63% (10)	100% (10)	0	14% (1)
Utensils	4% (7)	19% (3)	20% (2)	50% (1)	14% (1)
Tools	3% (5)	19% (3)	20% (2)	50% (1)	29% (2)
Chest	0	44% (7)	10% (1)	100% (2)	100% (7)
Bag/purse	3% (6)	0	0	0	0
Fire making tools	3% (5)	6% (1)	10% (1)	0	0
Foodstuff	3% (5)	0	0	0	0
Equestrian gear	1% (2)	6% (1)	0	0	14% (1)
Thor's hammers/amulets	1% (2)	6% (1)	0	0	14% (1)
Lock	0	13% (2)	0	100% (2)	29% (2)
Gaming boards...	0	0	0	0	0

Very common (100-76%)	Common (75-51%)	Less common (50-26%)	Uncommon (25-11%)	Rare (10-0%)
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Appendices

Appendix 9: Table with number of chamber graves in each find category, divided into graves without key, lock, or chest (“All other”); graves with key; graves with lock; graves with chest; and graves with key, lock, and/or chest.

Find category	All other chamber graves (70)	Chamber graves with key/lock/chest (44)	Chamber graves with key (25)	Chamber graves with lock (20)	Chamber graves with chest (33)
Cutting tools	71% (50)	93% (41)	96% (24)	90% (18)	94% (31)
Jewellery	60% (42)	95% (42)	96% (24)	95% (19)	94% (31)
Nails, mounts, etc.	50% (35)	66% (29)	64% (16)	70% (14)	67% (22)
Weapons and armour	60% (42)	45% (20)	28% (7)	30% (6)	48% (16)
Dress and personal eq.	39% (27)	77% (34)	76% (19)	80% (16)	76% (25)
Utensils	44% (31)	61% (27)	60% (15)	80% (16)	73% (24)
Trade	37% (26)	64% (28)	60% (15)	75% (15)	70% (23)
Beads	30% (21)	73% (32)	76% (19)	85% (17)	73% (24)
Sharpening tools	33% (23)	52% (23)	52% (13)	50% (10)	52% (17)
Personal grooming	24% (17)	55% (24)	48% (12)	55% (11)	58% (19)
Ceramics	21% (15)	48% (21)	44% (11)	55% (11)	55% (18)
Chest	0	75% (33)	56% (14)	95% (19)	100% (33)
Tools	19% (13)	43% (19)	36% (9)	50% (10)	55% (18)
Equestrian gear	21% (15)	32% (14)	32% (8)	20% (4)	30% (10)
Ice spikes and skates	24% (17)	23% (10)	24% (6)	15% (3)	24% (8)
Textile working tools	14% (10)	36% (16)	44% (11)	40% (8)	39% (13)
Animal bone	19% (13)	27% (12)	28% (7)	30% (6)	33% (11)
Key	0	57% (25)	100% (25)	45% (9)	42% (14)
Bag/purse	16% (11)	30% (13)	16% (4)	35% (7)	36% (12)
Lock	0	45% (20)	36% (9)	100% (20)	58% (19)
Fire making tools	11% (8)	14% (6)	16% (4)	5% (1)	12% (4)
Thor's hammers/amulets	4% (3)	18% (8)	20% (5)	25% (5)	18% (6)
Gaming boards...	7% (5)	11% (5)	4% (1)	10% (2)	12% (4)
Foodstuff	0	2% (1)	0	5% (1)	0

Very common
(100-76%)

Common
(75-51%)

Less common
(50-26%)

Uncommon
(25-11%)

Rare
(10-0%)

Appendices

Appendix 10: *The keys from Helgö with information on location, id-numbers, material, and type.*

Location	Object id	Object No.	Object	Material	Type	Year of excavation
BG 2	1900	SHM 25343 (F1900)	Key	Iron	Padlock key	1954-1961
BG 2	126584	SHM 25514 (F2345)	Key	Iron	Padlock key	1954-1961
BG 2	126804	SHM 25514 (F2411)	Key	Iron	Padlock key	1954-1961
BG 2	126151	SHM 25514 (F2155)	Key	Iron	Padlock key	1954-1961
BG 2	132592	SHM 26481 (F6223)	Key	Iron	Padlock key	1954-1961
BG 2	132958	SHM 27950 (F8396)	Key	Iron	Padlock key	1954-1961
BG 2	123535	SHM 25075 (F100)	Key	Iron	Padlock key?	1954-1961
BG 2	125155	SHM 25075 (F1417)	Key	Iron	Padlock key?	1954-1961
BG 2	125650	SHM 25343 (F1861)	Key	Iron	Padlock key?	1954-1961
BG 2	126334	SHM 25514 (F2243)	Key	Iron	Padlock key?	1954-1961
BG 2	124932	SHM 25343 (F1583)	Key	Iron & bronze	Rotary key	1954-1961
BG 2	124574	SHM 25075 (F935)	Key	Iron	Rotary key	1954-1961
BG 2	126329	SHM 25514 (F2241)	Key	Iron	Rotary key	1954-1961
BG 2	808632	SHM 25726 (F3448)	Key	Bronze	Rotary key	1954-1961
BG 2	132022	SHM 26142 (F5921)	Key	Iron	Rotary key	1954-1961
BG 2	125875	SHM 25343 (F2003)	Key	Iron	L-shaped lift-key	1954-1961
BG 2	126530	SHM 25514 (F2318)	Key	Iron	L-shaped lift-key	1954-1961
BG 2	128002	SHM 25726 (F3119)	Key	Iron	L-shaped lift-key	1954-1961
BG 2	130109	SHM 25925 (F4650)	Key	Iron	L-shaped lift-key	1954-1961

Appendices

BG 2	131091	SHM 26142 (F5373)	Key	Iron	L-shaped lift-key	1954-1961
BG 2	127469	SHM 25726 (F2763)	Key	Iron	Angular L-shaped lift-key	1954-1961
BG 2	129962	SHM 25925 (F4545)	Key	Iron	Angular L-shaped lift-key	1954-1961
BG 2	130965	SHM 26142 (F5268)	Key	Iron	Angular L-shaped lift-key	1954-1961
BG 2	464861	SHM 25925 (F4191)	Key	Iron	Lift-key	1954-1961
BG 2	126097	SHM 25514 (F2120)	Key	Iron	Uncertain	1954-1961
BG 2	126639	SHM 25514 (F2360)	Key	Iron	Uncertain	1954-1961
BG 2	126730	SHM 25514 (F2382)	Key	Iron	Uncertain	1954-1961
BG 2	130579	SHM 25075 (F18)	Key	Iron	Uncertain	1954-1961
BG 2	124755	SHM 25075 (F1106)	Key	Iron	Uncertain	1954-1961
BG 2	125705	HM 25343 (F1903)	Key	Iron	Uncertain	1954-1961
BG 2	125444	SHM 25343 (F1667)	Key	Iron	Uncertain	1954-1961
BG 2	126719	SHM 25514 (F2376)	Key	Iron	Uncertain	1954-1961
BG 2	126357	SHM 25514 (F2252)	Key	Iron	Uncertain	1954-1961
BG 2	130469	SHM 26142 (F4951)	Key	Iron	Uncertain	1954-1961
BG 1	1227292	SHM 29094 (F10780)	Key	Iron	Angular L-shaped lift-key	1962-1971
BG 1	432515	SHM 27258 (F7175)	Key	Iron	Lift-key	1962-1971
BG 1	467517	SHM 27448 (F7585)	Key	Iron	Lift-key	1962-1971
BG 1	432539	SHM 27258 (F7175)	Key	Iron	For sliding mechanism	1962-1971
BG 1	1227250	SHM 27258 (F6950)	Key	Iron	Uncertain (key-handle)	1962-1971
BG 1	1227284	SHM 28894 (F10233)	Key	Iron	Uncertain (key-handle)	1962-1971

Appendices

BG 1	432404	SHM 26943 (F6500)	Key	Iron	Uncertain	1962-1971
BG 1	432954	SHM 27258 (F7185)	Key	Iron	Uncertain	1962-1971
BG 1	1227274	SHM 27448 (F7731)	Key	Iron	Uncertain	1962-1971
BG 4	464798	SHM 28480 (F9067)	Key	Iron	Angular L-shaped lift-key	1965-1973
BG 4	1287055	SHM 28716 (F9994)	Key	Iron	Uncertain (key- handle?)	1965-1973
BG 3	139663	SHM 30711 (F12871)	Key	Iron	Padlock key	1966-1976
BG 3	465340	SHM 30711 (F12871)	Key	Iron	Padlock key	1966-1976
BG 3	139502	SHM 30711 (F12993)	Key	Iron	Padlock key?	1966-1976
BG 3	139676	SHM 29870 (F12017)	Key	Iron	Rotary key	1966-1976
BG 3	139673	SHM 30711 (F12873)	Key	Iron	L-shaped lift-key	1966-1976
BG 3	139672	SHM 30711 (F12647)	Key	Iron	Angular L-shaped lift-key	1966-1976
BG 3	139670	SHM 29592 (F11469)	Key	Iron	Lift-key	1966-1976
BG 3	139669	SHM 29435 (F11378)	Key	Iron	Uncertain	1966-1976
BG 3	139671	SHM 29870 (F12251)	Key	Iron	Uncertain	1966-1976
BG 3	139674	SHM 30711 (F12894)	Key	Iron	Uncertain	1966-1976
BG 6	455413	SHM 30249 (F173)	Key	Iron	Uncertain (key- handle)	1962-1976
BG 7	144949	SHM 30710 (F874)	Key	Iron	Rotary key	1976-1978
Ekerö 116, grave A26	451182	SHM 30249 (F2)	Key	Iron & bronze	Uncertain (key- handle)	1962-1976
Ekerö 116, grave A48	452956	SHM 30249 (F5)	Key	Iron	Angular L-shaped lift-key	1962-1976
Ekerö 118, grave 12	144635	SHM 30710 (F90)	Key	Iron	Rotary key	1976-1978
Ekerö 118, grave 17	144297	SHM 30710 (F14)	Key	Bronze	Rotary key	1976-1978

Appendices

Appendix 11: *The locks and chests from Helgö with information on location, id-numbers, material, type, and year of excavation/finding.*

Location	Object id	Object No.	Object	Material	Type	Year of excavation
BG 2	123532	SHM 25075 (F95)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	123898	SHM 25075 (F430)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	124032	SHM 25075 (F569)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	124033	SHM 25075 (F570)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	124121	SHM 25075 (F640)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	124273	SHM 25075 (F810)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	124286	SHM 25075 (F830)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	124287	SHM 25075 (F834)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	125041	SHM 25343 (F1714)	Lock	Bronze	Padlock	1954-1961
BG 2	136727	SHM 25075 (F7)	Lock	Iron	Padlock	1954-1961
BG 2	123528	SHM 25075 (F92)	Lock	Iron	Padlock	1954-1961
BG 2	123529	SHM 25075 (F93)	Lock	Iron	Padlock	1954-1961
BG 2	123530	SHM 25075 (F94)	Lock	Iron	Padlock	1954-1961
BG 2	123911	SHM 25075 (F377)	Lock	Iron	Padlock	1954-1961
BG 2	123947	SHM 25075 (F404)	Lock	Iron	Padlock	1954-1961
BG 2	124124	SHM 25075 (F571)	Lock	Iron	Padlock	1954-1961
BG 2	124125	SHM 25075 (F572)	Lock	Iron	Padlock	1954-1961
BG 2	371752	SHM 25075 (F573)	Lock	Iron	Padlock	1954-1961
BG 2	124127	SHM 25075 (F574)	Lock	Iron	Padlock	1954-1961

Appendices

BG 2	124144	SHM 25075 (F592)	Lock	Iron	Padlock	1954-1961
BG 2	124254	SHM 25075 (F691)	Lock	Iron	Padlock	1954-1961
BG 2	124255	SHM 25075 (F692)	Lock	Iron	Padlock	1954-1961
BG 2	124404	SHM 25075 (F802)	Lock	Iron	Padlock	1954-1961
BG 2	124286	SHM 25075 (F830)	Lock	Iron	Padlock	1954-1961
BG 2	124642	SHM 25075 (F997)	Lock	Iron	Padlock	1954-1961
BG 2	371751	SHM 25075 (F1347)	Lock	Iron	Padlock	1954-1961
BG 2	125156	SHM 25075 (F1418)	Lock	Iron	Padlock	1954-1961
BG 2	125164	SHM 25075 (F1419)	Lock	Iron	Padlock	1954-1961
BG 2	371750	SHM 25075 (F1422)	Lock	Iron	Padlock	1954-1961
BG 2	125455	SHM 25343 (F1675)	Lock	Iron	Padlock	1954-1961
BG 2	126142	SHM 25514 (F2149)	Lock	Iron	Padlock	1954-1961
BG 2	126471	SHM 25514 (F2297)	Lock	Iron	Padlock	1954-1961
BG 2	124908	SHM 25343 (F1580)	Lock	Bronze	Padlock?	1954-1961
BG 2	124678	SHM 25075 (F1024)	Lock	Iron	Padlock?	1954-1961
BG 2	123525	SHM 25075 (F87)	Lock	Iron	Lock-spring	1954-1961
BG 2	124524	SHM 25075 (F890)	Lock	Iron	Lock-spring	1954-1961
BG 2	126836	SHM 25514 (F2425)	Lock	Iron	Lock-spring	1954-1961
BG 2	124423	SHM 25075 (F818)	Lock?	Iron	Lock-spring?	1954-1961
BG 2	125159	SHM 25343 (F1862)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	125354	SHM 25514 (F2315)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	125661	SHM 25514 (F2385)	Lock	Iron & Bronze	Padlock	1954-1961

Appendices

BG 2	125826	SHM 25514 (F2447)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	125247	SHM 25343 (F1519)	Lock	Iron	Padlock	1954-1961
BG 2	125930	SHM 25343 (F2037)	Lock	Iron	Padlock	1954-1961
BG 2	126049	SHM 25343 (F2088)	Lock	Iron	Padlock	1954-1961
BG 2	616150	SHM 25514 (F2346)	Lock	Iron	Padlock	1954-1961
BG 2	126615	SHM 25514 (F2349)	Lock	Iron	Padlock	1954-1961
BG 2	126763	SHM 25514 (F2396)	Lock	Iron	Padlock	1954-1961
BG 2	127003	SHM 25726 (F2481)	Lock	Iron	Padlock	1954-1961
BG 2	616150	SHM 25514 (F2346)	Lock	Iron	Padlock?	1954-1961
BG 2	126904	SHM 25514 (F2443)	Lock	Iron	Padlock?	1954-1961
BG 2	1081063	SHM 25075 (F2314)	Lock	Iron	Lock-spring	1954-1961
BG 2	125313	SHM 25343 (F1552)	Lock?	Iron	Lock-spring?	1954-1961
BG 2	126062	SHM 25726 (F2560)	Lock	Bronze	Padlock	1954-1961
BG 2	126648	SHM 25726 (F2667)	Lock	Bronze	Padlock	1954-1961
BG 2	126735	SHM 25726 (F2840)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	127006	SHM 25726 (F2482)	Lock	Iron	Padlock	1954-1961
BG 2	127010	SHM 25726 (F2484)	Lock	Iron	Padlock	1954-1961
BG 2	127656	SHM 25726 (F2885)	Lock	Iron	Padlock	1954-1961
BG 2	127872	SHM 25726 (F3026)	Lock	Iron	Padlock	1954-1961
BG 2	127903	SHM 25726 (F3051)	Lock	Iron	Padlock	1954-1961
BG 2	128251	SHM 25726 (F3291)	Lock	Iron	Padlock	1954-1961
BG 2	128296	SHM 25726 (F3325)	Lock	Iron	Padlock	1954-1961

Appendices

BG 2	130353	SHM 25925 (F4837)	Lock	Iron	Padlock	1954-1961
BG 2	127034	SHM 25726 (F2492)	Lock?	Iron	Padlock?	1954-1961
BG 2	127930	SHM 25726 (F3066)	Lock?	Iron	Padlock?	1954-1961
BG 2	128858	SHM 25925 (F3722)	Lock?	Iron	Padlock?	1954-1961
BG 2	127896	SHM 25726 (F3039)	Lock	Iron	Lockspring	1954-1961
BG 2	129035	SHM 25925 (F3850)	Lock?	Iron	Lockspring?	1954-1961
BG 2	127075	SHM 25726 (F3001)	Lock	Bronze	Padlock	1954-1961
BG 2	127598	SHM 25726 (F3392)	Lock	Bronze	Padlock	1954-1961
BG 2	127599	SHM 25726 (F3393)	Lock	Bronze	Padlock	1954-1961
BG 2	127697	SHM 25726 (F3465)	Lock	Bronze	Padlock	1954-1961
BG 2	128382	SHM 25925 (F4411)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	128383	SHM 25925 (F4440)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	128384	SHM 25925 (F4586)	Lock	Bronze	Padlock	1954-1961
BG 2	130341	SHM 26142 (F5934)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	128371	SHM 25726 (F3389)	Lock	Iron	Padlock	1954-1961
BG 2	128373	SHM 25726 (F3389)	Lock	Iron	Padlock	1954-1961
BG 2	129813	SHM 25925 (F4408)	Lock	Iron	Padlock	1954-1961
BG 2	131875	SHM 26142 (F5875)	Lock	Iron	Padlock	1954-1961
BG 2	132111	SHM 26142 (F5951)	Lock	Iron	Padlock	1954-1961
BG 2	129835	SHM 25925 (F4427)	Lock?	Iron	Padlock?	1954-1961
BG 2	131227	SHM 26142 (F5471)	Lock?	Iron	Padlock?	1954-1961
BG 2	131577	SHM 26142 (F5671)	Lock?	Iron	Padlock?	1954-1961

Appendices

BG 2	131610	SHM 26142 (F5678)	Lock?	Iron	Padlock?	1954-1961
BG 2	129878	SHM 25925 (F4468)	Lock	Iron	Lockspring	1954-1961
BG 2	130123	SHM 26142 (F5803)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	130124	SHM 26142 (F5813)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	130147	SHM 26142 (F5817)	Lock	Iron & Bronze	Padlock	1954-1961
BG 2	131796	SHM 26142 (F5820)	Lock	Iron	Padlock	1954-1961
BG 2	5853	SHM 26142 (F5853)	Lock	Iron	Padlock	1954-1961
BG 2	132676	SHM 27687 (F7897)	Lock	Bronze	Padlock	1954-1961
BG 2	132701	SHM 27687 (F7901)	Lock	Bronze	Padlock	1954-1961
BG 2	132715	SHM 27687 (F7905)	Lock	Bronze	Padlock	1954-1961
BG 2	132795	SHM 27687 (F8127)	Lock	Bronze	Padlock	1954-1961
BG 2	132779	SHM 27687 (F7970)	Lock	Iron	Lockspring	1954-1961
BG 2	132654	SHM 26943 (F6286)	Lock	Iron	Padlock	1954-1961
BG 2	133003	SHM 27950 (F8482)	Lock	Iron	Padlock	1954-1961
BG 2	132989	SHM 27950 (F8470)	Lock?	Iron	Lockspring?	1954-1961
BG 2	132824	SHM 27687 (F8060)	Lock?	Iron	Lockspring?	1954-1961
BG 2	132675	SHM 27687 (F7896)	Lock	Bronze	Padlock	1954-1961
BG 1	1226884	SHM 26943 (F6349)	Lock	Iron	Padlock	1962-1971
BG 1	131710	SHM 26943 (F6353)	Lock	Iron & Bronze	Padlock	1962-1971
BG 1	1227226	SHM 26943 (F6358)	Lock	Iron	Padlock	1962-1971
BG 1	1226890	SHM 26943 (F6452)	Lock	Iron	Padlock	1962-1971
BG 1	1227243	SHM 27258 (F6741)	Lock	Iron	Padlock	1962-1971

Appendices

BG 1	1227248	SHM 27258 (F6891)	Lock	Iron	Padlock	1962-1971
BG 1	1227253	SHM 27258 (F7204)	Lock	Iron	Padlock	1962-1971
BG 1	433046	SHM 27448 (F7333)	Lock	Iron	Padlock	1962-1971
BG 1	1227286	SHM 28894 (F10255)	Lock	Iron	Padlock	1962-1971
BG 1	1227272	SHM 27448 (F7714)	Lock?	Iron	Padlock?	1962-1971
BG 1	432006	SHM 27448 (F7702)	Lock	Iron	Padlock?	1962-1971
BG 1	1227245	SHM 27258 (F6831)	Lock	Iron	Lock-spring	1962-1971
BG 1	432956	SHM 27448 (F7252)	Lock	Iron	Lock-plate	1962-1971
BG 1	1227285	SHM 28894 (F10240)	Lock	Iron	Key-plate	1962-1971
BG 1	132635	SHM 27448 (F7545)	Lock	Bronze	Lock fragment	1962-1971
BG 1	433078	SHM 27448 (F7609)	Lock	Iron	Lock fragments	1962-1971
BG 4	142710	SHM 28716 (F9994)	Lock	Bronze	Padlock	1965-1973
BG 4	467931	SHM 27950 (F8556)	Lock	Iron	Padlock	1965-1973
BG 4	1287038	SHM 27950 (F8556)	Lock?	Iron	Frag. of F8556?	1965-1973
BG 4	1287052	SHM 28480 (F9093)	Lock	Iron	Padlock?	1965-1973
BG 3	139662	SHM 28716 (F10209)	Lock	Iron	Padlock	1966-1976
BG 3	139501	SHM 29870 (F12156)	Lock	Iron	Padlock	1966-1976
BG 3	465323	SHM 28480 (F9501)	Lock	Iron	Padlock	1966-1976
BG 3	1259768	SHM 28480 (F9824)	Lock	Iron	Padlock	1966-1976
BG 3	468755	SHM 28716 (F10150)	Lock	Iron	Padlock	1966-1976
BG 3	468778	SHM 28716 (F10174)	Lock	Iron	Padlock	1966-1976
BG 3	1281580	SHM 29870 (F12191)	Lock?	Iron	Padlock?	1966-1976

Appendices

BG 3	139666	SHM 30711 (F12869)	Lock?	Iron	Uncertain/frag.	1966-1976
BG 3	1285443	SHM 28480 (F9466)	Lock	Iron	Key-plate	1966-1976
BG 3	468790	SHM 28716 (F10073)	Lock	Iron	Key-plate	1966-1976
BG 3	139675	SHM 28716 (F10196)	Lock	Iron	Key-plate	1966-1976
BG 3	139665	SHM 29094 (F11118)	Lock	Iron	Key-plate	1966-1976
BG 3	1285450	SHM 28480 (F9657)	Lock	Iron	Key-plate?	1966-1976
BG 3	1285431	SHM 28480 (F9430)	Lock	Iron	Key-plate?	1966-1976
BG 3	1286401	SHM 28716 (F10121)	Lock	Iron	Key-plate?	1966-1976
BG 3	139667	SHM 30711 (F12656)	Lock	Iron	Lock-spring	1966-1976
BG 3	139668	SHM 28716 (F10185)	Lock	Iron	Lock-spring	1966-1976
BG 3	465452	SHM 28716 (F10123)	Lock	Iron	Lock-spring?	1966-1976
BG 3	468661	SHM 28480 (F9476)	Lock	Iron	Lock-spring?	1966-1976
BG 3	139664	SHM 29094 (F10973)	Lock	Iron	Lock-spring, rim lock	1966-1976
BG 6	455415	SHM 30249 (F173)	Lock	Iron	Padlock	1962-1976
BG 6	428706	SHM 30249 (F172)	Chest	Iron	Mount/hinge	1962-1976
Ekerö 116, Grave A28	451625	SHM 30249 (F11)	Chest	Iron	Chest-hinge	1962-1976
Ekerö 118, Grave 15	144495	SHM 30710 (F36)	Chest?	Iron	Chest-fitting?	1976-1978
Ekerö 118, Grave 25A	144411(?)	SHM 30710 (F22)	Lock	Iron	Padlock shackle?	1976-1978

Appendices

Appendix 12: *The find categories present on the various terraces at Building Group 2 on Helgö. The 'x' marks presence, and the '?' marks possible presence.*

Find category	I	IV	III	VIII	II	V	VI	VII	IX
Ceramics	x	x	x	x	x	x	x	x	x
Cutting tools	x	x	x	x	x	x	x	x	x
Flint	x	x	x	x	x	x	x	x	x
Metal working	x	x	x	x	x	x	x	x	x
Nails, mounts, etc.	x	x	x	x	x	x	x	x	x
Sharpening tools	x	x	x	x	x	x	x	x	x
Slag	x	x	x	x	x	x	x	x	x
Tools	x	x	x	x	x	x	x	x	x
Utensils	x	x	x	x	x	x	x	x	x
Animal bone	x	x	x	x	x	x	x	x	
Beads	x	x	x	x	x	x	x	x	
Equestrian gear	x	x	x	x	x	x	x	x	
Jewellery	x	x	x	x	x	x	x	x	
Lock	x	x	x	x	x	x		x	x
Materials	x	x	x	x	x	x	x	x	
Textile working tools	x	x	x	x	x		x	x	x
Ice spikes and skates	x	x	x	x	x	x	x	x	
Weapons and armour	x	x	x	x	x	x		x	x
Thor's hammers / amulets	x	x	x	x	x	x		x	
Dress and personal equipment	x	x	x	x		x	x	x	
Key	x	x	x	x	x	x			
Fishing tools		x	x	x	x	x			
Fire making tools	x	x	x		x				
Trade	x	x	x	x					
Other objects and figures	x		x			x			
Agricultural tools	x			?			?		
Personal grooming	x	x							
Gaming boards and pieces				x			x		
Foodstuff		x					x		
Chest									
No. of categories	26	26	25	25	22	22	20	20	12

Appendices

Appendix 13: *The find categories present in the various building groups on Helgö. The 'x' marks presence, and the '?' marks possible presence.*

Find category	BG 1	BG 2	BG 3	BG 4	BG 5	BG 6	BG 7
Agricultural tools	x	x	x	x			
Animal bones	x	x	x	x		x	x
Beads	x	x	x	x		x	x
Ceramics	x	x	x	x		x	x
Chests						x	
Cutting tools	x	x	x	x	x	x	
Dress and personal equipment	x	x	x	x	x	x	x
Equestrian gear	x	x	x	x		x	x
Fire making tools	x	x	x	x			
Fishing equipment	x	x	x	x			
Flint	x	x	x	x	x	x	x
Gaming boards and pieces	?	x	x	?			
Ice spikes and skates	x	x	x	x		x	x
Jewellery	x	x	x	x	x		
Keys	x	x	x	x		x	x
Locks	x	x	x	x		x	
Materials	x	x	x	x	x	x	x
Metalworking	x	x	x	x	x	x	x
Nails, mounts, etc.	x	x	x	x	x		x
Personal grooming	x	x	x	x			
Sharpening tools	x	x	x	x			x
Slag	x	x	x	x		x	x
Textile working	x	x	x	x			x
Thor's hammers and amulets	x	x	x	x			
Tools	x	x	x	x	x		x
Trade	x	x	x	x		x	
Utensils	x	x	x	x		x	
Weapons and armour	x	x	x	x		x	

Appendices

Appendix 14: *The keys from Lovö, Sanda, and Vallbagar with information on location, id-numbers, material, type, and year of excavation.*

Location	Object No.	Object	Material	Type	Year of excavation
LOVÖ, grave A7	F1	Key	Iron	Key	1978-1987
LOVÖ, grave A38	F3	Key	Iron	Key	1978-1987
LOVÖ, grave A44	F2	Key?	Iron	Key?	2005
LOVÖ, grave A36	F3:10	Key	Iron	Angular L-shaped lift-key	1990
SANDA, K60	F98	Key	Bronze	Uncertain/not specified	1990-1991
SANDA, K64 backfill	F1006	Key	Iron	Lift-key	1990-1991
SANDA, Area C	SHM 35111 (F2704)	Key	Iron & gold	Padlock key	1990-1991
SANDA, K1	F1139	Key	Iron	Uncertain/not specified	1990-1991
VALLHAGAR, B.11	no no.	Key	Iron	Angular L-shaped lift-key	1946-1950
VALLHAGAR, B.19	no no.	Key?	Iron	Latch lifter?	1946-1950

Appendices

Appendix 15: *The locks and chests from Lovö, Sanda, and Vallbagar with information on location, id-numbers, material, type, and year of excavation.*

Location	Object No.	Object	Material	Type	Year of excavation
LOVÖ 57:1, Grave 2	no no.	Chest		Chest handles	1958-1966
LOVÖ 57:1, Grave 3	F138	Chest		Chest handle	1958-1966
LOVÖ 27:1, Grave A16	F2	Mounted lock	Iron	Lock-mount	1971-1978
LOVÖ 27:1, Grave A34	F1	Mounted lock	Bronze	Lock-mount	1971-1978
LOVÖ 28:1, Grave A37	F2	Chest	Iron	Chest mount	2002
LOVÖ 28:1, Grave A75	F2	Mounted lock	Iron	Lock-plate	2000
LOVÖ 28:1, Grave A76	F2	Lock/chest	Iron	Lock/chest-mount	2005
LOVÖ 28:1, Grave A77	F2	Lock/chest	Iron	Lock/chest-mount	2005
LOVÖ 34:1, Grave A54	F2	Chest	Iron	Chest nails	1991
SANDA, Area E	F1886	Mounted lock	Iron	Lock-spring case	1990-1991
SANDA, K21	F990	Mounted lock	Iron	Lock-spring case	1990-1991
VALLHAGAR, B.2	no no.	Mounted lock	Iron	Lock-spring	1946-1950
VALLHAGAR, B.7	no no.	Mounted lock	Iron	Lock-spring case	1946-1950