

TABLE OF CONTENTS

Table of Contents	9
Acknowledgments	13
Legend	15
List of Abbreviations	17
<hr/>	
1. Preface	21
<hr/>	
2. Lampmaking Throughout the Ages and the Romans in Gerulata	29
2.1 History of lampmaking	30
2.1.1 The first lamps	30
2.1.2 The Greek re-inventions - nozzle and covered bowl	31
2.1.3 Roman light	35
2.1.4 The Romans acquire lamps	36
2.1.5 Roman lamps in Gerulata	39
2.2 Rome, Pannonia and the archaeological history of Gerulata	40
2.2.1 The geography of Pannonia	41
2.2.2 The literary sources	42
2.2.3 Early Roman conquest of Pannonia	43
2.2.4 Maroboduus	44
2.2.5 Rome stalls	45
2.2.6 Laying the ground for the future province	45
2.2.7 Gerulata and its environs	48
2.2.8 The first auxiliary fort	49
2.2.9 The creation of the limes in Pannonia, and the second century	50
2.2.10 The Marcomannic Wars	52
2.2.11 The third century and the destruction of Gerulata	54
2.2.12 Renewal in the AD 270s and the fourth century	56
2.2.13 Valentinian and the final phase of Gerulata	57
<hr/>	
3. Catalogue of Lamps	61
How to read this catalogue:	63
Table of lamps from Gerulata	66
Bildlampen	67
3.1 Loeschcke type I - Volute lamps	68

3.1.1	Loeschcke type I b	73
3.1.2	Loeschcke type I b/c	74
3.1.3	Loeschcke type I c	80
3.1.4	Non-specific fragments of Loeschcke type I lamps	87
3.2	Loeschcke type VIII - Round lamps	92
3.3	Fragments of Bildlampen	102
Firmalampen		109
3.4	Loeschcke type IX - Early Firmalampen	112
3.4.1	Loeschcke type IX b	114
3.4.2	Loeschcke type IX c	120
3.5	Loeschcke type X - Later Firmalampen	122
3.5.1	Loeschcke type X: with relief stamps	126
3.5.2	Loeschcke type X: illegible stamps	170
3.5.3	Loeschcke type X: without stamps	177
3.5.4	Loeschcke type XK - with shortened nozzle	190
3.6	Unspecified fragments of Firmalampen	192
3.6.1	Firmalampen fragments with stamps	193
3.6.2	Firmalampen fragments without stamps	203
Uncommon types		226
3.7	Lamps with multiple nozzles	226
3.8	Glazed lamps	236
3.9	Bronze lamps	238
<hr/>		
4. Lamps for the Dead: the Cemeteries of Gerulata in Contemporary Funerary Practice		241
4.1	The last light	242
4.1.1	Two phases of burial in Gerulata	242
4.2	The case of Gerulata	243
4.2.1	Types of lamps in funerary contexts	243
4.2.2	The three cemeteries	248
4.2.3	Age and sex as factors	251
4.2.4	Lamps for the dead	253
4.2.5	Roman graves and provincial funerary practice	254
4.2.6	Lamps as personal objects in burial practice	255
<hr/>		
5. Catalogue of Stamps, Inscriptions, Marks and Distinctive Features		259
5.1	Producers' marks	260
5.1.1	Agilis	263
5.1.2	Aprio	264
5.1.3	Atimeti	264
5.1.4	S. C. A.	265
5.1.5	Campili	265

ACKNOWLEDGMENTS

5.1.6	Cassi	266
5.1.7	Ceriali	267
5.1.8	Communis	268
5.1.9	Cresces	269
5.1.10	C. Dessi	272
5.1.11	Festi	272
5.1.12	Fortis	273
5.1.13	Q. G. C.	278
5.1.14	Litogenes	279
5.1.15	Lucius	280
5.1.16	L. Nari	280
5.1.17	Neri	281
5.1.18	Octavi	282
5.1.19	C. P. S.	283
5.1.20	Pulli	283
5.1.21	Strobili	284
5.1.22	Ursu	285
5.1.23	Vibiani	286
5.1.24	Vibius	287
5.1.25	Illegible stamps	288
5.2	Workshop marks	290
5.2.1	Ornamental marks	292
5.2.2	Dots, circles and bullseyes	295
5.2.3	Linear marks	298
5.3	Inscriptions, incisions, and marks of a personal nature	299
5.3.1	The 'YYCO' inscription	299
5.3.2	The 'AY PR O' cursive relief	302
5.3.3	Other incisions	303
<hr/>		
6.	Catalogue of Discus Scenes and Iconography	307
6.1	The sacred	311
6.1.1	Gods, goddesses and heroes	311
6.1.2	Supernatural beings	325
6.1.3	Sacred objects	330
6.2	The mortal	332
6.2.1	Full figures	332
6.2.2	Masks	334
6.3	Animals	338
6.4	Plants, objects and ornaments	344
6.4.1	Plants	344
6.4.2	Objects	348
6.4.3	Ornaments	350

6.5 Indeterminate motifs	352
<hr/>	
7. Conclusion	355
7.1 Concerning lamp types	357
7.1.1 Lamp statistics	357
7.1.2 The Bildlampen	357
7.1.3 The Firmalampen	358
7.1.4 The multinozzlers and special shapes	361
7.2 Concerning manufacture	361
7.2.1 Producers' marks on the lamps of Gerulata	362
7.2.2 Gathering evidence for places of manufacture	367
7.2.3 Workshop marks on the lamps of Gerulata	370
7.2.4 Five modes of manufacture for Firmalampen	373
7.2.5 The case for long-distance trade in Gerulata	377
7.3 Concerning personal ownership and use of lamps	381
7.3.1 The olive oil supply	381
7.3.2 Alternative fuels, alternative light sources	382
7.3.3 Personal ownership expressed by involvement in the production process	384
7.3.4 Charred nozzles as indicators of use	385
7.3.5 Personal markings on the lamps of Gerulata	386
7.3.6 Lamps from the vicus, lamps from the camp	386
7.3.7 Lamps in the burial record	387
7.3.8 Who used the lamps of Gerulata?	390
7.4 Lamps in the context of Roman culture in Gerulata	392
7.4.1 The story of Amor and Psyche	392
7.4.2 Religious significance of lamps	394
7.4.3 Discus motifs on the lamps of Gerulata	395
7.4.4 Reception of Roman culture and religion in Pannonia	397
7.4.5 The role of the army	400
<hr/>	
Bibliography	405
List of Illustrations Under License	417
Appendices	419
Appendix A: Age categories used to describe human remains in Roman graves	420
Appendix B: Lamps dated by associated finds	421
Appendix C: Distinctive features on lamps	425