

# CONTENTS

Acknowledgments. . . . .	9
I. INTRODUCTION . . . . .	11
1.1 Conventions . . . . .	11
1.2 Aims and purposes . . . . .	11
1.3 Research history . . . . .	13
1.3.1 The development of the hoplite phalanx. . . . .	13
1.3.2 The course of hoplite battles. . . . .	17
1.4 Sources and methods. . . . .	18
1.4.1 Literary sources. . . . .	18
1.4.2 Archaeological evidence. . . . .	20
1.4.3 Methods used . . . . .	22
2. HOPLITE EQUIPMENT AND ITS LIMITATIONS . . . . .	25
2.1 The hoplite shield . . . . .	25
2.1.1 Nomenclature . . . . .	25
2.1.2 Materials and measurements. . . . .	27
2.1.3 Characteristics of the hoplite shield . . . . .	32
2.1.4 'Wielding' the hoplite shield. . . . .	38
2.1.5 The hoplite shield in combat. . . . .	41
2.1.6 Hoplite race and pyrrhic dance: the case for the light hoplite shield . . . . .	46
2.1.7 Comparison with a modern combat shield . . . . .	53
2.2 Headgear . . . . .	55
2.2.1 Typology . . . . .	55
2.2.2 Characteristics of the Corinthian helmet. . . . .	59
2.2.3 <i>The Corinthian helmet in combat</i> . . . . .	61
2.3 Body armour . . . . .	66
2.3.1 Breastplates. . . . .	66
2.3.2 Corslets . . . . .	70
2.3.3 Cuirasses and corslets in combat . . . . .	73
2.3.4 Greaves . . . . .	75
2.3.5 Additional body armour . . . . .	78

2.3.6	Effectiveness of bronze armour	79
2.4	Offensive weapons	81
2.4.1	The spear	81
2.4.2	Swords and other secondary weapons	85
2.4.3	The spear in combat	86
2.4.4	The sword in combat	92
2.5	Physical limitations – conclusions	95
2.5.1	The weight of armour	95
2.5.2	Physiology	98
3.	THE PHALANX	102
3.1	The development of the phalanx: myth or reality?	102
3.1.1	The development of phalanx fighting: an overview	102
3.1.2	The Homeric poems	105
3.1.3	The <i>Iliad</i> and hoplite fighting	108
3.1.4	The phalanx in Archaic poetry	115
3.1.5	The phalanx in Archaic iconography	123
3.1.6	The Amathus bowl	130
3.1.7	The phalanx during the Persian wars	135
3.1.8	The Solonian census classes	141
3.1.9	The development of the phalanx: conclusions	143
3.2	The shield in phalanx fighting	146
3.2.1	Introduction	146
3.2.2	<i>Rhypsaspia</i>	147
3.2.3	Comparison with a modern ‘phalanx’	155
3.3	Deployment	157
3.3.1	Width of file	157
3.3.2	Phalanx depth	167
3.3.3	The wings	172
3.3.4	Community ties in phalanx organisation	175
3.3.5	Place and function of the general	179
3.4	<i>Othismos</i>	183
3.4.1	A vexed question	183
3.4.2	The case against the mass-shove	187
3.4.3	Another purpose of the rear ranks?	194
3.4.4	Maintaining cohesion	195
3.4.5	<i>Othismos?</i>	198

4.	DURATION OF HOPLITE BATTLES .....	201
4.1	The problem of temporal designations .....	201
4.1.1	Introduction. ....	201
4.1.2	The phraseology of battle duration .....	202
4.1.3	Hoplite battles described as long .....	204
4.1.4	Ambiguous points of reference. ....	207
4.2	Contributing factors .....	208
4.2.1	Necessary phases .....	208
4.2.2	Different sectors faring differently .....	213
4.2.3	Pursuit .....	214
4.2.4	Physical limitations .....	215
4.3	Unusually long battles. ....	217
4.3.1	All-day battles: a problem of sources .....	217
4.3.2	All-day fighting: Sphakteria .....	220
4.4	Excursus: the possible influence of literary conventions .....	222
5.	CONCLUSION. ....	226
	APPENDIX: BATTLE INVENTORY .....	235
	BIBLIOGRAPHY. ....	293
	LIST OF ILLUSTRATIONS .....	303
	INDICES. ....	305
	General index .....	307
	Index of sources .....	321
	I. Literary sources. ....	321
	II. Inscriptions and papyri .....	337