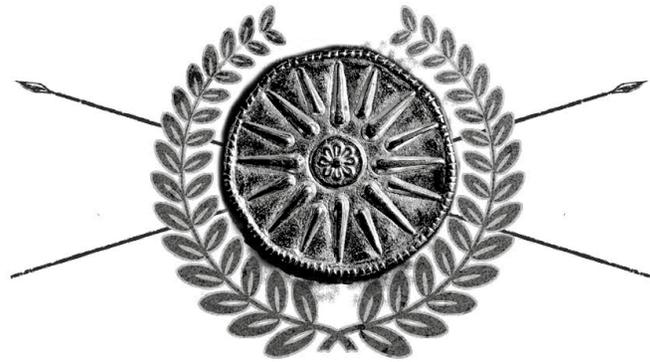


LEGION VERSUS PHALANX

The Epic Struggle for Infantry Supremacy in the Ancient World



MYKE COLE

AUDIOBOOK REFERENCE GUIDE



GLOSSARY

The words below are Greek, Latin *and* a few in English. Please note that unit strengths provided in this glossary apply to the period under study in this book (3rd to 2nd centuries BC). They change with time, and I ask that readers please keep this in mind when they consider the earlier Hellenistic kingdoms (such as Alexander in his imperial days) or the Roman Principate after the fall of the Republic.

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| <i>accensi</i> | early Roman skirmishers predating the <i>velites</i> . |
| Achaean League | a collection of Greek city-states covering the north-central Peloponnese. |
| <i>aedile</i> | a junior Roman magistrate responsible for the maintenance of temples, the hosting of games and general public order. |
| <i>agēma</i> | an elite body of troops in Hellenistic armies. The word means “vanguard,” though they did not always serve in that capacity. |
| <i>agmen quadratrum</i> | “arrangement of squares.” Possibly a reference to the <i>quincunx</i> , or to the hollow square formation, protecting the baggage at the center. |
| <i>agōgē</i> | the legendary system of Spartan military education. |

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| <i>agōn</i> | “struggle.” This could refer to an athletic contest, a poetry or theater competition, or a battle. |
| <i>ala</i> | from the Latin for “wing,” the standard unit for Roman allies. Usually stationed on the wings of the citizen legionaries, who held the center of the battle line; hence the name. |
| <i>alae</i> | plural of <i>ala</i> . |
| Antigonid | The Hellenistic dynasty descended from Alexander the Great’s general Antigonus I Monophthalmus (Antigonus the One-Eyed). Mostly confined to Macedonia. A modern term; Antigonids are referred to as “Macedonians” in the ancient sources, and sometimes in the modern ones, too. |
| <i>antilabē</i> | a loop on the rim of the <i>aspis</i> that served as a handle. |
| <i>araiotaton</i> | open-order formation for the Hellenistic phalanx. Used for rapid movement and not practical for combat. |
| <i>Argyraspides</i> | “Silver Shields.” Originally a corps of the army of Alexander the Great, renamed from the hypaspists. Later, a corps of Silver Shields was used in the Seleucid phalanx. |
| <i>as</i> | ancient Roman copper coin. |
| <i>aspis</i> | the heavy, round shield used by hoplites. |
| Attic helmet | an ancient style of bronze helmet that usually covered the head and the back of the neck only, leaving the face open for sight and breathing. This helmet was similar to the Chalcidian helmet, save that it lacked even the vestigial nose guard and frequently had a reinforced brow. |
| <i>aquilifer</i> | the Roman standard bearer who carried the legion’s eagle. |

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| augur | a Roman priest who interpreted omens by studying the flights of birds. |
| backfield | the area of a battlefield behind the battle line. |
| battle line | sometimes called the line of battle. Units of (most often) heavy infantry lined up, more or less shoulder to shoulder, usually laterally, providing as much frontage as possible. |
| Boeotarch | a chief officer of the Boeotian League. |
| Boeotian helmet | an ancient style of bronze helmet that usually covered the head only, leaving the face open for sight and breathing. It usually had a wide, wavy brim, resembling rippling fabric. |
| Boeotian League | an alliance of Greek city-states led by Thebes. |
| <i>boēthos</i> | a home guard corps of reservists with defensive duties, consisting of those too old, or too young, to serve on active duty. The <i>boēthoi</i> would be called on to garrison towns and forts in the event of an invasion that made inroads into the kingdom. |
| boss | the usually round metal bowl positioned in the center of a shield. The boss contained the shield's handle, and provided the warrior with protection for the hand; it also acted as a metal boxing glove for offensive action. |
| cataphract | from the Greek <i>kataphraktos</i> , "completely enclosed," super-heavy cavalry where both horse and rider are completely encased in metal, similar to the much later medieval knight. |
| centurion | anglicization of <i>centurio</i> . Commander of a century. With nearly 100 men under his command, the centurion's span of control makes his duties and acculturation much closer to that of a modern captain/lieutenant (O-3) than it does to a sergeant or other non-commissioned officer. |

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| century | from the Latin <i>centum</i> (100). Anglicization of <i>centuria</i> . A sub-unit of the Roman maniple consisting of nominally 100 men, but in practice usually around 60–80. |
| Chalcidian helmet | an ancient style of bronze helmet that usually covered the head, neck and cheeks (via attached cheek pieces), but leaving the face open for sight and breathing. It usually had a vestigial nasal guard that wouldn't have provided real protection to the nose. |
| <i>Chalkaspides</i> | “Bronze Shields.” One of the two main corps of the Antigonid phalanx. |
| <i>chiliarchia</i> | a unit of four <i>speirai</i> , for a total of 1,024 men. Roughly equivalent to a modern large battalion. |
| <i>chiliarchēs/chiliarch</i> | officer in charge of a <i>chiliarchia</i> . Roughly equivalent to a modern colonel. |
| Chryaspides | “Gold Shields.” A corps of the Seleucid phalanx. |
| city-state | often referred to as a <i>polis</i> . A sovereign political entity consisting of a mother city and any dependent territories. |
| <i>civitas</i> | the concept of the body of Roman citizens united by their culture and law into a public body. |
| <i>classis</i> | under the Servian reforms, that segment of the population who could afford the <i>hopla</i> and could therefore serve in the Roman phalanx. |
| <i>cognomen</i> | Roman third name. Initially nicknames, they eventually became hereditary. |
| cohesion | the ability for military formations to <i>stay</i> in formation even when they're moving and fighting. |
| consul | the highest military/political office in the Roman Republic. Two consuls were elected |

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| | annually and each alternated in holding <i>imperium</i> for a month. |
| Corinthian helmet | an ancient style of bronze helmet that usually covered the entire face and neck, with a Y- or T-shaped opening for sight and breathing. |
| <i>cornicen</i> | the trumpeter in a Roman legion. He also acted as the centurion's assistant. |
| <i>crista transversa</i> | “transverse crest.” The side-to-side helmet crest of a Roman centurion. |
| cubit | a unit of measurement: a cubit is about 18 inches, the distance between your elbow and the tip of your longest finger. |
| cuirass | body armor of any material. Usually implies both breast and backplate. |
| <i>curia</i> | “a gathering of armed men.” An ancient Roman voting assembly. |
| <i>cursus honorum</i> | the succession of public offices that a Roman was expected to hold before becoming consul. |
| <i>dediticii</i> | conquered peoples forced into permanent military alliance with Rome. |
| <i>deditio</i> | the act of becoming a <i>dediticius</i> . |
| <i>devotio</i> | a Roman custom in which commanders of losing armies charged straight into the enemy with the full knowledge that it was suicide. Such acts were thought to bring the favor of the gods, who would turn the tide of battle and grant victory to Rome. |
| <i>dilectus</i> | the Roman system of levy, by which men were called up for military service. |
| <i>diadochi</i> | see <i>successors</i> . |
| <i>dimoiritēs</i> | half-file leader in a <i>lochos</i> . |
| <i>dorul dory</i> | a 6–8- foot spear used by hoplites. |
| double envelopment | an envelopment of both flanks simultaneously. |

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| <i>drachma</i> | an ancient Greek coin. |
| envelopment | a state of affairs where a unit or battle line has greater frontage than the enemy unit or battle line, and thus is able to curl inward and attack the enemy from both the front and the flank. |
| <i>epistatēs</i> | “guy behind.” The soldier in the even numbered positions (second, fourth, sixth, etc) of a <i>lochos</i> counting from the front of the file. |
| <i>equites</i> | Roman cavalry. |
| <i>eromenos</i> | the younger boy in a homosexual relationship with an older man who usually also served as a mentor and patron, in Ancient Greece. |
| <i>evocatus</i> | “call out.” System of mobilizing reserves for the Roman army. |
| <i>extraordinarii</i> | “extraordinary ones.” Elite troops from the Roman <i>alae</i> picked out for special service. These camped near the consul and were used for special tasks, such as vanguard or rearguard duty, or reconnaissance missions. |
| file | a vertical arrangement of troops in a column, front-to-back. |
| flank | the side of an enemy unit or battle line. |
| <i>formula togatorum</i> | a list of military-aged males provided to Rome by the <i>socii</i> . |
| frontage | the lateral (left to right) distance covered by a military unit. The greater the frontage, the greater the chance to envelop an enemy unit or battle line, and the lesser the chance of being enveloped by the enemy. |
| <i>gens</i> | a grouping of Roman families that shared a common heritage. |

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| <i>gladius Hispaniensis</i> | often just referred to as <i>gladius</i> , the Roman short sword. |
| greaves | shin and sometimes knee protection of any material. |
| <i>hasta</i> | a spear. |
| <i>hastati</i> | “spearmen.” A class of Roman legionary who deployed in the first line of the <i>triplex acies</i> . Made up of younger and less experienced troops. |
| heavy infantry | the term used to refer to the weight of the soldiers’ equipment (meaning, they’re heavily armed and armored), and sometimes referring to the tightness of their formation (they generally fight formed up in close order, and not in loose or dispersed order). Heavy infantry are primarily used for close or “shock” combat. |
| hecatomb | a sacrifice of 100 cattle. |
| <i>hēgemones</i> | “leaders.” Possibly officers in a Hellenistic phalanx, or possibly every phalangite in the front of his file. |
| Hellenic | having to do with Greece. |
| Hellenistic | having to do with those cultures and polities who were heavily influenced by Greece, but not actually Greek themselves, such as the Macedonians, Epirotes and the successor dynasties of the Antigonids, Ptolemies and Seleucids. Also refers to the time period during/after the rise of Alexander the Great. |
| <i>hemithorakion</i> | half-cuirass that covers the abdomen. |
| <i>hetairoi</i> | “companions.” The close associates of a Hellenistic king. |
| <i>hippeis</i> | a term for Greek cavalry, that in later years came to mean high social status, similar to the Roman <i>equites</i> . <i>Hippeis</i> might not |

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| | necessarily be horsemen, and might serve as elite infantry. |
| hoplite | <i>hoplitēs</i> in Greek, a citizen-soldier of ancient Greek city-states. Hoplites formed the heavy infantry backbone of their armies. From the Greek <i>hopla</i> , which refers to their equipment. |
| hypaspist | “shieldbearer.” The “shieldbearers” were an elite unit under Philip II and Alexander the Great, probably fighting as hoplites. |
| <i>imperium</i> | “the power to command.” Military authority in ancient Rome. |
| <i>infra classem</i> | under the Servian reforms, that segment of the population who could not afford the <i>hopla</i> , and therefore could not serve in the phalanx, acting as light troops instead. |
| <i>kausia</i> | an ancient Macedonian felt hat. Broad and slightly conical. Looks kind of like you’re wearing a pancake on your head. |
| <i>kopis</i> | from the Greek <i>koptō</i> , “to cut”, a sword with a slightly curving blade sharp on one side, like a cleaver. Sometimes used as a side arm by Hellenistic phalangites. |
| <i>kōnos</i> | a Hellenistic bronze helmet very similar (or possibly identical to) the <i>pilos</i> . |
| <i>knēmides</i> | greaves. |
| <i>legatus</i> | “legate.” A Roman of senatorial rank who usually commanded one of the two legions under each consul. |
| <i>legio</i> | from <i>legere</i> (to choose), the basic heavy infantry formation of Rome after the regal period. Usually around 5,000 strong. |
| legion | anglicization of <i>legio</i> . |
| <i>Leukaspides</i> | one of the two main corps in the Antigonid phalanx. Likely inferior to the <i>Chalkaspides</i> . |
| <i>leves</i> | Roman skirmishers predating the <i>velites</i> . |

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| light infantry | term used to refer to the weight of the soldiers' equipment (meaning, they're lightly armed and armored), and sometimes referring to the looseness of their formation (they generally fight in open or dispersed order, and not in close order). Light infantry are primarily used as skirmishers, or to hold terrain that would disrupt the cohesion of heavy infantry. |
| <i>linothorax</i> | Greek/Hellenistic linen body armor. |
| <i>lochagos</i> | leader of a <i>lochos</i> , roughly equivalent to a modern 2nd lieutenant. |
| <i>lochos</i> | in Hellenistic armies, a file of 16 phalangites. Roughly equivalent to a modern platoon. |
| <i>lorica hamata</i> | Roman body armor made of interlocking metal rings. In use during the period studied in this book. |
| <i>lorica segmentata</i> | Roman body armor made from articulating steel bands. Not in use during the period studied in this book. |
| Magna Graecia | "Greater Greece." Southern Italy colonized by the Greeks. |
| Mamertines | "Sons of Mars." A group of Italian mercenaries brought to Sicily from their home in Campania. |
| maniple | from the Latin <i>manipulus</i> (handful). A sub-unit of the Roman legion consisting of two centuries. |
| <i>meson</i> | intermediate formation of a Hellenistic phalanx. Allows approximately 3-foot distance for each phalangite. |
| <i>miles</i> | a common soldier, a legionary. |
| Montefortino helmet | an ancient style of bronze helmet that usually covered the head only. Favored by Roman and Celtic warriors. |

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| morale | the ability of soldiers to continue toward their operational goal (attacking or defending a position) in the face of injuries, casualties or other adverse battlefield conditions. When morale fails, soldiers rout. |
| <i>ochanē</i> | a cloth or leather strap from which phalangites hang their shields, looping around the neck and shoulders. |
| <i>ocrae</i> | greaves. |
| <i>oikos</i> | household. A confusing term that is used differently in different sources. Generally refers to the family, the house and extended holdings. |
| <i>optio</i> | a centurion's second-in-command. Roughly the equivalent of a modern 1st lieutenant. |
| order of battle | a term used to describe the structure of a military force. Includes command structure, strength and disposition of personnel. |
| <i>othismos</i> | “the push.” Describes the act of two hoplite phalanxes shoving one another in an effort to break the opposing line. |
| <i>ouragos</i> | file closer (soldier in the last position) in a <i>lochos</i> . |
| outflank | a maneuver wherein a unit is able to attack an enemy from its flank. Sometimes referred to as “turning the flank.” |
| <i>pankration</i> | “all-force.” A kind of mixed martial art that combined throws, holds, punches, kicks and whatever else you could think of, apart from biting and eye-gouging. |
| <i>partheniaie</i> | “sons of virgins.” The bastard sons of unmarried Spartan women. |
| <i>paterfamilias</i> | the male head of a Roman family. |
| Peloponnesian League | an alliance of Greek city-states led by Sparta. |
| <i>peltē</i> | shield usually used by phalangites, and also |

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| | <p>by other soldiers in Hellenistic armies. Smaller than the <i>aspis</i> and not as concave. Rigged to allow the left hand to protrude past the shield rim to enable the phalangite to use his pike with both hands.</p> |
| <i>peltastai</i> | <p>a body of soldiers bearing the <i>peltē</i>. Sometimes the Anglicization of this, “peltasts,” refers to phalangites with the <i>peltē</i>, but it is also used to refer to javelin-armed skirmishers, most frequently from Thrace.</p> |
| <i>pezhetairoi</i> | <p>“foot companions.” A body of phalangites. It is debated if this term was used for an elite unit within a Hellenistic phalanx, or was simply the term applied to everyone in the phalanx.</p> |
| phalangite | <p>a soldier serving in a Hellenistic (<i>not</i> in a classical hoplite) phalanx.</p> |
| phalanx | <p>a rectangular heavy infantry formation that consists of soldiers with adjacent or overlapping shields and spears or pikes. The basic heavy infantry formation of both the Hellenic and Hellenistic worlds.</p> |
| <i>phalarae</i> | <p>metal medallions used to indicate honors in a Roman legion.</p> |
| Phrygian helmet | <p>See Thracian helmet.</p> |
| <i>pila</i> | <p>plural for <i>pilum</i>.</p> |
| <i>pilos</i> | <p>a brimless, conical, felt cap worn in ancient Greece.</p> |
| <i>pilos</i> helmet | <p>an ancient bronze helmet mimicking the shape of the <i>pilos</i>. This helmet only provided protection for the head, leaving the face and neck entirely bare.</p> |
| <i>pilum</i> | <p>javelin used by Roman legionaries. Iron, pyramidal head on the end of a long, thin metal shank attached to a wooden shaft.</p> |

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| | Most legionaries carried two, one heavy and one light. |
| <i>polis</i> | a city-state in ancient Greece. |
| <i>poleis</i> | plural for <i>polis</i> . |
| <i>porpax</i> | a metal loop for the left forearm used in both the <i>aspis</i> and <i>peltē</i> |
| <i>posterior</i> | “behind.” The junior of the two centurions in a maniple. |
| <i>praefectus sociorum</i> | “prefect of the allies.” A Roman officer whose authority/span-of-control roughly approximated that of a modern colonel (in land or air service) or a captain (in maritime service) in charge of a Roman <i>ala</i> . |
| praetor | commander of a Roman field army, and also a senior Roman magistrate. |
| <i>primus pilus</i> | also known as <i>primipilus</i> , “First javelin.” The senior centurion of a legion. |
| <i>principes</i> | “leaders.” A class of Roman legionary who deployed in the second line of the <i>triplex acies</i> . Made up of men in the prime of their lives with some battle experience. |
| <i>prior</i> | “before.” The senior of the two centurions in a maniple. |
| <i>protostatēs</i> | “guy in front.” Soldier in the odd numbered positions (first, third, fifth, etc) of a <i>lochos</i> counting from the front of the file. |
| pseudo-Corinthian helmet | an ancient style of bronze helmet similar to the Corinthian helmet, but the nose-protection and eye holes have all shrunk to a purely decorative size, and now sit high up on the forehead. Frequently employed cheek pieces, a flaring brim and at least one plume holder. |
| <i>psiloi</i> | From “ <i>psilos</i> ” meaning “naked” or “bare.” The Greek term for skirmishers. |

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| <i>pteryges</i> | “feathers.” A skirt of fabric or leather flaps that protected the abdomen, groin or legs. |
| Ptolemies | the Hellenistic dynasty descended from Alexander the Great’s general Ptolemy I Soter (“the Savior”). Mostly confined to what is now modern Egypt. |
| <i>pugio</i> | a dagger carried by Roman soldiers. Some believe it to be a side arm, others a camp tool, and possibly both. |
| <i>pyknosis</i> | see <i>meson</i> . |
| <i>pyrokausis</i> | “fire-burn.” Term possibly used to indicate the campfire around which the members of a <i>lochos</i> would eat together. |
| <i>quincunx</i> | a modern term used to describe the deployment of the Roman <i>triplex acies</i> . It references the checkerboard pattern of dots on the five-side of a six-sided die. |
| rank | a horizontal arrangement of troops in a row, side to side. |
| rearguard | the trailing part of a military formation. |
| reserve | troops kept back from the fighting and committed by the general where and when they are needed as the battle evolves. |
| retreat | an orderly, fighting withdrawal from a battle. |
| <i>rhomphaia</i> | a scythe-like weapon favored by Thracians that was half-sword, half-polearm, with a blade as long as the haft. |
| rout | fleeing from a fight with no attempt to keep order or defend oneself. |
| Sacred Band | an elite unit of Thebes, composed of 150 pairs of homosexual lovers. Greek historians have also described an elite unit of the Carthaginian army as a “Sacred Band.” |
| <i>sarissa</i> | Hellenistic pike anywhere from 15-26 feet long. |

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| satrap | a provincial governor under the Persian Empire. |
| <i>sauroter</i> | “lizard-killer.” A butt-spike, usually made of bronze, and employed on both the pike and the spear. |
| <i>scutum</i> | large, oval shield with a central boss used by Roman legionaries. |
| Seleucid | the Hellenistic dynasty descended from Alexander the Great’s general Seleucus I Nicator (“the Conqueror”). Mostly confined to modern Turkey and the Levant. |
| Servian reforms | military reforms introduced by the Roman king Servius Tullius. |
| skirmishers | troops whose primary role is to use missiles to wound or kill enemy troops, and to retreat before coming into close contact. |
| <i>signifer</i> | standard bearer in a Roman legion. Acted as the unit’s banker. |
| <i>socii</i> | Italian tribes and <i>poleis</i> in a permanent (and unequal) military alliance with Rome. |
| <i>socii Latini</i> | <i>socii</i> of the “Latin status.” |
| Spartiate | “Spartan,” but really implying “equal.” A citizen of the Spartan city-state who went through the rigorous and intensive warrior training that made the Spartans famous. |
| <i>speira</i> | a unit of four <i>tetrarchiai</i> , for a rough total of 256 soldiers. Approximately somewhere between a modern company and battalion. |
| <i>speirarchēs/speirarch</i> | the officer in charge of a <i>speira</i> . Roughly equivalent to a modern lieutenant colonel. |
| <i>spolia opima</i> | “rich plunder.” The weapons, armor and other treasure stripped from an enemy leader killed in single combat. Once of the highest military honors a Roman could win. |
| stratēgia | a unit of four <i>chiliarchiai</i> , for a total 4,096 |

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| | soldiers. Roughly equivalent to a modern brigade. |
| stratēgos | officer in charge of a <i>stratēgia</i> . Roughly equivalent to a modern brigadier general. |
| successors | also known as the <i>diadochi</i> , the rival generals who fought over Alexander the Great's empire, establishing Hellenistic dynasties in their own right. The three best known and longest-lived are the Ptolemies, the Antigonids and the Seleucids. |
| <i>synaspismos</i> | "locked shields" formation for a Hellenistic phalanx. Requires elevation of the pike to a level impractical for combat, and is therefore entirely defensive. |
| <i>tesserarius</i> | the watch commander in a Roman legion. Named for the <i>tessera</i> , a small tile or block of wood on which watchwords were written. |
| <i>tetrarchai</i> | "leaders of four." Officers in charge of a <i>tetrarchia</i> . Roughly equivalent to a modern army captain. |
| <i>tetrarchia</i> | a unit composed of four <i>lochos</i> for a total of 64 soldiers. Roughly equivalent to a modern company. |
| <i>tetrarchēs</i>/tetrarch | singular of <i>tetrarchai</i> . |
| thorax | cuirass. |
| Thracian helmet | Sometimes known as the Phrygian helmet. An ancient style of bronze helmet that usually covered the entire face and neck. The upper face was usually left open for sight and breathing, and the lower face protected by large cheek pieces, sometimes embossed to look like a long beard. The most distinctive element of the helmet was its high peak, inclined forward like a curling wave. |
| <i>thureophoroi</i> | a body of soldiers bearing the <i>thureos</i> . |

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| <i>thureos</i> | a large oval shield with a strip-boss (as opposed to a bowl) and a reinforcing spine. |
| <i>triarii</i> | “third rankers.” A class of Roman legionary who deployed in the third line of the <i>triplex acies</i> . Made up of hardened veterans. |
| tribune | Latin <i>tribunus</i> , Roman officer ranked below a legate, but above a <i>centurio</i> . Roughly equivalent to a modern colonel. |
| <i>tribunus militum</i> | the leader of a Roman tribe during the regal period. |
| <i>triplex acies</i> | the three-line battle order of the Roman legion, consisting of three lines of staggered maniples in the <i>quincunx</i> pattern. The first line was the <i>hastati</i> , followed by the second line of the <i>principes</i> , followed by the third line of the <i>triarii</i> . |
| triumph | A public celebration of a victorious military commander, which included a procession through the streets of Rome. Only granted for the greatest of victories, it was one of the most coveted honors among Rome’s military elite. |
| <i>umbo</i> | see “boss.” |
| vanguard | the leading part of a military formation. |
| <i>velites</i> | “fast movers.” The youngest and poorest class of troops in the Roman army, serving in the role of skirmishers. |
| Vergina sun | an ancient Greek and Hellenistic heraldic device featuring a 16-rayed sun. |
| <i>virtus</i> | Roman masculine virtue. Encompassing courage, military skill, valor, decency and honor. |
| <i>vitis Latina</i> | Latin vine-rod. |
| war band | the most common infantry formation among the Celtic peoples of this period. Usually |

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| <i>xiphos</i> | only semi-organized and prizing individual bravery over discipline and keeping ranks. a straight, sometimes leaf-bladed, cut and thrust sword around 1–2 feet long. The standard side arm of the Hellenistic phalangite. |
| <i>xyston</i> | a two-handed spear around 12 feet long. |

Bibliography

There are many editions of translations of the primary sources. There's a lot of debate surrounding which translation is best, but the bottom line is that you're best served by doing it yourself. Even better, there are more than a few libraries online that provide primary sources in both the original language and in translation for free. My favorite is Tufts University's Perseus Digital Library, which you can find at <http://www.perseus.tufts.edu>. Perseus accepts donations, and if you've enjoyed this book at all, I'd ask that you please give generously.

I did as much translating as I could with my admittedly weak Latin and Greek, and leaned on a variety of translations to check my work. So, below I'll provide my list of sources, and I'll leave it to you to decide which translation you like best, or if you'd rather slug it out with the Latin or Greek yourself.

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 Cassius Dio, *Roman History*
 Claudius Aelianus, *Various History*
 Cornelius Nepos, *Life of Iphicrates*
 Diodorus Siculus, *Historical Library*
 Dionysius of Halicarnassus, *Roman Antiquities*
 Eusebius of Caesarea, *Chronicle*
 Flavius Eutropius, *Abridgement of Roman History*
 Gaius Julius Caesar, *Commentaries on the Civil War*
 Gaius Plinius Secundus (Pliny the Elder), *Natural History*
 Gaius Valerius Flaccus, *Argonautica*
 Grattius Faliscus, *Cynegeticon*
 Herodotus, *The Histories*
 John Zonaras, *Epitome of Histories* (this is a medieval source)
 Julius Pollux, *Thesaurus*
 Lucius Annaeus Florus, *Epitome*
 Lucius Mestrius Plutarchus (Plutarch), *Parallel Lives*
 ——— *Moralia*
 Marcus Junius Justinus Frontinus, *Epitome of Trogus' Philippic Histories*
 Marcus Terentius Varro, *On the Latin Language*
 Marcus Tullius Cicero, *Cato the Elder on Old Age*
 Marcus Velleius Paterculus, *Roman History*
 Menander, *The Girl Who Has Her Hair Cropped*
 Paullus Orosius, *Seven Books of History against the Pagans*
 Pausanias, *Description of Greece*
 Phlegon of Tralles, *Marvels*
 Polybius, *Histories*
 Publius Flavius Vegetius Renatus, *Concerning Military Matters*
 Publius Ovidius Naso (Ovid), *The Book of Days*
 Publius Papinius Statius, *The Thebaid*
 Quintus Ennius, *Annales*
 Sextus Julius Africanus, *Embroidered*
 Sextus Julius Frontinus, *Stratagems*
 Strabo, *Geography*
 Theophrastus, *Enquiry into Plants*

Thucydides, *History of the Peloponnesian War*
 Tiberius Catus Asconius Silius Italicus, *Punica*
 Titus Livius (Livy), *Books from the Foundation of the City*
 Valerius Maximus, *Memorable Deeds and Sayings*
 Xenophon of Athens, *Cyropaedia*

Reenactors and Experimental Archaeologists

A lot of incredible work is being done in this field, and there is an amazing amount that can be gleaned from experimenting with the equipment and tactics that defined the ancient battlefield. I want to acknowledge these groups here as a source. A quick Google search will reveal any number of them, probably not too far from you, but I want to remind you of one project in particular: the Linothorax Project of Professor Gregory S. Aldrete at University of Wisconsin Green Bay. Professor Aldrete's scientific approach to reproducing Hellenistic linen cuirasses using original materials and processes, and then testing them under real battlefield conditions is, in my opinion, one of the best examples of reenactment and experimental archaeology being put to use to illuminate and enrich scholarship in ways that conventional archaeology and examination of the literary sources never will. You can check out the project (and go down a rabbit hole of images, videos and articles) here – <https://www.uwgb.edu/aldreteg/Linothorax.html>. I encourage you to view reenactors as historians tackling history from a different angle, and to push past the nerd stereotypes that have dogged the field for so long. Don't let these keep you from using one of the most effective tools we have for learning about the past.

War games

As with reenactment, war gaming is a critical part of understanding ancient warfare, and I once again want to make sure I call the

discipline out as a legitimate and even important means of study for any student of ancient military history. Tabletop games that simulate the military strategy and tactics of ancient war allow students to grasp the interplay of combined arms and troop roles, terrain and leadership, weather, maneuver, line of sight, morale, and almost every factor save the experience of the individual (which is best left to reenactors). The act of painting miniatures will make you aware of the tiniest details in uniforms and equipment (and any miniatures war gamer will tell you that Osprey books are probably the best resource for getting this stuff right!).

War games vary in quality, but I want to mention a few here. GMT Games (gmtgames.com) produces consistently high quality products that combine a real effort at historical accuracy with simplicity and efficient design that allows players to forget the rules, and instead get lost in the experience of planning set piece battles. If you're new to war gaming, I highly suggest you start out with *Commands & Colors: Ancients* as it's a simple way to dip your toe in. I also recommend rule systems like *Hail, Caesar* and *Warhammer Ancients* (no longer made, but you can still find it), though these are considerably more complicated. *De Bellis Antiquitatis* is another great way to dip your toe in, if you can make it past the rule book's utterly impenetrable English. Osprey's Wargames series is a great set of rules spanning almost every period of history on land and sea, and often written by (and in consultation with) the historians that make their other series so important.

Modern Sources

Remember my primary goal here: I want you to fall in love with history. To that end, I will suggest here not only the secondary sources that were useful to me for research purposes, but those I think are compelling reads that will grab your attention and hopefully cultivate a love of the discipline. While I won't cite it here, I want to include historical fiction. It is absolutely possible to write historical fiction

grounded in scholarship that can educate, illuminate and most importantly, grab you and suck you in. Please make sure you check out the work of Steven Pressfield (I've already mentioned *The Afghan Campaign*), Mary Renault (*The Last of the Wine* is my favorite) and of course Colleen McCullough (*The First Man in Rome* is her most famous).

My first choice is Osprey's complete line of series books (and no, they are not paying me to say this). The Men-at-Arms and Elite series cover details of military organization and equipment by army. Campaign covers military campaigns in depth. Warrior does a deep-dive on individual warrior kit, deployment and the direct experience in battle at a personal level. All of these books are written with accessibility in mind, and are heavily illustrated to help bring the world of the text to life. Osprey books launched my interest in history, and it has been lifelong. I hope they'll do the same for you. Here's a selection of some of the titles that I referenced for this book (I'll just put the year and the series title, since you already know they're Osprey, Oxford books):

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Bishop, Mike, *The Gladius* (Weapon, 2016).

Bishop, Mike, *The Pilum* (Weapon, 2017).

D'Amato, Raffaele, *Roman Centurions 753–31 BC* (Men-at-Arms, 2011).

Fields, Nic, *Tarentine Horseman of Magna Graecia 430–190 BC* (Warrior, 2008).

Fields, Nic, *Early Roman Warrior 753–321 BC* (Warrior, 2011).

Fields, Nic, *Lake Trasimene 217 BC* (Campaign, 2017).

Heckel, Waldemar and Jones, Ryan, *Macedonian Warrior* (Warrior, 2006).

Rocca, Samuel, *The Army of Herod the Great* (Men-at-Arms, 2009).

Salimbeti, Andrea and D'Amato, Raffaele, *The Carthaginians 6th–2nd Century BC* (Elite, 2014).

Sekunda, Nicholas, *The Army of Alexander the Great* (Men-at-Arms, 1984).

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- Webber, Christopher, *The Thracians 700 BC – AD 46* (Men-at-Arms, 2001).
- Wilcox, Peter, *Rome's Enemies (2) Gallic & British Celts* (Men-at-Arms, 1985).
- Wise, Terrance, *Armies of the Carthaginian Wars 265–146 BC* (Men-at-Arms, 1982).

For the rest, I'm going to break down modern sources between books and periodicals (magazine and journal articles). I do this because where you look for books (libraries, bookstores) is usually different from where you find scholarly articles (online repositories like Journal Storage – JSTOR – available at jstor.org).

Books

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- Brunt, Peter A., *Italian Manpower*, Clarendon Press, Oxford (1987).
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- Carey, Brian T., *Warfare in the Ancient World*, Pen & Sword Military, Barnsley (2013).
- Champion, Jeff, *Antigonus the One-Eyed*, Pen & Sword Military, Barnsley (2014).
- Champion, Jeff, *Pyrrhus of Epirus*, Pen & Sword Military, Barnsley (2017).
- Chaniotis, Angelos, *War in the Hellenistic World*, OUP, Oxford (2005).
- Connolly, Peter, *Greece and Rome at War*, Greenhill, London (2006).
- Dintsis, Petros, *Hellenistische Helme*, Bretschneider, Rome (1986).
- Dodge, Theodore A., *Hannibal*, Da Capo, Boston (2004).
- Eckstein, Arthur, M., *Mediterranean Anarchy, Interstate War, and the Rise of Rome* (University of California, Berkeley (2009).
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- Kleu, Michael, *Die Seepolitik Philipps V. von Makedonien*, Dr Dieter Winkler, Bochum (2015).
- Kromayer, Johannes, *Antike Schlachtfelder in Griechenland: Bausteine zu einer antiken Kriegsgeschichte. Zweiter Band. Die Hellenistisch-Römische Periode: von Kynoskephalae bis Pharsalos*, Weidmann, Berlin (1907).

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- Lane Fox, Robin, *The Classical World*, Basic, New York (2006).
- Lendon, Jon E., *Soldiers & Ghosts: A History of Battle in Classical Antiquity*, Yale University Press, New Haven (2005).
- Matthew, Christopher, *An Invincible Beast: Understanding the Hellenistic Pike Phalanx in Action*, Pen & Sword, Barnsley (2016).
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- Chrysafis, Charalampos I., “Pyrokausis: Its Meaning and Function in the Organization of the Macedonian Army” in *Klio* 96-2 (2014), pp. 455–68.
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