Roman army

Roman infantry helmet (Imperial Gallic type). Late 1st century

Coin showing (obverse) head of the late Roman emperor Julian (ruled AD 361-3) wearing diadem and (reverse) soldier bearing standard holding kneeling captive by the hair and legend VIRTUS EXERCITUS ROMANORUM ("Courage of the Roman army"). Gold *solidus*. Sirmium mint

The **Roman army** (Latin: ***exercitus Romanorum***) is the generic term for the armed forces deployed by the kingdom of Rome (to ca. 500 BC), the Roman Republic (500-31 BC), the Roman Empire (31 BC - AD 476) and its successor, the Byzantine empire (476-1453). It is thus a term that spans approximately 2,000 years, during which the Roman armed forces underwent numerous permutations in composition, organisation, equipment and tactics, while conserving a core of lasting traditions.

In terms of its development the Roman army can be divided into the following 8 broad historical phases:

1. The Early Roman army of the regal era and of the early Republic (to ca. 300 BC). During this period, it has been suggested that the Roman army followed Etruscan or Greek models of organisation and equipment. The early Roman army was based on an annual levy or conscription of part-time soldiers, hence the term legion for the basic Roman military unit (derived from *legere*, "to levy").

2. The Roman Republican army or "Polybian army" (named after the Greek historian Polybius, who provides the most detailed extant description of this phase) of the mid-Republican period (ca. 300-88 BC). During this period, the Romans, while maintaining the levy system, adopted the Samnite manipular organisation for their legions and also bound all the other peninsular Italian states into a permanent military alliance (see *Socii*). The latter would provide an equal number of levies to the Roman ones, organised in units called alae, which campaigned alongside the Roman legions.

3. The Roman imperatorial army (88 - 30 BC), the transition from the citizen-levy army of the Republic and the professional standing arny of the Empire. During this period, quasi-standing armies were commanded by the *imperatores*, powerful warlords such as Caesar, Pompey, and Mark Antony, who contested supreme power in numerous civil wars. As a result of the Social War (91-88 BC), all Italians were granted Roman

citizenship and the old allied *alae* were abolished and its members integrated into the legions. Also, the citizen-cavalry of the Republic virtually disappeared and was wholly replaced by indigenous cavalry from the Roman provinces.

4. The Roman imperial army (30 BC to AD 284), when the Republican system of temporary levies was replaced by a standing professional army of mainly volunteers, as established by the first Roman emperor, Augustus (sole rule 30 BC - AD 14). The legions, now almost entirely large heavy infantry formations of 5,000-6,000 men) were still open only to Roman citizens (i.e. mainly the inhabitants of Italy and Roman colonies until AD 212). They were now flanked by the auxilia, a corps recruited mainly from *peregrini*, imperial subjects who did not hold Roman citizenship (the great majority of the empire's inhabitants until 212, when all were granted citizenship). The *auxilia* were divided into much smaller formations of roughly cohort size (ca. 500 men). These contained not only heavy infantry as the legions, but also light infantry, heavy and light cavalry, archers and slingers. Both legions and auxilia regiments were mostly stationed along the empire's borders.

5. The Late Roman army (284-476 and its continuation, in the surviving eastern half of the empire, as the East Roman army to 641). In this phase, crystalised by the reforms of the emperor Diocletian (ruled 284-305), the Roman army returned to systematic conscription for most of its recruitment of citizens, while admitting large numbers of non-citizen barbarian volunteers. However, the army remained full-time professional and did not return to the short-term levies of the Republic. The old dual organisation of legions and auxilia was abandoned, with citizens and non-citizens now serving in the same units. The old legions were broken up into cohort or even smaller sizes. At the same a substantial proportion of the army's effectives were stationed in the interior of the empire, in the form of *comitatus praesentales*, armies that escorted the emperors.

6. The Byzantine army (641-1071), is the army of the Byzantine state in its classical form (i.e. after the permanent loss of its Near Eastern and North African territories to the Arab conquests after 641). This army was based on conscription of professional troops in the themes structure characteristic of this period.

7. The Komnenian Byzantine army, named after the Comneni dynasty, or medieval Byzantine army (1071-1204). This was the army of Byzantium after the permanent loss of its traditional main recruiting ground of Anatolia to the Turks following the Battle of Manzikert in 1071, until the fall of Constantinople to the Western crusaders in 1204. This army was chracterised by a large number of mercenary regiments composed of troops of foreign origin such as the Varangian Guard of Anglo-Saxons. However, the old theme-based system of conscription continued.

8. The Palaiologan Byzantine army, named after the dynasty of the Palaiologi (1259-1453), which ruled Byzantium between the recovery of Constantinople from the Crusaders and its fall to the Turks in 1453. During this final phase, the Byzantine army finally lost any meaningful connection with the standing imperial Roman army. The Palaiologan army consisted largely of foreign mercenary bands.

This article describes some broad features of the historical phases above, and their interaction with the political and social development of the Roman state. Detailed information on each phase is contained in the linked dedicated article. Readers seeking discussion of the Roman army by theme, rather than by chronological phase, should consult:

Early Roman army (to ca. 338 BC)

The early Roman army is shrouded by lack of evidence. Ancient historians' accounts of the history of Rome before it was destroyed by the Gauls in 386 BC (390 by Roman reckoning) are regarded as highly unreliable by modern historians. Livy, the main surviving ancient source on the early period, himself admits that the pre-386 period is very obscure and that his own account is based on legend rather than written documentation, as the few written documents that did exist in the earlier period were mostly lost in the Gallic fire.[1]

Socio-political summary

According to Roman legend, Rome was founded by Romulus in 753 BC. However, the vast amount of archaeological evidence uncovered since the 1970s suggests that Rome did not assume the characteristics of a united city-state (as opposed to a group of separate hilltop settlements) before around 625 BC. The same evidence, however, has also conclusively discredited Andreas Alföldi's once-fashionable theory that Rome was an insignificant settlement until ca. 500 BC and that the Republic was not established before ca. 450 BC. There is now no doubt that Rome was a major city in the period 625-500 BC, when it had an area of ca. 285 hectares and an estimated population of 35,000. This made it the second-largest in Italy (after Tarentum) and about half the size of contemporary Athens (585 hectares, inc. Piraeus).[2] Also, few scholars today dispute that Rome was ruled by kings in its archaic period, although whether any of the 7 names of kings preserved by tradition are historical remains uncertain (Romulus himself is generally regarded as mythical). It is also likely that there were several more kings than those preserved by tradition, given the long duration of the regal era (even if it did start in 625 rather than 753 BC).[3]

The Roman monarchy, although an autocracy, did not resemble a medieval monarchy. It was not hereditary and based on "divine right", but elective and subject to the ultimate sovereignty of the people. The king was elected for life by the people's assembly, although there is strong evidence that the process was in practice controlled by the patricians, a hereditary aristocratic caste. Most kings were non-Romans brought in from abroad, doubtless as a neutral figure who could be seen as above patrician factions. Although blood relations could succeed, they were still required to submit to election.[4] The position and powers of a Roman king were thus similar to those of Julius Caesar when he was appointed dictator-for-life in 44 BC and indeed of the Roman emperors.

In addition, it seems certain that the kings were overthrown in ca. 500 BC, probably as a result of a much more complex and bloody revolution than the simple drama of the rape of Lucretia related by Livy, and that they were replaced by some form of collegiate rule.[5] It is likely that the revolution that overthrew the Roman monarchy was engineered by the

patrician caste and that its aim was not, as rationalised later by ancient authors, the achievement of "liberty", but of a patrician-dominated oligarchy. The proverbial "arrogance" and "tyranny" of the Tarquins, epitomised by the Lucretia incident, is probably a reflection of the patricians' fear of the Tarquins' growing power and their erosion of patrician privilege, most likely by drawing support from the plebeians (commoners). To ensure patrician supremacy, the autocratic power of the kings had to be fragmented and permanently curtailed. Thus the replacement of a single ruler by a collegiate administration, which soon evolved into two Praetors (later called Consuls), with equal powers and very limited terms of office. Patrician supremacy was assured by limiting eligibility to hold the republican offices to patricians only.

The establishment of a hereditary oligarchy obviously excluded wealthy non-patricians from political power and it is this class that led plebeian opposition to the early Republican settlement. The early Republic (510-338 BC) saw a long and often bitter struggle for political equality, known as the Conflict of the Orders, against the patrician monopoly of power. The plebeian leadership had the advantage that they represented the vast majority of the population and of their own growing wealth.

External relations

Site of a typical Etruscan hill town. Civita di Bagnoregio, Lazio, Italy

Gate on the Caelian Hill of the so-called "Servian Wall" of Rome, . The wall, made of massive tufa stone blocks, was built shortly after Rome was sacked by the Gauls in 390 BC. Several sections survive to this day

It appears likely that Rome in the period 550-500, conventionally known as the period it was ruled by the Tarquin dynasty, established its hegemony over its Latin neighbours.[6] The fall of the Roman monarchy was followed by a war with the Latins, who probably took advantage of the political turmoil in Rome to attempt to regain their independence. This war was brought to an end in 493 BC by the conclusion of the a treaty called the *foedus Cassianum*, which lay the foundations for Rome's military alliance with other Italians states throughout the Republic. According to the sources, this was a bilateral treaty between the Romans and the Latins. It

provided for a perpetual peace between the two parties; a defensive alliance by which the parties pledged mutual assistance in case of attack; a promise not to aid or allow passage to each other's enemies; the equal division of spoils of war (half to Rome, half to the other Latins) and provisions to regulate trade between the parties. In addition the treaty may have provided for the Latin armed forces levied under the treaty to be led by a Roman commander.[7] These terms served as the basic template for Rome's treaties with all the other Italian *socii* acquired over the succeeding 2 centuries.

The impetus to form such an alliance was probably provided by the acute insecurity caused by a phase of migration and invasion of the lowland areas by Italic mountain tribes in the period after 500 BC.[8] The new Romano-Latin military alliance proved strong enough to repel the incursions of the Italic mountain tribes, but it was a very tough struggle. Intermittent wars, with mixed fortunes, continued until ca. 395 BC. The Sabines disappear from the record in 449 BC (presumably subjugated by the Romans), while campaigns against the Aequi and Volsci seem to have reached a turning point with the major Roman victory on Mount Algidus in 431 BC.[9] In the same period, the Romans fought 3 wars against their nearest neighbouring Etruscan city-state, Veii, finally reducing the city in 396 BC, probably increasing the *ager Romanus* (Roman territory) by ca. 65%.[10]

At this juncture, Rome was crushed by an invasion of central Italy by the Senones Gallic tribe. Routed at the river Allia in 386 BC, the Roman army fled to Veii, leaving their City at the mercy of the Gauls, who proceeded to ransack it and then demand a huge ransom in gold to leave. The effects of this disaster on Roman power are a matter of controversy between scholars. The ancient authors emphasize the catastrophic nature of the damage, claiming that it took a long time for Rome to recover.[11] Cornell, however, argues that the ancients greatly exaggerated the effects and cites the lack of archaeological evidence for major destruction and the building of the so-called "Servian" Wall as evidence that Rome recovered swiftly. The Wall, whose 11km-circuit enclosed 427 hectares (an increase of 50% over the Tarquinian city) was a massive project which would have required an estimated 5 million man-hours to complete, implying plentiful financial and labour resources.[12] Against this, Eckstein argues that the history of Rome in the 50 years subsequent to 386 BC appears a virtual replay of the previous century. There were wars against the same enemies except Veii (i.e. the Volsci, Aequi and Etruscans) in the same geographical area, and indeed against other Latin city-states such as Praeneste and Tibur, just 30 miles away. In addition, a treaty concluded with Carthage in ca. 348 BC seems to describe Rome's sphere of control as much the same area as in a previous treaty signed in the first years of the Republic 150 years earlier: just Latium Vetus and not even all of that.[13]

Military developments

Livy claims that king Servius Tullius (conventional rule 578-535 BC) divided the Roman citizen-body into 6 property classes for the purposes of military service, specifying the number of *centuriae* (military units of 100 men) that each class was required to provide. However, the scheme would have resulted in the majority of the total levy being raised from

the two top property classes, which were also the smallest numerically, which is clearly nonsensical. Scholars agree that this centuriate reform cannot have been established by Servius in the form described by Livy in book I.43. Instead, the reform must date from much later (see Roman Polybian army below). However, the scholar P. Fraccaro has interpreted the "Servian" reform in the light of other data on the early army to reconstruct the real size and structure of the Servian army.

Infantry
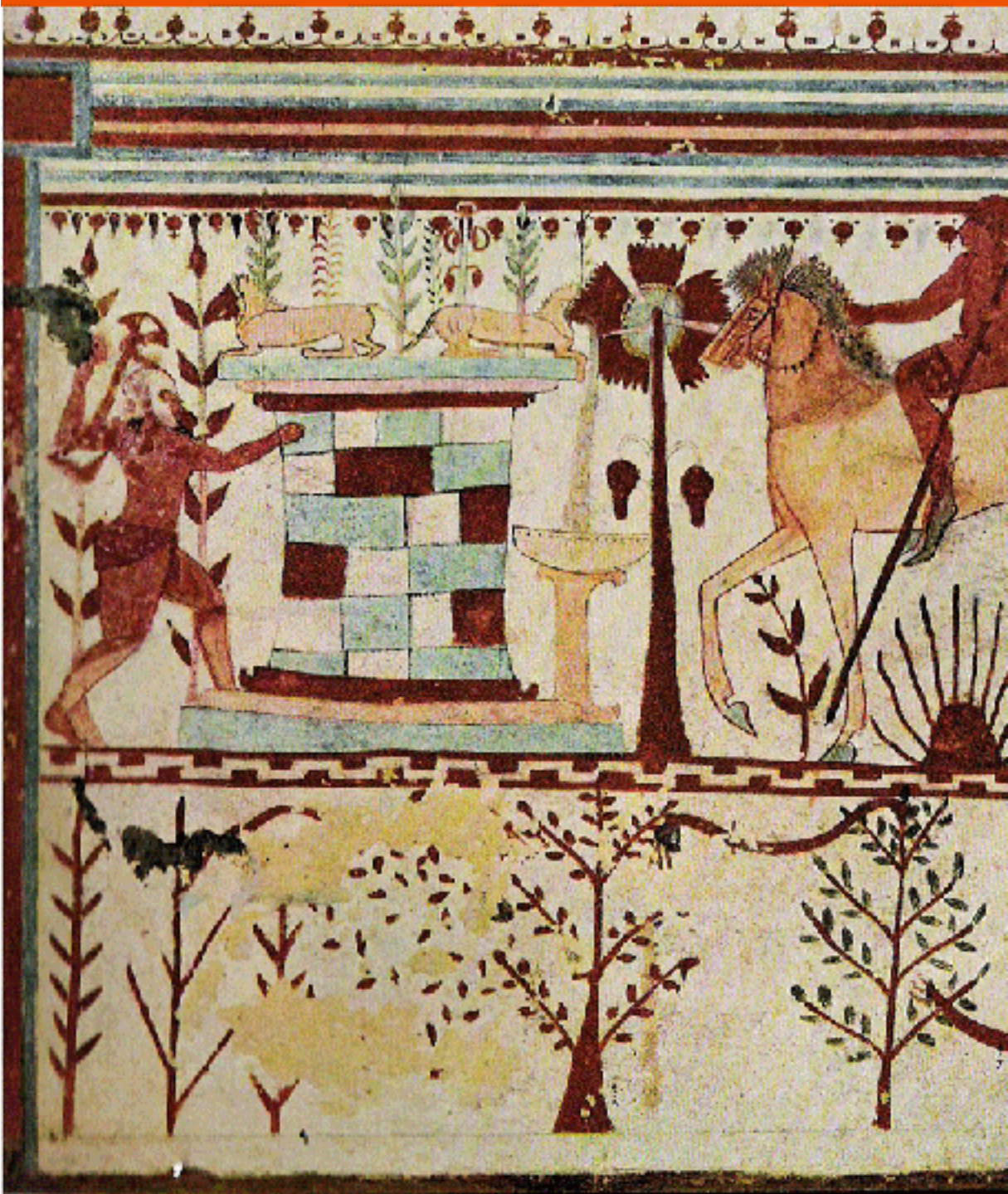
Etruscan tomb mural showing the ambush of Troilus by Achilles. The mural shows an Etruscan foot warrior and a mounted warrior. ca. 550 BC. This evidence supports Polybius' report that Roman cavalry at this time was unarmoured. Tomb of the Bulls, Tarquinia, Italy

According to Livy, Romulus raised 1,000,000 infantry from each of the 3 original tribes of Rome (*Ramnes*, *Tities* and *Luceres*).[14] Fraccaro suggests that the hoplite (armoured) infantry was doubled in size to a single legion of 6,000, which, together with 2,400 *velites*

(unarmoured infantry) and 600 cavalry adds up to a total regal levy of 9,000 *iuniores* (men of military age: aged 16 to 45).[15] Until recently, Fraccaro's thesis was not widely accepted because of Alfoldi's theory that "insignificant" regal Rome could not have supported such a powerful army (or cavalry).[16] But with an estimated 35,000 inhabitants, a regal military levy of 9,000 is plausible.[17] According to the Fraccaro interpretation, when the Roman monarchy was replaced by two *praetores*, the royal army was divided equally among them for campaigning purposes, each legion numbering 3,000 hoplites, 1,200 *velites* and 300 cavalry, for a total of 4,500 men.[18] This remained the normal size of a legion until the end of the Social War (88 BC).

On the basis of Etruscan representations, it has been widely accepted that the main early Roman infantry were armoured hoplites, who fought in a phalanx formation. These would probably have worn bronze helmets, breastplate and greaves and a round leather or wooden shield. They were armed with a spear, sword and dagger.[19]

Cavalry

Romulus supposedly established a cavalry regiment of 300 men called the *Celeres* ("the Swift Squadron") to act as his personal escort, with each of the three tribes supplying a *centuria* (century; company of 100 men), This cavalry regiment was supposedly doubled in size to 600 men by King Tarquinius Priscus (conventional dates 616-578 BC).[20] According to Livy, Servius Tullius also established a further 12 *centuriae* of cavalry.[21] But this is unlikely, as it would have increased the cavalry to 1,800 horse, implausibly large compared to 8,400 infantry (in peninsular Italy, cavalry typically constituted about 8% of a field army). [22]. This is confirmed by the fact that in the early Republic the cavalry fielded remained 600-strong (2 legions with 300 horse each).[23]

An important question is whether the royal cavalry was drawn exclusively from the ranks of the Patricians (*patricii*), the aristocracy of early Rome, which was purely hereditary.[24] This is certainly the mainstream view among historians, starting with Mommsen. (However, Cornell considers the supporting evidence tenuous).[25] Since the cavalry was probably a patrician preserve, it follows that it probably played a critical part in the coup against the monarchy. Indeed, Alfoldi suggests that the coup was carried out by the *Celeres* themselves. [26] However, the patrician monopoly on the cavalry seems to have ended by around 400 BC, when the 12 *centuriae* of *equites* additional to the original 6 of regal origin wered probably formed. Most likely patrician numbers were no longer sufficient to supply the ever-growing needs of the cavalry. It is widely agreed that the new *centuriae* were open to non-patricians, on the basis of a property rating.[27]

According to the ancient Greek historian Polybius, whose *Histories* (written ca. 140s BC) are the earliest substantial extant account of the Republic, Roman cavalry was originally unarmoured, wearing only a tunic and armed with a light spear and ox-hide shield which were of low quality and quickly deteriorated in action.[28]

Roman Republican army (338 - 88 BC)

Socio-political summary

The opening of the Consulship to plebeians in 367 BC marked the plebs' final victory in the struggle against patrician political monopoly. By 338 BC, the privileges of patricians had become largely ceremonial (such as the exclusive right to hold certain state priesthoods). But this did not result in a more egalitarian form of government. The wealthy plebeians who had led the "plebeian revolution" had no more intention of sharing real power with their poorer and far more numerous fellow-plebeians than did the patricians. Oligarchy based on birth was replaced by oligarchy based on wealth. It was probably at this time (around 300 BC) that the so-called "Servian" centuriate reform was introduced. The citizen-body was divided, for the purposes of voting and taxation, into 7 classes based on an assessment of their property. Each class was in turn subdivided into a varying number of voting constituencies called *centuriae* (not to be confused with the military unit of the same name, which contained ca. 100 men). The two top classes, the *equites* (inc. the patricians) and First Class, accorded themselves an absolute majority of the votes (98 .of 193 *centuriae*) in the *comitia centuriata*, the main electoral and legislative assembly, despite representing a tiny fraction of the population. [29] Overall, votes were allocated in inverse proportion to population. Thus the lowest social echelon (the *proletarii*, under 400 *drachmae*), was allocated just 1 of the 193 *centuriae*, despite being probably the largest.[30]

ANALYSIS OF ROMAN CENTURIATE ORGANISATION[31]

Class	Property Rating (*drachmae*: *denarii* after 211 BC)	No. of votes	Military service
Patricii (patricians)	n.a. (hereditary)	6	Officers/legionary cavalry
Equites (knights)	over 25,000?*	12	Officers/legionary cavalry
First	10,000 - 25,000?	80	Legionary cavalry
Second	7,500 - 10,000	20	Legionary infantry
Third	5,000 - 7,500	20	Legionary infantry
Fourth	2,500 - 5,000	20	Legionary infantry

Fifth	400 (or 1,100) - 2,500	30	Legionary infantry (*velites*)
Proletarii (a.k.a. *capite censi*)	Under 400 (or 1,100)	1	Fleets (oarsmen) The property threshold for *equites* is uncertain, although the natural progression of the lower thresholds would suggest 25,000 *denarii*. In the late Republic, the threshold stood at 50,000 *denarii*, until it was doubled to 100,000 by Augustus.

N.B. An extra 4 *centuriae* were allocated to engineers, trumpeters et al., to make a total of 193 *centuriae*. There is a discrepancy in the minimum rating for legionary service between Polybius (400 *drachmae*) and Livy (1,100). In addition, Polybius states that the *proletarii* were assigned to naval service while Livy simply states that they were exempt from military service. In both cases, Polybius is to be preferred, as 1,100 *drachmae* seems too high a figure for destitute individuals and it is likely that the Roman military would have made use of the manpower of this group.

Power thus remained in the hands of the tiny minority of the population that provided the legionary cavalry, as it had done in the patrician era. As Livy himself puts it: "Thus every citizen was given the illusion of wielding power through the right to vote, but in reality the aristocracy remained in full control. For the *centuriae* of knights were summoned first to vote, and then the *centuriae* of the First Property Class. In the rare event of a majority not being attained, the Second Class was called, but it was hardly ever necessary to consult the lowest classes."[32]

At the same time, the period of the Samnite wars saw the emergence of the Senate as the predominant political organ at Rome. In the early Republic, the Senate had been an *ad hoc* advisory council whose members served at the pleasure of the Consuls. Power rested with the Consuls, acting with the ratification of the *comitia*, a system described as "plebiscitary" by Cornell. This situation changed with the *Lex Ovinia* (promulgated sometime in the period 339-318 BC), which made the Senate into a formal constitutional entity. Its members now held office for life and were thus freed from control by the Consuls.[33]

In the period following the *Lex Ovinia*, the Consuls were gradually reduced to executive servants of the Senate. By the end of the Samnite Wars in 290 BC, the Senate enjoyed complete control over virtually all aspects of political life: finance, war, diplomacy, public order and the state religion.[34][35] The rise of the Senate's role was the inevitable consequence of the increasing complexity of the Roman state due to its expansion, which made government by short-term officers such as the Consuls and by plebiscite impractical.[36]

The Senate's monopoly of power in turn entrenched the political supremacy of the wealthiest *echelon*. The 300 members of the Senate were mostly a narrow, self-perpetuating *clique* of

ex-Consuls (*consulares*) and other ex-Magistrates, virtually all members of the wealthy classes. Within this elite, charismatic personalities, who might challenge senatorial supremacy by allying with the commoners, were neutralised by various constitutional devices.[37] The Roman polity exhibited, in the words of T. J. Cornell, an historian of early Rome, "the classic symptoms of oligarchy, a system of government that depends on rotation of office within a competitive elite, and the suppression of charismatic individuals by peer-group pressure, usually exercised by a council of elders."[38]

External relations

Map of the Roman confederation in 100 BC, on the eve of the Social War. Note the patchwork political configuration. The Roman possessions (in grey-blue) straddle the strategic centre of the Italian peninsula and the Tyrrhenian coastal plain. Latin colonies (dark red) are scattered in strategic locations. Other *socii* (pink) are concentrated in the mountainous interior

Roman copper *aes grave* coin dated at around the end of the First Punic war (ca. 241 BC). (Obverse) head of Janus, the two-faced god. (Reverse), prow of a warship, which became a common coin motif and virtually a symbol of the Roman Republic . It celebrated Rome's crushing victory over the Punic navy and emergence as the naval superpower of the Mediterranean

Phase I (338-264 BC): Rome gains hegemony over Italy: The 75-year period between 338 BC and the outbreak of the First Punic War in 264 BC saw an explosion of Roman expansion and the subjugation of the entire peninsula to Roman political hegemony, achieved by virtually incessant warfare. Roman territory (*ager Romanus*) quadrupled in size, to cover ca. 20% of peninsular Italy. The Roman citizen population nearly tripled, from ca. 350,000 to ca. 900,000, ca. 30% of the peninsular population.[39] Latin colonies, joint Roman/Latin foundations on the soil of conquered enemies, probably comprised a further 10% of the peninsula. The other 60% of the peninsula remained in the hands of other Italian *socii* who were, however, forced to accept Roman supremacy.

The period of expansion was launched by the final defeat of the rebellious Latin League, a confederation of cities in *Latium Vetus* ("Old Latium" - that is the territory south of the river Tiber inhabited by the Latins (to which the Romans themselves belonged). Most of Latium Vetus became Roman territory. This gave the Romans a secure base from which to expand. The main challenge faced by Rome during this period was the struggle for supremacy with

the Samnites. Tough mountain-dwelling pastoralists of the Abbruzzi region in south-central Italy, the Samnites had a reputation for martial ferocity unrivalled in the peninsula.[40] Their military effectiveness was greatly enhanced by the formation of the Samnite League by the four Samnite tribal cantons (the Caudini, Hirpini, Caraceni and Pentri). This brought their forces under the unified command of a single general in times of crisis.[41] It took the Romans 3 gruelling wars (the Samnite wars, 343 - 290 BC), during which they suffered many severe reverses, to subjugate the Samnites.

The Romans' ultimate triumph so alarmed the leading Greek city in the Italian South, Tarentum (mod. Taranto) that the city invited the help of a leading monarch from the Greek mainland, Pyrrhus of Epirus. The latter invaded Italy in 281 BC, facing the Romans with a Hellenistic professional army for the first time. Despite the disparity in training, the Roman citizen-levies surprised Pyrrhus by proving a good match for his own. The Romans won one major battle (Beneventum) and lost two (Heraclea and Ausculum), although in these they inflicted such heavy casualties on the enemy that the term "Pyrrhic victory" was coined.

The arrival of Pyrrhus triggered a widespread revolt by the southern *socii*, the Samnites, Lucani and Bruttii. But the revolt was far from universal. The Campanians and Apulians and the central Italians (Etruscans and Umbrians) remained loyal to Rome. The defeat at Beneventum forced Pyrrhus to withdraw in 275, but it was not until 272 that the rebel *socii* were reduced. The surviving accounts for this later phase of the war are thin, but its scale is clear from Rome's celebration of 10 triumphs, each implying the slaughter of at least 5,000 enemy.[42]

Phase II (264-201 BC): Rome crushes Carthage, its main rival for hegemony in the western Mediterranean. In 264 BC, Carthage was the foremost naval power in the Mediterranean, a prowess it inherited from its Phoenician founders. It was a city-state whose enormous wealth was based on commerce, not territory. It used its navy to protect the sea-routes between the string of trading emporia that it controlled all over the Mediterranean. Its previous relations with Rome were friendly: the terms of two treaties between the two cities, defining the sphere of influence of each, are extant (ca. 498 and 348 BC).[43] On both occasions, Rome was a small land-based power, whose sphere of influence was defined as Latium Vetus only, while Carthage's naval supremacy was threatened by the Etruscan and Greek cities of Italy But by 275 BC, Rome had gained hegemony over the whole Italian peninsula, and Carthaginian control of the Tyrrhenian sea was incompatible with Rome's strategic and commercial interests. The main zone of contention was the island of Sicily, which the Carthaginians had largely conquered, in alliance with the leading Greek city of Syracuse. The Romans launched an invasion of Sicily, resulting in a protracted land war for control of the island. But the First Punic War (264-41 BC) was primarily a naval conflict, as control of the seas would result in control of the island.

The Romans challenged, and broke, Carthaginian naval supremacy for good, an astonishing achievement for a power hitherto insignificant in naval terms. This success was achieved by combining the naval skills and technology of Rome's Greek allies in Italy such as Neapolis, who as *socii navales* were required to supply fully-crewed warships, with the fighting skills of

Rome's legionary levies acting as marines. Innovations such as the *corvus* (literally "crow", a combination of gang-plank and grappling-hook) enabled the Roman marines to fight as on land. Carthage lost the war and was forced to relinquish control of the 3 large Tyrrhenian islands, Sicily, Sardinia and Corsica. Rome became the naval hegemon of the Mediterranean, a position it did not relinquish until the barbarian invasions some 700 years later.

As compensation for the lost islands, the Carthaginians, under the leadership of the Barcid family, staged a comeback by expanding Carthage's coastal possessions in Spain to almost half of the Iberian peninsula. When this expansion was challenged by Rome, the brilliant Carthaginian general Hannibal launched a daring overland invasion of Italy with his Spanish army, starting the Second Punic War (218-201 BC). Hannibal's strategy was to use his military presence to break up the Rome's military alliance with the ca. 150 *socii* or allies. The striking success of his invasion, resulting in 3 crushing Roman defeats in quick succession (218-6 BC), faced Rome with a massive defection of its southern Italian allies and its most perilous military crisis since the Gallic sack of 390 BC. However, superior Roman manpower and military organisation eventually prevailed and in 201 BC Carthage was reduced to a petty client-state.

Phase III (201-88 BC): Rome breaks the Hellenistic monarchies and gains hegemony in the eastern Mediterranean. The legacy of the huge conquests of Alexander the Great, king of Macedon, (died 323 BC) was a number of powerful monarchies in the eastern Mediterranean, established by Alexander's generals (the so-called Diadochi), when they shared his empire between them. The many different peoples of the region were ruled by a Greek elite and adopted a common Greek language and culture. These monarchies are known in modern historiography as the *Hellenistic* states. Although their boundaries often changed through internecine wars and new states sprung up from time to time, a stable core of 3 major political units persisted for centuries: Macedon itself, normally including much of Greece and Thrace; the Seleucid kingdom (Anatolia, Syria, Mesopotamia and Iran); and the Ptolomaic kingdom (Ancient Egypt). In the century following its triumph over Carthage in 201 BC, Rome, the new Mediterranean superpower, subdued these kingdoms one by one. First in line was Philip V of Macedon who had forged an alliance with Hannibal and used the latter's successful; invasion of Italy to attempt to extend his influence in Greece. The year after the final defeat of Carthage, Rome launched the Second Macedonian War (200-197 BC) and crushed Philip's army at the Battle of Cynoscephalae, definitively consigning the famed Macedonian phalanx to the dustbin of history. Philip was reduced to petty client-king status.

[edit]
Social impact of military service

The Republican army of this period, like its earlier forebear, did not maintain standing or professional military forces, but levied them, by compulsory conscription, as required for each campaigning season and disbanded thereafter (although formations could be kept in being over winter during major wars). Service in the legions was limited to property-owning Roman citizens, normally those known as iuniores (age 16-46). Each soldier was expected to pay for his own equipment, so persons of the lowest class below assessed wealth of 400

drachmae were not eligible for service in the legions. According to the Greek author Polybius, these were assigned to naval service as oarsmen, which required no equipment.[44] Of the other classes, the poorest troops would join the *velites* (light infantry), whose equipment was less expensive than a heavy infantryman's.[45] Those with the highest property rating, and thus able to afford their own horse, joined the cavalry.[46] Thus the majority of Roman foot soldiers came from the families of small freeholders (i.e. peasants who owned small plots of land).[47]

During the Samnite Wars, the military burden on the core social group was very onerous. The standard levy was raised from 2 to 4 legions and military operations took place every single year. This implies that ca. 16% of all Roman adult males spent every campaigning season under arms in this period, rising to 25% during emergencies.[48] But even this pales into insignificance compared to the demands on Roman manpower of the Second Punic War. Polybius estimates Roman citizen *iuniores* (excluding the Italian allies) at ca. 231,000 in 225 BC, on the eve of the war. Of these, some 50,000 perished in the great defeats of 218-6 BC. Of the remaining 180,000, the Romans kept at least 100,000 men in the field, in Italy and overseas, continuously in the period 214-203 (and 120,000 in the peak year).[49] In addition, ca. 15,000 were serving in the Roman fleets at the same time.[50] Thus, if one assumes that fresh recruits reaching military age were cancelled out by campaign losses, fully *two-thirds* of Roman *iuniores* were under arms continuously during the war. This barely left enough to tend the fields and produce the food supply. Even then, emergency measures were often needed to find enough recruits. Livy implies that, after Cannae, the minimum property qualification for legionary service was largely ignored. In addition, the normal ban on criminals, debtors and slaves serving in the legions was lifted. Twice the wealthy class were forced to contribute their slaves to man the fleets and twice boys under military age were enlisted.[51]

Military developments

A Roman senior officer (centre), of the time of Polybius, as depicted on a bas-relief from the Altar of Cn. Domitius Ahenobarbus, ca. 122 BC. Probably a *tribunus militum* (joint legionary commander), the officer wears a decorated bronze cuirass, *pteruges*, mantle, and Attic-style helmet with horsehair plume. In the Republican army, *tribuni* were elected, as were the overall army commanders, the Consuls, by the *comitia centuriata* (main people's assembly), but were drawn from the knightly class. Musee du Louvre, Paris

The gruelling contest for Italian hegemony that Rome fought against the Samnite League led to the transformation of the Roman army from the Greek-style hoplite phalanx that it probably was in the early period to the Italian-style manipular army described by Polybius. It is believed that the Romans copied the manipular structure from their enemies the Samnites, learning through hard experience its greater flexibility and effectiveness in the mountain terrain of central Italy.[52] It is also from this time that every Roman army which took the field was regularly accompanied by at least as many troops supplied by the *socii* (Rome's Italian military confederates, often referred to as "Latin allies").[53] This was in line with the model established by the *foedus Cassianum* during the early Republic (see above), although now, as a result of Rome's expansion, the allies were not simply the other Latins, but included

virtually all the cities and tribes of peninsular Italy (some 150 autonomous states by 264 BC). In most cases, the *socius'* sole treaty obligation to Rome was to supply to the confederate army, on demand, a number of fully-equipped troops up to a specified maximum each year. [54] The vast majority of *socii* were required to supply land troops (both infantry and cavalry), although most of the coastal cities were *socii navales* ("naval allies"), whose obligation was to provide either partly- or fully-crewed warships to the Roman fleet. Little is known about the size of contingent each *socius* was bound to provide, and whether it was proportional to population or wealth.

The next milestone in the development of the army was the Second Punic War. Hannibal's victories highlighted the deficiencies of the Roman army, which had evolved to fight wars against similarly equipped forces of competing Italian states. The infantry lacked specialist missile troops such as archers (*sagittarii*) and slingers (*funditores*). From ca. 218 BC onwards, Roman armies regularly hired mercenary units of archers from Crete and slingers from the Balearic islands (the inhabitants of these islands became synonymous with slingers: *Baleares* was an alternative name for "slingers" in classical Latin). At the same time, Roman cavalry had become a heavy armoured force specialising in the shock charge. While formidable, it lacked the operational flexibility afforded by the light Numidian cavalry (*equites Numidae*) so effectively employed by Hannibal in conjunction with his own heavy cavalry (Iberians and Gauls). From 206 BC, when the Numidian king Massinissa switched sides from Carthage to Rome, until the 3rd century AD, Roman armies were almost always accompanied by troops of Numidian light horse.

The Roman and allied levies were kept in separate formations. Roman citizens were assigned to the legions, while the Latin and Italian allies were organised into *alae* (literally: "wings", because they were always posted on the flanks of the Roman line of battle). A pre-Social War consular army always contained an equal number of legions and *alae*. From the time of the Samnite Wars, when the number of legions levied each year was doubled to four, a normal consular army would contain two legions and two *alae*, or about 20,000 men (17,500 infantry and 2,400 cavalry). In times of emergency, a Consul might be authorised to raise a double-strength army of 4 legions and 4 *alae* e.g. at the Battle of Cannae in 216 BC, where each Consul commanded an army of about 40,000 men.[55] A select group of the best allied troops, denoted *extraordinarii*, would be detailed to act as an escort brigade for the Consul. They would normally be one-third of the cavalry and one-fifth of the infantry (i.e. in a normal consular army, 600 horse and about 1,800-foot).[56]In battle, it was the custom to draw up the Roman legions in the centre of the infantry line, with the Latin *alae* on the flanks. The Roman cavalry was posted on the right wing, the Latin cavalry held the left. The left wing thus outnumbered the right by 3 to 1, a practice exploited by Hannibal at Cannae, who drew up his best cavalry to face the much smaller Roman cavalry and quickly routed it. The order of battle of a normal consular army could be summarised thus:

Reconstruction of a Roman legionary soldier of the Republican era. Note oval shield and Montefortino-type helmet. The equipment of legionaries in the imperial era was similar, but more sophisticated

Roman coin issued during the Second Punic War (218-201 BC) showing (obverse) the god of war Mars and (reverse) probably the earliest image of a Roman cavalryman of the Republican era. Note helmet with horsehair plume, long spear (*hasta*), small round shield (*parma equestris*), flowing mantle. Roman cavalry was levied from the *equites*, and from volunteers of the second property class, until the early 1st century BC. Bronze *quincunx* from Larinum mint

ORDER OF BATTLE OF A NORMAL ROMAN CONSULAR ARMY 3rd/2nd centuries BC

[57]

Left wing	XX XX	Left flank	Left centre	Right centre	Right flank	XXXX	Right wing
EQUITES LATINI (1,800 cav)		ALA LATINA SINISTRA (ca. 4,500 inf)	LEGIO ROMANA I (4,200 inf)	LEGIO ROMANA II (4,200 inf)	ALA LATINA DEXTRA (ca. 4,500 inf)		EQUITES ROMANI (600 cav)

Officers

Equites (including patricians) were exclusively eligible to serve as senior officers of the army. [58] These were the 6 *tribuni militum* in each legion who were elected by the *comitia* at the start of each campaigning season and took turns to command the legion in pairs; the 3 *decuriones* that commanded each *turma* of cavalry, and the *praefecti sociorum*, the commanders of the Italian confederate *alae*, who were appointed by the Consuls.[59]

Infantry

The legion of this time contained ca. 4,200 infantry.[60] To distinguish it from the cohort-based legion of the late Republic, it is often referred to as the "manipular legion" because of its division into 35 *manipuli* (maniples) of 120 men each. However, in emergencies, the Senate might authorise legions of up to 5,000 strong.[46] There were no professional officers. Each legion had 6 *tribuni militum* ("military tribunes"), elected by the *comitia* from the ranks of the *equites*, would take turns to command the legion in pairs. Compared to the manipular legion, Polybius gives little detail about the structure of an allied *ala*. An *ala* contained 4-5,000 infantry. It was commanded by 3 Roman *praefecti sociorum*, appointed by the Consuls,

presumably with one acting as commander and the other two as deputies, as in the cavalry *turmae*.[61] The allied infantry appears to have been divided into *cohortes*, the first appearance of such units, which were eventually adopted by the legions (after the Social War). The size of the allied cohorts is unknown, and may not have been standard units at all, but simply a generic term denoting the contingent from each *socius*. However, Livy's account of operations in Spain during the 2nd Punic War mentions units of 400-600 *socii* that he calls *cohortes*, although he may be using this term anachronistically.[62] It is not known whether the *alae* fought in three ranks as did the legions.

The heavy legionary infantry of this period was divided into three classes, which formed the front, middle and rear lines of the Roman order of battle, respectively: *hastati*, *principes* and *triarii*. There were only minor differences of equipment between the three. Clothing was a short-sleeved, one-piece woollen tunic and hob-nailed sandals. The standard armour was a bronze helmet, chain-mail cuirass and an oval wooden shield. Weapons included a couple of *pila* (heavy javelins), a *gladius Hispaniensis* (a short stabbing- and slashing- sword) and a *pugio* (dagger). The *velites* (light infantry) wore no armour and carried javelins and a sword. It is believed that the infantry of the allied *alae* were similarly equipped. This equipment remained the standard throughout the imperial era and beyond.

Cavalry

The legionary cavalry during this period was drawn exclusively from the two higher classes, *equites* and Property Class I. The latter had started to be admitted to cavalry service when the *equites* properly so-called were no longer sufficiently numerous to satisfy the needs of the cavalry. This most likely occurred during the Samnite Wars, when the normal levy of Roman cavalry was doubled to 1,200 (4 legions' contingent). According to Mommsen, Class I *iuniores* were all eventually required to join the cavalry.

Each Polybian legion contained a cavalry contingent of 300 horse, which does not appear to have been officered by an overall commander.[63] The cavalry contingent was divided into 10 *turmae* (squadrons) of 30 men each. The squadron members would elect as their officers 3 *decuriones* ("leaders of 10 men"), of whom the first to be chosen would act as the squadron's commander and the other two as his deputies.[64] In addition, each allied *ala* contained 900 horse, three times the size of the legionary contingent. The allies would thus supply three-quarters of a consular army's cavalry.[65]

Legionary cavalry underwent a transformation during this period, from the light, unarmoured horsemen of the early period to the Greek-style armoured cuirassiers described by Polybius. [66] A Lucanian tomb mural from Paestum (ca. 350-300 BC) shows a Samnite horseman, wearing a variant of a Corinthian-style helmet and bronze strap-on breastplate.[67] The earliest extant images of Republican cavalrymen are on a few coins dated to the Second Punic War (218-201 BC). In one, the rider wears a variant of a Corinthian helmet and carries a small round cavalry shield, known as a *parma equestris*. A coin of 197 BC shows a Roman cavalryman in Hellenistic composite cuirass and helmet. But by this time, the Roman cavalry may already have adopted chain mail armour (*lorica hamata*) from the Celts, who are known to have used it as early as ca. 300 BC. Mail had certainly been adopted by ca. 150 BC, as

shown by a monument erected to commemorate the battle of Pydna (168 BC).[68] Most images show cavalrymen with a *parma equestris* and a spear (*hasta*), but the Ahenobarbus monument of 122 BC and a coin of 136 BC shows cavalrymen without shields. The latter may imply that, in the late 2nd century BC, some cavalrymen carried long lances (*contus*), which would be held in both hands, precluding a shield.[69] It is known from literary accounts that *equites* carried swords, most likely the same *gladii Hispanienses* used by the infantry. [70] There is no evidence that *equites* carried bows and arrows and the Romans probably had no mounted archers before they came into contact with Parthian forces after 100 BC.[71] It is believed that *ala* cavalry was similarly equipped.[72]

Roman cavalry of the Republican period specialised in the shock charge, followed by close melee combat.[73]

There is a persistent view among some historians that the Romans of this period made poor cavalrymen and even preferred to dismount to fight wherever possible. Against this, Sidnell argues that the record shows that Roman cavalry were a formidable force which won a high reputation for skill and valour in numerous battles of the 3rd century BC.[74] Examples include the Battle of Sentinum (295 BC), in which the cavalry played a crucial role in the Romans' crushing victory over an enormous combined army of Samnites and Gauls. On the left wing, the Romans twice drove back the more numerous Gallic cavalry with spirited frontal charges, but pursued too far and became entangled in a melee with the enemy infantry. The Gauls then unleashed their chariots, whose unfamiliar rumbling noise panicked the Roman horses and resulted in a chaotic Roman flight. However, on the right, the Roman cavalry routed the Samnite infantry with a devastating charge on their flank.[75] At Heraclea (280 BC), the Roman cavalry dismayed the Epirote king Pyrrhus by prevailing in a bitterly contested melee against his professional Thessalian cavalry, then regarded as the finest in the world, and were only driven back when Pyrrhus deployed his elephants, which panicked the Roman horses.[76] At Telamon (225 BC), the Roman cavalry fiercely contested a strategic hill on the flank of the battlefield with more numerous Gallic cavalry. In what developed as a separate cavalry battle before the main infantry engagement began, the Gauls were eventually driven off the hill by repeated Roman charges, enabling the Roman horse to launch a decisive flank attack on the Gallic foot.[77]

The main reason for disparagement of the Republican cavalry is its performance during Hannibal's invasion of Italy (218-03 BC), when it was generally outclassed by the Carthaginians, notably the crushing defeats that Roman horse suffered at the Trebia and at Cannae. But Sidnell points out these reverses were not due to poor performance by the Romans, who fought with their customary courage and tenacity, but to the Hannibalic cavalry's far superior numbers and the operational flexibility afforded by his Numidian light cavalry.[78] At Cannae, 6,000 Roman horse (including Italian confederates) faced 10,000 Carthaginians, and on the Roman right wing, the Roman cavalry of 2,400 was probably outnumbered by more than 2 to 1 by Hannibal's Spaniards and Gauls, and wiped out in a fierce battle of attrition. In the words of Polybius: "As soon as the Spanish and Celtic horse on the (Carthaginian) left wing came into contact with the Roman cavalry... the fighting which developed was truly barbaric... Once the two forces had met they dismounted and fought on

foot, man to man. Here the Carthaginians finally prevailed, and although the Romans resisted with desperate courage, most of them were killed..."[79] The fact that the Romans dismounted has been used to support the thesis of a Roman cavalry that lacked confidence in its horsemanship and was actually just a mounted infantry. But since the Carthaginian cavalry also dismounted, Livy's explanation is more credible, that fighting on horseback was impractical in the confined space between the right flank of the Roman infantry and the river Aufidus.[80]

The cavalry of Roman armies before the 2nd Punic War had been exclusively Roman and confederate Italian, with each holding one wing of the battleline (the Romans usually holding the right wing). After that war, Roman/Italian cavalry was always complemented by allied native cavalry (especially Numidian), and was usually combined on just one wing. Indeed, the allied cavalry often outnumbered the combined Roman/Italian force e.g. at Zama, where the 4,000 Numidians held the right, with just 1,500 Romans/Italians on the left.[81] One reason was the lessons learnt in the war, namely the need to complement heavy cavalry with plenty of light, faster horse, as well as increasing the cavalry share when engaging with enemies with more powerful mounted forces. It was also inevitable that, as the Roman Republic acquired an overseas empire and the Roman army now campaigned entirely outside Italy, the best of non-Italian cavalry would be enlisted in increasing numbers, including (in addition to Numidians) Gallic, Spanish and Thracian horse.[82]

Nevertheless, Roman and Italian confederate cavalry continued to form an essential part of a Roman army's line-up for over a century. They were especially effective in wars in the East, where they encountered Hellenistic Macedonian and Seleucid cavalry which fought in set-piece battles using equipment and tactics similar to the Romans' own. For example, at Magnesia (190 BC), 3,000 Roman cavalry on the right wing routed 7,000 facing Syrian and Greek cavalry (including 3,000 *cataphracti* - Parthian-style heavily armoured cavalry) then wheeled and assisted the legions in breaking the Seleucid phalanx by attacking it in the flank and rear.[83] As earlier in the war against Hannibal, they were less successful against elusive tribal cavalry such as the Lusitanians under Viriathus in their bitter resistance to Roman rule (151-140 BC) and the Numidians themselves under king Jugurtha during the latter's rebellion (112-105 BC), when they were obliged to rely heavily on their own Numidian allied horse.[84]

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