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THE RISE OF THE SASSANIAN ELEPHANT CORPS: ELEPHANTS AND THE LATER ROMAN EMPIRE

BY

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Abstract: The Sassanian Persians used elephants on various occasions against the armies of the Later Roman Empire. This article considers when elephants were first incorporated into the Sassanian army, why they were thought necessary, their deployment and equipment during the period in question, and the degree to which the Sassanian way of elephant warfare differed from that of neighbouring peoples. In addition, the paper proposes a close association between the use of elephants and Persian notions of kingship. Much emphasis is placed on the martial activities of Shapur II and the testimony of the Greek soldier-historian Ammianus Marcellinus.

Keywords: Sassanians, Persia, elephants, Roman Empire, kingship

Not a great deal has been written about Roman encounters with elephants in the Later Roman Empire[1]. Perhaps this has something to do with the fact that elephants, for most students of the ancient world, cease being animals of any real military importance after the end of the Roman Republic[2].

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[1] Abbreviations follow the "Liste des périodiques" in *L'Année philologique*. Other abbreviations are as per S. Hornblower & A. Spawforth (eds.), 1996. *The Oxford Classical Dictionary*, 3rd edn., Oxford & New York, except *Chron. A. 354* = *Chronographus Anni CCCLIIII*; Mbh. = *Mahābhārata*; RV = *Ṛgveda*. References to "Dindorf, *Chron. Pasch.*" and "Dindorf, *HGM*" respectively refer to L. Dindorf (ed.), 1988. *Chronicon Paschale*, 2 vols., University Microfilms International, Ann Arbor, facsimile of 1832 edn.; and L. Dindorf (ed.), 1970. *Historici Graeci Minores*, 2 vols., Bibliotheca Teubneriana, Leipzig. Except where noted otherwise, translations are from the relevant Loeb Classical Library volume, with the exception of Vegetius (Milner 1996) and Zosimus (Ridley 1982). I would like to thank Prof. Anthony R. Birley, Dr Brian W. Jones and Dr Tom Stevenson for reading earlier drafts of this paper, and especially Dr Philip Rance for insightful criticisms on a more advanced version. Thanks must also be expressed to Prof. Dr. Ernie Haerinck of *Iranica Antiqua* for leading me to some informational sources that I would have otherwise overlooked.

[2] Claudius may have taken elephants to Britain in A.D. 43. Cassius Dio (60.21.2) writes that elephants had been assembled for the expedition, but it is not clear if they were

However, with the fall of the Parthian dynasty of the Arsacids in A.D. 224, Rome would again face pachyderms on her eastern frontier, and beyond (as we shall see in the case of the emperor Julian). The Sassanian rulers, who viewed themselves as the legitimate successors to the Achaemenians, revived Persian elephant warfare after a hiatus of several centuries. To be sure, many of us are quite familiar with the way in which the Carthaginians used elephants in mass frontal assaults against Roman heavy infantry, and the way in which the generals of the Hellenistic Seleucid and Ptolemaic dynasties placed their elephant corps on the wings of their battle-formations in order to terrify the opposing cavalry. Despite this, few classical scholars have thought about the way in which states beyond Egypt and Syria employed their elephants. In this article, an overview of the Sassanian use of elephants will be provided, with particular emphasis placed on their rôle in the Persian wars of the fourth century A.D., especially Julian's failed campaign.

The Sassanian use of elephants from the beginning of their dynasty until Julian's Persian war has been given very little attention since Scullard provided some discussion in a monograph dating to 1974. But this account is now outdated to some extent, particularly in view of more recent scholarship on the sources, particularly the *Historia Augusta* and the various Eastern texts that pertain to the Sassanian period. Rance (2003) has recently contributed a highly useful paper on elephants in late antiquity, but he devotes only a little over seven pages to the specific period that concerns us here[3].

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actually taken. Although it is debatable, Scullard (1974: 199) feels that there is good reason to assume that the elephants were embarked, mainly for the purpose of terrifying the native Britons. Still, it is difficult to imagine that these elephants played any rôle in battle. Of note, too, is that Polyaenus (*Strat.* 8.23.5) preserves the story that Caesar used an armoured and turreted elephant to help his troops cross a river in Britain. Didius Julianus, when he faced the invasion of Septimius Severus, supposedly turned some of the elephants used for ceremonial purposes into weapons of war by fitting them with turrets. The beasts were not amenable to this idea and promptly ejected the turrets and their unfortunate occupants; see Cass. Dio 74.16.2-3; Herod. 2.11.9.

[3] The existence of this recent paper was brought to my attention by Michael Schellenberg M.A. soon after the present article had been accepted for publication. Rance's article represents an admirable study of Sassanian elephant warfare that deals mainly with 5th-7th century developments, yet does provide a brief account of the beginnings of Sassanian elephant warfare. I agree with most of Rance's interpretations regarding our period, but hope that the present paper will provide a more detailed overview of elephantine matters from the reign of Ardashir I to that of Shapur II. For the sake of completeness, Rance's article is referred to where appropriate.

What is more, the non-classical sources referred to above provide a valuable means to corroborate detail found in the pages of the more familiar Greek and Latin works. A number of important issues arise, which lead us to the following research questions. When can we say with any certainty that the Sassanians started to use elephants for military purposes? Did the Sassanians use elephants in ways that differed from the classical model? And, if so, whence did they gain their newfound knowledge? To what extent was contact with India instrumental in the reestablishment, not only of the elephant squadrons themselves, but the way in which these units were used? In the end, we hope to show that the Sassanian use of elephants was dictated, not by western norms (which had in any case abated), but by eastern — and specifically Persian — notions of elephant warfare. The following investigation therefore seems to take us full circle, for the first attested Mediterranean encounter with military elephants comes from Arrian's treatment of the battle of Gaugamela in 331 B.C., although this account suggests that the animals were not actually deployed.

I. A return to elephant-warfare in the East

Before we look in detail at the Sassanian elephant's rôle in combat, it will probably be well to provide a brief history of the return to large-scale elephant warfare in the East. This will be important, especially given that the ancient sources, when examined closely, are not entirely clear about when Romans first encountered Sassanian elephants.

As noted above, the Achaemenian Persians may have possessed elephants (or at least had access to them), and they were supposedly with Darius III at Gaugamela during the campaign against the Macedonian king Alexander in 331 B.C. Arrian (3.8.6) claims that fifteen animals were present and had been brought by the Great King's Indian allies, though they do not appear to have been used in the battle itself and are not mentioned by other extant sources[4]. We are told that the elephants were positioned

[4] Devine (1975: 374-385) would appear to support this and only mentions elephants in the context of the battle's aftermath (382). Devine does not explain why they were not used in the battle; nor does Griffith 1947: 77-89. Other works that fail to question the presence of elephants include Hamilton 1974: 281; Hammond 1989: 141, 143; Lane Fox 1973: 234, 239-240; Milns 1968: 118-120 (these works are generally representative of mainstream scholarship).

in the centre of the Persian line "ahead of [Darius'] royal squadron" (Arr. 3.11.6: κατὰ τὴν [Δαρείου] ἴλην τὴν βασιλικὴν). Scullard (1974: 64-65) supposes that the beasts were new additions to the Persian host and that their employment in the battle would have been fraught with danger, especially since the Persians were going to rely almost exclusively on their cavalry and scythed chariots[5]. And this is not improbable, if, indeed, the elephants were really present. Darius' elephants were apparently captured after the battle along with the baggage train (Arr. 3.15.4, 3.15.6). Of interest, too, is that Curtius Rufus (5.2.10) reports that, when Alexander was approaching Susa, the local satrap sent, as a form of welcoming gift, twelve elephants that Darius had imported from India. It might well be supposed that these beasts were also military animals, though one cannot be entirely sure. Thus, if we believe Arrian and Curtius Rufus, there existed some sort of tradition, however debateable, of Persians using elephants for military purposes. It is worth noting that Achaemenian elephants first appear in the context of large-scale invasion deep into Persian territory, which is at least consistent with what Ammianus describes with reference to Julian's invasion in A.D. 363, the Byzantine emperor Heraclius' campaign in A.D. 628, and Arab incursions in the A.D. 630s. Xenophon, however, offers no similar corroborative information in his *Anabasis*[6], which deals with the very late fifth century B.C.

In light of the above, it is not surprising that, when the 'foreign' Parthian dynasty was finally overthrown in A.D. 224, the Sassanians, as the supposedly legitimate inheritors of the Persian throne, should return to the old ways — be those ways real or imagined. The main problem with this thesis is that, as will be argued, Sassanian elephants do not seem to have been employed in warfare until several decades after the fall of the Parthians. One should note that, though the Parthian kings were fellow Iranians (at least from a modern and therefore anachronistic geographical perspective)[7], they were regarded officially by the Sassanians as pretenders

[5] Followed by Hammond 1997: 106. Other commentators add little to the topic. The matter is worthy of further investigation, though space does not permit us to do so on this occasion. It is odd that Bosworth's otherwise detailed commentary (1980: *ad loc.*) offers no assistance. Symptomatic of the problem, too, is that Marsden (1964), in his eighty-page account of the battle, does not even seem to mention elephants.

[6] These details were pointed out by Dr Philip Rance in personal correspondence.

[7] The satrapy of Parthia lay beyond Media.

to the throne of the King of Kings[8], which had been wrested from the Achaemenians by Alexander the Great. Still, it should be noted that it is not entirely understood when — or even if — the kings of the Achaemenian dynasty began to maintain a herd of elephants[9].

With respect to our problem, the *Historia Augusta* (*HA*) provides our first port of call. Indeed, it furnishes us with the first historical context of Sassanian elephants possibly being used in warfare, although it must be noted that the text was compiled long after the elephantine events that it describes. Let us turn to the Persian king Ardashir's attempt to besiege Nisibis in A.D. 230. In the following year, the Roman emperor Severus Alexander came to the aid of the city and personally led an army against the Persians. The outcome was indecisive and hostilities were suspended. Severus Alexander's campaign is recorded in the *HA* as a great Roman victory (*Sev. Alex.* 55-56), while Herodian's more down-to-earth account (6.4.4-6.6.6) suggests that the Persians had got the better of the young emperor. Of interest to us is that the oftentimes wildly imaginative *HA*, which we will presume was written in the late fourth century by a single author, as the current state of scholarship dictates, mentions that Ardashir (called Artaxerxes in the classical literary tradition) fielded no less than 700 elephants. The author goes on to state that Severus Alexander, in a letter to

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[8] This claim, of course, added a degree of legitimacy to Ardashir's revolt against the Parthian king in A.D. 224. Despite this, the Romans, during the period in question, failed to appreciate this political and ethnic subtlety — they continued to describe their Persian enemies as "Parthians".

[9] Scullard (1974: 33-34) points out that Ctesias of Cnidus, who spent much time at the court of Artaxerxes II (he was court physician "from 405 until at least 387"), wrote about elephants in the now-lost *Persica* and *Indica*. A very small number of fragments from these works concerning elephants are still extant, but are generally of no real value to the present discussion; on this topic, see especially Bigwood 1989: 302-316; id. 1993: 537-555. Still, in one fragment preserved by Aristotle (*Gen. an.* 2.2, 736a), Ctesias states that elephant semen hardens so much upon drying that it becomes like amber, though Aristotle denies this (see also *Hist. an.* 3.22, 523a, with Bigwood 1993: 540; *cf.* Romm 1989: 572-573). Ctesias' report might suggest first-hand observation, which, if true, may point towards a Persian herd of elephants, or even a breeding stud. But this, admittedly, is not attested by any source and is not especially likely given that later evidence exists for the difficulty of breeding elephants in Iran; on this topic, see Rance 2003: 383-384, n. 141. But Scullard (1974: 34) makes the point that this information could have come from those who had experience with the beasts in India, or elsewhere. Any claim that Achaemenian kings of this period (and earlier) kept elephants is therefore purely speculative.

the senate, claimed to have killed 200 of the beasts, captured a further 300, and sent eighteen to Rome[10]. Scullard (1974: 201) writes that "The figures for the elephants, as also those given for the Persian cavalry, are clearly nonsense and could well be divided by ten".

What Scullard does not take into account is that most — if not all — of the letters found in the *HA* were probably fabricated, as Syme repeatedly takes pains to point out[11]. This makes us doubt claims that elephants were used by Ardashir at all. Indeed, Herodian's altogether more reliable account of the campaign (6.5.1-6.6.6), which seems to be curiously, and perhaps playfully, discredited in the *HA* at *Sev. Alex.* 57.2 (*in annalibus et apud multos*: "in the annals and in many writers"), nowhere mentions elephants, nor does that of the much later Byzantine epitomator Zonaras (12.15)[12]. With regard to this conundrum, Scullard (1974: 201) provides two possibilities: a) that the Persian elephants supposedly encountered in A.D. 230 "were inventions designed to portray Severus as a second Alexander the Great who had faced the elephants of Porus"; or b) that the *HA* referred to elephants because it was "well known" that they formed part of the Persian army when the series of biographies was written in the late fourth century — "they were naturally presupposed to have been there in an earlier period". But could there be some basis of fact to the *HA*'s assertions? Given that Herodian's account is brief and does not provide any figures, Scullard (1974: 201) supposes that "behind the exaggerations of the *Historia Augusta* may lie an element of truth"[13].

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[10] Four elephants were also supposed to have drawn the emperor's chariot in his triumphal passage through the streets of Rome (*HA Gord.* 27.9).

[11] *E.g.* Syme 1971: 1: "a mass of fabrications, notably forged documents"; at 112, he is described as "a rogue scholar". Cameron (1971: 255) draws attention to the "manifestly forged documents" contained within the *HA*. For further comments on the controversy, see Paschoud 2001: viii-xii. Paschoud takes pains to point out that "l'historien ancien fait tout d'abord oeuvre d'art, de rhétorique" (xi), and that "il était normal de recourir à la fiction pour être plus eloquent" (xii); on fraudulent letters in antiquity, Syme (1983: 1-11) provides a convenient overview.

[12] See also the brief accounts of Aurelius Victor (*Caes.* 24.2), Eutropius (*Brev.* 8.23), Festus (*Brev.* 22.1), Jerome (*Chron.* 223) and Orosius (7.18.7).

[13] This is supported in earlier volumes, *e.g.* Rawlinson 1876: 43. In addition, see Krebs 1964: 218, who questions the figures, but not the use of elephants; he does at least note, however, that "Herodian erwähnt in seinem Bericht über diesen Feldzug überhaupt keine Elefanten".

It is important to place the passage in the context of subsequent literature on the *HA*[14]. Before this, however, we need to have a close look at the most relevant section of the *locus*:

> iam primum elephanti septingenti idemque turriti cum sagittariis et onere sagittarum. ex his triginta cepimus, ducenti interfecti iacent, decem et octo perduximus. falcati currus mille octingenti[15]. ex his adducere interfectorum animalium currus ducentos potuimus, sed id, quia et fingi poterat, facere supersedimus. centum et uiginti milia equitum eorum fudimus, cataphractarios, quos illi clibanarios uocant, decem milia in bello interemimus, eorum armis nostros armauimus (*Sev. Alex.* 56.3-5).
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> First of all, there were seven hundred elephants provided with turrets and great loads of arrows. Of these we captured thirty, we have two hundred slain upon the field, and we have led eighteen in triumph. Moreover, there were scythed chariots, one thousand eight hundred in number. Of these we could have presented to your eyes two hundred, of which the horses have been slain, but since they could easily have been counterfeited we have refrained from doing so. One hundred and twenty thousand of their cavalry we have routed, ten thousand of their horsemen clad in full mail, whom they call cuirassiers, we have slain in battle.

One aspect that Scullard fails to mention is the presence, in Severus Alexander's purported letter, of Persian scythed chariots (*falcati currus*). While Scullard, as seen above, suggests that the presence of elephants could be a retrospective addition, this could hardly have been the case for the scythed chariots. The Sassanian Persians do not seem to have used these vehicles at any stage in their history. Ammianus, for one, never mentions them. This, more than any other element of the letter, clearly places the veracity of the passage in question, and causes us to doubt whether the

[14] It is disappointing that Bertrand-Dagenbach (1990) fails to make much of the specific information that interests us. Note that she writes that "les acclamations *uere Parthicus, uere Persicus* d'*AS* 56, 9 relèvent de la pure fantaisie" (19); for general commentary on the Persian war, see 180-183.

[15] The same numbers of elephants and scythed chariots are reported at *HA Sev. Alex.* 55.2.

Persians fielded elephants in A.D. 230 at all. Scullard (1974: 201) proposes that the author was perhaps influenced by accounts of the Hydaspes, where Alexander battled the elephants of the Indian king Porus. Yet the playful author of the *HA* may have had Gaugamela in mind rather than the Hydaspes, especially since elephants and scythed chariots were supposed to have taken part in the former contest[16]. Curtius, though he fails to include elephants at Gaugamela, even uses the term *falcati currus*, *e.g.* at 4.13.33, 4.14.14 and 4.15.3. While the references to heavily armoured cataphracts (*catafractarios*)[17] hardly seem out of place in the *HA*, the phrase *quos illi clibanarios uocant* perhaps suspiciously echoes Amm. Marc. 16.10.8, where armoured horsemen parade through Rome in Constantius II's parade of A.D. 357 — witness *sparsique cataphracti equites (quos clibanarios dictitant)*: "scattered among them were full-armoured cavalry (whom they call *clibanarii*)"[18]. In view of the problems signalled above, the silence of Herodian and the anachronistic nature of the *HA*'s life of Severus Alexander does not allow us to demonstrate (at least with any certainty) that the Sassanians used elephants for military purposes in the mid-third century A.D., even though they might well have done so. It might also be worth drawing attention to the *HA*'s claim that the elephants were *turriti cum sagittariis*. Ammianus, as we shall see below, never specifically mentions that Persian elephants carried turrets let alone

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[16] While only Arrian mentions elephants and scythed chariots together at Gaugamela, Diodorus Siculus mentions Darius' chariots on a number of occasions (*e.g.* 17.39.4: ἁρμάτων δρεπανηφόρων). Justin's rather unreliable epitome of Pompeius Trogus mentions neither of these two weapons. Rance (2003: 356) also points out that the failure of late antique authors to specify the contemporary applications of elephants leaves open the possibility that modern historians will make "anachronistic assumptions" based on the more detailed Hellenistic sources; see also 362 of the same article (specifically on the "obvious anachronism" of the scythed chariots).

[17] For a description of Shapur II's armoured horsemen, see Amm. Marc. 25.1.12-13; Lib. *Orat.* 59.69-70. Heliodorus of Emesa (*PLRE* I, "Heliodorus 3") gives an even more detailed account in his *Aethiopica* (9.14.3-15.6). Although found in a work of fiction, this *locus* should nevertheless be given consideration on account of its detail. For descriptions of Roman cataphracts, see Jul. *Orat.* 1.37C-38A; Lib. *Orat.* 18.206. On the largely similar Sarmatian-style horsemen, see Negin 1998: 65-75; and, especially in relation to the language found at Amm. Marc. 16.10.8, see also Speidel 1984: 151-156 (= Speidel 1992: 406-411).

[18] De Jonge (1972: 118) draws our attention to Veg. *Epit.* 3.24.7, which also mentions *clibanarii* alongside *catafracti equi*, although the context is rather different to that of Ammianus and the *HA*.

archers on their backs in set-piece engagements, although we can be rather more certain that they were used in siege-warfare.

Sextus Julius Africanus, writing in the reign of Severus Alexander, included a smallish section on elephant warfare in his multifarious *Cesti* (frg. 1.18). This *locus* led Vieillefond (1970: 63-64) to suggest that elephants must have become a matter of interest at this particular time, presumably as a result of the threat posed by Rome's eastern enemies. Yet, as Rance (2003: 361) perceptively notes, the section in question is "explicitly antiquarian and compiled from classical *topoi*". One might well adduce Aelian's discussion of elephant warfare at *Tact.* 22-23, which, like that of the much earlier Asclepiodotus (*Tact.* 8), was purportedly included in his work "for the sake of completeness" (ὅμως πρὸς τὸ τέλειον τῆς γραφῆς)[19]. Now, Aelian was writing at some time in the first or second century A.D. (most likely the very early second)[20]. But this has not led to the belief that the Parthians were using elephants at the time of composition. Julius Africanus' elephantine section, once again, seems also to have been included for the sake of displaying his erudition or because he viewed elephants as a subject worthy of inclusion (for whatever reason). Still, it is well to note that he was writing outside the narrow late-Hellenistic subgenre from which the tactical writers independently descended. Thus we still have no firm evidence to support the 'testimony' of the *HA* regarding the elephants of Ardashir.

The next possible reference that we have pertaining to Sassanian elephants also comes from the *HA*. We read that Shapur I (or Sapor, the son of Ardashir) attempted to invade Syria but was prevented from doing so by Gordian III, who beat the Persian king at Resaina (*HA Gord.* 26.3-27.1; Amm. Marc. 23.5.17). In the *HA*'s account, our source declares that twelve elephants were sent to Rome (*Gord.* 33.1)[21], though other accounts fail to

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[19] Asclepiodotus deals with elephants at *Tact.* 1.3, and especially 8-9. *Cf.* Arr. *Tact.* 19, where the author does not even bother going into great detail about elephant warfare, such is its irrelevance to the military situation of the day; Arrian's *Tactica*, being written sometime in Hadrian's reign, was roughly contemporaneous with that of Aelian, although there is no evidence that Arrian knew the latter's work. There is also no evidence that Aelian was familiar with Asclepiodotus' treatise, though it is very likely that they drew independently on the same tradition; see Rance 2003: 357-358, with notes.

[20] Indeed, it has been more closely dated to *c.* A.D. 106-113; see Dain 1946: 15-21; Devine 1989: 31.

[21] These elephants are not *specifically* linked to Gordian's Persian war, *i.e.* we are not told that they were captured war elephants. Scullard (1974: 202) writes "or 22" with

mention this detail. Gordian was assassinated shortly thereafter and his successor Philip is said to have celebrated games in A.D. 248 that included animals previously collected by Gordian for a "Persian triumph" (*ad triumphum Persicum*: *Gord.* 33.2). Of this imperial menagerie destined for the ring, thirty-two animals were elephants (*Gord.* 33.1). Once again, the *HA*, at least according to Scullard (1974: 201-202), seems to imply that the Persians were using elephants in numbers against Rome in the mid-third century, though this, too, is arguable[22]. Unfortunately, a source like the *HA* inspires little confidence. What, then, can we glean from the above? Given the highly problematic nature of the *HA*, it seems fitting to refrain from using this material as proof that elephants were used by the Persians in the first half of the third century A.D. Moreover, since a) the elephant-less Parthians were deposed in A.D. 224 and b) the campaign against Severus Alexander dates to A.D. 230, one has to wonder if elephants came to be used so quickly (though their use, of course, cannot be discounted on these grounds alone).

The Caesar Galerius perhaps encountered elephants when he went to war with the Persians, on Diocletian's orders, in A.D. 297. A reference in one of the *chronica* mentions that Diocletian and Galerius celebrated a victory with a triumph through the streets of Rome[23]. Thirteen elephants and, strangely enough, "six charioteers" (*agitores VI*) supposedly participated in this triumphal parade. But we still find no reference to Sassanian elephants being encountered in battle. The elephants exhibited in the parade, rather than being trophies of war as one might otherwise suspect,

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reference to the number of beasts that Gordian supposedly sent to Rome, presumably because the author of the *HA* writes that, during Gordian's reign, there were thirty-two elephants in Rome, ten of which had been sent by Severus Alexander (*Gord.* 33.1). Scullard presumably thinks that the balance must have been sent by Gordian, but this does not necessarily follow. The same text mentions that hippopotami, giraffes and a rhinoceros, among other wild beasts, were also set to appear in the intended Persian triumph (*Gord.* 33.1-2). Still, it is clear that these animals were procured because of their exotic nature — not because they were captured in Persia. Thus the elephants, too, need not necessarily be connected with the conflict, something which Rance (2003: 362) also points out.

[22] See n. 21 *supra*.

[23] See *Chron. A. 354*, 27-28 (*MGH:AA* 9, *Chron. min.* 1, 148). But no mention of elephants is made by Eumenius at 5(9).21.1-3, which *locus* touches upon Galerius' exploits on behalf of his Augustus, the emperor Diocletian. Nixon and Saylor Rodgers (1994: 148) write that "the date [of this panegyric] can be no earlier than 297 and may be as late as 299 or even later".

may have been included simply for the purpose of giving the display an "eastern" flavour[24]. This would also help to explain the otherwise inexplicable reference to charioteers — perhaps, in any case, another example of contemporary constructions of Gaugamela, or else battles against the Seleucids, finding their way into popular beliefs. Once again, the sources provide us with little concrete evidence that the Sassanians were using elephants for warfare in the third century A.D.

Perhaps of more use is an Arabic text, *viz.* the *Annales* of al-Ṭabarī (*c.* A.D. 839-923)[25], which records a fragment of the poet 'Amr b. Ilah. The relevant section reads as follows:

> Have you not been filled with grief as the reports come in about
> What has happened to the leading men of the Banū 'Abīd,
> And of the slaying of [al-]Ḍayzan and his brothers, and of the
> Men of Tazīd, who were wont to ride forth in the cavalry squadrons?
> Sābūr [*i.e.* Shapur] of the Hosts attacked them with war elephants, richly
> Caparisoned, and with his heroic warriors (1.829)[26].

The poem refers to the deeds of Shapur I, the son of Ardashir, and is set in the context of the fall of al-Ḥaḍr (*i.e.* Hatra), which was ruled by a man called variously Satirun or, in Arab tradition, al-Ḍayzan. The fragment in question was supposedly written by 'Amr. B. Ilah, a man "who was with al-Ḍayzan" (1.829)[27]. This would appear to give the testimony some weight. Given that Hatra fell to Shapur I in 240, this poetic fragment provides us with something of a problem. More work needs to be undertaken in order to divine the veracity of the assertion, but, for our purposes, it seems best to view the fragment with considerable caution. Similarly, the *History of the Armenians* by Moses Khorenats'i (Moses of Khorene) recalls that the Armenian king "Trdat" (*i.e.* Tiridates), at some time during the reign of Diocletian[28],

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[24] On locally-held "circus" elephants used in late antiquity for triumphs, see Rance 2003: 362, 371.

[25] *Annales* = *Ta'rīkh al-rusul wa'l-mulūk*. This comprehensive work spans from the time of the earliest Patriarchs until July of A.D. 915.

[26] Trans. of Bosworth 1999: *ad loc.* Bosworth (1999: 36, n. 111) points out that "these verses appear in other Arabic texts".

[27] Trans. of Bosworth 1999: *ad loc.*

[28] This *terminus ante quem* is provided by Moses' statement that "Trdat" became king of Armenia "in the third year of Diocletian" (2.82).

engaged in a battle against the Persians in which he personally "scattered the ranks of elephants" (2.82)[29]. Yet this account was written long after the event related[30]. It therefore may have been embellished with anachronistic details. To be sure, the passage in question abounds in fantastic statements that probably have little basis in reality. Thus we are provided, once again, with no firm and incontestable evidence that elephants were being used for strictly military purposes by the Sassanian Persians in the third century A.D.

Of course, we share our problem regarding the sources with countless other investigators of the third century. The absence of any commanding and relatively reliable historical narrative, such as that of Thucydides, Tacitus or Ammianus, allows room for a good deal of speculation. As a consequence, one cannot really say with any certainty that the Sassanian Persians employed elephants in this troublesome century.

Matters certainly change by the fourth century A.D. The catalyst for this change, it seems, was the belligerent Shapur II (and, from a historiographical perspective, we have access to arguably more reliable source material). In one of Libanius' *Orationes*, the orator describes the preparations made by the Sassanian Persians to combat the Romans in the age of Constantine the Great. Libanius tells us that, while the Achaemenian kings Darius and Xerxes had been content to build up their forces over a period of ten years when they each essayed to conquer Greece, Shapur thought that "four decades" was a more appropriate length of time. The orator mentions the well-trained nature of Persian military units such as "cavalry, men-at-arms, archers and slingers" (τὴν ἵππον, τὴν ἀσπίδα, τοὺς τοξότας, τοὺς σφενδονήτας: *Orat.* 59.64), but adds that the Persians not only trained in the expected arts of war but also introduced others:

> τὰ μὲν ἐξ ἀρχῆς νενομισμένα πρὸς ἄκρον ἐκμελετῶντες, ὧν δὲ οὐκ εἶχον τὴν ἐπιστήμεν, ταῦτα παρ' ἑτέρων εἰσφερόμενοι καὶ τῶν μὲν οἰκείων οὐκ ἀφιστάμενοι τρόπων, προστιθέντες δὲ τοῖς ὑπάρχουσι θαυμασιωτέραν παρασκευήν (*Orat.* 59.64).

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[29] See Dodgeon and Lieu 2002: 319 (= trans. Thomson 1978: *ad loc.*).

[30] The exact date of composition is unknown, but Dodgeon and Lieu (2002: 396) write that "the chronicle utilizes material later than the fifth century"; see also Thomson 1978: 60-61.

> They trained to a consummate degree what methods had been their practice from the beginning, but those of which they did not have an understanding they introduced from others. They did not give up their native customs, but added to their existing methods a more remarkable power.

Although this "power", or "force" (παρασκευήν)[31], could perhaps be a reference to siege-craft, it is important to note that Libanius introduces elephants very shortly thereafter. Indeed, Libanius informs us that "already he [*i.e.* Shapur II] had collected a stock of elephants, not just for empty show, but to meet the needs of the future" (ἤδη δὲ καὶ γένος ἐλεφάντων ἤγειρεν οὐκ εἰς θέαν ψιλήν, ἀλλ' εἰς τὴν χρείαν τοῦ μέλλοντος: *Orat.* 59.65). What exactly this might mean is debatable. It seems certain, given the context, that this is a reference to elephants for use in warfare; but one might also infer that whatever elephants had previously been in the employ of the Persian monarch (if indeed such beasts *had* existed) had been kept for reasons of pomp and circumstance rather than military ends — or else the passage is a reference to the contemporary Roman use of elephants, as Malosse (2003: 194) maintains[32]. The use of a verb relating to gathering together or collecting (*viz.* ἤγειρεν) therefore seems to refer, if not a start from scratch, to a considerable augmentation of the royal elephant force. Whatever we may think of Libanius' testimony — he was, after all, an orator — the real story of the Sassanian war-elephants more or less begins with Shapur II.

II. Elephants attack: the reign of Constantius II (A.D. 337-359)

Following the death of Constantine the Great in A.D. 337, the Persian king Shapur II, who had reportedly planned so well for his wars against Rome, invaded Mesopotamia and laid siege to Nisibis. This occurred in either A.D. 337 or in A.D. 338. Theodoret, in his *Historia Religiosa*, reports that

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[31] I owe this particular interpretation to personal correspondence with Dr Philip Rance; *cf.* Soz. *H.E.* 6.1.6: σὺν πολλῇ ... παρασκευῇ ἱππέων καὶ ὁπλιτῶν καὶ ἐλεφάντων ("with a strong force of cavalry, infantry and elephants"). Thus we see the word most definitely associated with Sassanian military elephants.

[32] Malosse (2003: 194) believes that "Libanios laisse entendre qu'il existait à son époque dans l'Empire romain des élevages d'éléphants pour les besoin des spectacles".

the bishop Jacob (St. James) led the town's defence and that Shapur had led "as many elephants as he could muster" to the siege (1.11)[33]. Scullard (1974: 202) is no doubt correct to point out that Jacob was probably not responsible for sending out a swarm of gnats and mosquitoes with a view to attacking the trunks of the Persian elephants (*H.R.* 1.11; see also *H.E.* 2.31.12-14). Despite these fantastical claims, it seems clear enough that elephants *were* involved in the siege, which means that Theodoret's account is the first reasonably reliable instance of Sassanians employing elephants in combat against Roman forces. The same story is found in the Syriac text known as the *Historia Sancti Ephraemi* (6-7, cols. 15-19)[34] and in the Syriac *Chronicon* of Michael the Syrian (7.3).[35] Of course, thoroughly derivative Syriac accounts often contain similar or identical accounts without telling us precisely whence they procured their information. Constantius II eventually reached an agreement with the Persian king. As a result, hostilities — and the use of elephants against Rome — were once again suspended. In A.D. 344, Shapur again marched into Mesopotamia, but Constantius II checked his progress in a battle waged near Singara. Nisibis came under attack for the second time in A.D. 346, and for the third time in A.D. 350.

Julian's panegyric in honour of his imperial cousin Constantius II, which deals with the siege of A.D. 350, mentions the presence of Indian elephants equipped for military duties. These beasts are first described accompanying the Persian king's advance at *Orat.* 2.63b (ξὺν τοῖς θηρίοις). The future emperor points out that "these [*i.e.* the Persian elephants] came from India and carried iron towers full of archers" (ταῦτα δὲ ἐξ Ἰνδῶν εἵπετο, καὶ ἔφερεν ἐκ σιδήρου πύργους τοξοτῶν πλήρεις: *Orat.* 2.63b). The presence of elephants in the third siege would appear to be confirmed by the eyewitness Ephrem's Syriac *Carmina Nisibena* (2.18)[36], though no real details are given regarding the elephants' deployment. Julian, however, informs us that the elephants were used in the attack on the walls of Nisibis,

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[33] On Jacob's part in the siege, see especially Peeters 1920: 285-373.

[34] See Dodgeon and Lieu 2002: 168-169.

[35] See Dodgeon and Lieu 2002: 170-171. Michael the Syrian lived A.D. 1126-1199.

[36] See Dodgeon and Lieu 2002: 195. Ephrem's *Sermones de Nicomedia* (extant in Armenian) also mentions Persian elephants being "defeated" at 15.113; see Dodgeon and Lieu 2002: 196. See also Ephrem's *Hymni contra Iulianum* 2.19 (Dodgeon and Lieu 2002: 241), which, although about Julian, repeatedly refers to Nisibis: "the waters suddenly burst out and smote against it, earthworks were brought low and elephants were drowned".

along with the Persian cavalry (*Orat.* 2.64b). After the Persian horsemen had been driven off with great losses, the Persians, trusting in the elephant's apparent novelty value, decided to make a show of their pachyderms (*Orat.* 2.65b). Julian writes that the heavily armoured Persian cavalry had experienced difficulty with the boggy terrain (which had been rendered thus owing to dykes and other siege-works); because of this, or so Julian opines, the Persians surely did not think to deploy their elephants as they might originally have planned (*Orat.* 2.65b-c). With this in mind, the next section is especially interesting:

> προσῆγον δὲ ἐν τάξει μέτρον διεστῶτες ἀλλήλων ἴσον, καὶ ἐῴκει τείχει τῶν Παρθυαίων ἡ φάλαγξ· τὰ μὲν θηρία τοὺς πύργους φέροντα, τῶν ὁπλιτῶν δὲ ἀναπληρούντων τὰ ἐν μέσῳ (*Orat.* 2.65c).
>
> They came on in a battle line at equal distances from one another, in fact the phalanx of the Parthians resembled a wall, with the elephants carrying the towers, and hoplites filling up the spaces between.

The defending Romans, rather than being cowed by the scene, thought it "a splendid and costly pageant in procession" (λαμπρᾶς καὶ πολυτελοῦς πομπῆς πεμπομένης) and showed their admiration by showering missiles upon it (*Orat.* 2.65d). Incensed by this, the Persians attacked — despite the bog — and suffered for their recklessness: some of the elephants were wounded by the Roman missiles and sank into the mud (*Orat.* 2.65d-66a). The *Chronicon Paschale* (350)[37] and Theophanes' generally identical *Chronographia* (A.M. 5841)[38], which derivative account really has little, if any, independent evidential value, largely confirm Julian's version of events. But these texts were obviously written long after the events took place, although the *Chronicon Paschale* does make mention of a letter of Vologaeses, the third bishop of Nisibis (*c.* A.D. 350-361/2). Of especial interest is the *Chronicon Paschale* and Theophanes' reference to "armoured elephants" (ἐλέφαντας ἐνόπλους)[39], and the statement that those elephants

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[37] = Dindorf, *Chron. Pasch.* 536, line 18 to 538, line 1.

[38] = De Boor 1980: 39, line 13 to 40, line 13. On the siege, see also Lightfoot 1988: 105-125; Maróth 1979: 239-243.

[39] "Armed elephants" in Whitby and Whitby's quite accurate translation (1989: *ad loc.*) of the ἐλέφαντας ἐνόπλους of the *Chronicon Paschale* (= Dindorf, *Chron. Pasch.* 537,

that did not succumb in the bog about-faced into their own ranks. According to the aforementioned sources, over 10,000 men were supposed to have been killed, which number, of course, seems rather excessive — if not grossly exaggerated. That something of the sort *did* take place is suggested by Ammianus, for he writes, when discussing Julian's campaign of A.D. 363, that the Persian elephants operating at this time were to be "scuttled" by their drivers if it looked as though they were about to panic (25.1.15). This was prescribed in order to avoid what happened at Nisibis: *acceptae apud Nisibin memores cladis* ("remembering the disaster suffered at Nisibis": Amm. Marc. 25.1.15)[40].

What can one make of Julian's "testimony"? We have to remember that Julian's rather formulaic oration was written while he was campaigning in Gaul[41]. As a consequence, Julian would have had to rely on second-hand reports of the siege — Julian had not yet experienced warfare in the East. Thus kernels of his narrative obviously contain much that is truthful in nature (such as the sequence of events and the units employed), but some of the rhetorical flourishes should be regarded as suspect. Given that a scholar such as Julian had complete mastery of both Latin and Greek and had undoubtedly read a vast number of works in both languages, it is quite possible that his account of the attacking Persian elephants was in some way influenced by earlier readings. Thus we cannot regard Julian's version of events as one-hundred-percent correct. Of further interest is that Julian, together with other authors who wrote about the same event, associates elephants with siege warfare. This is attested by the altogether more reliable Ammianus.

In A.D. 359, the Persian king renewed his attacks on Mesopotamia. The first target was the highly strategic Roman outpost of Amida, a heavily fortified town located on the upper Tigris. Ammianus, being attached to the staff of the general Ursicinus, was present at the seventy-three-day

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line 13). For Theophanes, see De Boor 1980: 39, line 26. Mango and Scott (1997: *ad loc.*) provide "armed elephants" for this *locus*.

[40] Ammianus had presumably dealt with this instance at some earlier point in the *Res Gestae*, though the relevant book is now lost. Frakes (1995: 232-246) provides a discussion of cross-references and historical allusions, but does not adduce Amm. Marc. 25.1.15. Sozomen (*H.E.* 2.14.2) also refers to elephants, supposedly in the order of 300 (μετὰ τριακοσίων ἐλεφάντων), being used against a rebellious Persian city around this time. Rance (2003: 363, n. 36) believes that the invested city could well be Susa and adduces an Arabic source to confirm this.

[41] For some evidence of this, see Jul. *Orat.* 2.56b and 101d.

siege, which means that his information regarding the episode should be of reasonable quality[42]. Aside from the gleaming ranks of the ever-present Persian cataphracts, elephants were also involved. Ammianus writes of the sight behind the west gate: "with them [*i.e.* the Persians], making a lofty show, slowly marched the lines of elephants, frightful with their wrinkled bodies and loaded with armed men, a hideous spectacle, dreadful beyond every form of horror, as I have often declared" (*cum quibus elata in arduum specie elephantorum agmina rugosis horrenda corporibus, leniter incedebant, armatis onusta, ultra omnem diritatem taetri spectaculi formidanda, ut rettulimus saepe*: 19.2.3)[43]. Unfortunately, Ammianus fails to record numbers, but his reference to the elephants carrying armed men (*armatis onusta*) is significant and will be discussed in more detail below[44]. As we shall see, Ammianus records the presence of Persian elephants a number of times in his account of Julian's campaign, although he never hints that the Persians elephants carried anyone except their drivers in those later battles. Still, at Amm. Marc. 19.2.3, it could be inferred that Persian elephants did, on occasion, carry men on their backs (if not turrets).

That elephants were used in siege-warfare is reinforced by Amm. Marc. 19.7.6-7, where the Persians "with troops of elephants" (*elephantorum agminibus*) bear down upon the walls of Amida. Despite the fear that the beasts seem to have caused, the defending Roman garrison managed to drive the animals off with firebrands. Ammianus reports that, when the Roman flames touched the elephants' skin, "the drivers were unable to control them" (*regere magistri non poterant*: 19.7.7). This is not the first

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[42] On the siege, see especially Austin 1979: 148-150; Blockley 1988: 244-260; on Ammianus' reliability, see 246 of the latter article, where Blockley concedes that some aspects of the account may recall "the literature of classical antiquity through the frequent use of *topoi* and other forms of reference". Blockley here follows Rosen 1970: 10-68. Naudé (1958: 100) also notes rhetorical touches in Ammianus' description of the siege, as does Paschoud 1989: 37-54, especially 45-53. In addition, see Kelly 2004: 155-156; Lenssen 1999: 40-50; Thompson 1947: 125-126; *id.* 1966: 145-146. But we need not adduce scholarly literature that ascribes personal motives to some of the episode's content.

[43] As Sabbah (1970: 209, n. 233) points out, "Cette description des éléphants — qui aura son écho en 19, 7, 6 — doit reprendre des tableaux qui contenaient les livres perdus". Unfortunately, we cannot tell in which context these descriptions were made ("sous les règnes de Valérien, de Gallien et d'Aurélien?"). Ammianus also describes the animals as *belua*, which, according to de Jonge (1982: 143), "is the standard term for 'monsters'".

[44] De Jonge (1982: 30-31) holds that, at Amida, the elephants were "brought along by Eastern allies of Sapor", which view he derives from the mention of *Segestani* (Amm. Marc. 19.2.3; *cum quibus* refers to these troops). On this, see Rance 2003: 363-364.

time that we read of mahouts losing control of their charges when attacked by the enemy — accounts of the use of these animals in Republican times contain a number of similar episodes, most famously the battle of Zama in 202 B.C.[45]. Glover (1948: 11) makes the point that elephants were "as independable as poison gas, which with a change of wind turns and confuses those who employed it"[46]. Ammianus' personal account of the siege breaks off here, for he managed to slip out of the town under the cover of darkness.

The Romans, it seems, were not the only ones to have had contact with Sassanian elephants during our period, at least if Armenian sources are to be believed. According to the chronologically confused late-fifth-century *Epic Histories* traditionally — although erroneously — attributed to P'awstos Buzand[47], one of the Persian kings (perhaps Shapur II?), apparently had designs on the kingdom of Armenia and, with a view to invading that country, dispatched a considerable force[48]. The *Epic Histories* relates that the Persians employed "innumerable elephants" (3.8)[49]. Unfortunately, the author fails to give details about the way in which these elephants were used, other than that a good many were captured when the Armenians managed to surprise the Persians in their camp. In a later passage (3.21), which the *Epic Histories* quite wrongly places in the reign of Valens[50] rather than near the end of Constantine's rule or at some time in Constantius II's reign (as some authorities have contended[51]), we read that

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[45] Some of the more famous elephantine disasters include the following: Beneventum (275 B.C.): Plut. *Pyrrh.* 25.5; Flor. 1.13.12-13; Panormus (250 B.C.): Polyb. 1.40.12-13; Metaurus (207 B.C.): Polyb. 11.1.8-9; Ilipa (206 B.C.): Polyb. 11.24.1; Zama (202 B.C.): Livy 30.33.13; Polyb. 15.12.2; Numantia (153 B.C.): App. *Ib.* 9.46; Thapsus (46 B.C.): *B Afr.* 83.2; Flor. 2.13.67.

[46] See also Gowers 1947: 45; Rance 2003: 360. For similar ancient thoughts, see App. *Ib.* 9.46; Pliny *N.H.* 8.9.27.

[47] He is also known, however incorrectly, as Faustus of Buzanda/Buzanta. On the matter of authorship and name of the text, see the summary of Garsoïan 1989: 11-16. The text describes Armenian events from *c.* A.D. 330 to 387.

[48] For a convenient summary of the broader chronological problems, see Dodgeon and Lieu 2002: 380-381.

[49] Trans. of Garsoïan 1989: *ad loc.*

[50] *E.g.* the *Epic Histories* calls the emperor "Valēs, king of the Greeks" (trans. of Garsoïan 1989: *ad loc.*), which obviously represents a reference to Valens.

[51] A reference to "the Emperor Constantine [Kostandianos]" is thought to refer to the Caesar Constantius, later the emperor Constantius II, rather than to his imperial father; on the *locus*, see Garsoïan 1989: 265, n. 6, 384. Baynes (1910: 627-628 = 1955: 187-189) argues that the *locus*, which focuses on the abduction of the Armenian king "Tiran",

the Persian king decided to retaliate. This time, the king, or so it is alleged, would personally lead the expedition. Among the baggage train, which included camp followers, documents of state and the royal women (including the Queen of Queens), was "a multitude of elephants"[52]. The expedition was apparently unsuccessful. According to the author, much of the king's baggage train was captured, including — we might well presume — the elephants. Although a good deal of what the *Epic Histories* says cannot be corroborated and is probably a reflection of the conflated oral traditions of the author's own day, the implication is that the Persian elephants had a royal significance, and that elements of the king's herd travelled wherever he did. This appears to be mirrored to some extent by Ammianus when he discusses Julian's campaign.

The problem with the information imparted above is that the references to elephants could relate, not to the time of Shapur II, but to A.D. 297; that is, the year in which the Caesar Galerius inflicted a defeat on Narses in which the king's harem and baggage train were captured. Indeed, a reference to "Nerseh" (*i.e.* Narses, who ruled A.D. 293-302) *is* made at 3.20 and 3.21 of the *Epic Histories*. As Garsoïan (1989: 39) argues, the presence of "Nerseh" could be the result of fusing Galerius' victory with "the far less brilliant encounter [with the Romans] under ... Constantius ca. 344 in which another Narseh, the son of Šāhpuhr II, had met his death"[53]. Both these Persian misadventures tellingly took place in Armenia. If the above view holds, it is just possible that the references to Sassanian elephants may hail from earlier texts. This would seem to corroborate the information presented by one of the Latin *chronica* regarding elephants taking part in Galerius' triumph[54]. It is notable that Rance (2003: 367) has previously put forward this view: "(probably) 297". Despite this, the opposite contention could be true — we know, and with considerable certainty, that elephants *were* indeed used by the armies of Shapur II. Even if the

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relates to *c.* 335. But *cf.* the work of Toumanoff (1969: 233-281), which radically alters the established chronology; likewise Hewsen 1978-1979: 104-105. On the controversy, see also Dodgeon and Lieu 2002: 380-381, 395, where it is pointed out that Libanius, in the lengthy panegyric on Constantius and Constance pronounced before their father's death (*Or.* 59), fails to mention Constantius' involvement: "Libanius' silence ... is significant".

[52] Trans. of Garsoïan 1989: *ad loc.*

[53] On this, see also Garsoïan 1989: 263, n. 9, 265-266, n. 16, with Dodgeon and Lieu 2002: 295. *Cf.* Ensslin 1936: 102-110.

[54] For references, see n. 23 *supra*.

description was based primarily on accounts of Narses' defeat (as seems relatively likely), the appearance of elephants could be an anachronistic interpolation on the compiler's part, or even of one of those writers who compiled the texts used in the production of the *Epic Histories*. Once again, it is difficult to put too much faith in evidence that the Sassanians used elephants in the third century A.D., though one is inclined to give far greater credence to the notion that they were being used at this time than that they were deployed against the armies of Severus Alexander more than six decades earlier.

III. Elephants and Julian: the campaign of A.D. 363

Let us now turn our attention to the use of elephants against Roman forces in Julian's unsuccessful campaign of A.D. 363[55]. Our main source is Ammianus Marcellinus. Of great import is that Ammianus was a participant, and it is largely because of this that his account should be of some authority, although Austin (1979: 151) is of the opinion that his descriptions of battles may be less exact than his descriptions of more static engagements like sieges[56]. Still, it should be remembered that "Schlachtsbeschreibungen oder überhaupt kriegerischen Aktionen", as Peter pointed out over a century ago, number among the "Ausstattungsstücken" of the ancient historians and are therefore imbued with rhetorical conventions[57].

The first mention that Ammianus makes of elephants being used against Julian's force occurs at 24.6.8, when the Persians first clashed with the Romans at a location not far from Coche, at which location the emperor's forces had previously rested[58]. The Persians opposed the Roman forces with *turmae* of lance-wielding cataphracts. Behind these armoured horsemen (witness the use of *in subsidiis*) were stationed "companies of infantry"

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[55] For a general overview of the campaign, see Ridley 1973: 317-330.

[56] See also Austin 1979: 162, where he points out that Ammianus was "a man without much personal experience of the action itself". Of course, Ammianus, as a staff officer, would still have had recourse to questioning those who had actively participated in the various military engagements.

[57] Peter 1897: 296, 307, followed by Avenarius 1956: 65, 145. With regard to the application of this view to Ammianus, see Naudé 1958: 92-105.

[58] The presence of elephants on the Persian side is also attested by Sozomen (*H.E.* 6.1.6), who writes that they were marshalled on the banks of the Tigris together with other units; see n. 31 *supra*.

(*manipuli ... peditum*), who seem to have fought largely without armour[59]. Behind these men we eventually find the elephants: *post hos elephanti*. Sadly, Ammianus fails to give any indication regarding the number of animals that took the field. But what is strange is that, in Ammianus' account of the engagement, we find no mention of the elephants actually being deployed. Indeed, it strikes us as odd that the elephants were placed *behind* the poorly protected Persian infantry, who themselves were stationed behind the cataphracts — unless, of course, they were meant to act as some sort of cover in the event of retreat, or else bolster the morale of the Persian troops and simultaneously discourage their flight[60].

After the opening exchanges, the "first battle-line" or *acies prima* of the Persians (it is difficult to divine precisely what Ammianus means here) gave way (24.6.12). Though weary, the Romans pursued the Persians "to the very walls of Ctesiphon" (*ad usque Ctesiphontis muros*: Amm. Marc. 24.6.12). There, they desisted and supposedly were prevented from scaling the walls by the sage counsel of the general Victor (24.6.13). In the end, it is not the Persian elephants that trample over the Romans, as one might have expected. Rather, it is the Romans who trample on the bodies of the Persian dead (Amm. Marc. 24.6.15). Although Ammianus writes of the "battle" as if it were the Trojan War relived (24.6.14), what evidence we do have suggests that this was never intended to be the campaign's pivotal battle. Indeed, Ammianus records that 2,500 Persians were killed, in addition to seventy Romans (24.6.15). Zosimus (3.25.7) corroborates this, although he states that not more than seventy-five Romans met their doom[61]. Instead of the absence of elephants in battle being an omission on

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[59] These men were protected by "oblong, curved shields covered with wickerwork and raw hides" (*contecti scutis oblongis et curuis, quae texta uimine et coriis crudis*: Amm. Marc. 24.6.8). Wickerwork shields (and helmets) are also mentioned by Eunapius at frg. 21; see Dindorf, *HGM* I, 226, lines 10-11.

[60] For the sake of comparison, see Rance 2003: 377-378, where the deployment of Sassanian elephants in the late sixth century A.D. is discussed.

[61] Libanius (*Or.* 18.254) writes of 6,000 Persian dead, though he gives no figures for the Roman forces. On these *loci*, see Paschoud 1979: 179-180. Ridley (1973: 321) casts grave doubts on the veracity of these astonishingly low figures. Still, it is worth pointing out that comparable ratios are found elsewhere, *e.g.* Strasbourg in A.D. 357 (243 Roman soldiers and four officers killed compared to more than 6,000 Alamanni; Amm. Marc. 16.12.62) and Tricamarum in A.D. 533 (less than fifty Romans killed compared to *c.* 800 Vandals: Procop. 4.3.18). Routed troops generally succumb in large numbers as they turn to flee, but some rhetorical exaggeration might also be expected. For a more extreme instance, witness the information supplied

Ammianus' part, the Persians may never have intended to deploy them in the way that we might suppose (*i.e.* in the front line). This was perhaps because they would have interfered with the operations of the cataphracts, or else would have succumbed to the arrows of their own side. As an alternative, they may not even have been brought to the battle as war elephants, but were simply part of the army's baggage train (Rance 2003: 364). That this was the case is also suggested by Ammianus' claim (24.6.8) that the Persian beasts were stationed in the rearmost position.

The next reference to elephants before a battle occurs at Amm. Marc. 25.1.14 (although the description of the Persian forces used in the engagement begins at 25.1.11). Ammianus describes the *contus*-wielding cataphracts at 25.1.12-13. Somewhere close to these men were stationed the archers. Ammianus' *iuxtaque sagittarii* (25.1.13) unfortunately helps us little in determining their exact position. Whatever the case may be with regard to the cataphracts and archers, the elephants were clearly placed behind them once again:

> Post hos elephantorum fulgentium formidandam speciem et truculentos hiatus, uix mentes pauidae perferebant, ad quorum stridorem odoremque et insuetum aspectum magis equi terrebantur. quibus insidentes magistri, manubriatos cultros dexteris manibus illigatos gestabant, acceptae apud Nisibin memores cladis, et si ferociens animal, uires exsuperasset regentis, ne reuersum per suos (ut tunc acciderat) collisam sterneret plebem, uenam quae caput a ceruice disterminat, ictu maximo terebrabant. exploratum est enim aliquando ab Hasdrubale Hannibalis fratre, ita citius uitam huius modi adimi beluarum (25.1.14-15)[62].

> Behind them the gleaming elephants, with their awful figures and savage, gaping mouths could scarcely be endured by the faint-hearted; and their trumpeting, their odour, and their strange aspect alarmed the horses still more. Seated upon these, their drivers carried knives with handles bound to their right hands, remembering the disaster suffered at Nisibis; and if the brute strength of the driver proved no

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by Tacitus (*Agr.* 37.6) about Mons Graupius in A.D. 83/4 (360 Romans killed, including one officer, compared to 10,000 Britons).

[62] *Cf.* Livy 27.49.1-2.

> match for the excited brute, that he might not turn upon his own people (as happened then) and crush masses of them to the ground, he would with a mighty stroke cut through the vertebra which separates the head from the neck. For long ago Hasdrubal, brother of Hannibal, discovered that in that way brutes of this kind could be quickly killed.

For us, many points of interest can be gleaned from this passage. That Ammianus uses *fulgentium* seems to imply that the elephants were protected in some way with metal armour[63], though one commentator has suggested otherwise[64]. Ammianus elsewhere uses *fulgere* and the related *fulgor* to describe units presumably equipped with defensive armour[65]. We know of other *loci* where elephants are so described (and archaeological evidence from various periods seems to confirm this)[66]. Yet this is the first time that the reader encounters Sassanian Persian elephants equipped with armour, which suggests that, on this occasion at least, they were meant to act as combatants rather than merely providers of logistical support — unless, of course, Ammianus has been too heavily influenced by earlier accounts of armour-equipped war elephants. It is also interesting to note

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[63] *Cf.* Cornelissen (1886: 280), who preferred to read *ingentium* for *fulgentium*: "Non intellego *fulgentium* .... Corrigendum puto *ingentium*". The critical edition of Fontaine (1977: IV.1, *ad loc.*) maintains *fulgentium*, as does that of Seyfarth (1978: *ad loc.*). For references to "shining" applied to a formidable armoured foe, see *e.g.* Onas. 28; Polyaenus, 8.23.20; Veg. *Epit.* 1.20.11, 2.14.8.

[64] Fontaine (1977: IV.2, 203, n. 497) holds that "Les éléphants 'brillent' à la fois par l'éclat de leur ivoire et par celui de leur harnachement, où se mêlent les étoffes précieuses: teintes en purpre, ou brochées d'or". Of course, Ammianus nowhere describes these attributes (at least in the extant books) — Fontaine seems to take them directly from Florus: *elephantis ... auro purpura argento et suo ebore fulgentibus* (1.24.16). One would expect the Sassanian elephants to be equipped with similar items, but Ammianus' use of *fulgentium* without any form of qualification, in my opinion, points to armour of some kind, in addition to the elements listed above by Florus. Hoover (2005: 36-37) believes that references to armoured elephants in antiquity are rather shaky, especially in terms of body armour. Still, he acknowledges that "segmented leg and neck defences" may have been worn, in addition to "head protection". In terms of the Seleucid elephants and body armour, he concludes that the evidence is "rather poor" (37). Of course, it is difficult to apply the results of this enquiry to a much later period.

[65] *E.g.* Amm. Marc. 31.10.9. For an account of Ammianus' predilection for *fulgere* and *fulgor*, see Meurig Davies 1951: 153. *Cf.* Flor. 1.24.16.

[66] See *e.g. B Afr.* 72.4: *ornatusque ac loricatus ... elephas*; *cf. B Afr.* 86.1: *elephantosque ... ornatos armatosque cum turribus ornamentisque.*

that, while we find mention of "drivers" (*magistri*), there is no reference to other crewmen. Although it obviously represents an *argumentum e silentio*, Ammianus seems to preclude the possibility of turrets, for we might expect mention of them in what might well be regarded as an eyewitness account. This problem will be dealt with in greater detail below.

The *locus* in question is clearly useful to some degree, but it is strange that, in the rather brief description of the ensuing engagement, Ammianus nowhere mentions the elephants being used in combat. Once again, this is odd. Ammianus concerns himself primarily with the effect of the arrows, which suggests that these weapons were the real cause for alarm — not the elephants. Indeed, we are told that Julian modified his battle-plans by causing his men to advance swiftly against the enemy, not in order to mitigate the threat posed by the elephants, but in order to minimise the effect of the Persian bowmen (25.1.17). The Roman troops, who had advanced in close order, smashed into the Persian line and "with mighty effort drove the serried ranks of the enemy before them" (*denseti Romani pedites confertas hostium frontes, nisu protruserunt acerrimo*: 25.1.17). The clash was indecisive, although Ammianus typically reports that "the Persian losses were greater" (*effusius cadentibus Persis*: 25.1.18).

If Ammianus' testimony is given the credence it appears to deserve (at least with respect to the basics of troop-movement), it hardly seems probable that the elephants were ranged directly against the Roman lines. In particular, Julian would not have ordered his ranks to close in such a dense formation. One has only to recall the defeat of Regulus' densely packed infantry by Xanthippus' Carthaginian elephants in 255 B.C. to realise the danger posed by rampaging elephants to troops crammed into a narrow battle-line[67]. It is also worth adducing the manner in which Scipio Africanus sought to minimise the effect of the eighty or so elephants that Hannibal ranged against him at Zama in 202 B.C. — Scipio opened out his

[67] This took place in the First Punic War at a location not far from Tunis. Xanthippus, the Spartan mercenary general contracted by Carthage, achieved his success when he loosed "very nearly a hundred elephants" (τὸ δὲ τῶν ἐλεφάντων πλῆθος ἔγγιστά που τῶν ἑκατόν) in a frontal assault against Roman legionaries commanded by Regulus (Polyb. 1.32.9). The Carthaginian beasts charged the Roman centre, which had been deployed in a "line shorter [*i.e.* frontally compact] and deeper" (τὴν δὲ σύμπασαν τάξιν βραχυτέραν μὲν) than had been employed on other occasions (Polyb. 1.33.10). Polybius (1.34.6) tells us that those Romans who survived the elephant charge were left to face the fresh Carthaginian phalanx. For modern commentary on this battle, see Bleckmann 2002: 167-168.

forces so that the elephants could pass through without doing extensive damage to his heavy infantry[68]. Again, Ammianus' narrative contains useful details, but it remains problematic on account of the dearth of information that he provides about the Persian elephants in battle.

Julian encounters elephants for the last time at Amm. Marc. 25.3.4, in the context of a sudden attack in which the unprotected emperor is mortally wounded[69]. At this time, the Roman column was marching through country flanked by higher ground (Zon. 13.13.14). The Persians, who had regularly been bested in stand-up fights, had by this time given up regular infantry battles and were resorting to ambuscades (*structis insidiis*: Amm. Marc. 25.3.1). The imperial column seems to have stretched out over some distance. Julian went forward to survey what lay ahead and received the news that the "rear guard" (*arma cogentium*) was being attacked (Amm. Marc. 25.3.2). Ammianus (25.3.4) reports that, while the emperor was rushing to the rear, the "centre companies" (*centurias ... medias*) also came under attack from Persian cataphracts supported by elephants. Ammianus writes that "our men could hardly endure the smell and trumpeting of the elephants" (*faetorem stridoremque elephantorum impatienter tolerantibus nostris*: 25.3.4), which remark may owe more to his literary antecedents than to his own observations. Despite their fear, the "light-armed forces" (*nostra succinctior armatura*) were determined to come to grips with the aggressors (Amm. Marc. 25.3.5). Ammianus writes thus: "and as the

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[68] According to Frontinus (*Strat.* 2.3.16), Livy (30.33.1-3) and Polybius (15.9.7-10), Scipio sought to minimise the potential effect of the Carthaginian elephants by eschewing the traditional chequerboard formation for his legions and creating passageways filled with light infantry or *uelites*. When faced with the elephants, the light infantry were to vacate the passageways so that the beasts could pass through without causing much damage.

[69] Ammianus (25.3.2-3) writes that Julian, eager to assist his fellow-soldiers, forgot his cuirass (*oblitus loricae*). We are told previously that he was "unarmed" (*etiam tum inermi [sc. principi]*). On the other hand, the Byzantine epitomator Zonaras (13.13.17) records that Julian was not wearing his cuirass (θώραξ) on account of its excessive weight and the stifling heat; on these references, see Charles 2004a: 143. It might be added that Socrates (*H.E.* 3.21.11-12) holds that Julian spurned armour because of over-confidence; see also the testimony of Libanius (18.268). Various authors, such as Eutropius (10.16.1-2), Festus (*Brev.* 28.3), Orosius (7.30.6), Philostorgius (*H.E.* 7.15), Socrates (*H.E.* 3.21.9-18), Sozomen (*H.E.* 6.1.12-13) and Zonaras (13.13.10-21), fail to mention that elephants took part in this encounter (or in any other battles of the period for that matter). The ecclesiastical authors, in particular, compress much of the detail and devote most of their attention to Julian's death, a matter which need not detain us.

Persians turned in flight, they hacked at their legs and backs, and those of the elephants" (*auersorumque Persarum et beluarum, suffragines concidebat et dorsa*: 25.3.5). Scullard (1974: 204) tentatively writes that the beasts were "hamstrung?". Yet it seems fairly clear from Ammianus' words that this was *exactly* what he wants his readers to understand[70]. With Julian mortally wounded, elephants reappear at the end of the description (Amm. Marc. 25.3.11), where we find them fitted with "horrifying crests" (*cristarumque horrore*)[71]. Of interest is that the elephants seem to have been thrust back into the fighting when the Persians detected a weakening in their enemy's resolve — witness the use of "the exulting Persians" (*animosius Persae*). Marching before the Persian bowmen, who were at that point showering the Romans with arrows (Amm. Marc. 25.3.11), the elephants seem to have been employed so as to heighten the enemy's terror. In addition, the beasts provided cover for the vulnerable archers[72].

What can we make of this? The Roman defence against the elephants in Julian's final battle certainly recalls instances of hamstringing that date to the Republic, particularly accounts dealing with the Pyrrhic and Punic wars[73]. Once again, we see tried and tested methods of dealing with elephants resurfacing in the Late Empire[74]. But what is of especial interest is that elephants, at this *locus*, are initially used in what could almost be termed guerrilla warfare (though this might be something of an exaggeration given the relative magnitude of the operations). Still, it does seem to have been "a carefully prepared ambush", as Austin (1979: 155) suggests.

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[70] Fontaine (1977: IV.1, *ad loc.*) would appear to support this: "et se mirent à tailler jarrets et croupières aux Perses et à leurs monstres qui avaient fait volte-face".

[71] For commentary, see Fontaine 1977: IV.2, *ad loc.*, who adduces Livy 37.40.4: *addebant speciem frontalia et cristae et tergo impositae turres* ("head-armour and crests and towers placed upon their backs ... added to their impressiveness"). It is worth noting, as Rance (2003: 365, with n. 48) points out, that Ammianus' account is regularly imbued with earlier Latin diction (especially that of Livy), which suggests that vigorous pressing of his wording and vocabulary may not yield many benefits. For a visual representation of a crested elephant, see Daremberg and Saglio 1892: 540, fig. 2645.

[72] On the possible veracity of this *locus*, see Austin 1979: 155.

[73] For example, Appian (*Pun.* 7.41) describes the hamstringing of elephants at Zama in 202 B.C.

[74] Vegetius (*Epit.* 3.24.1-16) provides a discussion of the way in which elephants (and chariots) might be defeated, though he fails to mention hamstringing as an option. It is worth noting that Vegetius, though he wrote after Julian's Persian campaign (A.D. 383 is the text's *terminus post quem*), does not mention Persian elephants, only those used by Pyrrhus, Hannibal, Antiochus (presumably Antiochus III) and Jugurtha (*Epit.* 3.24.6).

The details preserved by Ammianus are not especially clear, and it could well be that the Persian plan was to split the exhausted Roman column, perhaps in order to trap a section of the troops, which men could later be used as a further bargaining chip in the almost inevitable truce negotiations to come[75].

Sources dealing with the Republican period regularly point out that elephants cannot operate with any real effect over uneven terrain. Indeed, this becomes something of a literary *topos*. But while elephants could not *fight* effectively on uneven ground, they were agile enough to negotiate difficult terrain without apparent ill effect[76]. One has only to think of Hannibal's famed crossing of the Alps. Thus it is clear that the Sassanian Persians did not hesitate to use their elephants for high-impact skirmishing activities in unexpected situations, a combat function apparently neglected by Hellenistic or Carthaginian armies (at least as far as one can ascertain from the extant evidence). That the Persian elephants operated with the cataphracts is also of signal import. This implies that Indian elephants were swift enough to keep pace with the presumably more mobile Persian cavalry units[77]. Yet this need not unduly surprise when one takes into account that the Persians relied on their rather ponderous cataphracts, heavily armoured troops mounted on large and well-protected horses.

After Julian's decease, Jovian was elected emperor and resolved to get his troops away from Persian territory as quickly as possible. Ammianus tells us that the Roman column "extended for four miles" (*acies ad usque lapidem quartum porrigebatur*: 25.5.6), something which must have made the Roman army a particularly inviting target. Indeed, the Persian king himself was drawing near in order to direct operations in person (Amm. Marc. 25.5.8). When the Romans eventually encamped anew, they set about killing victims and having their entrails inspected (Amm. Marc. 25.6.1)[78]. It

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[75] I owe this interpretation to Dr Philip Rance.

[76] On this theme, see Rance 2003: 383.

[77] Ammianus, when he compares the march of the elephants to that of the bow-armed infantry, does use *tardius praecedentes* (25.3.11).

[78] This seems odd given that Jovian is generally regarded as a Christian. Still, Rolfe (1950: 522, n. 1) points out that "the sacrifice may not have been made by Jovian's order". Wallace-Hadrill, in his notes to Hamilton's Penguin translation (1986: 465), likewise discerns no cause for alarm: "Pagan sacrifices continued, though Jovian was ... a Christian"; see also Fontaine 1977: IV.2, 248, n. 615: "c'est bien un rite officiel 'pour le salut de l'Empire'". *Cf.* Gibbon 1994: 947, n. 102, who feels that Ammianus was trying to suggest otherwise.

was revealed that they ought to break camp quickly but, as preparations for renewing the march were being set in train, "the Persians attacked us, with the elephants in front" (*adoriuntur nos elephantis praeuiis Persae*: Amm. Marc. 25.6.2). Ammianus mentions that the "unapproachable and frightful stench" (*faetorem inaccessum terribilemque*) distressed both soldiers and horses alike (25.6.2). It seems that the Persian plan was for the elephants (which again go unnumbered) to throw the Roman lines into confusion so that the cataphracts could take advantage of the ensuing tumult — we read that the *Iouiani* and *Herculiani*, the premier *legiones palatinae*[79], were able to kill "a few of the beasts" (*occisis beluis paucis*) before they resisted the armoured horsemen (Amm. Marc. 25.6.2). The *Iouii* and *Victores* came to the aid of their comrades and are credited with killing two elephants (Amm. Marc. 25.6.3). The attack was eventually beaten off. Zosimus, writing much later (3.30.2-3), also records this incident, although it is worth pointing out that Zosimus may have derived much of his information from secondary sources such as Eunapius[80]. Of interest is that, once again, we see elephants a) used together with cataphracts, and b) involved in what the ancient sources describe was essentially an ambuscade[81]. This battle will be the occasion for further commentary below.

Despite our assertion that Ammianus records information that might well be regarded as eyewitness data, we should still be alert to the highly literary and rhetorical nature of much of his text. Crump (1975: 28) even goes so far as to say that, in his description of Julian's Persian campaign, Ammianus "did not demonstrably rely upon his own experiences extensively"[82]. Furthermore, Kelly (2004: 156) alerts us to sections of the text

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[79] For a full discussion of these two élite units, see Charles 2004b: 109-121, which article includes a comprehensive survey of the relevant literature.

[80] On the question of reliance on Eunapius, see especially Fornara 1991: 4: "beyond reasonable doubt".

[81] Some comments are made at Rance 2003: 365, 372-373.

[82] Eunapius has been proposed as a possible source for Ammianus' account of the campaign; see *e.g.* Matthews 1986: 19. If true, this would further support Crump's belief that Ammianus was "without access to the inner circles of command", and thus could not write "solely from observation about high-level planning and the general activities of the army during these operations". But Fornara (1991: 1-15) has cogently refuted the supposed connection between Ammianus and Eunapius. He concludes that "divergent accounts in Ammianus and Zosimus ultimately derive from the autopsy of the two eyewitnesses, Ammianus and Oribasius [Julian's physician during the Persian expedition], than from any interdependency between Ammianus and Eunapius" (13). See also Norman 1957: 129-133; Chalmers 1960: 152-160; Thompson 1966: 152-154.

where Ammianus involves himself in the narrative and adds that these "personal descriptions ... act as authorial statements". We should bear this in mind when assessing Ammianus' description of the use and appearance of the Sassanian elephants — only in his vibrant description of the siege of Amida (and the use of elephants against that town) do we receive a strong indication of personal involvement in the narrative.

While it is reasonable to assign a degree of credibility to his report that Persian elephants wore armour and that they had crests affixed to their heads, it is also worthwhile to take into account the information that Ammianus imparts about the beasts' drivers, *i.e.* that they were equipped with knives that could be used, in case of emergency, to "scuttle" their charges. This information is probably quite correct, but the fact that Ammianus (25.1.15) writes that this was an innovation on Hasdrubal's part demonstrates to what extent the author maintained a meaningful dialogue with his literary antecedents[83]. Indeed, Livy (27.49.2) provides us with this very information. Other elements of the text also point to the highly formulaic renderings of the Persian employment of elephants, in particular the manner in which their trumpeting and smell proved terrifying to the Roman cavalry. A slight problem with this testimony, however, is that the elephants hardly ever seem to have been employed directly against Roman cavalry formations, as far as one can tell.

Scullard (1974: 204) writes that the Persian elephants "had made a very considerable contribution [to the eventual Persian victory] if Ammianus is to be followed". But is this necessarily so? While Ammianus mentions elephants on a number of occasions, he does not always give any indication regarding whether the elephants were actually employed in battle. Indeed, elephants only seem to have achieved combat success in what were essentially ambush operations, which strikes the reader as somewhat odd given that it is more usual to read of elephants taking centre stage in large set-piece engagements such as the Bagradas valley, Raphia, Zama and Thapsus. That it was "a Persian principle to avoid general engagements altogether, except in peculiarly favorable circumstances" (Browning 1975: 195), does not help us either. In the first battle attended by elephants, the Persians obviously had the opportunity to deploy the beasts as they saw fit — it was not a haphazard disposition, at least according to Ammianus.

[83] On this, see Paschoud 1989: 37-54. With specific regard to the "classicizing" mention of Hasdrubal, see Rance 2003: 365, with n. 48.

Rance (2003: 282), who refers to the logistical use of elephants among Persian armies, has recently made the important point that, in some instances where Sassanian elephants are recorded as being positioned at the rear of the battlefield, they may not necessarily be present as "war elephants", *i.e.* beasts intended for combat duties. It would be well to bear this in mind, although, in the case of Shapur II's battles against Julian, there is little evidence to support this ostensibly logical interpretation; in addition, Ammianus (25.1.14) implies, on one occasion, that the Persian elephants wore body armour. This would seem to suggest a combat rôle.

IV. The appearance and equipment of the Sassanian elephants

The equipment carried by the Sassanian elephants during the period in question is worthy of discussion, especially when the ancient source material seems to provide contrary information. We have previously looked in passing at the equipment of the Sassanian elephants. It is thus necessary to review this information in greater detail (and from a holistic perspective) in order to see what we can derive from it. Perhaps the most important question pertains to the circumstances in which Sassanian elephants were provided with turrets or howdahs. Unlike the controversy with regard to turrets surrounding the smaller African forest elephants used by the Carthaginians, Numidians and the Ptolemaic Egyptians[84], it is quite obvious that the larger

[84] Many authorities suggest that the elephants of Carthage, the vast majority of which would have been of the African forest variety, did not carry howdahs into battle. Sabin (1996: 70, n. 76) believes that the evidence is "ambiguous"; see also Scullard 1974: 240-245. Head (1982: 187) holds that "it seems to me highly probable that Carthaginian elephants did in fact use towers", while Warry (1980: 95) writes that it is "uncertain" whether they did, but believes that Ptolemaic forest elephants "certainly did so" (*cf.* the controversial Polyb. 5.84.2-6, which pertains to Raphia). One might well adduce a Punic silver coin dating to *c.* 220 B.C., which depicts an African forest elephant with a goad-carrying mahout on top — but clearly no turret. For a convenient representation, see Wise 1982: 9. The African forest elephant is properly called *Loxodonta africana cyclotis*. These animals, now extinct in northern Africa, are in fact smaller than the Indian varieties (*Elephas maximus*, various sub-species) and are therefore certainly smaller than the large African bush elephant (*Loxodonta africana africana*), which does not seem to have been used for military purposes in antiquity. A sound overview of the differences between the Indian and the two types of African elephant is provided by de Beer 1955: 92-93. Sukumar (2003: 54) reports that, as a result of the 2002 IUCN/SSC African Elephant Specialist Group's most recent determination on the issue, the official sub-species status of *Loxodonta africana cyclotis* remains — at least until further taxonomic studies confirm widely held suspicions that it is a full species.

Indian elephant — the largest variety used in warfare in the ancient world — was quite capable of carrying a howdah.

The *HA*'s reference to turreted elephants at *Sev. Alex.* 56.3 should probably be disregarded. This brings us to Julian's testimony (*Orat.* 2.63b, 2.65c), which tells us that the Persian elephants encountered in the reign of Constantius II were equipped with turrets, as introduced above. One might argue that, because Julian had not yet witnessed elephants in battle, this account should not be taken at face value. Indeed, the sort of military texts that Julian had presumably read in his studies would have contained the elephants of Hellenistic kings equipped with turrets (variously written as *turres*, πύργοι or θωράκια). This could explain the appearance of turrets in what certainly remains a highly rhetorical text. Despite this, we should perhaps be prepared to give Julian the benefit of the doubt. Whatever the case, that the elephants employed by Shapur II in A.D. 350 carried turrets filled with fighting men, as Julian supposes, merely tells us that turrets were used in siege-warfare, not that they were employed in regular pitched battles. This supposition is given some weight, however slight, by the more or less identical accounts of the *Chronicon Paschale* (350)[85] and Theophanes (*Chron.* A.M. 5841)[86], both of which record the presence of Sassanian elephants that had been "adapted" in some way[87], presumably for siege warfare: ἐλεφάντων ... ἐπιτηδείων πρὸς συμμαχίαν. What this might mean is uncertain, but it could be a reference to protective armour, and perhaps even turrets.

More reliable evidence regarding turrets is provided by Ammianus. Certainly, Ammianus (19.2.3) describes Persian elephants "loaded with armed men" (*armatis onusta*) in the context of one of the innumerable sieges of Nisibis, but this does not necessarily refer to turrets being employed[88],

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[85] = Dindorf, *Chron. Pasch.* 536, line 20 to 537, line 1. For the *Chronicon Paschale*, Whitby and Whitby (1989: *ad loc.*) prefer "elephants trained for military support", which represents a slightly free though perfectly acceptable translation of the Greek.

[86] See De Boor 1980: 39, lines 14-15. Mango and Scott (1997: *ad loc.*) provide "elephants capable of fighting on his side", which translation does little to help the present cause.

[87] On both occasions, this is the translation of Dodgeon in Dodgeon and Lieu (2002: 203, 205).

[88] It is believed that the Indian elephants used against Alexander by Porus at the Hydaspes (326 B.C.) were driven by a mahout, with a warrior mounted on the back of the animal as if riding a horse. On this, see Scullard 1974: 240; Starnaman 2004: 68. A further man, it seems, could sit behind the main warrior; for an artist's impression, see Warry 1991: 78.

even though this is the most likely possibility[89]. More important, it seems, is that at no point in Ammianus' description of Julian's Persian campaign do we find any mention of turret-equipped elephants. Ammianus mentions elephants equipped with some sort of protection, though it is impossible to specify whether this armour covered the body, or merely the vulnerable head, neck and legs[90] — witness the presence of "gleaming elephants" at 25.1.14 (*elephantorum fulgentium*)[91]. He even mentions elephants fitted with "horrifying crests" (*cristarumque horrore*: 25.3.11). What is more, Ammianus does not make any mention of elephants carrying anyone except their drivers. Given that a) Ammianus was possibly an eyewitness (or at least had access to first-hand information from his comrades) and b) saw fit to mention a detail as insignificant as a crest, it seems rather surprising that he failed to mention the use of turrets — if, indeed, they really were used by Persian elephants in A.D. 363. Though it obviously represents another *argumentum e silentio*, we might infer, from the information that Ammianus presents, that Sassanian elephants used outside of siege-warfare did not usually carry turrets.

Thus we have seen that, in the field, Persian elephants could — if our interpretation of Amm. Marc. 25.1.14 holds — have been equipped with some form of armour (presumably a mixture of lamellar and scale) and a crest, probably for the purpose of inspiring dread. But, outside of siege warfare, they were not normally burdened with troop-filled turrets, as far as one can tell[92]. That it was not unusual for the Indian variety of elephant

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[89] According to Procopius, turret-equipped elephants were used by the Sassanian Persians for siege-warfare in the time of Justinian II (*De Aed.* 2.1.11). Procopius tells us that wooden turrets (ξυλίνους ... πύργους) carried on the elephants' shoulders (ἐπὶ τῶν ὤμων) allowed the Persian troops to tower over the walls of the besieged and loose arrows at will. But *cf.* Procop. 8.13.4, 8.14.35 (no specific reference to towers on the beasts, but fighting men were perched on the backs of the elephants described).

[90] *Cf.* Hoover 2005: 36-37.

[91] On the possibility of armoured Sassanian elephants (in the context of the third siege of Nisibis), see the testimony provided by the *Chronicon Paschale* and Theophanes' *Chronographia* in n. 39 above. But no turrets are mentioned.

[92] It seems likely that, in earlier periods, the African forest elephant could be equipped with armour but was not normally provided with a turret, which means that the beast, on these occasions, was intended for 'ramming' duties rather than what we might anachronistically term battlefield close-support. For example, a fragment of a statuette shows an African elephant wearing scale armour on its flanks and a frontal covering its forehead, below which seems to appear lamellar armour on the trunk (*cf.* Livy 37.40.4, where we find a description of armoured Indian elephants of the Seleucid king Antiochus III at Magnesia

to be provided with armour but not a turret is corroborated from what we know of the use of these beasts in Indian warfare. Many representations, including exquisitely painted miniatures, exist that show elephants of much later periods (*e.g.* the seventeenth century, in addition to the Mughal and Rajput periods) equipped with armour of various sorts and a single warrior stationed behind the beast's head[93]. Siege-warfare, however, seems to have been an entirely different proposition. That a reliable source like Ammianus mentions elephants carrying armed men is significant, even if it does not provide us with conclusive evidence for turrets. Still, given that Julian seems confident about their use (despite our misgivings, he *does* mentions them on two occasions), it is not entirely improbable that they were used at some point for siege-warfare during our period[94].

Before we close on this theme, it might be worth adducing a carved relief dating to around A.D. 500, or perhaps even later, from Taq-i-Bustan in Kurdistan depicting Sassanian elephants on a hunting expedition. Behind the driver is a large blanket, over which is mounted a saddle-like construction carrying a warrior, who, incidentally, is depicted in much larger scale than his fellows in order to emphasise his more exalted position in society[95]. Behind this central figure is another man who, it can just be seen, hangs on to the back of the saddle. Still, it is difficult to say whether this should be adduced to the present argument, especially given the non-military nature of this sculptural depiction[96].

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in 190 B.C.). For a representation, see Sekunda 1994: figs. 52, 53; Daremberg and Saglio 1892: 540, fig. 2625. This statuette was used to construct a colour plate in which an African elephant (presumably an African forest elephant) carries a howdah with three crewmen (Sekunda 1994: pl. 7). The statuette in question does show two straps across the animal's back, but no howdah can be seen.

[93] For some representations, see Pant 1997: figs. 86, 87. On the armour of Indian elephants of all periods, see Pant 1997: 113-115, with Gupta 1983: colour pls. 1-4 (where Indian elephants are ridden by a single aristocratic mahout like a horse).

[94] Scullard (1948: 159-160, with n. 9) argues that it appears unlikely that Hannibal's elephants — especially the smaller African ones — carried turrets in set-piece engagements. Yet he does admits the possibility of turreted elephants being used in siege situations; *cf.* Scullard 1948: 166, where a coin possibly showing a Hannibalic elephant with a tower is adduced (he opines that the tower might be for "ceremonial purposes", or was used in "static fighting" such as siege-warfare).

[95] For a clear representation, see Scullard 1974: pl. XI.

[96] Still, Nicolle (1996: 28-29) uses this plastic representation in order to reconstruct the military appearance of Sassanian elephants: "These elephants are taking part in a hunt rather than a battle but their harness is likely to have been the same".

V. Common themes exposed

One of the main themes that prevail in the more reliable accounts is the use of elephants in siege warfare, which was something of a Sassanian specialty (Wilcox 1986: 33). Although elephants, from a Mediterranean perspective, had been used in siege warfare in Hellenistic and Republican times, the Sassanian Persians appear to have used particularly large numbers of elephants when they invested fortified positions. Despite this, our sources suggest that the beasts proved to be of scant efficacy in these situations — they hardly appear to have been instrumental in the outcome of mural engagements. The elephant's large size naturally made it an attractive target for defending bowmen, in addition to the various mechanical weapons of the day. Indeed, Vegetius mentions something of the sort in his *Epitoma* (3.24.14-16). In short, the elephant proved just as ineffective in siege warfare in the Late Empire as it did in the Republican period[97], though this did not stop its employment for this purpose.

Of particular interest is the way in which elephants were used — or rather not used — in the set-piece battles of the period. Indeed, it seems rather odd that Persian elephants, as far as one can tell, were not employed against massed infantry formations. Ammianus, our most reliable source for the period under discussion, does not seem to allude to this, the expected elephant stratagem. While the *HA* might ostensibly suggest the use of large numbers of elephants against the forces of Severus Alexander, it seems wise to set that testimony aside.

The reader will recall that the Carthaginians, during the Punic Wars, used their small African forest elephants against massed Roman infantry on a number of occasions[98]. Once again, Xanthippus, the Spartan-born mercenary general employed by Carthage, routed Regulus' infantry in 255 B.C. near Tunis with a frontal assault by elephants. Hannibal intended to do likewise at Zama in 202 B.C., though his elephant-assault was unsuccessful and merely served to hasten the Carthaginian defeat. The Sassanians, however, did not seem to favour this sort of tactic. Perhaps they were mindful of the damage that elephants could do to their own ranks if

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[97] For some examples of the disastrous use of elephants in siege warfare, see especially Plut. *Pyrrh.* 33.4-5 (Pyrrhus at Argos in 272 B.C.), Polyb. 1.40.12-13 (Hasdrubal at Panormus in 250 B.C.) and App. *Ib.* 9.46 (Nobilior at Numantia in 153 B.C.). At this latter *locus*, elephants are described as "the common enemy" (κοινοὺς πολεμίους).

[98] See n. 84 *supra*.

repelled by a resolute defence. On the other hand, the elephants' lack of active involvement in set-piece engagements may have been because they often constituted part of the baggage train and, as a consequence, were not meant to be used as weapons of war. Of course, neither of these possibilities can be confirmed, at least for our period.

In the various wars waged by Hellenistic princes against each other, elephants were often employed on the wings in order to frighten the opposing cavalry[99]. While the Sassanians were undoubtedly aware of the untrained horse's fear of the elephant's trumpeting, aspect and odour, they chose not to take advantage of this when combating Roman and allied cavalry. In the set-piece battles mentioned by Ammianus, elephants appear to have been drawn up in reserve, or else were part of the baggage train. Even though it seems that were not required, it could very well be that the Persians intended to use them as a *coup de grâce*, in the event of the cataphracts and archers successfully carrying out their respective tasks. Perhaps they were envisaged as a kind of battlefield close-support that would effectively "mop up" pockets of resistance. Sadly, for the Persians, this never eventuated and the elephants seem to have been ushered quietly from the battlefield.

Even more unusual is that — at least according to Ammianus — the Sassanian Persians used elephants in what might be termed ambuscades. This is almost unique, especially in the geographic circumstances[100]. We are told that Persian elephants were used together with cataphracts to attack the Romans whilst in camp, and to attack them whilst on the march. Thus Ammianus suggests that elephants were far more mobile in the field than we might otherwise have supposed. Perhaps the Persians felt that, by using elephants for what were essentially surprise attacks, they could maximise the psychological value of the beasts against the Roman infantry and cavalry. On the other hand, it could be that the psychological shock value of the elephants, which apparently appeared from nowhere, led Ammianus to think of the attacks as ambushes — or else he is endeavouring to explain away what may have been a Roman intelligence failure, the blame

[99] On this, see Bar-Kochva 1976: 77: "the main value of elephants was as a 'screen' against cavalry".

[100] One might readily imagine that elephants were often used in ambuscades in the tropical Far East, especially where the landscape is lush and heavily wooded, and where elephants had presumably been trained to operate in such an environment.

for which could have been laid at Julian's door. Whatever the case, Persian elephants achieved far more success when used in this fashion than when used against fortified positions, at least during the period of which this article treats. Such a manner of deploying elephants seems to have been a purely eastern phenomenon — one does not read of such things occurring in the Pyrrhic or Punic wars, or in the battles waged by Alexander's successors.

When taken together, the points made above appear to indicate one thing: that the Sassanian way of using elephants in warfare was quite unlike that employed by the various combatants of the Mediterranean world in Hellenistic and Republican times. The failure to deploy elephants in the front line in set-piece engagements, and their use in surprise attacks, belong to a rather different military tradition. Given that there was a considerable hiatus between the last time that a Mediterranean or Middle Eastern power used powerful contingents of elephants in warfare and the rise of the Sassanian elephant corps, one might imagine that the tactics of the Persians were influenced to some degree by those of the Indians, the people from whom the elephants were originally (and presumably continuously) procured — Libanius (*Orat.* 59.64), as discussed earlier, may be hinting at this when he writes that Shapur II introduced new ways of waging war to the Persian army.

Perhaps the Sassanian method of waging war with elephants was largely of their own creation and, what is more, was specifically attuned to the overall Persian fighting style, which placed great reliance on charging cataphracts and showers of deadly arrows. If Arrian is to be believed[101], we might even look as far back as the battle of Gaugamela for some kind of explanation regarding the Sassanian reluctance to employ elephants in the van in pitched battles. At Gaugamela, in which engagement the Achaemenian Persians relied heavily on their cavalry arm, the fifteen elephants supposedly present were not deployed. The elephants accompanied the king. They were part of his royal entourage. Just because this does not cohere with western military ideas does not mean that this made no sense to the Sassanians — especially when cast in terms of oriental kingship and the need to demonstrate royal power in a tangible way to the multifarious subject peoples that constituted the Persian empire.

[101] See Arr. 3.8.6, 3.11.6, 3.15.4, 3.15.6.

Wilcox is probably right to suggest that, although elephants continued to be used by eastern and oriental armies up until "the widespread introduction of gunpowder" (and beyond), one of the main reasons for their retention in such armies was "tradition" (Wilcox 1986: 44). Certainly, it seems that the Sassanian Persians realised that elephants, for the most part, were of scant utility in a pitched battle — they placed most of their faith in their cataphracts and the power of the bow. In terms of siege-warfare, they believed that elephants had some use, though it appears that they may have been over-confident in this assumption. The Sassanian employment of elephants in surprise attacks was probably — and perhaps surprisingly — the beasts' most effective combat application, when not used for logistical purposes. Thus the elephant was not viewed as a particularly dependable weapon of war, but it surely suited the proud and regal nature of the Sassanian dynasty to (re?)introduce the beast into the ranks of the Persian army, and retain it[102]. But, being a militarily pragmatic people (especially with regard to investing fortified positions), they also decided to make combat use of elephants when the occasion warranted it, especially in the "atypical" situation of a foreign incursion deep inside their territory (Rance 2003: 365), *e.g.* Julian's invasion of A.D. 363.

The Persian monarch was the King of Kings, and the supposed inheritor of the throne of the Achaemenians (who may have used or — at the

[102] It is believed that the Sassanians restored the Achaemenian institution of the "Immortals" (ἀθάνατοι), the supposedly 10,000-strong infantry found in Herodotus (τῶν ... μυρίων: 7.83). But one must take note that the Sassanian Immortals — at least as Procopius describes them at Daras (A.D. 530) — seem to have been a cavalry unit of indeterminate size, but surely less than 10,000 (τὸν τῶν ἀθανάτων λεγομένων λόχον: 1.14.31, *cf.* 1.14.44). Gibbon (1994: 948, n. 104), after introducing Ammianus' *regius equitatus* (25.5.8), writes that "It appears from Procopius, that the Immortals ... were revived, if we may use that improper word, by the Sassanides". This occurs in the context of a Persian attack on Jovian's column. This could give weight to the idea that, because the Achaemenians used (or at least *were thought* to have used) elephants, the Sassanians decided to reintroduce them. Still, problems exist with our understanding of the "Immortals", especially as Herodotus describes them (*e.g.* specifically at 7.83, 7.211, 8.113; implied at 7.41, 7.215). Indeed, the élite infantry guard of Darius III at Gaugamela in 331 B.C. was the (presumably) 1,000-strong μηλοφόροι or "Apple Bearers" (attested by Arrian at 3.11.5, 3.13.1, 3.16.1; and Diodorus Siculus at 17.59.3; *cf.* Hdt. 7.41, where 1,000 men bearing spears with butts in the shape of golden apples are mentioned; this could be a reference to the same unit, especially since they march directly behind Xerxes). One might also adduce the Sassanian revival of a supposedly 'purer' form of Zoroastrianism and its control by the state; on this, see Boyce 1979: 102-103; Christensen 1944: ch. 3; Cook 1983: 150; Zaehner 1961: 170-171.

very least — were *thought* to have kept elephants). Possession of elephants, therefore, must have been consonant with the king's exalted status, even if ancient Zoroastrian texts do associate the elephant with "the noxious creatures [*xrafstar*] of Ahreman" (de Blois 1982: 360), which theme is also discussed by Tafazzoli (1975: 395-398). Still, it is puzzling to note that elephants, apart from the famous hunting relief at Taq-i-Bustan, are not prominent in royal iconography at any period during the Sassanian tenure of the Persian throne, although one should guard against making too many assumptions regarding this lack of plastic evidential material.

In eastern lore, the elephant had been associated with kingship to at least the time of the *Ṛgveda*[103], although the Aryans of the time specialised in chariot-warfare. Moreover, the *Chāndogya Upaniṣad* (7.24.2) speaks of "cows and horses, elephants and gold, slaves and wives, fields and abodes" with respect to the way in which wealth and status were reckoned[104]. The Buddha also associates the elephant with kingship and princes[105]. Likewise, the numerous battle-scenes of the *Mahābhārata* are filled with royal war-elephants[106]. In later times, the highly efficient cavalry of the Mughal princes "marched over the dead bodies of [Hindu] elephants"; but they still made the beast a symbol of the "glory and grandeur" of their court (Pant 1997: 98)[107]. Indeed, among the various dynasties of Indian rulers,

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[103] At one point (RV. 4.4.1), Agni is asked to proceed like a king on his elephant (*ibha*). Pant (1997: 89) points out that it is not known if elephants were used for warfare in this period; see also Ghoshal 1964: 37; *cf.* Singh 1989: 76. See also the enigmatic RV. 9.57.3. But Bhakari (1981: 62) states that elephantry, "as an organised force, is of the post-Vedic origin". On this, see Hopkins 1889: 57-376, and especially 265-267. Hopkins (1889: 267) opines that, in the *Ṛgveda*, kings fighting in howdahs may number "among the later additions".

[104] Trans. of Hume 1949: *ad loc.*; see also Pant 1997: 89; Singh 1989: 78. *Cf. Kathaka Upaniṣad* 1.1.23: "many cattle, elephants, gold and horses", trans. of Hume 1949: *ad loc.*

[105] *E.g. Majjhima Nikāya* 1.414-415, 2.94; *Aṅguttara Nikāya* 3.157-162.

[106] For a full treatment, see Singh 1989: 80-81, with Mbh. 1.62.12, 1.102.17, 1.123.7, 4.60.7, 6.20.7, 6.91.23, 6.91.33 (*cf.* 5.164.38, 6.17.36), 6.17.20, 8.8.21.

[107] When Nadir Shah invaded India in 1739, he was contemptuous of his Hindu opponents' elephants: "what strange practice is this that the rulers of Hind have adopted? In [*sic*] the day of battle they ride on an elephant and make themselves a target for everybody" (Dalpat Singh, *Malahat-i-maqal*, No. 1828 in the British Museum, London, folio 54b, in Pant 1997: 97, with 104, n. 140). One might well adduce what befell Porus, who was mounted on a very large elephant at the Hydaspes and thus became an obvious target for Alexander's men; see Arr. 5.18.4-7; Curt. 8.14.13, 8.14.31-40; Diod. Sic. 17.88.4-6; Plut. *Alex.* 60.12-13. On the battle, see Hamilton 1956: 26-31; Starnaman 2004: *passim.*

the elephant served as a "royal insignia" (Pant 1997: 87). Singh (1989: 75) points out that "Its use [in India] was always confined to the kings and their nobility"[108]. It is not improbable that the Sassanian Persians also followed this tradition, an idea which is promoted by Tafazzoli (1975: 397). Thus, in the tradition of the East, the elephant served a purpose that was not merely military — it was a living symbol of the ruler's omnipotence[109].

In view of the above, although the Sassanian kings regularly used elephants for military purposes, one of the main reasons for their inclusion in the Persian army was the beast's symbolic import, although it must be added that the elephant eventually came to play a more important — and increasingly effective — rôle in Sassanian logistical operations (something which perhaps mirrors the increasing use of elephants for technical purposes on the subcontinent). That elephants almost always accompanied the king on campaign would appear to add weight to this theory, though it must be remembered that their use was not the king's preserve and that other generals (and the Persian princes) could deploy them[110].

Finally, one might well ask why the Parthians did not use elephants for military purposes; or, at least, why they were not attracted to the royal symbolism that the elephant seems to have had for the succeeding dynasty. Although this will undoubtedly remain a conundrum, it is well to bear in mind the arguably more offensive mindset of the Sassanian dynasty, and its greater desire to implant its pre-eminence on neighbouring peoples and powers, including Rome. Of course, more work evidently needs to be carried out with regard to this matter.

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[108] The ownership of elephants in Ethiopia was also a royal prerogative (pointed out by Dr Philip Rance in personal correspondence). Juvenal (12.102-108) asserts that the Roman emperors also exercised some sort of elephantine monopoly.

[109] See also Bosworth 1961: 61, who likens the later Islamic Ghaznevid dynasty's preoccupation with elephants to that of contemporary Indian rulers, from whom the beasts were procured. One might also consider Seleucid attitudes to the elephant. Newell (1941: 165) writes that, for the Seleucid dynasty, the elephant was "an abstract symbol of Seleucid power and majesty"; see also Bar-Kochva 1976: 81-82. This theme is extended by Hoover 2005: 35-44. Rawlinson (1876: 649) points out that the elephant corps held the "the first position" in the Sassanian army, presumably because of its association with kingship rather than its utility in battle.

[110] Witness the first major battle in Julian's campaign of A.D. 363. Shapur did not directly command the opposing forces, which included an undisclosed number of elephants.

V. Conclusion

It is well known that the chief value of elephants in ancient warfare was psychological. Although the beasts could obviously frighten inexperienced cavalry units or reduce an infantry line to a quivering pulp, the ancient sources repeatedly suggest that, once the initial fear of the beasts had been mastered, elephants could be beaten with relative ease. Indeed, elephants, if attacked by resolute missile troops or hamstrung by intrepid swordsmen, were more likely to about-face and crush their own ranks rather than wreak havoc upon their intended targets. But Roman infantry in the Late Empire had obviously had little experience of elephant-warfare. As a consequence, the psychological value of the Sassanian elephants would have been viewed by the Persian generals as something of considerable import. Ammianus certainly wanted to convey the feeling that he had been impressed by the beasts. Even though elephants do not seem to have been used in the first battle between Julian's forces and the Persians, he pauses to comment on their imposing bulk (Amm. Marc. 24.6.8)[111]. What is more, a number of encounters with elephants over a period of time (A.D. 359 and 363) apparently did not inure Ammianus to their sight (or at least that is what he wanted his readers to believe). Perhaps this was one of the reasons, aside from logistical uses, why the Sassanian Persians decided to employ them, albeit in unexpected ways[112].

Still, it must be pointed out — once again — that the inclusion of elephants in the Persian army was perhaps closely associated with their symbolic worth. Of scant practical use in set-piece engagements during the period of which this article treats, the elephant served as a living representation of the wide-ranging power of the Sassanian monarch. Indeed,

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[111] At Amm. Marc. 25.3.11, we find mention of the enormous bodies of the elephants (*magnitudine corporum*). This echoes language found earlier at Amm. Marc. 19.7.6, where the "noise and huge bodies" of the beasts are described as the most terrifying thing that the human mind can conceive (*quorum stridore immanitateque corporum nihil humanae mentes terribilius cernunt*).

[112] Vegetius, the late Empire military epitomator, also describes the way in which elephants can terrify the enemy (*Epit.* 3.24.5). But Vegetius, though he does sometimes refer to contemporary events, does not appear to be concerned overmuch with elephants in his own day. Moreover, the examples of elephant warfare that he provides generally appear to pertain to the Republican period of history — he gives little indication of the threat posed by Sassanian elephants, although Rance (2003: 359) points out that Vegetius does uses the present tense in one section of his text concerning the use of *carroballistae* (a kind of bolt-projecting artillery weapon) against elephants; see *Epit.* 3.24.14.

though military elephants were used with more success in later periods such as the sixth and seventh centuries A.D. (they were employed mainly for siege-warfare, "engineering" duties and subduing less-sophisticated enemies)[113], that herds of elephants were still maintained in the Persian service says much about their symbolic value rather than their military efficacy. Moreover, the more successful use of elephants in later times perhaps adds further credence to the belief that the Sassanians had only recently come to use elephants *en masse* in the fourth century A.D., especially during the reign of Shapur II. From the Persian point of view, the King of Kings' ability to gain access to herds of elephants demonstrated the power of his dynasty to his neighbours and rivals, and his kingdom's pre-eminence. It is clearly in this context that we should consider the importance of the Sassanian elephant corps. One might well leave the last word to Gibbon, who observed that "satraps and elephants, [were] perhaps of equal value in the eyes of their monarch"[114].

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[113] Procopius rarely describes Persian war elephants. When they *are* mentioned, the beasts appear in the context of siege warfare, which accords with Rance's view (2003: 358) that elephants in the sixth century were mainly used for "logistical and poliorcetic operations". Rance (2003: 373-382) provides detailed and incisive treatment of Sassanian elephant warfare from the fifth to early seventh centuries A.D. and thus should be the interested reader's first port of call. Procopius also provides some useful references: 8.13.4-5 (eight elephants are mentioned); 8.14.10; 8.14.32-37 (siege of Archaeopolis, in Lazica, and preparations leading up to the siege); 8.17.10-11 (a large number used against the Lazi and their strongholds); *De Aed.* 2.1.11 (elephants equipped with wooden towers). Procop. 8.14.35 also refers to men riding on Persian elephants, though towers are not specifically mentioned; with regard to this *locus*, one might also consider Procop. 8.13.4. See also Agath. 3.20.5, where elephants are used to blockade a river; see also 3.26.8 (elephants with bowmen used as a defensive wall) and 3.27.1-4 (where wounded elephants carrying soldiers wreak havoc on their own men).

[114] Gibbon 1994: 941.

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