WHAT DID ELEPHANTS FEAR IN ANTIQUITY *?

Résumé. - L'intérêt manifesté par les auteurs grecs et latins pour l'éléphant trouve son origine dans les confrontations militaires. En conséquence, les aspects récurrents de la représentation de l'éléphant dans les textes anciens étaient sa taille énorme, sa force menacante et toute-puissante dans les combats, ainsi que sa férocité. Toutefois, à partir d'Aristote, une représentation différente se développa parallèlement, qui a progressivement fait de l'éléphant non plus une bête menacante, mais un animal 'civilisé' et ami de l'homme, se comportant comme lui et se mettant à son service. Pour ce faire, les textes anciens ont souligné les faiblesses de l'éléphant, en se concentrant sur sa sensibilité et sa vulnérabilité. En particulier, l'Antiquité a déconstruit l'image naturelle de l'éléphant, en introduisant une série d'inimitiés - fictives ou exagérées - entre lui et certains animaux et insectes beaucoup plus petits et plus faibles, principalement le porc et la mouche. La peur qu'inspireraient les souris aux éléphants, dominante dans les fictions populaires contemporaines, tire son origine de ces oppositions anciennes. Ces oppositions et leurs connotations idéologiques dans le domaine de l'imaginaire collectif de l'Antiquité sont étudiées dans le présent article, ainsi que les caractéristiques de l'éléphant dans la pensée ancienne. Il semble que, depuis l'Antiquité, la représentation de l'éléphant tienne d'un mélange de réalité et de fiction, et qu'elle reflète des points de vue idéologiques et esthétiques spécifiques.

In the summer of 2001, a three-ton elephant was bathing in the lake of the Denver Zoo. Scared by the sudden noise of water splashing, he rampaged, escaped and caused havoc in the city¹. Similar stories of elephants fleeing in panic, often with disastrous consequences, narrations of real or fictitious events in which elephants are easily *scared*, are frequent in the

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^{1.} As reported in the Greek newspaper *To Vima* 12 June 2001, A13. On his way, he turned over a pram (the baby in it miraculously survived) and injured his trainer; the whole scene caused an asthma crisis to a passer-by.

media. They are also part of a modern popular conception of this particular animal as an aggregate of opposites that counterbalance its actually aggressive nature and allow the caricatural transformation of its true, wild nature into a "customer-friendly" image: huge and yet fragile, thick-skinned but hyper-sensitive, a bestial force that trembles at the least menacing sights and sounds. The image of the elephant as a gentle giant is rooted in ancient Greek and Roman thought and imagery. The same can also be argued regarding the widespread modern view that features especially in childrenoriented fiction, such as in the opening scenes of Walt Disney's *Dumbo*, namely that elephants are *panicked* in the presence of mice, which is a purely fictitious statement with no scientific support². In the following pages it will be argued that, in fact, the elephant's alleged fear of mice is a late addition to the long ancient list of elephantine fears and enmities.

The elephant was alien to the Greek fauna. Therefore it is reasonable that the first references to it betray a limited knowledge of its characteristics and behaviour ³. Yet, as soon as the Greeks became familiar with it, it surfaced the sources, especially in reference to its behaviour and aretalogies ⁴. In some cases, the ancient accounts may now seem too

3. The word $\ell\lambda\epsilon\phi\alpha\zeta$ stands for ivory in Homer, in lieu of the animal (e.g., *Il.*, 4.141, 5.583; *Od.*, 4.73, 8.404, 19.563-564; see also, e.g., Alc., fr. 350 L-P, Hes., *Sc.* 141, Hdt., 3.97.3). Herodotus (3.114, 4.191) is aware that it is a huge animal that lives in Africa (Libya, Ethiopia). Plato goes a step further and informs us that in Atlantis lived a large population of elephants which is a huge and voracious animal (*Criti.*, 114e-115a). On the elephant in the Greek and Roman history, thought and literature in general see R. CARRINGTON (1958); M. GIEBEL (2003), p. 87-95; K. KARTTUNEN (1997), p. 187-201; O. KELLER (1909-1913), p. I.372-383; I. OPELT (1959); H. H. SCULLARD (1974), p. 32-207; J. M. C. TOYNBEE (1973), p. 32-54; M. WELLMANN (1905).

4. Interest in the elephant and its customs must have originated after the encounters of Alexander's army with war elephants, first those of Darius (Gaugamela, 331 B.C.) and then those of king Porus (326 B.C.). Nevertheless, it was the wars of his successors that introduced the deployment of elephants in battle to the Greek-speaking world. See J. M. C. TOYNBEE (1973), p. 32-33. However, the encounter at Gaugamela is strongly debated, since elephant participation in the actual battle is nowhere mentioned. G. T. GRIFFITH (1947-1948), A. M. DEVINE (1975) and P. DUCREY (1985), p. 93-96 do not mention any elephants in action, although fifteen of them were listed in the ranks of Darius' army (Arr., An., 3.8.4) but then mysteriously disappeared from the narratives of the battle. F. L. HOLT (2003, p. 93-96) too, doubts any elephant part in the battle and so does recently J. M. KISTLER (2005, p. 26-29). It seems that, albeit initially there, they were eventually moved away from the battlefield shortly before the battle, back to the baggage train of the Persian camp, where together with

^{2.} See, in this sense, R. CARRINGTON (1958), V. J. MAGLIO (1973), S. SIKES (1971), R. SUKUMAR (2003), J. H. WILLIAMS (1950). See also the relevant entries in *The Columbia Encyclopedia*, or the *Encyclopedia Britannica*. As to the sensitivity of elephants in captivity see below p. 249-250.

limited, non-scientific or outdated, yet they reveal the Greeks' and the Romans' fascination with this exotic animal with which they came across under the most inauspicious circumstances ⁵. Due to the absence from our sources of Ctesias' supposed first Greek account of the elephant, Aristotle seems at the moment to be the one who set the ground for the ancient world's view on the animal ⁶. He ascribed to it certain traits of behaviour that became commonplaces and influenced its future aretalogies, traits that rendered it more intimate to men and thus smoothed the way for its entrance to the ancient animal inventory. Thanks to him, the elephant's nature was blunted to the extent that he wanted it to be the mildest of all wild beasts and to have such a gentle temper that its taming was the easiest of all ($\tau \iota \theta \alpha \sigma \sigma \delta \tau \alpha \tau \circ v$, $\eta \iota \epsilon \rho \delta \tau \alpha \tau \circ v$, $\pi \rho \hat{\alpha} \circ v$). The elephant is endowed with the ability to understand ($\xi \upsilon v \iota \eta \sigma \iota v$), a quality that strongly distinguishes it from other beasts and renders it more akin to man, tamable and extremely

5. H. G. H. TABOADA (1995), p. 113.

6. Aelian (*NA*, 17.29) names Ctesias as his source on Indian elephants at war, which if true would make him the first who gave a detailed account on this animal. Ctesias possibly was the now lost source for Aristotle's accounts on the elephant (*HA*, 497b22-31, 500b6-14, 501b29-502a3, 571b32-572a5, 578a17-24, 596a3-9, 605a23-b5, 610a15-33, 630b18-30). See J. M. BIGWOOD (1993), p. 539-544; K. KARTTUNEN (1997), p. 188-189. On other possible sources for Aristotle (Mnesitheus, Eudoxus of Cnidus, Callisthenes) see J. M. BIGWOOD (1993), p. 544 and f. J. S. ROMM (1989), following observations already made by G. E. R. Lloyd, strongly challenges as fictitious the commonplace hypothesis that Alexander sent one of his captive elephants, or one of the elephants that were donated to him by a satrap (Curt., 2.5.10), to his beloved teacher, Aristotle, for observation.

the Persians' camels they were captured by Parmenion (Arr., An., 3.15.4). H. H. Scullard (1974, p. 64-65) suggests that this was an appropriate measure because of the Persian horses' fear and turmoil at the company of elephants, which weakened one of Darius' strongest assets, namely, the Persian cavalry (while the elephants' size obstructed the manoeuvres of the Scythian chariots). Therefore, the elephants were removed during the night before the battle. See M. B. CHARLES (2007a), p. 303-304 and J. M. KISTLER (2005), p. 29-30. J. M. Kistler is skeptical regarding another explanation for the elephants' absence, namely that at the beginning of the battle, as the Scythian chariots rushed ahead, they got panicked and ran back to the baggage train. He proposes, instead, that when elephants got their routine activities changed, they become confused or belligerent; that was the case of the elephants in armor who after a long wait under the boiling sun started to leave the battlefield before the battle began. He also offers an alternative explanation, that during this long wait they were intoxicated with wine, as it was customary for Indian mahouts to excite their elephants with rice wine before the battle started. See J. M. KISTLER (2005, p. 137) on the war elephant's intoxication. The nearly total eclipse of the moon (Arr., An., 3.7.1) recorded ten days before the battle according to A. R. BURN (1952) or the moon being on the second day of its last guarter on the eve of the battle - E. BADIAN (2000), p. 259-260 - might have aggravated the irrascibility of both horses and elephants, and thus made the Persians doubt the need for the use of elephants, especially given their numerical superiority compared to the Macedonians.

useful. In fact, the elephant can be educated and taught a good deal. This is so because it possesses and exhibits, to man's amazement, certain essential human attributes, such as intelligence and sensitivity, as well as a kind of continence, attributes that will be much admired later and will also be set by Christian writers as an example against human debauchery ⁷.

However, Aristotle's portrait does not stop here. It continues with the elephant being endowed with most of man's intellectual, moral and sentimental distinctive traits: the elephant is clever, docile, pious, grateful, just, it feels remorse and even falls into depression when it does something terribly wrong⁸. This is so, probably, because the elephant is believed to be imitating human actions, yet in a gentle way and not in a self-ridiculing manner like the monkey; the elephant can dance, alone or in groups, perfectly and harmonically; it can follow the rhythm of the flute, jump with grace and even play the cymbals. It performs admirable tricks in shows, sometimes better than men⁹. It is pious, it worships the gods and the sun, beeing respectful to human hierarchies; it has an prodigious memory that enables it to learn and keep orders; it is always faithful to its master and reciprocates every good act and quite often it even protects the weak and defenseless humans. Even a kind of love for humankind, a sense of ou- $\lambda \alpha \nu \theta \rho \omega \pi i \alpha$, seems to be at play here as elephants have been seen driving flies away from sleeping babies with their trunks, and gently rocking their cradles to put them to sleep. Moreover, king Porus' elephant kept protecting its wounded master until it realized he was falling unconscious and then it carefully laid him on the ground. The intelligence of the elephant is also expressed in reports of sociability and solidarity, since the animal has a strong sense of collectivity. Elephants help their trapped comrades escape from pits. Young elephants are respectful of their elders

^{7.} HA, 488b22, 630b18-21 (= Πάντων δὲ τιθασσότατον καὶ ἡμερώτατον τῶν ἀγρίων ἐστὶν ὁ ἐλέφας: πολλὰ γὰρ καὶ παιδεύεται καὶ ξυνίησιν, ἐπεὶ καὶ προσκυνεῖν διδάσκονται τὸν βασιλέα. Ἐστι δὲ καὶ εὐαίσθητον καὶ τῆ συνέσει τῆ ἄλλῃ ὑπερβάλλον. Ὁ δ' ἂν ὀχεύσῃ καὶ ἔγκυον ποιήσῃ, τούτου πάλιν οὺχ ἅπτεται). See also Ar. Byz., Ep., 2.102 and I. MASTROROSA (2003). A pun on the elephant's celebrated unique behaviour towards sex that differentiates him from beasts and renders him admirable by any moralizing author might underlie Aelian's assertion that the elephant is stunned and loses its self-restraint when seeing a beautiful woman (NA, 1.38.3 and f., followed by the story of an enamoured Alexandrian elephant). The sexual self-restraint of the elephant was discussed in a critical tone by M. FOUCAULT (1985), Introduction 2.2 ("a form of behaviour").

^{8.} Plin., *HN*, 8.1-15; Plu., *Mor.*, 968b-e, 970c-e, 972b-f, 974c-d, 977d-e; Ael., *NA*, 4.24, 8.10; Arr., *Ind.*, 13-14; Philostr., *VA*, 2.12-13. On the elephant's talents see also Ar. Byz., *Ep.*, 2.68-132 (his lost treatise on animals was probably the source for Aelian's views, since the Byzantine epitome often seems to copy Aelian).

^{9.} Arr., Ind., 14; Philostr., VA, 2.13.

and stand by the side of their wounded or sick comrades, despite the danger of self-sacrifice implied in such acts ¹⁰. Plutarch, in a parade of elephant *mirabilia*, reports the story of a characteristically dull elephant in Rome, who was so ashamed of being rebuked and punished that he was seen studying at night under moonlight! Furthermore, another elephant in Syria cleverly brought to justice a blameworthy supervisor who kept stealing the supplies from its good master. And, most admirable of all, it is said that elephants can perform perfect surgeries to their wounded comrades: namely, they pull out sharp pikes and spears and arrows from their bodies skillfully, easily and without causing any harm ¹¹!

Comradeship, collaboration, high skills, sense of justice, resourcefulness, versatility, physical and mental flexibility, emulation and love of honour, reverence and modesty, the Hesiodic good $\xi \rho \iota_{\zeta}$, all these qualities and many more were combined with vigor and cleverness in order to turn the elephant into the ultimate servant of man. As a result, the hunting of such a smart beast brings glory to humans and justifies their superiority and ruling position in nature; even more admirable is their achievement to tame it and put it at their service, often as a spectacle whereby human civilization admires itself. This is possibly why ancient writers nurtured so often the fantasy of their audiences with vivid and long descriptions of elephant hunting and elephant's theatrical skills, as at the circus, for example, where the elephant turns out to be the most popular entertainment animal, as it performs rhythmic motion and tightrope-walking, or participates in spectacular fights against its own species or other animals, such as bulls ¹².

However, despite these marvellous characteristics and contrary to our modern experience of the elephant and the aesthetics it induces, Greeks and

^{10.} Plu., Mor., 970-2c; Ael., NA, 11.14, 13.22; Athen., 607a; Ar. Byz., Ep., 2.102; Apostolius s.v. 'Έλέφαντος οὐδὲν διαφέρεις', Corpus Paroemiographorum Graecorum (= CPG, ed. E. L. VON LEUTSCH and F. G. SCHNEIDEWIN, vol. 1-2, Göttingen, 1839-1851). The pious elephant who worships the sun is juxtaposed to the chthonian Cerberus on a little donarium in a cistern at Veii (3rd – 2nd century A.D.). See L. AMBROSINI (2001) and (2005).

^{11.} Plu., Mor., 968b-e, 974d.

^{12.} Arr., *Ind.*, 13. Alexander himself is said to have staged such a show, setting a fierce fight between an extremely big dog he had received as a gift, first against a lion and then against an elephant. The dog, victorious in both fights, managed to bring the elephant to the ground by turning fast around it and biting it suddenly and decisively. See Plin., *HN*, 8.61. On elephant training see, e.g., Plu., *Mor.*, 968c; Plin., *HN*, 8.4-6; Ael., *NA*, 2.11; Sen., *Ep.*, 85.41; Mart., 1.104.9 and f.; Suet., *Iul.*, 53.2. Elephants appear in Roman triumphs (e.g., Plin., *HN*, 8.16; Sen., *Brev. Vit.*, 13.3) and in games at the arena (Cic., *Fam.*, 7.1.3; Livy, 44.18; Plin., *HN*, 8.2-3, 8.3.6, 8.19 and f.; Sen., *Brev. Vit.*, 13; Ael., *NA*, 2.11). See J. P. BALSDON (1969), p. 304-309; J. M. KISTLER (2005), ch. 2, 30, and 33; H. H. SCULLARD (1974), p. 250-253.

Romans usually encountered this animal as a war machine that filled its enemies' ranks with fear. Elephants on assault must have been a horrendous sight and a powerful and seemingly invincible weapon. This is confirmed by Greek texts that repeat the $\varphi \phi \beta \varphi \zeta$ that the elephant inflicted upon men and animals alike. For example, Arrian narrates how the horses of Alexander's cavalry were horrified and bolted at the sight of Porus' beasts and when hearing their growlings ($\tau \hat{\omega} v \, \epsilon \lambda \epsilon \varphi \hat{\omega} v \tau \omega v \, \epsilon \tilde{\chi} \tau \tilde{\eta} \, \tau \epsilon \, \delta \psi \epsilon i \, \tilde{\alpha} \mu \alpha$ $\kappa \alpha i \, \tau \tilde{\eta} \, \phi \omega v \tilde{\eta} \, \phi \varphi \beta \phi \delta v \tau \omega v \, [...] \, \tilde{\epsilon} \kappa \phi \rho \upsilon \epsilon \zeta \, \gamma i \gamma \upsilon \delta \mu \epsilon \upsilon v \tau \delta \zeta \, \alpha \mu \phi'$ 'A $\lambda \epsilon \xi \alpha \nu \delta \rho \upsilon \, i \pi \pi \epsilon \tilde{\upsilon} \sigma \upsilon)^{13}$. Similarly, Polybius notes that the Romans were terrified just at the rumour that the Carthaginians' elephants had broken their ranks ¹⁴.

Still, whether generals soldiers citizens or simple folk, Greeks and afterwards Romans had to adapt to this new war spectacle and to challenge it. Paradoxically but luckily enough, the beast proved to be fragile and vulnerable. It might have taken archers and javelin throwers in great numbers, it might have required firing torches at the elephant's face or violently shaking them in front of its eyes, devices that would actually scare any animal, digging ditches and filling them with sharp and pointed obstacles, such as iron spikes to pierce its soft and vulnerable sole, it might even have taken too many soldiers simultaneously chopping the legs of the beast with their swords, as if to bring a giant tree down, yet the sources will soon agree that in terms of battle tactics the towering threat can be penetrated, pierced, mortally injured and ruthlessly brought down ¹⁵. Most importantly, it was soon realized that elephants do experience fear. That is, they get easily panicked and may rampage and crush its own allies in its

^{13.} Arr., An., 5.10 and 5.15 respectively.

^{14.} Plb., 1.39.11-12: Oi γὰρ Ῥωμαῖοι, διαδοθείσης φήμης περὶ τῆς ἐν τῆ Λιβύη μάχης ὅτι τὰ θηρία τάς τε τάξεις αὐτῶν διασπάσαι καὶ τοὺς πλείστους διαφθεῖραι τῶν ἀνδρῶν, οὕτως ἦσαν κατάφοβοι τοὺς ἐλέφαντας [...]. Cf. 3.53.8. See also Livy, 21.55, 27.14.6-7, 36.10, 44.5.1-2. See J. M. KISTLER (2005), ch. 7, 17-18, 26, 30; A. MAYOR (2003), 195-196, 199. On elephants in ancient war: P. D. ARMANDI (1843); R. F. GLOVER (1943-1944), p. 258-61 and (1948), p. 1-6; J. M. KISTLER (2005); A. MAYOR (2003), p. 193-205; H. H. SCULLARD (1948) and (1974), p. 185 and f. From the very beginning, Aristotle saw the need for the military use of the elephant's fighting vigour and described its training, its destructive force and skills, as well as its hunting, in *HA*, 610a15-34. Furthermore, an elephant can live up to sixty years with twenty years of full vigour, which rendered them a useful investment for ancient armies. See J. M. KISTLER (2005), p. 65.

^{15.} E.g., D.S., 18.71.2-6, 19.84.2-5; Plu., *Pyrrh.*, 16 and f.; Ael., *NA*, 8.10.37-48; Amm. Marc., 19.7.6-7. See also R. F. GLOVER (1943-1944), p. 265-266 and (1948), p. 6 and f. and J. M. KISTLER (2005), p. 13 and f., p. 54-61, p. 163-165. On Scipio's master tactics to confront the enemy's elephants, see Caes., *B Afr.*, 27.

flight. Therefore, in an attempt to fight the fear inflicted by the beast, and turn it against the enemy's ranks, many stories stress the disastrous consequences of the beast's panic and rampage throughout friendly ranks, turning the other side's greatest asset its Trojan horse. The fearsome beast does indeed know fear. According to ancient authors, the male elephant experiences $\phi \delta \beta o \varsigma$, $\tau \alpha \rho \alpha \chi \eta$ and *timor*, when he is injured or trapped by the enemy's aforementioned tricks, or when he loses his mounted guide ¹⁶. He is also said to fear water and be extremely nervous when he is transported over it; therefore, crossing a river proves to be a weak point for every army with elephants ¹⁷.

The elephant's ears were also considered to be extremely sensitive, a fact that is supported scientifically, albeit as regards their goading or piercing, in lieu of the sounds of flies, gnats or pigs (issues that will be further examined below). This scenario often surfaces in ancient accounts and, were it true, no elephant could resist more than a few minutes in the wild ¹⁸. More generally, in ancient narratives the beast was rumored to panic at sudden, sharp, high-pitched and penetrating sounds, such as the squealing of pigs, the buzzing of insects, the sound of slings and arrows; similarly, it panicked at the whizzing sound of stones and leaden bullets ¹⁹. For example, Caesar's stratagem to make his archers and slingers target the elephants of the enemy panicked the beasts, which in their turn rampaged

^{16.} Plb., 3.46.9, 1.40.13; Livy, 21.28, 21.35, 21.55, 27.49; Lucr., *RN*, 5.1339-40. See J. M. KISTLER (2005), p. 56.

^{17.} Plb., 3.46.9-12 (some of Hannibal's elephants fell from the rafts and drowned in the river Rhone out of fear of water, διὰ τον φόβον); Livy, 21.28.11-12; Plin., HN, 8.1; Frontin, Str., 1.7.2. See S. O'BRYHIM (1991), p. 121. In fact, however, elephants that had grown close to water not only did not fear it, but they were rather good swimmers. See J. M. KISTLER (2005), p. 111. Maybe the elephants mentioned as fearing water were raised in captivity and thus were not accustomed to rivers. In another case, African elephants are said to be afraid of Indian elephants. Namely, Polybius (5.84.2-7) informs us that at the battle of Raphia (217 B.C.) Ptolemy Philopator's elephants could not stand the sight, strength, smell and trumpeting sound of Antiochus' Indian elephants. They did not even come close to them, but, terrified, they took to flight. On this passage see M. B. CHARLES (2007b). See also R. F. GLOVER (1943-1944), p. 267-269. In the Third Maccabees, Ptolemy's elephants (probably in an event involving the later Ptolemy VIII Physcon and not Ptolemy IV Philopator) are also said to have fled in terror and crushed their own troops at the sight of the angels that God sent to protect the Jews who were about to be slaughtered at the hippodrome of Schedia: L. M. WILLS (2002), p. 174, p. 187-193.

^{18.} Plin., HN, 8.34. Cf. J. H. WILLIAMS (1950), p. 139-152 and S. SIKES (1971), p. 282-283.

^{19.} See H. H. SCULLARD (1974), p. 265, n. 32; J. M. C. TOYNBEE (1973), p. 36-38.

and crushed their own troops in the battle of Thapsus (46 B.C.)²⁰. Similarly, in his account of elephant hunting, Aelian describes their fear at the sound of trumpets, or the beating of spears on shields, as well as at firebrands being lifted in the air and shaken against their faces, which resulted in their flight and entrapment in the pits previously dug for this purpose²¹. Similarly, Livy and a few centuries later, Zonaras, describe how at the battle of Zama (202 B.C.) the Romans under Scipio's command scared Hannibal's elephants and put them to flight by beating their shields with their spears and shouting a big and terrifying battle cry 22 . In fact, the recorded battles in which elephants rampaged for various reasons and caused havoc in their own ranks are so numerous that one cannot but wonder on the effectiveness of their military use ²³. Their behaviour on the battlefield was so unpredictable that they must have often puzzled generals and hindered their tactics. However, their military use for so many centuries indicates that these disasters were not the rule. Therefore, ancient authors tended to record only these catastrophes in detail in order to stress the exceptions and thus to strengthen morale in future battle²⁴. It is true, though, that in terms of tactics elephants were rather slow and hard to

22. Livy, 30.33.13 and Zonar., Epitome, 2.291.

^{20.} Caes., *B Afr.*, 83.2; Flor., 2.13.67. To commemorate such a glorious turn of events, Caesar issued *denarii* that depicted an elephant trampling on a snake, thus referring to his adversary's defeat at the hand of his own elephants, and maybe producing or continuing the legendary enmity between the elephant and the snake; see also fn. 28 below. On these *denarii* see H. COHEN (1930), p. 17, no. 49. However, this is not the only connection between Caesar and the elephant. According to Aelius Spartianus, in Moorish the elephant is called *caesai*, which explains why Caesar was nicknamed thus (apart from its Caesarian birth), namely because he slew an elephant in battle [Aelius Spartianus, 2.3, in D. MAGIE (ed.), *Scriptores Historiae Augustae*, vol. 1, Cambridge (Mass.), 1922].

^{21.} Οὐκοῦν ἐν τῆ τοιαύτῃ μάχῃ πολλάκις μὲν κρατοῦσιν οἱ ἐλέφαντες, πολλάκις δὲ καὶ ἡττῶνται δείματα ἐξ ἐπιβουλῆς καὶ δέα ποικίλα ἐπαγόντων. Καὶ γὰρ σάλπιγγες ἄδουσι, καὶ δοῦπόν τε καὶ κτύπον ἐργάζονται πρὸς τὰς ἀσπίδας ἀράττοντες τὰ δόρατα, καὶ πῦρ τὸ μέν τι ἐπὶ τῆς γῆς ἐξάπτουσι, τὸ δὲ μετέωρον αἴρουσι, καὶ ἄλλο σφενδονῶσι δαλοὺς διαπύρους ἀκοντίζοντες καὶ δῷδας μακρὰς πυρὸς ἐνακμάζοντος τοῖς θηρίοις κατὰ προσώπου βιαίως ἐπισείοντες. ἅπερ οῦν τὰ θηρία δεδιότα καὶ δυσωπούμενα ὠθεῖται, Ael., NA, 8.10.37-48. See also A. MAYOR (2003), p. 194.

^{23.} See M. B. CHARLES (2007a), p. 333; P. DUCREY (1985), p. 105-110; A. MAYOR (2003), p. 196-197. Elephants are reported to have rampaged with disastrous effects for their ranks at the battles of Beneventum (275 B.C.), Panormus (250 B.C.), Metaurus (207 B.C.), Ilipa (206 B.C.), Zama (202 B.C.), Numantia (153 B.C.), Thapsus (46 B.C.): App., *Ill.*, 9.46; Flor., 1.13.12-13; Livy, 27.48; Plu., *Pyrrh.*, 25.5; Plb., 1.40.12-13, 11.1.8-9, 11.24.1, 15.12.2.

^{24.} To name a few elephant triumphs on the battlefield, despite the outcome of the battle: at Ipsus (301 B.C.), at Heraclea (280 B.C.), at the famous "elephant battle" of Antiochus against the Galatians in Anatolia (274 B.C.), at Tunis (255 B.C.).

handle, which might explain their eventual disappearance from the battle-field.

It is, of course, possible that in captivity elephants are more likely to be scared, as it happens to any confined creature. As a matter of fact, the elephants that ancient authors came upon and who were used either in civil or in military tasks, were indeed animals in captivity. This might explain their reactions to the aforementioned stratagems. However, if this was the usual and predictable reaction of war elephants, rather than a rare case due to special circumstances ²⁵ or a fictitious statement, then it would have been common knowledge and elephants would have easily been reduced to battlefield ridicule. Instead, elephants championed their strength in battlefields for centuries. So, it seems that this 'sensitivity' and vulnerability of the elephant is over-stressed in the sources; both continue the Aristotelian 'belittling' and 'humanization' of the beast, especially regarding its sensitivity ²⁶. At the same time, they bring its well-known aggressive nature, its terrifying traits when in the wild, to a more man-friendly level, thus softening the fear of men towards it, facilitating a certain familiarity with it, and justifying the hope that the pachyderm can be pierced, penetrated, if not by weapons, then by shrieking sounds. Such a view is reminiscent of the popular belief that everything, no matter how big or scary, has its vulnerable spot, its Achilles' heel, and thus it can be scared and eventually defeated. Similarly, the reputed fear of the elephant towards mice accentuates the oxymoron of such a fearful war machine and huge beast being intimidated by the small but courageous. However, a series of sources can be juxtaposed regarding the alleged fear of sounds, sources in which elephants appeared to have no problem with sounds: elephants

^{25.} H. H. SCULLARD notes (1974, p. 22) that in captivity elephants can be panicstricken either by seeing a mouse run or hearing a dog bark. This seems to contradict the circus or zoo situation, where flies and mice party at the elephant's dung and food, while animal sounds are everywhere. Yet, in the mid-1980s, it was discovered that elephants communicate by subsonic sounds (a fact that the ancient writers ignored). Could this explain their reactions to the shrieking sounds of mice and pigs (which would be in a frequency too high for their ears) that are recorded in certain ancient sources, especially when in captivity and under really stressful battle conditions and thus verify the rare cases reported in the ancient sources? On the elephant's subsonic communication: P. WALDAU (2002), p. 76.

^{26.} *HA*, 630b21, although it is highly uncertain that by the sensitivity or 'quick perception' of the elephant (εὐαίσθητον) Aristotle refers to its fears. This assignation of human traits of character and behaviour to the elephant can also be discerned in modern works. For example, in her description of elephant fears in the ancient battlefields, Adrienne Mayor comments (italics mine): "their [the elephants'] highly developed *aesthetic sensibilities* [they are 'agitated by discordant sounds and *abhor ugly things*'] could be turned against them in battle". A. MAYOR (2003), p. 199-200.

danced to the sound of flute and cymbal, they marched despite the turmoil that was produced by the enemies' wild cries and their horses' neighing (as they bolt at the sight of the elephants); they added the shrilling sound of their trunks to the pandemonium caused in their ranks by their fellow soldiers' cries and trumpeting, they paraded in triumphs and heard the crowd's cries without any noticeable reactions and they wore bronze bells on their necks without being bothered by their metal sound ²⁷.

Equally frequent in ancient sources and even more surprising are reports on the elephant's apprehension at the sight of certain small and seemingly insignificant animals. That such a gifted beast, almost man's equal, experiences so many and absurd fears was a necessary counterbalance to its aretalogies in order both to explain and justify its submission to humans, to further accentuate and glorify human achievements and to diminish the possible fear towards it. Despite his fascination with animal hostilities (e.g., HA, 610a15-34) and his extended accounts of the elephant, Aristotle does not mention any of its animosities. This strengthens the point that the latter surfaced as soon as the beast had to be 'domesticated' in popular thought, at first in order to diminish popular fears at the hearing of its coming or its populating the enemy ranks. As a result, the elephant proves weak at heart against ridiculous adversaries, such as the fly and the mouse, thus stressing the popular notion that the big should always respect, if not fear, the small and seemingly unimportant and powerless.

Judging by the number and the dates of the references to this hostilities, we can infer three preliminary points. The first is that the elephant's main enemies are the pig and the fly 28 . The second is that few of these relations

^{27.} Ael., NA, 2.11; Arr., Ind., 13-14; id., An., 5.10, 7.3; Philostr., VA, 2.13; Ar. Byz., Ep., 2.90. A. S. PEASE (1904), p. 35, p. 37-42. In fact, the elephant's trunk is like a hoarse trumpet according to Arist., HA, 536b22, a remark that seems to verify the elephant's military deployment, as well as to explain its confrontation by animals with shrieking voices or a mouth that acts like a trumpet, like the gnat, see below p. 256 and f. On the vulnerability of the strong, and the subsequent respect towards every agent, despite its size or form, see C. A. ZAFIROPOULOS (2001), ch. 2 and 4.

^{28.} There are also some other, less popular antagonism of the elephant, namely against a) the snake (δράκων). See Luc., 9.732; Plin., *HN*, 8.34, 8.71, 8.149, 9.46; Ael., *NA*, 6.21; Pompon., *De chorographia*, 3.62. Cf. K. KARTTUNEN (1997), p. 164, p. 227 and f.; J. C. MURPHY and R. W. HENDERSON (1997), p. 90-93; H. H. SCULLARD (1974), p. 217-218; J. M. C. TOYNBEE (1973), p. 38. No reason for their enmity is given. Nevertheless, an interesting note in Pliny, *HN*, 9.17.46, that in India giant worms grab the elephants by their proboscis and kill them directs us to think that in popular imagination a giant snake or worm would resemble a trunk, in which case similarity in nature would explain antagonism, from which conflict would in turn spring. See also S. AMIGUES (2005), on the giant-worms in Indian rivers (this as well

seem real or are verified by scientists²⁹. The animosities and fears of the elephant belong to the realm of fiction, to popular imagination. The reasons for their conception and their aims remain to be outlined. Parallel to this, we should trace the resemblances and the differences that shape the various frameworks of similarity and juxtaposition between the elephant and its to paraphrase Burkert's That is, adversaries. "symbiosis in cult / antagonism in myth" schema, similarity in nature, in terms of appearance and behaviour, often leads to antithesis and conflict in popular belief and fictitious accounts. Of course, such an antagonism or even open conflict could also be based on clear antithesis in nature, appearance and behaviour. Thirdly, the most curious, least verifiable and currently dominant popular aspect of the elephant's fears is that it is scared of mice. Can a terminus post quem be traced for this particular belief and what purposes does it serve?

The pig ($\hat{v}\varsigma$) appears to be a major fear of the elephant in ancient sources. Although, as Karttunen notes, "naturalists assure us that there is no truth in such claims that elephants hate pigs and cannot stand their grunting", the elephant's fear of the pig and generally of small animals and insects, was considered to be both a natural and a historical fact ³⁰. The first to record this in our surviving sources are Seneca (*De ira* 2.11.5), who informs us that the pig's voice terrifies the elephant ("elephantos porcina vox terret") and Pliny the Elder, in his *Natural History* (*Naturalis Historia* 8.9.27). In fact, Pliny is currently a *terminus post quem* for both the elephant's fear of pigs and its aversion of mice (as we will see below). While he describes how to tame an elephant, he states that elephants feel terror at the faintest grunting of a pig (*iidem minimo suis stridore terrentur*). Unfortunately, he gives no further comment on this incredible assertion, as

as the work by J. C. Murphy and R. W. Henderson were brought to my attention by the anonymous referee).

b) The elephant is also in enmity with the rhinoceros (Ael., *NA*, 17.44), an animal that was little known to Greeks and Romans. Such a relation could have derived either from an observation of the African elephant or from a local tradition, on which however there is no scientific data, apart from the fact that they both are aggressive; or it might have derived through the juxtaposition of the rhino's horn with the elephant's tusk.

c) Finally, probably in captivity, the elephant is afraid of the horned ram and avoids it, Ael., *NA*, 1.38.1, S.E., *P.*, 1.58, Horap., *Hieroglyphica*, 85 Sbordone; Ar. Byz., *Ep.*, 2.106-7. See J. C. MURPHY and R. W. HENDERSON (1997), p. 90; G. NENCI (1955), p. 391. When an elephant is frenzied, it is said that it comes to its senses when it sees a ram, Plu., *Mor.*, 641b-c. Could it be that the folklore associated the tusk and the horns again on the basis of an antagonistic similarity?

^{29.} R. CARRINGTON (1958), p. 41; K. KARTTUNEN (1997), p. 200.

^{30.} K. KARTTUNEN (1997), p. 200.

if it would have seemed obvious to his readers, as if it was an old and widespread belief. The idea of such a nonsensical fear and connection of the elephant with the pig soon became popular. Plutarch places this enmity next to other more famous animal hostilities, such as that between the lion and the rooster. He points out that the elephant avoids the pig and notes its strong hatred for it, hatred that becomes fear ³¹.

Aelian continues what by then seems to have become a popular belief ³², but he takes it a bit further and gives it a historical basis. He claims that the Romans drove away the elephants of Pyrrhus of Epirus and won a glorious victory thanks to the grunting of pigs ³³. He does not give any further details on this strategic ruse, however, he offers us the first testimony on the military use of the supposed animosity between the elephant and the pig. However, later on in his *De natura animalium* Aelian presents another detailed historical example of this bizarre stratagem:

I reported earlier on the fact that the elephant is afraid of the pig and now I want to tell what happened at Megara when the Megarians were besieged by Antipater³⁴ [...] As the Megarians were in a hard position, they smeared some pigs with liquid pitch, set them on fire and let them loose towards the enemy. As the frenzied pigs fell upon the ranks of the ele-

32. Ael., NA, 8.28.12 (ἐπεὶ καὶ ἀλεκτρυόνα δέδοικε λέων καὶ τὸν αὐτὸν βασιλίσκος καὶ μέντοι καὶ ὑν ἐλέφας).

34. Aelian mistakes Antigonus Gonatas for Antipater here, although he had named him correctly at 11.14. See H. H. SCULLARD (1974), p. 114.

^{31.} Plu., Mor., 537c (εἰκὸς δὲ καὶ τῷ λέοντι πρὸς τὸν ἀλεκτρυόνα καὶ τῷ έλέφαντι πρός την ψν μίσος ίσχυρον γεγεννηκέναι τον φόβον), 981e (είτε φεύγει τὰ θηρία τὸν ἀνθίαν ὡς σῦν ἐλέφαντες ἀλεκτρυόνα δὲ λέοντες – in fact, there seems to be an unexplained confusion of the elephant with the lion already in HA, 630a2-3, where we learn that a lion was scared by a pig's grunting). See also Horap., *Hieroglyphica*, 86 Sbordone, where it is reported that in Egyptian hieroglyphs an elephant avoiding a pig symbolizes the king avoiding a babbling man. See G. NENCI (1955), p. 392 and f. In the Greek sources the pig appears either as \hat{v}_{ζ} or (less often) as its synonym $\sigma \hat{v}\varsigma$. The former was more frequent in Greek (especially in Attic Greek) and signifies both the pig as a domesticated animal and the boar. See P. CHANTRAINE (1999), s.v. $\hat{v}\zeta$ and $\sigma\hat{v}\zeta$. In popular thought, synonyms or similar forms of words can be easily and are often interchanged. The elephant's self-restraint towards sex offers an alternative interpretation to its enmity against the pig, an animal that had sexual connotations in Greek thought, as in Aristophanes, yet this is simply a hypothesis that I cannot substantiate at the moment. Finally, a passage from Polybius tempts us to suppose that this enmity might have also sprung from a confusion of words. Polybius narrates (1.40.13-14) how during the First Punic War the Romans managed to push the enemy's elephants into flight using their spears, their $\delta\sigma\sigma\sigma\delta$. Could the $\delta\sigma\sigma$ have been confused with the $\delta\varsigma$? This is another riddle to be solved.

^{33.} Ael., NA, 1.38.1-4 (Όρρωδεῖ ὁ ἐλέφας κεράστην κριὸν καὶ χοίρου βοήν. Οὕτω τοι, φασί, καὶ Ῥωμαῖοι τοὺς σὺν Πύρρῳ τῷ ἘΗπειρώτῃ ἐτρέψαντο ἐλέφαντας, καὶ ἡ νίκῃ σὺν τοῖς Ῥωμαίοις λαμπρῶς ἐγένετο.). See J. M. KISTLER (2005), p. 90-92.

phants and squealed, for they were burning, the beasts were driven crazy and deeply disturbed. Neither could they keep in line or be calm, although they had trained since they were small, either because out of instinct the elephants hate the pigs and loathe them, or because they freaked at the shrieking sound of their voice. Their trainers realized this and since then they raise pigs alongside with elephants, so that by being accustomed to them the elephants will fear them less ³⁵.

Here Aelian has added another historical example, which makes his narrative more credible. This time the story is more detailed and possible instructions for future use are clearer: pigs have to be thrown against the enemy's elephants in order to cause rampage because of the pigs' squealing. Frenzy leads to more frenzy (οἰστρημέναι, ἐξέμαινον), οίστρος to μανία; screams in agony, so characteristic of pigs when slaughtered or when just caught, instil horror and terror in the enemy. The morbid trick guarantees frenzied and agonizing screams, as well as certain success. Another detailed version of this story is given by Polyaenus and he seems to correct Aelian. He gives the right name of the besieger, who is Antigonus Gonatas, and offers more details that render the story more plausible: the pigs scream for a long way, frenzy (ototpoc) is in the elephants' side only and it is Antigonus himself and not the humble Indian elephant trainers, who is in charge with the training of elephants, and who conceived the ingenious trick of raising them alongside with pigs from then on ³⁶.

Scullard takes both stories to be true and dates the Romans' ruse against Pyrrhus' elephants either at the battle of Ausculum (279 B.C.) or at

^{35.} Ότι δέδοικεν ὑν ἐλέφας ἀνωτέρω εἶπον τὸ δὲ ἐν Μεγάροις γενόμενον Μεγαρέων ὑπ' Ἀντιπάτρου πολιορκουμένων ἐθέλω εἰπεῖν, καὶ μέντοι καὶ τὸ εἰρησόμενον τοῦτό ἐστι. τῶν Μακεδόνων βιαίως ἐγκειμένων, ὑς πίττῃ χρίσαντες ὑγρῷ καὶ ὑποπρήσαντες αὐτὰς ἀφῆκαν ἐς τοὺς πολεμίους. Ἐμπεσοῦσαι δὲ ἄρα ἐκεῖναι οἰστρημέναι ταῖς τῶν ἐλεφάντων ἴλαις καὶ βοῶσαι, ἅτε ἐμπιπράμεναι, ἐξέμαινον τοὺς θῆρας καὶ ἐτάραττον δεινῶς. Οὕτε οῦν ἔμενον ἐν τάξει, οὕτε ἦσαν ἔτι πρᾶοι, καίτοι καὶ ἐκ νηπίων πεπωλευμένοι, εἴτε φύσει τινὶ οἱ ἐλέφαντες ἰδία μισοῦντες τὰς ὑς καὶ μυσαττόμενοι, εἴτε καὶ τῆς φωνῆς αὐτῶν τὸ ὀξὺ καὶ ἀπηχὲς πεφρικότες ἐκεῖνοι. Συνιδόντες οῦν ἐκ τούτου οἱ πωλοτρόφοι τῶν ἐλεφάντων ὑς παρατρέφουσιν αὐτοῖς, ὥς φασιν, ἵνα γε ἐκ τῆς συνηθείας ἦττον ὀρρωδῶσιν αὐτάς., ib., 16.36.

^{36.} Polyaen., Strategemata, 4.6.3: 'Αντίγονος Μέγαρα πολιορκῶν τοὺς ἐλέφαντας ἐπῆγεν. Οἱ Μεγαρεῖς σύας καταλείφοντες ὑγρῷ πίσσῃ καὶ ὑφάπτοντες ἡφίεσαν· αἱ δὲ ὑπὸ τοῦ πυρὸς καόμεναι κεκραγυῖαι πολλῷ δρόμῳ εἰς τοὺς ἐλέφαντας ἐνέπιπτον· οἱ δὲ οἰστρῶντες καὶ ταρασσόμενοι ἄλλος ἄλλῃ διέφευγον. 'Αντίγονος τοῦ λοιποῦ προσέταξε τοῖς Ἰνδοῖς τρέφειν ὑς μετὰ τῶν ἐλεφάντων, ἵνα τὴν ὄψιν αὐτῶν καὶ τὴν κραυγὴν τὰ θηρία φέρειν ἐθίζοιτο.

Beneventum (275 B.C.)³⁷. In addition, scholars take an early bronze and brick-like form of money, an *aes signatum*, from the first half of the third century B.C., as evidence of Aelian's testimony. On one side an elephant is depicted as probably wearing a bell on its neck, and on the other a sow. Because the sides of an *aes signatum* were usually interrelated in meaning, it is accepted that this particular *aes* reflects the outcome of the Romans' victorious confrontation with Pyrrhus' elephants ³⁸. Nenci proposed an interesting, though a bit far-fetched, answer to the elephant versus the sow riddle, suggesting that it referred to the boar which represented the emblem of the legion that fought against Pyrrhus' elephants; in an open display of its magic force the emblem started grunting and scared off the elephants ³⁹. Yet, the argument would be more to the point if the fifth legion's military ability defeated the elephants. However, Aelian confused the oral tradition that the "pigs" (i.e. that specific legion) beat the elephants, with real pigs, which he then thought of as able to achieve such a thing by their squealing.

Nevertheless, as we have seen, the elephant was already associated in Antiquity with pigs as an illustration of its supposedly fearful nature vis-àvis the tiny. It could be that before Seneca, Pliny and Aelian, it was Aristophanes of Byzantium, in his now lost zoological handbook, who shaped the nucleus of the myth that the elephant dreads the pig's voice and that whether out of hate or fear, the fact is that elephants abhor pigs ⁴⁰. In Aesop's fable on "the camel, the elephant and the ape", the ape scorns the

^{37.} H. H. SCULLARD (1974), p. 114-115, p. 271, n. 58. In a similar defense tactic, in 1398 A.D., Tamerlane seems to have planned to set aflame the buffaloes from his army and thus scare away the Sultan of Delhi's fearful elephants, in case they raided his camp. See J. M. KISTLER (2005), p. 204.

^{38.} It is the *aes signatum* no. 9 in E. A. SYDENHAM (1952). On this see M. H. CRAWFORD (1974), vol. I, p. 132 and vol. II, p. 716-718. See also J. M. C. TOYNBEE (1973), p. 34; H. H. SCULLARD (1974), p. 115 and pl. 14; H. H. SCULLARD and Sir W. GOWERS (1950), pl. 16-17. H. H. SCULLARD (1948) concludes that the elephant depicted here is definitely Indian, as were Pyrrhus', and not African, in his argument against the case that the *aes signatum* referred to the Punic Wars. Yet, this is not a decisive argument, since Hannibal's elephant army included Indian elephants, F. DE VISSCHER (1960), p. 54-55.

^{39.} In support of his argument he cites Sextus Pompeius Festus, *De uerborum significatione* (ed. W. M. Lindsay, Leipzig, 1913, p. 298) *s.v. porci effigies*. See G. NENCI (1955), p. 394-395. However, against Nenci's suggestion see M. H. CRAWFORD (1974), p. 718, n. 1, who states that there is no evidence that "the sow *per se* was the badge of the Latins", although he also notes that the *aes* "may preserve the record of an incident in the Pyrrhic war", the well-known fear of elephants at the squeal of pigs.

^{40.} From which we have a Byzantine epitome, Ar. Byz., *Epit.*, 2.106-107 (Όρρωδεῖ δὲ ὁ ἐλέφας κεράστην κριὸν καὶ χοίρου βοήν. Τοὺς δὲ ὑς εἴτε μυσάττονται εἴτε καὶ δεδίασιν, ἀποστρέφονται γοῦν.)

elephant as a candidate for the throne of the animal kingdom, because with him as king there will always be fear in case a small pig invades the kingdom⁴¹. At the end of the ancient literary spectrum, Procopius presents a more natural and less gruesome historical example, whether true or fictitious, which is in fact a variation of the old stratagems. During the siege of Edessa by the Persian king Osroes I (544 A.D.), one of his elephants broke the thin balance between the two armies when it entered the city walls and brought Edessa closer to its capture. In a final but crucial act, the besieged hung a pig from the wall tower, the pig started squealing and as a result the elephant stepped back and left ⁴². The story is repeated in the Suda, where the Athenians replace the Edessians⁴³. In both cases, there are no frenzies, no fires or gruesome details, as if describing the obvious. But a new version is proposed by the anonymous Byzantine author of the Life of Alexander King of the Macedonians, who in an anachronistic move takes a giant step back and places the event during the first contact of Greeks and elephants in Alexander's military campaign. He narrates how Alexander the ingenious war leader, thought of catapulting (!) baby pigs which squealed even more wildly against king Porus' elephants. The elephants threw the towers they carried and ran away without looking back ⁴⁴.

No matter how unbelievable some of these stories may seem, regardless of how true or fictitious they are, the juxtaposition of elephants to pigs is manifest in Antiquity and it was probably the first of the ancient animosities and fears of the elephant. It originated either in a military historical precedent, the candidates being either Alexander's battle against Porus (although no historian of these wars narrates such an event) or a historical event during the wars of the successors or the Punic wars, Pyrrhus' military campaign or Caesar's victory at Thapsus. It seems pointless at the moment trying to establish a historical starting-point for

^{41.} Τὸν δὲ ἐλέφαντα, ὅτι δέος ἐστί, μὴ αὐτοῦ βασιλεύοντος χοιρίδιον ἡμῖν ἐπιθῆται: fable 220 in Perry's *Aesopica* (Urbana, 1952). On this fable and on animal elections in Aesop's fables see C. A. ZAFIROPOULOS (2001), p. 102-105.

^{42.} Procop., Pers., 8.14.35 and f. Cf. H. H. Scullard (1974), p. 205.

^{43.} Suda, s.v. κεκραγμός.

^{44.} Anonymus Byzantinus, Vita Alexandri Regis Macedonum, 36.6 (ed. Jürgen Trumpf, Stuttgart, 1974). See A. MAYOR (2003), p. 200. The two animals are mingled in an imaginary way in Dio Cassius' report of a bad omen at Rome, a miraculous birth of a pig that looked like an elephant except for its feet (HR, 43.2.1). Lucretius' famous reference at the boues lucae (RN, 5.1302-4) is followed, almost immediately, by his reference to the use of wild pigs in battle (sues saeuos, 1308-1309) without, however, making any further connection between elephants and pigs. In India elephants are said to flee when they hear the swine's grunting (as well as lions do to a rooster's cockcrow), J2614.3 TMI (= S. THOMSON, Motif-Index of Traditional Folk-Literature, vol. 1-6, Bloomington, 1955-1958).

such stories. Moreover, this enmity may also be the product of popular imagination, either from natural observation (although it is highly improbable that elephants, whether in their natural environment or in captivity would be afraid of other animals, let alone how hard it would be for them to come in contact with pigs) or from a juxtaposition of the big to the small, of the notoriously frightful but timid to the seemingly insignificant yet courageous ⁴⁵.

We should consider whether such hostility would be justified by the characteristics of the pig in comparison to those of the elephant. The answer is affirmative, taking into consideration that in folklore conflicts arise between opponents that present similarities, that is, opponents that can be placed and weighed under comparable terms. The boar is the opposite of Aristotle's docile and calm elephant: it is ferocious, aggressive, ignorant and stubborn ⁴⁶. Aristotle states that farmers get rid of rats in their fields by sending pigs to dig up the rats' holes ⁴⁷; since the enmity of elephants and mice is another case of elephant adversity, then pigs are successful also against another enemy of the elephant. In sum, behind this whole spectrum of the pig's confrontation with the elephant lies the idea that the beast is vulnerable. Therefore, appearances are deceptive and people should fear nothing if the giant elephant turns out to be harmless, as well as the view that the pachyderm can be penetrated not only by spears, swords and spikes but its eardrums are also penetrated by the shrieking sounds of such unimportant creatures as pigs and mice! Nevertheless, it remains an oddity that pigs do scare elephants. Still, what about our urban fantasies regarding the elephant's fear of mice and the traces of their animosity? At the moment, it seems that to scare an elephant is paradoxically easy enough: in ancient thought it takes a pig and some shrieking sounds. But it also takes a fearless insect.

From the second century A.D. onwards, a new hostility is manifest, namely that between the fly and the elephant. First in Lucian, who in his encomium of the insect points out that it torments ($\lambda \upsilon \pi \epsilon \hat{\imath}$) the elephant by entering ($\pi \alpha \rho \epsilon \iota \sigma \delta \upsilon \upsilon \mu \epsilon \upsilon \eta$) the many wrinkles of its fat skin and sucks its blood with its proboscis ($\tau \hat{\imath} \pi \rho \upsilon \upsilon \upsilon \mu \alpha \dot{\imath} \alpha$)⁴⁸. Once again, the issue of

^{45.} On this see C. A. ZAFIROPOULOS (2001), ch. 2, 4. A 6th century A.D. relief at Taq-i-Bustan depicts a royal boar hunt, possibly by king Chosroes, in which dead boars are loaded on elephants who had participated in the hunt, another indication of the beasts not being afraid of gruntings, such as those of the boar. See M. B. CHARLES (2007a), p. 333; J. CURTIS (2000), p. 80; H. H. SCULLARD (1974), p. 206-207.

^{46.} Arist., HA, 488b14-15; PA, 651a1.

^{47.} Id., HA, 580b23-4.

^{48.} Lucianus, Musc. Enc., 6.3-5.

penetration is present, this time using a μίμησις of a sword or a javelin, or rather a μίμησις of a proboscis, namely the sting at the fly's mouth that is also called 'proboscis' and which it uses to get its food as well as to seize and hold, like an elephant (καὶ τῇ προβοσκίδι, ἢν κατὰ τὰ αὐτὰ τοῖς ἐλέφασι καὶ αὐτὴ ἔχουσα προνομεύει τε καὶ ἐπιλαμβάνεται)⁴⁹. Lucian states that with its proboscis the fly can penetrate any type of mammal skin, even that of an elephant ⁵⁰. In the case of the philanthropist elephant the proboscis had also a defensive and protective role against the fly that annoyed sleeping babies ⁵¹. As regards the fly, however, the proboscis turns to an extremely strong, offensive weapon that can drill even an elephant, another case of like confronting the like. The two creatures are again juxtaposed in a different context: that of a famous proverb in Antiquity, "to make an elephant out of a fly" (ἐλέφαντα ἐκ μυίας ποιεῖν / ποιεῖς), that is, to exaggerate or to be arrogant and utter teratologies ⁵².

The connection of the elephant with the fly ($\mu \hat{\nu} \alpha$, $\mu \nu \hat{\iota} \alpha$, *musca*) would have been easier to make, compared to that between the elephant and the pig. Nowadays too, elephants attract swarms of flies, maybe because of the large quantities of dung they produce. Like the pig, the fly also has certain similarities with and differences from the elephant that explain their association in popular thought. Flies are also pious and have a proboscis like elephants ⁵³. Contrary to them, however, flies are notorious for their boldness and persistence, they are intrusive and impudent ⁵⁴. The 'soldier' or 'dog' fly ($\sigma \tau \rho \alpha \tau \omega \tau i \varsigma / \kappa \dot{\omega} \omega \nu$) was called so either because of its dwelling in military camps, or due to its persistence; hoplites were said to be afraid of its spear ⁵⁵. In ancient thought flies were often confused with horseflies

51. Ael., NA, 11.14; Athen., 607a, see above p. 244.

52. Lucianus, *Musc.Enc.*, 12.11-12; Apostolius, 7.5 CPG; Diogen., 2.67 CPG; Greg.Cyp., 3.4 CPG; Zenobius, 3.68 CPG; Suda *s.v.* ἐλέφας. Cf. M. DAVIES and J. KATHIRITHAMBY (1987), p. 155.

53. On the pious flies and their association with the cult of Hercules and Apollo see I. C BEAVIS (1988), p. 225; L. BODSON (1975), p. 10-15 and Paus., 5.14.1.

54. I. C BEAVIS (1988), p. 222-223. See H., Il., 17.570-572; X., *Mem.*, 3.11.5; Ael., *NA*, 2.29, 7.19 (it is impudent and hard to beat); Lucianus, *Musc.Enc.*, 5; Oppian, *Hal.*, 2.445 and f. However, the fly is also a symbol of the fragility of life, as in Simonides, fr. 355P.

55. I. C BEAVIS (1988), p. 220 and Tragica Adespota, fr. 295 Nauck.

^{49.} Ib., 3.9-14.

^{50.} Ib., 6 and Plin., HN, 8.30. See also J211.2.1 TMI (= S. THOMSON, *Motif-Index of Traditional Folk-Literature*, vol. 1-6, Bloomington, 1955-1958), an Indian fable where the fly flies free and jeers at the elephant who is at royal service but still a slave and J971, an Arab fable that reproduces the elephant's animosity against flies and the sensitivity of its ears; here it kills the flies that try to drink water from its ear.

and gnats, based on the belief that they all have a sting (the κέντρον), occasionally called proboscis like the elephant's trunk, with which they penetrate animals' skin and drink their blood ⁵⁶. In particular, the gadfly, the olorpoc, was notorious for attacking cattle, usually their ears, which would explain its confusion with the fly as an enemy of the elephant, especially regarding attacks at its vulnerable part. Its buzzing sound renders the gadfly even more perilous for its enemies. The image of penetration is once again present, as the $0i\sigma\tau\rho\sigma\zeta$ stings its victims and drives them into frenzy and loss of any control, leading them at exactly the opposite end of the moderate and human-like behaviour of the elephant. A proper adversary for an elephant, like the pig, the oforpoc too has military traits: it displays incredible courage - to the Aristotelian extreme of audacity -, and persistence ⁵⁷. Its confusion with the fly or the hypothesis of an original hostility between the $\hat{oi}\sigma\tau\rhooc$ and the elephant, although not stated in our sources, would be justifiable especially in the Roman world. That is because when the Romans first came in contact with Pyrrhus' Indian elephants during his military campaign in Italy, four of which were captured and paraded in triumph in Rome, they called the elephant "Lucanian cow", luca bos, probably for being seen for the first time in Lucania, north of Calabria ⁵⁸; that is, being a kind of *cow*, it would seem more reasonable that the elephant is tormented by the gadfly, the celebrated cause of cow frenzy. Moreover, if the hypothesis that the word 'elephant' derived from the Phoenician aleph (i.e. "the ox") is true, then the elephant would have been grouped with cattle already from its introduction into the Greek ⁵⁹.

58. J. M. C. TOYNBEE (1973), p. 33-34. Varro, *Ling.*, 7.39; Plin., *HN*, 8.16; Isid., *Etym.*, 12.2.15. Cf. Plu., *Pyrrh.*, 16 and f.

59. H. H. SCULLARD (1974), p. 264, n. 16 and R. D. BARNETT (1948), p. 6. Yet this would hardly explain the $-\alpha v\tau$ - form in the ending. R. D. BARNETT (1948), p. 6-7, proposes a similar but more plausible etymology from the Hittite word *u-lu-ba-das*, which was pronounced *ulubands*, and meant 'the bull'. M. L. West (1992) proposes a more persuasive reading from the Semitic '*alpu* ('the ox'), particularly from the phrase *alap Hane*, which means "ox from the area of Hanu at Euphrates". Another interesting consequence from the olortpoc substratum regarding the enmity between elephant and fly would be that the olortpoc was also notorious for the erotic frenzy into which it drove its victims, something which would make an excellent antithesis to the elephant's abstinence from sex. On the tragic olortpoc and its connotations see R. PADEL (1992), p. 14-17, p. 120-125.

^{56.} I. C BEAVIS (1988), p. 222.

^{57.} I. C BEAVIS (1988), p. 225-229; M. DAVIES and J. KATHIRITHAMBY (1987), p. 150-164. Arist., *HA*, 490a20, 528b29-31, 532a5 and f., 596b15, 661a25-6, 682b35; Ael., *NA*, 4.51, 6.37; Schol. *Od.*, 22.229. The olortpoc torments mammals: *Od.*, 22.300-301, Hdt., 2.93, A., *PB*, 566, 575 and f., *Suppl.*, 306 and f., 541 and f. On the vulnerability of the elephant's ear to the bite of a fly see H. DELBRÜCK (1975), p. 564, n. 8.

The confusions continued as next to the fly came the gnat. Achilles Tatius, at around the same time with Lucian's first reference describes the fear of the elephant for the gnat, especially for its penetrating buzzing. In the "fable of the gnat and the elephant" we read how the lion, dispirited by its fear of the rooster, regains its self-confidence when seeing the elephant constantly moving its ears in fear of the small and buzzing mosquito. The elephant believes that the mosquito will kill, if it enters his ears. The gnat proves to be so powerful that it can scare the mighty elephant ⁶⁰. The fable shows through the negative and tragic example of someone else's sufferings how one should never underestimate the small and insignificant, and always respect the latter's opponents. This fable, though, is followed by the "fable of the gnat", in which the arrogant gnat is mortally punished, the moral being that one should always respect the limits for action that derive from one's natural capacities, and always be on alert for a sudden change of affairs, which will definitely come if one is too boastful. In this fable the gnat sarcastically torments the lion. It leaves it exhausted and defeated, boasts of its power, not noticing a spider's web that turns out to be its fatal end. The fable provides us with a crucial characteristic of the gnat that would explain its entry into the list of elephant enmities. The gnat states that besides its bravery, it is a genuine instrument for war; it trumpets before taking position, similarly to an army; its mouth is both a trumpet and an arrow; it is at the same time a trumpeter and an archer ⁶¹. It turns itself into a bow and shoots itself towards its adversary, it penetrates and wounds the enemy. In fact, the gnat is the scariest archer, for it can never be seen. Its buzzing sound is like that of a trumpet which always plays the tune of victory ⁶². Furthermore, given the vulnerability of the elephant's

^{60.} Ούτω δὲ γνώμης ἔχων ἐλέφαντι περιτυγχάνει καὶ προσαγορεύσας εἰστήκει διαλεγόμενος. καὶ ὁρῶν διὰ παντὸς τὰ ὡτα κινοῦντα, "Τί πάσχεις;" ἔφη· "καὶ τί δή ποτε οὐδὲ μικρὸν ἀτρεμεῖ σου τὸ οῦς;" καὶ ὁ ἐλέφας, κατὰ τύχην παραπτάντος αὐτῷ κώνωπος, "Όρῷς," ἔφη, "τοῦτο τὸ βραχὺ τὸ βομβοῦν; ἢν εἰσδύῃ μου τῃ τῆς ἀκοῆς ὁδῷ, τέθνηκα." καὶ ὁ λέων, "Τί οῦν ἔτι ἀποθνῃσκειν," ἔφη, "με δεῖ, τοσοῦτον ὄντα καὶ ἐλέφαντος εὐτυχέστερον, ὅσον κρείττων κώνωπος ἀλεκτρυών;" ὑρῷς, ὅσον ἰσχύος ὁ κώνωψ ἔχει, ὡς καὶ ἐλέφαντα φοβεῖν. Ach. Tat., 2.20.2-2.21, fable 259 in Perry. Cf. J881.2, L478 TMI.

^{61.} Όργανον γὰρ ὅλος εἰμὶ πολέμου. Μετὰ μὲν σάλπιγγος παρατάττομαι, σάλπιγξ δέ μοι καὶ βέλος τὸ στόμα ὥστε εἰμὶ καὶ αὐλητὴς καὶ τοξότης. ἐμαυτοῦ δὲ ὀϊστὸς καὶ τόξον γίνομαι τοξεύει γάρ με διαέριον τὸ πτερόν, ἐμπεσῶν δὲ ὡς ἀπὸ βέλους ποιῶ τὸ τραῦμα ὁ δὲ παταχθεὶς ἐξαίφνης βοῷ καὶ τὸν τετρωκότα ζητεῖ. Ἐγὼ δὲ παρὼν οὐ πάρειμι. Ach. Tat., 2.22, fable 255 in Perry. See M. DAVIES and J. KATHIRITHAMBY (1987), p. 1-2 and M. L. WEST (1969), p. 114 and f. The trumpeteering gnat appears already in Aristophane's *Nubes*, 160 and f.

^{62.} Περιϊπτάμενος ἅμα καὶ τῷ βόμβῳ καταυλῶν [...] ἐπηύλει μέλος ἐπινίκιον. Cf. E., *HF*, 159-164 where the coward archers act against the heroic battle code,

ears, it seems reasonable that such a trumpeter triumphs against the fragile beast. But the elephant's proboscis is also said by Tatius to resemble a trumpet, which raises the possibility that another reason why these two creatures were opposed might have been their sharing this common linguistic feature ⁶³. The first to make such a connection was Aristotle who described the sound that the elephant makes using its trunk like that of a hoarse trumpet. Horace later used the word *barrus* as a synonym for elephant, a word etymologically linked with *barrire* which means "to roar", thus implying the deep and menacing sound that the elephant produces ⁶⁴. So, next to the animosity with the pig, there seems to be a popular and literarily established negative connection – mirrored in fables and proverbs – between elephants and insects, especially the fly but also the gnat and the otorpoc, which sting the sensitive elephant with their proboscis and torment him with their sound, as they would do to any cattle.

As regards the mouse, the arch-enemy of the elephant in modern popular fiction, it is quite impressive that this supposed enmity does not feature in any of the prolonged ancient accounts on the elephant, neither in the sources on its military and other use, nor in Aristotle, Pliny, Aelian, Arrian, Plutarch, Aristophanes of Byzantium and so on. The two creatures are first brought into an antithetical relation by Pliny in a framework that is completely different to that of the elephant and its traditional adversaries. Pliny states that of all living creatures elephants hate mice the most and, if they see one merely touch the fodder placed in their stall, they are repulsed by it (animalium maxime odere murem, et si pabulum in praesepio positum attingi ab eo uidere fastidiunt)⁶⁵! This is not a sign of a mutual enmity; it is rather a gesture of disgust and disdain, which looks very anthropomorphic for it resembles human reactions towards the mouse. That is, as regards its loathing of mice, the elephant reacts like a human. Such an aversion brings the philanthropist beast even closer to man and away from its animal nature, because now it also seems to share with men sensitivities and reactions to nature which are produced by 'civilization'. This story seems to reflect a new, urban approach to nature, which was also present in the image of elephants rocking cradles. Thus, a very popular proverb in Antiquity states that the elephant does not touch the mouse,

according to which one must stand for one's ground and not shoot from distance and then run away.

^{63.} Μεταξὺ δὲ τῶν ὀδόντων ἀνίσταται αὐτῷ προβοσκίς, κατὰ σάλπιγγα μὲν καὶ τὴν ὄψιν καὶ τὸ μέγεθος, εὐπειθὴς δὲ τῶν πρὸς τὸν ἐλέφαντα. Ach. Tat., 4.4.4.

^{64.} Hor., Epod., 12.1. See H. H. Scullard (1974), p. 264, n.14, Arist., HA, 536b22.

^{65.} Plin., HN, 8.10.29. Repeated by Isidore of Seville, Etym., 12.2.16.

meaning that it disregards it and thinks of it as totally base and unimportant to deal with ⁶⁶. However, although in fables worldwide the mouse is an enemy of the elephant, often a mortal one, it seems that ancient Greek and Roman imagination has not tackled such a relation ⁶⁷.

Yet, based on the previous adversities, it would make sense to make the mouse an enemy of the elephant. The mouse is pious and is associated with Apollo Smintheus, the god of plague, and Hercules⁶⁸. Similarly to the elephant, it is very brave and renowned for its military organization and its co-operative qualities⁶⁹. It also has internalized higher human qualities, as celebrated in fables where the mouse reciprocates favours⁷⁰. There is also an isolated testimony to the mouse as a trumpeter in a series of bronze mice in comic scenes wherein a mouse stands on its hind legs and blows a trumpet ⁷¹. But that is all. We have to wait until the fourth century A.D. to hear the first mention of the elephant's fear of mice. Saint Basil says that he does not admire the stature of the elephant but rather that of the mouse for it fills the elephant with the fear ⁷². This is the old Greek popular issue of

68. See Fr. BERNHEIM (1978); L. BODSON (1975), p. 66; O. HEKSTER (2002); A. H. KRAPPE (2004). There was also Dionysus Smintheus at Rhodes and the Sminthia festival in honour of him and Apollo, D. MORELLI (1959), p. 41-42, p. 122-125.

69. See O. KELLER (1909-1913), vol. I, p. 199-201. The military prowess of the mouse is mocked in the *Batrachomyomachia*. In a similar spirit fable 165 in Perry presents the ridiculous mice generals falling prey to the cat. Aelian, *NA*, 6.41 describes the movement of Egyptian mice as if it were an invading army that destroyed everything in its way, an image that makes sense given the cultic association of mice with Hercules. See O. HEKSTER (2002), p. 367-368. See also B. BECKMANN (1972), p. 65-66, p. 368. Cf. fable 146 in Perry and fable 82 in Babrius for the courageous mouse that runs over the body of a lion.

70. Fable 150 in Perry, 107 in Babrius and B371.1 TMI.

71. J. M. C. TOYNBEE (1973), p. 203, pl. 100 and H. B. WALTERS (1899), p. 284, no. 1858.

72. Basil., Hexaemeron, 9.5.71-72: Οὐ μαλλον ἄγαμαι τὸν ἐλέφαντα τοῦ μεγέθους, ἢ τὸν μῦν, ὅτι φοβερός ἐστι τῷ ἐλέφαντι. I must also point out here the anonymous reader's interesting suggestion that μῦς here refers to rats rather than mice

^{66.} Ἐλέφας μῦν οὐχ ἀλίσκει / οὐκ ἀλεγίζει, Apostolius, 7.8 CPG; Diogenianus, 4.45 CPG; Gregorius Cyprius, 2.48 CPG; Macarius, 3.75 CPG; Zenobius, 3.67 CPG.

^{67.} India and Congo: the elephant is killed by the mouse that runs through its trunk into its head and spreads poison over its brain, L315.5.1 TMI. India: the mouse single-handedly fights the elephant and destroys both the elephant and the kingdom, H1161.3.1 TMI. The elephant is on most friendly terms with the mouse in Hinduism, as in the case of Ganesha, one of the five main deities, the elephant-headed god, symbol of power and knowledge, who uses a mouse, in Sanskrit $M\bar{u}saa$ or $M\bar{u}sa$ (a form very close to the Greek and the Roman terms), as his humble vehicle, thus bringing together the big and the small, and symbolizing the importance of little things. Africa: the elephant curses the mouse, and vice versa, which results in the cursed being crushed whenever it crosses a road, A2239.9-10 TMI.

respect for every adversary, no matter how small or impotent, and of not judging by appearances, which can be highly and fatally deceptive, which has now been appropriated by the Christian context that gives hope to the socially powerless and the oppressed.

What happened in between? In the field of popular thought any conclusive interpretations are imprudent. With this in mind, I hypothesize that an aural confusion in Greek, intentional or accidental, might have led to a new animal hostility which proved to be more lasting and powerful in popular fiction. In particular, I suggest that at some unspecified point in the history of Greek popular thought the mouse, or $\mu \hat{\upsilon} \varsigma$ in Greek, became the new and eventually the most successful adversary of the elephant, due to an aural confusion, or rather a linguistic amalgam of the fly with the pig, the μυΐα and the \hat{v}_{ζ} , who had been the original enemies of the elephant in Greek and Roman thought ⁷³. This is not a far-fetched hypothesis, since a similar confusion and combination in popular thought has already been ingeniously attested by Papademetriou's study, which shows how a modern Greek proverb on the fly supposedly eating iron, derives from an ancient Greek and Latin paradoxon, according to which the mouse, the µûc and mus in Latin eats iron, a testimony on the strength and courage of mice. In particular, he argued that the modern Greek proverb $\tau p \omega(\gamma) \epsilon \eta \mu \psi \gamma \alpha$ σίδερο και το κουνούπι ατσάλι ("the fly eats iron and the mosquito steel") stems from a paradoxon often cited by Greek and Roman authors (such as Aelian, Antigonus of Carystus, Livy, Pliny the elder, Theophrastus and others), namely that there exist mice that eat iron or other metals. He rightly notes that in fables and proverbs "substitution of one animal for another is quite usual" without any change in the morale of the fable or the proverb. The close phonetic similarity of mice (µúες) and flies $(\mu \nu i \alpha i, \mu \hat{\nu} \epsilon \varsigma)$ led to an aural misunderstanding and then to the linguistic substitution of flies for mice ⁷⁴. Apart from this linguistic scenario, though,

and thus to their bites of captive elephants. However, Basil's statement seems to me to be more in line with a traditional image of the elephant being afraid of small creatures, set by him against a novel adversary, rather than an information he had read (I am not aware of any such information in our surviving ancient sources) or perceived himself (to my knowledge, despite his erudition, he was not a man who was on good terms with the observation of the natural world). Still, I would not rule out the possibility that St. Basil referred here to rats' bites, although he does not say it (which would have been expected, since he subsequently describes into detail the scorpion's use of its sting). See also the objections on the translation of the word $\mu \hat{\nu} \varsigma$ as 'rat' in P. CHANTRAINE (1999), s.v. $\mu \hat{\nu} \varsigma$.

^{73.} Mice and hogs are brought together when they both put elephant cavalry to flight, in K2351.3 TMI.

^{74.} J.-Th. PAPADEMETRIOU (1970), based on the similar sounding and writing of the two words which led to confusions in folk literature. Actually, in modern Greek,

such a juxtaposition may have also derived from outside the Greco-Roman world, where the two animals were already in opposition, namely from an Indian tradition that came to Greece either after Alexander's campaign or through the Hellenistic kingdoms, or from an African tradition that could have come to Rome through its contacts - military, for example - with Africa. Whatever their origins, however, the fact is that the elephant's ancient enemies share certain characteristics of boldness and / or bravery, of military skills, of the ability to penetrate physically or aurally, which may have derived from the natural sensitivity and the annoyance of the beast's ear to buzzing sounds of a fly or of insects in general. This justified and animated the popular notion and motif of not underestimating the small and insignificant fly or pig, which, whether or not the hypothesis of a linguistic confusion stands, developed into the more successful confrontation of the elephant with the mouse. Originally, the aim of such a story could have been to diminish the terrifying notoriety of the elephant as a weapon in the hands of an enemy. This constituted a novel experience for the ancient world that was expanding ever more, yet in the end it came to symbolize the aforementioned maxim in favour of the weak. The elephant's image as a fearful war machine weakened and waned after numerous failures in battle, a reasonable consequence of its difficult tactical handling and the gradual improvement, after many centuries of battle experience, of strategies against it. Thus, fiction and reality paved the way for our modern urban view of mice and elephants.

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the plural for flies (μύγες, compared to ancient Greek μυῖαι) sounds very similar to mice (μύες). In fact, in places such as Pholegandros, Siphnos, Thessaly, Ainos of Thrace, the form μῦες is used, a form much closer to the modern Greek word for mice. See J.-Th. PAPADEMETRIOU (1970), p. 101, n. 37. The latter has been replaced in modern Greek by ποντικοί (the adjective from the phrase ποντικος μῦς, that is "a kind of weasel" or the "ship rat", following G. BABINIOTIS, Λεξικό της Νέας Ελληνικής Γλώσσας, Athens, 2008, *s.v.* ποντίκι).

Bibliography

- S. AMIGUES (2005) : "Les animaux nommés ΣΚΩΛΗΞ dans les *Indica* de Ctésias, *FGrH* 45 (46)", *Revue de Philologie* 79, p. 7-15.
- P. D. ARMANDI (1843) : Histoire des éléphants dans les guerres et les fêtes des peuples anciens jusqu'à l'introduction des armes à feu, Limoges.
- L. AMBROSINI (2001) : "Un donario fittile con elefanti e Cerbero dal santuario di Portonaccio a Veio", in G. CAVARRETTA, D. GIOIA, M. MUSSI, R. PALOMBO (ed.), La Terra degli Elefanti. Atti del 1º Congresso Internazionale, Roma, 381-386.
- L. AMBROSINI (2005) : "Cerbero e l'elefante. Ipotesi sulla ricostruzione di un donario fittile dal santuario di Portonaccio a Veio", in A. COMELLA, S. MELE (ed.), Depositi votive e culti dell'Italia Antica dell'età arcaica a quella tardo-repubblicana. Atti del Convegno di studi Perugia, 1-4 giugno 2000, Bari, p. 189-207.
- E. BADIAN (2000) : "Darius III", HSCPh 100, p. 241-267.
- J. P. BALSDON (1969) : Life and Leisure in Ancient Rome, New York.
- R. D. BARNETT (1948) : "Early Greece and Oriental Ivories", JHS 68, p. 1-25.
- I. C. BEAVIS (1988) : Insects and Other Invertebrates in Classical Antiquity, Exeter.
- B. BECKMANN (1972) : Die Maus im Altertum: Vorbereitende Unterschungen zu einer Herausgabe der hochmitelalterlichen Mäusesagen, Zürich.
- Fr. BERNHEIM (1978) : "The Sminthian Apollo and the Epidemic among the Achaeans at Troy", *TAPhA* 108, p. 11-14.
- J. M. BIGWOOD (1993) : "Aristotle and the Elephant again", *AJPh* 114, p. 537-555.
- L. BODSON (1975) : IEPA ZQIA. Contribution à l'étude de la place de l'animal dans la religion grecque ancienne, Bruxelles.
- A. R. BURN (1952) : "Notes on Alexander's Campaigns, 332-330", JHS 72, p. 81-91.
- R. CARRINGTON (1958) : Elephants: A Short Account of their Natural History, Evolution, and Influence on Mankind, London.
- P. CHANTRAINE (1999) : Dictionnaire étymologique de la langue grecque. Histoire des mots (with a Supplement by A. BLANC, Ch. de LAMBERERTERIE, J.-L. PERPILLOU), Paris.
- M. B. CHARLES (2007a) : "The Sassanian Elephant Corps", *Iranica Antiqua* 42, p. 301-346.
- M. B. CHARLES (2007b) : "Elephants at Raphia: Reinterpreting Polybius 5.84-5", CQ 57, p. 306-311.
- H. COHEN (1930) : Description historique des monnaies frappées sous l'Empire Romain, vol. 1, Leipzig.
- M. H. CRAWFORD (1974) : Roman Republican Coinage, vol. 1-2, Cambridge.
- J. CURTIS (2000²) : Ancient Persia, London.

- M. DAVIES, J. KATHIRITHAMBY (1987) : Greek Insects, Oxford.
- F. DE VISSCHER (1960) : "Une histoire d'éléphants", AC 29, p. 54-55.
- H. DELBRÜCK (1975) : History of the Art of War within the Framework of Political History. Vol. 1: Antiquity, London (transl. of Geschichte der Kriegkunst im Rahmen der politischen Geschichte, vol. 1-2, Berlin, 1920-1936).
- A. M. DEVINE (1975) : "Grand Tactics at Gaugamela", Phoenix 29, p. 374-385.
- P. DUCREY (1985) : Guerre et guerriers dans la Grèce, Fribourg.
- M. FOUCAULT (1985) History of Sexuality. Vol.2: Use of Pleasure, London (transl. of Histoire de la sexualité. Vol. 2 L'Usage des plaisirs, Paris, 1984).
- M. GIEBEL (2003) : Tiere in der Antike. Von Fabelwesen, Opfertieren und treuen Begleitern, Darmstadt.
- R. F. GLOVER (1943-1944) : "The Elephant in Ancient War", CJ 39, p. 257-269.
- R. F. GLOVER (1948) : "The Tactical Handling of the Elephant", G&R 17, p. 1-11.
- G. T. GRIFFITH (1947-1948) : "Alexander's Generalship at Gaugamela", JHS 67-68, p. 77-89.
- O. HEKSTER (2002) : "Of Mice and Emperors: a Note on Aelian *De Natura* Animalium 6.40", *CPh* 97, p. 365-370.
- F. L. HOLT (2003) : Alexander the Great and the Mystery of the Elephant Medallions, Berkeley London.
- K. KARTTUNEN (1977) : India and the Hellenistic World, Helsinki.
- O. KELLER (1909-1913) : Die antike Tierwelt, 2 vol., Leipzig.
- J. M. KISTLER (2005) : War Elephants, London.
- A. H. KRAPPE (2004) : "Apollo Smintheus", CPh 36, p. 133-141.
- V. J. MAGLIO (1973) : Origin and Evolution of the Elephantidae, Philadelphia.
- I. MASTROROSA (2003) : "Proximumque humanis sensibus (*Plin.* Nat. 8,1,1: gli elefanti degli antichi fra etologia e aneddotica storico-geografica", in F. GASTI, E. ROMANO (ed.), *Buoni per pensare. Gli animali nel pensiero e nella letteratura dell' antichità*, Pavia, p. 125-146.
- A. MAYOR (2003) : Greek Fire, Poison Arrows and Scorpion Bombs. Biological and Chemical Warfare in the Ancient World, New York London.
- D. MORELLI (1959) : I Culti in Rodi, Pisa.
- J. C. MURPHY, R. W. HENDERSON (1997): Tales of Giant Snakes. A Historical Natural History of Anacondas and Pythons, Malabar, FL.
- G. NENCI (1955) : "Un prodigio dei *signa* nella battaglia di *Ausculum* e le origini di un *topos* fisiologico", *RFIC* 33, p. 391-404.
- S. O'BRYHIM (1991) : "Hannibal's Elephants and the Crossing of the Rhone", CQ 41, p. 121-125.
- I. OPELT (1959) : "Elefant", *Reallexikon für Antike und Christentum*, vol. 4, p. 1001-1026.
- R. PADEL (1992): In and Out of the Mind. Greek Images of the Tragic Self, Princeton.
- J.-Th. PAPADEMETRIOU (1970) : "The Mutations of an Ancient Greek Proverb", REG 83, p. 94-105.

- A. S. PEASE (1904) : "Notes on Some Uses of Bells among the Greeks and Romans", *HSCPh* 15, p. 29-59.
- J. S. ROMM (1989) : "Aristotle's Elephants and the Myth of Alexander's Scientific Patronage", *AJPh* 110, p. 566-575.
- H. H. SCULLARD (1948) : "Hannibal's Elephants", NC 8, p. 158-168.
- H. H. SCULLARD (1974) : The Elephant in the Greek and Roman World, Ithaca.
- H. H. SCULLARD, Sir W. GOWERS (1950) : "Hannibal's Elephants again", NC 10, p. 271-283.
- S. SIKES (1971) : The Natural History of the African Elephant, New York.
- R. SUKUMAR (2003) : The Living Elephants: Evolutionary Ecology, Behavior and Conservation, Oxford.
- E. A. SYDENHAM (1952) : The Coinage of the Roman Republic, London.
- H. G. H. TABOADA (1995) : "Polibio (5.84.5 S.) y los elefantes de Rafia", *Habis* 26, p. 113-117.
- J. M. C. TOYNBEE (1973) : Animals in Roman Life and Art, London.
- P. WALDAU (2002) : The Specter of Speciesism. Buddhist and Christian Views of Animals (Oxford).
- H. B. WALTERS (1899) : Catalogue of the Bronzes, Greek, Roman, and Etruscan in the British Museum, London.
- M. WELLMANN (1905) : "Elefant", RE 5, p. 2248-2257.
- M. L. WEST (1969) : "Near Eastern Material in Hellenistic and Roman Literature", HSCPh 73, p. 113-134.
- M. L. WEST (1992) : "Elephant", Glotta 70, p. 125-128.
- J. H. WILLIAMS (1950) : Elephant Bill, New York.
- L. M. WILLS (2002) : Ancient Jewish Novels. An Anthology, Oxford.
- C. A. ZAFIROPOULOS (2001) : *Ethics in Aesop's Fables: the* Augustana *Collection*, Leiden.