## HANNIBAL, ELEPHANTS AND TURRETS IN SUDA @ 438 [POLYBIUS FR. 162<sup>B</sup>] – AN UNIDENTIFIED FRAGMENT OF DIODORUS\*

Suda Θ 438: Θωράκιον ὅτι Ἀννίβας, Καρχηδονίων στρατηγός, φέρων τῶν ἐλεφάντων τὰ θωράκια καὶ τοῖς τῶν θηρίων οἰκιδίοις ἐπὶ πλεῖστον ὕψος τοὺς κλάδους ἀποκόπτων ἀσφαλῆ καὶ ῥαδίαν τὴν ὁδοιπορίαν κατεσκεύαζε.

*Thôrakion*: Hannibal, the Carthaginian general, by carrying the turrets of the elephants and making use of the beasts' litters to cut away the branches to the greatest height, made the route secure and easy.

This entry in the *Suda* has had a chequered history as a potential fragment of Polybius' *Historiae*. It was first identified as Polybian by Casaubon and included in the *editio princeps* of 1609, and was retained in subsequent editions, though one suspects owing more to scholarly inertia than conviction. It was excised by Schweighäuser (1789–95) and restored by Büttner-Wobst (1904), but marked in square parenthesis as dubious. It thus resides in the current Teubner edition among the *fragmenta ex incertis libris*  $[162^b]$ . It continues to be cited in both general and specialist lexica as a doubtful or spurious fragment of Polybius. In consequence its authenticity has been universally distrusted in modern scholarship from various perspectives – lexical, textual and historical: in her edition of the *Suda* Adler marks  $\theta$  438 as a dubious citation of Polybius; in his classic study of the elephant in

- \* I am grateful to Nicholas Sekunda (University of Gdansk) and Michael Charles (Southern Cross University NSW) for their comments, and to the latter for kindly allowing me to read his paper (2008) in advance of publication. The following abbreviations have been used: Bigwood (1980) = J.M. Bigwood, 'Diodorus and Ctesias', Phoenix 34.3 (1980), 195-207; Chamoux and Bertrac (1993) = F. Chamoux and P. Bertrac, Diodore de Sicile: Bibiothèque Historique. Introduction générale. Livre I ([Budé] Paris, 1993); Charles (2008) = M.B. Charles, 'African forest elephants and turrets in the Ancient World', *Phoenix*, forthcoming; Charles and Rhodan (2007) = M.B. Charles and P. Rhodan, 'Magister Elephantorum: a reappraisal of Hannibal's use of elephants', CW 100.4 (2007), 363-89; Goukowsky (1972) = P. Goukowsky, 'Le roi Pôrus, son éléphant et quelques autres', BCH 96 (1972), 473-502; Goukowsky, Diodore XVII = P. Goukowsky (ed. and French trans.), Diodore de Sicile, Bibliothèque Historique Livre XVII ([Budé] Paris, 1976); Goukowsky, Fragments II = P. Goukowsky (ed., French trans. and comm.), Diodore de Sicile, Bibliothèque Historique. Fragments II. Livres XXI-XXVI ([Budé] Paris 2006); Gowers and Scullard (1950) = W. Gowers and H.H. Scullard, 'Hannibal's elephants again', NC (ser. 6) 10 (1950), 271-83; Scullard (1948) = H.H. Scullard, 'Hannibal's elephants', NC (ser. 6) 8 (1948), 158-68; Scullard (1974) = H.H. Scullard, The Elephant in the Greek and Roman World (London, 1974); Walbank, Commentary = F.W. Walbank, A Historical Commentary on Polybius (Oxford, 1957-67).
  - <sup>1</sup> A. Adler (ed.), Suidae Lexicon (Leipzig, 1928–38; repr. Stuttgart, 1967–71), 2.724.
- <sup>2</sup> I. Casaubon (ed.), *Polybii ... Historiarum libri qui supersunt* (Paris, 1609), 1027; J. Schweighäuser (ed.), *Polybii Megalopolitani Historiarum quidquid superest* (Leipzig, 1789–95), 5.60–1, fr. 22; T. Büttner-Wobst (ed.), *Polybius, Historiae* ([Bibliotheca Teubneriana] Leipzig, 1904; repr. Stuttgart, 1967), 4.535, fr. 162<sup>b</sup>.
- <sup>3</sup> E.g. H. Stephanus et al. (edd.), *Thesaurus Graecae Linguae* (Paris, 1831–65<sup>3</sup>), 4.474, s.v. θωράκιον, 5.1781, s.v. οἰκίδιον; LSJ<sup>9</sup>, 813, s.v. θωράκιον, 1203, s.v. οἰκίδιον [Plb.] fr. 162<sup>b</sup>; A. Mauersberger (ed.), *Polybios–Lexicon* (Berlin, 1956–68; repr. 2006), Bd 1.3, 1164, s.v. θωράκιον, Bd. 1.4, 1722, s.v. οἰκίδιον: [fr. 162b].

Graeco-Roman antiquity Scullard dismisses the entry on the grounds that 'the source is not known and only very doubtfully could it be attributed to Polybius'; while Walbank excludes the fragment from his commentary.<sup>4</sup> To the present author's knowledge, however, Polybius' authorship has never been defended or refuted with argumentation. If it is true that the ascription to Polybius was never more than Casaubon's overconfident surmise, can the fragment be assigned with confidence to another author? There is more at stake than a purely parochial issue of Polybian studies or locating a new abode for a homeless fragment. The wider historical significance of Suda  $\theta$  438 for the campaigns of Hannibal is that, excepting some demonstrably fictive allusions in later Latin poetry, this fragment contains the only explicit and unequivocal statement that Hannibal's elephants were furnished with turrets. Furthermore, all previous studies of this armament have overlooked the important information concerning its terminology and construction that this fragment uniquely preserves. Identification of the author and ultimate source will therefore contribute to the protracted debate over whether African forest elephants, distinct from the Indian species, were so equipped in Carthaginian armies or more broadly in the Hellenistic period.

The first task in the process of identification is to narrow the field of candidates. It has long been recognized, if not widely appreciated, that the compiler of the *Suda* (c. 1000) did not derive its numerous quotations of historical authors from first-hand acquaintance with the original works but rather though the convenient medium of a recently published encyclopaedia. De Boor demonstrated that all the historical entries in the *Suda*, with the exception of those that originate from earlier lexica or scholia, were drawn from the *Excerpta Constantiniana*, the thematic volumes of historical extracts compiled at the direction of Constantine VII Porphyrogenitus (913–59), with the overwhelming majority of citations being, as here, anonymous. There is no reason to believe that *Suda*  $\theta$  438 uniquely derives from a different source or methodology. The compiler of the *Suda* used only a small number of volumes of *Excerpta*. Of those volumes fully or partly preserved today, he made use of *De virtutibus et vitiis* and *De legationibus*, but not *De insidiis* or *De sententiis*. In addition, the *Suda* drew material from volumes that have not survived, among which De Boor identified the second half of *De virtutibus*, as well as the  $\pi \epsilon \rho \hat{\iota}$   $\sigma \tau \rho \alpha \tau \eta \gamma \eta \mu \acute{\alpha} \tau \omega v$ ,  $\pi \epsilon \rho \acute{\iota}$ 

<sup>&</sup>lt;sup>4</sup> A. Adler (ed.), *Suidae Lexicon*, loc. cit. (app. crit.); Scullard (1974), 242 (reiterating id. [1948], 162, n. 9); Walbank, *Commentary*, III 753.

<sup>&</sup>lt;sup>5</sup> The dependence of the *Suda* on the *Excerpta Constantiniana* was first observed by H. Valesius (ed.), *Polybii, Diodori Siculi* ... *Excerpta ex Collecteneis Constantini Augusti Porphyrogentae* (Paris, 1634), unpag. pref., but the nature and extent of the relationship was demonstrated by C. de Boor, 'Suidas und die Konstantinische Exzerptsammlung', *BZ* [pt. I] 21 (1912), 381–424; [pt. II] 23 (1914–19), 1–127; and exemplified in previous case studies: 'Zu Iohannes Antiochenus', *Hermes* 20 (1885), 321–30, at 327–30; 'Die Chronik des Georgius Monachus als Quelle des Suidas', *Hermes* 21 (1886), 1–26. See also J. Becker, *De Suidae Excerptis Historicis* (Bonn, 1915); A. Adler (ed.), *Suidae Lexicon*, I sxi–xi; reiterated in id., 'Suidas (Lexikograph)', *RE* 4A.1 (1932), 675–717, at 679, 700–6; P. Lemerle, *Le Premier Humanisme Byzantin. Notes et remarques sur enseignement et culture à Byzance des origines au Xe siècle* (Paris, 1971), 285–7.

<sup>&</sup>lt;sup>6</sup> There is no question that  $Suda~\theta~438$  might derive from an earlier lexicon and scholion; De Boor (n. 5 [1914–19]), 22–37 shows that in historical entries originating from such sources the author is always cited, mostly using  $\dot{\omega}_S$  or  $\pi\alpha\rho\dot{\alpha}$ . In contrast, the majority of entries deriving from the *Excerpta Constantiniana* are anonymous; in the minority of instances where the author is specified he is almost always named in the nominitive preceding the citation, occasionally with  $\lambda\dot{\epsilon}\gamma\epsilon\iota$  or  $\phi\eta\sigma\dot{\iota}$ .

 $\tilde{\epsilon}$ κκλησιαστικῶν,  $\pi\epsilon\rho$ ὶ ἀνδραγαθημάτων, and perhaps one other volume with military content. The *Suda* therefore becomes an indirect source for the contents of these lost volumes. Since *Suda* θ 438 is not found in the extant volumes of *Excerpta*, it must come from a historical work that was excerpted in one of the lost volumes. Given the subject matter – a famous general devising a solution to a natural obstacle – one might conjecture that the  $\pi\epsilon\rho$ ὶ  $\sigma\tau\rho\alpha\tau\eta\gamma\eta\mu\dot{\alpha}\tau\omega\nu$  was the most likely intermediary.

A good picture of the historical works quarried during the compilation of the Excerpta has been constructed from the indices auctorum preserved in the prologues of the extant volumes (De legationibus 1, De virtutibus), or, where the prologue is missing, identified from the contents (De legationibus 2, De insidiis, De sententiis), or, for lost volumes, reconstructed from entries in the derivative Suda. For the present purposes it is sufficient to observe that, for the classical and Hellenistic periods, Constantine's excerptors relied exclusively on a small number of long narrative histories by well-known authors. Their selection must in part reflect the historical holdings of the imperial library at Constantinople, but from a practical perspective such works were better suited to the process of excerption than short and/or specialised monographs. The moral dimensions and edifying intent of Constantine's great encyclopaedic project also called for reliance on reputable authorities. It can be established with confidence, therefore, that of the historical texts known to have been excerpted in the Excerpta only four authors could have supplied material relating to Hannibal, namely Polybius, Diodorus, Appian and Cassius Dio. Suda  $\theta$  438 must belong to one of this quartet.9

In addition to the potential author, one should consider where in an account of Hannibal's campaigns the incident described could have possibly occurred. The technical aspects of  $Suda~\theta~438$  will be discussed below, but the context of the episode appears to be a march through heavily wooded terrain by a Carthaginian force equipped with elephants; the challenge is logistical – a time-consuming and labour-intensive operation of forest clearance – and combat with the enemy does not appear to be imminent. Since elephants were known to be impeded by dense woodland, it may be assumed that this forested district was too extensive to be easily circumvented and/or that the route taken by Hannibal was one of strategic or tactical necessity or advantage. The name of Hannibal is freely associated with war-elephants, but in the

 $<sup>^7</sup>$  For cross-references in the extant Excerpta to the lost  $\pi\epsilon\rho \grave{\iota}$  στρατηγημάτων cf. EL 1.14.26, 62.31; 2.379.26; EV 1.335.19; 2.116.19, 123.26; EI 222.3; ES 131.28;  $\pi\epsilon\rho \grave{\iota}$  ἐκκλησιαστικεν: EV 1.145.18;  $\pi\epsilon\rho \grave{\iota}$  ἀνδραγαθημάτων: EV 1.338.7, 354.4; 2.120.6; EI 33.8. There are several candidates for the other volume(s) with military content:  $\Pi\epsilon\rho \grave{\iota}$  συμβολη̂ς: EV 1.99.9;  $\Pi\epsilon\rho \grave{\iota}$  συμβολη̂ς πολέμων: EI 207.34 (if the last two are indeed different); or  $\Pi\epsilon\rho \grave{\iota}$  νίκης: EL 2.390.3;  $\Pi\epsilon\rho \grave{\iota}$  ἀνακλήσεως ἤττης: EV 1.9.20;  $\Pi\epsilon\rho \grave{\iota}$  ἤττης: ES 210.15.

 $<sup>^8</sup>$  Accordingly, A. Adler (ed.), *Suidae Lexicon* 2.724 (marg.) marks  $\theta$  438 as 'E' = 'Excerpta Constantini Porphyrogenitae quae hodie non exstant' (cf. 1.xix.).

<sup>&</sup>lt;sup>9</sup> For detailed argumentation see C. de Boor, 'Zu den Exzerptsammlungen des Konstantin Porphyrogennetos', *Hermes* 19 (1884), 123–48; id. (n. 5 [1912]), esp. 408–14; T. Büttner-Wobst, 'Die Anlage der historischen Encyclopädie des Konstantinos Porphyrogennetos', *BZ* 15 (1906), 88–120, esp. 96–100. For the most convenient summary of the shape and composition of the *Excerpta Constantiniana* see the masterly P. Lemerle (n. 5), 280–8; recently affirmed and elaborated by B. Flusin, 'Les *Excerpta* constantiniens, logique d'une anti-histoire', in S. Pittia (ed.), *Fragments d'Historiens grecs autour de Denys d'Halicarnasse* (CEFR 298 [Rome, 2002]), 537–59. See similar arguments in T.M. Banchich, 'An identification in the *Suda*: Eunapius on the Huns', *CPh* 83 (1988), 53.

<sup>&</sup>lt;sup>10</sup> Elephants entangled among trees: Sall. *Iug.* 53.3, *impeditos ramis arborum*. Plut. *Pyrrh*. 21.7 may refer to Pyrrhus' elephants impeded by a wooded riverbank at the battle of Ausculum in 279

sources his deployment of these animals is limited to two relatively brief and well-documented periods. <sup>11</sup> First, in the opening stages of the Second Punic War, in summer/autumn of 218 B.C., Hannibal led an army of invasion, including 37 elephants, from the Roman–Carthaginian frontier on the Ebro, through southern Gaul and across the Alps. An unspecified number survived the Alpine transit to fight at the battle of the Trebia (late 218 B.C.), though all but one of the remaining beasts died during the harsh winter of 218/17 B.C. <sup>12</sup> The authorities at Carthage voted a reinforcement of 40 elephants in 216 B.C. (Livy 23.13.7) and an unstated number disembarked in Italy in 215 B.C. (ibid. 41.10), but their role and significance in subsequent operations are obscure, not least because of inconsistencies in the evidence that have been much discussed in modern scholarship. <sup>13</sup> Second, Hannibal deployed at least 80 elephants at the battle of Zama in 202 B.C., without success. <sup>14</sup>

B.C., as Scullard (1974), 106; Charles and Rhodan (2007), 379; however, in the most recent editions the reading  $\delta\lambda\omega\delta\eta$  found in all codices is emended to  $i\lambda\nu\omega\delta\eta$  (ed. K. Ziegler [1971²]; ed. corr. cum add. H. Gärtner [1996]), in which case the obstacle would be mud, though I can see no compelling reason to distrust the transmitted text. See discussion of this episode in A.B. Nederlof, *Plutarchus' Leven van Pyrrhus. Historische Commentaar* (Amsterdam–Paris, 1940), 144–6, and generally R.F. Gower, 'The tactical handling of the elephant', G&R 17 (1948), 1–11, at 5; Charles and Rhodan (2007), 379–80.

- <sup>11</sup> See Scullard (1948); Gowers and Scullard (1950); Scullard (1974), 154–77; J. Edwards, 'The irony of Hannibal's elephants', *Latomus* 60 (2001), 900–5; and now Charles and Rhodan (2007). The *Suda* entry is not adduced.
- <sup>12</sup> Polyb. 3.42.11 numbers 37 elephants at the crossing of the Rhône; cf. App. *Hann.* 1.4; Eutr. *Brev.* 3.8.2. On the Trebia see Charles and Rhodan (2007), 372–6. Sole survivor of winter 218/17 B.C.: Livy 21.56.6, 58.11; 22.2.10; Zonar. 8.24 (Dindorf 2.242.6–7).
  - <sup>13</sup> For the meagre references to post-215 B.C. elephants and bibliography see n. 21 below.
  - <sup>14</sup> Polyb. 15.11.1; Livy 30.32.4, 35.3; App. Pun. 7.40; Front. Str. 2.3.16.
- <sup>15</sup> For the countless attempts to match ancient accounts to modern topography see selectively Walbank, *Commentary*, 1.382–7 with older literature; D. Proctor, *Hannibal's March in History* (Oxford, 1971); J. Seibert, *Forschungen zu Hannibal* (Darmstadt, 1993), 195–200; J. Prevas, *Hannibal Crosses the Alps: The Invasion of Italy and the Punic Wars* (Cambridge, MA, 1998).
- <sup>16</sup> See the brief summary of historical and ecological data by G. de Beer, *Alps and Elephants: Hannibal's March* (London, 1955), 144–7; with additional thoughts by D. Proctor (n. 15), 205–7.
- 17 Cassius Dio apud Zonar. 8.23 (Dindorf 2.239–40), Ἐντεῦθεν Ἀννίβας ἀπιέναι πρὸς Ἰταλίαν σπεύδων, ὑποπτεύων δὲ τὰς ἐπιτομωτέρας τῶν ὁδῶν, ἐκείνας μὲν παρεξῆλθεν, ἑτέραν δὲ πορευθεὶς ἰσχυρῶς ἐπόνησε (Then Hannibal, in haste to set out for Italy, but suspicious of the more direct roads, turned aside from them and followed another, in which he met with grievous hardships ...'); there follows a literary topos of icy mountain fastnesses of the sort Polybius (3.47.6–12) had already criticized.

not found in Polybius' account, when, in order to make a massive bonfire to shatter an obstructive boulder, Hannibal's troops arboribus circa immanibus deiectis detruncatisque struem ingentem lignorum faciunt ('felled some huge trees that grew near at hand, and lopping off their branches, made an enormous pile of logs'). 18 More generally, the essentially pro-Barcid accounts that underlie the historical tradition of the march from the Ebro to Cisalpine Gaul exalt the courage and endurance of Hannibal and his army, and the crossing of the Alps in particular became a crucial ingredient in Hannibal's development as a heroic and, later, romantic figure. 19 Stories of how the Carthaginians triumphed over natural obstacles unsurprisingly accumulate in this phase of the war, including the well-documented crossing of the Rhône, of which there were conflicting ancient accounts, and other remarkable episodes of route-clearance and road building.<sup>20</sup> It is not impossible that the *Suda* entry refers to an otherwise unreported incident after 215 B.C., when Hannibal received new elephants from Africa, and the Roman pursuit of 'Fabian tactics' dictated the avoidance of open ground in favour of hilly or obstructed terrain, though one struggles to identify a trace of any corresponding operation or locale in the sources for this later period. Furthermore, references to elephants after 215 B.C. occur almost exclusively in Livy's account. Modern scholarship has tended to dismiss these Livian beasts as the exaggeration or invention of a Roman annalistic tradition, but, for the present purposes, their disputed historicity is of less significance than the fact that Livy clearly drew this information from a source that was not exploited by our four Greek historians, for whom elephants are predominantly an exotic logistical challenge of the Ebro-to-Italy march of 218 B.C.<sup>21</sup>

- Livy 21.37.2; cf. also App. Hann. 1.4; Amm. Marc. 15.10.11; Syrianus Magister [Anon. Byz.], De Re Strategica 18 (61.51–6), ed. G.T. Dennis, Three Byzantine Military Treatises ([CFHB Series Washingtoniensis 25] Washington, D.C., 1985) (as 'the Anonymous Byzantine Treatise on Strategy'). On this incident see E.T. Sage, 'A chemical interpretation of Livy', Classical Weekly 16 (10) (1922–3), 73–6; de Beer (n. 16), 112–13; J. Prevas (n. 15), 148–9. For the scientific phenomenon in antiquity see also Vitr. 8.3.19; Pliny, NH 23.27.57; Vita S. Theodori Syceotae 55, ed. and French trans. A.-J. Festugière, Vie de Théodore de Sykéôn ([Subsidia Hagiographica 48] Brussels, 1970), 1.47.
- <sup>19</sup> C. Jourdain-Annequin, 'L'image de la montagne ou la geographie à l'epreuve du mythe et de l'histoire: l'exemple de la traversée des Alpes par Hannibal', *DHA* 25.1 (1999), 101–27; D. Hoyos, *Hannibal's Dynasty: Power and Politics in the Western Mediterranean, 247–183 BC* (London, 2003), 111.
- <sup>20</sup> Cf. Polyb. 3.54.5–55.9; Livy 21.36.1–37.6; Nepos, *Hann.* 3.4. For logistical difficulties: J.F. Shean, 'Hannibal's mules: the logistical limitations of Hannibal's army and the battle of Cannae, 216 BC' *Historia* 45.2 (1996), 159–87, at 177–80. On the Rhône crossing there are as many modern views as authors; for older bibliography see J. Seibert (n. 15), 194–5; more recently: R.S. O'Bryhim, 'Hannibal's elephants and the crossing of the Rhône, *CQ* 41 (1991), 121–5; P. Leveau, 'Le franchissement du Rhône par Hannibal: le chenal et la navigation fluviale à la fin de l'Âge du Fer', *RA* (2003 [1]), 25–50; O.J. Schrier, 'Hannibal, the Rhone and the "Island": some philological and metrological notes', *Mnemosyne* 59.4 (2006), 501–24.
- <sup>21</sup> For post-215 B.C. elephants in Livy cf. 23.18.6, 41.10, 43.6, 46.4 (cf. Plut. *Marc.* 12.3); 26.5.3, 11, 6.1–2, 9–12; 27.42.7. For discussion of Livy's sources and reliability see Scullard (1974), 162–4; Charles and Rhodan (2007), 377–8, citing earlier *Quellenforschungen*. The accounts of Polybius and Cassius Dio (apud Zonaras) contain no references to elephants after 217 B.C. The only post-215 B.C. occurrence of elephants in Appian is his report of a small number used in a nocturnal assault on the Roman siege-lines around Capua in 211 B.C. (*Hann.* 41–2, cf. Livy 26.5.3. 11, 6.1–2. 9–12), but the details of this episode are not at all consistent with *Suda* θ 438. Diodorus' account of the Hannibalic War (Books 26–7) is lost but for disjointed fragments; one might, however, speculate that, given the adherence of Diodorus and Appian to a common source (nn. 67–8 below), the absence of post-215 B.C. elephants from Appian (other than at Capua in 211 B.C.) may reflect what the lost books of Diodorus contained or omitted.

Finally, in its haste to deny Polybian authorship of Suda  $\theta$  438 scholarship has overlooked certain valuable technical details which are of intrinsic interest but also point to an origin in a well-informed contemporary source. The author specifies that Hannibal managed to traverse this wooded terrain  $\phi \epsilon \rho \omega \nu \tau \hat{\omega} \nu \epsilon \lambda \epsilon \phi \hat{\alpha} \nu \tau \omega \nu \tau \hat{\alpha}$ θωράκια καὶ τοῖς τῶν θηρίων οἰκιδίοις ἐπὶ πλεῖστον ὕψος τοὺς κλάδους  $\dot{a}\pi_0\kappa\dot{o}\pi\tau\omega\nu$ , 'by carrying the turrets of the elephants and making use of the beasts' litters to cut away the branches to the greatest height'. The author clearly refers to two different items of elephant equipment  $-\tau \hat{\omega} \nu \ \hat{\epsilon} \lambda \epsilon \phi \hat{\alpha} \nu \tau \omega \nu \ \tau \hat{\alpha} \ \theta \omega \rho \hat{\alpha} \kappa \iota \alpha$  and  $\tau \hat{\alpha} \ \tau \hat{\omega} \nu$ θηρίων οἰκίδια. In order to facilitate the elephants' passage through the trees, their  $\theta\omega\rho\acute{\alpha}\kappa\iota\alpha$  had to be removed and 'carried' ( $\phi\acute{\epsilon}\rho\omega\nu$ ), presumably by soldiers or servants, while the οἰκίδια were left on the elephants, apparently as a means of cutting back the branches to a maximum height. The lemma  $\theta\omega\rho\acute{\alpha}\kappa\iota\sigma\nu$  indicates that this word provided the chief lexical interest for the compiler of the Suda. The basic definition of  $\theta\omega\rho\acute{a}\kappa\iota o\nu$  relates to a protective barrier or parapet, notionally the height of a man's chest, hence 'breastwork' is the closest English equivalent, though the word is used in connection with analogous breast-high structures, including walls, screens, battlements, a ship's gunwales or a crow's nest. The orthographic variants  $\theta\omega\rho\alpha\kappa\epsilon\hat{\iota}o\nu$  and  $\theta\omega\rho\acute{a}\kappa\iota o\nu$  are well attested in documentary and literary sources, including Polybius and Diodorus.<sup>22</sup> In addition,  $\theta\omega\rho\acute{\alpha}\kappa\iota\sigma\nu$  is found with the specific meaning of a 'turret' or 'parapet' mounted on a war-elephant, obviously the context here, though this usage is rare and, as will be demonstrated below, of considerable assistance in identifying the provenance of this passage.<sup>23</sup> In contrast, the word οἰκίδιον is otherwise undocumented in this context; a literal derivation would suggest a 'small chamber', 'cabin' or 'compartment'. It is difficult to escape the conclusion that in Suda  $\theta$  438  $\tau \dot{\alpha}$   $\theta \omega \rho \dot{\alpha} \kappa \iota a$ designates only the upper section of the apparatus mounted on each elephant's back – the 'breastworks', 'screens' or 'parapets' - which in the constrained circumstances of this episode are disassembled and removed to reduce the overall height of the animal and its equipment. This more restricted sense of  $\theta\omega\rho\acute{a}\kappa\iota\upsilon\nu$  is recognized in some lexica.<sup>24</sup> The οἰκίδια left on the elephants must then be a lower section of the same

<sup>&</sup>lt;sup>22</sup> Polyb. 8.4.4: δρυφακτώσαντες καὶ σκεπάσαντες ὑπερπετέσι θωρακίοις, 'railed in and covered by a high breastwork'; Diod. 14.51.2: ἐβάσταζον ἄνδρας ἐν θωρακίοις, 'they raised up men in crow's-nests'; 27.44.4:  $\tau o \dot{v}_S \tau o \hat{i}_S \theta \omega \rho \alpha \kappa \epsilon i o i_S [F \theta \omega \rho \alpha \kappa i o i_S] \dot{\epsilon} \phi \epsilon \sigma \tau \hat{\omega} \tau \alpha_S$ , 'the men standing behind the screens'. The forms  $\theta\omega\rho\alpha\kappa\epsilon\hat{\iota}$  ov and  $\theta\omega\rho\hat{\alpha}\kappa\iota$  are corroborated by Suda  $\sigma$ 436: θωρακείον: τὸ τείχος; 437: θωρακείοις: προμαχῶσι, δρυφάκτοις, λωρικίοις (= Phot. Lex.  $\Theta$  300 [ed. C. Theodoridis];  $> \Sigma v v \alpha \gamma \omega \gamma \dot{\eta} \lambda \dot{\epsilon} \dot{\epsilon} \epsilon \omega v \chi \rho \eta \sigma \dot{\iota} \mu \omega v \theta$  149 [ed. I.C. Cunningham]).  $\mu \dot{\epsilon} \chi \rho \iota$ μέν τινος ὑποπεπτηχότες τοῖς θωρακίοις ἡρέμουν (= Suda v 558; > Jos. BJ 5.7.4[318]). For θωράκιον as parapet, wall or barrier: Menodot. Sam. FHG 3.104 F 1 (apud Athen. Deipnos. 15.672.d); Jos. BJ 5.7.4(318); Ath. Mech. 18.11, 23.9 (with remarks of D. Whitehead and P.H. Blyth, Athenaeus Mechanicus, On Machines (Περὶ μηχανημάτων), trans. and comm. [Stuttgart, 2004], 117, 125). For  $\theta\omega\rho\alpha\kappa\epsilon\hat{i}o\nu$  as breastwork, parapet or screen: Aesch. Sept. 32;  $IG^{2^2}.463.86$ ; IGRom. 4.293°i39 (Pergam. second century B.C.), 1465, 1474 (Smyrna). A breast-high part of surface wall: P.Cair.Zen. 445 (third century B.C.). The gunwale of a trireme: IG2<sup>2</sup>.1604.31. The crow's-nest on a ship: Eratosthenes fr. 60 (apud Schol. in Apoll. Rhod. Arg. 1.566), ed. K. Strecker, De Lycophrone, Euphronio, Eratosthene comicorum interpretibus (Greifswald, 1884), 42–3; Asclepiades Myrleanus FHG 3.298 (apud Athen. Deipnos. 11.475a = Eustathius Thessal. Comm. ad Homeri Odysseam [Leipzig 1825-6] 1.67.13); Athen. Deipnos. 5.43.e; Pollux, Onom. 1.91 (with E. Bethe [ed.] 1.29, app. crit.).

<sup>&</sup>lt;sup>23</sup> Diod. 2.17.8; 17.88.6 (app. crit.); Ael. NA 13.9 (Megasthenes F 36a Müller).

<sup>&</sup>lt;sup>24</sup> E.g. LSJ<sup>9</sup>, 813, s.v.  $\theta\omega\rho\acute{\alpha}\kappa\iota\sigma\nu$ , 'also, the tower on the back of elephants, or rather the upper part thereof', citing the current passage (as [Plb.] fr. 162<sup>b</sup>), though blurring the distinction at 1203, s.v. οἰκίδιον, 'tower on the back of an elephant'; similarly A. Mauersberger (n. 3), Bd. 1.3, 1164, s.v.  $\theta\omega\rho\acute{\alpha}\kappa\iota\sigma\nu$ , 'Turm auf d. Rücken v. Elefanten oder dessen Oberteil ... [fr. 162b]', but again Bd.

To my knowledge, no other source makes this terminological distinction or supplies comparable explicit data concerning a bipartite construction of elephant turrets. It is interesting to note, however, that Scullard has already hypothesized that such 'towers ... would presumably be made of light wooden frameworks, fenced around with light materials, such as wicker-work'. The testimony of the limited representational evidence is ambiguous, and in some instances certainly marred by artistic licence or guesswork, though Scullard observes that close examination of the turreted elephant depicted on the well-known plate from Capena (Museo di Villa Giulia, inv. 23949) 'suggests a number of parallel lines running down from top to bottom, which could indicate some form of light slatting'. <sup>26</sup> Also of potential relevance is an unprovenanced engraved sardonyx (Cabinet des Médailles, Bibliothèque Nationale, inv. 1911) depicting an (African?) elephant mounted with a low-walled open platform or howdah (an οἰκίδιον without  $\theta\omega\rho$ άκια?), in which stand two spearmen fully exposed above the hip.<sup>27</sup> I plan a fuller treatment of this subject in a separate study, but I stress here that it is overwhelmingly unlikely that the description preserved in Suda  $\theta$  438 is the fancy of a later author writing at a time when elephant warfare had abated, and these details suggest that this episode was first reported by a well-informed source, who based his account on autopsy or eye-witness testimony, and who was acquainted with technical aspects of elephantry. One might also infer that this record of Carthaginian logistical difficulties in dense woodland during a route-march reflects a Carthaginian standpoint, rather than Roman intelligence of enemy activity, and probably originates from a Carthaginian witness, a consideration to which I shall return below.

We therefore have four candidates for authorship, a likely historical setting and a potential authorial perspective. Casaubon's ascription of the fragment to Polybius was not merely wishful thinking. The Suda contains copious entries drawn from the Constantinian Excerpta of Polybius, who must be considered among the compiler's favourite authors, and the Suda is therefore an important editorial resource for reconstituting the lost books of Polybius. Difficulties arise, however, when one attempts to place  $\theta$  438 within Polybius' narrative: his account of the passage from the

<sup>1.4, 1722,</sup> s.v. οἰκίδιον, 'Turm auf dem Rücken von Elefanten'. See already J. Schweighäuser (n. 2 [1792]), 5.60, 'Possis suspicari,  $[\theta\omega\rho\acute{\alpha}\kappa\iota a]$  esse *pinnas* vel *propugnacula*, quae superne cingebant turriculas, dorsis belluarum impositas'.

 $<sup>^{25}</sup>$  The phrase  $\tau o \hat{i} s \tau \hat{\omega} v \theta \eta \rho \hat{l} \omega v o \hat{i} \kappa \iota \delta \hat{l} o i s$  is construed here as instrumental dative, 'by means of the beasts' litters', rather than pure dative, 'cutting away the branches to the greatest height for the beasts' litters'. This interpretation is the more likely, as it would seem strange, having gone to the trouble of removing the turrets, to leave the litters on the elephants if they added significantly to the overall height; rather, the  $o \hat{l} \kappa \hat{l} \delta \iota a$  are mentioned because they have a functional significance in this operation. In any case, the bipartite construction of this equipment is clear.

<sup>&</sup>lt;sup>26</sup> Scullard (1974), 244, with pl. 7a, and bibliography at 113, n. 7; see also J.D. Beazley, *Etruscan Vase-Painting* (Oxford, 1947), 211–12 with pl. 39.1; Gowers and Scullard (1950), 273, n. 9; Goukowsky (1972), 490–1, fig. 8.

<sup>&</sup>lt;sup>27</sup> A. Chabouillet, *Catalogue général et raisonné des camées et des pierres gravées de la Bibliothèque Impériale* (Paris, 1858), 254, no. 1911; Goukowsky (1972), 490–1, fig. 10; Scullard (1974), 245, fig. 23.

Rhône to Gallia Cisalpina is extant and complete, and the fragment finds no parallels therein (3.47–55, cf. also Livy 21.30–8). Casaubon was not alone in assigning unidentified anonymous *Suda* entries to Polybius which later turned out to belong to another author.<sup>28</sup> Of the other candidates, Appian may be safely ruled out since his brief account of these events is also preserved in full (*Hann*. 1.4). The relevant book of Cassius Dio (14) survives as a reasonably detailed epitome in Zonaras and again there is nothing of this incident.<sup>29</sup> To summarize: Polybius and Appian must be excluded. It is not impossible that our fragment derives from a fuller version of Dio's work, but there is no positive evidence to recommend such a hypothesis, and arguments to be presented below point strongly to the fourth candidate, Diodorus.

Significantly fewer citations from Diodorus than Polybius have been identified in the Suda. This is presumably because Diodorus' Bibliotheca was relatively lacking in lexical interest, the primary criteria for inclusion, but his rather colourless style also hinders recognition of unattributed entries.<sup>30</sup> The Suda contains 64 entries derived from Diodorus, with another dozen or so suspected fragments. Ascription of Suda  $\theta$ 438 to Diodorus has much to recommend it on a priori grounds. In contrast to the narratives of Polybius, Appian and Cassius Dio, the section of Diodorus' work dealing with the Hannibalic War (Books 26-7) survives only as insubstantial textual wreckage salvaged from the Excerpta Constantiniana and Excerpta Hoescheliana, which preserve a few widely scattered fragments, mostly short and deprived of context, from which a coherent picture cannot be reconstructed.<sup>32</sup> It was once hoped that an outline of these books might be dimly discerned in a skeletal résumé found in the twelfth-century historical verses of John Tzetzes, who claims Diodorus as one of his sources, but this farrago of clichés and errors cannot be claimed as a 'fragment' in any real sense.<sup>33</sup> Diodorus' account of the early phase of the war, including Hannibal's passage into Italy and the battles of 218–216 B.C., has entirely perished. Of the four candidates, therefore, only Diodorus provides a suitable lacuna into which our fragment might be inserted.

Furthermore, insofar as the brevity of the *Suda* entry permits analysis of vocabulary and style, Diodorus' authorship is supported by comparative lexical evidence

- <sup>29</sup> Cassius Dio apud Zonar. 8.23 (Dindorf 2.238–40); the only reference to elephants in this period is the crossing of the Rhône (239.18–19).
- <sup>30</sup> For citations of Diodorus in the *Suda* see J. Becker (n. 28), 47–55; De Boor (n. 5 [1914–19]), 90–1; A. Alder, 'Suidas (Lexikograph)', *RE* 4A.1 (1932), 675–717, at 702; Chamoux and Bertrac (1993), cxxxviii–cxl. The lower number of citations from Diodorus, in any case, is not accounted for by the amount of material available to the compiler of the *Suda*: in the extant *Excerpta Constantiniana* Diodorus is represented by 949 excerpts drawn from all 40 books, see Chamoux and Bertrac (1993), cxxxiv–cxxxvii.
  - 31 See Appendix
- $^{32}$  Goukowsky, Fragments II, 166 estimates that Book 26 covered the decade from the crossing of the Alps to the battle of the Metaurus (218–207 B.C.)
- <sup>33</sup> Diod. 25.19 (Walton) = J. Tzetzes, *Historiarum Variarum Chiliades*, ed. P.A.M. Leone (Naples, 1968), 1.703–808 (*Hist.* 27), citing (703–4) Diodorus, Cassius Dio and Dionysius of Halicarnassus. The Alpine crossing occupies just two lines (749–50), with no mention of elephants. This summary appears to be Tzetzes' own construct, written from memory rather than quotation, and with major blunders (e.g. Cannae follows Metaurus). Goukowsky, *Fragments II*, 140–1 excludes most of the text.

<sup>&</sup>lt;sup>28</sup> For citations of Polybius in the *Suda* see De Boor (n. 5 [1912]), 395–7; id. (n. 5 [1914–19]), 24–7, 65–81; J. Becker, *De Suidae Excerptis Historicis* (Bonn, 1915), 67–71. For another example of mistaken identity: H. Valesius (n. 5), 212, assigned *Suda* α 2062 (Adler 1.186.1–2) to Polybius (now [fr. 106]), an ascription retained for two centuries until T. Gaisford (ed.), *Suidae Lexicon* (Oxford, 1834) noticed that the entry is in fact Diod. 14.10.3.

from other parts of his Bibliotheca. First, the non-technical vocabulary of the fragment keenly favours Diodorus, certainly over Polybius. This is best illustrated with the final clause ἀσφαλῆ καὶ ῥαδίαν τὴν ὁδοιπορίαν κατεσκεύαζε. The word ὁδοιπορία, here meaning 'passage' or 'march', is found nowhere in Polybius, once in Appian's Hannibalica and once in Cassius Dio. In contrast, δδοιπορία is a standard element of Diodorus' vocabulary, occurring 51 times.<sup>34</sup> More conclusively, among these passages of Diodorus is one instance of a  $\delta \delta o \iota \pi o \rho i \alpha$  similarly made  $\dot{\alpha} \sigma \phi \alpha \lambda \hat{\eta}$  (4.19.4) and another of  $\hat{\rho}_{\alpha}\delta'(\alpha\nu)$   $\tau\hat{\eta}\nu$   $\delta\delta_0\iota\pi_0\rho(\alpha\nu)$  (12.12.3). These coincidences of vocabulary do not occur in the other three historians, or indeed in any classical author other than Diodorus. Second, when we turn to technical vocabulary the pattern is yet more revealing. We have already observed that it was the terminus technicus  $\theta\omega\rho\dot{\alpha}\kappa\iota\sigma\nu$  that attracted the interest of the compiler of the Suda, and the various definitions of this term have been discussed. With the meaning 'turret' or 'parapet' on a war-elephant, however,  $\theta\omega\rho\dot{\alpha}\kappa\iota\sigma\nu$  is an exceptionally rare usage, both inherently and relative to  $\pi \dot{\nu} \rho \gamma o s$ , the only term employed in this context by Polybius and other Hellenistic authors. Indeed  $\theta\omega\rho\acute{\alpha}\kappa\iota\sigma\nu$  is attested with this sense in only three other instances, two of which occur in Diodorus.<sup>36</sup> The three passages will be discussed in detail.

(1) Within an excursus on the history of Assyria and Media (2.1–34), Diodorus provides an account of an Assyrian invasion of India led by Semiramis (2.16.4–19.10), an entirely fictional episode the historicity of which was doubted even in antiquity (cf. Strabo 15.1.5–6). Diodorus relates the response of the Indian ruler Stabrobates when informed of the enemy's preparations: ποιησάμενος δὲ καὶ τῶν ἀγρίων ἐλεφάντων θήραν καὶ πολλαπλασιάσας τοὺς προϋπάρχοντας, ἐκόσμησεν ἄπαντας τοῖς εἶς τὸν πόλεμον καταπληκτικοῖς λαμπρῶς. (8) διὸ καὶ συνέβαινε κατὰ τὴν ἔφοδον αὐτῶν διά τε τὸ πλῆθος καὶ τὴν ἐπι τῶν θωρακίων κατασκευὴν ἀνυπόστατον ἀνθρωπίνη φύσει φαίνεσθαι τὴν ἐπιφάνειαν ('having conducted a hunt for wild elephants and multiplied by many times the number already at his disposal, he fitted them all out splendidly with such things as would strike terror in war; and the consequence was that during their attack, on account of their large number and the fact that they had been furnished with turrets, they appeared like something beyond the power of human nature to withstand', 2.17.7–8).

Diodorus' chief source for this tale was Ctesias of Cnidus (Lenfant F 1 = FGrH 688 F 1), whom he cites eleven times, and whose *Persica* (written shortly after 398/7 B.C.) he almost certainly knew directly; or at least no convincing case has been made for a *Zwischenquelle*.<sup>37</sup> Semiramis' theatrical attempt to counter the Indian ruler's

<sup>&</sup>lt;sup>34</sup> Diod. 2.6.6, 54.2, 7; 3.17.3, 72.4; 4.19.4, 22.5, 23.1; 5.29.1; 11.56.4, 74.2, 75.2, 80.1; 12.12.3; 13.89.3, 112.5; 14.19.9, 26.4, 5, 27.2, 28.2, 47.5; 15.53.2; 16.17.5, 31.3, 42.1, 84.5; 17.4.4, 24.2, 32.3, 53.3, 65.2, 94.2, 106.1; 18.59.3; 19.5.3, 19.1, 21.2, 24.5, 26.5, 31.2, 38.5, 80.2; 20.29.7, 42.2; 22.10.1; 29.23.1; 33.14.4; 34/5.2.28, 4.1, 8.1. Cf App. *Hann.* 40; Cassius Dio 56.20.3.

 $<sup>^{35}</sup>$  Diod. 4.19.4: ἐποίησεν ἀσφαλῆ τοῖς μεταγενεστέροις τὴν ὁδοιπορίαν; 12.12.3: ῥαδίαν ἔχουσα τὴν ὁδοιπορίαν.

Goukowsky (1972) passim fails to appreciate the rarity of this usage of  $\theta\omega\rho$ άκιον and erroneously employs it as if it were widely used vocabulary; similarly Scullard (1974), 240–2; Charles (2008).

<sup>&</sup>lt;sup>37</sup> Ctesias F1b (§§16–19). Fragments of Ctesias are cited after D. Lenfant (ed., French trans. and comm.), *Ctésias de Cnide, La Perse, l'Inde, autres fragments* ([Budé] Paris, 2004). Date of the *Persica*: F. Jacoby, 'Ktesias¹', *RE* 1.9 (1922), 2032–73, at 2034–6; Lenfant (ed.), xviii, xxvi.—xxv. For Diodorus' use of Ctesias see Bigwood (1980), citing earlier bibliography. Diodorus' direct knowledge of the *Persica* was demonstrated at length by P. Krumbholz, 'Diodors' assyrische Geschichte', *RhM* 41 (1886), 321–41; id., 'Zu den Assyriaka des Ktesias', 50 (1895), 205–40; 52 (1897), 237–85; endorsed and supplemented by Bigwood (1980), 196–9.

elephants is a central theme that runs through the story of her expedition, and there is no doubt that the elephants themselves are an original element of Ctesias' narrative.<sup>38</sup> There are very good reasons, however, for thinking that Diodorus did not find the reference to turrets  $(\theta\omega\rho\acute{\alpha}\kappa\iota\alpha)$  in Ctesias' work but inserted this detail himself. Diodorus substantially altered the style and content of his source, and supplemented the *Persica* with his own remarks as well as material drawn from other authorities.<sup>39</sup> Although he occasionally allows his model to influence his language, Diodorus' narrative is for the most part framed in his own choice of vocabulary and little can be reconstructed of Ctesias' original wording. This is certainly the case with the current passage, in which a stereotypical battle account has been fashioned from words and phrases favoured by Diodorus elsewhere in his work.<sup>40</sup> Furthermore, Diodorus' interpolations are sometimes betrayed by details that must post-date Ctesias' era or conflict with the extant fragments of his works. The most glaring anachronisms involve the unhistorical retrojection of military technology: hence the Assyrians have at their disposal stone-throwing artillery  $(\pi \epsilon \tau \rho o \beta \delta \lambda o \iota)$  which was first developed in the Greek world in the mid fourth century B.C., and was thus unknown even in Ctesias' day.<sup>41</sup> In this context, it is widely accepted that throughout the Indian subcontinent in

<sup>38</sup> Diod. 2.16.8–17.8, 18.6–6. Cf. *Suda*  $\sigma$  220 (Adler 4.339) for another account of Semiramis and the elephants, which must also derive from Ctesias (though omitted by Lenfant ed. [2004]), on which see P. Krumbholz (n. 37 [1897]), 279–80. There are three other references to elephants in Ctesias' *Persica* and *Indica*: (1) autopsy of an elephant with its Indian trainer at Babylon: Ctesias F 45b = Ael. *NA* 17.29, cf. 5.55 (cf. Aristotle, *HA* 9.1.610a22–4); see J.M. Bigwood, 'Ctesias' description of Babylon', *AJAH* 3 (1978), 32–52, at 32–3; id., 'Aristotle and the elephant again', *AJPh* 114.4 (1993), 537–55, at 542–3. (2) Military applications of elephants in India: Ctesias F 45b = Ael. *NA* 17.29; Ctesias F 45.7 = Photius, *Bibl.* 72.45a (cf. Aristotle, *HA* 9.1.610a15–22), with Lenfant (ed.), 187, 319–22, n. 890; Goukowsky (1972), 474–5; K. Karttunen, *India in Early Greek Literature* ([Studia Orientalia 65] Helsinki, 1989), 63, n. 460; id., *India and the Hellenistic World* ([Studia Orientalia 83] Helsinki, 1997), 188. (3) Cyrus encounters elephants during a campaign against the Derbices: Ctesias F 9.7 = Photius, *Bibl.* 72.36b.

<sup>39</sup> Bigwood (1980), 199–200. The most detailed study of Diodorus' style is J. Palm, *Über Sprache und Stil des Diodoros von Sizilien. Ein Beitrag zur Beleuchtung der hellenistischen Prosa* (Lund, 1955), though his demonstrations do not include the section examined here. For Diodorus' other named sources: Cleitarchus cited at Diod. 2.7.3 (= *FGrH* 137 F 10); an unknown Athenaeus at Diod. 2.20.3–5; see J.M. Bigwood (n. 38 [1978]), 45, n. 11; id. (1980), 199, n. 20, 202–3, 205–6; J. Boncquet, *Diodorus Siculus (II,1–34) over Mesopotamië: Een historische kommentaar* ([Verhandelingen van de koninklijke academie voor wetenschappen, letteren en schone kunsten van België. Klasse der letteren 122] Brussels, 1987), 75–7.

<sup>40</sup> For Diodorus' stereotyped battle-pieces see C. Vial (ed.), *Diodore Livre XV* ([Budé] Paris, 1977), xx–xii. The account of the battle between Semiramis and Stabrobates features vocabulary typical of Diodorus, especially  $\kappa \alpha \tau \alpha \pi \lambda \dot{\eta} \tau \tau \epsilon \sigma \theta \alpha \iota$  and its cognates (2.16.3, 8; 2.17.7, 19.4). See J. Palm (n. 39), 167; Bigwood (1980), 201. G. Goossens, 'L'Histoire d'Assyrie de Ctésias', *AntCl* 9 (1940), 25–45, at 41–2 discerns in the engagement between Semiramis and Stabrobates (2.19) the dynamics of a Hellenistic battle.

<sup>41</sup> Diod. 2.27.1. See G. Goossens (n. 40), 43; Bigwood (1980), 204–5; J. Boncquet (n. 39), 164–5. For Diodorus' interest in the technical aspects of warfare see Chamoux and Bertrac (1993), li–liv; for artillery in particular see now H.M. Schellenberg, 'Diodor von Sizilien 14,42,1 und die Erfindung der Artillerie im Mittelmeerraum, *Frankfurter elektronische Rundschau zur Altertumskunde* 3 (2006), 14–23 (http://www.fera-journal.eu). Similarly, Diod. 2.16.4 comments that the Indian elephant is larger than the African, a fact of which Ctesias was almost certainly ignorant, see J.S. Romm, 'Aristotle's elephant and the myth of Alexander's scientific patronage', *AJP* 110.4 (1989), 566–75, at 574–5; J.M. Bigwood (n. 38 [1993]), 543, n. 31, 550, n. 66; see further discussion see n. 60 below. Diodorus' account of Semiramis' Indian campaign refers to post-Ctesias events: 2.5.6 (Dionysius of Syracuse), 5.7 (Punic Wars), 17.3 (Perseus of Macedon). See also anachronistic geographical terminology reflecting Seleucid rather than Ctesian (i.e. Achaemenid) usage: Bigwood (1980), 200–1. It has also been observed that Diodorus' treatment

the late fifth / early fourth century B.C., and probably much later still, war-elephants were not furnished with turrets or howdahs and so, even granting that Semiramis' expedition is an unhistorical fantasy, this equipment simply could not have been mentioned by Ctesias or his Persian informants. Accordingly, all modern commentators concur that the  $\theta\omega\rho\acute{a}\kappa\iota a$  on Stabrobates' elephants are Diodorus' own invention inspired by Hellenistic practices.<sup>42</sup>

(2) In an account of Alexander's victory on the River Hydapses in 326 B.C., Diodorus describes how the rajah Porus was heavily wounded and attempted to withdraw his elephant from the fighting (17.88.6). The text of Diodorus 17 depends on two manuscript prototypes which at this point preserve different readings. Parisinus gr. 1666 (= R) reads: διὰ τὸ πληθος τῶν τραυμάτων γενόμενος ἔξαιμος ἐλιποψύχησε καὶ περικλασθεὶς περὶ τὸ θωράκιον πρὸς τὴν γῆν κατηνέχθη, 'having lost much blood on account of the multitude of his wounds, he fainted and, slumping over the parapet, sank to the ground'. Directly above  $\theta\omega\rho\acute{\alpha}\kappa\iota\sigma\nu$  occurs the word  $\theta\eta\rho\acute{\iota}\sigma\nu$  written in the same hand. It cannot be determined whether it was the copyist of R himself who first inserted this supralinear variant or whether he mechanically reproduced what he found in his exemplar, though in either case its presence surely expresses a Byzantine editor's doubt or incomprehension of the word  $\theta\omega\rho\acute{a}\kappa\iota\upsilon\nu$  in the main text.<sup>43</sup> In Mediceo-Laurentianus gr. 70-12 (= F), however, the sole family II manuscript to contain Diodorus 17, one reads only  $\theta \eta \rho i \sigma \nu$ . Editorial choice of variant therefore determines whether the enfeebled Porus fainted and tumbled over 'the parapet' on his elephant or, in the absence of a turret, merely slumped over 'the beast' itself. The reading  $\theta \eta \rho i \sigma \nu$  was preferred by Henri Estienne in the *editio princeps* (1559) and retained by all subsequent editors, including the influential edition of Peter Wesseling (1745), even though he stressed in his commentary the superior merits of  $\theta\omega\rho\acute{a}\kappa\iota o\nu$ . <sup>44</sup> Goukowsky has especially pressed the case for  $\theta\eta\rho\acute{a}o\nu$ , arguing that a turret is not mentioned by the other authors who, like Diodorus, drew on the so-called 'Vulgate' or Cleitarchan tradition for this episode. 45 Moreover, Goukowsky con-

of Assyrian and Median history (2.1–34) contains psychological characterization of individuals consistent with moralizing stereotypes found elsewhere in his *Bibliotheca*, which cannot therefore be authentic elements of Ctesias' *Persica*, see Bigwood (1980), 202.

- <sup>42</sup> Goukowsky (1972), 475 with n. 10; Scullard (1974), 35–6, 241; J.M. Bigwood (n. 38 [1993]), 243, n. 31; Lenfant (ed.), 45, n. 229 (F1b §17.8). For the howdah in ancient India see n. 55 below.
- <sup>43</sup> Goukowsky (1972), 473 asserts that in R the reading ' $\Theta\eta\rho$  for est indiscutablement une variante de premier main, que le plus proche parent connu de R, le *Vaticanus 132*, donne lui aussi selon la même disposition'. *Vaticanus gr.* 132 (= Y) cannot be used to illuminate the textual history of this variant in R, however, because Y is a fifteenth-century apograph of R and not an independent witness, as Goukowsky seems to believe here and reiterates, more guardedly, at Goukowsky, *Diodore XVII*, xlix. For the orthodox view of these codices see Chamoux and Bertrac (1993), cii–cv, cix–cx, with stemma codicum at cxxi.
- <sup>44</sup> See most recently Goukowsky, *Diodore XVII*, 123–4. See P. Wesselingius (ed.), *Diodori Siculi Bibliothecae Historicae Libri Qui Supersunt* (Amsterdam, 1745), 2.229.18–19, 'Quis controversiam his movisset, nisi veteres membranae ansam praeberent?  $\theta\omega\rho\acute{\alpha}\kappa\iota\upsilon\nu$ , quod ostentant, non plane incongruum est ... Itaque id si reliquit Auctor, indicabitur Porum ... ex ea machina in terram versum corruisse. Nihil tamen decerno, quod & vulgatum tueri se possit'.
- 45 Goukowsky (1972), 473–4. Cf. Curt. 8.14.31. The Vulgate tradition did, however, envisage Porus' elephants themselves as 'towers' within the metaphorical 'rampart' formed by the Indian infantry: Diod. 17.87.5: ἡ μὲν οὖν ὄλη σύνταξις αὐτῶν ὑπῆρχε πόλει παραπλήσιος τὴν πρόσοψιν ἡ μὲν γὰρ τῶν ἐλεφάντων στάσις τοῖς πύργοις, οἱ δὲ ἀνὰ μέσον τούτων τοῖς μεσοπυγίοις ὡμοίωντο; Curt. 8.14.13: Beluae dispositae inter armatos speciem turrium procul fecerant; Polyaenus, Strat. 4.3.22: ὥστε τὸ σχῆμα τείχει μεγάλω παραπλήσιον οἱ μὲν

vincingly demonstrates, albeit by an argumentum e silentio, that war-elephants were not equipped with turrets or howdahs of any kind in the Punjab or (before c. 300–280 B.C.) in the armies of the Diadochi, who initially obtained their elephants and elephant-handling techniques from north-western India. Rather, elephants in this region and period were manned either by a mahout alone or assisted by a single spear-or sarissa-armed 'rider'  $(\hat{a}\nu\alpha\beta\acute{a}\tau\eta_S)$  sitting astride the animal's back.<sup>46</sup> Goukowsky concludes that if Diodorus did write  $\theta\omega\rho\acute{a}\kappa\iota\sigma\nu$  it could only have been a slip of his pen, a prospect he deems unlikely, and so he prefers to discern in this reading 'une correction due à un grammairien trop érudit'.

Goukowsky's remarks on the Vulgate tradition and the contemporary utilisation of war-elephants are not disputed here, but their relevance and value in resolving this particular textual crux are illusory. In particular, Goukowsky's appeal to the Realien of Indian warfare in the late fourth century B.C. is both unnecessary and irrelevant; it is Diodorus' opinion that matters. The previously cited passage of Diodorus 2.17.8 (as §1) demonstrates beyond doubt that the first-century B.C. historian believed, however inaccurately or anachronistically, that ancient Indian war-elephants were furnished with turrets; that he was disposed to interpolate this technical detail into his source material, and that the very word he used to denominate this item of equipment was the exceptionally rare term  $\theta\omega\rho\acute{\alpha}\kappa\iota o\nu$ . <sup>47</sup> One may also legitimately doubt whether even the most erudite and meticulous of Byzantine scribes, upon encountering  $\theta\eta\rho\acute{\iota}o\nu$ in the current passage, would have found reason to distrust this unexceptionable reading and conjectured instead the recherché classical usage  $\theta\omega\rho\acute{a}\kappa\iota\sigma\nu$ , which can only be considered the lectio difficilior and thus the less likely of the two readings to be Byzantine scribal surmise. Goukowsky's explanation is in any case incompatible with the codicological evidence: the configuration of the variant readings  $\theta\omega\rho\acute{\alpha}\kappa\iota\upsilon\nu$ and  $\theta \eta \rho i \sigma \nu$  in R leaves no doubt that, whoever was responsible, the supralinear  $\theta \eta \rho i \sigma \nu$ must have been the later insertion into an exemplar that originally read only  $\theta\omega\rho\acute{a}\kappa\iota o\nu$ , and not vice versa. 48 Furthermore, upon closer inspection the competing claims of codices R and F prove to be no contest at all: the mid-tenth-century R is more often a more reliable witness than the fifteenth-century F; a perusal of Goukowsky's apparatus for Diodorus 17.88 reveals that of the eighteen other divergent readings in R and F in this chapter, R is correct in seventeen instances, the sole exception being a minor orthographic variant. 49 Indeed, it may even be doubted whether F is an independent witness to the reading  $\theta \eta \rho i \sigma v$ ; it is true that in F the text

έλέφαντες ἐοικότες πύργοις, οἱ δὲ πεζοὶ μεσοπυργίοις (cf. Livy 28.14.4 for a similar metaphorical usage). For the vexed question of the Vulgate tradition see selectively J.R. Hamilton, 'Cleitarchus and Diodorus 17', in K.H. Kinzl (ed), Greece and the Eastern Mediterranean in Ancient History and Prehistory. Studies presented to Fritz Schachermeyr on the Occasion of his Eightieth Birthday (Berlin–New York, 1977), 126–46; N.G.L. Hammond, Three Historians of Alexander the Great: The So-Called Vulgate Authors, Diodorus, Justin, and Curtius (Cambridge, 1983); L. Prandi, Fortuna è realtà dell' opera di Clitarco ([Historia Einzelschriften 104] Stuttgart, 1996).

<sup>&</sup>lt;sup>46</sup> Goukowsky (1972), 474–92, 497–8; summarized by Scullard (1974), 240–2.

<sup>&</sup>lt;sup>47</sup> Aside from the word  $\theta\omega\rho$ άκιον, these two passages of Diodorus share typically Diodoran descriptive vocabulary: 2.16.2:  $\lambda$ αμπρῶς κεκοσμημένοι τοῖς εἶς τὸν πόλεμον καταπληκτικοῖς; 2.17.7: ἐκόσμησεν ἄπαντας (ἐλέφαντας) τοῖς εἶς τὸν πόλεμον καταπληκτικοῖς  $\lambda$ αμπρῶς; 17.87.4: τοὺς δ' ἐλέφαντας καταπληκτικῶς κεκοσμημένους.

<sup>&</sup>lt;sup>48</sup> Note also that the only other instance of a supralinear 'correction' in this section of R is manifestly wrong and conflicts with the common reading in both R and F: 17.89.5 διὰ  $\tau \hat{\omega} \nu$   $\pi o \tau \alpha \mu \hat{\omega} \nu$  RF: διὰ  $\tau \hat{o} \nu$   $\pi o \tau \alpha \mu \hat{o} \nu$  Rs!.

<sup>&</sup>lt;sup>49</sup> Goukowsky, *Diodore XVII*, 122–4 app. crit. The exception is 17.88.4 γινόμενον F: γιγ- R.

of Diodorus 17–20 derives independently from a majuscule archetype  $\Phi$  and thus embodies an authentic tradition, but the text has been modified by a late Byzantine editor in a process of recension that involved, *inter alia*, introducing corrections from other manuscripts, including R. The editor of F would therefore have been aware of the two variants  $\theta\omega\rho\acute{\alpha}\kappa\iota o\nu$  and  $\theta\eta\rho\acute{\iota}o\nu$  in R, and the presence of  $\theta\eta\rho\acute{\iota}o\nu$  in F is just as likely to be a product of his editing as a genuine tradition from  $\Phi$ . Accordingly, the stylistic, lexical and codicological evidence, individually and cumulatively, overwhelmingly favours  $\theta\omega\rho\acute{\alpha}\kappa\iota o\nu$  against  $\theta\eta\rho\acute{\iota}o\nu$ , regardless of whatever wider historical thesis Goukowsky seeks to present.

(3) The third and only non-Diodoran instance occurs in a fragment of the *Indica* of Megasthenes preserved in Aelian's De natura animalium 13.9:  $\Phi \epsilon \rho \epsilon \iota \delta \epsilon \tau \delta \alpha \rho \mu \alpha$ παραβάτας καὶ δύο. ΄Ο δὲ στρατιώτης ἐλέφας ἐπὶ τοῦ καλουμένου θωρακίου, ἢ καὶ νὴ Δία τοῦ νώτου γυμνοῦ καὶ ἐλευθέρου, πολεμιστὰς μὲν τρεῖς {\*\*} παρ' έκάτερα βάλλοντας, καὶ τὸν τρίτον κατόπιν τέταρτον δὲ τὸν τὴν ἄρπην ἔχοντα διὰ χειρών, καὶ ἐκείνη τὸν θῆρα ἰθύνοντα, ώς οἴακι ναῦν κυβερνητικὸν ἄνδρα καὶ  $\epsilon \pi \iota \sigma \tau \acute{\alpha} \tau \eta \nu \tau \mathring{\eta}_S \nu \epsilon \acute{\omega}_S$ , 'The chariot also carries two crewmen. The war-elephant, on what is called the "turret", or, by Jove, on his bare and unencumbered back, carries three warriors, {of whom two} shoot to either side, and the third at the rear, while a fourth man carries in his hand the goad with which he controls the beast, much in the same way as a pilot and ship's captain control a ship'.51 The same passage of Megasthenes underlies a much more abbreviated report in Strabo's Geographica: δύο δ' εἰσὶν ἐπὶ τῷ ἄρματι παραβάται πρὸς τῷ ἡνιόχῳ. ὁ δὲ τοῦ ἐλέφαντος ἡνιόχος τέταρτος, τρεῖς δ' οἱ ἀπ' αὐτοῦ τοξεύοντες, 'There are two crewmen in the chariotin addition to the driver, while the driver of the elephant is one of four, with three others shooting bows from it'.52 Again the text is problematic. In his Indica Megasthenes reported his observations during an embassy to Patâliputra, capital of the Mauryan Empire, during the reign of Chandragupta, a journey conventionally placed c. 304/3 B.C., but conceivably dating to any point c. 319/18-288 B.C.<sup>53</sup> The fuller text in Aelian states that a Mauryan elephant crew normally comprised three archers plus a mahout, and that some sort of turret or howdah  $(\theta\omega\rho\acute{\alpha}\kappa\iota\upsilon\nu)$  was one option in combat, alternative to all four men perching on the elephant's back and shoulders. Goukowsky influentially dismissed the reference to a  $\theta\omega\rho\dot{\alpha}\kappa\iota\sigma\nu$  as Aelian's interpolation, noting that this detail is not found in Strabo's version, and again stressing the otherwise heavy silence of both literary and representational sources with regard

<sup>&</sup>lt;sup>50</sup> See F. Bizière (ed. and French trans.), *Diodore de Sicile, Livre XIX* ([Budé] Paris, 1975), xx–xxii; Chamoux and Bertrac (1993) ciii–cv, cxxi, cxxxvi–cxxxvii, who characterize F as 'résultat d'un travail philologique tardif' (civ).

<sup>&</sup>lt;sup>51</sup> Aelian, *NA* 13.9, ed. R. Hercher (Leipzig, 1864; repr. Graz, 1971) 323.13–20 (with app. crit. at xlv) = E.A. Schwanbeck (ed.), *Megasthenis Indica* (Bonn, 1846; repr. Amsterdam, 1966), F 35.4 = Müller *FHG* 2.431 F 36a. It is mystifying why Jacoby *FGrH* 715 omits this fragment, yet allows Strabo 15.1.52 = F 31 (see following note). Jacoby's inconsistency caused unjustified doubts concerning 'uncertainty of origin' in Scullard (1974), 241.

<sup>&</sup>lt;sup>52</sup> Strabo 15.1.52 = Megasthenes: Schwanbeck F 34.15 = Müller *FHG* 2.431 F 36a = Jacoby, *FGrH* 715 F 31 (3 C.2 634.12–14).

<sup>&</sup>lt;sup>53</sup> See A.B. Bosworth, 'The historical setting of Megasthenes' *Indica*', *CPh* 91.2 (1996), 113–27, who remarks on the fragility of the traditional date of 304/3 B.C. and argues for earlier contact, though, in my view, the bureaucratic system Megasthenes describes is more suggestive of the Mauryan Empire in its well-established phase. The *terminus ante quem* is the death of Chandragupta in 288 B.C. For a summary of earlier scholarship see A. Zambrini, 'Gli Indika di Megasthene', *ASNP*<sup>3</sup> 12 (1982), 71–149; 15 (1985), 781–853; K. Karttunen (n. 38 [1997]), 70–94.

to the use of howdahs in India and the Hellenistic world before *c.* 300–280 B.C., around when, Goukowsky contends, elephant turrets or carriages were first devised in the West, probably by or for Pyrrhus in Epirus (and presumably transmitted back to India at some later date or developed there independently).<sup>54</sup>

The complex problem of the origin and diffusion of the howdah awaits definitive discussion, which will not be attempted here, but I note that the Indian sources are more complicated and equivocal than Goukowsky allows, and his thesis runs the risk of homogenizing the evidence for elephant warfare across a vast and diverse subcontinent. Furthermore, the intertextual case for Aelian's interpolation of content is weak – Strabo's version is in every way more cursory and the absence of a  $\theta\omega\rho\acute{\alpha}\kappa\iota\sigma\nu$ , or indeed any explanation of how the crew was mounted, is just one of several respects in which Strabo's account is deficient. Scullard endorsed Goukowsky's contention that 'the mention of towers could well be an addition by Aelian himself on the basis of its (sic) frequent mention by Hellenistic writers whom he knew', but, like Goukowsky, Scullard failed to appreciate the rarity of  $\theta\omega\rho\acute{\alpha}\kappa\iota\sigma\nu$  in this context – given that  $\pi\acute{\nu}\rho\gamma\sigma$ s is the only word for an elephant 'turret' or 'howdah' documented in Greek sources other than Diodorus, it is difficult to divine in which 'Hellenistic writers' Aelian would have found this obscure usage?

The evidence does not admit a simple solution. On the one hand, Aelian (c. A.D. 175–235) was a consummate rhetorician whose stylistic interests created opportunities for interpolation. Comparison with other Megasthenes-derived sources reveals that, while Aelian preserved some of the wording of his model, there can be no doubt that the received text of this fragment also reflects his own idiomatic tastes.<sup>57</sup> If not Megasthenian, the reference to a  $\theta\omega\rho\acute{\alpha}\kappa\iota\nu\nu$  might have arisen from Aelian's known predilection for archaic or recherché vocabulary.<sup>58</sup> If this be the case, it is possible that

<sup>&</sup>lt;sup>54</sup> Goukowsky (1972), esp. 488–9. He does not consider what possible counter-current/s might have carried this allegedly Greek innovation in elephant tactics back to the source of the elephants. Goukowsky's view is accepted by Scullard (1974), 241–2.

<sup>&</sup>lt;sup>55</sup> Indologists have observed that other apparent discrepancies in the Greek sources for ancient Indian elephantry may be resolved by the simple realization that customs and techniques varied across India; in particular, the petty dynasties and aristocratic polities of the western Punjab and Indus valley, as observed by the authors who accompanied Alexander in 327–6 B.C., differed in significant respects from the centralized bureaucracy and powerful state-funded standing army of the Mauryan Empire, as described by Megasthenes. See T.R. Trautmann, 'Elephants and the Mauryas', in S.N. Mukherjee (ed.), India. History and Thought. Essays in Honour of A.L. Basham (Calcutta, 1982), 254-81, esp. 254-60. The very fact that Megasthenes states (on the combined testimony of Aelian and Strabo) that a Mauryan war-elephant carried a four-man crew should at least alert us to the likelihood that the military practices of the Gangetic plain differed from the mahout-ἀναβάτης model Goukowsky discerns in north-western India. The Indian sources do not permit firm conclusions concerning the early history of the howdah, see remarks and older bibliography in D. Singh, Ancient Indian Warfare with Special Reference to the Vedic period (Leiden, 1965), 75, 78-84; S.K. Bhakari, Indian Warfare: An Appraisal of Strategy and Tactics of War in the Early Medieval Period (New Delhi, 1981), 62-9; G.N. Pant, Horse and Elephant Armour (Delhi, 1997), 107-11 (to be read with caution).

<sup>&</sup>lt;sup>56</sup> Scullard (1974), 241–2, see n. 36 above.

<sup>&</sup>lt;sup>57</sup> The phrase η καὶ νη Δία, for example, certainly belongs to Aelian, cf. NA 1.29.4; 5.16.9; 6.53.9; 11.15.3; 12.6.7, 15.6; 14.10.3, 26.41; 17.11.14; ep. rust. 18. With equal certainty, however, other vocabulary can be deemed the authentic wording of Megasthenes, e.g.  $\pi o \lambda \epsilon \mu \iota \sigma \tau \dot{a}s$ ; see analysis by B.C.J. Timmer, Megasthenes en de Indische Maatschappij (Amsterdam, 1930), 156–7, 164–7.

 $<sup>^{58}</sup>$  Note, for example, that Ael. NA 13.9, 22 is the only author to use the word  $\begin{align*}{l} \begin{align*}{l} \begin{align*}{$ 

Aelian's choice of  $\theta\omega\rho\acute{\alpha}\kappa\iota\sigma\nu$  over  $\pi\acute{\nu}\rho\gamma\sigma\varsigma$  owes nothing to earlier Hellenistic histories, as Scullard reasoned, but is a purely metaphorical allusion inspired by his comparison of the elephant to a ship and the attested use of  $\theta\omega\rho\acute{\alpha}\kappa\iota\nu$  with the sense of a gunwale or crow's-nest. <sup>59</sup> The epexegetical construction  $\tau o \hat{v}$   $\kappa a \lambda o v \mu \acute{e} v o v \theta \omega \rho a \kappa \acute{e} o v$ , 'the so-called "turret", at least implies Aelian's awareness that he is dealing with arcane jargon. On the other hand, proponents of the Megasthenian pedigree of  $\theta\omega\rho\acute{\alpha}\kappa\iota\sigma\nu$  in Aelian might find modest support in the occurrence of the same usage in Diodorus' Bibliotheca. Of all the historians who refer to elephant turrets Diodorus is distinctive in two respects: he alone employs the term  $\theta\omega\rho\acute{a}\kappa\iota\sigma\nu$  and he alone used Megasthenes' Indica as a source. More specifically, Diodorus amplified his primarily Ctesias-based account of Semiramis' invasion of India (2.16-17) by inserting additional Indiarelated material drawn from the same sources as he later exploited for his main treatment of India (2.35-42); these sources included Megasthenes.<sup>60</sup> The exclusive terminological concurrence between Aelian and Diodorus, therefore, opens the possibility that both authors imported this atypical usage of  $\theta\omega\rho\acute{a}\kappa\iota\nu\nu$  from Megasthenes, though uncertainty about the nature and extent of Diodorus' familiarity with the *Indica* means that this line of reasoning cannot advance beyond conjecture. <sup>61</sup>

 $\sigma\iota\delta\eta\rho\omega$ . It is pointed out by R. Goossens, 'Gloses indiennes dans le Lexique d'Hésychius', AntCl 12 (1943), 47–55, at 52–3, that ἀγγόρπης must result from negligent copying; he suggests a conflation of ἄγγος· ὅρπη (cf. Sanskrit anka, ankusa), though LJS<sup>9</sup> 1256, s.v. ὅρπη consider ἄγγος· ἄρπη another possibility. For alternative terminology cf. Aristotle, HA 9.1.610a28: δρεπάνον; App. Pun. 7.43: κέντρον.

<sup>59</sup> See n. 22 above.

<sup>60</sup> At 2.16.3 Diodorus briefly introduces the reader to India insofar as this background is required for narrating Semiramis' expedition. This survey was not in Ctesias, but closely resembles and anticipates Diodorus' main description of India at 2.35.3, see P. Krumbholz, 'Wiederholungen bei Diodor', RhM 44 (1889), 286-98, at 293-6; Bigwood (1980), 206; J. Boncquet (n. 39), 114-15; Lenfant (ed.), 43, n. 222 (F 1b §16.3-4). Similarly, the account of Semiramis' invasion plan at Diod. 2.16.4 prompts the observation that Indian elephants are larger than African, a fact unknown to Ctesias (see n. 41 above) which Diodorus drew from the same source as he used for his main account of India at 2.35.4 (cf. also 42.1). The verbal parallels leave no doubt that the same source lies behind this doublet: Diod. 2.16.4:  $\tilde{\epsilon}\chi\epsilon\iota$   $\delta\dot{\epsilon}$   $\kappa\alpha\dot{\iota}$   $\tau\hat{\omega}\nu$ <u>ἐλεφάντων</u> ἄπιστον πλῆθος, οἳ ταῖς τε ἀλκαῖς καὶ <u>ταῖς</u> τοῦ σώματος <u>ῥώμαις πολὺ</u> προέχουσι τῶν ἐν τῆ Λιβύη γινομένων; 2.35.4: καὶ πλείστους δὲ καὶ μεγίστους ἐλέφαντας έκτρέφει, χορηγούσα τὰς τροφὰς ἀφθόνους, δι' ἃς <u>ταῖς ῥώμαις</u> τὰ θηρία ταῦτα <u>πολὺ</u> προέχει τῶν κατὰ τὴν Λιβύην γεννωμένων. Diodorus' source for this statement cannot be identified with certainty, as several authors appear to have made similar remarks. Onesicritus expressed this view (cf. Strabo 15.1.43), though the data on elephants at Diod. 2.42 in every other respect conflict with the fragments of Onesicritus (FGrH 134 F 14). Megasthenes remains a more likely possibility, as Jacoby, FGrH 2B.2 474 avers, though in his collection of the fragments of the Indica he puzzlingly admits only Diod. 2.35.4 (715 F 4) but omits the identical Diod. 2.16.4. Jacoby's inconsistency led Scullard (1974), 60 with n. 29 into some confusion.

<sup>61</sup> The optimistic view of early scholarship (E.A. Schwanbeck [n. 51], 57–8, 85–93) that Diodorus 2.35–42 is a straightforward epitome of Megasthenes' *Indica* has been abandoned. This whole section is included by Jacoby *FGrH* 715 as Megasthenes F 4, but printed in small type in recognition of the lack of explicit attribution. It is generally accepted that Diodorus' treatment of India draws (directly or indirectly) on Megasthenes, but that he also took India-related material from (an)other Hellenistic source(s) (possibly Onesicritus via Cleitarchus). The subject would benefit from reappraisal, see P. Krumbholz (n. 60), 293–6; Jacoby *FGrH* 3.C.2 606 app. crit.; B.C.J. Timmer (n. 57), 19–21; O. Stein, 'Megasthenes', *RE* 1.29 (1931), 230–326, at 267–71; T.S. Brown, 'The merits and weaknesses of Megasthenes', *Phoenix* 11 (1957), 12–24, at 15–18, 21–2; R.C. Majumdar, 'The Indika of Megasthenes', *JAOS* 78 (1958), 273–6; K.D. Sethna, 'Rejoinder to R.C. Majumdar', *JAOS* 80 (1960), 243–8; R.C. Majumdar, 'The Surrejoinder to K.D. Sethna', *JAOS* 80 (1960), 248–50; K. Karttunen (n. 38 [1997]), 73.

To summarize: the textual history of the *Suda* requires that  $\theta$  438 must derive from one of four authors: Polybius, Appian, Cassius Dio or Diodorus. All the evidence – historical, textual, stylistic, lexical – supports the view that this is a fragment of Diodorus. His *Bibliotheca* offers by far the most likely lacuna; the non-technical vocabulary of the fragment exhibits close verbal coincidences with Diodorus' extant text, and with no other work; and, of the four candidates, the rare usage of  $\theta\omega\rho\acute{\alpha}\kappa\iota\nu\nu$  in the sense of a 'turret' or 'parapet' on a elephant is unique to, and even diagnostic of, Diodorus, and marks him out from all the Hellenistic historians who universally denominate this equipment using the word  $\pi\acute{\nu}\rho\gamma \rho s$ . Indeed, even if the field were not limited to these four historians, Diodorus would still be the most likely suspect.

I conclude with some brief remarks concerning the potential historical significance of  $Suda~\theta~438$  and the possible source that ultimately underlies this anecdote about Hannibal. It is well known that in war the Indian elephant (Elephas~maximus) can be furnished with a turret or howdah, if required, but whether this was the case with the smaller African forest elephant (Loxodonta~cyclotis) used by Ptolemaic, Carthaginian and Numidian armies has long been controversial. The most recent and comprehensive review of the evidence concurs with the majority of earlier scholarship that African forest elephants did not ordinarily carry turrets, though this view necessarily entails an argument from silence, which is occasionally broken by awkward testimony to the contrary that can only be discounted by special pleading. The positive evidence for specifically Carthaginian use of elephant turrets is undeniably slight, but even those studies which argue a negative case concede the possibility of the exceptional use of turrets in a variety of contexts – ceremonial, propagandistic or poliorcetic.  $^{64}$ 

<sup>&</sup>lt;sup>62</sup> For the different species see Scullard (1974), 15–31, 60–3; R. Sukumar, *The Living Elephants: Evolutionary Ecology, Behavior and Conservation* (Oxford, 2003), 45–6, 52–4; Charles and Rhodan (2007), 364–7.

<sup>63</sup> See now Charles (2008), who essentially affirms the views of Scullard (1948); (1974), 240-5. Problematic for the negative case are explicit references to *elephanti turriti* of Juba I of Numidia in 46 B.C. in B.Afr. 30.2, 41.2, cf. 86.1 (elephantosque LXIIII ornatos armatosque cum turribus ornamentisque). The author of B.Afr was contemporary, well informed and conversant with military technicalia, while his sparse Caesarian diction is free of gratuitous literary embellishment, see most recently M. Müller, Das Bellum Africum: Ein historisch-philologischer Kommentar der Kapitel 1-47 (Diss. Trier, 2001), 33-46, with an ample bibliography. A coin of Juba II, dated A.D. 21/2, depicts an unambiguously African elephant bearing a turret, see J. Mazard, Corpus Nummorum Numidiae Mauretaniaeque (Paris, 1955), 103, no. 276, with pl. at 247; Scullard (1974), pl. 23.j. Also of possible relevance here is a fragment of Juba II's writings on elephants (FGrH 275 F 50), which alleges that the 'Libyans' in the past branded some war-elephants by engraving the symbol of a tower  $(\pi \dot{\nu} \rho \gamma \sigma s)$  on their tusks. See also Polyb. 5.84.2-7, where elephants deployed by Ptolemy IV at the battle of Raphia in 217 B.C. expressly carry turrets, though one school of thought has sought to explain away this evidence by inferring that Ptolemy fielded a force of predominantly (unturreted) African elephants supplemented by a small number of turreted Indian beasts, and postulating Ptolemaic access to and/or breeding of the Indian species, see Gowers and Scullard (1950), 272-7; Scullard (1974), 143-4; and now M.B. Charles, 'Elephants at Raphia: reinterpreting Polybius 5.84–5', CQ 57 (2007), 306–11.

<sup>64</sup> The testimony of Lucr. 5.1302–4; Sil. *Pun.* 4.599; 9.239–40, 577–8; 17.621; Juv. 12.110 can be safely disregarded as poetic embroidery. Scullard assembles the meagre representational evidence for certain or probable Hannibalic elephants equipped with towers: (1) small silver coins rev. depicting turreted elephant (species uncertain) probably issued by rebel Campanian cities post-216 B.C.; (2) a phiale from Cales in Campania; (3) a terracotta figure from Pompeii (insecurely dated). See Gowers and Scullard (1950), 278–9, pl. 16b; Scullard (1974), 170–1, 176–7, 243 with pls. 10.a–b, 22.h. On this basis Scullard (1948), 161–2 and n. 9 denies Carthaginian use of towers, but at 166 allows exceptional circumstances; repeated at Scullard (1974), 243, with a chronological qualification: 'it is safer to believe that the Carthaginians in their earlier use of elephants did not encumber them with towers ... [N]evertheless some archaeological evidence

Once it is admitted that African forest elephants not only could but sometimes did carry turrets, residual objections on the grounds of the perceived physical inferiority of the species become doubtful. 65 That being the case, regardless of whether the turrets were, in the event, employed frequently or exceptionally, they would still have to be transported when a Carthaginian army took the field, rather than improvised on campaign, and presumably the elephants themselves were the best vehicles for this load. It has been conjectured that after 215 B.C. Hannibal may have had at his disposal some (or at least one) Indian elephants, allegedly supplied to Carthage by Ptolemy IV (221-205/4 B.C.), who had captured Seleucid (Indian) elephants at Raphia in 217 B.C.; according to this view, any reference to turreted elephants after this date could relate instead to the Indian species. The tissue-thin evidence for this hypothesis hardly compels, however, and Romano-Egyptian friendship throughout the Second Punic War appears at least to rule out Ptolemy IV as a supplier of precious Indian elephants to Rome's enemy. 66 Consequently, acceptance of the historicity of the episode reported in Suda  $\theta$  438 controverts only those previous studies which dogmatically contend that African forest elephants were never, in any circumstances, furnished with turrets, a position which hardly seems tenable.

It was demonstrated above that both instances of  $\theta\omega\rho\acute{\alpha}\kappa\iota a$  in Diodorus (2.17.8; 17.88.6) are his own interpolation of an unhistorical detail that was not present in his source. This does not appear to be the case at  $Suda~\theta~438$ , in which  $\tau \grave{\alpha}~\theta\omega\rho\acute{\alpha}\kappa\iota a$  and  $\tau \grave{\alpha}~o\imath\kappa i \delta\iota a$  are not mere descriptive embellishment but intrinsic and integral elements of the account, and it is overwhelmingly unlikely that this technical distinction, and thus the entire episode, is the invention of Diodorus; in short, he is the conduit not the source. It has also been suggested that this incident derives ultimately from eyewitness testimony, most probably Carthaginian, and possibly with military expertise. This begs the obvious question whether Diodorus could have had access to such information. Although Diodorus' account of the Second Punic War survives as a few isolated fragments that merely hint at the content and arrangement of lost Books 26–7, exhaustive Quellenanalyse has established some possible sources. While detailed interpretations differ, it has long been recognized that comparison of the remains of Diodorus with other extant sources permits two basic conclusions: first, for this

does suggest that towers were carried on occasion during the Hannibalic War'. Charles and Rhodan (2007), 366–8 similarly nuance a generally negative argument: '(368) we assume ... that African elephants used in warfare by Carthage were not equipped with turrets (at least in pitched battles)'. More positive is Goukowsky (1972), 490, n. 67, 'Il semble que les Carthaginois n'aient équipé que tardivement leurs éléphants de tours, mais il est certain qu'une partie au moins de ceux d'Hannibal étaient ainsi armés'. Other opinions, both scholarly and amateur, are assembled by Charles and Rhodan (2007), 366 with n. 19.

<sup>65</sup> To my knowledge, this proposition originates in W. Gowers, 'African elephants and ancient authors', *African Affairs* 47 [188] (1948), 173–80, at 179; repeated with minor rewording in Scullard (1948), 161–2; (1974), 242; similarly de Beer (n. 16), 104; J.F. Lazenby, 'Elephants', *OCD*<sup>3</sup>, 520; id., *Hannibal's War: A Military History of the Second Punic War* (Warminster, 1998<sup>2</sup>), vii, 15–16.

<sup>66</sup> The case for Hannibal's Indian elephant(s) relies on an imaginative interpretation of inadequate numismatic and onomastic evidence, see Gowers and Scullard (1950), 277–83; H.H. Scullard, 'Ennius, Cato, and Surus', *CR* (N.S.) 3 (1953), 140–2; Scullard (1974), 170–6; F. de Visscher, 'Une histoire d'éléphants', *AntCl* 29 (1960), 51–60 at 54–5; Charles and Rhodan (2007), 366. I plan to examine this problem in a separate study. For Egypt's official neutrality and actual assistance to Rome during the Second Punic War see L.H. Neatby, 'Romano-Egyptian relations during the third century BC', *TAPA* 81 (1950), 89–98; A. Lampela, *Rome and the Ptolemies of Egypt. The Development of their Political Relations* 273–80 BC ([Commentationes Humanarum Litterarum 111] Helsinki, 1998), 33–86.

period Diodorus owes nothing to Polybius; second, numerous striking correspondences with Appian, and to a lesser degree with Livy, indicate that Diodorus' main source for the Second Punic War was a historical work, written in Greek, which belonged to or drew on the Roman annalistic tradition. This author was certainly pre-Livian, and possibly pre-Polybian, and was peculiarly well informed about domestic politics at Carthage.<sup>67</sup> Although opinions have differed, the most recent and comprehensive assessment of the evidence has tentatively advanced the candidature of Lucius Cincius Alimentus. 68 With regard to Suda  $\theta$  438, this proposal is especially tantalizing. The plebeian senator L. Cincius Alimentus (c. 240-190 B.C.) wrote a history of Rome in Greek that ran from the foundation of the city to the end of the Second Punic War.<sup>69</sup> Alimentus participated in the war against Hannibal: he commanded two legions as praetor in Sicily in 210 B.C., where he remained as propraetor in 209/8 B.C. After his return to Rome in 208 B.C., he was a member of the three-man mission sent to the consul T. Quinctius Crispinus in Capua. More significantly, Alimentus reported in his work that he had been taken prisoner by Hannibal but apparently treated with respect, and his confinement (c. 208–201 B.C.) placed him as a privileged witness to Carthaginian perspectives. During his detention he had the opportunity to converse with Hannibal himself about his previous conduct of the war. As revealed in a fragment preserved by Livy, Hannibal specifically provided Alimentus with detailed information on the Carthaginian army during its crossing of the Rhône and the Alps. 70 L. Cincius Alimentus, already proposed as the chief source for Diodorus 26–7, could therefore be the source for the episode in Suda  $\theta$  438.

Diodorus' dependence on this annalistic tradition for his principal model does not preclude his use of supplementary material from another source(s). As a second possibility, it is interesting to note that among the fragments of Diodorus 26 is an explicit reference to a 'Carthaginian' account of the Second Punic War: 'Sosylus the Lacedaemonian wrote a work about Hannibal in seven books'. The fragment supplies no context and the reference does not in itself prove that Diodorus had read this work, though it does not seem too incautious to assume that he had a good reason to mention it.<sup>71</sup> Sosylus' work was at least known, and possibly available, up to the early

<sup>&</sup>lt;sup>67</sup> H. Hesselbarth, *Historisch-kritische Untersuchungen zu dritten Dekade des Titus Livius* (Halle, 1889), 593–4; E. Schwartz, 'Diodorus', *RE* 1.5 (1903), 663–707, at 688–9; G. De Sanctis, *Storia dei Romani* 3.2² (Florence, 1968), 647–50; F. Càssola, 'Diodoro e la storia romana', *ANRW* 2.30.1 (1982), 724–73, at 763; K.S. Sacks, *Diodorus and the First Century* (Princeton, 1990), 131–2; C.G. Leidl, 'Appians "Annibaike": Aufbau, Darstellungstendenzen, Quellen', *ANRW* 2.34.1 (1993), 428–62, esp. 457–9; D. Gaillard (ed. and French trans.), *Appien, Livre VII. Le livre d'Annibal* ([Budé] Paris, 1998), xviii–xxvii.

<sup>&</sup>lt;sup>68</sup> P. Goukowsky (ed. and French trans.), *Appien, Livre VIII, Le livre africain* ([Budé] Paris, 2001), lxxix–lxxxvii; summarized in Goukowsky, *Fragments II*, 148, 168.

<sup>&</sup>lt;sup>69</sup> For testimonia, fragments and secondary literature see M. Chassignet (ed. and French trans.), *L'annalistique romaine* I. *Les annales des pontifes. L'annalistique ancienne (fragments)* ([Budé] Paris, 2003), lxxiii–ix, 54–9; H. Beck and U. Walter (ed. and German trans.), *Die frühen römischen Historiker* I: *Von Fabius Pictor bis Cn. Gellius* ([Texte zur Forschung, Band 76. Wissenschaftliche Buchgesellschaft] Darmstadt, 2005²), 137–47.

<sup>&</sup>lt;sup>70</sup> Livy 21.38.2–5: *L. Cincius Alimentus, qui captum se ab Hannibale scribit ... ex ipso autem audisse Hannibale ...* = F 10 Chassignet = F 10 Beck-Walter = F 7 Peter = *FGrH* 810 T6, F5.

<sup>&</sup>lt;sup>71</sup> Diod. 26. fr. a 7a (ed. Goukowsky) (= Exc. 3 Hœschel = 4 Walton = FGrH 176 Sosylus T 2): Μηνόδοτος ὁ Περίνθιος τὰς Ἑλληνικὰς πραγματείας ἔγραψεν ἐν βιβλίος πεντεκαίδεκα, δὲ Σώσιλος δὲ ὁ Λακεδαιμόνιος (Ἰλιος Hæschel) τὰ περὶ Ἀννίβαν ἔγραψεν ἐν βιβλίοις ἑπτά. Goukowsky, Fragments II, 168, 176 n.15 stresses that Diodorus' reliance on or even familiarity with either Menodotus or Sosylus cannot be assumed on the basis of this notice.

first century A.D., when Diodorus' contemporary Cornelius Nepos also implies familiarity.<sup>72</sup> Of the several Greek historians employed in Hannibal's retinue Sosylus appears to have enjoyed a particulary close acquaintance with the general: he accompanied Hannibal on his campaigns, taught him Greek and wrote a seven-book history of his achievements, an eye-witness account of the Hannibalic War that would have provided a corrective to Roman historiographic traditions.<sup>73</sup> Sosylus' work was known to Polybius, who censures it as 'the gossip of the barber's shop'; this criticism need not exclude Polybius' use of Sosylus, though this cannot be demonstrated.<sup>74</sup> The sole surviving specimen of Sosylus' writing, preserved on a mutilated papyrus at Würzburg, is an account of a naval battle fought between the Carthaginian and Roman-Massiliote fleets, probably at the mouth of the Ebro in 217 B.C., though the location and date are disputed. This fragment testifies, on the contrary, to his descriptive precision, detailed information and objectivity, and makes Polybius' judgement seem at best harsh, if not malicious.<sup>75</sup> Despite its brevity and damaged condition, the technical aspects of this battle account, and in particular Sosylus' description of the Cathaginians'  $\delta\iota\epsilon\kappa\pi\lambda\sigma\upsilon_s$  and the Massiliotes' counter-manoeuvre, has impressed modern readers. Although the evidence hardly substantiates the view that Sosylus served Hannibal as a military adviser, as some have conjectured, his understanding of contemporary warfare appears beyond reproach.<sup>76</sup> I shall not press

- <sup>72</sup> Nepos, *Hann.* 13.3. It is not possible to discern which details, if any, Nepos might have taken from Sosylus, or even to be sure that he had direct knowledge of this work, see J. Geiger, *Cornelius Nepos and Ancient Political Biography* (Stuttgart, 1985), 109–11.
- 73 Cf. Nepos, Hann. 13.3: huius (sc. Hannibalis) belli gesta multi memoriae prodiderunt, sed ex his duo, qui cum eo in castris fuerunt simulque vixerunt, quamdiu fortuna passa est, Silenus et Sosylus Lacedaemonius. atque hoc Sosylo Hannibal litterarum Graecarum usus est doctore, 'many writers have handed down a record of his (Hannibal's) military achievements, but among these men there were two who were actually with him on campaign and lived with him as long as fortune permitted, Silenus and Sosylus the Lacedaemonian. It was this Sosylus whom Hannibal employed as a teacher of Greek'. For older bibliography on Sosylus see Walbank, Commentary, 1.430–31. For Greek historians in Hannibal's entourage: V. Krings, 'Les lettres grecque à Carthage', in C. Baurain et al. (edd.), Phoinikeia Grammata. Lire et écrire en Méditerranée (Namur, 1991), 649–68; J. Seibert (n. 15), 11–13; D. Briquel, 'La propagange d'Hannibal au début de la deuxième guerre punique: remarques sur les fragments de Silènos de Kalèaktè', in Actas del IV Congreso Internacional de Estudios Fenicios y Púnicos 1 (Cadiz, 2000), 123–7; D. Briquel, 'Sur un fragment de Silènos de Calè Actè (le songe d'Hannibal, FGrHist 175, F 8). A propos d'un article récent', Ktema 29 (2004), 145–57; O. Devillers and V. Krings, 'Le songe d'Hannibal. Quelques reflexions sur la tradition litteraire', Pallas 70 (2006), 337–46.
- <sup>74</sup> Polyb. 3.20.5, on which see now V. Krings, 'La critique de Sosylos chez Polybe III 20', in G. Schepens and J. Bollansée (edd.), *The Shadow of Polybius: Intertextuality as a Research Tool in Greek Historiography: Proceedings of the International Colloquium, Leuven, 21–22 September 2001* ([Studia Hellenistica 42] Leuven, 2005), 223–36, with earlier bibliography.
- <sup>75</sup> FGrH 176 F 1, reproduced with partial French trans. in V. Krings, Carthage et les Grecs c. 580–480 av. J.-C. Textes et histoire (Leiden–Boston–Cologne, 1998), 217–29, and again with detailed commentary in G. Schepens, 'Die Westgriechen in antiker und modener Universalgeschichte. Kritische Überlegungen zum Sosylos-Papyrus', in R. Kinsky (ed.), Diorthoseis. Beiträge zur Geschichte des Hellenismus und zum Nachleben Alexanders des Großen ([Beiträge zur Altertumskunde 183] Munich–Leipzig, 2004), 73–107. See also C. Ferone, 'Il frammento di Sosilo sulla battaglia dell'Ebro del 217 a.C. (F.Gr.Hist. 176 Fr. 1)', in M. Capasso (ed.), Papiri letterari greci e latini (Galatina, 1992), 127–39; G. Zecchini, 'Ancora sul Papiro Würzburg e su Sosilo', in B. Kramer et al. (edd.), Akten des 21. internationalen Papyrologenkongresses, Berlin 1995 ([AfP Beiheft 3] Stuttgart–Leipzig, 1997), 1061–7.
- <sup>76</sup> It has been speculated that Sosylus not only taught Hannibal Greek but was also a tactical adviser, a belief inspired by the statement of Veg. *Epit.* 3.pr.7 that in Italy Hannibal employed an unnamed '*Lacedaemonium doctorem armorum*', see e.g. J.F. Lazenby, *The Spartan Army*

the evidence further, for fear of building a house of cards, but offer L. Cincius Alimentus and Sosylus for further consideration as the ultimate source for *Suda*  $\theta$  438, with a marginal preference for the former.

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## APPENDIX. CITATIONS OF DIODORUS IN THE SUDA

The Suda contains 44 entries derived from Diodorus via extant Excerpta Constant*iniana*: Diod. 8.7.6 =  $\rho$  308 (4.308.14–15) = EV 1.214.11–12; Diod. 8.18.1 et 19 =  $\sigma$ 1271 (4.448.21-449.7) = EV 1.215.20-216.8; Diod.  $13.35.4 = \alpha 1871 (1.168.13-15) =$ EV 1.232.2-4; Diod. 29.17.1 (Alder 5 Ind. Auct. 75 errore 19.17.1) =  $\delta$  1596  $(2.147.24-6) = EL\ 400.26-7$ ; Diod.  $19.81.3-4 = \delta\ 429\ (2.41.2-10) = EV\ 1.249.12-21$ ; Diod.  $21.17.1 = \tau 600 (4.553.5) = EV 1.254.19$ ; Diod.  $21.17.1 - 3 = \tau 602 (4.554.2 - 28) =$ EV 1.254.19–255.17; Diod. 21.17.4 [errore 21.7.14 in Adler] =  $\kappa$  214 (3.17.20–31) = EV 1.275.18-30; Diod. 23.16 =  $\epsilon$  3393 (2.442.14-16) et  $\pi$  442 (4.41.25-6) = EL 406.7-10; Diod.  $24.3.2 = \pi 341 (4.33.11-14) = EV 1.260.10-16$ ; Diod. 28.15 [errore Adler 38.15] =  $\epsilon 2657 (2.385.21-2) = EL 398.8-9$ ; Diod.  $29.4 = \alpha 3602 (1.325.26-7) =$ EL 398.27–8; Diod. 29.9 =  $\alpha$  2642 (1.234.1–4) = EL 399.33–400.2; Diod. 29.17.1 [omit Adler] =  $\delta$  1596 (2.147) = *EL* 399–401; Diod. 29.11 = v 466 (4.668.7–8) = *EL* 400.7–8; Diod.  $29.12 = \kappa 676 (3.52.2-4) = EL 400.18-20$ ; Diod.  $29.33 = \chi 457 (4.819.11-13) =$ EL 401.16–18; Diod.  $30.2 = \alpha 1763 (1.157.11-14) = EL 401.31-402.1$ ; Diod. 31.5.3 = $\pi$  522 (4.49.5–7) = *EL* 402.23–5; Diod. 31.7.2 =  $\alpha$  3088 (1.277.1–3) = *EL* 403.5–7; Diod.  $32.6 = \pi 444 (4.42.17) = EL 404.31-2$ ; Diod.  $32.6.1 = \alpha 1935 (1.173.27-9)$  et  $\delta$ 798 (2.75.13–15) = EL 404.27–31; Diod. 32.6.4 =  $\epsilon$  2246 (2.350.22–3) = EL 405.6–8; Diod. 33.5 =  $\alpha$  2440 (1.217.23–5) et  $\alpha$  4611 (1.431.4–5) = EL 405.20–3, 26–8; Diod.  $33.16 = \epsilon 217 (2.203.24 - 5) = EL 406.10 - 11$ ; Diod.  $33.28a - b = \alpha 316 (1.33.18 - 20)$  et  $\alpha$ 1835 (1.165.5–6) et  $\beta$  121 (1.455.13–14) et  $\gamma$  8 (1.503.1–2) et  $\epsilon$  2673 (2.386.18–12) et  $\epsilon$ 3533 (2.453.29–30) et  $\epsilon$  3786 (2.477.14–16) et  $\iota$  111 (2.609.15–17) et  $\lambda$  865  $(3.302.19-22) = EL \ 406.17-21, \ 32-407.3, \ 6-10, \ 14-19; \ Diod. \ 34/5.38.1 = \delta \ 462$  $(2.47.31-2) = EV \ 1.312.17-18$ ; Diod.  $34/5.34 = \pi \ 2362 \ (4.201.16-17) = EV$ 1.313.13-17; Diod. 36.15.2-3 =  $\alpha$  4274 (1.394.10-12) et  $\epsilon$  2759 (2.393.8-9) et  $\kappa$  787 (3.59.7-8) et  $\sigma$  1495 (4.467.2-3) = EL 408.20-2, 29-32; Diod. 40.1.3 =  $\alpha$  2319 (1.208.6-8) et  $\tau 405 (4.531.21-2) = EL 409.23-5, 31-3.$ 

Another 11 entries not found in the surviving volumes of *Excerpta* can be identified from the extant books of Diodorus: Diod. 13.67.2 (Adler 5 Ind. Auct. 75 errore 62.2) =  $\alpha$  3559 (1.321.25–6); Diod. 14.10.3 = a 2062 (1.186.1–2) (falso Polyb. fr. 106); Diod. 14.20.3 =  $\alpha$  4040 (1.369.8–9); Diod. 14.23.1 =  $\nu$  354 (4.659.27–660.2); Diod. 15.53.4 =  $\delta$  369 (2.36.3–5); Diod. 15.84.2 =  $\epsilon$  2067 (2.339.8–9); Diod. 17.82.7 =  $\alpha$  2617 (1.232.4–5); Diod. 17.85.5 =  $\pi$  2818 (4.234.4–5); Diod. 19.96.4 =  $\alpha$  3722 (1.335.8–9); Diod. 20.11.5 =  $\pi$  444 (4.42.14–15); Diod. 26.2 =  $\chi$  240 (4.801.4–6).

(Warminster, 1985), 170; G. Zecchini (n. 75), 1063–4; Goukowsky, *Fragments II*, 105, n. 144, 141, n. 38, 176, n. 16. E.L. Wheeler, 'The Hoplomachoi and the legend of Spartan drillmasters', *Chiron* 13 (1983), 1–20, at 1–2, 15–16, casts doubt on this thesis, arguing that although Vegetius probably does allude to Sosylus, the Spartan's military role is a mistaken late deduction by Vegetius himself or his source.

A further 9 entries name Diodorus, but come from sections of his work preserved in neither the *Excerpta* nor the direct tradition: Diod. fr.  $5 = \alpha 2668 (1.236.23-4)$ ; fr.  $6 = \epsilon 1471 (2.295.16-17)$ ; fr.  $7 = \epsilon 1521 (2.299.17-19)$ ; fr.  $8 = \kappa 1803 (3.135.23-4)$ ; fr.  $9 = \sigma 1021 (4.427.2-3)$ ; fr.  $10 = \sigma 1544 (4.470.13-14)$ ; fr. 11 = v 586 (4.676.24-6); fr.  $12 = \chi 9 (4.780.5-7)$ ; fr.  $13 = \chi 538 (4.828.17-18)$ .

There are 12 suspected fragments: *Suda*  $\alpha$  741 (1.71.6–7) (vel Polyb.); *Suda*  $\alpha$  1961 (1.176.11–12); *Suda*  $\alpha$  2612 (1.231.22–4); *Suda*  $\alpha$  2925 (1.264.18–19); *Suda*  $\delta$  1368 (2.129.21–3) (vel Polyb.); *Suda*  $\epsilon$  19 (2.189.14) (vel Polyb.); *Suda*  $\epsilon$  3524 (2.453.7–8); *Suda*  $\epsilon$  179 (2.532.8) (vel Cass. D.); *Suda*  $\kappa$  647 (3.50.25) (falso Polyb. fr. 169; Diod. vel Cass. D.); *Suda*  $\nu$  65 (3.440.13) (vel Cass. D.); *Suda*  $\pi$  2231 (4.191.10); *Suda*  $\phi$  556 (4.747.3–4).