

ARISTOTLE'S BIOLOGY AND HIS LOST HOMERIC PUZZLES*

INTRODUCTION

Diogenes Laertius' list of Aristotle's works includes a *Homeric Puzzles* (Ἀπορημάτων Ὀμηρικῶν) in six books (5.26, no. 119), as does the list in the biography of Aristotle attributed to Hesychius (no. 106).¹ This latter also includes a *Homeric Problems* (Προβλημάτων Ὀμηρικῶν) in ten books (no. 147), which appears to be the same as an item in the biography (extant in Arabic) attributed to Ptolemy al-Gharib (no. 104).² The later and more derivative *Vita Marciana* attributes to Aristotle a *Homeric Questions* (Ὀμηρικὰ ζητήματα).³ The only other reference to the title of such a work by Aristotle is from the anonymous *Antiatticista*, a second-century A.D. lexicon (s.v. βασιλίτσσα): 'They say Alcaeus the comic poet and Aristotle in *Homeric Puzzles* said this.'⁴ Finally, *Poetics* 25 – which begins περὶ δὲ προβλημάτων καὶ λύσεων – is a summary, with examples, of just such a work, and a description of how to undertake such an inquiry.

I proceed on the assumption that Aristotle wrote one work, in at least six books, presenting and solving puzzles and problems related to the epics of Homer.⁵ (I refer to this work hereafter as *Homeric Puzzles*.) The two most recent collections of the fragments of Aristotle include nearly 40 fragments each from (or testimonia about) this work (fr. 366–404 Gigon/142–79 Rose).⁶ The vast majority of these texts are drawn from the numerous scholia in the manuscripts of the *Iliad* and the *Odyssey*⁷ – though many or

* I wish to thank an anonymous referee for comments that significantly improved this essay. I learned of the death of Allan Gotthelf, who has done so much to further our knowledge of Aristotle's biology, shortly after completing this essay. I dedicate it to his memory.

¹ The lists in Diogenes Laertius (third century A.D.) and the *Vita Hesychii* (sixth century A.D.) may well go back to the Hellenistic period, though much about these lists is uncertain and disputed. See P. Moraux, *Listes anciennes des ouvrages d'Aristote* (Louvain, 1951).

² For the Arabic text (with German translation) of the list of Aristotle's works, transmitted by Ptolemy al-Gharib, see C. Hein, *Definition und Einleitung in der Philosophie: Von der spätantiken Einleitungsliteratur zur arabischen Enzyklopädie* (Frankfurt, 1985). This list is ultimately derived from Andronicus of Rhodes (first century B.C.). Regarding the title Προβλημάτων Ὀμηρικῶν, cf. the extant Ὀμηρικῶν προβλημάτων of Heraclitus 'the Allegorist' (c. first–second centuries A.D.). See D. Russell and D. Konstan, *Heraclitus: Homeric Problems* (Atlanta, 2005). Aristotle is never mentioned in this work, perhaps because Heraclitus' allegorical interpretation is at odds with Aristotle's more straightforward approach.

³ Cf. the title of the Ὀμηρικῶν ζητημάτων of Porphyry (third century A.D.; see below n. 8).

⁴ Ἀλκαῖόν φασι τὸν κωμωδοποιὸν καὶ Ἀριστοτέλην ἐν τοῖς Ὀμήρου ἀπορημάσιν εἰρηκέναι. *Anecdota Graeca* (vol. 1, p. 84 Bekker) = Aristotle fr. 404 Gigon.

⁵ 'Homer' is shorthand for 'the poet(s) who composed the *Iliad* and the *Odyssey*'.

⁶ O. Gigon, *Aristotelis opera*, vol. 3: *Librorum deperditorum fragmenta* (Berlin, 1987) has superseded V. Rose, *Aristotelis qui ferebantur librorum fragmenta* (Leipzig, 1886³).

⁷ For brief accounts of the Homeric scholia, see G.S. Kirk, *The Iliad: A Commentary*, vol. 1: *Books 1–4* (Cambridge, 1985), 38–43; R. Janko, *The Iliad: A Commentary*, vol. 3: *Books 13–16* (Cambridge, 1992), 20–8; and E. Dickey, *Ancient Greek Scholarship: A Guide to Finding, Reading, and Understanding Scholia, Commentaries, Lexica, and Grammatical Treatises, from their Beginning*

most of these, in turn, come from Porphyry's *Homeric Questions*.⁸ Along with *Poetics* 25, these texts are clearly our best source for information about the *Homeric Puzzles*. This material, however, would likely fill, or represents the content of, less than one book; but Aristotle's *Homeric Puzzles* consisted of multiple books. I think it worthwhile to explore other ways of determining the content of this lost work.

Aristotle cites Homer nine times in the *History of Animals*. In the biology as a whole, he cites him eleven times. In what follows, I examine all of the Homeric references in the biological works, and argue that, taken together, they likely provide additional evidence about the content of the *Homeric Puzzles*. And at the very least, these passages give us a better idea of how Aristotle would have approached some of the debates engaged in by Homeric scholars in antiquity.⁹ So far as I know, no one has suggested this source.¹⁰

Before proceeding, I need to present a couple of basic points from *Poetics* 25, which should help in understanding the biological excerpts I discuss.¹¹ First, according to Aristotle, the standard of correctness in mimetic art is not simply the way things were or are; an artist may also (properly) imitate or represent what is *said* or *thought* to be to the way things were or are.¹² The best example would be any story involving the Olympian gods: Aristotle does not believe such beings exist, though most people at the time did and of course most playwrights made use of stories about them.¹³ A second

to the Byzantine Period (Oxford, 2007), 18–23. I have made use of the following editions: H. van Thiel, *Scholia D in Iliadem* (Köln, 2000), available online only (<http://kups.ub.uni-koeln.de/1810/>); H. Erbse, *Scholia Graeca in Homeri Iliadem (scholia vetera)*, 5 vols. (Berlin, 1969–88); N. Ernst, *Die D-Scholien zur Odyssee: Kritische Ausgabe* (Köln, 2006), available online only (<http://kups.ub.uni-koeln.de/1831/>); W. Dindorf, *Scholia Graeca in Homeri Odysseam* (Oxford, 1855).

⁸ The first book of Porphyry's *Homeric Questions on the Iliad* is extant in one manuscript (Vaticanus gr. 305); see R. Sodano, *Porphyrii Quaestionum Homericarum Liber I* (Naples, 1970). For the rest, extracts from Porphyry's *Homeric Questions* (on the *Iliad* and the *Odyssey*) have survived among the Homeric scholia. It is not always clear what material is Porphyrian. J. MacPhail, *Porphyry's Homeric Questions on the Iliad: Text, Translation, Commentary* (Berlin, 2011) replaces the obsolete (and far too inclusive) H. Schrader, *Quaestionum Homericarum ad Iliadem pertinentium reliquiae* (Leipzig, 1882). H. Schrader, *Quaestionum Homericarum ad Odysseam pertinentium reliquiae* (Leipzig, 1890), however, is the sole edition of these fragments. (On the one Aristotle 'fragment' in the extant first book of Porphyry's *Homeric Questions on the Iliad* – which does not come from his *Homeric Puzzles* – see the Appendix.)

⁹ On Homeric scholarship before and contemporary with Aristotle, see N. Richardson, 'Aristotle's Reading of Homer and Its Background', in R. Lamberton and J. Keaney (edd.), *Homer's Ancient Readers: The Hermeneutics of Greek Epic's Earliest Exegetes* (Princeton, 1992), 30–40. In what follows, I use the expression 'Homeric scholar' quite loosely as shorthand for anyone who expressed opinions about the Homeric epics.

¹⁰ In general, the *Homeric Puzzles* has received little attention over the past century. Some exceptions: H. Hintenlang, 'Untersuchungen zu den Homer-Aporien des Aristoteles' (Diss., University of Heidelberg, 1961); G. Huxley, 'Historical criticism in Aristotle's "Homeric Questions"', *Proceedings of the Royal Irish Academy* 79 (1979), 73–81; B. Breitenberger's German translation of the fragments, with commentary, in H. Flashar, U. Dubielzig, and B. Breitenberger (edd.), *Aristoteles: Fragmente zu Philosophie, Rhetorik, Poetik, Dichtung* (Berlin, 2006), 305–21, 369–430.

¹¹ *Poet.* 25 is notoriously difficult; but I think the points I here adumbrate are uncontroversial.

¹² Another proper object of representation is the way things *should be* (*Poet.* 25, 1460b32–5). This alternative is of capital importance in Aristotle's aesthetics; but it will not concern me here, as my interest is the portrayal of or claims about animals. And even a portrayal of a horse, say, which stretches the truth in a way that is aesthetically defensible, according to Aristotle, would not be considered the presentation of a horse as it ought to be.

¹³ *Poet.* 25.1460b35–1461a1. There are, however, aesthetic limits to the representation of the gods. See, for example, Aristotle's criticism of the *deus ex machina* ending in Euripides' *Medea*: *Poet.* 15.1454a37–b2.

(and related) point: even if an artist has committed an error – has imitated or represented something that does not conform to what is true, or what is said or thought to be true – it is not necessarily an *aesthetic* error. In fact, some errors are justified on the grounds that they better achieve some legitimate aesthetic aim. For instance, a beautiful, well-executed painting of a running horse, which fails to make the placement of the legs match the reality of equine motion, commits an error in knowledge of a particular field of study, but not (necessarily) an error in the mimetic art in question, namely painting.¹⁴ The same would be true, Aristotle says, of a beautiful painting of a doe with horns. Such factual errors are not grounds for a major aesthetic criticism.¹⁵ If a painting could have been well executed *and* factually accurate about such equine or cervine details, then it would have been even better; however, if some legitimate aesthetic end is met by ignoring or contradicting such details – even if the result is impossible – that is justified on aesthetic grounds, and should not be criticized. For example (mine, not Aristotle's): if a poet portrays a horse leaping an impossibly wide distance or clearing an impossibly high wall, and such a portrayal better conveys grandeur or heroic stature – without straining credulity too much and becoming ridiculous – then such an impossibility is aesthetically justified.

HOMER IN ARISTOTLE'S BIOLOGY

I follow the standard order of appearance in the *corpus Aristotelicum*: nine passages from the *History of Animals*,¹⁶ and then one each from the *Parts of Animals* and *Generation of Animals*.¹⁷ For each Aristotle-text, my method is the following (though not always in this order): (1) to set the Homeric context, quoting the relevant text;¹⁸ (2) to present the Aristotle-text and provide its context; (3) to attempt to formulate the kind of puzzle the Aristotle-text might have been connected to, and, if possible, Aristotle's solution; (4) if possible, to provide evidence from other ancient works that the relevant Homeric text in fact was the subject of debate in antiquity.

1. Hist. an. 3.3, 513b24–8: on Il. 13.545–7

The account of the gruesome death of Thoön at the hands of Antilochus, in *Iliad* 13, includes an unusual anatomical description (545–7):

¹⁴ *Poet.* 25, 1460b17–21. Aristotle explains this aspect of equine motion in *IA* 14, 712a23–b9.

¹⁵ *Poet.* 25, 1460b31–2. On does lacking antlers, see *Part. an.* 3.1, 662a1–2 and *Hist. an.* 4.11, 538b18–19. There was in antiquity a debate over this biological fact, and the artists who were ignorant of it (though, judging by the extant relevant texts, the debate did not involve Homer). See Aristophanes of Byzantium, *Epitome of the History of Animals* 2.488–9 (127.9–15 Lampros) and Aelian, *NA* 7.39, both of whom disagree with Aristotle.

¹⁶ I use the text of D. Balme, *Aristotle: Historia Animalium*, vol. 1: *Books I–X: Text*, prepared for publication by A. Gotthelf (Cambridge, 2002). Note that Balme re-established the manuscript order of the books, which had been changed by Theodore Gaza and subsequently accepted by modern editors, including Bekker. See Balme (this note), 1, and P. Beullens and A. Gotthelf, 'Theodore Gaza's translation of Aristotle's *De animalibus*: content, influence, and date', *GRBS* 47 (2007), 469–513. Following Balme's notation, '7(8)', for example, means Book 7 according to the manuscript tradition, Book 8 in modern editions.

¹⁷ I do not discuss *De motu an.* 4.699b32–700a6 (cf. *Il.* 8.19–22), as its subject is not biological.

¹⁸ The texts of Homer that I have used are: M.L. West, *Homeri Ilias*, 2 vols. (Leipzig, 1998 and 2000) and P. von der Mühlh, *Homeri Odyssea* (Basel, 1962).

Ἀντίλοχος δὲ Θόωνα μεταστρεφθέντα δοκεύσας
οὐτάσ' ἐπαΐξας, ἀπὸ δὲ φλέβα πᾶσαν ἔκερσεν,
ἢ τ' ἀνὰ νῶτα θεόουσα διαμπερές ἀχέν' ἰκάνει.

Antilochus, watching Thoön as he turned around,
rushed at him and struck, and he cut through¹⁹ all the vessel
which runs up the back continuously till it reaches the neck.

In *Hist. an.* 3.3, Aristotle turns to describing 'the great vessel' (ἡ μεγάλη φλέψ, 513b1) – i.e. the *vena cava*. At one point, he quotes Homer approvingly (513b24–8):

ἢ δ' ἐπὶ τὸν σφόνδυλον τοῦ τραχήλου τείνουσα φλέψ καὶ τὴν ῥάχιν πάλιν παρὰ τὴν ῥάχιν
τείνει, ἦν καὶ Ὅμηρος ἐν τοῖς ἔπεσιν εἴρηκε ποιήσας "ἀπὸ δὲ φλέβα πᾶσαν ἔκερσεν, ἢ τ'
ἀνὰ νῶτα θεόουσα διαμπερές ἀχέν' ἰκάνει".

The vessel extending to the vertebra of the throat and to the backbone extends back again along the backbone, which [vessel] Homer too portrayed in these lines, saying: 'he cut through all the vessel which runs up the back continuously till it reaches the neck.'

Aristotle's identification of the vessel mentioned by Homer with the *vena cava* is not unproblematic; and just as modern Homeric scholars continue to debate the identity of this vessel,²⁰ ancient scholars likely did as well. At least one scholiast clearly agrees with Aristotle.²¹ Aristarchus flagged the passage, and Aristicus' explanation of what is supposedly objectionable in it survives: it includes πᾶσαν where one would expect ὅλην (the *whole* vessel, not *all* the vessel), and it does not successfully convey what had happened to Thoön: 'he had fallen after the strike owing to the spinal vessel having been loosened and no longer being the enduring sinew'. Aristicus (presumably following Aristarchus) may have identified this vessel with the spinal cord and not the *vena cava*, and the same could be said for the D-scholiast.²²

¹⁹ It may be more natural to translate ἀπὸ ... ἔκερσεν 'cut away' or 'cut off', but 'cut through' is possible (and seems to be required for sense). See R. Cunliffe, *A Lexicon of the Homeric Dialect* (London, 1924), s.v. ἀπό: 'In reference to severing or cutting, away, off, through.' Zenodotus of Alexandria (third century B.C.) would disagree (Σ^A *Il.* 13.546: Ζηνόδοτος "διὰ δὲ φλέβα"). He thought ἀπό should be emended to διὰ – I assume on the grounds that he believed διὰ was needed to convey that the vessel was being cut *through*, i.e. severed. A. Kelly, *A Referential Commentary and Lexicon to Homer, Iliad VIII* (Oxford, 2007), 127, understanding 'cut away/off', describes this as 'the removal of the φλέψ running up Thoön's back'.

²⁰ K. Saunders, 'The wounds in *Iliad* 13–16', *CQ* 49 (1999), 345–63, at 349–51, writes of *Il.* 13.545–7: 'There is no such vein'; and 'the effort of the scholiasts, supported by Aristotle ..., to identify it with the main artery (aorta ...) or vena cava ... are futile, since they are both immediately in front of the spine and protected thereby from a stab wound from behind'. He considers other scholarly suggestions before concluding: '[W.-H. Friedrich, *Verwundung und Tod in der Iliad* (Göttingen, 1956), 43] thought the vein was simply a Homeric fantasy, and Friedrich is probably right.'

²¹ Σ^{bT} *Il.* 13.547: ἀνὰ νῶτα θεόουσα: ἀνατομικῶς, οἶδε τὴν καλουμένην κοίλην φλέβα, τὴν ἐκ δεξιῶν τῆς ῥάχως ἀνερχομένην ἀπὸ τοῦ ἥπατος καὶ κατὰ τὸ διάφραγμα χωροῦσαν ἐπὶ τὴν καρδίαν καὶ ἀπὸ ταύτης ἐπὶ τὸν τράχηλον. Homer 'knew it was the so-called hollow vessel' (i.e. the *vena cava*). This is the Hippocratic term for it (see *Loc. Hom.* 3, which contains identical language: τὴν κοίλην φλέβα καλουμένην). Aristotle does not use this terminology; but note that Galen explicitly identifies 'the greatest vessel' with the one named 'hollow': μεγίστη φλέψ, ἦν κοίλην ὀνομάζουσι (in *Hp. Nat. Hom.* [15.135 Kühn]). More on Galen and this work shortly.

²² *De signis Iliadis* 13.546–9 (ex Σ^A): ἡ διπλή ὅτι πᾶσαν ἀντὶ τοῦ ὅλην καὶ ὅτι ἐπὶ τὴν πληγὴν πέπτωκε διὰ τὸ παραλελύσθαι τὴν νωτιαίαν φλέβα καὶ μηκέτι εἶναι τὸ ἀντέχον νεῦρον. Σ^D *Il.* 13.546: 'he severed the whole spinal vessel' (ὅλην δὲ ἀπέτεμε τὴν νωτιαίαν φλέβα). See Saunders (n. 20), 350. Janko (n. 7), 114 claims that this vessel is the spinal cord.

There is further evidence for ancient debate about how anatomically accurate this Homeric passage is, in an interesting passage from Galen's commentary on the Hippocratic *On the Nature of Man*. In *On the Nature of Man* 11, which discusses 'the thickest of the vessels' (αἱ παχύταται τῶν φλεβῶν), the author states not that there is one major vessel running along the spine, but two pairs of vessels. Galen in his commentary claims that this is so obviously wrong that 'someone has added the account to the Hippocratic treatise' (εἰς Ἱπποκράτειον σύγγραμμα παρενέθηκέ τις τὸν λόγον). A few lines later he adds:

The [nature] of the greatest vessel is so clear that anyone who is able to learn something from dissection would not be able to overlook it, and this has been agreed to by everyone to such an extent that even the poets themselves know it. In any case, Homer says: 'he cut through all the vessel, which runs up the back continuously till it reaches the neck'. He knew, then, that there is a single one, as indeed there is, not four ...²³

One may merely speculate that Aristotle too would have defended Homer against the Hippocratic (or pseudo-Hippocratic) account, and in general taken part in this debate.

2. *Hist. an.* 3.12, 519a18–20: on *Il.* 20.73–4

At the opening of *Iliad* 20, Zeus informs the other gods that they may now take part in the war, each helping the side he or she supports. The gods pair off in battle: Poseidon against Apollo, Ares against Athena, Hera against Artemis, Leto against Hermes (67–72). Our passage follows (73–4):

ἄντα δ' ἄρ' Ἥφαιστοιο μέγας ποταμὸς βαθυδίνης,
ὄν Ξάνθον καλέουσι θεοί, ἄνδρες δὲ Σκάμανδρον.

And against Hephaestus was the great, deep-swirling river,
whom gods call Xanthus [i.e., Yellow], and men Scamander.

The topic of *Hist. an.* 3.12 is animals changing colour, especially owing to changes in their environment. At 519a9, Aristotle turns to discussing change in hair colour 'following changes to their waters' (κατὰ τὰς τῶν ὑδάτων μεταβολάς) – presumably their drinking-water – with a focus on lambs. He provides a few examples, concluding the discussion:

δοκεῖ δὲ καὶ ὁ Σκάμανδρος ποταμὸς ξανθὰ τὰ πρόβατα ποιεῖν· διὸ καὶ τὸν Ὅμηρον φασιν ἀντὶ Σκαμάνδρου Ξάνθον προσαγορεύειν αὐτόν.

In fact the Scamander River is thought to make lambs yellow; and this is why they say Homer calls it Xanthus instead of Scamander.

There certainly was, in antiquity, a dispute over this *Iliad* passage: over why the Scamander was also called Xanthus, and why the gods called it the latter. As is usually

²³ Gal. in *Hp. Nat. Hom.* (15.138 Kühn): τὸ δὲ τῆς μεγίστης φλεβὸς οὕτως ἐστὶ πρόδηλον, ὡς μήτε τινὰ λαθεῖν δύνασθαι τὸν δυνηθέντων ἐξ ἀνατομῆς τι μαθεῖν, ὁμολογηταί τε πάντιν ἄχρι τοῦ καὶ τοὺς ποιητὰς αὐτοὺς γινώσκειν. Ὅμηρος γοῦν φησιν· "ἀπὸ δὲ φλέβα πᾶσαν ἔκερσεν, ἢ τ' ἀνὰ νότα θεούσα διαμπερὲς ἀχέν"· ἰκάνει". μίαν οὖν αὐτὴν οἶδεν, ὡςπερ οὖν καὶ ἔστιν, οὐ τέτταρας ...

the case, most of the evidence comes from fairly long after Aristotle – though his ‘they say’ (φασιν) indicates that this question was already a topic of discussion and that the river’s purported capacity to turn things yellow (or lambs, at any rate) was one reason given for why it was called Xanthus.²⁴ In fact, to judge from the other evidence, every explanation involved this capacity. Eustathius (drawing on other sources)²⁵ mentions three such claims in his commentary on the *Iliad*:

It is called Xanthus, since, they say, it yellows especially those who bathe in it, as the Lycian Xanthus²⁶ does as well; or also, when it swells it whitens the crops growing beside it, and in this way [makes them] yellow ... Or because Aphrodite, before the Judgment [of Paris], by bathing in it, acquired yellow hair.²⁷

If this was a problem that Aristotle discussed in his *Homeric Puzzles*, what might his solution have been? That he writes ‘they say’ seems to suggest that that was not his own answer – that he was simply using this alternative answer as an opinion supporting his claim about changing waters transforming the hair colour of certain animals, and not as a key to explaining Homer. Of course, it may also have been his own solution, and he was simply being non-committal in the context of the *Hist. an.*-discussion of lambs. Or, it could be that his own answer was a more obvious one (which had nothing to do with lambs): the river was called Xanthus because it looks yellow. (At *Il.* 21.8 it is described as ἀργυροδίνην, ‘silver-swirling’.)²⁸ But his answer might not have been that straightforward – at least, there might be a good reason for someone to suggest a less obvious explanation. As I indicated, the original problem was likely not simply why the river is called Xanthus but why it is called that *by the gods*. An explanation in terms of special transformative powers was thus arguably more suitable.

3. *Hist. an.* 6.20, 574b29–575a1: on *Od.* 17.326–7

In a poignant scene in *Odyssey* 17 (290–327), a disguised Odysseus, talking to Eumaeus, recognizes an old dog lying nearby on a dung heap: it is Argos, whom Odysseus had raised as a pup. Whereas no one else has recognized Odysseus, Argos

²⁴ Cf. Pl. *Cra.* 391e–392a (though Plato’s interest is in why one name is more correct – that is to say, divine – than the other).

²⁵ Eustathius of Thessalonica (twelfth century A.D.) wrote massive commentaries on the *Iliad* and the *Odyssey*. ‘Their value consists particularly in the assemblage of material drawn from the old scholia and the lost works of earlier scholars and lexicographers’ (*OCD*³ s.v. Eustathius). I have made use of the standard editions: M. van der Valk, *Eustathii archiepiscopi Thessalonicensis commentarii ad Homeri Iliadem pertinentes*, 4 vols. (Leiden, 1971–87); G. Stallbaum, *Eustathii archiepiscopi Thessalonicensis commentarii ad Homeri Odysseam*, 2 vols. (Leipzig, 1825–6).

²⁶ A river with the same name, which ran through ancient Lycia.

²⁷ Eust. *Il.* 20.73–4 (vol. 4, p. 374): Ξάνθος δὲ λέγεται, ἐπεὶ φασί, διαφερόντως τοὺς λουομένους ξανθίζει, ὡς καὶ ὁ Λύκιος Ξάνθος, ἢ καὶ τοὺς παραπεφυκότας παιῶνων καρποὺς λευκαίνει καὶ οὕτω ξανθὴν ... ἢ ὅτι Ἀφροδίτη πρὸ τῆς κρίσεως ἐν αὐτῷ λουσαμένη ξανθὰς ἔσχε τρίχας. Cf. Σ^{BT} *Il.* 20.73–4, *Etym.Gud.* s.vv. Ξανθός and Σκαμάνδριος πηγῆ, and *Etym. Magn.* s.v. Ξάνθος.

²⁸ That seems like the obvious answer. But it has been argued that, etymologically, Scamander and Xanthus have the same root, which is in fact unconnected to ξανθός (‘yellow’). This interpretation is described in M. Edwards, *The Iliad: A Commentary*, vol. 5: *Books 17–20* (Cambridge, 1991), 297–8. Note also M.L. West, *The Making of the Iliad: Disquisition and Analytical Commentary* (Oxford, 2011), 366: ‘Scamander was evidently the name in use in P’s [i.e. the author’s] time, Xanthos one current in poetic tradition.’ See also Janko (n. 7), 197.

pricks up his ears at his master's voice. Odysseus and Eumaeus talk about the dog briefly and then exit, at which point (326–7):

Ἄργον δ' αὖ κατὰ μοῖρ' ἔλαβεν μέλανος θανάτοιο,
αὐτίκ' ἰδόντ' Ὀδυσῆα ἔεικοστῶ ἔνιαυτῶ.

The doom of black death now seized Argos,
straightaway having seen Odysseus in the twentieth year.

In *Hist. an.* 6.20, Aristotle presents assorted information about dogs, with particular attention to the Laconian breed. Towards the end of the chapter, he discusses the age of the Laconian dog (574b29–575a1):

ζῆ δὲ τῶν Λακωνικῶν κύων ὁ μὲν ἄρρην περὶ ἕτη δέκα, ἡ δὲ θήλεια περὶ ἕτη δώδεκα, τῶν δ' ἄλλων κυνῶν αἱ πλεῖσται περὶ ἕτη τετρακακίδεκα ἢ πεντεκακίδεκα, ἔνιαυτοὶ δὲ καὶ εἴκοσιν· διὸ καὶ Ὀμηρον οἴονται τινας ὀρθῶς ποιῆσαι τῷ εἰκοστῷ ἔτει ἀποθανόντα τὸν κύνα τοῦ Ὀδυσσεύως.

Of the Laconian dogs the male lives about ten years, the female about twelve, whereas of the other dogs most of the females live around fourteen or fifteen years, but some even twenty; and this is why some believe that Homer correctly portrays the dog of Odysseus dying in the twentieth year.

Once again, Aristotle's own words – 'some believe' (οἴονται τινας), etc. – indicate that at the time he wrote this, people were debating, in connection with Argos, whether it was possible for a dog to live for twenty years or more. One interpretation, it seems, was that Homer is accurate: some dogs live past twenty, and therefore Argos could have. This is confirmed by Eustathius, who again provides a clue to some of the parties of the debate. After quoting *Od.* 17.326–7, he refers to 'the inquiry into how long Argos was strong enough to live' (τὴν ἱστορίαν ἐπὶ πόσον ὁ Ἄργος ἐξήρκεσε ζῶν). The first interpretation he presents, which seems to be his own, is roughly the sort of interpretation mentioned by Aristotle: some side with Homer, who is accurate, 'because dogs can live even 24 years' (ὅτι δὲ καὶ εἰκοσιτέσσαρα ζῶσιν ἕτη κύνας).²⁹

What would Aristotle have made of this interpretation? He might have balked at using the longevity of some female dogs as support for Homer's portrayal of Argos (a male). Aristophanes of Byzantium (c. 257–180 B.C.), a Homeric scholar in his own right, discussing *Hist. an.* 6.20 in his *Epitome* of Aristotle's *History of Animals*, either criticizes Aristotle or (more likely) tries to distance him from this interpretation: 'The [male] Laconian [dog] lives ten years, the female twelve; but the other females live to fourteen. But the myth being made about the dog of Odysseus, that he lived twenty years, is among the things believed in in vain.'³⁰ There is other evidence, however, that Aristotle defended at least one aspect of the accuracy of this Homeric passage (and perhaps more importantly, that he discussed this issue in his *Homeric Puzzles*). Here is fr. 400 Gigon:

²⁹ Eust. *Od.* 17.326–7 (vol. 2, p. 146).

³⁰ Ar. Byz. *Epit.* 2.180 (Lampros): ζῆ δὲ ὁ μὲν Λακωνικὸς ἕτη δέκα, ἡ δὲ θήλεια δώδεκα· αἱ δὲ ἄλλαι ζῶσι δεκατέσσαρα. τὸ δὲ μυθολογούμενον περὶ τοῦ τοῦ Ὀδυσσεύως κυνός, ὡς εἴκοσιν ἕτη ἔζησε, τῶν εἰκῆ πεπιστευμένων ἐστίν.

Ἀριστοτέλης φησὶν ὅτι πρεσβύτης ἦν ἤδη σφοδρὰ ὁ κύων καὶ ὑπὸ τῆς ἡδονῆς τῆς πρὸς τὸν Ὀδυσσεῖα ἐτελεύτησεν εἰκότως· αἱ γὰρ σφοδραὶ ἡδοναὶ καὶ ἰσχυραὶ διαλύουσι. διὸ καὶ τὸν κύνα ἐποίησεν ἀναγνωρίσαντα καὶ ἡσθέντα ἀποψύξαι.³¹

Aristotle says that the dog was already a very old one and it is reasonable that he was killed by his pleasure with regard to Odysseus: for very strong pleasures undo [us]. And this is why [Homer] portrayed the dog as recognizing [him] and so being content to die.

This answers a different (but related) question: was it reasonable to portray Argos dying shortly after seeing Odysseus? But the age of Argos, and how plausible such an age was, would likely have been brought in to answer this question.

The other interpretation Eustathius mentions also combines the age of Argos and the cause of his death. I think the implication in what follows is that even if it were the case that Argos lived an unnaturally long life, he did so because his long life and the manner of his death were used by the gods to send a good omen to Odysseus:

The ancients say Argos died so quickly under the pleasure of the recognition, for little weight puts to rest ancient bodies, according to Sophocles, often at least when they are overcome by stronger things – like violent pains, and similarly [violent] pleasures. But the action, it is said, was an omen auspicious for Odysseus. For the dog was perhaps white, as was written before,³² and everything white is a good omen. Now as a dog both weak through old age and dying at the same time as the sighting of Odysseus, it revealed the shamelessness and weakness of the suitors and their not being long for this world, even if otherwise they themselves were gladdened with high expectations.³³

Both *Poetics* 25 and the fragmentary evidence of the *Homeric Puzzles* reveal that Aristotle prefers straightforward explanations or interpretations, if possible, and not allegorical ones or appeals to the divine – though divine intrusions into a story are fine, he thinks, if necessitated by the plot (see n. 13). He discusses omens, however, only when they are an explicit part of Homer's story.³⁴

I think one other interpretation was likely concerning this passage – one which may well have prompted the debate over it in the first place. Zoilus of Amphipolis was known as Ὀμηρομάστιξ, 'Scourge of Homer'. He lived in the fourth century B.C. and so may well have been known to Aristotle. He appears to have focussed on and been hypercritical about what many would regard as non-essentials.³⁵ One can imagine Zoilus (or someone like him) criticizing Homer for unrealistically extending the life of Argos.

Such a criticism would not have impressed Aristotle, however. Even if the facts of canine biology did not support Homer, that would have been little cause for concern; for, as we have seen, such factual errors are tolerable if some legitimate aesthetic end

³¹ Σ^A *Od.* 17.326, perhaps from Porphyry's *Homeric Questions on the Odyssey*.

³² See Eust. *Od.* (vol. 2, p. 145).

³³ Eust. *Od.* (vol. 2, p. 146): φασὶ δὲ οἱ παλαιοὶ ὡς τέθνηκεν οὕτω ταχὺ ὁ Ἄργος ὑφ' ἡδονῆς τῆς ἐπὶ τῷ ἀναγνωρισμῷ, σμικρὰ γάρ τοι ῥοπή εὐνάζει κατὰ Σοφοκλῆν τὰ παλαιὰ σώματα, ὅπου γε καὶ τῶν ἰσχυρῶν πολλακίς περιγίνονται ὡς περ σφοδραὶ λύπαι, οὕτω καὶ ἡδοναί. τὸ δὲ πρᾶγμα καὶ σύμβολον ἦν, ὡς ἐρρέθη, αἴσιον τῷ Ὀδυσσεῖ. λευκὸς μὲν γὰρ ἴσως ἦν ὁ κύων, ὡς καὶ προεγράφη. πᾶν δὲ λευκὸν χρηστὸν σύμβολον. ὡς δὲ καὶ κύων καὶ ἀσθενὴς διὰ γῆρας καὶ ἄμα τῆ τοῦ Ὀδυσσεῦς θέα θανάων, τὸ τῶν μνηστήρων ἐδήλου ἀναιδῆς καὶ ἀσθενῆς καὶ ὀκύμορον, εἰ καὶ ἄλλως χρησταὶς ἐλπῖσιν ἔσαινον ἑαυτοῦς.

³⁴ See fr. 369 Gigon = Σ^B *Il.* 2.305 = Porph. *ad Il.* 2.305–29 (pp. 44–7), on the prophecy of Calchas (*Il.* 2.323–9).

³⁵ See Porph. *ad Il.* 10.276 (pp. 178–9). Aristotle never mentions Zoilus; but he does mention this sort of critic (see e.g. *Poet.* 25, 1461b1–3; cf. *Metaph.* N.6, 1093a26–8.)

is achieved, and I believe that that condition is met here: this touching scene connects Odysseus with his past life in Ithaca, and underscores all that was absent or lost in the intervening twenty years. Stretching the longevity of Argos slightly beyond what was likely or possible (if that is what Homer did) to cover Odysseus' twenty-year absence was a small price to pay.

4. *Hist. an.* 6.21, 575b4–7: *on Il.* 2.402–3 & 7.313–5 and *Od.* 19.418–20 & 10.19–20

In three passages, Homer mentions a five-year-old bull:

αὐτὰρ ὃ βοῦν ἱέρευσεν ἄναξ ἀνδρῶν Ἀγαμέμνων
πίονα πενταέτηρον ὑπερμενεί Κρονίωνι.

But Agamemnon, lord of men, sacrificed a bull,
fat and of five years, to the son of Cronus, supreme in might. (*Il.* 2.402–3)

οἱ δ' ὅτε δὴ κλισίῃσιν ἐν Ἀτρείδαο γένοντο,
τοῖσι δὲ βοῦν ἱέρευσεν ἄναξ ἀνδρῶν Ἀγαμέμνων
ἄρσενά πενταέτηρον ὑπερμενεί Κρονίωνι.³⁶

When they came to the huts of the son of Atreus,
Agamemnon, lord of men, sacrificed a bull for them,
male and of five years, to the son of Cronus, supreme in might. (*Il.* 7.313–15)

Αὐτόλυκος δ' υἱοῖσιν ἐκέκλετο κυδαλίμοισι
δείπνον ἐφοπλίσσαι· τοῖ δ' ὄτρύνοντος ἄκουσαν.
αὐτίκα δ' εἰσάγαγον βοῦν ἄρσενά πενταέτηρον.

Autolycus called to his glorious sons
to make ready the meal; and they hearkened to his call.
At once they led in a bull, male and of five years. (*Od.* 19.418–20)

In a fourth passage, however, the age of a bull is said to be nine seasons:

δῶκε δέ μ' ἐκδείρας ἀσκὸν βοῶς ἐννεώροιο,
ἔνθα δὲ βυκτῶν ἀνέμων κατέδησε κέλευθα·

[Aeolus] gave me a wine-skin, made of the hide of a flayed bull of nine seasons,
and therein he bound the paths of the blustering winds. (*Od.* 10.19–20)

Much ancient Homeric scholarship or interpretation was concerned with explaining apparent contradictions – or, in the case of Homer's more severe critics, pointing out contradictions. For example, why does Homer at one point say that Crete has 100 cities (*Il.* 2.649) but elsewhere 90 (*Od.* 19.172–4)?³⁷

The first three passages do not necessarily contradict the fourth, but some critics apparently thought they did or thought Homer needed to be defended against such a

³⁶ West (n. 18) brackets *Il.* 7.315 as an interpolation.

³⁷ For the question and various solutions – including Aristotle's – see fr. 370 Gigon = Σ^B *Il.* 2.649 = Porph. *ad Il.* (pp. 68–9). On contradictions, see *Poet.* 25, 1461a31–b9.

charge. Aristotle was aware of this issue. In *Hist. an.* 6.21, he presents assorted information about cattle; and after a brief description of their usual longevity, he writes (575b4–7):

ἀκμάζει δὲ μάλιστα πεντετῆς ὄν, διὸ καὶ Ὅμηρον φασι πεποιθκέναι τινὲς ὀρθῶς ποιήσαντα “ἄρσενά πενταέτηρον” καὶ τὸ “βοὸς ἑννέωροιο”· δύνασθαι γὰρ ταυτὸν.

[The bull] is at its prime especially when five years old, and this is why some say Homer portrayed them well, writing ‘male and of five years old’ and ‘bull of nine seasons’; for [they say these] can be the same.³⁸

This brief passage might actually indicate two Homeric questions or puzzles: (1) Was Homer right that a bull is, at five years, in its prime (and so ideally suitable as a sacrifice to Zeus)? (2) Does Homer equate ‘five years’ and ‘nine seasons’, and if so, was he justified in doing so? I have, however, encountered no (other) evidence for the first of these questions. Aristotle at any rate answers it in the affirmative.

He appears non-committal about the second question, however: some say that ‘five years’ and ‘nine seasons’ mean the same thing. So far as I have been able to determine, without exception the ancient lexical and etymological works, as well as the Homeric scholia, all take ‘nine seasons’ to mean ‘nine years’.³⁹ On this view, Homer did not equate ‘five years’ and ‘nine seasons’. One obvious approach, then, for those who equate ‘nine seasons’ and ‘nine years’, is to say that the first three passages all describe ritual sacrifice (or, in the third case, ritual meal preparation), and so require a bull in its prime (i.e. five years old), but that nothing rules out a wineskin, divinely crafted to contain the winds, being made out of the hide from a nine-year-old bull. Another approach would be to claim that Homer *did* equate the two, but that he was wrong to do so.

Eustathius does not offer any direct help with our passage (though it is perhaps noteworthy that he quotes *Hist. an.* 6.21 in support of Homer).⁴⁰ He does make a relevant comment on *Od.* 10.390, however, which describes Odysseus’ encounter with what look like ‘nine-season’ (ἑννέωροισιν) pigs – in fact his comrades, transformed by Circe. One interpretation, which Eustathius prefers, is that ‘nine-season pigs’ (ἑννέωροι σύες) refers to ‘nine-year-olds’ (οἱ ἑννεαετείς). But an alternative, he says, is to take ἑννέωροι to mean ‘nine of the seasons’ (οἱ ἑννέα ὥρων), and so ‘two years and one month’ (ἑτῶν δύο καὶ ἐνὸς μηνός).⁴¹ This approach seems useless for anyone attempting to make five years equal nine seasons; but it may be further evidence of the sort of mathematical manipulation Homeric scholars engaged in to fix what they took to be contradictions. For example, Aristotle’s longest and most complicated extant solution to a Homeric problem is his answer to the following question (reported by Porphyry):

To begin with, the following is agreed to be one of the old inquiries, in which [Homer] says: ‘and the stars have advanced, and more than two parts of the night have passed on, and yet

³⁸ I take φασι τινὲς to govern δύνασθαι (as well as πεποιθκέναι): ‘they say these terms can be the same’. Most translators take Aristotle to be claiming that they are the same.

³⁹ E.g. Σ^D *Od.* 10.19, ἑννέωροιο: ἑννεαετούς, cf. *Apollon. Lex.* (p. 68 Bekker).

⁴⁰ See Eust. *Il.* 2.402–3 (vol. 1, p. 374): καὶ Ἀριστοτέλης οὖν ἱστορήσας ἀκμάζειν μάλιστα τὸν βοῦν πέντε ἔτη ὄντα λέγει ὀρθῶς πεποιθκέναι τὸν Ὅμηρον βοῦν ἄρσενά πενταέτηρον. φησὶ δὲ καὶ τὸ “βοὸς ἑννέωροιο” ταυτὸν δύνασθαι.

⁴¹ Eust. *Od.* 10.390 (vol. 1, p. 386); there is a problem with Eustathius’ arithmetic. A. Heubeck and A. Hoekstra, *A Commentary on Homer’s Odyssey*, vol. 2: *Books IX–XVI* (Oxford, 1990), 44 remark, without further comment, that ἑννέωροισιν means ‘nine years’.

a third part remains' [*Il.* 10.252–3]. For how, if these two parts and yet more of them as well have run out, does the third part remain but not part of a third?⁴²

Whether Aristotle similarly accepted the challenge and tried to equate five years and nine seasons is impossible to determine, though in *Hist. an.* 6.21 he attributes to other people the view that five years and nine seasons are the same.

5. *Hist. an.* 6.28, 578a32–b5: on *Il.* 9.538–9 and *Od.* 9.190–1

What follows are two (seemingly) unrelated passages, one describing a wild pig, the other the Cyclops Polyphemus:

ἦ δὲ χολωσαμένη διον γένος Ἰοχέαιρα
ὤρσεν ἐπι χλοῦνην σὺν ἄγριον ἀργιόδοντα ...

and enraged at [Oineus'] glorious family, the Lady of Arrows [i.e. Artemis] roused against [him] a *chlounēs* wild pig with shining teeth ... (*Il.* 9.538–9)

καὶ γὰρ θαῦμ' ἐτέτυκτο πελώριον, οὐδὲ ἐφκει
ἀνδρὶ γε σιτοφάγῳ, ἀλλὰ ρίψ ὑλήεντι

and indeed he had been formed an enormous wonder, not like a man, an eater of bread, but like a wooded peak ... (*Od.* 9.190–1)

The connection between these two passages is entirely accidental: Aristotle's quotation of this description of the wild pig combines parts of both passages. Apparently, his text (of *Il.* 9.538–40) was different from that of the manuscript tradition (but see n. 44).

In *Hist. an.* 6.28, Aristotle presents assorted information about wild pigs. Here is the second half of this brief chapter (578a32–b5):

τῶν δ' ἄρρῆνων καὶ ἄγριων [*sc.* ὑῶν] οἱ τομῖαι μείζους γίνονται καὶ χαλεπότεροι, ὥσπερ καὶ Ὀμηρος ἐποίησεν “θρέψεν ἐπι χλοῦνην σὺν ἄγριον· οὐδὲ ἐφκει θηρὶ γε σιτοφάγῳ, ἀλλὰ ρίψ ὑλήεντι.” γίνονται δὲ τομῖαι διὰ τὸ νέοις οὐσιν ἐμπύπτειν νόσημα κνησιμὸν εἰς τοὺς ὄρχεις· εἶτα ζυόμενοι πρὸς τὰ δένδρα ἐκθλίβουσι τοὺς ὄρχεις.

Of the male wild [pigs], the castrated ones become largest and fiercest, as Homer too wrote: '[Artemis] reared against [him] a *chlounēs* wild pig: not like a bread-eating⁴³ beast, but like a wooded peak.' They become castrated because an inflection involving itching befalls them, when they are young, in the testicles; then, scratching themselves against trees, they squeeze out their testicles.

That Aristotle's text of the *Iliad* was different may be an indication that this passage received scholarly attention;⁴⁴ but the major controversy concerned the meaning of

⁴² Fr. 385 Gigon = Σ^B *Il.* 10.252 = Porph. *ad Il.* (pp. 170–7): αὐτίκα τῶν παλαιῶν ζητημάτων ὁμολόγηται εἶναι τὸ τοιοῦτο, ἐν οἷς φησιν “ἄστρα δὲ δὴ προβέβηκε, παρῶρχκεν δὲ πλέον νύξ τῶν δύο μοιράων, τριτάτη δ' ἔτι μοῖρα λέλειπται”. πῶς γὰρ εἰ αἱ δύο μοῖραι ἐξήκουσιν αὐταῖ τε καὶ ἔτι τούτων πλέον, ἢ τριτάτη μοῖρα λέλειπται ἀλλ' οὐχὶ τῆς τρίτης μόριον;

⁴³ This epithet makes more sense in a passage about Cyclopes, contrasting bread-eating humans with man-eating Polyphemus (ἀνδροφάγοιο, *Od.* 10.200). Perhaps as a contrast to wild pigs, σιτοφάγῳ means 'grain-eating' (as in herd animals and certain domesticated animals).

⁴⁴ Eustathius, commenting on the *Iliad* passage, reports that the text of 'the Geographer' (i.e. Strabo) is different, which he says indicates that lines have dropped out of Homer's text (*Il.* 9.539; vol. 2, p. 793). The text he quotes is the same as Aristotle's. Heubeck and Hoekstra (n. 41), 133

χλούνην. To judge from the scholia and from Eustathius, in antiquity other meanings offered for this mysterious word were: ‘solitary’, ‘fierce’, ‘strong’ and ‘living in the wild’.⁴⁵ Aristotle, however, clearly thinks it means ‘castrated’, otherwise his quotation from Homer would be unconnected to his discussion of castrated wild pigs. Little else can be said about the nature of the debate.

6. *Hist. an.* 7(8).28, 606a18–21: *on Od.* 4.85

In *Odyssey* 4, Telemachus is in Sparta to speak with Menelaus, who tells him about the many lands he visited during the Trojan expedition, like Cyprus, Egypt, Ethiopia (85):

καὶ Λιβύην, ἵνα τ' ἄρνες ἄφαρ κεραοὶ τελέθουσι ...

and Libya, where lambs become horned at once ...

In *Hist. an.* 7(8).28, Aristotle discusses a variety of animal kinds, and how they differ from one location to another. Libya receives a lot of attention. For example (606a18–21):

καὶ ἐν μὲν Λιβύῃ εὐθὺς γίνεται κέρατα ἔχοντα τὰ κερατώδη τῶν κριῶν, οὐ μόνον οἱ ἄρρηνες ὡσπερ Ὅμηρός φησιν ἀλλὰ καὶ τὰ ἄλλα· ἐν δὲ τῷ Πόντῳ περὶ τὴν Σκυθικὴν τοῦναντίον· ἀκέρατα γὰρ γίνονται.

And in Libya the horned rams are born straightaway having horns – not only the males, as Homer says, but the others as well; whereas in the Pontus, around Scythia, it is the opposite: they are born hornless.

According to the manuscript tradition, Aristotle must be assuming that in the *Iliad* passage ἄρνες (‘lambs’) refers to males only,⁴⁶ and using τὰ ἄλλα (‘the others’) to refer to female lambs. Many editors have found this problematic.⁴⁷ Bekker therefore emended ἄρρηνες to ἄρνες (from *Od.* 4.85) – a plausible revision accepted by most editors since (Balme being an exception). For this emendation to work, however, κριῶν (‘rams’) must be emended as well. I think the best suggestion is Dittmeyer’s κτηνῶν,⁴⁸ which, with τὰ κερατώδη, yields ‘the horned herd animals’. Consequently, τὰ ἄλλα would have to refer to the other horned herd animals, which arguably makes more sense than ‘the females’.⁴⁹ But whether such lingering textual issues reflect ancient debates over the meaning of *Od.* 4.85 is impossible to determine.

write that Aristotle ‘contaminated these [*Iliad*] verses with *Od.* 9.190–1’, and Strabo cited Aristotle, ‘thus creating the mirage of a genuine paradosis’.

⁴⁵ See P. Chantraine, *Dictionnaire étymologique de la langue grecque: histoire des mots* (Paris, 1977), 1264 s.v. χλούνης, and e.g. Aristophanes of Byzantium apud Eust. *Il.* 9.539 (vol. 2, p. 794) and Σ^B *Il.* 9.539.

⁴⁶ This is not necessitated by Homer’s text, as ἄρνες (masc./fem. nom. pl.) with κεραοὶ (masc. nom. pl.) could refer to males alone or to both males and females.

⁴⁷ See David Balme’s comment on this passage (in *Aristotle: Historia Animalium*, vol. 2, *Books I–VIII: Commentary*, prepared for publication by A. Gotthelf [Cambridge, forthcoming]). I am grateful to Allan Gotthelf for giving me access to this work prior to publication.

⁴⁸ L. Dittmeyer, *Aristotelis De animalibus historia* (Leipzig, 1907), 346 (ex Hdt. 4.29).

⁴⁹ The first half of the passage would thus be rendered: ‘And in Libya the horned herd animals are born straightaway having horns – not only the lambs, as Homer says, but the others as well.’

To judge from *Hist. an.* 7(8).28 and Hdt. 4.29, as well as from the scholia and Eustathius,⁵⁰ the following were the main points of debate or discussion concerning *Od.* 4.85: (1) Was Menelaus' claim intended to be limited to males or applicable to all lambs? (2) What precisely did Homer mean by ἄφαρ ('at once')? Is he saying that Libyan lambs are born with horns, or that they begin to grow horns immediately at birth, or merely that they grow them earlier (and perhaps more quickly) than in other places? (3) What is special or significant about Libya? And (however one answers these questions) (4) is Homer's claim true?

Regarding the third question, the closest Aristotle comes to answering it is to say, in *Hist. an.* 7(8).28, in connection with all of the differences he has discussed, that the cause in some cases is the food (606a25–6), in others the climate (606b2–3).⁵¹ He is more explicit about the other issues: Homer's claim about Libyan lambs was accurate, as far as it goes – but he should not have limited the claim to males (or to lambs, depending on how one reads the text). Further, contrasting Libya and Scythia makes clear that Aristotle took Homer to be saying that the animal in question is born with horns; and here too he believed this to be accurate. (Note that Aristotle does not write 'as some people say' or the like.) This is a lot to pack into one brief passage, and I find it entirely plausible that these issues were discussed by Aristotle at greater length in his *Homeric Puzzles*.⁵²

7. *Hist. an.* 8(9).12.615b5–10: on *Il.* 14.289–91

In *Iliad* 14, the god Sleep settles in a tree on Mt Ida, in the form of a bird, which, like the river Scamander, has two names (289–91):

ἔνθ' ἦστ' ὄζοισιν πεπυκασμένος εἰλατίνοισιν
 ὄρνιθι λιγυρῇ ἐναλίγκιος, ἦν τ' ἐν ὄρεσσι
 χαλκίδα κικλήσκουσι θεοί, ἄνδρες δὲ κύμινδιν.

There he sat covered by the branches of the fir,
 in the likeness of a whistling bird, which in the mountains
 the gods call *chalkis*, and men *kumindis*.

Hist. an. 8(9).7–36 is a lengthy set of descriptions of the attributes and behaviour of many kinds of birds. In 8(9).12, Aristotle writes (615b5–10):

ἡ δὲ κύμινδιν ὀλιγάκις μὲν φαίνεται, οἰκεῖ γὰρ ὄρη, ἔστι δὲ μέλας καὶ μέγεθος ὅσον ἰέραξ ὁ φασσοφόνος καλούμενος, καὶ τὴν ἰδέαν μακρὸς καὶ λεπτός. κύμινδιν δὲ καλοῦσιν Ἴωνες αὐτόν· ἦς καὶ Ὅμηρος μέμνηται ἐν τῇ Ἰλιάδι εἰπὼν “χαλκίδα κικλήσκουσι θεοί, ἄνδρες δὲ κύμινδιν”.

The *kumindis* rarely appears, for it dwells in mountains, and it is black and as large as the hawk called the pigeon-killer, and its form is long and narrow. Ionians call it *kumindis*; indeed, Homer mentions it in the *Iliad*, saying ‘the gods call [it] *chalkis*, and men *kumindis*’.

⁵⁰ See Σ^D *Od.* 4.85, Σ^P *Od.* 4.85 and Eust. *Od.* 4.83 (vol. 1, p. 150). Eustathius quotes both Aristotle and Herodotus in support of Homer.

⁵¹ According to Hdt. 4.29, a hot climate promotes the growth of horns, whereas a cold climate does the opposite.

⁵² As this Homeric line is inessential – it names one item in a list of examples of the many lands through which Menelaus travelled – its inaccuracy (if it were inaccurate) would not have been justifiable on aesthetic grounds. But correcting Homer here does not amount to levelling a major aesthetic criticism.

The ancients may have discussed which bird this in fact is, though there is little evidence about the nature of such a discussion. At *Birds* 1181, Aristophanes includes it among a group of taloned birds: ‘kestrel, buzzard, vulture, *kumindis*, eagle’ (κερχυής, τριόρχης, γύψ, κύμινδης, αϊετός). One Homeric scholar adds, at the end of a fairly lengthy scholion, τινές δὲ τὴν γλαυκά (‘and some [say it is] the owl’), and this identification is almost certainly correct.⁵³ Also discussed was whether the noun κύμινδης was masculine or feminine, though there is no evidence about the precise nature of this debate.⁵⁴

Most of the discussion of this passage centred around why this bird received two names, and especially why it received *these* two names.⁵⁵ First, the divine name: one plausible suggestion is that the name *chalkis* comes from its having bronze (χαλκός) colouring.⁵⁶ Another suggestion is that this bird is given ‘the sweet-sounding name [*chalkis*] by the gods’ (τὸ εὐφώνον ὄνομα τοῖς θεοῖς) and that it ‘is inspired by the Muses’ (ὑπὸ Μουσῶν καταπνεόμενος); but, again, no connection specifically to the name *chalkis* is indicated.⁵⁷ This same scholiast, however, mentions a couple of mythological explanations that have been offered, and these allow us to make the (or a) connection:

Some say that it is Harpalyce, who had intercourse with her father Clymenus by force, and boiling their son Presbon she served [Presbon] to him. Or that she coupled with Zeus, and Hera turned her into a bird; but she [first] spent time in Chalcis being a human. And some say Chalcis is the mother of the Corybantes.⁵⁸

This passage contains, among the mythology, an actual explanation of the name *chalkis*: the bird was in some way associated with the city of Chalcis (in Euboea). And if Chalcis (a mythological woman) was mother of the Corybantes, who are connected to music and dancing, that could explain why this is the bird’s divine name.

As for the human name: this bird, we are told, is called *kumindis* either from the sound it makes (which means, I take it, that the name is onomatopoeitic),⁵⁹ or because of its connection to sleep (e.g. κοιμημα)⁶⁰ or to concealment (κρύψις).⁶¹ These last two (false) etymologies are no doubt based on the Homeric passage.

The brief *Hist. an.* 8(9).12 passage does imply that Aristotle would have taken a stand in the debates on this passage: he claimed to know which bird it is; he described

⁵³ See Janko (n. 7), 196–7, a valuable comment on all aspects of *Il.* 14.289–91.

⁵⁴ Παρὰ δὲ τισὶ θηλυκῶς λέγεται (Σ^D *Il.* 14.291); ἔτι δὲ ὁ κύμινδης ἢ ἡ κύμινδης, ἑκατέρως γὰρ λέγεται (Eust. *Il.* 14.291; vol. 3, p. 643). I assume Aristotle is right that the word is feminine (ἢ κύμινδης), though perhaps it was sometimes written ὁ κύμινδης, since Homer presents it as Sleep (ὁ Ὑπνος) transformed.

⁵⁵ Cf. Pl. *Cra.* 392a – though, again, Plato’s interest is in why one name is divine.

⁵⁶ One scholiast quotes Aristotle, and seems to connect his claim that the bird is black with its ‘being bronze in colour’: ἔστι δὲ μέλας, χαλκίζων τὴν χροίαν (Σ^D *Il.* 14.291). Cf. Σ^T *Il.* 14.291a: ἢ ὅτι χαλκίζει τὴν χροίαν.

⁵⁷ Σ^T *Il.* 14.291a. Cf. Eust. *Il.* 14.291 (vol. 3, p. 643).

⁵⁸ τινές δὲ φασιν αὐτὴν εἶναι Ἄρπαλύκην, ἢ μυγεῖσα τῷ πατρὶ Κλυμένω κατὰ βίαν, ἐνήσασα τὸν υἱὸν Πρέσβωνα παρέθηκεν αὐτῷ. ἢ ὅτι Διὶ συνῆλθεν, Ἥρα δὲ ὠρνίθωσεν αὐτήν· ἐν Χαλκίδι δὲ διήγεν ἄνθρωπος οὕσα. οἱ δὲ τὴν μητέρα τῶν Κορυβάντων Χαλκίδα φασίν.

⁵⁹ Σ^D *Il.* 14.291: καλεῖται κύμινδης ἀπὸ τῆς φωνῆς (‘is called *kumindis* from its sound’).

⁶⁰ Σ^D *Il.* 14.291: εὐεπιφορον δὲ εἰς ὕπνον τὸ ὄρνεον (‘the bird easily inclines towards sleep’); Σ^{Gen.} *Il.* 14.291: ἐκ τούτου δὲ καὶ κύμινδης καλεῖται, παρὰ τὸ κοιμάσθαι (‘and it is also called *kumindis* from this, from “falling asleep”). Eustathius writes that some people claim κύμινδης comes from κοιμημα, ‘sleeping’ (*Il.* 14.291; vol. 3, p. 643).

⁶¹ Σ^D *Il.* 14.291: αἰεὶ δὲ τὴν κεφαλὴν ὑπὸ τοῦς κλάδους κρύπτει (‘it always hides its head under branches’); Σ^T *Il.* 14.291a: ἢ ὅτι κατὰ νύκτα ὁράται (‘or because she is seen [only] at night’). See also Eust. *Il.* 14.291 (vol. 3, p. 643).

it (however unhelpful that description is now); he may have offered an explanation as to why it had more than one name (though the explanation does not refer to the gods): 'the Ionians call it *kumindis*' (the implication being that other Greeks – and perhaps non-Greeks – called it *chalkis*). Aristotle defends the accuracy of Homer's account, at least to this extent: Homer places the bird on Mt Ida and has it cover itself behind branches; Aristotle says this kind of bird dwells in the mountains and therefore is rarely seen.

8. *Hist. an.* 8(9), 32.618b18–30: *on Il.* 24.315–16

In the final book of the *Iliad*, Priam prays to Zeus and asks for a bird-omen – 'dearest of birds, with the greatest power' (φίλτατος οίωνων, καί εὐ κράτος ἐστὶ μέγιστον, 24.311) – as a sign that he may safely go to Achilles to appeal for Hector's corpse. Zeus responds (315–16):

αὐτίκα δ' αἰετὸν ἦκε, τελειότατον πετεηνῶν,
μόρφον θηρητήρ', ὃν καὶ περκνὸν καλέουσιν.

Straightaway he sent an eagle, most perfect⁶² of winged creatures,
morphnos the hunter, which is also called *perknos*.⁶³

As we shall see, the key issues in antiquity surrounding this passage were: the identity of this eagle, whether it is identical to other eagles mentioned in the *Iliad*, why it is called *morphnos*,⁶⁴ and whether Homer was right in naming it the most powerful eagle.

Aristotle discusses the *morphnos* in *Hist. an.* 8(9).32, in his account of the kinds of eagles (618b18–30):

τῶν δ' αἰετῶν ἐστὶ πλείονα γένη, ἔν μὲν ὁ καλούμενος πύγαργος· οὗτος κατὰ τὰ πεδία καὶ τὰ ἄλση καὶ περὶ τὰς πόλεις γίνεται· ἔνιοι δὲ καλοῦσιν νεβροφόνον αὐτόν ... ἕτερον δὲ γένος αἰετοῦ ἐστὶν ὁ πλάγγος καλεῖται, δευτέρος μεγέθει καὶ βόμῃ· οἰκεῖ δὲ βήσσαις καὶ ἄγῃ καὶ λίμνας, ἐπικαλεῖται δὲ νηττοφόνος καὶ μορφνός· οὗ καὶ Ὅμηρος μέμνηται ἐν τῇ τοῦ Πριάμου ἐξόδῳ. ἕτερος δὲ μέλας τὴν χροάν καὶ μέγεθος ἐλάχιστος καὶ κράτιστος τούτων· οὗτος οἰκεῖ ὄρη καὶ ὕλας, καλεῖται δὲ μελανάετος καὶ λαγαφόνος. ἐκτρέφει δὲ μόνος τὰ τέκνα οὗτος καὶ ἐξάγει. ἔστι δ' ὠκυβόλος ...

Of the eagles there are many kinds, [1] one is what is called white-rump; this occurs throughout the plains and the groves and the cities; and some call it fawn-killer ...⁶⁵ [2] There is another kind of eagle, which is called *plangos*, second in size and strength; it dwells in valleys and hollows and lakes, and is nicknamed duck-killer and *morphnos*; and Homer mentions it in the *Expedition of Priam*.⁶⁶ [3] And another is black in colour and smallest in size and strongest

⁶² In this context, *τελειότατον* may mean surest or most reliable of birds qua omen. See N. Richardson, *The Iliad: A Commentary*, vol. 6: *Books 21–24* (Cambridge, 1993), 305–6.

⁶³ Although *περκνός* is an unusual word, which required identification in scholia and lexical works, its meaning is clear enough (note Erotian: *περκνόν· μέλαν*). It is related to *περκάζω*, which means 'become dark' (Σ^{bT} *Il.* 24.316b: *περκνόν δὲ μέλινα, ὡς βότρυν, ὃν καὶ περκάζειν φασίν*). So far as I can tell, it was not an object of discussion or debate among Homeric scholars; but see Eust. *Il.* 24.316 (vol. 4, p. 911).

⁶⁴ One issue, for which there is no evidence of interest on Aristotle's part, was the etymology of *μόρφνος*. According to Apollon. *Lex.* s.v. *μόρφνον* (p. 113 Bekker), it is a shortened form of *μορφόνος* (unlikely an actual word), which is said to come from τὸν διὰ τοῦ φόνου τὸν μόρον ἐπιφέροντα ('the one who brings *doom* through *killing*'). Cf. Eust. *Il.* 24.316 (vol. 4, p. 910).

⁶⁵ I omit further details about this bird, as they are not relevant in the present context.

⁶⁶ I.e. Priam's 'expedition' in *Iliad* 24 to appeal to Achilles.

of them; this dwells in mountains and forests and is called black-eagle and hare-killer. This one alone completes the rearing of its young and leads them out. And it is quick-striking ...

Aristotle describes three other kinds: dark-winged (περκόπτερος), sea-eagles (άλιαετοί) and true-breds (γνησίους); the true-bred is 'the largest of all of the eagles' (μέγιστος τῶν αἰετῶν ἀπάντων) (618b31–619a12). So, of the six kinds of eagles, Aristotle identifies the *morphnos* – the one Homer mentions in *Iliad* 24 – with the *plangos* (also known as the duck-killer). Aristotle may also be correcting Homer: the *morphnos* is *not* the most powerful; the third is.⁶⁷

Porphyry makes it clear that *Il.* 24.315–16 was a topic of discussion among Homeric scholars, and particularly the identity of the eagle mentioned therein:

It was questioned what sort of eagle Homer mentions here [i.e. *Il.* 24.315–16]: the white-rump or the Aphrodite⁶⁸ or [the] dusky – about which he speaks in *Iliad* 10⁶⁹ – and again, [the one] 'with the swoops of the black eagle, the hunter', about which he speaks in *Iliad* 21. But this is the same, called *morphnos* by name, and it too is black, about which Aristotle says 'black in colour and smallest in size and strongest; it dwells in mountains and forests and is called black-eagle and hare-killer; and it is quick-striking.'⁷⁰

Porphyry equates the *morphnos* of *Iliad* 24 with the eagle referred to in *Iliad* 21; and this is plausible. He then goes on to identify this eagle with the *third* one mentioned by Aristotle (whereas Aristotle identifies it with the second). One explanation is that Porphyry is confused. But I think it is just as likely that he is indicating his disagreement with Aristotle on this issue, and using Aristotle's own discussion to attempt to refute him – on the grounds that the third is black (see *Il.* 21.252) and the strongest, whereas Aristotle's choice is 'second in size and strength' and its colour is not specified.

One might argue that the fact that Porphyry quotes from the *History of Animals*, and not from the *Homeric Puzzles* (which he quotes or paraphrases often), implies that Aristotle did not discuss this issue in the latter. But that does not follow. Aristotle could have written about the eagle of *Iliad* 24 in both works: a fuller presentation of the problem and his solution in the *Homeric Puzzles*, but a very different presentation – with a passing reference to Homer (perhaps lifted straight from his *Homeric Puzzles*) – in his account of eagles in the *History of Animals*.

9. *Hist. an.* 8(9).44, 629b21–4: *on Il.* 11.552–4 & *Il.* 17.661–3

Homer twice in the *Iliad* uses identical lines to describe a lion, which in turn is used as a metaphor in two different contexts: once to describe Ajax responding to the attack of the

⁶⁷ Cf. *Il.* 24.311 (κράτος ἐστὶ μέγιστον) and *Il.* 21.253 (κάρπιστος) with *Hist. an.* 8(9).32, 618b27 (κράτιστος).

⁶⁸ MacPhail (n. 8), 271: 'The name is surely owed to Aphrodite's role in Zeus' seduction of Nemesis. Zeus disguises himself as a swan and Aphrodite as an eagle and has her pursue him into Nemesis' lap (Hyginus 2.8).'

⁶⁹ Πέλλος means 'dusky', 'dark' or 'grey'. The bird Athena sends to Odysseus and Diomedes in *Iliad* 10 is a heron (ἐρωδιόν). Cf. Arist. *Hist. an.* 8(9).1.609b21–3. Porphyry is aware that this bird is a heron: see *ad Il.* 10.276 (pp. 178–9).

⁷⁰ Porph. *ad Il.* 24.315–6 (pp. 270–3): ἐζητήθη ποίου μέμνηται ἐνταῦθα Ὅμηρος αἰετοῦ, τοῦ πυγάργου ἢ τοῦ ἀφροδισίου ἢ πέλλου, περὶ ὧν φησιν ἐν τῇ Ἰλιάδι Κ, καὶ πάλιν "αἰετοῦ οἴματ' ἔχων μέλανος τοῦ θηρητήρος" περὶ οὗ φησιν ἐν τῇ Ἰλιάδι Φ. ἐστὶ δὲ ὁ αὐτός, καλούμενος μορφνός ὀνόματι καὶ μέλας δὲ ὧν, περὶ οὗ φησιν Ἀριστοτέλης· "ἕτερος δὲ μέλας χροῶν καὶ μέγεθος ἐλάχιστος καὶ κράτιστος· οἰκεῖ δ' ὄρη καὶ ὕλας, καλεῖται δὲ μελαναἰετος καὶ λαγωσφόρος. ἐστὶ δὲ ὠκυβόλος."

Trojans (11.551–3), and once to describe Menelaus, frustrated in his pursuit of Patroclus (17.661–3):⁷¹

... θαμέες γὰρ ἄκοντες
ἀντίον ἀΐσσοσι θρασειῶν ἀπὸ χειρῶν
καιόμεναί τε δεταί, τάς τε τρέει ἐσσύμενός περ·

... for the raining javelins
fly from bold hands straight [at him],
and the flaming torches, and these he shrinks from despite his zeal.

In *Hist. an.* 8(9).44, Aristotle commences a discussion of ‘the characters of animals’ (τὰ ἦθη τῶν ζώτων), for instance courage and cowardice (what would be ethical virtues or vices in humans). He begins with a long account of lions, which includes the following (629b21–4):

ἀληθῆ δὲ καὶ τὰ λεγόμενα, τὸ τε φοβεῖσθαι μάλιστα τὸ πῦρ, ὥσπερ καὶ Ὅμηρος ἐποίησεν
“καιόμεναί τε δεταί, τάς τε τρέει ἐσσύμενός περ”, καὶ τὸ τὸν βάλλοντα τηρήσαντα ἴεσθαι ἐπὶ
τοῦτον.

What is said [about the lion] is true, both that what it fears most of all is fire – as indeed Homer portrayed: ‘and the flaming torches, and these he shrinks from despite his zeal’ – and that it watches the man throwing [the spear] and rushes at that one.

There was discussion in antiquity of the meaning of unusual words in this Homeric passage, and especially δεταί (= λαμπάδες, ‘torches’).⁷² And there was debate over the propriety (in *Iliad* 11) of comparing Ajax first to a lion (548–57), and then straightaway to a donkey (558–62).⁷³ But I have discovered no evidence (aside from the *Hist. an.* passage itself) that there might have been discussion concerning the accuracy of Homer’s account of lions and their fear of fire. All one can do further is speculate that, if Aristotle did take part in such a discussion or debate, he offered a straightforward defence of Homer.

10. Part. an. 3.10, 673a10–17: on *Il.* 10.457 and *Od.* 22.329

The following line is found once each in the *Iliad* and the *Odyssey* to describe a decapitation in battle – in the one case, Diomedes killing Dolon (*Il.* 10.457), in the other, Odysseus killing Leodes (*Od.* 22.329):

φθεγγομένου δ’ ἄρα τοῦ γε κάρη κονίησιν ἐμίχθη.

and while he was speaking his head mixed in the dust.

⁷¹ Some modern scholars have doubts about how appropriate or effective the metaphor is in this latter case. See Edwards (n. 28), 126 and West (n. 28), 341.

⁷² See: Ath. 15.701A; Philoxenus, fr. 395 Theodoridis s.v. δετή; Σ^D *Il.* 11.554, Σ^T *Il.* 11.554 and Σ^{BT} *Il.* 17.663. This last paraphrases Aristotle: καὶ Ἀριστοτέλης ἐν τῷ Περὶ ζῴων φησὶ λέοντα μάλιστα τὸ πῦρ δεδοικέναι. δεταί δὲ ὀξυτόνωσ αἰ συνδεδεμένα ἐκ ξύλων λαμπάδες.

⁷³ Σ^D *Il.* 11.547 begins with a question in the *problemata* tradition: διὰ τί ὅτε μὲν λέοντι ὅτε δὲ ὄνφ παραβάλλει τὸν Αἴαντα; (‘Why at one point is Ajax compared to a lion, and at another to a donkey?’). Σ^A *Il.* 11.548a confirms that this was a topic of debate, and indicates that the passage was omitted by Zenodotus, in part for this same reason: ὅτι ἀπὸ τοῦτου Ζηνόδοτος ἀθετεῖ ἕως τοῦ “ἦμε πόλλ’ ἀέκων”, ἴσως ὅτι νῦν μὲν λέοντι παραβέβληκεν, ἐξῆς δὲ ὄνφ. Both scholiasts defend Homer on the grounds that the two comparisons make two different, and valid, points.

In the course of his discussion of the diaphragm or midriff (ὑπόζωμα, φρένες), in *Part. an.* 3.10, Aristotle quotes this Homeric line, dismissing one interpretation of it (673a10–17):

συμβαίνειν δὲ φασὶ καὶ περὶ τὰς ἐν τοῖς πολέμοις πληγὰς εἰς τὸν τόπον τὸν περὶ τὰς φρένας γέλωτα διὰ τὴν ἐκ τῆς πληγῆς γινομένην θερμότητα. τοῦτο γὰρ μᾶλλον ἐστὶν ἀξιολύσιον ἀκούσαι λεγόντων ἢ τὸ περὶ τὴν κεφαλὴν, ὡς ἀποκοπέισα φθέγγεται τῶν ἀνθρώπων. λέγουσι γὰρ τινες ἐπαγόμενοι καὶ τὸν Ὅμηρον, ὡς διὰ τοῦτο ποιήσαντος: “φθεγγομένη δ’ ἄρα τοῦ γε κάρη κονίησιν ἐμίχθη”· ἀλλ’ οὐ, “φθεγγομένου”.⁷⁴

They say laughter also results in the case of blows to the area around the midriff in battle, owing to the heat coming from the blow. In fact those saying this are more trustworthy to listen to than the people telling the one about the head, which, having been cut off, speaks. For some even bring in Homer, saying that because of this he wrote: ‘while *it* was speaking, his head was mixed with the dust’ – but not ‘while *he* was speaking’.

Aristotle is willing to accept some anecdotal evidence about certain blows received in battle producing unexpected sounds (blows to the midriff producing laughter), but there are limits to what ought to be believed: for instance, a severed head continuing to talk.

Aristotle was aware of the received text and a proposed emendation: φθεγγομένου and φθεγγομένη. He defends the former (which is the reading of the manuscripts) on the grounds that this one alone saves Homer from an unacceptable impossibility. (It should be mentioned that even the text that Aristotle favours is often misinterpreted as referring to a talking severed head.)⁷⁵ But whereas the subject of φθεγγομένη would (it was claimed) have to be the head (κάρη),⁷⁶ the subject of φθεγγομένου could (grammatically) be either the killer or the killed, which makes possible a more plausible reading (from the viewpoint of anatomy, according to Aristotle): ‘while he [Diomedes/Odysseus] was speaking, the head [of Dolon/of Leodes] mixed in the dust’.

To judge from the scholia and Eustathius, however, there were attempts in antiquity to defend the portrayal of a severed head talking, given the context of both scenes and on the grounds of what was taken to be the nature of the mechanics of human speech. One scholiast claimed that φθεγγομένου refers to the beginning of speech, when the sound is first released but before it has become articulate speech.⁷⁷ Eustathius (or the unknown scholars whose views he is reporting) stresses that, in both cases, the

⁷⁴ Text: I. Bekker, *Aristoteles Graece*, vol. 1 (Berlin, 1831).

⁷⁵ For example, here is *Il.* 10.457 as rendered in three well-known English translations: ‘suddenly his head, deceiv’d, fell speaking on the ground’ (Chapman); ‘Dolon’s head still speaking dropped in the dust’ (Lattimore); ‘the shrieking head went tumbling in the dust’ (Fagel). I believe, however, that recent commentators have the right view: B. Hainsworth, *The Iliad: A Commentary*, vol. 3: *Books 9–12* (Cambridge, 1993), 198: ‘φθεγγομένη (in agreement with the feminine κάρη) would imply the severed head is still pleading, a bizarre and gruesome thought, typical enough of this poet. Articulate speech is not in question in the Odyssean passage, and need not be foisted onto this’; see also J. Russo, M. Fernández-Galiano; A. Heubeck, *A Commentary on Homer’s Odyssey*, vol. 3: *Books 17–24* (Oxford, 1992), 278.

⁷⁶ Eustathius (*Il.* 10.457; vol. 3, p. 110), however, reports that some people, claiming φθεγγομένου is unclear, posit φθεγγομένη instead; but he adds: οὐχ’ Ὀμηρικὴ δὲ ἡ φράσις: οὐ γὰρ ἐστὶ θηλυκῶς ἢ κάρη παρ’ Ὀμήρῳ (‘but the expression is not Homeric; for κάρη according to Homer is not feminine’). Elsewhere (*Il.* 8.83; vol. 2, p. 537) Eustathius writes that the ancients considered it neuter, more recent scholars feminine (οὕτω καὶ τὸ κάρη παρὰ τοῖς παλαιοῖς καὶ ἡ κάρη παρὰ τοῖς ὕστερον). According to LSJ (s.v. κάρη) κάρη is neuter epic ionic.

⁷⁷ Σ^{bT} *Il.* 10.457: “φθεγγομένου δ’ ἄρα τοῦ γε”: ἅμα τῷ ἄρξασθαι φωνὴν ἀφείναι πρὶν σαφηνισθῆναι τὸ λεγόμενον ...

victim was not killed in active combat, but was on his knees in supplication (οὐ μαχόμενος ἀλλὰ γουνοούμενος); and, recognizing that the end might well be near, the victim was hyper-talkative (ὑπερλαλήσαντος) in appealing for his life. In this context, at least, the argument runs, it is plausible that the flow of words begun before the decapitation could continue briefly afterwards.⁷⁸ Such interpretations receive support, some thought, from the nature of human anatomy. For instance: 'the breath goes up to the mouth and filling it pours out, and yet the head has been cut [off], such that – the tongue still being moved – the head lying below seems to speak'.⁷⁹

I think it probable that, contemporary with Aristotle, when the decapitation line was discussed, this sort of appeal to anatomy was already being deployed in defence of Homer. Aristotle would likely have had something to say about that. Or, alternatively, Aristotle got this line of argument started by appealing to human anatomy in defence of his own interpretation (against the talking severed head), and others tried to respond in kind. In any case, Aristotle clearly thought that a talking severed head was an impossibility not justified by the plot of the *Iliad* or other aesthetic considerations. I would speculate that he thought such a spectacle is more comical than grand, and would have undercut the seriousness appropriate to epic. Rather than criticize the line, however, he (correctly) interpreted Homer in a way that saved him from criticism.

11. *Gen. an. 5.5, 785a11–16: on Il. 8.83–4*

In *Iliad* 8, Homer describes an arrow striking Nestor's horse. The animal was struck (83–4)

ἄκρην κακ κορυφήν, ὅθι τε πρῶται τρίχες ἵππων
κρανίῳ ἐμπεφύασι, μάλιστα δὲ καίριόν ἐστιν.

on the top of the head, where the first hairs of horses
grow on the skull, and it is especially mortal.

In *Gen. an. 5.5*, continuing a discussion of grey hair in men, Aristotle turns to why such a change in hair colour is not (as?) evident in other animals. The reason, Aristotle says, is that their brains are smaller and less fluid than those of humans. He adds (785a11–6):

τοῖς δ' ἵπποις πάντων ἐπισημαίνει μάλιστα ὧν ἴσμεν ζῶων ὅτι λεπτότατον τὸ ὀστοῦν ὡς κατὰ μέγεθος ἔχουσι τὸ περὶ τὸν ἐγκέφαλον τῶν ἄλλων. τεκμήριον δ' ὅτι καίριος ἡ πληγὴ εἰς τὸν τόπον τοῦτον γίνεταί αὐτοῖς· διὸ καὶ Ὅμηρος οὕτως ἐποίησεν· "ἵνα τε πρῶται τρίχες ἵππων κρανίῳ ἐμπεφύασι, μάλιστα δὲ καίριόν ἐστιν".⁸⁰

Of all the animals that we know of, this is most marked in horses, because the bone they have surrounding the brain is much thinner in proportion to size than that of other [animals]. Proof is that a blow to this spot is mortal to them; and this is why Homer portrayed [a horse being killed] in this way: 'where the first hairs of horses grow on the skull, and it is especially mortal'.

⁷⁸ Eust. *Od.* 22.329 (vol. 2, p. 284).

⁷⁹ Eust. *Il.* 10.457 (vol. 3, p. 110): τὸ πνεῦμα μέχρι τοῦ στόματος ἀνελθὼν καὶ πληρῶσαν αὐτὸ ἐξεχύθη, καίτοι τμηθείσης τῆς κεφαλῆς, ὥστε ἐτι κινουμένης τῆς γλώττης δοκεῖν τὴν κεφαλὴν κάτω κεκλιμένην φθέγγεσθαι. Cf. Eust. *Od.* 22.329 (vol. 2, p. 284). Eustathius is presenting or summarizing such views as are found in Σ^B *Il.* 10.457 and Σ^D *Il.* 10.457.

⁸⁰ Text: H. Drossaart Lulofs, *Aristotelis de generatione animalium* (Oxford, 1965).

So far as the surviving evidence suggests, this passage did not generate much discussion among ancient scholars.⁸¹ Eustathius indicates that some debated whether *πρῶται τρίχες* ('the first hairs') refers to the horse's mane (*χαίτη*) or to its frontal tuft of hair (*προκόμιον*), though he thinks it is clearly the latter – as did the D-scholiarist before him.⁸² There may also have been discussion of why this part of the head was so vulnerable.⁸³

CONCLUSION

In conclusion, I wish to say a few words about the relative dates of the *Homeric Puzzles* and the biological works (especially the *History of Animals*), then summarize the roles played by the Homeric passages in the biological works, and finally speculate about a possible connection between these passages and the *Homeric Puzzles*.

Stephen Halliwell, in a discussion of the date of the *Poetics*, wisely comments: 'Aristotelian chronology is a minefield from which the prudent keep their distance.'⁸⁴ I plan to take a few tentative steps into this minefield – safely stepping only where others have trodden – in the hope of making some progress in discovering the relationship, if there is one, between Aristotle's *Homeric Puzzles* and his biological works.

David Balme has made a strong case for the *History of Animals* having been written *after* the other biological treatises, and (more tentatively) for Aristotle having begun that work during his Lesbos period (around 344 B.C.).⁸⁵ Elsewhere he writes that the *History of Animals* 'remains unfinished, with evidence that new items were constantly being added'.⁸⁶

For Aristotle's poetical works, Halliwell's brief appendix on the date of the *Poetics* provides an excellent analysis of all of the evidence, with proper caution against any but the most tentative conclusions – which he offers as follows:

I would tentatively suggest that the *Poetics* has its roots in Aristotle's early thought, the period of his direct contact with the wonderful stimulus of Plato's passionate moralism, and that it actually contains some material first drafted before 347; but that it also received later attention from the philosopher.⁸⁷

⁸¹ Heraclitus (19.1–4) took *Il.* 8.83–4 to be evidence that Homer located the rational part of the soul in the brain. See Russell and Konstan (n. 2), 36–7.

⁸² Eust. *Il.* 8.83 (vol. 2, p. 537–8); Σ^D *Il.* 8.83: *πρῶτας τρίχας λέγει τὸ καλούμενον προκόμιον*. In this same passage, Eustathius also discusses many (forms of) words for (regions of) the head: *κάρα*, *κορυφή*, *κράς*, *κεφαλή*, *κράας*, *κάρηαρ*, *κάρηνον*, *κρανίον*, *κράνος*, *κρήδεμον*, *κόρση*. He does not remark on their all beginning with kappa.

⁸³ See Σ^{bT} *Il.* 8.83a2: 'This region is fatal by being close to the membranes of the brain' (*θανάσιμος δὲ ἔστιν ὁ τόπος διὰ τὸ τὸν ἐγκέφαλον πλησιάζειν ταῖς μὴνιγξιν*).

⁸⁴ S. Halliwell, *Aristotle's Poetics* (Chicago, 1998²), 'Appendix 1: the date of the *Poetics*', 324.

⁸⁵ D. Balme, 'Date of *HA* and its relation to other treatises of Aristotle', in his introduction to *Aristotle: History of Animals: Books VII–X*, Loeb Classical Library (Cambridge, MA and London, 1991), 21–6. This should be read in conjunction with J. Lennox, 'Aristotle's biological development: the Balme hypothesis', in W. Wiens (ed.), *Aristotle's Philosophical Development: Problems and Prospects* (Lanham, MD, 1996), 229–48.

⁸⁶ D. Balme, 'Aristotle's use of division and differentiae', in A. Gotthelf and J. Lennox (edd.), *Philosophical Issues in Aristotle's Biology* (Cambridge, 1987), 69–89, at 80.

⁸⁷ Halliwell (n. 84), 330.

On the relationship between *Poetics* 25 and the *Homeric Problems* (as he calls it), he writes:

Poetics 25 has the look of being a compressed summary of an already worked out scheme of problems and their solutions. But I am not aware of any clear evidence for the date of the *Homeric Problems* ... The *Homeric Problems*, containing a mass of material on a very large number of issues, would in any case appear a peculiarly suitable work to have been compiled over a protracted period of time.⁸⁸

It would not be overly speculative to claim that Aristotle began both his study of animals and his *Homeric Puzzles* relatively early in his career (or at least not late in it), and that he worked on both continually, over a long stretch of time, and conceivably at the same time (at least some of the time). Or to put it another way: there is no reason to think that one of these works was written before the other, in any meaningful sense, and certainly not that one – the *Homeric Puzzles*, say – was shelved and forgotten by the time Aristotle began his work in biology.

If Aristotle was working on his biological works and the *Homeric Puzzles* at the same time or during the same period, then it is perhaps less surprising that he would refer, in the former, to Homer and Homeric scholars. But what purpose do these passages serve? And why do so many (relative to the rest of the corpus) appear in the *History of Animals*?

In five of the eleven passages that I have examined, Homer himself is quoted or cited in support of the point Aristotle is making: *Hist. an.* 3.3, 513b24–8 (on the great vessel); *Hist. an.* 6.28, 578b1 (on castrated wild pigs); *Hist. an.* 7(8).28, 606a18–21 (on Libyan lambs); *Hist. an.* 8(9).44, 629b21–4 (on the lion's fear of fire); and *Gen. an.* 5.5, 785a11–16 (on the skull of horses).⁸⁹ In one of these passages (on wild pigs), the support from Homer requires or implies an interpretation of the meaning of the cryptic word *χλοῦνην*; in another (on Libyan lambs) the support is conditional, in that it requires that Homer be partially corrected.

In three passages, what some people say about Homer is cited in support of the point Aristotle is making: *Hist. an.* 3.12, 519a18–20 (on waters producing change in colour); *Hist. an.* 6.20, 574b29–575a1 (on the age of female dogs); and *Hist. an.* 6.21, 575b4–7 (on when a bull is in its prime).⁹⁰ In none of these cases is it made clear whether Aristotle agrees with the opinion presented (though perhaps we should assume that if he had agreed he would simply have cited Homer).

In the remaining three passages, the Homeric citation does not (and I assume was not meant to) support Aristotle's claim, and so its purpose is unclear: *Hist. an.* 8(9), 12.615b5–10 (on the bird *kumindis*); *Hist. an.* 8(9), 32.618b18–30 (on the eagle in *Iliad* 24); *Part. an.* 3.10, 673a10–17 (on a severed head speaking).⁹¹ In this third case, Aristotle takes the opportunity to criticize an opinion some had about Homer; and his purpose might have been to remind the reader (or listener) that there are limits to what anecdotal evidence he is willing to take seriously. But in the first two cases, Aristotle merely states that the bird he is discussing is mentioned in Homer, and so I

⁸⁸ *Ibid.*, 327–8. See also R. Janko, *Philodemus On Poems, Books 3–4, with fragments of Aristotle On Poets* (Oxford, 2011), 388–9.

⁸⁹ See above, Sections 1, 5, 6, 9 and 11.

⁹⁰ See above, Sections 2–4.

⁹¹ See above, Sections 7, 8 and 10.

do not see what purpose these passages serve (aside from adding colour to a biology lecture).

David Balme noted that one significant difference between the *History of Animals* and the rest of the biology is the abundance of references to expert opinion: ‘The other treatises contain little specialist knowledge, whereas *Hist. an.* quotes extensively from fishermen, stock farmers, bee keepers, eel breeders, bird fanciers, etc.’⁹² For example, midway through *Hist. an.* 8(9).40, Aristotle’s long chapter on bees, he provides an account of animals that are a threat: wasps, three kinds of birds (titmouse, swallow and bee-eater), frogs and toads (626a7–b1). He mentions that the bee-keepers (οἱ μελισσεῖς) hunt the frogs and remove the wasps’ nests and the nests of the swallows and bee-eaters that are nearby (626a9–13). He ends this account (626a30–b1):

ἀπόλλυσι δὲ καὶ ὁ φρῦνος τὰς μελίττας· ἐπὶ τὰς εἰσόδους γὰρ ἐλθὼν φυσᾷ τε καὶ ἐπιτηρῶν ἐκπετομένας κατεσθίει· ὑπὸ μὲν οὖν τῶν μελιττῶν οὐδὲν δύναται κακὸν πάσχειν, ὁ δ’ ἐπιμελόμενος τῶν σημηῶν κτείνει αὐτόν.

The toad too destroys bees; for coming to the entrances [of the hives] it blows, and looking out for them it eats them as they fly out. Now it can suffer no harm from the bees, but the man tending the hives kills it.

I think it is safe to assume that the reports from beekeepers do not merely confirm certain conclusions Aristotle came to independently; they are likely his *source* for that information. Similarly, consider this account of the *anthias*, a kind of fish (*Hist. an.* 8(9).37, 620b33–5):

ὅπου δ’ ἂν ἀνθίας ἦτ οὐκ ἔστι θηρίον· ᾧ καὶ σημείῳ χρώμενοι κατακολυμβῶσιν οἱ σπογγεῖς, καὶ καλοῦσιν ἱεροῦς ἰχθύς τούτους.

Wherever the *anthias* is, there is no beast [i.e. shark]; and the sponge-divers use it as a sign that they can dive, and so they call these sacred fish.

Again, it is highly likely that information about the *anthias* gained from interviewing sponge-divers does not merely confirm this account, but makes it possible – is its source.

That Aristotle relies on specialist knowledge more in the *History of Animals* than he does in the other biological works might explain why this work contains far more references to Homer or Homeric scholars. But these citations are generally quite different from the reports from other specialists. The eight Homer-references that support the point Aristotle makes merely offer opinions that act as a kind of independent confirmation. They add no new information. For example, recall these two passages:

The vessel extending to the vertebra of the throat and to the backbone extends back again along the backbone, which indeed Homer presented in these lines, saying: ‘he cut through all the vessel which runs up the back continuously till it reaches the neck’. (*Hist. an.* 3.3, 513b24–8)

Of the Laconian dogs the male lives about ten years, the female about twelve, whereas of the other dogs most of the females live around fourteen or fifteen years, but some even twenty. And this is why some believe Homer correctly portrays the dog of Odysseus dying in the twentieth year. (*Hist. an.* 6.20, 574b29–575a1)

⁹² Balme (n. 85), 24. For a longer list of such specialists, see the index to this work (prepared by A. Gotthelf), under ‘Experts’ (pp. 563–4).

In all eleven cases, one could remove the reference to Homer or what people say about a Homeric passage, and the point Aristotle is making would remain intact. None of them (even those that offer some support) is *essential* to Aristotle's discussion; none is tightly integrated to the context in which it appears. This is especially true of the three passages that mention Homer, but offer Aristotle no support. And note that in one passage that does offer some support (*Hist. an.* 6.21, 575b4–7, on when a bull is in its prime), Aristotle mentions – completely unnecessarily, in the context of that chapter – that people say that in Homer 'five years' and 'nine months' could be the same.

Most of the Homer-references could well be excerpts from somewhere else – information plucked from another source, in which they are a much better fit. But what source? I think there are two possibilities. First, Aristotle's notebooks. Allan Gotthelf explains that

the full Aristotelian scientific inquiry must be thought of as having three stages: the *collection* of data, the *organization* of data, and the *explanation* of data ... There is no surviving treatise at [the collection] stage. This is the notebook stage, where Aristotle records observations and reports, evaluates them, deciding which to accept and which to reject; looks for shared features across different kinds; etc.⁹³

Second, the six or more books of the *Homeric Puzzles*.⁹⁴

Of course, I cannot rule out in every case the possibility that Aristotle copied relevant passages directly from (his memory of) the Homeric epics into his notebooks or into the specific biological treatise; and in some cases perhaps that is what he did. (I mention a couple of examples shortly.) But I think that, based on the evidence I have provided, in all eleven cases it is at least *possible* that the source was the *Homeric Puzzles* – that Aristotle was, directly or indirectly, drawing on that work.⁹⁵ Moreover, in every case the discussion of animals is more helpful in interpreting Homer than the citations from Homer or Homeric scholars are in illuminating some point about biology. That is, for example, his observations-based discussion of the age of dogs is more helpful and 'at home' in a discussion of the age of Odysseus' dog Argos than the reference to what some say about the age of Argos is in the *History of Animals*' account of the longevity of dogs. This is suggestive.

Now in two cases only do I think the possibility of a connection to the *Homeric Puzzles* is slight: (9) *Hist. an.* 8(9).44, 629b21–4 (on the lion's fear of fire) and (11) *Gen. an.* 5.5, 785a11–16 (on the skull of horses). These passages would not, I think, be worth considering if not for the other Homeric passages and for the fact that Aristotle wrote a *Homeric Puzzles*. In these two, Aristotle does not refer to what others say about the passage, and there is no evidence of any complications in the text of Homer and little evidence of any debate in antiquity. If these were the only references

⁹³ A. Gotthelf, *Teleology, First Principles, and Scientific Method in Aristotle's Biology* (Oxford, 2012), 383. Gotthelf goes on to describe, as a work from this stage of inquiry, Aristotle's lost *Dissections* (pp. 383–4; see fr. 295–324 Gigon). See also Gotthelf's comments on the work *On Marvellous Things Heard*, which is generally considered inauthentic (p. 385). The *History of Animals* is from the *organization* of data stage, the *Parts of Animals* and the *Generation of Animals* from the *explanation* of data stage (p. 383).

⁹⁴ Aristotle might have jotted down passages from his *Homeric Puzzles* into his notebooks, but in such cases I would still regard the *Homeric Puzzles* as the source.

⁹⁵ By 'possible' I do not mean merely that it is logically possible, but that there is some genuine support for the claim I am making and that nothing rules it out as impossible (though the case is no stronger than that and certainly not conclusive).

to Homer in the biology, I would assume that they came from Aristotle's intimate knowledge of Homeric epic (though I would still wonder why he included them).

But I do not think one should say the same about the other nine passages: with these, there is a higher probability that they came not simply from Aristotle's knowledge of the Homeric epics, but from his sustained work on the epics in the context of ancient Homeric scholarship. There are more complexities involved, and there is more evidence that the passages were the subject of debate in antiquity. I believe that that is clear from my discussion of them. And if I had to name passages that I thought went beyond the *possibility* of coming from the *Homeric Puzzles* and rose to the level of *probability*, I would mention these three: (3) *Hist. an.* 6.20, 574b29–575a1 (on the longevity of Odysseus' dog Argos), (8) *Hist. an.* 8(9), 32.618b18–30 (on the *morphnos* eagle of *Iliad* 24) and (10) *Part. an.* 3.10, 673a10–17 (on a severed head speaking).

If I am right, then the biological works, and especially the *History of Animals*, give us further insights (beyond the 'fragments' and *Poetics* 25) into the nature of the *Homeric Puzzles* – and particularly into some of the puzzles Aristotle likely addressed, and in some cases how he might have solved them.⁹⁶ The passages I have examined also confirm what we know from the other sources: that Aristotle respected and revered Homer, and sought whenever possible to defend him, but that this reverence did not amount to uncritical approval.

APPENDIX: THE CORPSE-EATING FISH OF *ILIAD* 21

In *Iliad* 21, while Achilles is slaughtering Trojans alongside the Scamander River, he encounters Lycaon, who pleads for his life. Achilles ignores his plea, kills him, and then tosses his corpse into the river, declaring (126–7):

θρόσκων τις κατὰ κῶμα μέλαιναν φρήϊ' ὑπαΐξει [or ὑπαλύξει]
 ἰχθύς, ὅς κε φάγησι Λυκάονος ἀργέτα δημόν.⁹⁷

Leaping along the waves, some[thing] will dart [or 'escape'] beneath the black rippling,
 [a] fish, which will feed upon Lycaon's shiny fat.

The discussion of these verses in the first book of Porphyry's *Homeric Questions on the Iliad* contains the only quote from or paraphrase of Aristotle in the part of this work that survives in manuscript form,⁹⁸ and its source is not the *Homeric Puzzles*:

⁹⁶ I do not mean to suggest that Aristotle's discussion of biological issues in his *Homeric Puzzles* is limited to (at most) the eleven cases that I have discussed in this essay. Janko (n. 7), 23–4, 71–2, 339 notes a number of passages in Homer in which Zenodotus emends the text in the name of zoological accuracy. These could reflect ancient debates in which Aristotle took part, though no evidence for that participation survives.

⁹⁷ West brackets *Il.* 21.126–35 as an interpolation. His text reads ὑπαΐξει (with the manuscripts), and he accepts the conjecture ὡς over the manuscripts' ὅς (which I prefer).

⁹⁸ The only other reference to Aristotle in the extant first book is in §16 (pp. 115–16 Sodano): οὐδεὶς γὰρ τῶν παλαιῶν οὐδ' Ἀριστοτέλης βότρυν ζῶον ἔγραψε, κέχρηται δὲ Ὅμηρος ἐπ' ἀμπέλου τῷ "βότρυς" ὀνόματι ('For none of the ancients, not even Aristotle, wrote βότρυν [to refer to] an animal, but Homer did use the word for a grape-vine' [see *Il.* 23.562]).

εἰ δ' "ὑπαλύξει" γράφοιτο, φησὶ Πολύκλειτος τὸν νοῦν τοιοῦτον ἔσσεσθαι· καταδύσεται μὲν εἰς τὸ βάθος τοῦ κύματος ὃ ἰχθύς φεύγων τῆς φρίκης τὴν ψυχρότητα. καὶ γὰρ αὐτῷ πολεμιώτατον· τοῦ γοῦν χειμῶνος ἐκ τοῦ πελάγους εἰς τὴν γῆν καταίρουσι. πολλοὺς δὲ αὐτῶν καὶ φωλεύειν κατὰ βάθους διὰ τὴν αὐτὴν αἰτίαν ἰστορεῖ καὶ Ἀριστοτέλης ἐν τῷ ζ' Περὶ ζῴων φύσεως· ψυχροτάτη δ' ἡ φρίκη, καὶ μάλιστα ἂν βόρειος ἤ. γενόμενος δ' ἐν τῷ βάθει τοῦ Λυκάονος ἔδετα τὸ λίπος. (§8, pp. 42–3 Sodano)

But if 'ὑπαλύξει' was written, Polycleitus⁹⁹ says that the intention will be this: the fish will plunge to the depths below the waves, escaping the cold of the rippling-water. Indeed, [the cold] is quite hostile to it; at least, in winter [fish] move in from out of the open sea towards the land. Aristotle, in Book 6 [or 7]¹⁰⁰ of *On the Nature of Animals*, reports that many of them even hide in the depths for the same reason: the rippling-water is quite cold, and especially if it is northern.¹⁰¹ And being in the depths it will eat the fat of Lycaon.

Neither Rose (3rd edn) nor Gigon include this text in their collections of fragments, and for good reason:¹⁰² this is almost certainly a reference to Aristotle's *History of Animals* (Τῶν περὶ τὰ ζῷα ἰστοριῶν), for the seventh book¹⁰³ includes a discussion of fish hibernating, especially in winter (see *Hist. an.* 7[8].15).¹⁰⁴ Although it is unclear as presented whether the reference to the fish eating the fat of Lycaon was meant to be part of the report from *On the Nature of Animals*, there is no reason to think that Aristotle wrote a work with this title, in which he discussed the corpse-eating fish of *Iliad* 21.

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⁹⁹ Not otherwise known; modern scholars (see n. 104) have suggested emendations.

¹⁰⁰ I argue that ζ' here represents 7 (according to the Milesian system, in which the digamma [F] is used for 6).

¹⁰¹ I.e. if the rippling is caused by the North wind (βόρειος).

¹⁰² See n. 6. It was, however, included in Rose's second edition (fr. 333), which is volume 5 of Bekker's *Aristotelis Opera* (Berlin, 1870). In his first edition of the fragments (V. Rose, *Aristoteles Pseudepigraphus*, [Leipzig, 1863]), he quotes from this passage in a note on another text (cheating a bit by printing ἐβδόμῳ in place of ζ') and refers to *Hist. an.* 7(8).15 and Theophrastus' lost Περὶ τῶν φωλεόντων (*On [Animals] that Hibernate*, see Diogenes Laertius 5.44).

¹⁰³ In the book order of the manuscripts (see n. 16).

¹⁰⁴ This is not to deny that Aristotle might have discussed *Il.* 21.126–35 in his *Homeric Puzzles*. Note that this passage has received since antiquity and continues to receive scholarly attention. See the A-scholia – e.g. Σ^A *Il.* 21.126 = Philetas fr. 57 (Spanoudakis) = Aristonicus, *De signis Iliadis ad* 21.126 – and Eustathius (*Il.* 21.127; vol. 4, pp. 470–1), and (for modern scholarship) e.g. S. Hatzikosta, 'Il., 21, 126 and its alleged interpretation by Philetas', *L'Antiquité Classique* 63 (1994), 201–9.