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## Sacred Sneezes in Aristotle, *Historia animalium* I 11 and [Aristotle], *Problemata physica* XXXIII 7 & 9

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ABSTRACT – The aim of this essay is to shed light on three related Peripatetic texts that have received little scholarly attention: a passage in Aristotle's *Historia animalium* I 11, on the nose, which mentions in passing that «sneezing [...] is alone of breaths (πνευμάτων) a sign prophetic and sacred»; and, two chapters in pseudo-Aristotle, *Problemata physica* XXXIII, which ask and attempt to answer the question: why is sneezing (thought to be) sacred? An important issue distinguishing the latter from the former is the view that the head is the seat of reason.

KEYWORDS – Aristotle; *Historia animalium*; omen; *Problemata physica*; religion; sacred; sneezing; Strato – Aristotele; *Historia animalium*; presagio; *Problemata physica*; religione; sacro; starnuto; Stratone.

The provinces of the deities were so subdivided, that there was even a God of Sneezing (see *Aristotle's Problems*, sec. 33, cap. 7).

David Hume, The Natural History of Religion, n. 1

## 1. «HISTORIA ANIMALIUM» I 11, «PROBLEMATA PHYSICA» XXXIII AND THEIR CULTURAL AND INTELLECTUAL CONTEXT

There is clearly no one purpose for which each of the over 900 chapters of the *Problemata physica* attributed to Aristotle was composed. This should come as no surprise, given that this massive collection (the third longest work in the *corpus Aristotelicum*) is surely the product of many hands compiled over many decades, if not centuries <sup>1</sup>. Some chapters raise questions with a view to discovering the efficient cause of some phenomenon; some raise questions about a passage in a philosophic or scientific text (e.g. a Theophrastean *opusculum* or Hippocratic treatise); some

<sup>&</sup>lt;sup>1</sup> Cf. Flashar 1962, 295-384; Mayhew 2011, I, xiii-xxxiii, and Bodnar 2015.

attempt to solve an *aporia*; some set out to explain a saying, traditional lore, or other widespread or reputable opinions (*endoxa*); and, some try to achieve a combination of two or more of these purposes <sup>2</sup>.

I am concerned here with two related *problèmata* that raise questions about a passage in Aristotle's *Historia animalium* I 11 and an *endoxon* to which it refers. They are of special interest, being two of the very few chapters in this work that deal with a religious issue  $^3$ . They are located in [Pr.] XXXIII, which (according to its title, ὅσα περὶ μυκτῆρα) is concerned with the nostril  $^4$ . All but four of its eighteen chapters, however, are devoted to sneezing (1-5, 7-12, 15-17), and two of these (7 and 9) deal with the idea that sneezing is divine or sacred  $^5$ .

A noteworthy ancient Greek example of a sacred sneeze, which both Aristotle and the author of [*Pr*.] XXXIII 7 and 9 6 would surely have been aware of, is *Odyssey* XVII 539-547 7. After Penelope says to the 'beggar' (i.e. Odysseus in disguise) that if Odysseus were to return, he would take vengeance on the suitors,

[...] Telemachus sneezed loudly 8, and around the house it echoed terribly; but Penelope laughed.

<sup>&</sup>lt;sup>2</sup> Flashar 1962 is still the best commentary on the *Problemata physica*. Centrone 2011 and Mayhew 2015 are two important collections of essays on the *Problemata*. Though neither contains an essay dealing with the *problemata* that are my focus here, many of the essays deal with the connection between the *Problemata* and the works of Aristotle.

<sup>&</sup>lt;sup>3</sup> [Pr.] XXIV 19 is similar in form to them, but quite brief. I quote it in its entirety: «Why are hot bathing-places sacred? Is it because they come from two very sacred things, sulfur and lightning bolt?» (Διὰ τί τὰ θερμὰ λουτρὰ ἰερά; ἢ ὅτι ἀπὸ τῶν ἰερωτάτων γίνονται, θείου καὶ κεραυνοῦ;). Translations from the Greek are my own, except where indicated. For the *Problemata*, I have used my Loeb translation (Mayhew 2011), often modified.

<sup>&</sup>lt;sup>4</sup> The *Problemata* ends with eight books dealing with human anatomy, broadly understood: eyes (XXXI), ears (XXXII), the nostril (or nose) (XXXIII), the mouth «and the things in it» (XXXIV), touch (XXXV), the face (XXXVI), the entire body (XXXVII), and complexion (XXXVIII). G. Marenghi included [*Pr.*] XXXI-XXXVIII in his *Aristotele, Problemi di medicina* (1999²).

<sup>&</sup>lt;sup>5</sup> It is worth mentioning in this connection [Pr.] XXXIII 11, which begins: «Why is the sneezing that occurs from midnight until midday not good, but the sneezing from midday until midnight is?» (Διὰ τί οἱ μὲν ἀπὸ μέσων νυκτῶν ἄχρι μέσης ἡμέρας οὐκ ἀγαθοὶ πταρμοί, οἱ δ᾽ ἀπὸ μέσης ἡμέρας ἄχρι μέσων νυκτῶν;) In this problêma, the author goes on to refer to «why we beware sneezing» (διὸ εὐλαβούμεθα πτάρειν). But as there is no direct reference to the sacred or to omens, nor to πνεῦμα or the mechanics of sneezing, I do not discuss it here.

<sup>&</sup>lt;sup>6</sup> I assume for the sake of convenience (and it may well be true) that [*Pr.*] XXXIII 7 and 9 were composed by the same person, though not much in what follows hangs on this assumption.

<sup>&</sup>lt;sup>7</sup> For commentary, cf. Steiner 2010, 147-148.

<sup>8</sup> Steiner 2010, 147: «the only sneeze in epic».

[...] Τηλέμαχος δὲ μέγ' ἔπταρεν, ἀμφὶ δὲ δῶμα σμερδαλέον κονάβησε· γέλασσε δὲ Πηνελόπεια. (541-542)

Three lines later, she adds (545-547):

Don't you see, my son has sneezed at all my words? So death complete will indeed befall my suitors, All of them, and not one will escape death and destruction.

οὺχ ὁράᾳς, ὅ μοι υἰὸς ἐπέπταρε πᾶσιν ἔπεσσι; τῶ κε καὶ οὺκ ἀτελὴς θάνατος μνηστῆρσι γένοιτο πᾶσι μάλ', οὐδέ κέ τις θάνατον καὶ κῆρας ἀλύξει.

Penelope saw Telemachus' sneeze – occurring when it did – as a favorable omen from the gods 9.

Aristotle mentions sneezing as an omen, in passing, in the first book of the *Historia animalium*. In *Hist. an*. I 6, he initiates a discussion of the differences between animal parts, beginning with the parts of a human being, as they are the ones we know best (491a 14-23). He starts at the top of the body, and *Hist. an*. I 8-11 are devoted to the face and head. In I 11, he writes (492b 5-13):

Further, the part of the face that is a passage for breath is the nose. For one both inhales and exhales with it, and sneezing <sup>10</sup> – an exiting of amassed breath – occurs through it and is alone of breaths a sign prophetic and sacred. But at the same time, inhalation and exhalation occur in the chest, and it is impossible to inhale or exhale separately with the nostrils, because it is from the chest that inhalation and exhalation come, along the uvula, and not from some part of the head. It is in fact possible to live without making use of this [i.e. the nose]. <sup>11</sup>

ἔτι προσώπου μέρος τὸ μὲν ὂν τῷ πνεύματι πόρος ῥίς· καὶ γὰρ ἀναπνεῖ καὶ ἐκπνεῖ ταύτη, καὶ ὁ πταρμὸς διὰ ταύτης γίνεται, πνεύματος ἀθρόου ἔξοδος, σημεῖον οἰωνιστικὸν καὶ ἱερὸν μόνον τῶν πνευμάτων. ἄμα δ' ἡ ἀνάπνευσις καὶ ἔκπνευσις γίνεται εἰς τὸ στῆθος, καὶ ἀδύνατον χωρὶς τοῖς μυκτῆρσιν ἀναπνεῦσαι ἢ ἐκπνεῦσαι διὰ τὸ ἐκ τοῦ στήθους εἶναι τὴν ἀναπνοὴν καὶ ἐκπνοὴν κατὰ τὸν γαργαρεῶνα, καὶ μὴ ἐκ τῆς κεφαλῆς τινι μέρει· ἐνδέχεται δὲ καὶ μὴ γρώμενον ταύτη ζῆν.

What is important for my purposes (as will become clear) is that Aristotle treats sneezing as a kind of breath (the build up from inhalation, followed

<sup>&</sup>lt;sup>9</sup> For other ancient Greek examples of a sneeze as an omen, cf. Pease 1911; Flashar 1962, 744; Steiner 2010, 147-148, and Zierlein 2013, 286.

 $<sup>^{10}</sup>$  The word πταρμός ('a sneeze' or 'sneezing') appears thirty-four times in the *corpus Aristotelicum*: once here, and thirty-three times in the *Problemata* – twenty of these in [*Pr.*] XXXIII.

<sup>&</sup>lt;sup>11</sup> In translating this passage, I have made use of Reeve 2019, 13. For detailed commentary on the passage, cf. Zierlein 2013, 285-287.

by a massive exhalation) <sup>12</sup>. So it follows that sneezing, like breathing generally, occurs in and comes from the chest, not the nose – and therefore not from the head <sup>13</sup>. It is in this context that Aristotle makes the remark about sacred sneezing.

Aristotle regards as at least noteworthy, in a scientific work, the view that sneezes were used in prophecy and considered sacred. But what is the purpose of this remark about sneezing <sup>14</sup>? If the *Historia animalium* were a set of Aristotle's lecture notes, one might conclude that this remark was merely a colorful aside; but the scholarly consensus (with which I agree) is that that is not the nature of this work. It is a scholarly treatise «Between Data and Demonstration» (to use the title of Lennox 2001b, ch. 2): it represents the organization of data stage of Aristotle's biological enterprise – with 'data' including not only Aristotle's own first-hand scientific observations, but also common *endoxa* as well as reports of strange animals and phenomena <sup>15</sup>.

<sup>&</sup>lt;sup>12</sup> As Zierlein 2013, 286 explains, Aristotle nowhere provides a physiological explanation of sneezing, though such an explanation can be found in the *Problemata*: «Während sich in den aristotelischen Schriften keine physiologische Erklärung für das Phänomen des Niesens findet, wird dessen Ursache in der im Corpus Aristotelicum überlieferten und aus dem 3. Jahrhundert v. Chr. stammenden peripatetischen Schrift *Problemata Physica* X 54.897 a 1ff. ausführlich beschrieben (vgl. auch *Probl.* X 18.892 b 22ff. und *Probl.* XXX 10.962 b 8ff.): Beim Niesen handelt es sich um feuchte Luft, die durch ein Übermaß an körperlicher Wärme und Feuchtigkeit aus der Herzregion zur Nase steige und gesammelt ausgestoßen werde. Aufgrund der aufrechten Haltung des Menschen wandere die aufsteigende Wärme bei ihm vollständig in den Kopf, während sie sich bei den übrigen Lebewesen im Körper verteile. Intensives und häufiges Niesen ist demzufolge eine menschliche Besonderheit».

<sup>&</sup>lt;sup>13</sup> For Aristotle, that the nose, and its position on the face, is important with respect to the sense of smell and *not* to breathing, cf. *Part. an.* II 10, 657a 4-11. In *Resp.* 11, he says that one of the two functions of the mouth is to be a passage for breath, but he does not mention the nose or nostrils.

<sup>&</sup>lt;sup>14</sup> Zierlein 2013, 286 merely comments: «Das Niesen wird in der griechischen wie auch römischen Antike allgemein als ominöses Zeichen betrachtet» (followed by references). David Balme (c.d.s., *ad loc.*), commenting on iερόν, remarks: «the point here may be that man sneezes more frequently than animals». I cannot rule that out; but note that why humans sneeze more than other animals is the question raised in [*Pr.*] X 18; X 54, and XXXIII 10, and in every case the answer has nothing to do with the sanctity of sneezing. But that this is connected to the human's upright stature (more on which shortly), see above n. 12.

<sup>&</sup>lt;sup>15</sup> On the nature and purpose of the *Historia animalium*, see *Hist. an.* I 6, 491a 7-14, and (in addition to Lennox 2001b, ch. 2) Balme 1987; Gotthelf 2012, 315-324, 383-388, and Lennox 2021, § 5.1. On the surprising nature of some of the data included in this work, cf. Leunissen 2021, 73-76 (which bears the subheading: «The Importance of Folklore, Fables, and Hearsay for the Collection of Zoological Facts»), and especially Lloyd 1983, *passim*.

Aristotle was not interested solely in what he could observe himself or gather from the reports of people who work with animals (e.g. shepherds, beekeepers) 16. He believed it was also worth examining claims about animals and phenomena that were considered strange or paradoxical (especially in the context of biological research). Sometimes reports of such *mirabilia* or *paradoxa* were dismissed as false, but other times they were accepted provisionally (if verification was not possible) and used as supplementary data to support some point. As an example of the former, in Hist. an. VI 7, Aristotle writes that the cuckoo «is said by some» (λένεται ὑπό τινων) to be a hawk transformed (563b 14-15) – a claim he rejects straightaway. This may be a marvelous thing heard (θαυμάσια ἀκούσματα), but it is patently false and so dismissed. Most of the evidence for θαυμάσια ἀκούσματα having played a positive role are in Hist. an. VIII (IX) 17. Hist. an. VIII (IX) 5, for instance, reads like a series of reports of such phenomena, organized so as to illustrate or demonstrate the intelligence of deer. For example: «It is said that no one has vet seen the left horn; for [it is said] that they conceal it as having some medicinal property» (λέγεται δ' ώς τὸ ἀριστερὸν κέρας οὐδείς πω ἑώρακεν· άποκρύπτειν γὰρ αὐτὸ ὡς ἔγον τινὰ φαρμακείαν) (611a 29-30) 18.

I would speculate that Aristotle's comment in *Hist. an.* I 11 about sacred sneezing falls somewhere between these two examples. That is, he neither dismisses it as obviously false, like the cuckoo – hawk report, nor does he provisionally accept it, like the report of deer burying their horn (as a sign of cervine intelligence). Instead, he is or at least seems to be neutral or noncommittal <sup>19</sup>. This does not necessarily imply, however, that Aristotle had no opinion about this *endoxon*. That may explain why he immediately goes on to make the point (beginning  $\alpha\mu\alpha$   $\delta$ , which suggests a contrast) that sneezing comes from the chest and not the head (more on this shortly).

Incidentally, I do not regard this interest in θαύματα or *paradoxa* as some 'shadowy area' in Aristotle's biological inquiry, beyond or within

<sup>&</sup>lt;sup>16</sup> Cf. Zatta 2022, 179, and especially Leunissen 2021.

<sup>&</sup>lt;sup>17</sup> That is, book VIII according to ancient evidence and the medieval manuscripts (and accepted in Balme 2002), book IX according the rearrangement of Theodore of Gaza (made standard by Bekker). On the role of θαυμάσια ἀκούσματα in *Hist. an.* VIII (IX), cf. Mayhew c.d.s.

<sup>18</sup> A similar report is included in [Arist.] *Mir. ausc.* 75, and in [Antig. Car.] *Mir.* 20 (which refers to Aristotle), as well as in Theophrastus' (lost) *On Animals Said to Be Grudging* (Περὶ τῶν ζώων ὅσα λέγεται φθονεῖν): cf. Phot. *Bibl.* cod. 278, 528a 40 - b 27 (fr. 362A FHS&G), Ael. *NA* III 17 (fr. 362C), and Plin. *NH* VIII 115 (fr. 362D).

<sup>&</sup>lt;sup>19</sup> I am grateful to both of the journal's referees for urging me to rethink my previous view that Aristotle was here obviously dismissing the idea of the sacred sneeze.

rationality and logic <sup>20</sup>. Rather, I see it as consistent with the nature and aims of the *Historia animalium*, and even with Aristotle's commitment to empirical foundationalism (though admittedly, this interest at times might seem to be in tension with it) <sup>21</sup>.

In any case, it is worth comparing the *Hist. an*. I 11 aside about sacred sneezing with the opening of Aristotle's *De divinatione per somnum*:

Concerning the divination that occurs during periods of sleep, and is said to result from dreams, it is not easy to treat it with contempt or to believe it.

περὶ δὲ τῆς μαντικῆς τῆς ἐν τοῖς ὕπνοις γινομένης καὶ λεγομένης συμβαίνειν ἀπὸ τῶν ἐνυπνίων, οὕτε καταφρονῆσαι ῥάδιον οὕτε πεισθῆναι. ( $Div.\ somn.\ 1$  462b 12-14)

In the case of the divination in dreams, of course, Aristotle goes on to explain his own views at length. By contrast, the idea that sneezing is sacred and prophetic – which in *Hist. an.* I 11 similarly seems to reside in his evaluation somewhere between contempt and belief – is set aside without further comment. Perhaps this was in part because he found it a relatively trivial issue, in part because he was leaving it to others to pursue further. In any case, it is likely that Aristotle's brief remark prompted the author of [Pr.] XXXIII 7 and 9 to raise questions that ask for such further explanation  $^{22}$ .

#### 2. «Problemata Physica» XXXIII 7 and 9

The remainder of this essay is, in effect, a commentary on [Pr.] XXXIII 7 and 9 <sup>23</sup>. I want to assess the arguments contained therein, and further, attempt to determine what they imply about the attitude of their author

<sup>&</sup>lt;sup>20</sup> Describing the interest in *mirabilia* on the part of Aristotle and Ctesias, Jacob 1981, 121 writes: «Mais peut-on laisser ainsi de côté cet aspect important de la mentalité grecque, et ne retenir que les éléments et les secteurs relevant de la raison et de la logique? Ne faut-il pas prendre en compte de pareilles 'zones d'ombre' et en rechercher les principes organisateurs qui, peut-être, relèvent d'une logique différente?». Li Causi 2003, 102 uses the same language: «le zone d'ombra nello spazio della razionalità degli antichi».

<sup>&</sup>lt;sup>21</sup> Cf. e.g. Leunissen 2021, 68-73. For an account of Aristotle's empirical foundationalism, cf. Salmieri 2014.

 $<sup>^{22}</sup>$  Similarly, Meeusen 2020, 68: «Since Aristotle does not provide an explanation, it may well be that the author of Pr.~33.9 saw a problem here that required separate discussion and further consideration».

<sup>&</sup>lt;sup>23</sup> Louis's *Les Belles Lettres* edition of the *Problemeta physica*, in three volumes, is now considered standard. The third volume (1994) contains [*Pr.*] XXXIII. But Marenghi's edition is in fact superior, in the case of the twenty books for which he

toward this religious *endoxon*. I proceed in the order in which they appear, in part because there seems to be a certain logic to that order (as I hope to make clear) and in part because the second is longer and more involved.

## [Pr.] XXXIII 7 begins:

Why do we consider sneezing to be divine, but not coughing or a runny nose?

Διὰ τί τὸν μὲν πταρμὸν θεῖον 24 ἡγούμεθα εἶναι, τὴν δὲ βῆχα ἢ τὴν κόρυζαν οὔ;

The question is not about the divinity of sneezing, but about why it is *considered* divine while coughing and a runny nose are not. I think it possible that the manner of raising this question is itself a polite (note the first person plural) implicit criticism: Why do *we* hold *sneezing* to be divine, but not other things issuing from the head? Coughing, as a kind of  $\pi v \epsilon \tilde{v} \mu \alpha$ , is a good analogue; but a runny nose is apt as well, for although it is not a kind of  $\pi v \epsilon \tilde{v} \mu \alpha$ , it too is a (relatively minor) bodily function that involves something exiting the body from the same place that a sneeze does.

The author asks two follow-up questions, each one offering a different way of answering the question (which the author does not pursue further). The first:

Is it because it comes out of the most divine part of us, the head, from which there is reasoning?

η διότι ἐκ τοῦ θειοτάτου τῶν περὶ ἡμᾶς τῆς κεφαλης, ὅθεν ὁ λογισμός ἐστι, γίνεται;

This one focuses on what is supposedly positive about sneezing (the implication being that the others lack this): sneezing comes from the most divine part, the head. But why is the head the most divine part? Was this view shared by Aristotle? And is it not the case that coughing and a runny nose come from the head?

In Part. an. IV 10, 686a 25-35, Aristotle argues that the human being «alone of the animals is upright, on account of the fact that its nature and

produced critical editions, in four distinct works (cf. for instance n. 24). His edition of [*Pr.*] XXXIII is found in Marenghi 1999<sup>2</sup>, 218-235.

<sup>&</sup>lt;sup>24</sup> θεόν (god) is the reading of all of the manuscripts (recall the epigraph to this paper, from David Hume). Flashar 1962, 744, and Louis 1994, 72 both accept this reading, and refer to θεῖον as Richard's conjecture (1915, 152), which it was. But Marenghi 1999², 222 indicates that θεῖον was suggested by a second hand in the margins of one of the major manuscripts ( $K^a = Marcianus\ gr.\ IV,\ 58;\ 13^{th}\ c.$ ), and that the important  $13^{th}$  century Latin translation of Bartholomew of Messina had augurium.

essential-being are divine; and it is a function of that which is most divine to think and to reason» (ὀρθὸν [...] ἐστι μόνον τῶν ζώων διὰ τὸ τὴν φύσιν αὐτοῦ καὶ τὴν οὐσίαν εἶναι θείαν· ἔργον δὲ τοῦ θειοτάτου τὸ νοεῖν καὶ φρονεῖν) <sup>25</sup>. In *Eth. Nic.* X 8, 1177b 26 - 1178a 7, Aristotle claims that humans are divine owing to their ability to think – to their possession of νοῦς (thought or understanding) <sup>26</sup>. What is missing from both of these accounts, however, but of capital importance in [Pr.] XXXIII 7, is the idea that the head is the most divine part *because that is where reasoning resides*.

This is important, as it reveals that [Pr.] XXXIII 7 could not have come from Aristotle, or from anyone in his school who agreed with him about the locus of human reasoning. At least, that is the case if the first follow-up question in [Pr.] XXXIII 7 is meant to imply a possible solution. For on Aristotle's view, although reason can be considered divine, the head is not the seat of reasoning, for the brain is not the organ of perception or cognition. Aristotle is aware that people hold this view, but he rejects it (cf. Juv. 3, 469a 20-23). He claims instead that the purpose of the brain (the coldest organ) is to regulate (by cooling) the temperature of the body, and especially the heat in the heart (cf. Part. an. II 7 and Somn. 3, 457b 26-31)  $^{27}$ . It is the heart that plays the central role in sense perception, whereas there is no organ in the body that is the seat of thought or understanding (vooeg))  $^{28}$ .

Instead, the view described here (the solution implied) possibly comes from Plato  $^{29}$  or (more likely, in the context of the *Problemata*) from the Lyceum while Strato (died c. 270 BC) was scholarch, if not after him. In pseudo-Plutarch, *Placita* IV 5 (*Mor.* 899A) ( $\approx$  fr. 57 Sharples), Strato is included in the group of thinkers who locate the authoritative or principal part of the soul in (some part of) the head:

<sup>&</sup>lt;sup>25</sup> Translation from Lennox 2001a, slightly modified. For commentary and a presentation of Aristotle's argument (including the gaps in it), cf. Lennox 2001a, 317-318.

 $<sup>^{26}</sup>$  E.g. 1177b 30-31: εί δὴ θεῖον ὁ νοῦς πρὸς τὸν ἄνθρωπον, καὶ ὁ κατὰ τοῦτον βίος θεῖος πρὸς τὸν ἀνθρώπινον βίον. On the divinity of νοῦς, cf. also Metaph. A 7 and 9.

<sup>&</sup>lt;sup>27</sup> On cooling as the purpose of breathing, cf. *Resp.* 8-11, 15-16.

<sup>&</sup>lt;sup>28</sup> On the heart, cf. e.g. *Part. an.* III 4 and *Somn.* 2. On νοῦς, cf. *De an.* II 1, 413a 3-7, 413b 24-29; III 5, 430a 17-19; *Gen. an.* II 3, 736b 21-29.

<sup>&</sup>lt;sup>29</sup> Louis 1994, 111 n. 22: «Conception platonicienne». Cf. Plat. *Ti.* 44d-45b (and on the construction of the body, with channels for the exiting of breath and their relation to the parts of the soul, cf. 69c-71d). It is noteworthy that while discussing pig brains (ἐγκέφαλοι χοίρειοι), Athenaeus (II 66c) attributes the following view to the ancient Greeks generally (and he names Homer, Sophocles, Euripides, and Aristophanes): «That they considered the head sacred is clear from their swearing by it and revering as sacred the sneeze coming from it» (ὅτι δ' ἰερὸν ἐνόμιζον τὴν κεφαλὴν δῆλον ἐκ τοῦ καὶ κατ' αὐτῆς ὀψινύειν καὶ τοὺς γινομένους ἀπ' αὐτῆς πταρμοὺς προσκυνεῖν ὡς ἱερούς).

What is the authoritative [part] of the soul, and in what is it. Plato, Democritus: in the head as a whole. Strato: in the space between the eyebrows.

Τί τὸ τῆς ψυχῆς ἡγεμονικὸν καὶ ἐν τίνι ἐστίν Πλάτων Δημόκριτος ἐν ὅλη τῆ κεφαλῆ. Στράτων ἐν μεσοφρύφ. <sup>30</sup>

It is unclear whether the author of [*Pr.*] XXXIII 7 is claiming or proposing that the head is considered divine because it is thought to be the seat of reason, and as sneezing comes from the head it too is considered divine; or further, that there is thought to be some connection between sneezing and reasoning. I see no reason to accept the latter, unless in the background here (though left unstated) is the claim from Aristotle that sneezing is prophetic – i.e. used as an omen, a source of information, and so of cognitive value.

Now, as indicated, one might object that coughing and a runny nose emerge from the head as well, and so these too ought by the same logic to be considered divine. This I think may well account for the second follow-up question. While the first focused on what is supposedly positive about sneezing, the second focuses on what is negative about coughing and a runny nose:

Or is it because the others come from diseases, but this does not?

ἢ ὅτι τὰ μὲν ἄλλα ἀπὸ νοσούντων γίνεται, τοῦτο δὲ οὕ;

This is a good way to proceed. That is, one can see why the author would hold (or people generally would believe) that coughing and a runny nose are associated with disease or poor health, whereas even the healthiest people are capable of sneezing sometimes. Moreover, works in the Hippocratic corpus, for instance, often treat sneezing as something associated with health (which of course is not to say that it is never associated with illness) <sup>31</sup>.

<sup>&</sup>lt;sup>30</sup> After a couple of other figures with similar views, pseudo-Plutarch turns to those who locate the authoritative part of the soul elsewhere (e.g. in the heart).

<sup>&</sup>lt;sup>31</sup> Prog. 14 claims that in lung diseases, sneezing is a bad sign (κακόν), but that in all other deadly diseases, it is beneficial (ἀλλ' ἐν τοῖσιν ἄλλοισι νουσήμασι τοῖσι θανατώδεσι νοσήμασιν οωδεστάτοισιν οἱ πταρμοὶ λυσιτελέουσιν). On sneezing as a way in which nature takes care of an illness, and so is something good, cf. Epid. VI 5; and note Aph. V 35: «In a woman suffering from ailments in the womb, or having difficulties in childbirth, an onset of sneezing is good» (γυναικὶ ὑπὸ ὑστερικῶν ἐνοχλουμένη, ἢ δυστοκούση, πταρμὸς ἐπιγινόμενος, ἀγαθόν). Thus, the application of what induces sneezing (τὸ πταρμικός) is sometimes recommended (cf. e.g. Mul. I 68, II 17 [126 L]). On sneezing as a positive, cf. also Aph. V 49 and VI 13, Coac. 145 and 393. For other

[*Pr.*] XXXIII 7 ends with the second follow-up question. As is so often the case with chapters in the *Problemata* (especially brief ones), more questions are raised than are answered.

Perhaps because coughing and a runny nose were considered and rejected in [Pr.] XXXIII 7, two other arguably comparable bodily functions – in fact they are both kinds of  $\pi v \epsilon \tilde{u} \mu \alpha$  – are put forward in [Pr.] XXXIII 9  $^{32}$ :

Why are the other escapes of breath, such as flatulence or belching, not sacred, but the escape of a sneeze is sacred?

Διὰ τί τῶν μὲν ἄλλων πνευμάτων αἱ ἔξοδοι, οἶον φύσης καὶ ἐρυγμοῦ, οὐχ ἱεραί, ἡ δὲ τοῦ πταρμοῦ ἱερά;  $^{33}$ 

I suspect that flatulence might imply a critical rather than a neutral approach to the issue, though it is a burst of air  $^{34}$ . Flatulence, however, is clearly *not* from the head, whereas one might think belching is. Not so, says the author of [Pr.] XXXIII 9 – as is clear from the first follow-up question, with additional comment:

Is it because of the three regions involved – the head, the trunk, and the lower abdomen <sup>35</sup> – the head is the most divine? But flatulence is breath from the lower abdomen and belching from the upper, whereas sneezing is from the head. Because this region is most sacred, therefore, they also revere the breath there as sacred.

πότερον ὅτι τριῶν τόπων ὄντων, κεφαλῆς καὶ θώρακος καὶ τῆς κάτω κοιλίας, ἡ κεφαλὴ θειότατον; ἔστι δὲ φῦσα μὲν ἀπὸ τῆς κάτω κοιλίας πνεῦμα, ἐρυγμὸς δὲ

instances of sneezing as a bad sign, cf. e.g. *Epid.* I 23, *Mul.* II 44 (153 L). In at least one case, sneezing marked the beginning of the end: *Epid.* V 21.

<sup>&</sup>lt;sup>32</sup> This *problêma* has also been transmitted in another collection of *problêmata*: pseudo-Aristotle/pseudo-Alexander, *Supplementa Problematorum* (cf. Kapetanaki - Sharples 2006), specifically [*Sup. Pr.*] II 50 (cf. the Appendix below). The text of [*Sup. Pr.*] II 50 is arguably superior, and I twice emend [*Pr.*]XXXIII 9 based on its readings (once more than Marenghi does), and in one case I refer to its variant reading in a footnote (the next one).

 $<sup>^{33}</sup>$  Where [Pr.] XXXIII 9 has iepá, [Sup. Pr.] II 50 has µóvη, which is arguably better: «but only the escape of a sneeze is?».

<sup>&</sup>lt;sup>34</sup> But note Hom. *Hymn Hermes* 294-298 for an example of flatulence as an omen. It comes from the infant Hermes, however, and is followed by a sneeze. Steiner 2010, 147 calls this «a play on the prophetic sneeze, here preceded by a less decorous form of bodily emission».

<sup>&</sup>lt;sup>35</sup> Aristotle describes the θώραξ (trunk) as the part of the body between the neck and genitals (*Hist. an.* I 1, 491a 29-30). If that were its meaning here, it would include the lower abdomen, but clearly it does not. In my Loeb translation (2011, 365) I rendered it *chest*; but given the next line, it likely refers to the part of the body between (and not including) the neck and the lower abdomen ( $\tau$ ῆς κάτω κοιλίας). The θώραξ does include, however, the upper abdomen ( $\tau$ ῆς ἄνω [sc. κοιλίας]) mentioned in the next sentence.

τῆς ἄνω, ὁ δὲ πταρμὸς τῆς κεφαλῆς. διὰ τὸ ἱερώτατον οὖν εἶναι τὸν τόπον καὶ τὸ πνεῦμα τὸ ἐντεῦθεν ὡς ἱερὸν προσκυνοῦσιν.

This explains why sneezing is considered sacred and belching is not;  $^{36}$  and looking back at [Pr.] XXXIII 7, this could also be used against coughing, which comes from the lungs (which are located in the trunk). But the author does not indicate why the head is sacred, which is supposed to be the reason why people are said to revere sneezing. I assume it is for the same reason that in [Pr.] XXXIII 7 (perhaps by the same author) the head is called the most divine part: it is considered the seat of reason.

The second follow-up question, with explanation, is a bit more sophisticated than what we have seen so far:

Or is it that all the breaths signify that the regions mentioned are for the most part in a better condition? For without passing [anything] <sup>37</sup>, the breath in escaping brings relief, so that sneezing too [signifies] that the region around the head is healthy and able to produce concoction. For when the heat in the head masters the moisture, then the breath becomes a sneeze.

ἢ ὅτι ἄπαντα τὰ πνεύματα σημαίνει τοὺς εἰρημένους τόπους βέλτιον ἔχειν ὡς ἐπὶ τὸ πολύ; μὴ διαχωρούντων γάρ, κουφίζει τὸ πνεῦμα διεξιόν, ὅστε καὶ ὁ πταρμὸς τὸν περὶ τὴν κεφαλὴν τόπον, ὅτι ὑγιαίνει καὶ δύναται πέττειν. ὅταν γὰρ κρατήσῃ ἡ ἐν τῇ κεφαλῇ θερμότης τὴν ὑγρότητα, τὸ πνεῦμα τότε γίνεται πταρμός.

The author may be making use of Hippocratic conceptions of the mechanics of sneezing  $^{38}$ . But what is important for our purposes is that the author is making the case that all three 'escapes of breath' are healthy  $^{39}$ . So the answer to the opening question cannot be that sneezing is healthy while the other two are not (as in [Pr.] XXXIII 7, where coughing and a runny nose were distinguished from sneezing by being

<sup>&</sup>lt;sup>36</sup> Louis 1994, 111 n. 28 comments: «L'emploi de προσκυνοῦσιν est apparemment ironique, comme plus bas à 962b6». I doubt that the use of προσκυνοῦσιν in 962b 6 (the last line of [*Pr.*] XXXIII 9) is ironic.

<sup>&</sup>lt;sup>37</sup> E.g. excrement or nasal mucus.

<sup>&</sup>lt;sup>38</sup> Cf. e.g. *Aph.* VII 51: «Sneezing comes from the head when the brain is overheated or when the cavity in the head is overly-moistened. So, the air inside overflows, and it makes a noise because its escape is through a narrow passage» (πταρμὸς γίνεται ἐκ τῆς κεφαλῆς, διαθερμαινομένου τοῦ ἐγκεφάλου, ἢ διυγραινομένου τοῦ ἐν τῆ κεφαλῆ κενεοῦ· ὑπερχέεται οὖν ὁ ἀὴρ ὁ ἐνεὼν, ψοφέει δὲ, ὅτι διὰ στενοῦ ἡ διέξοδος αὐτοῦ ἐστιν). Cf. [*Pr.*] X 18 and 54 (and cf. n. 12 above).

 $<sup>^{39}</sup>$  Epid. II 3, 1 states that increases or decreases in coughing, sneezing, belching, and flatulence (inter alia) are signs to look for in certain kinds of afflictions: ἐφ' οἶσί τε καὶ ὁκοῖα τὰ σημεῖα καὶ πλείω ἢ μείω γινόμενα, χάσμη, βὴξ, πταρμὸς, σκορδίνημα, ἔρευξις, φῦσα· πάντα τὰ τοιαῦτα.

unhealthy). Sneezing alone, however, is a sign (and cause) of health *in the head*, which according to the author is most vital.

To support the claim that sneezing signifies health, [Pr.] XXXIII 9 continues:

And this is why they test those who are dying with what induces sneezing, so that if they cannot be affected by this, they are past saving.

διὸ καὶ τοὺς ἐκθνήσκοντας κρίνουσι πταρμικῷ, ὡς ἐὰν μὴ τούτῷ δύνωνται πάσχειν, ἀσώτους ὄντας.  $^{40}$ 

#### The author concludes:

So, as a sign of health in the best and most sacred region, they revere [sneezing] as sacred and make it a good omen.

ώστε ώς σημεῖον ὑγείας τοῦ ἀρίστου καὶ ἱερωτάτου τόπου προσκυνοῦσιν ὡς ἱερόν, καὶ φήμην ἀγαθὴν ποιοῦνται.

This conclusion has a Prodicean ring to it. Sextus Empiricus for instance (to quote just one relevant fragment) reports (*Math.* IX 50-54 = Prodicus fr. 75 Mayhew):

Prodicus said that what benefited life had been supposed to be a god, thus sun and moon and river and lakes and pastures and crops and everything of this sort.

Πρόδικος δὲ τὸ ὡφελοῦν τὸν βίον ὑπειλῆφθαι θεόν, ὡς ἥλιον καὶ σελήνην καὶ ποταμοὺς καὶ λίμνας καὶ λειμῶνας καὶ καρποὺς καὶ πᾶν τὸ τοιουτῶδες.  $^{41}$ 

That is to say, our *Problemata* author does not take sacred sneezing seriously – in the sense of regarding it as possibly true – but neither does he dismiss it contemptuously. Rather, he wants to explain a widespread belief that is in fact false. It is a sign of health issuing from the most authoritative part of the body, and that is why people have come to revere it <sup>42</sup>.

But perhaps we can (also) find in this conclusion a more Peripatetic explanation. Toward the end of *Metaphysics*  $\Lambda$  8, Aristotle writes that mythic or religious stories may contain a grain of truth or have their source in something true:

<sup>&</sup>lt;sup>40</sup> *Epid.* VII 1, 112 describes a patient who was suffering from head pain and fever and was of unsound mind in a phrenetic way (παρέκρουσε τρόπον φρενιτικόν); and, although something was used to induce sneezing (πταρμικά), he died.

<sup>&</sup>lt;sup>41</sup> Cf. further frs. 70-77 for Prodicus' atheism (or agnosticism) and his conception of the origin of belief in the gods.

<sup>42</sup> Cf. Meeusen 2020, 68.

From the oldest and most ancient times it has been handed down in the form of a myth (έν μύθου σχήματι), left to posterity, that these [i.e., the celestial objects] are gods and that the divine embraces the whole of nature. The rest was added later in mythical form (μυθικῶς) with a view to the persuasion of the many and with a view to its legal and beneficial use (πρὸς τὴν πειθὼ τῶν πολλῶν καὶ πρὸς τὴν εἰς τοὺς νόμους καὶ τὸ συμφέρον χρῆσιν); for they say these [gods] are anthropomorphic or like some of the other animals [...]. If one were to separate the first [point] and take it alone – that they believed the first beings to be gods (ὅτι θεοὺς ῷοντο τὰς πρώτας οὐσίας εἶναι) – one would think that they spoke divinely, etc. (1074a 38 - b 14)

So to return to *Hist. an.* I 11, perhaps the reason Aristotle did not dismiss the common view that sneezing was considered prophetic and sacred, was that this view, though false, might have been based in, or had its origin in, some fact of reality – for instance, that sneezing was a sign of good health <sup>43</sup>. And this is what the author of [*Pr.*] XXXIII 7 and 9 set out to explore – though not necessarily with the same view as Aristotle's concerning the head as the seat of reason <sup>44</sup>.

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<sup>&</sup>lt;sup>43</sup> For an attempt to explain why Aristotle seems to take traditional Olympian religion seriously, though it obviously contradicts his metaphysical commitments, cf. Segev 2017.

<sup>&</sup>lt;sup>44</sup> I would like to thank the journal's referees for comments that improved this essay.

#### **APPENDIX**

### Arist. [Pr.] XXXIII 9 ≈ Arist./Alex. [Sup. Pr.] II 50

Διὰ τί τῶν μὲν ἄλλων πνευμάτων αἱ ἔξοδοι, οἶον φύ-	962a32
σης καὶ ἐρυγμοῦ, οὐχ ἱεραί, ἡ δὲ τοῦ πταρμοῦ ἱερά; πότερον	
ότι τριῶν τόπων ὄντων, κεφαλῆς καὶ θώρακος καὶ τῆς κάτω	
κοιλίας, ή κεφαλή θειότατον; ἔστι δὲ φῦσα μὲν ἀπὸ τῆς	35
κάτω κοιλίας πνεῦμα, ἐρυγμὸς δὲ τῆς ἄνω, ὁ δὲ πταρμὸς	
τῆς κεφαλῆς. διὰ τὸ ἱερώτατον οὖν εἶναι τὸν τόπον καὶ τὸ	
πνεῦμα τὸ ἐντεῦθεν ὡς ἱερὸν προσκυνοῦσιν. ἢ ὅτι ἄπαντα τὰ	
πνεύματα σημαίνει τοὺς εἰρημένους τόπους βέλτιον ἔχειν ὡς	
ἐπὶ τὸ πολὺ; μὴ διαχωρούντων γάρ, κουφίζει τὸ πνεῦμα διε-	40
ξιόν, ὥστε καὶ ὁ πταρμὸς τὸν περὶ τὴν κεφαλὴν τόπον, ὅτι	962b1
ύγιαίνει καὶ δύναται πέττειν; ὅταν γὰρ κρατήση ἡ ἐν τῆ	
κεφαλῆ θερμότης τὴν ὑγρότητα, τὸ πνεῦμα τότε γίνεται	
πταρμός. διὸ καὶ τοὺς ἐκθνήσκοντας κρίνουσι πταρμικῷ, ὡς	
ἐὰν μὴ τούτῷ δύνωνται πάσχειν, ἀσώτους ὄντας. ὥστε ὡς	5
σημεῖον ὑγείας τοῦ ἀρίστου καὶ ἱερωτάτου τόπου προσκυνοῦσιν	
ώς ἱερόν, καὶ φήμην ἀγαθὴν ποιοῦνται.	

 $[Pr.] = \text{Arist.} [Pr.] \times \times \times \times \times Y = \text{Arist.} [Sup. Pr.] = \text{Arist.} [Sup. Pr.] \times Y = \text{Arist.} [$ 

#### BIBLIOGRAPHY

Balme 1987

D.M. Balme, The Place of Biology in Aristotle's Philosophy, in A. Gotthelf - J.G. Lennox (eds.), *Philosophical Issues in Aristotle's Biology*, Cambridge 1987, 9-20.

Balme 2002

D.M. Balme (ed.), Aristotle, *Historia Animalium*, I, *Books I-X: Text*, prepared for publication by A. Gotthelf, Cambridge 2002.

Balme c.d.s.

D.M. Balme (ed.), Aristotle, Historia Animalium, II, Commentary, Cambridge c.d.s.

Bodnár 2015

I. Bodnár, The *Problemata physica*: An Introduction, in Mayhew 2015, 1-9.

#### Centrone 2011

B. Centrone (a cura di), Studi sui «Problemata physica» aristotelici, Pisa 2011.

#### Flashar 1962

H. Flashar (hrsg.), Aristoteles, Problemata physica, Berlin 1962.

#### Gotthelf 2012

A. Gotthelf, Teleology, First Principles, and Scientific Method in Aristotle's Biology, Oxford 2012.

#### Jacob 1981

C. Jacob, De l'art de compiler à la fabrication du merveilleux: sur la paradoxographie grecque, *Lalies* 2 (1981), 121-140.

#### Kapetanaki - Sharples 2006

S. Kapetanaki - R. Sharples (eds.), Pseudo-Aristoteles (Pseudo-Alexander), *Supplementa Problematorum*, Berlin 2006.

#### Lennox 2001a

J.G. Lennox (ed.), Aristotle, On the Parts of Animals I-IV, Translated with an Introduction and Commentary, Oxford 2001.

#### Lennox 2001b

J.G. Lennox, Aristotle's Philosophy of Biology: Studies in the Origins of Life Science, Cambridge 2001.

#### Lennox 2021

J.G. Lennox, Aristotle's Biology, in E. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*, Stanford 2021.

#### Leunissen 2021

M. Leunissen, Empiricism and Hearsay in Aristotle's Zoological Collection of Facts, in S. Connell (ed.), *The Cambridge Companion to Aristotle's Biology*, Cambridge 2021, 64-82.

#### Li Causi 2003

P. Li Causi, Sulle tracce del manticora. La zoologia dei confini del mondo in Grecia e a Roma, Palermo 2003.

#### Llovd 1983

G.É.R. Lloyd, Science, Folklore and Ideology: Studies in the Life Sciences in Ancient Greece, Cambridge 1983.

#### Louis 1994

P. Louis (ed.), Aristote, Problèmes, III, Sections XXVIII-XXXVIII, Paris 1994.

#### Marenghi 1999<sup>2</sup>

G. Marenghi (a cura di), Aristotele, *Problemi di medicina*, Milano 1999<sup>2</sup>.

#### Mavhew 2011

R. Mayhew (ed.), Aristotle, *Problems*, II, *Books 20-38* (with D. Mirhady, ed., [Arist.] *Rhet. to Alex.*), Cambridge, MA 2011.

#### Mavhew 2015

R. Mayhew (ed.), *The Aristotelian «Problemata physica»: Philosophical and Scientific Investigations*, Leiden 2015.

Mavhew c.d.s.

R. Mayhew, Historia animalium 8(9), 5, De mirabilibus auscultationibus 5 & 75, and Two of Theophrastus' Lost Works on Animals, in S. Connell (ed.), Philosophical Reflections on Aristotle's Historia Animalium, Leiden c.d.s.

Meeusen 2020

M. Meeusen, Aristotle's Second Breath: Pneumatic Processes in the Natural Problems (On Sexual Intercourse), in S. Coughlin - D. Leith - O. Lewis (eds.), The Concept of Pneuma after Aristotle, Berlin 2020, 63-91.

Pease 1911

A.S. Pease, The Omen of Sneezing, *CP* 6.4 (1911), 429-443.

Reeve 2019

C.D.C. Reeve (ed.), Aristotle, Generation of Animals & History of Animals I, Parts of Animals I, Indianapolis 2019.

Richards 1915

H. Richards (ed.), Aristotelica, London 1915.

Salmieri 2014

G. Salmieri, Aristotelian Epistêmê and the Relation between Knowledge and Understanding, Metascience 23 (2014), 1-35.

Segev 2017

M. Segev, Aristotle on Religion, Cambridge 2017.

Steiner 2010

D. Steiner (ed.), Homer, Odyssey Books XVII-XVIII, Cambridge 2010.

Zatta 2022

C. Zatta, Aristotle and the Animals: The Logos of Life Itself, New York 2022.

Zierlein 2013

S. Zierlein (hrsg.), Aristoteles, Historia Animalium, Buch I und II. Übersetzt, Eingeleitet und kommentiert, Berlin 2013.

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