CHAPTER 3

Theophrastus on Odorous Exhalations and the Nature of Perception

Robert Roreitner

Perception was an important theme for Theophrastus. He is the author of *De sensibus*, which offers a detailed critical analysis of the views on the nature of perception ascribed to Aristotle's predecessors. The sixth book of *De causis plantarum* is dedicated to explaining phenomena connected to flavours and odours, especially the naturally produced ones. In *De odoribus* we find a similar investigation focusing primarily on artificially produced odours.[1] Theophrastus is also credited with other thematically related writings that are now lost, such as *On Vision* in four books.[2] And he wrote a book covering the topics of (at least) Aristotle's *De anima* II 5–III 5 that is referred to by our sources as either Theophrastus' *De anima* II or his *Physics* V.

What can we learn from these sources about Theophrastus' views on perception? How far did he follow Aristotle? Did he take positions on some of the notoriously difficult questions in Aristotle's account? Did he introduce some important innovations? Relatively little attention has been paid to these questions, apparently because our resources for answering them are far from optimal. As on most other issues, we have evidence suggesting that Theophrastus took over the central tenets of Aristotle's theory of perception. But, more interestingly, we also have evidence (in *CP* VI and *Od.*) suggesting that he went beyond, and seemingly against, what Aristotle said—especially with regard to how odours are mediated and perceived. He ascribed an important role to what he calls "exhalations" and what he seems to conceive of as streams of tiny particles continuously emitted by odorous objects and transported by the air to the perceivers' olfactory organs. There has been some discussion of exactly how radical Theophrastus' innovation was in this respect, how

1 Thompson (1941), 16–20, argues that some version of *Od.* (treating mainly of odours produced by human art) was originally (a part of) the lost eighth book of *CP* (following book VI, which is about naturally produced flavours and odours and, presumably, book VII on flavours produced by human art). Cf. the programme laid down at *CP* VI 3.3. Cf. Wöhrle (1988) and Reger (2005).

2 DL V 49.

© ROBERT ROREITNER, 2025 | DOI:10.1163/9789004739314_005
This is an open access chapter distributed under the terms of the CC BY-NC-ND 4.0 license.

far he shifted from Aristotle and whether he ended up being consistent with himself or not.[3]

The question of consistency becomes more urgent as Theophrastus moves closer to Aristotle's own discussion of smell—and perception in general—in *DA* II 5–12 and *De sensu*. This is the case with Theophrastus' *De sensibus* (containing, among other things, an extensive polemic against effluence accounts of perception)[4] and especially with his *De anima* II. The latter should be our key piece of evidence, but unfortunately our only source of information about it is indirect and not very reliable. Unlike in the case of passages concerning *nous*, where we have at least two sources that can be checked against each other (yielding a reasonable amount of certainty that we possess several verbatim quotes from Theophrastus), for perception (and *phantasia*) we are limited to the exclusive testimony of Priscian of Lydia's *Metaphrasis in Theophrastum* (6th century CE). The author openly acknowledges his allegiance to the Iamblichean Neoplatonic doctrine of the soul and perception as the lens through which he tries to extract and absorb what Theophrastus "adds beyond that which Aristotle has handed down" and what Theophrastus "offers by raising difficulties".[5] Priscian provides us with 22 pages of quotes, paraphrases and, especially, his own reflections and solutions concerning perception, all integrated within a single flow of thought, where distinguishing the individual elements with any certainty becomes very difficult and often impossible.[6] Combined with the terse and aporetic nature of Theophrastus' discussion (that, we are told, was "compressed and concise in style" but contained "many difficulties (ἀπορίαι), many analyses, and many solutions"),[7] the task of establishing something firm about Theophrastus' views on perception may seem hopeless. Still, a comparison with the later section of *Metaphrasis* (25–37) dealing with *nous* shows that Priscian *is* sometimes quoting Theophrastus and that he is doing so quite reli-

3 See Sharples (1985); Sedley (1985); Eigler and Wöhrle (1993), 16–18; Schorlemmer (2022), 71–82, and (Forthcoming).

4 For an analysis of *De sensibus* as "an integral part of the same Peripatetic dialectic as the *DA*", see Johansen (2019) (quoted from p. 228). Cf. also Mansfeld (1996).

5 Priscian, *Metaphr*. 7.17–23. For Priscian's account, see Steel (1997), 105–137 (with Steel 1978, 142–154, for Priscian's strategy in general), and Kalderon (2017). Cf. also Perkams (2005) and De Haas (2010).

6 Huby (1999) (commenting on Fortenbaugh et al. 1992, 12–38 = 273–296 FHS&G) is the most detailed existing assessment of what may, anyhow, come from Theophrastus (cf. Huby 1997 for *Metaphrasis* 1–22 as a whole). The question is helpfully revisited by Caston (2019) with important new insights and what I find to be a more solid selection of relevant passages.

7 Themistius, *In DA* 108.8–10.

ably.[8] Hence, one cannot simply dismiss *Metaphrasis* 1–22 as unreliable and stick to other texts.[9] If we are interested in Theophrastus' views on the very nature of perception (rather than particular phenomena of smell), it is likely that Priscian's *Metaphrasis* contains key pieces of evidence—the task is to tell them apart from Priscian's own philosophical outbursts with a reasonable degree of certainty and to reconstruct at least some general insights from what must have been quite an elusive text, even in its full form. That is, admittedly, a very difficult task, and so it is hardly surprising that only two attempts of this kind have been undertaken—and that they arrived at diametrically opposed conclusions.[10]

This paper reassesses the existing evidence and offers a somewhat different overall reconstruction of Theophrastus' views on perception. My diagnosis is that with both main *foci* of scholarly discussion, the existing approaches tend toward one extreme or the other, whereas Theophrastus' account occupies an interesting middle position. Theophrastus' account of odorous exhalations has either been treated as articulating an entirely different theory of smell than that held by Aristotle or been ignored, as if Theophrastus had nothing to add to Aristotle's explanation of how we smell things. The only other option seemed to be that Theophrastus was inconsistent and followed Aristotle in some contexts, while radically diverging from him in others. In section 1, I argue that Theophrastus' account of odorous exhalations does constitute an important innovation with respect to Aristotle, but that it was intended to be integrated within Aristotle's general account of perception—and of smell in particular. What Theophrastus does is to introduce a novel, complementary causal factor which enhances the explanatory force of the Aristotelian account, allowing it to explain phenomena that could not be explained without this additional factor. In the rest of the paper, I turn to our evidence for Theophrastus' views on the

8 Compare especially Priscian, *Metaphr.* 27.8–14 with Themistius, *In DA* 108.1–6; but also Priscian, *Metaphr.* 25.28–29 with Themistius, *In DA* 107.34–35; Priscian, *Metaphr.* 26.1–2 with Themistius, *In DA* 108.6–7; and Priscian, *Metaphr.* 28.20–22 with Themistius, *In DA* 108.15–17.

9 For such a tendency, see Schorlemmer (2022), 71–79 subsuming everything we find in *Metaphrasis* under "Wahrnehmung nach Priskian" and contrasting it with "Wahrnehmung in Theophrasts eigenen Worten", which is reconstructed solely on the basis of *CP* VI and *Od.* One danger in this approach is that it ends up ascribing the status of a general theory to something that was intended as a much more specific enquiry operating within a very different general framework. More on this below.

10 See Laks (2002) with the revised English version in Laks (2019) (arguing for a spiritualist reading of Theophrastus) and Caston (2019) (arguing for a materialist reading of Theophrastus along the lines of Caston 2005; cf. Caston 2020). In what follows I refer to Laks (2019)—rather than Laks (2002)—as the latest version of Laks' interpretation.

nature of mediation and perception. In section 2, I discuss difficulties he seems to have raised against competing accounts of mediation. In sections 3 and 4, I provide evidence against the idea that Theophrastus endorsed a spiritualist account of mediation and perception, as well as offering a reconstruction of his views on mediation as the transference of a thoroughly physical and perceiver-independent affection. At the same time, in section 4, I question the existing materialist interpretation of our fragmentary evidence for Theophrastus' views on the nature of perception, offering an alternative that is at least equally consistent with the sources and that better agrees with the account of mediation defended in section 3.[11]

1 Odorous Exhalations and the Aristotelian Account of Smell

The idea that in his explanations of olfactory phenomena in *CP* VI and *Od.* Theophrastus might have embraced an effluence theory of smell sounds surprising, not only because such a theory sharply conflicts with Aristotle's views, but also because Theophrastus himself launches an extended attack on effluence theories of perception in *Sens.* 12–22. It has been suggested that in his argument against effluences in *Sens.* 20 Theophrastus in fact *limits* his target to hearing and sight, to the exclusion of smell.[12] At 505.6–10, he argues that if (1) effluence causes wasting away (εἰ ἡ φθίσις διὰ τὴν ἀπορροήν) and if (2) odours come about by means of effluence (συμβαίνει δὲ καὶ τὰς ὀσμὰς ἀπορροῇ γίνεσθαι), then those objects with the strongest odours would perish most quickly—which according to Theophrastus conflicts with phenomena: in fact, the most odorous things tend to last longest. David Sedley translates the first premise as "if wasting away is due to effluence" and interprets it as articulating a universal claim about wasting away being due to effluences. This claim is easy to challenge—why should there not be other kinds of wasting away, due, say, to excessive excretion or lack of nourishment?—[13] which allows for the possibility that Theophrastus in fact wanted to retain as true the second premise endorsing an effluence account of smell.

11 The questions bearing on the nature of mediation and perception naturally draw one's attention back to much-discussed passages in Aristotle. However, in this paper, I refrain from discussing Aristotle's views in their own terms and limit myself to evaluating the fragmentary Theophrastean evidence. For the former, I refer the reader to Roreitner (2025).

12 Sedley (1985).

13 Cf. *Sens.* 20, 505.5–6.

It is doubtful, though, that the first premise is intended as a universal claim about wasting away. The implication from wasting away to effluences is irrelevant to the argument. What is needed is the opposite implication, namely that if there are effluences from object *x*, then *x* is being wasted away.[14] While there are likely to be cases of wasting away that do not involve effluences, there are no effluences that would not involve at least some amount of wasting away of the underlying material. This is a sound common-sensical premise that would be hard to deny and that is exactly what one needs to ground the conclusion of Theophrastus' argument—a conclusion that conflicts with the phenomena. If this analysis is correct, then in *Sens.* 20 Theophrastus must mean to deny the second premise (i.e. that smelling comes about by means of effluences) as his proper target. Hence, this passage of *De sensibus* increases, rather than reduces, the tension with Theophrastus' apparent adoption of effluence account of smell in other treatises.[15]

This tension comes primarily from *De causis plantarum* VI and *De odoribus*, where Theophrastus repeatedly speaks of exhalations (usually ἀποπνοαί) coming out of fragrant objects, which conspicuously resemble Empedoclean effluences (ἀπορροαί). Some scholars have concluded that the tension between these passages and Theophrastus' other works is hard, if not impossible, to resolve.[16] Others have gone even further, seeing this as evidence that Theophrastus abandoned Aristotle's account of how odours are mediated and perceived.[17] The truth is, though, that in none of the relevant passages from *CP* VI is the precise role of the exhalations and their contribution to mediation of odours and to smelling itself entirely clear, and none shows that exhalations are intended as an alternative to Aristotle's account of the perceptual object's acting on the medium and, through it, on the sense organ. The most suggestive text

14 That is clearly how the premise is read by Stratton (1917) ("if effluence involves a loss of substance"). The translation by Ierodiakonou and Bydén (Forthcoming) ("if decay is caused by the effluence") is more suggestive of Sedley's understanding.

15 At *Sens.* 90, 526.25–26, Theophrastus treats the idea that odour is a kind of effluence as something more or less agreed upon (σχεδὸν ὁμολογεῖται). If this means, as it seems, that smelling always and essentially involves effluences and that this is how smelling is to be explained, then Theophrastus is obviously excluding Aristotle from the agreement, and so there is no reason to assume that he is silently including himself. Perhaps the idea can also be given a more relaxed interpretation, according to which it claims only that some cases of smelling somehow involve effluences (cf. Eigler and Wöhrle 1993, 16). Even Aristotle and Theophrastus could agree on this point.

16 See Sharples (1985), 204: "How far Theophrastus abandons or compromises an Aristotelian account of the transmission of odours is a question that seems difficult to resolve". Cf., e.g., Stratton (1917), 39, or Gottschalk (1967), 25.

17 Besides Sedley (1985), see now Schorlemmer (2022), 76–79, and (Forthcoming).

is *De odoribus* 45, where exhalations are not only unmistakably described in terms of tiny material particles coming out of flowers; the author is, moreover, offering an explanatory account in terms of fine and light particles of rose perfume penetrating and filling up "passages" (πόροι) associated with the organ of smell.[18] That sounds very much like an effluence account of smell—but only at first sight.

In fact, what is explained by the case of fine and light particles filling up the passages is *not* smelling, but, on the contrary, a certain incapacity to smell—an inability to discriminate odours. Theophrastus relates the story of perfumers who, when the customer is unwilling to buy their rose perfume, scent him with it, "so that he is unable to smell the scents of other perfumes" (πρὸς τὸ μὴ αἰσθάνεσθαι τὰ παρὰ τῶν ἄλλων, *Od.* 45.7). Moreover, he provides an explanation for this phenomenon: due to its fineness and lightness, the rose perfume "penetrates and fills up the passages, so that the sense, being entirely taken up and filled with it becomes incapable of discriminating" (διικνεῖται καὶ συμπληροῖ τοὺς πόρους, ὥσθ' ἡ αἴσθησις κατειλημμένη καὶ πλήρης οὖσα κρίνειν ἀδυνατεῖ, *Od.* 45.9–11). In his translation, Arthur Hort weakens the last claim by adding "unable to judge *the others*", as if the sense of smell in this condition were still able to "judge" the odour of the rose perfume—and that seems to be how the passage is understood by those who see in it an effluence account of smell.[19] But there is no justification for this addition.[20] While the cunning perfumer may believe that his trick condemns the poor customer to continuously smell his rose perfume, Theophrastus analyses what happens in terms of the customer being rendered unable to genuinely smell anything whatsoever: the customer's sense of smell becomes unable to κρίνειν—period.[21] In the context of percep-

18 Schorlemmer (Forthcoming) argues that πόροι are not passages, but rather "tiny caves or holes" and that "Theophrastus would have explained the transition from one perceived smell to another by extrusion of the first particles by the next". But, to my knowledge, there is no good evidence for this understanding of πόροι in relation to smell, while there is at least one solid piece of evidence for the idea of πόροι as passages, namely *CP* VI 9.3.6–9, which speaks of an ἀτμός sent from the mouth "through the passages" (διὰ τῶν πόρων) to the sense of smell (εἰς τὴν ὄσφρησιν). Theophrastus' talk of olfactory passages finds support in Aristotle's answer to the question of why humans need inhalation in order to smell at *DA* II 9, 421b32–422a3. The reason is that inhalation uncovers a covering "because the veins and passages (πόροι) are dilating" (cf. *Sens.* 5, 444b20–28, and Priscian, *Metaphr.* 16.17–18).

19 See, e.g., Schorlemmer (2022), 77: "Diese Geruchspartikel hätten unterschiedliche Formen, womit er [d.h. Theophrastus] einerseits erklärt, warum ein Rosenduft, wenn er mit einem anderen Geruch zusammen auftrete, anstelle des anderen wahrgenommen werde."

20 Cf. Eigler and Wöhrle (1993), who duly translate it "so daß die Sinnesempfindung … jegliches Unterscheidungsvermögen verliert" or Baltussen (2015a), 44.

21 The case under consideration represents one of three situations κωλύοντες τὴν κρίσιν (*Od.* 46.2).

tion, κρίνειν means primarily to discriminate, to tell things apart,[22] and one can hardly discriminate *x*—that is, tell *x* apart from other qualities in a given range—when one is unable to discriminate anything else in that range. The fact that Theophrastus invokes olfactory passages and their being filled with the exhalations from rose perfume is perfectly in line with this Aristotelian analysis of perception as discrimination: what the exhalations explain is not a genuine case of smelling (i.e. olfactory discrimination), but rather a case of disabling the sense of smell.[23] This situation thus resembles cases in which a sense is disabled by an extreme perceptual experience as analysed by Aristotle, for instance, in *DA* II 10: having tasted something very bitter or being sick, everything appears (φαίνεται) bitter to the person, so that she is unable to perceive anything.[24] The fact that exhalations of rose perfume can have a similar effect on the sense of smell does not imply that smelling must or indeed can be realised by means of exhalations fitting into passages in the perceiver's organs, any more than standard cases of perception involve extreme affections on Aristotle's account.[25]

Similar conclusions can be drawn about Theophrastus' explanation of the fact that some flowers, such as violets, smell better at a greater distance in *CP* VI 17.1: this is because these plants also emit other exhalations coming from

22 Cf. Ebert (1983).

23 The proposed interpretation of *Od.* 45–46 is, I believe, perfectly compatible with what follows in *Od.* 47. Here Theophrastus explains why, when it is added to a mixed perfume, the rose scent initially crowds out the other scents, but soon vanishes. The *explanans* here is the power of the rose scent to quickly disperse, in the form of exhalations, throughout the surrounding air. This, I take it, allows it to act on the olfactory organs first, before anything else can do so. Although Theophrastus does not repeat here the claim that, when filling the passages, the rose scent makes the sense of smell incapable of discrimination, everything he says is perfectly compatible with such an account: presumably, one genuinely smells the rose perfume only for a certain period of time, namely until one's olfactory passages are filled with it, which prevents one from smelling anything, including the rose perfume itself.

24 *DA* II 10, 422b5–10 (cf. II 12, 424a14–15, 28–32, II 2, 426a30–b8, III 4, 429a31–b3; *Insomn.* 2, 459b13–18). See also Theophrastus, *Sens.* 19, 504.30–505.1: "when an echo is present in the ears, a flavour in the sense of taste or an odour in the sense of smell, they all become blunted, and the fuller they are of what is like [their objects], the more blunted they are."

25 With the support of the Alchemies of Scent laboratory, we ran a little experiment with Sean Coughlin in Prague, with the goal of recreating the experience of the deceived customer. One suggestive outcome was that it is not enough to be exposed to the rose perfume once. If it is to "destroy" other odours, a bit of it needs to be applied to the customer's body, ideally near the nose (that is apparently the point of "scenting" the customer). When done like this, the trick seems to be quite effective. While the text of *Od.* 45–46 may read as if the olfactory passages remain filled up after being briefly exposed to the rose perfume, it seems more likely to me now that what Theophrastus has in mind is a situation where the customer is exposed to it *continually*, so that the passages are continually being filled up.

other parts than the flower, which apparently block the passages and make it impossible for the exhalations from the flower to come through, or rather act through properly.[26] This is only possible from a greater distance, because the disturbing exhalations cannot travel far due to their earthly nature—they fall down. Due to its inability to act through the obstacles or to overpower other odours acting on the olfactory organ, the odour of violets is described as being "weak". Nothing here suggests that exhalations have anything to do with explaining the smelling of violet itself, or indeed that Theophrastus is interested in this general phenomenon. Rather he seems to be focusing on a much more specific problem.[27]

An additional reason to think twice before assuming that Theophrastus' talk of odorous exhalations was intended as an alternative to Aristotle's account is that Theophrastus' criticism of effluence theories is not limited to *De sensibus*. We also find a similar criticism in *De causis plantarum* VI. In VI 5.4, Theophrastus discusses why non-human animals, although they often have a sharper sense of smell, do not perceive certain odours—namely those that, in *Sens*. 5, Aristotle calls pleasurable in virtue of themselves (cf. *CP* VI 5.2; *Od*. 4). Theophrastus mentions the possibility of explaining this difference in terms of a difference in passages (πόροι)—say, by claiming that large animals have large passages and small animals small ones, which determines what odours they can and cannot perceive. In his response, Theophrastus not only rejects this simpleminded contrast between the structure of olfactory organs in large and small animals, but claims more generally that "perception does take place in passages; rather, one would better account for the affection and the lack of it (in which pleasure and pain consist) with respect to a disposition and a mixture [on the side of the perceiver]".[28] This strongly suggests that whatever the

26 Cf. *Od*. 12; *Probl*. XII 2, 906a30–35, XII 4, 906b36–907a4, XII 9, 907a24–28. Hieronymus of Rhodes (Fr. 53 W) seems to incorporate this observation within a general effluence account of smell and perception—but precisely there he appears to go beyond Theophrastus.

27 In *CP* VI 17.2, Theophrastus contrasts the "strong" odours which, on the contrary, are unpleasant when not tempered in some way—usually by mixing the odorous stuff with something else (Theophrastus' favourite example is the myrrh which is soaked in hydromel or sweet wine, so that it smells pleasant and sweet upon burning—cf. *Od*. 12–13). The idea of explaining smell in terms of exhalations is a far cry from Theophrastus' concept of "mixed odours" here.

28 Οὐδ' ἐν τοῖς πόροις ἡ αἴσθησις ἀλλὰ μᾶλλον πρὸς τὴν διάθεσιν καὶ τὴν κρᾶσιν τό τε πάθος ἀποδοίη καὶ τὴν ἀπάθειαν ἐν οἷς τὸ ἡδὺ καὶ τὸ λυπηρόν (*CP* VI 5.4.9–12). This is the very first allusion to odorous effluences and passages within *CP* VI. For both the objection and the alternative, see also Theophrastus, *Sens*. 34–35. Cf. Aristotle, *Sens*. 5, 444a33–b2.

role of the passages that are occasionally invoked in Theophrastus' discussion of smell may be, it is *not* to explain the basic fact that animals perceive odours.

That said, Theophrastus' talk of odorous exhalations and passages seems to mark a genuine advance with respect to Aristotle, insofar as it allows Theophrastus to address questions and explain phenomena that Aristotle never even formulates in the extant writings and that would be rather difficult, if not impossible, to address solely on the basis of Aristotle's teachings that have come down to us. One striking example is the question of why the odours of some things are only smelled while being eaten, which is addressed in *CP* VI 9.3.[29] Here an exhalation (ἀτμός) and its passing through passages (πόροι) seems crucial for the odour to be registered. Still, it is neither claimed nor implied that smelling itself is to be explained in terms of exhalations and passages or that every smelling involves exhalations.[30] In fact, the latter (and so *a fortiori* the former) seems to be denied by Theophrastus' explanation in *CP* VI 14.11 of why the rose's fragrance is retained when the rose is being dried *but does not carry far*—as it does when the rose is fresh. This is, Theophrastus claims, because drying roses become hard and "emit no exhalation" (οὐ δίδωσιν ἀναπνοήν, *CP* VI 14.11.7).[31] Obviously emitting an exhalation is not even a necessary condition for being smelled (otherwise dry roses that do not emit an exhalation could not be smelled—but they can, as is the case with many other fragrant dry plants), and so *a fortiori* it cannot figure in the general account of smell.[32]

---

29 Cf. *Od.* 12.

30 The πόροι here only seem to play the role of connecting the two senses located close to each other (cf. VI 9.1.4–5).

31 Indeed, throughout *CP* VI 14.9–11, exhalations are emitted by fresh flowers with sufficient humidity and only until they dry up. Theophrastus' point is to distinguish between those plants that, after exhalations have ceased because they are already dry, lose their fragrance (their fragrance is "lost by evaporation" (διαπνεῖται)) and those that do not—roses being an example of the latter class, together with melilots (cf. *Od.* 34). While this is relatively rare for flowers, there are many other types of plants like the one mentioned by Theophrastus. Indeed, many herbaceous plants (such as fenugreek) only become fragrant when dried (so their fragrance is emphatically *not* "lost by evaporation"). In many cases getting rid of exhalations, which is facilitated by ventilation, is the condition for becoming fragrant, see, e.g., *CP* VI 14.8.1–4, VI 16.4, VI 16.6. Cf. also *CP* VI 19.3 on the difference between water and oil: while water "evaporates" (διαπνεῖ) the odours, oil retains them.

32 That is not to deny that most flowers, according to Theophrastus, can only be smelled for as long as they are emitting exhalations (thanks to Richard Schorlemmer for stressing this). The point is that other things, and even some flowers, can be smelled without exhalations, and so even in other flowers exhalations cannot be a part of the account of how they are smelled (they can, at most, explain why flowers are smelled from afar, how the experience of their odour varies across distance or why they cease to be smelled after some time).

All this suggests the following conclusion: Theophrastus' use of exhalations in explaining various olfactory phenomena is intended as an innovation *within*—rather than *against*—the general theoretical framework set out by Aristotle in *DA* II 9 and *Sens.* 5. This is confirmed by the fact that at the outset of *CP* VI Theophrastus clearly recalls Aristotle's account of flavours and odours from *Sens.* 4–5:

> The nature of each kind [i.e. flavour and odour] has been distinguished elsewhere: both are somehow mixed according to a ratio, and while flavour is admixture of the dry and earthy in the wet or percolation of the wet through the dry by means of the hot (for it doesn't really matter [which description we choose]), odour is [some kind of presence] of the dry component of the flavour to the transparent (for that is the common nature of air and water). (Theophrastus, *CP* VI 1.1.4–10)[33]

This reads like a fair, albeit somewhat casual, summary of Aristotle's account in *Sens.* 4–5, especially 441b15–21 and 442b27–443a3.[34] When Theophrastus says that it does not matter whether we speak of percolation (as Aristotle does at *Sens.* 4, 441b17–19) or admixture, this seems to simply reflect the fact that Aristotle is elsewhere willing to speak of flavours as something *admixed* to the wet (see *DA* II 10, 422a13–14). The only difference Theophrastus cares to draw here between flavour and odour is that while the former is limited to the wet, the latter is present in both water and air. The mode in which odour is present in the transparent is not specified. From the context, it would seem to be some kind of mixture (as in Einarson's translation), which sounds somewhat surprising in comparison with Aristotle,[35] or a kind of percolation (διήθησις, as supplied by Amigues). However, Theophrastus says clearly that he is not interested, at the moment, in specifying whether we should understand flavour on the basis of an admixture or a percolation, and he does not give a name to how odours are present in the transparent at all; hence, even a neutral translation like Thompson's ("odour is produced by the dry component of the liquid flavour

33 Ἡ μὲν οὖν φύσις ποία τις ἑκατέρου τοῦ γένους ἐν ἄλλοις ἀφώρισται καὶ ὅτι μικτά πως ἄμφω κατὰ λόγον ἐστί. Χυμὸς μὲν ἡ τοῦ ξηροῦ καὶ γεώδους τῷ ὑγρῷ ἐναπόμιξις ἢ ἡ τοῦ ξηροῦ διὰ τοῦ ὑγροῦ διήθησις ὑπὸ θερμοῦ· διαφέρει δ' ἴσως οὐδέν. Ὀσμὴ δὲ τοῦ ἐν χυμῷ ξηροῦ ἐν τῷ διαφανεῖ· τοῦτο γὰρ κοινὸν ἀέρος καὶ ὕδατος.

34 Cf. 443b6–8, 445a13–14.

35 For the contrast between flavour as something mixed with the wet and odour as something merely acting on the medium, see Johansen (1997), 237–242, and (1996), or Johnstone (2012), 167–170.

in that which is transparent") can perhaps be justified.[36] The main point is that, for present purposes, Theophrastus is *not* interested in emphasising the difference between taste as a contact sense and smell as a distal sense—a difference that often remains unarticulated in Aristotle's own texts.[37] But not emphasising is not the same as undermining, and if Theophrastus wanted to do the latter, we would expect him to be explicit about it, especially since he seems to be doing nothing more here than recalling the shared Peripatetic background.[38]

If Theophrastus accepts this background, how do his innovative explanations in terms of exhalations fit in? It has been suggested that he abandons this framework later in *CP* VI, when he comes to plant fragrances,[39] but that is nowhere implied in the text.[40] Moreover, we have seen that, even later, Theophrastus is far from accepting exhalations as an essential or even necessary ingredient of smelling (he denies the claim that smelling should take place in passages, and he explicitly mentions dry flowers, and more generally dry plants, that do not emit exhalations and yet can be smelled). This suggests that he at least thinks of his explanatory accounts of involving exhalations as fitting into the broadly Aristotelian conception of flavours and odours recalled in *CP* VI 1.1.

It is not that hard to understand how this can be so. If odour is the effect exercised by the flavoured dry on air or water (cf. *Sens.* 5, 443a6–8, 445a13–14), then there are at least two options for explaining how the odour of a flower can reach me through the air so that I register it: either the flavoured dry stuff acts on the air *immediately where the flower is located* (as must happen in the case of dry roses and melilots), or the flower emits flavoured exhalations which are carried by the air to my vicinity—or perhaps even inside my olfactory system—while presumably acting on the air *all along the way*. This idea is supported by observable phenomena (the fragrances of flowers may be accompanied by a visible cloud of tiny particles) and more importantly by the explanatory power of the hypothesis: once adopted, it helps to explain numerous phenomena that would otherwise be hard to account for, including the fact that things that taste

36 Cf. *Sens.* 5, 443a7: ἡ ἐν ὑγρῷ τοῦ ἐγχύμου ξηροῦ φύσις ὀσμή.

37 Cf., e.g., *Sens.* 5, 443b12–14. This makes sense given that the difference between contact and distal senses is anyway relativised in *DA* II 7 and 11.

38 Cf. Thompson (1941), 70–71, who argues that the back-reference is to Aristotle's *De sensu* and *De anima*. Theophrastus speaks of "a kind of mixing" in the medium of smell also in *Physics* V (see Priscian, *Metaphr.* 14.10–12 quoted below in fn. 73), but here he makes it clear that he does not have genuine Aristotelian mixture in mind, but rather a specific kind of being affected (πάσχειν) by the odorous object. Presumably, he is speaking of "a kind of mixing" in place of Aristotle's "washing" and "cleansing".

39 See Schorlemmer (2022), 79.

40 Indeed, the framework seems to be reaffirmed at *CP* VI 14.7.6–9.

worse often smell better[41] or that things (supposedly) have a stronger odour in the morning and a weaker one at noon.[42] Theophrastus thus has very good reasons to hypothesise that exhalations play a role in how we do—or do not—perceive certain odours, especially the fragrances of flowers, without any need to reject or transform the general account of smell developed by Aristotle—something that Theophrastus shows no inclination to do.[43]

In undertaking this task, Theophrastus is likely to have felt encouraged by Aristotle's analysis of odours beneficial to human health in *Sens.* 5.[44] Some of Aristotle's formulations here sound as if he were already speaking of a kind of exhalation: some odours are carried up (ἀναφερόμεναι) to the brain on account of the lightness (κουφότης) of the heat in them (*Sens.* 5, 444a21–24).[45] In any case, Aristotle is absolutely clear that this process, which is directly connected to breathing, is not essential to smelling as such: smelling is conceived of as a unitary phenomenon across the animal kingdom, independently of whether a particular animal breathes or not and whether it lives on land or in the sea (cf. *Sens.* 5, 444b15–28, with *DA* II 7, 419a35–b3, and II 9, 421b13–26). As such, it must have a unitary explanation—as dictated by the principle of commensurate universality (*APo* I 4–5). This theoretical commitment is taken over by Theophrastus in the above-quoted passage from *CP* VI 1.1, where he follows Aristotle in identifying the medium of smell not exclusively with air, but rather with what is transparent—i.e. both air and water (cf. *Sens.* 5, 442b29–30). And Theophrastus retains this commitment consistently throughout his writings.[46]

41 See *CP* VI 16.8, where the answer is given in terms of exhalations: the unperfected flavours emit more exhalations, which enables them to affect the sense of smell more forcefully, regardless of whether the odour is agreeable or disagreeable. This is usually the case with wild fruits in comparison with cultivated ones. The situation with flowers is more complicated, as revealed by *CP* VI 20. For the more general question of why some things smell good but taste bad, see Katerina Ierodiakonou's contribution to this volume.

42 *CP* VI 17.2.5–8: the explanation is not spelled out, but from the context it seems that exhalations play some role. Cf. VI 17.3.1–6 for the differences between the seasons of the year.

43 There is thus nothing "tortuous" (Sharples 1985, 199) about the idea that flowers emit exhalations that act on the mediating air.

44 For a discussion of the distinction between the two kinds of odours and how they are perceived, see Lautner (Forthcoming). Cf. *Od.* 35–36.

45 See also the notion of ἀναθυμίασις at *Sens.* 5, 445a25–27. Cf. *Od.* 49–50 (with Eigler and Wöhrle 1993, 72–73) or *CP* VI 16.8–17.2.

46 See Theophrastus, *Sens.* 21–22, and Priscian, *Metaphr.* 16.13–14, who quotes Theophrastus as taking for granted (like Aristotle) that smelling can occur without breathing. Cf. *CP* VI 5.5.6, where Theophrastus considers the possibility that odours exhaling from chasms and caves are special in only being accessible to breathing animals, implying that most odours are not limited in this way.

Aristotle presumably discusses the specifics of human smell in *Sens.* 5 in order to explain the alleged effects on health and at least a part of the pleasure we take in odours in their own right: these are phenomena pertaining to smell that, however, cannot be explained on the basis of the general account of smell provided in *DA* II 9. Similarly, I suggest that, throughout *CP* VI, Theophrastus is invoking exhalations to explain phenomena pertaining to smell that cannot be explained on the basis of the general account of smell provided by Aristotle. In this way, he enhances the explanatory power of the Aristotelian account of perception, which he seems to treat as a common intellectual heritage. He advances the collective Peripatetic project by explaining: how odours can be mediated at a vast distance; how distance determines what we do and do not smell with regard to each given object; why most flowers are only fragrant while fresh; why wild fruits are often more fragrant than cultivated ones and, in general, why things with unperfected flavours tend to be more fragrant; how some odours—or even non-odorous exhalations—can "block" other odours or even temporarily disable the perceptual faculty; how the strength of odours depends on the time of the day and of the year; and so on and so forth. None of these phenomena can be directly explained on the basis of Aristotle's *De anima* and *De sensu* alone. At the same time, none of Theophrastus' explanations implies any change to the general account. Rather they all seem to be developed within the framework that we know from Aristotle's foundational texts. If Theophrastus emphasises this dependence less than we would like him to do, it is presumably because he simply sees it as obvious.

2 Confronting Effluence and Other Competing Theories in *Physics* V?

As we turn, with this in mind, to the meagre testimonies we possess of Theophrastus' discussion of perception in *Physics* V, it is interesting to observe that the discussion of effluence accounts of perception plays a more important role here than it does in Aristotle's *DA* II 5–12.[47] Theophrastus is reported to have raised the following difficulty for both effluence and extramission theories of vision:

47 Aristotle only mentions effluences once in passing at *DA* II 10, 422a14–15 (and once in connection with the nature of light at II 7, 418b13–15); cf. *Sens.* 5, 443b1–2. Ps.-Simplicius, *In DA*, omits any discussion of perceptual effluences (he only mentions them in passing at 155.24–25 when paraphrasing *DA* II 10, 422a14–15).

> And since he [i.e. Theophrastus] is clearly wanting the transparent to be moved by colours, and extending the problem about how the movement comes about, whether by some effluence, or whether by one thing acting and the other being affected, also to those who do not make seeing happen by means of the transparent, but from colours themselves being borne in, and again to those who suppose that the perceptive organ sends [something] out, it is right for us to enquire further also if in fact the transparent is moved, and what is its movement. (Priscian, *Metaphr.* 11.14–20)[48]

And a bit earlier he is reported to have considered (and ruled out) an effluence account of light:[49]

> But if light is incorporeal, why, he says, is it that it occurs in the presence of fire or, in general, body? For it would appear to be a kind of bodily effluence and a body. (Priscian, *Metaphr.* 9.31–33)[50]

The effluence account of light alluded to here was rejected by Theophrastus. If we can trust Priscian, the basis for this rejection was a comparison with heating: when something is heated, it receives the form of heat, not hot particles—and similarly when something is illuminated.[51]

In the first text quoted above, the effluence and extramission theories of vision are confronted with a dilemma that is not entirely transparent from

---

48 Ἐπεὶ δὲ φαίνεται κινεῖσθαι τὸ διαφανὲς ὑπὸ τῶν χρωμάτων βουλόμενος, καὶ τὴν ἀπορίαν τὴν πῶς κινεῖται, πότερον ἀπορροῇ τινι ᾗ τῷ τὰ μὲν ποιεῖν τὰ δὲ πάσχειν, διατείνειν καὶ ἐπὶ τοὺς μὴ διὰ τοῦ διαφανοῦς ποιοῦντας τὸ ὁρᾶν ἀλλ' ἀπ' αὐτῶν ἐπιφερομένων τῶν χρωμάτων, καὶ ἔτι ἐπὶ τοὺς ἐκπέμπεσθαι τὸ αἰσθητήριον ὑπολαμβάνοντας, δίκαιον ἡμᾶς ἐπιζητῆσαι ἔτι, εἰ τῷ ὄντι κινεῖται τὸ διαφανὲς καὶ τίνα κίνησιν. Here and elsewhere in this paper I use the translation by Huby (1997), with modifications.

49 cf. *DA* II 7, 418b13–15.

50 Ἀλλ' εἰ ἀσώματον τὸ φῶς, διὰ τί, φησί, πυρὸς ἢ ὅλως σώματος παρουσίᾳ γίνεται; δόξειε γὰρ ἂν ἀπορροή τις εἶναι σωματικὴ καὶ σῶμα. Cf. *Metaphr.* 8.1–9 (where Theophrastus is reported to have considered—and rejected—the possibility that the transparent is a body present in the air or water) and 5.22–24 with 13.25–31 (where effluence accounts are rejected without any explicit reference to Theophrastus).

51 ὃ δὴ ἐπιλυόμενος, ληπτέον, φησίν, οὐ τοῦτον τὸν τρόπον ἀλλ' ὡς πέφυκεν, ἐκεῖνο πάντως δηλῶν ὡς εἰδητική τις ἐστὶν ἡ τοῦ φωτὸς ἐνέργεια· ἐπεὶ καὶ ἡ θερμότης ἀπ' εἴδους (*Metaphr.* 9.33–10.1). The parallel with heat was already introduced at 8.27–9.9, apparently as Theophrastus' own (cf. Huby 1999, 54–55). Moreover, the account at 9.33–10.1 contradicts Priscian's account at 9.12–30 (see especially 9.19–20), suggesting that here, too, the comparison comes from Theophrastus.

Priscian's report. The thought may be related to Theophrastus' objections against Empedocles in *Sens.* 13. He may have meant to press on the effluence (and extramission) theories the question of whether perception is caused by the effluence (or extramission) itself or rather by its acting on the perceptive organ (or its being affected by the perceptual object). The former leads to difficulties such as having to explain why the perceiver perceives the external object rather than the other way round (*Sens.* 13, 503.4–6) or why the perceptive organ does not perceive itself (*Sens.* 13, 503.6–9). If the latter is right, one can further ask whether it is not better, at least for some sense modalities, to dispense with effluences (not to mention extramission) altogether and limit the account to acting and being affected.

Be that as it may, what is interesting about Priscian's testimonies is the need Theophrastus seems to have felt to address the effluence accounts—and to explain why Aristotle's action/affection account is superior to them. This interest may have been motivated by discussions in the post-Aristotelian Peripatos which was certainly more sympathetic to ideas akin to effluence accounts than Aristotle was.[52] Moreover, given Theophrastus' own use of exhalations in explaining various phenomena associated with smell (as discussed above), one can appreciate his concern to distance himself from the idea that effluences should explain smelling itself and perception more generally.

This polemical context can also shed some light on a worry that occupies several pages of Priscian's discussion. This worry is not explicitly ascribed to Theophrastus, but it is followed by φημὶ τοίνυν—one of the typical marks of switch from Theophrastus' queries to Priscian's responses:[53]

---

52 We find these tendencies attested in *De coloribus* (see, e.g., 793b33–794a2: "all [perceived] hues represent a threefold mixture of light, that through which the light appears, such as water or air, and underlying colours from which the light is reflected"), *Problemata* (e.g. VII 7, 887a15–21, XII 5, 907a8–12, XIII 4, 908a20–21), and Aëtius, *Placita* 4.13.3 (= 64 Sharples) referring to Strato: "Strato claims that colours travel from the bodies and give their colours to the intermediate air" (Στράτων χρώματά φησιν ἀπὸ τῶν σωμάτων φέρεσθαι συγχρώζοντ' αὐτοῖς τὸν μεταξὺ ἀέρα).

53 Cf. Caston (2019), 194–195. Unlike Fortenbaugh et al. (1992), Caston lists this passage among Priscian's quotations/paraphrases of Theophrastus, but without commenting on it. Priscian's response at 12.17–28 (which is further elaborated on at a later point) sharply contrasts in both language and doctrine with the formulation of the query, and it is based on a denial that the medium is really affected by the perceptual object (rather it is perfected by it)—something that clearly conflicts with Theophrastus' commitments as attested elsewhere. The question is echoed in Ps.-Simplicius, *In DA* 136.26–28, followed by a reference to the author's "epitome of Theophrastus' *Physics*" which is not unlikely to be our text (cf. also Priscian, *Metaphr.* 17.21–24). A similar objection is found in Plotinus, *Enn.* IV 5.2.50–56. But I do not think it should be taken as a specifically Platonist objection. A

> Is it then that they [i.e. perceptual objects] move the transparent, and it moves the sight, as if it were given shape by the colours? But if the transparent had been affected in this way we would perceive *it* and not the colour [out there]; but if we perceive the colour [out there], this would be what also moves our sight. But as for the transparent—the transparent, when illuminated, is also of itself a thing which moves sight, not by means of something else and not in the way that it is moved by colours—what then is its movement? So that we may know also how the things seen themselves move sight through the medium. (Priscian, *Metaphr.* 12.10–16)[54]

The concern here is not with effluence accounts as such, but rather with an account of mediation that assumes that the medium takes over the quality of the perceptual object.[55] If the medium acts on the perceiver on the basis of having taken over the quality of the perceptual object, then there is nothing to explain why the perceiver should perceive the distant object rather than the contiguous medium (or the closest part of it).[56] Or, indeed (one could continue), why should the perceiver perceive anything at all—if it is true that one cannot perceive what is put directly on the organ without something mediating the affection?[57] Now, although this worry does not concern effluence theories, it can be easily extended to them: if what the distant object does is to send effluences, then there is nothing to explain why the perceiver should perceive the distant object rather than the effluence which has reached her—and indeed how she could perceive anything at all. In fact, the worry seems to be directed against non-effluence accounts of mediation that too closely resemble efflu-

---

structurally similar consideration (directed against effluence accounts) is found, e.g., in Alexander, *In Sens.* 58.16–22, and *Mant.* 11, 136.6–11, and it is obvious how Alexander's own account of mediation seeks to disarm this kind of objection (see, e.g., *In Sens.* 59.10–15; *Mant.* 15). As far as I can see, it is not unlikely that the difficulty (implicit in Aristotle) was first articulated by Theophrastus.

54 Ἆρα οὖν αὐτὰ μὲν τὸ διαφανές, τοῦτο δὲ κινεῖ τὴν ὄψιν, οἷον μορφωθὲν αὐτὸ ὑπὸ τῶν χρωμάτων; ἀλλ' οὕτω τοῦ διαφανοῦς ἂν πεπονθότος ᾐσθανόμεθα καὶ οὐ τοῦ χρώματος· εἰ δὲ τοῦ χρώματος, τοῦτο ἂν καὶ τὴν ὄψιν κινοίη. ἀλλὰ τοῦ διαφανοῦς—τὸ δὲ διαφανὲς καὶ καθ' αὑτὸ κινητικὸν τῆς ὄψεως, ὅταν φωτίζηται, οὐ δι' ἑτέρου καὶ ὡς ὑπὸ τῶν χρωμάτων κινηθέν—τίς οὖν ἡ κίνησις; ἵνα καὶ ὅπως αὐτὰ τὰ ὁρώμενα διὰ τοῦ μεταξὺ κινεῖ τὴν ὄψιν.

55 Cf. Aristotle, *DA* II 10, 422a13–14.

56 The contrast is not drawn exactly in these terms (which may be due to Priscian's imprecise rendering), but this must be what is intended. The idea that the perceiver would perceive the medium rather than the colour only makes sense if under "colour" here we understand the colour *of the object out there*.

57 See *DA* II 7, 419a12–30; II 9, 421b16–17.

ence accounts. Potential targets include Strato and the author of *De coloribus* (if it was written by someone else):[58] if what colours do is to give themselves to the intermediate air, or to mix with the colour of the air, then what we really see—if anything—can only be the resulting colour of the intermediate air, not the colour of the distant object itself. Under perfect conditions, the colour of the air can happen to be exactly the same as the colour of the distant object. However, it does not come to be perceived as a colour *of that object*, but—if anything—as a colour *of the contiguous air*. How it is possible to get from here to perceiving colours of distant objects remains unexplained.

Now if Theophrastus did indeed raise this kind of dilemma (with the indicated target in mind), how did he intend to answer it? And how did he intend to answer it in the specific case of smell? Due to exhalations and the relatively slow process of affection, odours obviously have more independence from their sources than sounds or affections caused by coloured objects. But that just seems to be the way it is—and Theophrastus deserves credit for not only respecting this fact, but also attempting to explain various manifestations of it. The proper fragrance of a violet flower, for instance, can only be smelled from a distance: this fragrance that we perceive is not, like the colour of the violet, something that sticks to the distant object. Rather, it literally fills up the space between it and us, and indeed our olfactory organs, mixing with other exhalations along the way. Still, the way in which the flavoured dry particles act, via the air, on our organ must, presumably, be in principle the same as the way in which distant odorous objects without exhalations (like dry roses) act on it. As suggested in the preceding section, the bottom line for Theophrastus is that exhalations are neither a part of what mediation and perception are, nor a necessary condition for them. What needs to be explained then is how a distant perceptual object can act and be perceived *through* a medium rather than turning the medium into another perceptual object that acts on the perceiver and is perceived by them in its own right.

3 The Nature of Mediation

Thus, if mediation and perception are, according to Theophrastus, not defined by means of effluences or exhalations and can take place without them, how are they defined and how "material" are they? After reporting Theophrastus'

58 See fn. 52 above. For two different views on the authorship of *De coloribus*, see Wöhrle (1999), 45–51, and Gottschalk (1964). For the account contained in *De coloribus* (and its connection to Strato), see also Richard Schorlemmer's contribution to this volume.

question (which is closely related to the above-mentioned dilemma) as to "how [in mediation and perception] like is affected by like, air by external air and the wet by the wet [outside]" (15.29–31), Priscian offers a tentative solution, introducing the notion of the transsonant (διηχές) and the transodorant (δίοσμον).[59] The following passage spells out the kind of answer to Theophrastus' query these notions are supposed to provide:[60]

> And it is not that the like is affected by the like, but the potential by the actual: not indeed as air is affected by air, but as the potentially transsonant by the actually transsonic. (Priscian, *Metaphr.* 16.3–6)[61]

There is a spiritualist interpretation of this answer: instead of a genuine alteration turning the air, say, from odourless to stinky (or from wet to dry), what happens in the medium is a mere "phenomenal" change, which consists in the fact that someone perceives through it, and nothing else. Under the spiritualist interpretation of mediation, the change in question only takes place in the presence of perceivers, which turns it into a truly extraordinary kind of "change".

The first thing to observe here is that Priscian himself has a tendency to read Aristotle in spiritualist terms—for instance, when he claims that neither media nor perceptive organs are really *affected* by perceptual objects, but rather are *perfected* by them.[62] But this is a point made *against* Theophrastus, so if it implies anything at all, it is that Theophrastus did *not* endorse spiritualism in the sense in which Priscian does. Moreover, the above-quoted response, as such, by no means implies spiritualism. In mediating sounds, for instance, the

---

59 The notion of transsonance was already introduced earlier in an answer to the query about why the distal senses should need anything beyond their objects: "But, someone will say, as flavour is the proper perceptual object of taste, and sound of hearing, needing nothing else from outside for the organ of sense to be moved, unless indeed someone should speak of the transsonant, as colour needs the transparent […]" (ἀλλ', ἐρεῖ τις, ὡς ὁ μὲν χυμὸς ἴδιον αἰσθητὸν τῆς γεύσεως καὶ ὁ ψόφος τῆς ἀκοῆς οὐδενὸς ἔξωθεν εἰς τὸ κινεῖσθαι τὸ αἰσθητήριον δεόμενος, εἰ μὴ ἄρα τοῦ διηχοῦς τις εἴποι, ὡς τὸ χρῶμα τοῦ διαφανοῦς […], *Metaphr.* 10.17–20).

60 For an analysis of the entire section in which this passage comes up, which seems to inextricably combine quotes, paraphrases and Priscian's own reflections, see Huby (1999), 42–46.

61 καὶ οὐ τὸ ὅμοιον ὑπὸ τοῦ ὁμοίου πάσχει, ἀλλὰ τὸ δυνάμει ὑπὸ τοῦ ἐνεργείᾳ· οὐ μὴν ὡς ὁ ἀὴρ ὑπὸ τοῦ ἀέρος, ἀλλ' ὡς δυνάμει διηχὲς ὑπὸ τοῦ ἐνεργείᾳ διηχητικοῦ.

62 See *Metaphr.* 12.17–28 (in response to 12.10–16 and extended to hearing at 12.32–13.4) or 14.12–15 (in response to 14.10–12). Cf. 5.24–29, 6.27–7.1, 9.12–30 (about light) and 14.6–8. Another point suggesting spiritualism is Priscian's claim that the perceptive organ is not moved before it is active and would not be moved at all without being active at 2.4–5.

air can be affected in a perfectly physical, perceiver-independent, wave-like manner, meaning that a motion passes through it without leaving any persisting trace in the air itself. It is conceivable that mediation in general consists in changes being *passed through* the medium, so that the medium does not retain any trace of them—but without turning these changes into merely spiritual changes. For instance, the drying involved in the mediation of odours may well have literal drying or heating effects on the perceiver, as seems to be presupposed in Aristotle's account of human smell in *Sens.* 5, without normally leaving that effect in the mediating air: in standard cases, the air is not itself turned into a dryer, warmer or odorous air, because what it does is precisely to *mediate* the drying which "passes through" it (διικνεῖσθαι).[63]

The terms "transsonant" and "transodorant" may or may not come from Theophrastus.[64] André Laks seems to go too far in also ascribing to Theophrastus the metaphor of a lever (μοχλός) that comes up in this context (i.e. that of the question of why we see distant objects rather than contiguous air) in Ps.-Simplicius (*In DA* 136.20–29) with a reference to the author's "epitome of Theophrastus' *Physics*".[65] But the main point is that the notion of the transsonant and the transodorant, and even the metaphor of a lever, may well faithfully capture Theophrastus' original reply, without committing him to spiritualism.[66] The idea, I take it, is *not* that the medium undergoes a merely phenomenal change as something is perceived through it. Rather, it is *being affected* and *changed* in a perfectly physical, perceiver-independent way (like the beam of a lever when it is pushed down). However, if the medium is to duly play its mediating role,

63 For Theophrastus' use of διικνεῖσθαι for mediation, see *Metaphr.* 14.16–17 and 17.14–15.

64 Besides the two passages in the *Metaphrasis* (10.17–20, 15.31–16.9), the notions are ascribed to Theophrastus by Philoponus, *In DA* 354.12–16 (for Philoponus, see Ellis 1990, 295–299). Themistius, *In DA* 62.31–32, ascribes the two notions to anonymous "exegetes". The notion of the transodorant is also mentioned by Alexander, *In Sens.* 88.18–89.7, without any ascription (cf. *Quaest.* I 2, 7.10–11). The report of Arius Didymus in Stobaeus, *Anth.* 484.15–21 shows that the notion of the transsonant certainly predates Alexander. Whether the two notions can be traced back to Theophrastus has been a thorny issue. Baltussen (2000), 86 n. 67, and Schorlemmer (Forthcoming) argue against the ascription. Huby (1999), 51–52, 57–58, Laks (2019), 176–177 n. 34, and Johansen (2019), 234, defend it. Caston (2019), 195 n. 20, wisely remains agnostic.

65 Laks (2019), 181–183.

66 The two notions were probably introduced as a response to Aristotle's complaint at *DA* II 7, 419a32–b1, that there is no existing name to capture the nature common to air and water that is responsible for mediating odours parallel to the notion of "transparent" (cf. *Sens.* 5, 442b29–443a2). Surprisingly, Aristotle is satisfied here with identifying air as what mediates sounds, but it is easy to find out that water mediates sounds, too (cf. *DA* II 8, 418b13), and so the very same question arises for sounds as well.

the affection must never end up *having changed* the medium's proper qualities; if that happened, it would mark a failure to mediate, turning the alleged medium of perception into something perceptible in its own terms. In *De causis plantarum* VI, Theophrastus aptly describes what makes the air a good medium for smell: unless the odours are very strong (presumably), the air "is not able to retain them, but only to send them through" (οὐδ' ὁ ἀὴρ δύναται κατέχειν ἀλλὰ διαπέμψαι μόνον).[67]

There is an interesting passage in Priscian's *Metaphrasis* where he attempts to integrate ideas that at least *prima facie* challenge spiritualism. One explanation is that some of these ideas come from Theophrastus and what Priscian does is to try to show that he is able to take them on board.[68] After offering what reads like a spiritualist response (12.17–13.4) to the above-quoted question as to why we perceive distant objects rather than contiguous media—rephrased as "what then the transparent contributes to vision?" at 12.29—Priscian asks again "What then?" (13.4–5). He then goes on to elaborate on the three distal sense modalities one by one—recognising in each case, after all, a passive process (πάθημα καὶ κίνησις) or a passive disposition (διάθεσις παθητική) in the medium. In the case of hearing (13.5–9) and seeing (13.9–16), he is able to argue that this process or disposition is to be distinguished from the activity of mediation and perception proper.[69] In the case of smelling (and tasting and touching), though, the situation is more difficult for Priscian, and here is what he has to say:

> (i) But with regard to the object of smell and smelling, the affection which occurs in between is clearer, since even when the object smelt has gone away the odour remains, not only through the particles which have flowed off, but also because the air has been affected in some way, just as also it has been warmed when it is between that which is warming and that which has been warmed, and as the air is made sweet which is between the tongue and the honey. (ii) And both perception and the perceptual objects are even here in accordance with the form, but since both the perceptive organ and the perceptual object are in these cases more involved in matter, the affection in the air as well as in the percept-

67 *CP* VI 19.3.12–13. The odour "passes through it without fastening on it" (διϊὸν οὐχ ἅπτεται, VI 19.4.8–9).

68 The passage is not included by either Fortenbaugh et al. (1992) or Caston (2019).

69 For hearing, see also *Metaphr.* 14.25–15.1.

> ive organ becomes more forcefully, and thus more clearly, apparent in that they can come to share in the perceptible form. (Priscian, *Metaphr*. 13.16–25)[70]

The idea seems to be that we can understand the way in which the transodorant medium is affected when we observe the aftereffects of strongly odorous objects. When such an object is removed, not only do the emitted particles remain in the air (an echo of Theophrastus' exhalations); moreover, the air itself takes over the odour of the object that has been removed (it comes to share in the perceptible form). The latter observation, which is reminiscent of *DA* II 12, 424b17–19, is then extended to the hot and the sweet—that is, the objects of the two remaining (namely contact) sense modalities.[71]

What is the point of this observation? It is presumably not that, in each case of smelling, tasting and touching, the (external or internal) medium first comes itself to have the same quality as the perceptual object. Allowing this would make any response to the original dilemma impossible (we would always smell the odour of the contiguous air, taste the flavour of our own tongue and feel the warmth of our own body—or rather we would not perceive anything at all). Instead, the point seems to be that we can understand the nature of the affection and change passing through the media by observing what happens when the affection is too strong: the air itself becomes odorous, my hand warm and I come to have an aftertaste on my tongue.[72] What this is supposed to show, I take it, is that in normal cases of perception, too, the affection transmitted through the medium is exactly of this kind, and if it were strong enough it could have precisely these kinds of effects. It is precisely because the affection does *not*

---

70 (i) Ἐπὶ δὲ τοῦ ὀσφραντοῦ καὶ τῆς ὀσφρήσεως ἐναργέστερον τὸ συμβαῖνον ἐν τῷ μεταξὺ πάθημα, ὡς καὶ ἀπελθόντος τοῦ ὀσφραντοῦ ἐμμένειν τὴν ὀσμὴν οὐ διὰ τὰ ἀπορρεύσαντα μόρια μόνον ἀλλὰ καὶ αὐτοῦ πεπονθότος τι τοῦ ἀέρος, ὥσπερ καὶ θερμανθέντος ὅταν μεταξὺ τοῦ θερμαίνοντός τε καὶ τοῦ θερμαινομένου γίνηται, καὶ γλυκαζομένου τοῦ ἀέρος τοῦ μεταξὺ τῆς γλώττης καὶ τοῦ μέλιτος. (ii) καὶ κατὰ τὸ εἶδος μὲν κἀνταῦθα ἥ τε αἴσθησις καὶ τὸ αἰσθητόν, ἀλλὰ διὰ τὸ ἐνυλότερον καὶ τοῦ αἰσθητηρίου καὶ τοῦ αἰσθητοῦ ἐν τούτοις εἴδους σφοδρότερον καὶ διὰ τοῦτο ἐναργέστερόν τε τοῖς αἰσθητηρίοις καὶ ἐν τῷ ἀέρι, ἵνα μετάσχῃ τοῦ αἰσθητοῦ εἴδους, διαφαίνεται τὸ πάθος.

71 Cf. *Metaphr*. 14.22–25, where Priscian reports that on the issue of internal media of touch and taste, Theophrastus basically agrees with Aristotle without raising significant questions (cf. 5.19–20). The idea of sweetened air is surprising—it may have originated in Priscian's misunderstanding of Theophrastus who may have rather had in mind the internal media of touch and taste.

72 If we stick to Priscian's rendering, the consideration in the case of flavours and tangible qualities would rather be that from the results of their acting on non-perceptive bodies, we can infer the nature of their acting on perceivers' bodies (cf. *DA* II 12, 424b12–13). The upshot would be the same.

have these effects—the medium is being affected (πάσχον) by the object, but it passes the affection along before it can be completed in it (πεπονθός)—that the medium functions as a medium rather than becoming a perceptual object of its own.[73] The notion of a "transodorant" function captures this idea rather nicely, without necessarily having any spiritualist implications: at any rate, what happens in the medium is a perfectly physical process which occurs independently of whether a perceiver is present or not.

It is not clear what Priscian means when he says that, even here, both perception and the perceptual object "are in accordance with the form". Apparently, he wishes to preserve a spiritualist account of mediation proper and dissociate it from the physical changes in the medium (as in the case of seeing and hearing), but without really knowing how to do so.[74] There is, of course, nothing that rules out the possibility that Priscian himself created this difficulty. But it seems more likely that he is struggling with something he found in Theophrastus—attempting, not very successfully, to integrate Theophrastus' insights within his own account, as he often does.[75] If so, then at least the first part of the above-quoted passage—namely (i)—can shed some light on Theophrastus' account of mediation.[76]

---

73 We never learn anything more precise about the exact mechanism of this affection—either from Theophrastus' botanical works or from Priscian's reports—than what Aristotle lays down in *DA* II 9 and *Sens.* 5. A little later (*Metaphr.* 14.10–12), Theophrastus is quoted as saying: ἡ δὲ ὄσφρησις, φησί, διὰ τοῦ ἀέρος ὥσπερ ἀναμιγνυμένου πως ἔοικε καὶ πάσχοντος, ἡ δὲ ἀκοὴ σχηματιζομένου. But the mention of mixture here (echoing *CP* VI 1.1) should not be overinterpreted (as already noted in fn. 38). It may be just another expression for Aristotle's "washing" and "cleansing" (*Sens.* 5, 443a1–2, 445a13–14), and Theophrastus' καὶ πάσχοντος suggests that he understands it at any rate as a way of being affected rather than a mixing strictly speaking (cf. Huby (1999), 38–39). What is potentially relevant here is the present tense of πάσχειν: the medium is *being affected*—without (in successful cases) this affection ever coming to be completed, i.e. the medium *having been affected* (πεπονθός).

74 Compare modern spiritualist accounts of mediation (including that of odours) in Burnyeat (1992), (1995) and (2001) and especially Johansen (1997), 116–147. Cf. Broadie (1993).

75 Cf. Priscian's reaction at *Metaphr.* 14.12–15 to Theophrastus' claim (at 14.10–12) that the mediation of odours involves affection.

76 As also suggested by the Theophrastean idea of emitted (flavoured dry) particles there. Another interesting passage is *Metaphr.* 18.1–7, with a discussion of *DA* II 10, 422a34–b2. The question is why Aristotle insists that the tongue must be neither moist nor incapable of being moistened. Someone's suggestion (φαίη ἄν τις) against Aristotle is reported: it would seem that what matters is only that the tongue is not flavoured. This suggestion is then countered by affirming that since flavours are perceived by contact (ἁπτικῶς), the organ must be affected by the moist, too. Thus, perceiving flavours essentially involves moistening of the tongue, which appears, again, to go against the core idea of spiritualism. This passage is not included by Fortenbaugh et al. (1992) or Caston (2019), but see Huby (1999), 79, for a suggestion that the argument may come from Theophrastus. This

4 The Nature of Perception

If the preceding considerations are on the right track, it remains to be asked what kind of alternative to spiritualism Theophrastus might have embraced in his understanding of perception. I have argued that he did not endorse an effluence account (in which effluences would be necessary, or even essential, to perceiving). And everyone agrees that Theophrastus did not endorse literalism, as has been ascribed to Aristotle by some recent interpreters.[77] The very first testimony from Priscian seems to rule this out, as does a related passage in *De sensibus* (both are quoted below). The only remaining option currently on the table is the idea that Theophrastus conceived the transmission of perceptual information on the transduction model, as was originally proposed by Victor Caston for Aristotle.[78] Before evaluating this suggestion and asking whether Theophrastus' remarks may be understood in yet another way, we need to look at the key texts, starting with the very first preserved passage from Priscian's *Metaphrasis*:

> His [i.e. Theophrastus'] next target is concerned with perception. Since Aristotle wants the perceptive organs, when moved by the perceptual objects, to become like those objects by being affected, he asks what the becoming like consists in. For with perceptive organs, and even more with the soul, the capacity to become like [the perceptual object] in colour and flavours and sound and shape seems absurd. So he claims, too, that the becoming like occurs with regard to the forms and λόγοι without the matter. (Priscian, *Metaphr.* 1.3–8)[79]

The question about the kind of assimilation involved in perception naturally arises for any reader of *DA* II 5, where Aristotle concludes that "that which

---

suggestion can be supported by drawing a contrast with Ps.-Simplicius, *In DA* 157.11–29, where the author argues that the tongue needs to *be moist* and seems to leave no room for it being *moistened* when tasting (cf. also the continuation at 18.7–10, where Priscian hastily attempts to disarm the argument by recalling Aristotle and Theophrastus' view that the tongue is, in fact, not the proper organ of taste).

77 See, e.g., Slakey (1961); Sorabji (1974); Sorabji (1992a); Everson (1997).

78 See Caston (2005) and (2020) for Aristotle, and Caston (2019) for Theophrastus.

79 Περὶ αἰσθήσεως αὐτῷ ὁ σκοπὸς ἐφεξῆς. ἐπεὶ δὲ ὑπὸ τῶν αἰσθητῶν κινούμενα τὰ αἰσθητήρια ἐξομοιοῦσθαι τοῖς αἰσθητοῖς τῷ πάσχειν βούλεται ὁ Ἀριστοτέλης, ζητεῖ τίς ἡ ὁμοίωσις. καὶ γὰρ ἐπὶ τῶν αἰσθητηρίων καὶ ἔτι μᾶλλον ἐπὶ τῆς ψυχῆς ἄτοπον φαίνεται τὸ χρώματι καὶ χυμοῖς καὶ ψόφῳ καὶ μορφῇ ἐξομοιοῦσθαι δυνατόν. λέγει μὲν οὖν καὶ αὐτὸς κατὰ τὰ εἴδη καὶ τοὺς λόγους ἄνευ τῆς ὕλης γίνεσθαι τὴν ἐξομοίωσιν.

can perceive (τὸ αἰσθητικόν) [...] is being affected as being unlike, but once it has been affected it is assimilated and is like it [i.e. the perceptual object]" (418a4–6). In what sense is the perceiver like the perceptual object that she is perceiving? One reason why this is a difficult question is that basic principles of Aristotle's natural philosophy (spelled out most clearly in *GC* I 7) seem to imply that as soon as the perceiver *is like* the perceptual object, she can no longer *be affected* by it (for only unlike things can act upon each other). So how can she retain perceptual contact with it? A related concern has been raised above with respect to media: if a medium were to take over the quality it is supposed to mediate, it would thereby become unable to fulfil its function. In the case of media, this worry can be resolved by saying that they are never really assimilated (if they were, we would—at best—perceive them and not the distant objects). But this answer is not available in the case of perceivers (and their organs), since these *are* clearly assimilated somehow according to *DA* II 5—hence the urgency of Theophrastus' question about the mode of their assimilation.

The same kind of question is raised more fully and eloquently in *Sens.* 19 as a part of Theophrastus' polemic with the Empedoclean account of perception:

> It is particularly difficult to determine the affections of sight, but as far as other senses are concerned, how do we discriminate by the like? The problem is that "like" is indeterminate. For [we do] not [discriminate] sound by a sound, odour by an odour or, in general, quality by a quality of the same kind; rather, it would be more, so to speak, by contraries [that we discriminate]. For the sense has to be set before [the external perceptual objects] as being impassive (ἀπαθῆ γὰρ δεῖ τὴν αἴσθησιν προσάγειν). When, on the other hand, an echo is present in the ears, a flavour in the sense of taste or an odour in the sense of smell, they all become blunted, and the fuller they are of what is like [their objects], the more blunted they are—unless one draws distinctions about these. (Theophrastus, *Sens.* 19, 504.25–505.2)[80]

The demand for ἀπάθεια on the part of αἴσθησις here has most often been understood as requiring that the sense be devoid of any modifications prior to being

80 ἀλλὰ τὰ μὲν τῆς ὄψεως πάθη χαλεπώτερον ἔσται διελεῖν. τὰ δὲ περὶ τὰς ἄλλας αἰσθήσεις πῶς κρίνωμεν τῷ ὁμοίῳ; τὸ γὰρ ὅμοιον ἀόριστον. οὔτε γὰρ ψόφῳ τὸν ψόφον οὔτ' ὀσμῇ τὴν ὀσμὴν οὔτε τοῖς ἄλλοις τοῖς ὁμογενέσιν, ἀλλὰ μᾶλλον ὡς εἰπεῖν τοῖς ἐναντίοις. ἀπαθῆ γὰρ δεῖ τὴν αἴσθησιν προσάγειν· ἤχου δὲ ἐνόντος ἐν ὠσὶν ἢ χυλῶν ἐν γεύσει καὶ ὀσμῆς ἐν ὀσφρήσει κωφότεραι πᾶσαι γίνονται μᾶλλον ὅσῳ ἂν πλήρεις ὦσι τῶν ὁμοίων, εἰ μή τις λεχθείη περὶ τούτων διορισμός.

affected.[81] This neutrality is certainly insisted on, but it cannot, I think, be all that Theophrastus has in mind, given that his point about the impossibility of discriminating sound by a sound surely applies equally well to the situation in which the perceiver has already been affected by a sounding object: not even then can there be, for instance, "a sound" in the perceiver by which she would supposedly discriminate sound, for this inhering sound would blunt her hearing and make any perceptual contact with the external sound impossible. Thus, it is necessary for the perceiver to be not just "without modifications" prior to being affected, but also "impassive" in the sense of being able to resist being modified in a way that would turn her organs into perceptual objects similar to those acting upon her. This consideration seems to make any assimilation account impossible—unless, Theophrastus adds, one draws distinctions with regard to sound, odour, and other perceptual qualities. That would, effectively, mean drawing distinctions about the meaning of likeness.

Presumably, the distinctions Theophrastus is calling for are supposed to explain in what sense something like an odour can (and must) come to be present in the perceiver while she is perceiving and in what sense it cannot—that is, in what sense the latter is and in what sense it is not *like* the former. The above-quoted passage from Priscian closes by reporting Theophrastus' understanding of Aristotle's answer to this question: the perceivers are assimilated with respect to forms and λόγοι without the matter. We can be reasonably sure that this is Theophrastus' own formulation, for Priscian later repeats it verbatim (*Metaphr*. 3.27–29) before introducing his own qualifications. And the claim is not so surprising. Theophrastus is basically just saying that in order to fully understand the assimilation model introduced in *DA* II 5, we need to wait until II 12, where the kind of likeness is finally specified: perception is "the capacity to receive perceptual forms without the matter" (424a18–19) and the perceiver "is affected [...] with respect to λόγος" (a23–24). So far, so good. But how exactly should we understand the specification? This is, of course, a notoriously difficult question, and Priscian does not give us many hints as to how Theophrastus may have answered it.

What is reasonably clear, as noted above, is that Theophrastus would not accept the literalist reading of *DA* II 12, 424a17–24, which takes the idea of forms without matter as referring to nothing more than the fact that perceptive organs do not receive material particles coming from perceptual objects, but are only changed qualitatively. It is not just that Theophrastus *does*, as we

81 See, e.g., Caston (2019), 198, and Johansen (2019), 242. Along the same lines, Ierodiakonou and Bydén (Forthcoming) translate ἀπαθῆ as "in an unaffected condition". Strangely enough, George M. Stratton renders ἀπαθῆ as "in a passive state".

saw, speak about material exhalations being received by the organ of smell. Also and more importantly, the way in which he raises his question about the mode of assimilation seems to exclude the idea of a literal likeness being established in the organ: that would, apparently, be precisely the kind of likeness that makes our senses imperceptive, rather than making them perceive anything. It has been argued that, since Theophrastus cannot be referring to a literalist understanding of likeness, he must have a spiritualist assimilation in mind.[82] But we have seen that Theophrastus could not have endorsed a spiritualist understanding of mediation; and if media are affected by perceptual objects in a perfectly physical way—independently of whether a perceiver is present or not—then the perceivers can hardly be affected by the media in a merely spiritual way.

Victor Caston proposes that what happens in the perceptive organs, according to Theophrastus, is a case of transduction: the same ratio that defines the perceptual quality in question (as, say, a ratio of white and black) comes to be realised in the organ in a different pair of contraries (say, the contraries of viscous and runny). Caston has one key piece of evidence for this proposal, namely the following passage from Priscian:

> In what way, then, is λόγος the cause of perception? For λόγος lies in the mixture of the several and [or: that is] in the relation of them to one another. He solves this himself by placing λόγος not in the relation of the elements [to one another], but in that of the perceptive organ to the perceptual objects. (Priscian, *Metaphr.* 21.4–8)[83]

We can be reasonably sure that both the question and the answer here come from Theophrastus, since Priscian goes on, in his customary way, to polemicise against what he finds unacceptable in Theophrastus' answer, arguing that instead of identifying the relevant meaning of λόγος as that of relation (σχέσις) of the sense organ to its object, we should understand it as pertaining to the "living substance" (οὐσία ζωτική) from which the λόγος is "projected" (προβάλλεσθαι) in perception. Caston understands Theophrastus' "relation of the perceptive organ to the perceptual objects" in terms of an equation between the λόγος defining the perceptual object and the λόγος present in the perceptive organ: as *a* is to *b*, so *c* is to *d*, which is the point of transduction. However,

82 Laks (2019).

83 Πῶς οὖν ὁ λόγος τῆς αἰσθήσεως αἴτιος; ὁ γὰρ λόγος ἐν τῇ τῶν πλειόνων μίξει καὶ ἐν τῇ πρὸς ἄλληλα αὐτῶν σχέσει. ἢ τοῦτο καὶ αὐτὸς ἐπιλύεται, οὐκ ἐν τῇ τῶν στοιχείων ἀλλὰ ἐν τῇ τοῦ αἰσθητηρίου πρὸς τὰ αἰσθητὰ σχέσει ἀφορίζων τὸν λόγον.

this is hard to find in the text: instead of two λόγοι being equal, it speaks of a single λόγος consisting in a certain relation of the organ to the perceptual objects.[84] Moreover, the idea of two λόγοι seems to spoil the contrast between a relation of elements *to each other* on the one hand and a relation of the perceptive organ *to perceptual objects* on the other: if "elements" are understood in a sufficiently broad sense, then the λόγος realised in the viscous and the runny *is* a λόγος of elements, and thus provides no alternative.[85] Furthermore, the transduction interpretation implies that the relation in question (i.e. of equality) is perfectly symmetrical, whereas Theophrastus' formulation suggests that *unlike* in the case of the elements, where λόγος consists in their relation to *each other*, the relevant notion of λόγος consists in an asymmetrical relation of the perceptive organ to perceptual objects—which is as it should be, because the former perceives the latter and not the other way round.[86]

It seems more plausible to assume that only one λόγος is in play and that this λόγος is not to be understood in terms of a ratio of any elements or qualities inherent to the perceptive organ, but rather in terms of a relation of the perceptive organ to the perceptual objects. The context suggests that not being a λόγος of the elements is intended as equivalent to being a λόγος received "without the matter". There is, admittedly, very little to draw on in reconstructing Theophrastus' understanding of this notoriously tricky phrase, but the evidence at least seems to be perfectly compatible with the following interpretation. The assimilation involved in perceiving consists in receiving the form of the quality alone—that is, receiving the form without it coming to be enmattered in the organ (not even in a transduced way). Rather, the matter of the received quality remains outside—in the perceived object. Presumably, the form is nothing other than the λόγος—that is, the ratio defining the quality in question. The point is precisely that this λόγος comes to be present in the organ

84 Cf. *Metaphr*. 19.30–31, 20.23–25.

85 Caston also refers to Theophrastus, *Sens*. 32, 508.19–20 (ἐν συμμετρίᾳ τινὶ καὶ κράσει πρὸς τὸ αἰσθητὸν ἡ αἴσθησις). But the idea of two λόγοι being equal is not articulated here either.

86 One can also wonder, since—at least in the case of odours, flavours, and tangible qualities—what occurs when the medium or the organ is too forcefully affected is that it turns to have an odour, flavour or, say, heat of its own (as we saw above), how it could happen that in standard cases of perception, the organ does not become odorous, flavoured or hot, but acquires quite different qualities that only share the same ratio. Moreover, if what a quality *F* does to the organ is to make it *G*, then as soon as the organ has become *G*, it is not obvious how it could be affected by the quality *F* any further, and thus how it could continue to perceive it: it would seem that the organ once again becomes a *perceptible* object in its own terms rather than *perceiving* anything. It is not obvious why being *G* should make the organ any less blunted, in Theophrastus' terms, than being *F*.

not as a ratio of the organ's own constituents, but in the form of a relation that the organ establishes—during the time when the perceiving occurs—to the perceived object.[87]

But is this not just a regression to spiritualism? Not really. We have seen that the way in which the medium is affected and acts on the perceptive organ has nothing spiritual to it: the affection that mediates odours is such that it can end up turning the medium into an odorous object; the only reason why the medium remains neutral is that it immediately passes the affection along. It is this physical affection that arrives at the perceptual organ, and so the way in which the organ is being affected is certainly not merely spiritual. The point is simply that this affection cannot result in the organ acquiring the quality in question *as its own*—any more than the medium does. The only way in which the organ can be assimilated to the perceived object is purely formal: i.e. the form comes to be present in it while its matter remains outside. But, unlike in the case of spiritualism, this assimilation results from a perfectly physical kind of action exercised by the perceptual object, via the medium, on the perceptive organ.

How exactly it is that this way of being affected yields the requisite result (the form being received without its matter) is a different question, for which we find almost no clues in the testimonies we possess. However, one negative clue may perhaps be found in the very first passage from Priscian's *Metaphrasis* quoted above (1.3–8). It has been argued that the idea that literal assimilation is even more absurd in the case of the soul than in the case of the perceptive organ is Priscian's interpolation, since the concern with the soul's impassivity is typical of later Neoplatonist approaches and would make little sense in Theophrastus' case.[88] That, however, is far from obvious. In his so-called *Metaphysics*, Theophrastus comes close to accepting the view that perception is a motion of the soul itself[89]—just as Aristotle seems to accept it in *Physics* VII 3 (248a6–9) and *De somno* 1 (454a7).[90] And in his *On Motion* Theophrastus is

87 Does this mean that λόγος loses the meaning of "ratio" and acquires the vaguer meaning of "relation" (σχέσις) instead? I do not think so. The λόγος in question will be the ratio defining the perceived quality. The point is that it will not be present in the perceptive organ as a ratio of its own constituents, but exactly as the defining ratio of the quality of the perceptual object *out there*. (This, I take it, is possible due to the neutrality of the organ—both before and during perception.) In this way, the λόγος constitutes a relation of the perceiver to the perceived object.

88 See Caston (2019), 197.

89 ἐπεὶ καὶ αἱ αἰσθήσεις καίπερ ἐν τῷ πάσχειν οὖσαι δι' ἑτέρων ὅμως ἐν ψυχῇ γίνονται (*Metaph.* II 8 = 8a Gutas, 5b5–7).

90 The idea reflects Plato's view as articulated in *Theaet.* 186b11–c2; *Phlb.* 33d2–7, 34a3–5; or *Tim.* 43c–44c, 45c–d, 67b.

reported to have claimed that κρίσεις καὶ θεωρίαι are motions which "have their origin, their activity, and their end in the soul itself".[91] I am inclined to think that this claim in *On Motion* is made specifically for "theoretical discriminations"—that is, the acts of thinking as analysed in Aristotle's *De anima* III 4–5—and not for acts of perceptual discrimination.[92] Irrespective of that, it would not at all be surprising if Theophrastus were concerned in *Physics* V with the question as to whether or not the soul itself is affected by and assimilated to perceptual objects: following Plato and certain texts of Aristotle, he at least flirted with the idea elsewhere and he insists in *On Motion* that theoretical thinking, at any rate, *is* a motion of the soul itself. It would thus make perfect sense for him to emphasise (as Aristotle does in *DA* I 3–4) that the soul itself cannot be moved by, let alone assimilated to, perceptual objects acting on the perceptive organs.[93] One motivation for this emphasis comes from the fact that, in Aristotle's *De anima* II 5, the assimilation account is applied to τὸ αἰσθητικόν which often (but not always) means the perceptive part of the soul. If what Priscian says about the soul at *Metaphr.* 1.5–7 is a genuine report, then Theophrastus seems to have explicitly excluded an interpretation that can be traced back to antiquity and has also enjoyed some popularity in recent discussion of Aristotle.[94]

∴

Although perception was clearly an important topic for Theophrastus, the sources we possess are regrettably limited. I have argued that they allow us nevertheless to establish some conclusions with a reasonable degree of likelihood and to make educated guesses about other aspects of Theophrastus' view. There is no good reason to think that Theophrastus abandoned Aristotle's general account of perception, or his account of smell, in favour of a quasi-Empedoclean effluence theory. What he did was rather to introduce odorous exhalations as an additional, complementary causal factor allowing him to explain a significantly broader range of olfactory phenomena than would be possible on the basis of *De anima* and *De sensu* alone. Furthermore, there are

91 See Simplicius, *In Phys.* 964.29–965.6 = 271 FHS&G.

92 More on this in Roreitner (2024), 438–444. For a similar view, see, e.g., Sharples (2006), 171.

93 Cf. Aristotle, *DA* I 5, 410a10–11; III 8, 431b28–29.

94 It can be traced back to Themistius, followed later by, among others, Thomas Aquinas (for a reconstruction, see Roreitner 2023). Recently this view has been most forcefully defended by Lorenz (2007) (cf., e.g., Charles 2000, 111, Johansen (2012), 166, and Carter (2018), 53–58).

good reasons to think that the way perceptual objects act on the media and on the perceptive organs is not, according to Theophrastus, merely spiritual. Rather he seems to have conceived the role of the medium in terms of transferring perfectly physical (i.e. perceiver-independent) affections, but without ever having these affections completed in itself—that is, without itself acquiring the quality in question as a quality of its own. The same clearly holds for the perceptive organs, at least as far as literal assimilation is concerned: Theophrastus seems to have explicitly excluded the idea that when perceiving red colour, the eye-jelly itself comes to be red. Venturing beyond these findings seems impossible without introducing some amount of speculation. I have argued that nothing in our testimonies really suggests that Theophrastus understood the assimilation involved in perceiving along the lines of transduction. They are more suggestive, overall, of the idea that what the physical (i.e. perceiver-independent) acting of the perceptual object (via the medium) on the perceptive organ results in is a reception of the *form* of that object alone, while its matter remains outside: the form of the perceived object comes to be present in the ensouled organ (rather than in the soul itself) without becoming enmattered in it in any way. This is apparently what, for Theophrastus, perception is.[95]

---

95 This paper was presented at the "Methods in Aristotelian Tradition" conference in Olomouc (2024). Many thanks to the audience for the helpful discussion. I am most grateful to those who read and commented upon earlier versions: Mike Arsenault, Sean Coughlin, Katerina Ierodiakonou, Richard Schorlemmer, Luca Torrente and, in particular, Gweltaz Guyomarc'h, not only for his feedback, but also for kindly inviting me to contribute to the present volume. The work was supported by the Czech Science Foundation (project No. 25–16298S).