

The Predecessors' Dilemma

2.1 Generic Likeness

An. 2.5 opens and closes by referring to a view that holds perception to be a case of 'like being affected by like' (*LAL*). When Aristotle introduces this view, at 416b35–417a2, it is already clear that he takes the position to be importantly correct, but also somehow mistaken. He then substantiates this claim throughout the chapter, spelling out the aspects of truth as well as those of falsity on two occasions – namely, at the climax of the first provisional part of the chapter (417a17–21) and in the chapter's closing lines (418a3–6). I shall argue that, when correctly understood, these passages provide an important indication of what Aristotle intends to achieve in his first general account of perception.

Let us begin by considering how the chapter as a whole is framed. Immediately after announcing his goal of accounting for all perception – where perception is said to 'come about in being affected' – Aristotle introduces the view of anonymous thinkers who are reported to have believed that (in perception, apparently) like is affected by like. Aristotle then refers to his general inquiry into acting and being affected (in *GC* 1.7), suggesting that his treatment there should help us understand how far the anonymous thinkers were right, and how far they were wrong:

[R&W₁] Some [thinkers] also suppose that [in perception] like is affected by like. How this is possible and how it is impossible was explained in our general discussions of acting and being affected.

φασὶ δὲ τινες καὶ τὸ ὅμοιον ὑπὸ τοῦ ὁμοίου πάσχειν. τοῦτο δὲ πῶς δυνατόν ἢ ἀδύνατον, εἰρήκαμεν ἐν τοῖς καθόλου λόγοις περὶ τοῦ ποιεῖν καὶ πάσχειν.

(*An.* 2.5, 416b35–417a2)

At the very end of the chapter, Aristotle sums up his response to the view put forward by these anonymous thinkers as follows:

[R&W₃] That which can perceive is in capacity such as the perceptual object is already in fulfilment, as has been said. So [that which can perceive], being not like [the perceptual object], is being affected [by it] and, having been affected [by it], it has been assimilated [to it] and is like it.¹

τὸ δ' αἰσθητικὸν δυνάμει ἐστὶν οἷον τὸ αἰσθητὸν ἤδη ἐντελεχείᾳ, καθάπερ εἴρηται. πάσχει μὲν οὖν οὐχ ὅμοιον ὄν, πεπονθὸς δ' ὡμοίωται καὶ ἐστὶν οἷον ἐκεῖνο.

(*An.* 2.5, 418a3–6)

In this closing passage, Aristotle is explicitly applying to the case of perception the scheme that has been laid out in general terms at 417a17–21. Presumably, he thinks that, with the notion of preservative πάσχειν in hand (as worked out at 417b2–29), we are finally in a position to understand how perception can fit successfully within the assimilation model. Aristotle's response to the view that like is affected by like was first formulated as follows, with no explicit mention of perception:

[R&W₂] Everything is affected and changed by an agent that is in actuality.² Thus, in one sense it is affected by like, in another sense by unlike, as we said.³ For it is the unlike that is being affected, but, having been affected, it is like.

¹ Here, and in the following quotation, I translate the participles οὐχ ὅμοιον ὄν and πεπονθὸς literally (and somewhat awkwardly) by participles in the English, to reflect the fact that these need not have strictly temporal meanings (cf. Section 1.3). Cf., in this context, Mourelatos 1978, Graham 1980, and White 1980. This will become important later.

² Here, ἐντελεχεία seems clearly to have the same meaning as ἐντελεχεία at 417a9 and 418a4; hence my rendering of it as 'in actuality'. While some readers might think this rendering is a matter of course, I do not share this confidence. Rather, the present use of ἐντελεχεία in the sense of 'actuality' appears to be the *single exception* in *An.* 2.5. In all other places I believe ἐνέργεια can, and ought to, be translated as 'activity'. This is worth emphasizing because Aristotle intends to say something quite different by describing the perceptual object as being 'in actuality' or 'in fulfilment' (standardly, ἐντελεχεία) on the one hand and as being 'in activity' (ἐνέργεια) on the other. Indeed, it is very important for Aristotle to insist that a perceptual object is what it is in actuality/fulfilment (ἐντελεχεία) *independently* of whether it is in activity or not. More on this in Sections 3.1, 4.2, and 4.3. The possibility cannot be excluded that ἐνέργεια at 417a18 (attested as early as Alexander of Aphrodisias, *Quaest.* 3.3, 83.9) is an early scribal intervention, especially given how easily this might have happened after a passage (417a9–17) containing five ἐνέργεια-words and no ἐντελεχεία-word (cf. in this context Simplicius' testimony concerning Aristotle's definition of change in *Phys.* 3.1–2 (*In Phys.* 414.15–20), which suggests that replacing an ἐνέργεια-word by an ἐντελεχεία-word or vice versa was not uncommon; I owe this observation to Anagnostopoulos 2010: 74 n. 72).

³ The reference seems to be to R&W₁ or the text Aristotle was referencing there.

πάντα δὲ πάσχει καὶ κινεῖται ὑπὸ τοῦ ποιητικοῦ καὶ ἐνεργείᾳ ὄντος. διὸ
 ἔστι μὲν ὥς ὑπὸ τοῦ ὁμοίου πάσχει, ἔστι δὲ ὥς ὑπὸ τοῦ ἀνομοίου,
 καθάπερ εἵπομεν· πάσχει μὲν γὰρ τὸ ἀνόμοιον, πεπονθὸς δ' ὁμοίον ἔστιν.
 (An. 2.5, 417a17–21)

The general idea of Aristotle's response seems clear enough in both passages. Those who say that like is affected by like are right insofar as *the result* of being affected (expressed by the perfect tense πεπονθέναι) is considered, but they are wrong insofar as we consider the πάσχειν itself (in the present tense). That which can perceive is *like* the perceptual object insofar as it has (already) been affected by it, and so assimilated to it, but it is unlike it insofar as it is (still) being affected by it.

The first thing to notice about this formulation of Aristotle's response is that it is not exactly the one that most readers expect Aristotle to have in mind in R&W₁. Standardly, Aristotle's reference to *Generation and Corruption* in R&W₁ is interpreted as pointing to his resolution of the initial puzzle of GC 1.7 along the following lines.⁴ On the one side, most of the thinkers (οἱ πλεῖστοι) believe that like cannot be affected by like and that acting is possible only between things that are unlike and different from one another (323b3–10). On the other side, Democritus claims that what acts and what is affected must be the same and like (323b10–15). After presenting arguments in favour of and against each side (323b15–29), Aristotle turns to offer his own account, which he believes can incorporate the true elements of each party's view (323b29–324a9):

[**Genus/Species**] But given that not everything is such as to be affected [by something] and to act [on something], but only those [things can act one on another] that are contraries (ἐναντία) or that have a contrariety [between them], it is necessary that what acts and what is affected are in genus (τῷ γένει) like [one another] and identical, but in species (τῷ εἶδει) unlike and contrary [to each other]. For a body is such as to be affected by a body, a flavour by a flavour, a colour by a colour and in general one thing by another of the same genus. (GC 1.7, 323b29–33)

When we start reading An. 2.5 with this passage in mind, it may appear that Aristotle employs R&W₁ to refer to it.⁵ Yet, as we have seen, the way in which he fleshes out his response in R&W_{2&3} is different from the scheme presented in the quoted passage. Indeed, there are at least four reasons for not identifying Aristotle's reference in R&W₁ with this passage.

⁴ On that puzzle, see Joachim 1922: 148–52, Wildberg 2004: 224–32, Kelsey 2022: 80–2.

⁵ See e.g. Hicks 1907: 350, Ferejohn 1999: 156, Charles 2000: 114, Burnyeat 2002: 37–9, Polansky 2007: 225, and many others.

(1) The key distinction from Genus/Species between the two interpretations of likeness is never employed in *An.* 2.5. The state of the patient before the acting is completed is never described here in terms of generic likeness, but always in terms of unlikeness. Instead, Aristotle's response in *R&W*_{2&3} hinges on a distinction between the present and the perfect tense that is not even alluded to in Genus/Species.

(2) These differences seem well motivated. Later in *GC* 1.7, when Aristotle turns to consider the first principles of acting (at 324a24ff.), he, effectively, throws into question his earlier adoption of the 'Democritean' view according to which the patient and the agent are always generically alike, and so capable of mutually acting upon each other. Instead, there are, he insists, agents that can act while being impassive in the sense that they themselves are never affected by that upon which they act. The example that Aristotle provides here is the art of medicine.⁶ As he puts it: 'those agents that do not have the form in matter are impassive, whereas those that [have the form] in matter, can be affected'.⁷ The reciprocity in the latter case, Aristotle adds, is explained exactly by the fact that the agent and what it acts upon have the same matter and are of the same genus.⁸ Fire, for instance, is of this kind, for its heat is 'in matter'.⁹ Medicine, in contrast, is emphatically not a form 'in matter', and so the 'Democritean' generic likeness (implying reciprocity) cannot be applied to it, at least not straightforwardly.¹⁰ This point will hold for all productive arts, and it also has significant theoretical implications for how the agency of artisans should be understood: a medical doctor is not, qua doctor, affected by her patients because the form (i.e. the art of medicine), as the primary agent, is not 'in matter' (rather, it is in the doctor's soul); she may be exhausted by her practice or become infected with an illness while in the office, but that in no way diminishes or otherwise affects her expertise.¹¹

The reason why becoming clear on this is important for the question of how exactly *An.* 2.5 draws on *GC* 1.7 is that, as we shall see, Aristotle is eager to emphasize a similarity between the perceptive capacity and capacities like arts.¹² One crucial aspect of this comparison is that perceptual

⁶ See *GC* 1.7, 324a34–b2: '[agents] that do not share the same matter [with the patients] act while being impassive, like the art of medicine; for in producing health, it is in no way affected by that which is being healed'.

⁷ *GC* 1.7, 324b4–6. ⁸ *GC* 1.7, 324b6–10. ⁹ *GC* 1.7, 324b18–19.

¹⁰ Cf. again *GC* 1.10, 328a18–22.

¹¹ For Aristotle's account of impassive agents, see also *Metaph.* Z.7, 1032a27–b23 and *GA* 1.22, 730b5–23.

¹² See *An.* 2.5, 417b16–18, 417b29–32; cf. 417a32–b2. For further discussion, see Sections 3.1 and 3.2.

objects are to be conceived, according to Aristotle, as impassive agents like doctors.¹³ So, according to *De Anima*, the way in which the perceiver is related to perceptual objects is analogous to the way in which a patient relates to a medical doctor.¹⁴ It would be strange then if Aristotle opened *An.* 2.5 by accepting a demand of symmetrical generic likeness in the case of perceiver and perceptual object, in the way that it had been introduced in Genus/Species, because that schema does *not* apply, in *GC* 1.7 itself, to the cases most relevant to *An.* 1.5.¹⁵

The other pair of reasons for not identifying Aristotle's reference in R&W_I with the quoted passage from *GC* 1.7 come from a consideration of what Aristotle says about his predecessors in *GC* and *An.*, respectively. (3) First, in *GC* 1.7 Aristotle goes out of his way to stress that nobody shared Democritus' view according to which like is affected by like. Democritus, we read, talked about acting 'unlike all others, alone, in a peculiar way'.¹⁶ The view introduced at the outset of *An.* 2.5, in contrast, seems to be one that is widely shared.¹⁷

(4) Moreover, we shall see reasons to believe that the thinkers Aristotle has in mind at the outset of *An.* 2.5 all stand, without exception, on the other side of the *GC* 1.7 puzzle from Democritus. The context of *An.* 2.5 itself suggests, as noted above, that the *LAL* claim was made specifically as a part of the anonymous thinkers' reflections *on perception*. This seems to be confirmed by a passage from *An.* 1.5 which implies, among other things, that Aristotle has adherents of *LKL* in mind:¹⁸ it is in the context

¹³ See *An.* 3.2, 426a2–8 and 20–7; 3.7, 431a4–7 (if construed along with Menn 1994: 110 n. 49; cf. Corcilius 2020: 191–4). In fact, this idea may already be playing a role in *An.* 2.5, 417a13–14 (see Section 3.1). For further discussion of the impassivity of perceptual objects, see Section 7.1.

¹⁴ Temperatures, colours, and odours, to be sure, are not impassive agents on their own terms, as arts are according to Aristotle. This is because they do have their form in matter – and, so, *can* be affected by objects in contrary states. The analogy is primarily due to the kind of capacity that *perceivers* are endowed with: it is this capacity that allows perceivers to receive forms of perceptual objects without the matter and which makes it, in a sense that is yet to be explored, true that the agent and the patient here 'have not the same matter', so that the agent 'acts while being impassive' (*GC* 1.7, 324a34–5).

¹⁵ This is not to say that, on Aristotle's considered view, generic likeness does not have any application in the case of perception. In fact, he will take much care in *An.* 2.7–11 (and still more in *Sens.* 2–5) to specify, one by one, the material conditions for each sense, and in all of these cases the object and the organ will have something in common that can satisfy something like the 'Democritean' demand presented in Genus/Species. The point is only that none of this is relevant to the account of *An.* 2.5, which intends to capture the essence of perception on the most general level.

¹⁶ Δημόκριτος δὲ παρὰ τοῦς ἄλλους ἰδίως ἔλεξε μόνος (*GC* 1.7, 323b10–11). Cf. Theophrastus, *Sens.* 49, 513.10–17, where Democritus' view of acting is also presented as being exceptional.

¹⁷ This incongruity is noticed by Joachim 1922: 150; but instead of questioning the parallelism, he concludes that the attribution in *GC* 1.7 to Democritus *alone* is 'strange'.

¹⁸ The passage (410a23–6) is quoted and discussed in Sections 2.2 and 2.3.

of *LKL* that, according to Aristotle, these thinkers arrived at the conclusion that, in perception, the corollary *LAL* must hold. The immediate upshot of this observation for our question is the following. Whatever the exact motivation of their acceptance of *LAL* was, it seems to have been very different from Democritus' motivation for insisting on *LAL* as a universal thesis about being affected. Indeed, in their broader understanding of acting and being affected, the thinkers in question seem to have roundly disagreed with Democritus and insisted that only unlike can be affected by unlike. Perception is an exception for them, which produces a tension with their general view about acting rather than being an application of it. Accordingly, if Aristotle wants to explain in *An.* 2.5 the extent to which *their* claim that in perception like is affected by like is correct and the extent to which it is not, he cannot simply rehearse the argument from *GC* 1.7 that explained the truth and the falsity of *Democritus'* claim about being affected in general.

2.2 Aristotle's Engagement with LKL

Thus, if Aristotle is not thinking in $R\&W_1$ of the 'Democritean' generic likeness, (a) how is his response (here and in $R\&W_{2\&3}$) based on *GC* 1.7, to which he clearly refers? And (b) how did the interlocutors that he has in mind in $R\&W_1$ arrive at *LAL*?

(a) The Background from *GC* 1.7

In $R\&W_{2\&3}$, as we saw, *LAL* is analysed in terms of a distinction between being affected (present tense) and having been affected (perfect tense), where the view is said to be right insofar as what has (already) been affected is like the agent, but it is wrong insofar as what is (still) being affected must be unlike the agent. This is not a point that Aristotle explicitly elaborates in *GC* 1.7, but in one passage within that chapter he does espouse something very close to it. This, I submit, is the likeliest candidate for Aristotle's reference in $R\&W_1$ (on the assumption that he has one specific passage in mind):

Thus, it is now clear why it is well said that fire heats and what is cold cools down and in general (ὅλως) that what acts assimilates to itself that which is affected (τὸ ποιητικὸν ὁμοιοῦν ἑαυτῷ τὸ πάσχον). For what acts and what is affected are contrary (to each other) and coming to be moves into the contrary. Thus, it is necessary that what is being affected is transitioning

into that which acts (τὸ πάσχον εἰς τὸ ποιοῦν μεταβάλλειν), because it is in this way that coming to be will move into the contrary. (*GC* 1.7, 324a9–14)

According to Aristotle, the patient is unlike the agent acting on it, but the acting consists in assimilating the former to the latter. From here it is only a small step to the formulation of *R&W*_{2&3}: as long as something is *being affected* it is unlike that which acts upon it, but as soon as *it has been affected* (i.e. the assimilation has been completed) it is like it.¹⁹ The 'Democritean' likeness in genus plays no role here. While the quoted account is certainly consistent with the resolution of the initial dilemma in Genus/Species – and seems, indeed, to be implied by it²⁰ – the implication does not go in the other direction. Aristotle can easily talk about agents, such as the art of medicine (i.e. the form of health present in the doctor's soul) assimilating the doctor's patients to itself by producing health in them, without implying that the two sides share the genus or the matter in the sense that would allow the agent to be affected by that upon which it acts.

(b) The Proponents of *LAL*

If this is right, which thinkers did not, according to *An.* 2.5, sufficiently appreciate the difference between being affected on the one hand and having been affected and assimilated on the other? There is a wide consensus that Aristotle's primary interlocutors at the outset of *An.* 2.5 are those who, according to Book 1, endorsed *LKL* in the form of *straightforward isomorphism*, implying that the soul – as the primary cause of truly cognizing all things – must itself be (or be composed of) the element(s) of everything.²¹

This view is attributed very broadly in *An.* 1.2 to thinkers ranging from Empedocles (404b11–15) to Plato (404b16–27), Diogenes (405a23–5), Heraclitus (405a25–9), and Critias (405b5–8). In a summarizing passage at *An.* 1.2 405b10–23, Aristotle, in fact, attributes some version of this view to *all* of his predecessors with the single exception of Anaxagoras.

¹⁹ Cf. *Phys.* 3.2, 202a9–12 and Aristotle's solution to the dilemma as to whether like is nourished by like or contrary by contrary in *An.* 2.4 (see especially 416b3–9).

²⁰ At *GC* 1.7, 324a14–24 Aristotle spells out exactly how the quoted account confirms this resolution.

²¹ Despite this consensus, interpreters often hesitate to identify adherents of *LKL* with τινες at 416b35 (see e.g. Rodier 1900: 248, Hicks 1907: 350, and Burnyeat 2002: 38). This is because they take *R&W*₁ as referring to Genus/Species, which suggests that τινες must (despite being in the plural) coincide with Democritus alone. Once this interpretation has been rejected, however, the identification of τινες with the adherents of *LKL* is very natural.

This passage seems to be laying out the principal puzzle (ἀπορία) concerned with knowing:

Those who define the soul by knowing (τῷ γινώσκειν) assert either that it is the element or that it is composed of the elements, and all of them say much the same thing, except for one. For they claim that like is known by like (γινώσκεσθαι τὸ ὅμοιον τῷ ὁμοίῳ). And because the soul can know everything, they assume that it is composed of all principles. And so those who say that there is some single cause and [only] one element also assume that the soul is [something] one, such as fire or air. But those who say that there is more than one principle also assume that the soul is [something] more than one. Only Anaxagoras claims that νοῦς is impassive (ἀπαθής) and has nothing in common with anything else. But how (πῶς) it will know and in virtue of which cause (διὰ τίν' αἰτίαν), if it is such [as he claims], he did not say, nor is it clear from what he said. (*An.* 1.2, 405b13–23)

It is rather surprising to hear Aristotle saying that so many of his predecessors endorsed *LKL*, and it is even more surprising that he completely omits from his discussion in Book 1 the view that, according to Theophrastus, competed with this position – namely, that contrary is known by contrary (*CKC*).²² In fact, it is by contrasting these two approaches that Theophrastus' own treatise *De Sensibus* begins:

Concerning perceiving, the most important and widely shared opinions are two: some say that perceiving is by the like (τῷ ὁμοίῳ), others that it is by the contrary (τῷ ἐναντίῳ). (Theophrastus, *Sens.* 1, 499.1–2)

It is striking to see that, while Theophrastus goes on to attribute this latter view to 'those around Anaxagoras and Heraclitus' (*Sens.* 1, 499.3–4), Aristotle classes Heraclitus with *LKL* (*An.* 1.2, 405a25–9) and attributes an altogether different view to Anaxagoras. One point of agreement between Aristotle and Theophrastus that may be interesting for our purposes here is that they both exclude Democritus from the group of adherents of *LKL*. Aristotle does not ascribe any definite view of knowing to Democritus in Book 1, while Theophrastus says that Democritus'

²² Cf. Mansfeld 1996: 169–70. Aristotle's mention of 'those who included contraries among the principles' in the following lines should not be understood as referring to *CKC* (pace Laks 1993: 24, cf. Laks 2002a: § 15). Instead, it seems that Aristotle has in mind a sub-class of those proponents of *LKL* 'who say that there is more than one principle' (405b18–19). This sub-class would apparently include Empedocles (as Philoponus suggests at *In An.* 91.33–5). For a similar formulation, see Theophrastus *Sens.* 4, 500.2 (καὶ τῷ ἐναντίῳ καθ' αὐτὸ ποιεῖ τὴν αἴσθησιν) where he does not address *CKC* but instead stresses that Parmenides endorsed *LKL* also with respect to the principle that is contrary to light (i.e. darkness).

theory shares features reminiscent of both competing views but belongs fully to neither.²³ This further confirms the suggestion above about the opening passage of *An.* 2.5: if Aristotle does, indeed, have *LKL* in mind here, then the intended truth of *LAL* cannot be the Democritean truth explicated in *Genus/Species*.

Perhaps the most striking aspect of the discussion in Book 1 is that Aristotle explicitly associates *LKL* with the idea that perceiving is a kind of being affected. This attribution is already implicitly present in the above-quoted passage, as the contrasting feature of Anaxagoras' view is just that νοῦς is *impassive* (ἀπαθής), which implies that, according to *LKL*, the subject of knowing is *not* impassive, and so acting and being affected must apparently play some role in their account.²⁴ Later, in *An.* 1.5, when Aristotle launches a series of attacks on *LKL*, he explicitly attributes the assumption that perceiving is a kind of being affected to its proponents and accuses them, on this basis, of being implicated in a rather crude self-contradiction:

[**Self-Contradiction**] It is also absurd to claim on the one hand that like cannot be affected by like but on the other hand that like perceives like and like is known by like. [For] they also assume that perceiving is a kind of being affected and being changed. And [they assume] similarly for thinking and knowing.

ἄτοπον δὲ καὶ τὸ φάναι μὲν ἀπαθὲς εἶναι τὸ ὅμοιον ὑπὸ τοῦ ὁμοίου,²⁵
αἰσθάνεσθαι δὲ τὸ ὅμοιον τοῦ ὁμοίου καὶ γινώσκειν τῷ ὁμοίῳ τὸ ὅμοιον·
τὸ δ' αἰσθάνεσθαι πάσχειν τι καὶ κινεῖσθαι τιθέασιν· ὁμοίως δὲ καὶ τὸ νοεῖν
τε καὶ γινώσκειν.

(*An.* 1.5, 410a23–6)

This passage seems to be operating directly in the background of *R&W*₁. Since the thinkers in question believe that like is perceived by like and are committed to saying that perceiving is a case of being affected, they end up also committing themselves to the view that, in perception, like is affected by like (*LAL*) – despite the fact that this seems to contradict their general view on acting.

In *An.* 2.5, Aristotle does not refer to this self-contradiction. Instead, he chooses to frame his first general account of perception as explaining that *LAL* is right when it comes to 'having been affected' (perfect tense), but wrong when it comes to 'being affected' (present tense). In order to

²³ See *Sens.* 49, 513.10–17.

²⁴ Cf. Laks 1993: 24–5.

²⁵ Cf. *GC* 1.7, 323b3–4.

understand why Aristotle proceeds in this way, we, first of all, need to get a better handle on his striking analysis of *LKL* in *An.* 1.5.

2.3 *LKL* and the Passivity of Perception

Aristotle's claim that the adherents of *LKL* are committed to *LAL* for knowing (which leads to a crude contradiction) is surprising. This is so, among other reasons, because Theophrastus never says that the adherents of *LKL* believed perception to be a kind of being affected.²⁶ On the contrary, he represents the view that perception is an alteration or an affection as the main motivation for those who *opposed* *LKL* and who, instead, defended *CKC* (*Sens.* 2, 27, 31).²⁷ As we have noted, Aristotle's *De Anima* remains silent about this competing view and contrasts *LKL*, instead, with Anaxagoras' impassivity view.²⁸

We shall see that Theophrastus is well aware of this latter contrast.²⁹ The fact that his discussion is framed differently than Aristotle's can perhaps be explained by a difference in the respective purposes of their projects. The contrast between *LKL* and the impassivity view turns out to be more helpful if our aim is to motivate the true account of perception (and thought) by bringing out an apparent conflict between two basic requirements on knowing.³⁰ However, doing this would not be conducive to building a rich account of past views, given how little can be said about the impassivity view in comparison with *CKC*.³¹

²⁶ For an insightful discussion of Theophrastus' presentation of this view, see Johansen 2019.

²⁷ 'Those, on the other hand, who assumed that perceiving comes about by alteration (ἐν ἀλλοιῶσει γίνεσθαι) and that like cannot be affected (ἀπαθές) by like, but [only] contrary can be affected (παθητικόν) [by contrary], attributed knowing (τὴν γνώμην) to this [i.e. to the contrary]' (Theophrastus, *Sens.* 2, 499.7–9). Cf. *Metaph.* Γ.5, 1009b12–17.

²⁸ Cf. n. 22. Aristotle's own account does, to be sure, resemble this view in one aspect; cf. *An.* 2.11, 424a2–7 (discussed in Sections 6.4 and 6.5).

²⁹ See *Sens.* 19, 504.25–505.2 and 38, 510.9–11 (quoted and discussed in Sections 2.7 and 6.2, respectively).

³⁰ For further discussion, see Section 2.7 (cf. Section 1.4).

³¹ This is not to say that Theophrastus' aims are purely historical. He is clearly presenting his predecessors already with an eye towards arriving at the Aristotelian account (for a detailed discussion of the connection, see Mansfeld 1996 and Johansen 2019). That is why the *De Sensibus* can be particularly useful for reconstructing Aristotle's engagement with his predecessors in a richer way than *De Anima* 1 would permit us to do on its own. (For a discussion of Theophrastus' method in the *De Sensibus*, see Baltussen 2000: 31–70; cf. Baltussen 1992). Yet, this is also why the *De Sensibus* cannot be read as a trustworthy historical account. For a sceptical view on the historical value of Theophrastus' – and Aristotle's – construction of *LKL* in general and, in particular, his ascription of this view to Empedocles, see Sedley 1992: 26–31, cf. Kamtekar 2009: 216–25 (contrast e.g. Long 1966, who interprets Empedocles along the Peripatetic lines).

If this is right, the question remains why Aristotle believes himself to be justified in ascribing the claim that perceiving is a kind of being affected to the adherents of *LKL* and, by so doing, implicating them in the puzzle formulated succinctly in Self-Contradiction. Aristotle makes it clear here that the adherents of *LKL* in general believe that only unlike can be affected by unlike – that is, they disagree with Democritus when it comes to general intuitions about being affected. This immediately makes us wonder why they should accept *LAL* in the case of perception, and so commit themselves to such an obvious inconsistency.³²

I think the most likely answer is that, in Self-Contradiction (and apparently as early as *An.* 1.2, 405b10–23), and then again in R&W₁, Aristotle is building on certain considerations and arguments that, by his lights, *should* have led the adherents of *LKL* to assume that perceiving is a kind of being affected – irrespective of whether they, themselves, actually stated this assumption or not. Regrettably, there seems to be nothing in the *De Anima* itself that would help us understand how exactly this argumentative move might have been employed. This is where Theophrastus' critical discussion of *LKL* in his *De Sensibus* becomes genuinely helpful. Although it does not allow us to identify the exact considerations that Aristotle is presumably relying on in Self-Contradiction, it does provide an insight into *the kind of* arguments that can bring out the commitment to a passivity of perception on the side of the allegedly traditional *LKL*.³³

In Theophrastus' presentation, *LKL* is closely connected with the notion of effluences,³⁴ a view wherein the perceptual object emits something that is then brought to the perceiver and meets with what is like in them. This might have already been enough for Aristotle to conclude that the perceiver, according to *LKL*, must in fact *be affected* in some sense by this effluence as 'the ultimate and proper agent'.³⁵ In a similarly straightforward way, Theophrastus analyses Empedocles' concept of 'fitting'

³² Burnyeat is satisfied with recognizing a 'dialectic construct' in Self-Contradiction ('Never mind whether any one philosopher ever held this seemingly inconsistent triad of opinions', Burnyeat 2002: 37). It surely *is* a construct in the sense that the philosophers in question would certainly not be happy with their views being presented in this manner. However, we must not stop there. I shall attempt to show that, to understand Aristotle's engagement with his predecessors in *An.* 2.5, it is crucial to ask *how*, according to Aristotle, his predecessors came to be implicated in this predicament. Although Carter 2019a: 160–1 ascribes a great importance to Self-Contradiction, he does not raise this key question, either.

³³ For a kindred approach to Theophrastus' *De Sensibus* as 'an integral part of the same Peripatetic dialectic as the *DA*', see Johansen 2019: 228.

³⁴ See *Sens.* 1, 499.6 (τὸ μὲν αἰσθάνεσθαι τῇ ἀπορροῇ γίνεται). ³⁵ Cf. *GC* 1.8, 324b25–9.

(ἀρμόττειν), which describes the successful meeting of the effluence with the corresponding element in the perceiver, as being referred back to (1) the concept of likeness and (2) the concept of touching (so that like is touched by like), where the latter can be argued to imply already some kind of acting and being affected: ‘For he explains knowing by both these notions, namely the like (τῷ ὁμοίῳ) and the touching (τῇ ὁφῇ). That is why he used the term “fitting” (ἀρμόττειν).’³⁶

A more sophisticated strategy of eliciting the assumption on the part of LKL that perceiving is a kind of being affected could have been based on another kind of challenge that we also encounter in *An.* 1.5 (though this, too, occurs in an extremely compressed form):

In general, what is the reason for not everything having a soul if [as they say] everything is either an element or made out of elements, either one or more or all of them? Because [from this fact it would] necessarily [follow if we accept LKL that] everything knows something or a plurality of things or everything. (*An.* 1.5, 410b7–10)

Theophrastus develops a similar *symmetricity argument* in his polemic against Empedocles in *Sens.* 12: if there is nothing more about the *likeness* that characterizes perceivers with respect to their perceptual objects than what can be said about *any* two similar objects in nature,³⁷ then LKL will have the absurd consequence that everything can perceive something – namely all the things that are in some respect *similar* to it.³⁸

After this rather straightforward criticism, Theophrastus goes on to formulate two closely related objections that turn out to be directly relevant for our investigation:

Furthermore, in the ensouled beings themselves: (i) Why should the fire in the animal (τὸ ἐν τῷ ζῳῷ πῦρ) perceive rather than the fire outside (τὸ ἐκτός), given that each fits into the other (ἐναρμόττουσιν ἀλλήλοις)? For the symmetricity (ἡ συμμετρία) and the likeness (τὸ ὅμοιον) belong [to both in the same way]. And (ii) it is necessary that [the fire inside] has some distinguishing feature (διαφορά τις) if it is not itself able to fill the passages, whereas [the fire] entering from outside [can do this]. So, if [these two] were in every respect (πάντη)

³⁶ *Sens.* 15, 503.22–3; cf. Aristotle, *Sens.* 3, 440a15–20.

³⁷ In Empedocles’ case, as Theophrastus points out at *Sens.* 12, 503.3–4, both perception and ordinary likeness are explained in terms of some symmetricity between passages.

³⁸ This would especially be the case for those things that are composed of all the elements, such as bone and hair, which would – on this view – absurdly be prime candidates for being perceivers, see *Sens.* 23, 506.8–9; cf. *An.* 1.5, 410a25–b2.

and completely (πάντως) alike,³⁹ there would be no perception. (Theophrastus, *Sens.* 13, 503.4–9)

The problem with the concept of *likeness* as allegedly employed by Empedocles is that it seems to be perfectly symmetrical.⁴⁰ However, if this is the case and the effluence is, in fact, completely and in every respect *like* that which it is supposed to 'fit' into on the side of the perceiver, it is not clear at all (i) why we should say that the perceiver perceives the object that 'sent' this effluence, rather than saying that it is the effluence (or the external object by means of the effluence) that perceives the perceiver;⁴¹ and (ii) why the element present in the perceiver does not also perceive itself in the absence of any effluence.⁴²

We can imagine that once an adherent of *LKL* has followed his Peripatetic challenger this far, she may be willing to accept Theophrastus' offer and say that, according to her view, the perceiver and the perceived object are completely like one another (ὅμοιον πάντως), but are *not* like one another in all respects (ὅμοιον πάντη). Clearly, the perceiver is the one who *receives* the effluence while the object *sends* it and the effluence *is received*, and this makes their relation asymmetrical, explaining why one perceives whereas the other is perceived, or is that by means of which the source of the effluence is perceived. Once this much is agreed on, it is just a small step to also agreeing that, according to *LKL*, the object *acts*, while the perceiver *is affected*.

This appears to be at least one possible way of showing how the adherents of *LKL* are, in fact, committed to a passivity of perception, and so to *LAL*, although this conflicts with their general view of acting, according to which only unlike can be affected by unlike. There may also be other ways of securing this result, but these need not concern us now. What matters for our purposes is that, if this result can be brought about *in some way*, the thinkers in question (i.e. almost all of Aristotle's predecessors according to him) face the serious problem described succinctly in Self-Contradiction.

³⁹ For this formulation see *GC* 1.7, 323b18–20.

⁴⁰ Cf. *GC* 1.7, 323b3–7 (and b20–1), where a similar kind of symmetry is mentioned as the reason why most of Aristotle's predecessors (including, apparently, Empedocles) claimed that like cannot be affected by like.

⁴¹ Cf. Reinhardt 1916: 77–8 for an account of Parmenides' claim that dead bodies perceive darkness and silence (Theophrastus *Sens.* 4) as a criticism of what is generally taken to count for knowing.

⁴² This difficulty is further developed in *Sens.* 14 and is, arguably, restated by Aristotle in different terms just after he introduces *LAL*, at *An.* 2.5, 417a2–9 (which is quoted and discussed in Section 2.4).

However, Aristotle's aim should not be thought of as primarily destructive. Rather, in line with his view on the constructive role of puzzles, he seems to have believed that it is already a significant achievement to have successfully formulated the problem. That is because, once this is accomplished, the correct account of perceiving, which would successfully separate the truth from the error in *LKL*, is already in sight. It is exactly this problem, I suggest, from which *An.* 2.5 starts.

2.4 Another Challenge for LKL

Immediately after R&W₁, Aristotle formulates the following puzzle about perception:

(i) There is a difficulty (ἀπορία) [related to this view] as to why there is not perception (αἴσθησις), too, of the senses (τῶν αἰσθήσεων) themselves and why these do not produce perception (οὐ ποιοῦσιν αἴσθησιν) without [the presence of] external objects (ἄνευ τῶν ἕξω), given that fire and earth and the other elements are present in them and that perception is of these, either [of these elements] themselves or their accidents. (ii) [There being this difficulty,] that which can perceive (τὸ αἰσθητικόν) is clearly not in activity (ἐνεργείᾳ) but only in capacity (δυνάμει), which is why it does not perceive, just as the combustible [material] (τὸ καυστόν) does not burn (οὐ καίεται) on its own without that which can burn [something] (ἄνευ τοῦ καυστικοῦ); for [if it did,] it would burn itself (ἕκαστε ἂν ἑαυτόν) and would have no need of fire in fulfilment (τοῦ ἐντελεχείᾳ πυρὸς ὄντος). (*An.* 2.5, 417a2–9)

When the puzzle in (i) is read as a difficulty that Aristotle raises for himself, the answer in (ii) seems quite unsatisfactory.⁴³ However, reading the puzzle in this manner does not seem warranted, because Aristotle has not yet started formulating his own view. Rather, immediately before, he introduced the anonymous thinkers committed to *LAL*, while flagging that their view is only partly right. It is thus natural to read the puzzle within the context of Aristotle's engagement with *LKL*, as a way of showing the limits of the reported view and thereby preparing a foil for his own account. This seems to be exactly what Aristotle is doing.⁴⁴ More specifically, I want to suggest that the difficulty presented in (i) closely corresponds to one of the objections formulated by Theophrastus against Empedocles in *Sens.* 13, which has already been quoted above:

⁴³ See e.g. Shields 2016: 213–15 for this point.

⁴⁴ According to Burnyeat 2002: 39 the difficulty is just a 'reappearance' of Aristotle's argument against the Democritean view that like is affected by like from *GC* 1.7, 323b21–2. However, see Section 2.1 for the reasons why the Democritean view is unlikely to be relevant to Aristotle's purposes here.

And it is necessary that [the fire inside] has some distinguishing feature if it is not itself able to fill the passages, whereas [the fire] entering from outside [can do this]. (Theophrastus, *Sens.* 13, 503.6–8)

This objection is independent from the identification of perception as a kind of being affected.⁴⁵ Rather, as we have seen, this kind of argument can serve as a way of *eliciting* the assumption on the part of *LKL* that perception is indeed a kind of being affected by perceptual objects. Aristotle's point in (ii) is closely connected here, or so I shall argue.

He states: 'that which can perceive is not in activity, but only in capacity' (417a6–7), and so it requires an external perceptual object that is in fulfilment (417a9) and that can, thereby, bring it into activity.⁴⁶ This cannot be a simple statement of the obvious fact that perceivers sometimes do not perceive *X* and sometimes do, depending on whether *X* is present to them in the external world or not. No one could disagree with this; but it would be just another way of formulating the difficulty, not proposing a solution to it. Nor does Aristotle's point seem to draw on the technical meaning of τὸ αἰσθητικόν as being the perceptive capacity of the soul.⁴⁷ This would in no way contribute to an explanation of why the fire and the earth in the organs should be any less capable of activating the perceptive capacity than the fire and earth outside.⁴⁸

What Aristotle seems to have in mind in (ii) is rather that our explanation why something is *perceptive* must successfully account for the

⁴⁵ As is a similar puzzle raised at *Sens.* 14, 503.18–19: 'There is a difficulty in any case, for either it is necessary to presuppose [the existence of] void [in the passage], or animals will always perceive all the things [being present in the passages].' In this case, the trouble is no longer about the fire in the eye fitting into its own passages, but rather about other elements present in the organ doing so. Cf. *Metaph.* Γ.5, 1010b35–1011a1. For a similar observation about (i), see Carter 2019a: 162 and Anagnostopoulos 2023: 75–6.

⁴⁶ As has already been noted in n. 2, I believe that ἐνεργεία should not be rendered 'in actuality' here (as is commonly done). I take ἔστιν ἐνεργεία to mean roughly the same as ἐνεργεῖ, 'is active'. One reason to think that this must be so comes from a straightforward comparison with what Aristotle goes on to say at 417a21–b2 (and 417b16–19, 29–32): he will go out of his way there to insist that τὸ αἰσθητικόν *must* be described as already being 'in fulfilment' or 'in actuality' (ἐντελεχείᾳ). If this is the case then it is difficult to understand how he could claim, at 417a6–7, that it is 'obvious that τὸ αἰσθητικόν is *not in actuality*'. What is obvious is only that τὸ αἰσθητικόν is not, on its own, *active*; the exact kind of capacity that is characteristic of it has not yet been determined and one of Aristotle's points will be exactly that the relevant notion of capacity is *not* opposed to ἐντελεχεία. For further discussion on this matter, see Section 3.2.

⁴⁷ Pace Lorenz 2007: 192 and Carter 2019a: 162 (Aristotle's 'strategy for solving this problem is to make a distinction between (i) the actual state of the sense organs qua elemental and (ii) the potential state of the perceptive capacity that resides within them').

⁴⁸ The idea that τὸ αἰσθητικόν is used in this technical sense by Aristotle is questionable for *An.* 2.5 as a whole (cf. the comparison with *An.* 2.4, 416a21–b11 in Section 1.1, n. 17). For further discussion, see Section 5.4.

obvious fact that whether perceivers perceive *X* or not is determined by whether *X* is present to them in the external world or not. It is exactly at this point where the adherents to the traditional *LKL* view, as construed by Aristotle, fail. Their view will require them to explain why something is perceptive of, say, fire (or white colour) by an appeal to the *actual presence* of fire in it. Yet, this seems to imply unacceptably that the fire present in us should be perceptive of itself no less than it is of the external fire, which would make perception independent of whether or not an external object was present to the perceiver. As in Theophrastus' *Sens.* 13–14, the argument seems to be aimed at putting pressure on the symmetry of likeness presupposed by the traditional account.

One might then wonder whether Aristotle's lesson here at least hints at an alternative account. What he offers is an analogy with burning, which first of all reaffirms the characterization of perception as a case of being affected (being burned is Aristotle's favourite example of being affected).⁴⁹ The point of this analogy seems to be exactly an *asymmetry* between that which can perceive (compared with that which can burn) on the one hand and the perceptual object (compared with fire in fulfilment) on the other. This asymmetry is developed in terms of capacity (*δυνάμει*) and fulfilment (*ἐντελεχείᾳ*). Just as combustible material requires an actual fire acting on it to burn (or at least to start burning), that which can perceive needs, in order to be activated, an external perceptual object that is already in fulfilment. This puts obvious constraints on the sense in which *LKL* can be true – constraints that are parallel to those put on it by arguments eliciting the assumption that perception is a kind of being affected.

As soon as this much is agreed on, we immediately see important disanalogies in (ii) that are unlikely to have been missed by Aristotle.⁵⁰ Once the combustible material has been set on fire, (a) it continues burning on its own even after the initial source of it being set on fire has departed and (b) its capacity for burning is sooner or later exhausted. That which can perceive, in contrast, (a') ceases to perceive immediately upon the perceptual object being removed (i.e. upon the object ceasing to act on it), but (b') the capacity seems to be, in principle, inexhaustible. In order to account for these disanalogies, one would need to specify *the kind of capacities* that pertain, on the one hand, to that which can perceive, and, on the other, to that which can burn. Otherwise, the

⁴⁹ See *Cat.* 4, 2a3–4 and *Soph. Ref.* 22, 178a12–13; cf. *Phys.* 8.1, 251a15–16 and 251b31–252a1.

⁵⁰ Cf. *An.* 2.4, 416a9–18 for a contrast between animal/plant growth (nutrition) and the growth of a fire as it consumes combustible materials.

puzzle threatens to reappear, as it will seem that once the perceiver has been activated by the perceptual object, she will be always actively perceiving, or at least she will be perceiving until its capacity is exhausted, irrespective of whether the external object is still present or not. In other words, as long as we do not successfully distinguish the kind of capacity pertaining to perceivers from the kind of capacity pertaining to combustible materials, we shall not be in a position to understand why there cannot be *continued perceiving* without external perceptual objects being continuously present, or, indeed, how a case of continued perceiving differs from having an after-image. In this way Aristotle's lesson in (ii) starts building a case to show that distinctions need to be drawn between different kinds of capacities and different kinds of 'being activated' and 'being affected', as is done later in *An.* 2.5.

Yet, already at 417a2–9, Aristotle's puzzle – as a part of a larger Peripatetic engagement with *LKL* – brings out the limits of his predecessors' theory. It thereby circumscribes the conditions that any successful account of perception will need to fulfil.

2.5 The Truth of *LAL*

Let us now return to Aristotle's merciless analysis of *LKL* in Self-Contradiction: in perception like must be affected by like, but in general only unlike can be affected by unlike. This sounds like saying that *LKL* is simply wrong and beyond repair. And yet, Aristotle makes this view, and indeed its most problematic element (i.e. *LAL*), central to his argument in *An.* 2.5, returning at the two climaxes ($R\&W_{2\&3}$) to his explanation of the ways in which the claim is true and those in which it is false.

I have argued that the truth of *LAL* articulated here cannot be captured in terms of the 'Democritean' generic likeness. But what, then, can this truth amount to? Aristotle's concession to *LAL* in $R\&W_{2\&3}$ can easily sound like a mere courtesy, for he appears to be effectively saying that this view is plainly false. However, against this initial impression, I shall argue that there is a robust sense in which Aristotle *accepts LAL* (in line with the principle of τὰ καλῶς εἰρημένα λαβεῖν).

The difficulty with determining what is right about *LAL* will become clearer when we consider $R\&W_2$ in some detail:

Thus, in one sense it is affected (πάσχει) by like, in another sense by unlike, as we said. For it is the unlike that is being affected (πάσχει) but, having been affected (πεπρονθός), it is like. (*An.* 2.5, 417a18–21)

The problem is that, if we understand the difference between $\pi\acute{\alpha}\sigma\chi\epsilon\iota$ and $\pi\epsilon\pi\omicron\nu\theta\acute{o}\varsigma$ in the second sentence here (and then again in R&W₃) in a strictly temporal sense, Aristotle's acknowledgement that *LAL* is partly right becomes an empty gesture.⁵¹ The passage here says that the perceiver is affected ($\pi\acute{\alpha}\sigma\chi\epsilon\iota$) by like, and explains the truth of this fact, not in terms of any qualified sense of likeness, but in terms of the perfect tense: *LAL* is right insofar as the perceiver has been affected ($\pi\epsilon\pi\omicron\nu\theta\acute{o}\varsigma$) and so has come to be like the perceptual object. This concession is combined with a reservation formulated in terms of the present tense: *LAL* is wrong insofar as we consider not the result but what is leading up to it, 'for it is the unlike that is being affected ($\pi\acute{\alpha}\sigma\chi\epsilon\iota$)'.⁵²

Now, if the present and the perfect tenses in the second sentence are understood as temporal qualifications in terms of *Physics* 6.5–6 – that is, as distinguishing between an interval t_1 of changing from *A* to *B* and an interval t_2 of having changed to *B*, then the initial concession that there is a sense in which the perceiver is affected ($\pi\acute{\alpha}\sigma\chi\epsilon\iota$) by like turns out to be just empty words. This is the case because the result of Aristotle's analysis is that t_1 and t_2 meet only at a single moment *T*, as their common boundary, in which it is already true that *A* has changed to *B* and it is no longer true that *A* is changing to *B*. In terms of *GC* 1.7, this means that, starting with *T*, it is true that the perceiver is (in the full-fledged sense) like the perceptual object and so, starting with *T*, it is false that one can be affected by the other, for they now lack the requisite unlikeness. Thus, under a temporal interpretation of R&W_{2&3}, it is exactly at the moment in which the claim that the perceiver is like the perceptual object becomes true that it becomes impossible for the former to be affected by the latter. If Aristotle had this temporal model in mind in R&W_{2 & 3}, then the sense in which *LAL* is right would stand or fall due merely to an improper use of the present tense in R&W₁ and in the first sentence of R&W₂, referring indiscriminately to both the result and the process leading up to it. Once this inaccurate expression comes to be duly analysed into, on the one hand, the perfect tense signifying the result and, on the other, the present tense signifying what leads up to it, the initial formulation of *LAL* simply becomes false and should then be abandoned altogether. If this were the case, we would be left to wonder why Aristotle decided to frame *An.* 2.5 by claiming that there is something right about *LAL*.

⁵¹ Cf. e.g. Ferejohn 1999: 159.

⁵² If Aristotle were thinking of the 'Democritean' generic likeness, we would expect him to insist, on the contrary, that what is being affected is *like* the agent – just in a specific sense.

I suggest that, to avoid this unpleasant consequence and to understand Aristotle's point adequately, we *must not* take the distinction between the present and the perfect tense in $R\&W_{2\&3}$ in a straightforwardly temporal sense. Instead, we should understand the perfect and present tenses to signify the result and what leads up to it – or, more abstractly, the completion and the ongoing activity. The fact that in the case of changes (κινήσεις), as analysed in the *Physics* and *GC*, the completion and the ongoing activity exclude each other (because an ongoing change has, by definition, *not yet* been completed) does not mean that they must exclude each other in the case of every effect caused by an agent. It may be that there are *complete passive activities*, which are being caused by external agents, and which at the same time pass Aristotle's so-called tense test from *Metaph.* Θ.6 and *EN* 10.4. These activities, while being genuinely *passive* (as they are produced by an agent assimilating the patient to itself) would not be *kinetic*. Rather, their completion (πεπρονθέναι) would be no hindrance for the continuation of the agent's action and the patient's affection (πρόσχειν): the perfect tense would not exclude the present tense. I suggest that such a notion of complete passive activities is indeed what Aristotle intends to develop in *An.* 2.5 and that it is this notion that, ultimately, expresses the truth of *LAL*, purified of its elements of falsity.⁵³ If this is right, the argument appears to run as follows: if (1) perceiving is (a kind of) being affected and having perceived is (a kind of) having been affected, if (2) everything that has been affected by something has (in some sense) been assimilated to that agent and is (in some sense) like that agent, and if (3) everything that is perceiving has perceived, then (4) everything that is perceiving *X* is both (in some sense) like *X* and (in a way) being affected by *X*. Hence, (5) in all perception like is affected by like.

Here we are, as was noted in Section 1.3, touching on particularly controversial matters. There appears to be a *prima facie* tension between two major characteristics that Aristotle ascribes to perception in *An.* 2.5: on the one hand, as stated in (1) and (2), perception consists in being affected and being changed/alterd by the perceived object (416b33–4, 417b19–21, 418a3–6); however, on the other hand, as stated in (3), it is an activity based in a complete capacity (417a9–14, b16–18, b29–32)⁵⁴ and is itself complete (passing the tense test), unlike motions which are

⁵³ The notion is discussed in Sections 3.3–3.5.

⁵⁴ Cf. *Sens.* 4, 441b22–3: 'For perceiving is not like learning, but like theorizing.'

essentially incomplete (*Phys.* 3.2).⁵⁵ Myles Burnyeat famously discouraged interpreters from looking for any connection between *An.* 2.5 and the completeness expressed by the tense test.⁵⁶ According to him, Aristotle insists at 417a14–17 that natural philosophy must proceed by supposing ‘that there is no such thing as complete or unqualified actuality’.⁵⁷ Yet, as has been pointedly noted by Andreas Anagnostopoulos, this move seems to make Aristotle’s procedure ‘premised on a fundamental falsehood, of whose falsity the prepared reader is well aware’.⁵⁸ As an alternative, Anagnostopoulos suggests that we treat *An.* 2.5 as confronting the two perspectives on perception – perception as a kind of being affected and altered and perception as a complete activity – in a sort of antinomy. At 417a14–17, Aristotle signals the provisional nature of the former perspective (affection and assimilation), but without aiming, in *An.* 2.5, to provide a more satisfactory understanding of it, nor to show how it can be reconciled with the latter perspective.

However, if the proposed analysis of Aristotle’s involvement with *LKL* is apt, then *An.* 2.5 attempts to do significantly more than dismiss the latter perspective, expressed by (3), or merely confront it with the former view, expressed by (1) and (2), in an antinomy. Instead, it seems that Aristotle is interested here in investigating what the latter perspective tells us about the former as well as the way in which the former needs to be transformed if it is to be reconciled with the latter. In other words, Aristotle is asking *what kind of* being affected perception must be according to (1), and *what sort of* likeness must be established between the perceiver and the perceived object according to (2), in order for (1) and (2) to be jointly compatible with (3), and so in order for the truth elements of *LAL*, brought out in (4) and (5), to be preserved. This is a task hinted at elsewhere, but only taken up in *An.* 2.5.⁵⁹ The matter at issue here (as suggested in Section 1.3) is nothing less

⁵⁵ For more on the question of how the two kinds of completeness relate to each other, see Section 3.5.

⁵⁶ See Burnyeat 2002, 43–4, cf. 57. For Burnyeat’s critical view of the place of the second half of *Θ*.6 (1048b18–36) in Aristotle’s *Metaphysics* (directed against the tendency to overestimate, in the wake of Ryle 1954: 93–110, the quite exceptional contrast between ‘change’ and ‘activity’, as manifested, for example, in Kosman 1969: 58–62, and Kosman 1984), see Burnyeat 2008b; cf. Beere 2009: 221–30. See further n. 59.

⁵⁷ Burnyeat 2002: 47. ⁵⁸ Anagnostopoulos 2023: 81.

⁵⁹ This task is, arguably, noted but not further pursued in *Metaph.* *Θ*.6. While at 1048b2 seeing is introduced as if it were a standard case of change (see 1048b8–9) – that is, presumably, the fulfilment of a passive capacity for being changed by a perceptual object – the second half of *Metaph.* *Θ*.6 eliminates this imprecision by highlighting what, in Aristotle’s considered view, distinguishes seeing from standard changes. For an approach to the second half of *Metaph.* *Θ*.6 as ‘an important amendment’ of the mentioned shortcoming of the first half (i.e. 1048a25–b17), see

than offering an account of continued perceiving, which turns out to be a necessary condition of successfully accounting for perceiving in general.

In light of this, Aristotle's identification of being affected and being active at 417a14–17 appears to be more constructive than has hitherto been appreciated. If being perceptually affected *is* perceiving and if perceiving passes the tense test, then it appears that, while perceiving *X*, the perceiver both *has been affected* by – and so is like – *X* and continues *being affected* by *X*.⁶⁰ In this way, the passage provides us with a clue, albeit a provisional one, to the correct understanding of the assimilation model that follows immediately in R&W₂: we should learn to appreciate the connection that unlikeness has to the present tense and that likeness has to the perfect tense without assuming a straightforwardly temporal interpretation of these tenses. Without this, we shall never come to any better understanding of exactly what Aristotle thinks is true about *LAL*.⁶¹

But even if we accept the tenets of this lesson, much work remains to be done. Clearly, the project will stand or fall on Aristotle's success in accounting for *the kind of* being affected and *the sort of* likeness involved in perception. Read in the proposed way, the assimilation model implies that the perceiver is both unlike (because she is being affected by) and like (because she has been affected by) the perceived object. Understanding how this is possible will turn out to be the same task as understanding how it comes to be that an external perceptual object makes itself perceived by a perceiver rather than merely producing a perceptible replica in her sensory organs. The key idea, I submit, will be that the quality present in the perceiver as a result of her being affected by the perceived object remains a quality *of the object out there* rather than becoming a proper quality of the perceiver herself.⁶²

Menn forthcoming a: IIIa2 and Menn forthcoming b. Gonzalez 2019 even wants to see the second half as 'the linchpin of the whole thing [i.e. the *Metaphysics*]'. Be that as it may, the task, which is not further pursued in *Metaph.* Θ.6, but is arguably taken up in *An.* 2.5, is exactly to show how the two perspectives (namely, perception as a passive change and perception as a complete activity) can be unified in a single coherent account of perception.

⁶⁰ It seems that this feature of perceiving (wherein like is affected by like) was stressed by Theophrastus in his *Physics* 5, where he apparently conceptually distinguished between two ways of being affected by, and assimilated to, the agent: one whose result is independent from the presence of the agent, and one whose result exists only as long as the agent continues to act; see Laks 2019: esp. 181–2 (cf. Laks 2002a). I discuss Theophrastus' view elsewhere.

⁶¹ The truth of *LAL* is certainly not *captured* by R&W₂; we can see it here only when we take seriously the idea that the completeness of perception carries over into perceptual *πάσχειν*.

⁶² For further discussion, see Sections 3.1 and 4.2. Cf. the discussion of Aristotle's response to the so-called Empedoclean difficulty by Kalderon 2015. Although Kalderon does not primarily focus on *An.* 2.5, but rather on the notion of 'receiving forms without the matter' in *An.* 2.12, his analysis of

We have yet to work our way to Aristotle's full general account of perception. One of the remaining questions that we shall need to address in doing so is how the notion of complete passive activities differs from what happens in perceptual media, such as the air, which mediates colours, sounds, and odours.⁶³ For now, it ought to be stressed that, as we come to R&W₂, our access to the element of truth in *LAL* is, indeed, only provisional. Furthermore, one might have serious doubts whether *LAL* can contain any coherent truth at all: under the proposed interpretation, it may easily seem that Aristotle just wants to have his cake and eat it, too. The idea of something having been assimilated to (and so being like) something else and still being affected by it (and so being unlike it) may sound paradoxical or flatly impossible. Yet this, I reply, is exactly the result of the provisional nature of our understanding at this point that was flagged right before R&W₂: as long as we assume that being affected means being changed (*κινεῖσθαι*), and so being active only in the incomplete sense of changing, we can never properly understand the truth of *LAL*. However, without taking this truth on board somehow, the key phenomenon of continued perceiving cannot be accounted for, nor can the specific object-directedness of perception. This, I suggest, is one of the reasons why 'distinctions need to be drawn' and discussed in what follows R&W₂.

2.6 The Tense Test Weakened

Before moving on, let me address one issue concerning Aristotle's commitment to the truth of *LAL*. There is a weaker and a stronger version of it, and the weaker version transpires to be sufficient for Aristotle's purposes.

In *EN* 10.4 and *Metaph.* Θ.6, Aristotle clearly states, at least about seeing, that it is a complete activity in the sense that there is no moment in which what performs it is still coming to its goal. Its goal has always already been reached, as Aristotle repeatedly makes clear: 'he is seeing and at the same time he has seen' (*Metaph.* Θ.6, 1048b23); 'he has seen and is seeing at the same time the same thing' (1048b33); 'seeing appears to be complete at any moment of its duration' (*EN* 10.4, 1174a14–15);⁶⁴ 'for there is no

what Aristotle finds attractive about *LKL* points, I think, in the right direction (as against the usual identification of the truth of *LKL* with the 'Democritean' general truth about acting).

⁶³ See Section 4.4. If it turned out that this notion applies to media equally well as it does to perceivers, Aristotle's first general account in *An.* 2.5 would seem to be a failure.

⁶⁴ Housebuilding differs from seeing, because its parts 'are different in form and it is not possible to lay one's finger on a change complete in form at any moment of the process [of housebuilding] but only, if at all, in the whole of its duration' (1174a27–32).

generation of seeing ... , neither is [it] ... a change or a generation' (1174b12–14).⁶⁵

One might wonder, however, whether the same can be said about the other sense modalities as they are analysed in *An.* 2.8–11. In the case of hearing, for instance, this is at least a questionable assumption, as Aristotle seems to follow Plato's account – albeit not without reservations – of the difference between the high and the low being one that should be understood in terms of *duration*:⁶⁶

These [i.e. high = 'sharp' and low = 'heavy'] are called thus on account of an analogy with the tangible qualities, for high [is that which] moves perception over a short time (ἐν ὀλίγῳ χρόνῳ) to a great extent (ἐπὶ πολὺ), whereas low [is that which moves it] over a long time (ἐν πολλῷ) to a small extent (ἐπ' ὀλίγον). For it is not the case that the high is quick and the low is slow [as Plato said in the *Timaeus*], but rather that the motion of the high comes to be such in virtue of quickness and [the motion] of the low in virtue of slowness. (*An.* 2.8, 420a29–33)

Even without a proper analysis, this passage serves as a caveat, suggesting that the non-visual modalities may not be complete in the way developed for sight at *Metaph.* Θ.6 and *EN* 10.4.⁶⁷ It may be that – unlike seeing – hearing and possibly also other kinds of perceiving turn out to be temporal phenomena in the sense that, for instance, discriminating a low tone necessarily takes some time (unlike discriminating something as red), as it can be recognized only on the basis of its relative slowness over a given interval of time.⁶⁸

Fortunately, for our purposes it is not necessary to decide this question. The point is that *even if* this is so, *LAL* is no less true. For, even if hearing is not complete in the sense that there is a time when the perceiver is being affected by a sound without yet having been affected by it and assimilated to it, it will still differ from changes in that, once the perceiver has been affected and assimilated to a tone (whatever that means exactly), she can continue perceiving the very same tone – that is, continue being affected

⁶⁵ Cf. *Metaph.* Θ.8, 1050a23–b1; *Soph. Ref.* 22, 178a9–28; *Top.* 6.8, 146b13–19; *An.* 3.7, 431a4–7; *Sens.* 6, 446b2–4.

⁶⁶ See *Tim.* 67a7–c3; for Aristotle's reservations, cf. *GA* 5.7, 786b23–787a28.

⁶⁷ One may compare the definitions of the high and the low with the arguments of *EN* 10.4 suggesting that complete activities, unlike changes, are *not* defined with respect to any quantity of time, see 1174b8–10 (Aristotle here makes a contrast between ἐν χρόνῳ and ἐν τῷ νῦν ὅλον); cf. *EN* 10.3, 1173a32–b4, where the notions of quick and slow are explicitly claimed not to be applicable to pleasure as a case of complete activity.

⁶⁸ See, however, *Sens.* 6, 446b2–4, where Aristotle seems to be inclined to think that for hearing it is also true that whenever I am hearing I have already heard.

by it – which would be impossible in the case of, say, one object heating another.⁶⁹

To this limited extent, I take it that *LAL* will hold, according to Aristotle, for *all* sense modalities, including touch. Unlike the capacity for *becoming* cold, the capacity *to feel that* something is cold allows the living being endowed with this capacity to have been assimilated to the agent and yet still be affected by it. I have perceived that this snowball is cold, and in this sense I have received its coldness, and yet it continues to act on me as something cold (which is why I continue *perceiving it* rather than merely *being cold* – in a non-sensory qualitative sense – due to it⁷⁰). As in other cases of perception, I am being affected by the snowball as *like by like*. This might involve a part of my hand becoming literally like the snowball, but, crucially, this cannot be true about me as a whole: as a whole I remain *unlike* the snowball. This simple example manifests, I think, both the strength and the main weakness of the traditional *LKL* view: it shows that there is a non-trivial sense in which like can indeed only be perceived by like (i.e. by a perceiver assimilated to a perceptual object), but it also shows that standard notions of *acting* and *likeness* are not sufficient to properly articulate this fact since they offer no means of establishing the crucial distinction between ‘having perceived’ some quality and ‘having (literally) acquired’ it.

2.7 Aristotle's Way Out

The proposed explanation of why Aristotle finds *LAL* to be, in a non-trivial sense, true raises a difficulty. It is not immediately clear, on this view, what he can mean by saying that it is only *partly* true. And, even more importantly, it is not clear how he can solve the puzzle he raised against *LKL* in

⁶⁹ Against interpreters like Ross 1924 or Ryle 1954 who, from the stronger understanding, infer that complete activities are not temporal phenomena at all, Ackrill 1997 argues that we should take Aristotle's tense test as primarily making the weaker claim only (see p. 144: ‘there is no absurdity in saying that a man is still going on Y-ing even though it would already be true to say “he has Y-ed”’, rather than the stronger claim that ‘whenever “one sees” is true, so also “one has seen”’). Furthermore, Ackrill 1997: 146–8 helpfully distinguishes between the idea (a) that an activity can go on even when completed and (b) that it takes no time to complete an activity (cf. Natali 2013: 108–9). This is helpful because we can say much about perception by taking only the former into account. Drawing on *Phys.* 6.5–6, Ackrill suggests a purely temporal understanding of the perfect tense (e.g. ‘has been erected’) as referring ‘to a period of time preceding the moment’ to which the present tense (e.g. ‘is standing’) refers (Ackrill 1997: 147). This temporal understanding has, I think rightly, been criticized by Graham 1980 and White 1980; cf. Penner 1970 and Pickering 1977. For a background of this discussion, cf. Kenny 1963, Vendler 1967, and Mourelatos 1978.

⁷⁰ Which, indeed, I can still well be even when I am already warming myself up in front of a fireplace.

Self-Contradiction. This question brings us back to consider just how Aristotle set the stage at the end of *An.* 1.2 by confronting *LKL* not with *CKC* (as Theophrastus does), but rather with Anaxagoras' solitary demand that the knower must be impassive (405b12–23, quoted in Section 2.2). The reason for this, I suggest, is that, for Aristotle's purposes, *CKC* is *all too similar* to *LKL* (at least as he construes it) – it shares the same limitations – whereas Anaxagoras' view draws our attention exactly to the fundamental flaw of *LKL* (without, however, providing an independently viable alternative of its own).

I have argued that, in Aristotle's eyes, *LKL* articulates – albeit imperfectly – the right intuition according to which the perceiver is like the object she is perceiving and yet continues being affected by it; this is the *Acquaintance/Contact Requirement* (from Section 1.4) expanded by a reflection on continued perceiving. However, the adherents of *LKL* have no conceptual means for explaining how in perception like can be affected by like without falling into self-contradiction. Moreover, *CKC* does not provide any helpful corrective.⁷¹ The Anaxagoras of *An.* 1.2, 405b19–23, in contrast, puts his finger exactly on the sore spot: the perceiver cannot be assimilated to the perceptual object in the sense in which *LKL* envisages the likeness between the two to be realized because, if this were the case, then, rather than *perceiving X*, she would herself become a *perceptual* object similar to *X*, which would make her effectively unable to perceive *X* (or anything else). Anaxagoras' famous claim about νοῦς knowing everything on account of its not being mixed with anything is interpreted by Aristotle as pointing towards an alternative account of knowing, broadly speaking, which can meaningfully be applied to perception. Indeed, Aristotle seems to have been preparing the ground throughout *An.* 1.2 for introducing Anaxagoras' account of νοῦς as an alternative strategy of 'defining the *soul* by knowing'.⁷² This generalized account suggests that, whatever the subject of perception is, it needs to be neutral with respect to its objects *even*

⁷¹ To use an example given by Theophrastus (*Sens.* 28, 507.17): if the drinkable (πόσιμον) is perceived by the salty (ἄλμυρόν), then once the salty quality in me has been neutralized by the intake of water, I shall not be able to perceive the drinkable anymore. So, *CKC* does not help us to see what is wrong with *LKL*; rather, it straightforwardly denies what is right about it.

⁷² Anaxagoras is included at *An.* 1.2, 404a25–b7 among those who took the soul to be the principle of motion (apparently on the basis of B 12.14–15), and then again at 405a13–19 among those who approached the soul as responsible for both motion and cognition. In both cases, the stated rationale for this inclusion is Anaxagoras' alleged (partial) confusion of νοῦς and soul. In both cases, though, one might wonder why Aristotle bothers making this (shaky) interpretative claim given that he has other – safer – examples of each tendency among his predecessors. His motivation becomes clearer, I submit, if we see the two passages as building up to Aristotle's generalization of Anaxagoras' account of how νοῦς knows as the sole genuine alternative to *LKL*. Cf. Mansfeld 1996: 179–80 and Theophrastus, *Sens.* 38, 510.9–11 (discussed in Section 6.2).

when actively perceiving them (this is the *Unbiasedness/Externality Requirement*). Both Aristotle and Theophrastus seem to have thought that any serious proponent of *LKL* would have to address this challenge.

However, as Aristotle points out at *An.* 1.2, 405b20–3, Anaxagoras did not develop any full-fledged alternative to *LKL*. Rather, in just the way that the adherents of *LKL* failed because they did not have control over the precise sense of likeness (and being affected) relevant for perception, Anaxagoras fails because he does not have control over the precise sense of impassivity (and unlikeness). He applies it to the subject of knowing without any qualification. But, in doing so, he ends up at an impasse, too, unable to offer any causal account (and so any proper explanation) of knowing. This failure is particularly conspicuous in the case of perception: if that which can perceive could *in no way* be affected by any perceptual object and could have no likeness of it in itself, then it could obviously never come to perceive anything.

In this way, *LKL* and the Anaxagorean view seem each to contain exactly what the other misses. I suggest that *An.* 2.5 can be read as a way out of this key puzzle developed throughout *An.* 1.2 and 1.5. We can, then, understand *An.* 2.5 effectively as a way of showing how the truths of both views *need* to be and *can* be combined into a coherent account of perception that is able to solve the difficulties raised for each side.

On the one hand, we must admit, against *LKL* and with Anaxagoras, that if the perceiver is not to lose her perceptivity, she can never come to be like the external perceptual object in the sense of herself becoming a perceptual object similar to it. If something is to feel the coldness of something else, it must be able to retain its own unlikeness with respect to it: it must remain, so to speak, equally distant from all its potential objects (i.e. unbiased) and the perceived object must remain external to it. On the other hand, if the perceptive capacity were nothing but this power of resistance and the perceiver always remained *entirely* neutral, there could be no explanation as to how the activity of perceiving this or that object comes about. Accordingly, against Anaxagoras and with *LKL*, there must be a sense in which the perceiver *is* affected by, and assimilated to, the perceived object, but in such a way that having been assimilated to it is compatible with being further affected by it – that is, with like being affected by like (*LAL*).

Although, as we have seen, the main account of perception that Theophrastus ascribes to Anaxagoras has nothing to do with the demand of impassivity, at one point Theophrastus formulates a dilemma that is almost identical to the one that we have just seen emerging from *An.* 1.

He does so in the course of discussing Empedocles' adherence to *LKL*. Theophrastus suggests here that, contra Empedocles, the senses must be *impassive* and must be understood as resisting becoming like their objects – with the caveat that a properly specified kind of likeness may, after all, apply to them:

It is more difficult to determine the affections of sight (τὰ τῆς ὀψεως πάθη), but as far as other senses are concerned, how do we discriminate by like (πῶς κρίνωμεν τῷ ὁμοίῳ)? The problem is that 'like' (τὸ ὅμοιον) is indeterminate (ἀόριστον). 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, [as long as we understand likeness in the straightforward way] 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).⁷³ 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 (διορισμός) about these [i.e. apparently the sound, the flavour, the odour, and so on, present in the organs as the likenesses of the external objects]. (*Sens.* 19, 504.25–505.2)⁷⁴

The problem Theophrastus describes here is the one that is shared by both sides in *An.* 1.2 – namely, the lack of a sufficiently nuanced understanding of what 'to be affected by', 'to be assimilated to', and 'to be like' something else means. Both sides share, first of all, an all-too-narrow understanding of what 'to act' and 'to be affected' means. What is needed here are distinctions, a διορισμός – presumably like the one offered in *An.* 2.5 (417a21ff.).⁷⁵ Aristotle will succeed in reconciling the two side, only if he can show that each, effectively, speaks about 'being affected' (and 'being like') in a different way and that these two ways are in fact compatible. Only then shall we see that Anaxagoras was right to imply that the

⁷³ Strangely enough, Stratton 1917 renders 'ἀπαθῆ' here as 'in a passive state'. More plausibly, but not entirely so, the adjective has been understood in terms of a lack of any modifications prior to being affected (see e.g. Caston 2019: 198, and Johansen 2019: 242). This neutrality is certainly demanded, but it cannot be *all* that Theophrastus means here, for his point about the impossibility of discriminating sound by sound surely applies equally well to the situation in which a perceiver has already been affected by a sounding object: not even then can there be, for example, 'a sound' in the perceiver by which she would supposedly discriminate sound. So, the perceiver is not just 'without modifications' prior to being affected; she is impassive in the sense of not being accessible to receiving any modifications that would turn her organs into objects similar to the perceptual objects acting upon her.

⁷⁴ Cf. Priscianus, *Metaphr.* 15.26–16.6.

⁷⁵ Cf. Theophrastus, *Sens.* 12, 503.2–4: 'everything will perceive and mixing (μῖξις) will be the same as perceiving (αἴσθησις), unless he adds a distinction (διαφορά)'.

perceiver must be impassive and remain unlike the perceptual object *in one sense*, and that *LKL* was right that she must be affected by, and assimilated to, the perceptual object *in another sense*, such that she is able to be further affected by it.

Distinguishing these two senses and showing how the two insights can be combined in a consistent account, I contend, is exactly the task undertaken by Aristotle in *An.* 2.5. Central to this endeavour, as we shall next see, is the notion of preservative $\pi\acute{\alpha}\sigma\chi\epsilon\iota\nu$.