

Aristotle on the Nature and Causes of Perception

Robert Roreitner

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ARISTOTLE ON THE NATURE AND CAUSES OF PERCEPTION

In this book Robert Roreitner offers a fresh interpretation of Aristotle's philosophically intriguing answers to what the nature of perception is, how it can be explained, and how perception is distinguished from mere appearance. He argues that for Aristotle, perception is a complete passive activity, and explains why this notion merely appears self-contradictory to us. He shows how Aristotle succeeds in integrating causal, qualitative, and relational aspects of perception, and explains why he is neither a 'spiritualist' nor a 'materialist'. He presses and resolves an unappreciated dilemma for Aristotle's hylomorphic account of perception and the role of the soul therein. This rich study shows that although Aristotle's understanding of perception may be in many respects outmoded, its core insights remain philosophically engaging. This title is also available as Open Access on Cambridge Core.

ROBERT ROREITNER is Assistant Professor of Philosophy at Charles University, Prague. He is a co-author of *Aristotle on the Essence of Human Thought* (2024).

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ROBERT RORETNER
Charles University, Prague

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Abbreviations

Plato

Crat.	*Cratylus*
Gorg.	*Gorgias*
Leg.	*Laws*
Phaed.	*Phaedo*
Phaedr.	*Phaedrus*
Phil.	*Philebus*
Prot.	*Protagoras*
Resp.	*Republic*
Soph.	*Sophist*
Theaet.	*Theaetetus*
Tim.	*Timaeus*

Aristotle

An.	*On the Soul (De Anima)*
APo.	*Posterior Analytics*
APr.	*Prior Analytics*
Cael.	*On the Heavens*
Cat.	*Categories*
EE	*Eudemian Ethics*
EN	*Nicomachean Ethics*
GA	*On the Generation of Animals*
GC	*On Generation and Corruption*
HA	*History of Animals*
Insomn.	*On Dreams*
Iuv.	*On Youth and Old Age*
Long.	*On the Length and Shortness of Life*
MA	*On the Movement of Animals*

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Mem.	*On Memory and Recollection*
Metaph.	*Metaphysics*
Meteor.	*Meteorology*
MM	*Magna Moralia*
PA	*On the Parts of Animals*
Phys.	*Physics*
Poet.	*Poetics*
Pol.	*Politics*
Protr.	*Protrepticus*
Resp.	*On Respiration*
Rhet.	*Rhetoric*
Sens.	*On Perception and Perceptible Objects*
Somn.	*On Sleep and Waking*
Soph. Ref.	*On Sophistical Refutations*
Top.	*Topics*

Theophrastus

Metaph.	*Metaphysics*
Sens.	*On the Senses (De Sensibus)*

Galen

Hipp. Epid.	*Commentary on the Hippocratic Epidemics*
PHP	*On the Doctrines of Hippocrates and Plato*

Alexander of Aphrodisias

An.	*On the Soul*
In Sens.	*On Aristotle's* On Perception and Perceptible Objects
Mant.	*Supplement to* On the Soul
Quaest.	*Problems and Solutions*

Sextus

M	*Against the Mathematicians*
PH	*Outlines of Pyrrhonism*

Plotinus

Enn.	*The Enneads*

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Themistius, Philoponus, Ps.-Simplicius,
In An. *On Aristotle's* On the Soul

Priscianus
Metaphr. *Metaphrasis in Theophrastum*

Sophonias
In An. *On Aristotle's* On the Soul

Averroes
LC *Long Commentary on Aristotle's* On the Soul

Thomas Aquinas
In An. *On Aristotle's* On the Soul

John of Jandun
QAn. *Questions about Aristotle's* On the Soul

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For the Greek text of other works by Aristotle and of Plato's works I use the Oxford Classical Texts series (OCT).

The Greek text of Theophrastus' *On the Senses* comes from H. Diels, *Doxographi Graeci* (Berlin 1879), pp. 499–527.

For the Greek text of Aristotle's commentators I use the Commentaria in Aristotelem Graeca series (CAG).

The Latin text of Averroes' *Long Commentary on Aristotle's* On the Soul is from F. S. Crawford, *Averrois Cordubensis Commentarium magnum in Aristotelis De Anima libros* (Cambridge, MA 1953).

Unless otherwise indicated, all translations are mine.

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Introduction
The Unmoved Causes of Receptivity

0.1 The Nature of Perception

What is perception? Is it 'nothing but' a physical process? Or does it involve more? And if so, how exactly should this 'more' be spelled out? Much will depend on how, precisely, one should understand the relation between perception and the perceived object. Is the very nature of perception *relational*, and is perception 'transparent' with respect to its object? Or is perceptual experience characterized, and indeed defined, by an intrinsic *quality*? And does the content of perception coincide with its *cause*, or not?

Aristotle's treatment of perception may be of more than historical interest due to the intriguing way in which it combines features of *relational*, *qualitative*, and *causal* accounts of perception. At some points, he describes perception as a way of 'being affected' by perceptual objects.[1] In other contexts, perception and perceptual object are characterized as a specific kind of *relatives* (wherein one relatum – the perceptual object – is ontologically prior to the other).[2] Elsewhere, perception appears to have an intrinsic *qualitative* nature, as suggested by Aristotle's account of perception in terms of assimilation, which results in a presence – for the duration of the perception – of a quality in the perceiver.[3] Did Aristotle succeed in integrating the relational, qualitative, and causal features into a single coherent account? That would make his treatment of perception genuinely interesting from a philosophical point of view.

[1] See e.g. *Metaph.* Γ.5, 1010b30–1011a2 (where being a mover is a sign of an ontological priority of the perceptual object over perception), and many passages in the *De Anima*, for which see references in n. 4. Cf. *Soph. Ref.* 22, 178a9–19; *Insomn.* 2, 459b4–5; *MA* 7, 701b17–18; *Phys.* 7.2, 244b10–12.

[2] See especially *Metaph.* Δ.15, 1020b30–2, 1021a33–b3; *Cat.* 7, 7b35–8a12 and 10, 11b28–31). Cf. *An.* 2.4, 415a20–3 (with 1.1, 402b14–16).

[3] This is a key topic of *An.* 2.5–12, but see also *Cat.* 8, 9a28–b9 on the so-called passive qualities, where Aristotle explains that they are called passive owing to their power to cause perceptual affections, i.e. to assimilate perceivers to themselves and so make themselves perceived.

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One might be sceptical, however, and suggest that in Aristotle's work we find, at most, a plurality of perspectives on perception that were never intended to be fully integrated. Yet his account of perception in the *De Anima* – which has the makings of a general coherent theory – does, interestingly, make room for all the three features. The dominant element here seems to be the causal one: Aristotle continually asserts that perceiving – and, *mutatis mutandis*, thinking – is a way of *being affected* by its object.[4] However, even in the *De Anima* this is far from a straightforward answer to the definition-seeking *what-is-it* question. Aristotle spends a whole chapter – one of the most famous and difficult chapters in the corpus, namely *An.* 2.5 – on qualifying the sense in which perceiving actually is a way of being affected and excluding the senses in which it is not. Nor are the qualitative and relational aspects absent from the *De Anima*: the assimilation model of perception, prominent in *An.* 2.5 and beyond, suggests that perception has a qualitative nature; and the key idea that perception is a case of *discrimination* brings the account of the *De Anima* into line with the classification of perception and perceptual object as asymmetrical relatives.[5]

The fact that we find all of this in Aristotle's most systematic treatment of perception suggests that he does aim at integrating the three features and permitting them to coexist within his larger theory. Indeed, it suggests that he was well aware of the difficulties inherent in the deceptively simple question 'What is perception?' Even the simplest case of unimodal perception is, apparently, too complex to be unambiguously classified as either a kind of being affected, or a relatum, or a quality. Aristotle seems to have thought that any viable account should successfully integrate all three features.

There is, as noted above, solid evidence to suggest that in the *De Anima* Aristotle took the notion of 'being affected' (πάσχειν) to be at least the right starting point for capturing what perception is. But it is only the starting point, and the very chapter that is supposed to determine the sense in which perception is a kind of being affected, namely *An.* 2.5, also

[4] See *An.* 2.5, 416b33–4, 418a3–6; 2.7, 419a18–19; 2.10, 422b2–3; 2.11, 423b31–424a1; 2.12, 424a21–4, 424b7–8; 3.2, 426a1–6, 427a8–9; 3.4, 429a13–18; 3.7, 431a4–7; 3.12, 434b27–9, 435a5–8. Cf. e.g. *Soph. Ref.* 22, 178a4–27; *Insomn.* 2, 459b4–5; *MA* 7, 701b17–18; *GA* 5.1, 780a1–4.

[5] See especially *An.* 2.6, 418a14–15 and 2.11, 424a2–7; cf. *Metaph.* Δ.15, 1020b30–2. See also *Metaph.* l.1, 1053a2–20 for a close connection between 'discrimination' and 'measuring'. The relational nature of perception arguably becomes explicit in the account of it as receptive of forms without the matter in *An.* 2.12.

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arguably offers clues for understanding why perception can accurately be described as a quality and a relatum, too. In fact, this chapter can help us understand how intimately the three aspects under consideration are intertwined. What Aristotle suggests here, or so I shall argue, is that perception is a presence of a quality of the perceptual object in the perceiver, which makes it qualitative; but the quality must remain in an important sense a quality *of* the external object that one perceives, which suggests that perception is a relatum. Moreover, both this quality and the relation only exist insofar as – and for as long as – the external object continues acting on the perceiver, which, finally, confirms the classification of perception as a kind of being affected, from which Aristotle started. This framework presented in *An.* 2.5 – simplified in the above lines – is then further elaborated in the subsequent chapters of the *De Anima*, building up to Aristotle's well-known account of perception as a reception of forms without the matter.[6]

When Aristotle later comes to discuss *thinking* and the part of the soul responsible for it in *An.* 3.4, he, strikingly, reintroduces this ontological framework and the account of receptivity developed originally for perception.[7] This move is surprising, as acts of thinking are in many respects very different from acts of perceiving. Indeed, Aristotle goes on to closely analyse the differences. Still, he appears to believe that the basic ontological framework applies, and that the phenomenon of human thinking is to be understood within it. In any case, Aristotle certainly does not ignore the question of how relational, qualitative, and causal features of perception (and, *mutatis mutandis*, of thinking) cohere: in fact, the question turns out to be central to his entire inquiry into the cognitive faculties of the soul in *An.* 2.5–3.8.[8]

[6] Caston 2002: 788–91 locates Aristotle's account *somewhere in between* accounts that tend to reduce the quality of perception to its being *about* or *of* a qualitative perceptual object and accounts that, instead, ascribe to perception a quality *of its own*. The former could be analysed as reducing the qualitative nature of perception to its relational nature, while the latter reduce its relational nature to its qualitative nature. (Cf. Caston's 2004 defence of the relevance of Aristotle's account to the contemporary debate on *qualia* against Sisko 2004.) The question is *where exactly* Aristotle's account is to be located between these two extremes. Key to that question, I submit, will be his classification of perception as a kind of being affected.

[7] *An.* 3.4, 429a13–18 (discussed in Section 1.1).

[8] Besides relatum, quality, and being affected, a standard medieval quadrilemma also includes 'activity' (*actio*); see e.g. Peter Auriol, *Scriptum super primum* Sententiarum, D.35, *pars* 1, a.1 (concerned with thinking). More on the fourth aspect – that is, activity – and its compatibility with the causal perspective in Section 0.4.

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0.2 Aristotle's Explanatory Project

This observation, however, must be set in the proper context of Aristotle's project in the *De Anima*.[9] His aim here is emphatically not to provide an exhaustive *classification* of all mental phenomena. He clearly is not interested in suggesting that, say, all episodes of human 'thinking', as we experience them when engaging in solving a maths problem or figuring out the next move in a game of chess, are cases of being affected. That would be an absurd claim. Moreover, even in the case of perception, Aristotle surely does not want to suggest that all the complex episodes of perceptual experience can, in all of their facets, be entirely subsumed under the notion of being affected. Even in non-rational animals, such experiences will certainly involve complex sensorimotor interactions, sensory adaptations, various associations, interpretations based on experience, evaluations of the perceived objects 'as' beneficial or detrimental, and so on and so forth. And these could hardly be classified as cases of being affected. It is thus vital to bear in mind that the aim of the *De Anima* is not to provide any exhaustive classification of mental phenomena. Aristotle's project is *explanatory*.[10]

That, however, does not mean that we should expect to find complete explanations of any mental phenomena in the *De Anima* itself. Rather, Aristotle clearly considers the inquiry that forms this treatise as being only one piece of a much larger explanatory project, with a precisely determined role within it – that of defining the first principles (i.e. the ultimate *explanantia*) of the entire range of phenomena of embodied life.[11] In the *De Anima*, the constitutive capacities or parts of the soul are to be defined exactly as such *explanantia*.[12] It will be the subject of other parts of Aristotle's science of living beings, starting with the so-called *Parva Naturalia*, to employ the theoretical principles from the *De Anima* as

[9] For an overall account of Aristotle's project in the *De Anima*, see the introduction to Corcilius, Falcon, and Roreitner 2024 and Corcilius 2025; cf. e.g. Johansen 2012b: 9–46 and Hankinson 2019.

[10] See e.g. *An.* 1.1, 402a6–7, 402b16–403a2; 1.2, 403b25–30; 2.2, 413a20–b13.

[11] There is a long tradition of reading the *De Anima* against the background of Aristotle's account of the search for scientific definitions in *Posterior Analytics* 2. Besides the references already given in n. 9, see also e.g. Bolton 1978, Kent Sprague 1996, Achard 2004, Carter 2019a: 21–46, Mingucci 2021, and Lennox 2021a, 174–99.

[12] For discussion of Aristotle's notion of the 'parts' of the soul, see Corcilius 2008: 21–55 with Corcilius and Gregoric 2010; or Johansen 2012b: 47–72 with Johansen 2014. For a historical perspective on the individuation of the parts of the soul, see Corcilius 2015.

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starting points for explaining the complex phenomena of life – whether those of humans, animals, or plants.[13]

Given that the *De Anima* is engaged in such a foundational project, it seems likely that a key aim of the treatise should consist in correctly identifying the *basic* or *primary activities* of life, as well as the correlative objects of these activities. This appears to be the case because the constitutive capacities of the soul – that is, the first explanatory principles of the respective domains of life-phenomena – are to be defined as primarily responsible for such activities, which are their primary manifestations. The idea is that in each major domain there is a kind of activity on which all other phenomena explanatorily depend, but which itself can be defined independently from them; hence, when we find the capacity responsible for one of these primary activities, we have found a constitutive capacity of the soul.

So, the nutritive capacity is the first principle for a wide range of phenomena, including growth and diminution, as well as numerous changes involved in the processing of food, which – at least in animals – presupposes a complicated mechanism of balancing heat and cold. Aristotle, however, understood growth and diminution as derivative, and individual bodily changes as subservient to the activity of nourishing oneself. It is with respect to this nourishing activity that the nutritive capacity can be defined as being, primarily, that which preserves, by means of nutriment, the substance of the living body.[14] Similarly, the perceptive capacity and the thinking capacity are to be jointly responsible, as the ultimate *explanantia*, for the entire range of mental phenomena.[15] However, the key to defining these principles, according to Aristotle, is identifying the *primary* activity in each domain – that is, the primary activity of 'perceiving' (αἰσθάνεσθαι) and the primary activity of 'thinking' (νοεῖν) – in a technical sense such that each of them can be understood on their own without taking any other perceptual or intellectual acts into

[13] There are important hints as to how this should be achieved in *Sens.* 1 and *PA* 1.1. For the structure of this larger project, see Andrea Falcon's recent work (Falcon 2015, Falcon 2018, Falcon 2019, Falcon 2020, Falcon 2021, and Falcon 2024); cf. Johansen 2006, Corcilius and Falcon 2022. For the foundational role of the *De Anima*, and earlier scholarly discussion of the treatise, cf. also Lloyd 1992.

[14] See *An.* 2.4, 416a29–b20. For helpful discussions of Aristotle's account, see Johansen 2012b: 116–27, Lennox 2021b (with Coates and Lennox 2020), and Gill 2021.

[15] This is to assume that other capacities involved in accounting for these, such as *phantasia* (discussed in *An.* 3.3) or the desiring and moving capacity (discussed in *An.* 3.9–11), cannot be defined independently from the perceptual and the thinking capacity, and that these two are, according to Aristotle, definitionally separate from each other.

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account, while all other acts of perception or thought can only be understood properly with reference to one (or both) of these core activities.[16]

If this observation proves fruitful, it has important consequences for our initial question. This is because Aristotle's classification of perceiving and thinking as kinds of being affected – and of qualities and relata – is arguably intended to capture precisely, and exclusively, the nature of the two primary cognitive acts. The *De Anima*, thus, cannot be offering a philosophy of mind in the modern sense, but lays – at most – the groundwork for one. Furthermore, this observation implies that many of the prima facie objections against Aristotle's classification will simply miss their target, because they will be concerned with non-primary cognitive acts, which were never intended to be classified in such a way. In noting this point, a key question comes to the foreground: namely, what 'perceiving' and 'thinking' – understood as the primary manifestations of the two capacities – exactly *are*. In both cases, the answer is neither straightforward nor uncontroversial.

Because thinking lies beyond the scope of this study, I limit myself to perceiving.[17] What is sufficiently clear, in embarking on this discussion, is that Aristotle analyses the primary perceptual acts in close connection to the so-called *exclusive objects* (i.e. the qualities that define the individual sense modalities, such as colour for visual perception). But that does not mean that perceptual acts are simply acts of perceiving these exclusive qualities on their own, such that these qualities would then need to be interpreted or somehow combined – by further, synthetic acts – in order for the perceiver to perceive the external *bearers* of the qualities. Rather, as I shall argue, it is Aristotle's view that the bearers of qualities are perceived in a no less primary way than the qualities themselves. In any case, animals most probably never engage in such limited acts of perception on their own – these are always already constituents of more complex experiences involving acts that are not passive (such as associating sweetness with a yellow object out in the world, being pleased by it, and desiring it).

[16] I take this to be implied, among other things, by the methodological prescription formulated at *An.* 2.4, 415a14–23, which provides an answer to the question posed at *An.* 1.1, 402b10–16.

[17] I take the technical meaning of thinking (νοεῖν) governing the account of *An.* 3.4–5 to be nothing less than the grasping of the very essences of things – a very lofty achievement that humans rarely attain in its proper form. If so, the classification of thinking as a kind of being affected must not be taken to say anything directly about the processes of reasoning, inferring from premises, deliberating, and the like. This does not mean that understanding the sense in which these acts are, according to Aristotle, definitionally dependent on grasping essences is an easy task. For a discussion of this topic, I refer the reader to Roreitner 2024a.

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Furthermore, in the case of rational animals, these experiences involving perception are not purely perceptual, either.

0.3 The Role of the Soul

I shall discuss further potential misgivings concerning Aristotle's classification of perceiving (and thinking) as a case of being affected in the following section. First, however, it ought to be stressed that there is another, no less important, reason why the general ontological question about perception (and thinking) from which we began needs to be set in the wider context of Aristotle's agenda in the *De Anima* and its focus on the first principles (i.e. the ultimate *explanantia*) of the phenomena of life. Thus far, I have emphasized the limited scope of Aristotle's focus in the *De Anima*. However, its wide-ranging ambition should also be noted. Aristotle cannot merely identify the primary activities of life and say *what they are* in the sense of providing a general ontological classification. This would not accomplish his aim, which is to define the *capacity* of the soul responsible for each such activity that is capable of playing the role of the ultimate *explanans* for the entire domain of the corresponding phenomena. To achieve this feat, Aristotle must say what each capacity is, which will essentially involve spelling out *how* exactly each capacity is responsible for its defining activity – that is, what *exactly* its causal role in that activity amounts to. For instance, Aristotle has to make clear, at least on the most general level, how the perceptive capacity of the soul *causes* the activity of perceiving, and his project in the *De Anima* cannot be understood as successful unless he has made clear what the perceptive capacity of the soul must be like to play the requisite causal role of a first principle in perception.

These questions touch directly on Aristotle's central goal of defining the soul. The nature of this undertaking, as well as the content, novelty, and eventual attraction of Aristotle's account have all been matters of no small controversy. For some time in the late twentieth century, it was fashionable to compare Aristotle's account of soul – and, allegedly, of mental phenomena – with contemporary functionalism.[18] More recently, Aristotelian hylomorphism has come to be treated, defended, and

[18] See e.g. Putnam 1975, Nussbaum 1978, Shields 1991, Cohen 1992, and Nussbaum and Putnam 1992 (cf. Sorabji 1974). For a criticism of this approach, no less controversial than the approach itself, see Burnyeat 1992; for other critical appraisals, see e.g. Robinson 1978, Menn 2002, and now Charles 2021: esp. 36–8, 234–9.

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criticized as a contemporary position *sui generis*.[19] The present study is not aimed as a direct contribution to this debate, but it will be concerned, throughout, with several key aspects of it, which are brought into sharp relief by Aristotle's account of perception. This study will bear directly on the explanatory and causal role of the soul, and more specifically on the task of reserving causal primacy for the soul, without falling prey to illicit homuncularism.

We shall see that Aristotle sets exactly this task for himself in the *De Anima* when he accuses his predecessors, including Plato, of erroneously assimilating souls to bodies. It has been convincingly argued that, to counteract this tendency, Aristotle outlines in the *De Anima* a programme of purifying the soul of any bodily features erroneously ascribed to it by his predecessors.[20] This programme is intimately bound up with capturing the causal and explanatory role of the soul. As the set of the ultimate *explanantia* of embodied life, the soul must not be treated as if it were itself a living body (i.e. effectively another *explanandum*). Furthermore, it is not sufficient to insist that the soul is not a body, however emphatically one does so: rather, one's descriptions of the soul and its causal role must be consistent with this claim.

One of the issues that will become particularly important here is the notion of the soul's *unmoved nature* as Aristotle's key innovation – one that is strongly emphasized in the critical discussion of his predecessors. Aristotle's point is relatively straightforward in the case of animal self-motion, which is treated as one of the two basic kinds of phenomena of life besides cognition.[21] His grievance is that, in accounting for animal self-motion, his predecessors (with the half-hearted exception of Anaxagoras)[22] postulated the soul as a self-moving entity inside the animal body, because they believed that the soul could only be the primary moving cause of the body if it itself were in motion.[23] By Aristotle's lights, however, this is a fallacy that only reveals his predecessors' failure to identify properly the

[19] See especially Fine 1999, Johnston 2006, Koslicki 2006, Fine 2008, Koslicki 2008, Oderberg 2008, Jaworski 2011: 269–357, Rea 2011, Marmodoro 2013, Robinson 2014, Jaworski 2014, Jaworski 2016, Skrzypek 2017, and Shields 2019; see also the exchange between Robinson 2021 and Shields 2021, and also Charles 2021: 226–6 with Corcilius 2023.

[20] See Menn 2002.

[21] See *An.* 1.2, 403b25–7, 404b7–10, 405a23–5, 405b10–12; 1.5, 409b18–24; 2.2, 413a22–5; 3.3, 427a17–21; 3.9, 432a15–19.

[22] See *An.* 1.2, 404a25–b7 and 405a13–19 for the idea that the entirely impassive (and so unmoved) νοῦς is the primary cause of motion, although its relation to the notion of the soul as a mover remains unclear.

[23] See *An.* 1.2, 403b28–31 for Aristotle's claim that the correct view of soul as the primary mover, combined with the false assumption that only what is itself in motion can move something else, is

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ultimate *explanans* of animal self-motion. According to Aristotle, what is itself in motion cannot be the *primary* cause of motion, because it begs the explanation of where its own motion has come from.[24] Accordingly, once the soul has been agreed to be the primary cause of animal self-motion (as it widely was thought to be), it follows that Aristotle's predecessors effectively failed to identify the soul. Indeed, Aristotle has a battery of arguments showing that the soul *cannot* itself be in motion;[25] and he insinuates that his predecessors, including Plato, mistakenly talked of the soul as if it were a body.[26]

According to Aristotle, the idea of a self-moving soul is not only impossible but also unnecessary. It is unnecessary because the widely shared assumption according to which only things in motion can move something else is, in his view, incorrect. It is this sort of consideration that prepares the ground for the notion of an *unmoved mover* that is key to Aristotle's account of the soul as the primary cause of animal self-motion. This notion is vital for explaining animal locomotion and, *mutatis mutandis*, the other kind of 'self-motion', namely the motion 'with respect to nourishing and growth and diminution' for which the nutritive capacity is responsible.[27] In this latter case, just as in the case of locomotion, the soul will need to be conceived as an unmoved mover to explain the relevant changes occurring in the body.

Now, the notion of the soul as an unmoved mover is surely not self-evident and admits of being understood in several different ways.[28] Yet, what is at least fairly clear is the overall classification of the soul's involvement: it acts without being itself acted upon. Moreover, Aristotle is able to

what has led his predecessors to the false conclusion that soul is itself in motion. Cf. *Phaedr.* 245c–246a and *Leg.* 895e–896b.

[24] Cf. *APo.* 2.4, 91a35–b2 and e.g. Corcilius 2021. For Aristotle's treatment of self-motion, see also Ferro 2022.

[25] See *An.* 1.3, 406a12–407b12 with *An.* 1.4, 408a31–b30. For a discussion of Aristotle's arguments here, see Carter 2019a: 59–78 and Ferro 2022: 47–119. I shall have more to say about them in Sections 5.1 and 5.2.

[26] Cf. Aristotle's brief discussion of Democritus' openly materialist account of the soul at *An.* 1.3, 406b15–25 and his subsequent innuendo at 406b25–8 that Plato is proceeding in much the same way in the *Timaeus*, when offering his effectively physicalist account of the soul's causal role in locomotion in terms of it being 'intertwined' with the body.

[27] See *An.* 2.2, 413a23–5. For the application of the notion of an unmoved mover in the case of nutrition, see *An.* 2.4, 416a34–b3 and 416b20–3. For differences between the nutritive kind of 'self-motion' and self-motion proper, see Coren 2019.

[28] For an overview of three existing ways of understanding exactly what it means for the soul to be an unmoved mover, see Fernandez and Mittelmann 2017; cf. Corcilius and Gregoric 2013.

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draw on his conception of unmoved movers developed elsewhere, outside the *De Anima*.[29]

In both these respects, the situation is significantly more complicated when we move beyond locomotion and turn to the second major kind of life phenomena, namely cognition as that which allows animals not just to orient themselves in the world but also, in the case of rational animals, to understand it. It seems apparent that Aristotle wants to extend somehow the crucial point made about self-motion to the case of perception (and *mutatis mutandis* to thinking).[30] Yet, it is much less clear in this more elusive case what kind of account he has to offer – indeed, even the overall classification of the soul's involvement is far from obvious, and there is no robust account developed outside the *De Anima* that Aristotle could draw on for support. Prima facie at least, it seems that, according to Aristotle, the soul must not be taken as being itself moved by the objects of perception (or thought). However, it is not clear whether this implies that the soul itself somehow acts on or moves something. Even if we leave aside the question of what exactly that would mean, it is not obvious how this assumption could help to solve the puzzle Aristotle is tackling, given that perception is to be classified as a kind of *being affected by* the perceptual object. The question becomes: how can the soul remain unmoved, as seems to be demanded by Aristotle's general concerns about the soul and its explanatory role, when it is also conceived as the primary cause of perceptual (or thinking) acts, which are themselves classified as instances of reception and cases of being affected? How, that is, can the primary causes of receptivity, of taking things in, be unmoved?[31]

The idea that what accounts for perceivers' (and thinkers') ability to take things in is itself unmoved has, since antiquity, appeared all too paradoxical to most readers of the *De Anima*. Accordingly, Aristotle has often been interpreted either as not really taking the primary perceptual (and thinking) acts to be passive and receptive, or as not really taking the perceptive (and thinking) soul to be impassive and unmoved. And when the unmoved nature of the soul has been emphasized, it has usually come at the cost of the soul's explanatory role, leaving it, so to speak, causally sterile. The present study attempts to reconstruct the idea of unmoved

[29] Primarily in *Phys.* 8.4 (cf. *Metaph.* Λ.6–7). See Aristotle's reference at *An.* 1.3, 406a3–4.

[30] Aristotle repeatedly insists that not even in the case of perception can the soul truly be said to be itself in motion, see *An.* 1.3, 406a10–11 with 1.4, 408a34–b18.

[31] Aristotle, as we shall see, clearly conceives of the objects of perception (and thought) as unmoved movers. The main question is how the perceptive (and thinking) soul can be unmoved, too, as the primary cause of receiving these objects.

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causes of receptivity as a central insight of the *De Anima*. I contend that the passivity and receptivity of the primary perceptual acts on the one hand and the unmoved nature of the perceptive soul responsible for these acts on the other represent two key ideas of Aristotle's *De Anima*. The hope is that approaching these in their interconnection will help us to appreciate both the notion of passivity and receptivity – developed by Aristotle to capture the essence of the primary perceptual acts – and his novel conception of the unmoved soul.[32]

0.4 Complete Passive Activities

Aristotle's classification of the primary perceptive (and thinking) acts as kinds of being affected has often been approached with scepticism. Aristotle, to be sure, repeatedly says in the *De Anima* (and beyond) that both perception and thinking are cases of being affected by their objects. But these assertions have, since antiquity, often been read as, in fact, saying something quite different. One idea has been that 'being affected' only refers to a necessary condition or material component of these acts and that the *what-is-it* question with respect to these phenomena must be answered differently. Another idea has been that, in this context, Aristotle has modified the notion of being affected so radically that it has become effectively devoid of any genuine passivity (including any reference to the perceived object as being an efficient cause) and is meant to capture simply the transition from not being active to being active.[33] In some cases, the motivation behind these interpretative moves has explicitly been connected to Aristotle's conception of the soul as being unmoved, because it is rather opaque how an unmoved soul could be the cause of acts that consist in being affected. But no less important seem to have been considerations about the notion of being affected itself, as it might seem to be utterly inadequate to capture the essence of any cognitive act. One could argue that (i) the notions of acting and being affected are primarily developed by Aristotle to analyse material processes, but perception (and even more so thinking) seems to be something over and above such processes; and that (ii) perceiving (and

[32] If this is confirmed it should, next, also be investigated whether it holds for the primary thinking acts, i.e. acts of grasping essences as analysed in *An.* 3.4–5. That task, however, is beyond the scope of the present study.

[33] For further discussion of both ideas, see Chapter 1.

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thinking) is surely an *activity*, and so it would clearly be a category mistake to speak of it as something *passive*.

Let us review argument (i) first. It is, strictly speaking, a simplification to say that Aristotle's account of acting and being affected, as developed in *Phys.* 3.3 and *GC* 1.6–7, is meant to be used just for analysing material processes. In both texts Aristotle recognizes instances of agents that 'do not have the form in matter', such as the art, present in the artist's soul, which, on Aristotle's account, is an agent that cannot be itself reciprocally affected.[34] Nonetheless, in both these texts 'being affected' is conceived as a change (κίνησις) – that is, a process of progressively moving from *A* to *B* (where *A* and *B* are typically qualities of a single range, such as hot and cold). And it is obvious that perceiving itself cannot be such a process: when I am perceiving the coldness of a snowball over a period of time *t*, it may well be that my hand is becoming colder and colder throughout *t* (although this does not have to be the case), but my perceiving of the coldness surely does not consist in becoming colder and colder; rather I perceive the same coldness of the snowball throughout the whole of *t*. Indeed, as Aristotle stresses repeatedly, there is no time in which I would be, for instance, seeing without already having seen. In other words, unlike processes, perceiving is *complete*.[35] So, if the notion of 'being affected' were limited to processes (conceived as instances involving a progressive movement from *A* to *B*), it could hardly figure in the answer to the *what-is-it* question about perception.

However, when discussing perception, Aristotle does not merely take over the notion of being affected that he developed elsewhere. Rather, he goes beyond anything suggested in his *Physics* or in *Generation and Corruption* by insisting that the notion of being affected 'is not simple' and claiming that different kinds of being affected should be distinguished.[36] Such a distinction is supposed to help us understand the contrast between perception and processes like being cooled. It is a notoriously difficult scholarly question to ascertain how exactly this contrast should be understood. The influential idea that the relevant notion of being affected is synonymous with the notion of transition from 'not being active' to 'being active' makes the contrast so radically different from typical cases of being affected that it becomes unclear why Aristotle would

[34] *GC* 1.7, 324b4–6 (cf. 1.10, 328a18–22). Moreover, it should be noted that the agency of an agent is only numerically identical with the process undergone by the patient, without being identical with it in being, see Anagnostopoulos 2017.

[35] See *Metaph.* Θ.6, 1048b18–35 and *EN* 10.4. Cf. *Sens.* 6, 446b2–4. [36] *An.* 2.5, 417b2–5.

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call this notion a way of being affected at all. However, I shall argue that this idea is unwarranted and that the intended contrast is much less radical and more subtle. Once we understand it, we shall also be in a position to understand Aristotle's repeated assertion that perception *is* a kind of being affected. Indeed, this will provide the key to understanding how perceiving can be a case of being affected *and* a case of quality *and* a case of relatum, as well as how perceiving can be essentially complete (i.e. non-processual) *and* passive.

In pursuing this matter, I shall adhere to the following two methodological prescriptions: (a) rather than correcting Aristotle's assertions about what the primary perceptual (and thinking) acts are, we should try to understand them, as far as it is possible, at face value; and (b) in interpreting the notion of 'being affected' that is involved in these assertions, our starting point should be the full-blown notion of being affected that is developed in *Phys.* 3.3 and *GC* 1.6–7 and we should modify that notion only when and where Aristotle explicitly instructs us to do so. He never tells us, for instance, that something can be a case of 'being affected' without there being an agent that is, and remains throughout the time of its acting, distinct from the patient (a condition that is presupposed in both the *Physics* and *GC*).[37] So, the second prescription quickly rules out the idea of identifying the relevant notion of being affected with one of a mere transition that would be equally applicable to productive activities.

What about reason (ii), listed above – that is, the idea that perceiving and thinking are surely activities, and so not something passive? One obstacle in understanding Aristotle's account appears to be our modern notion of passivity, which in fact has a long medieval and ancient genealogy. It seems intuitively wrong, across various modern languages, to say that something is an activity and at the same time that it is passive; we tend to treat 'activity' and 'passivity' as mutually exclusive opposites.[38] This sharp distinction has an ancient heritage, derived from an opposition that crystallized in the Greek language of the Hellenistic period between derivatives of ἐνέργεια (activity) on the one hand and derivatives of

[37] Even the notorious case of a medical doctor healing herself will, in the final analysis, comply with this condition.

[38] For a classic modern account of this opposition, see Frankfurt 1977 (connecting the notion of activity with that of identity, i.e. with the question of what is and what is not 'part of me') and Raz and Ruben 1997 (Raz helpfully highlights ambiguous cases such as taking criticism without responding); see also Harré and Madden 1975: 82–100, 112–16, or Mayr 2011: 198–209 (who connects 'activity' with the modern notion of 'energy'); cf. further Korsgaard 2009, Katsafanas 2011, and McAninch 2017.

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πάσχειν (being affected) on the other. The scholiasts and grammarians of the time, for instance, standardly distinguish between the active (ἐνεργητική) and the passive (παθητική) voice of verbs (διάθεσις).[39] This opposition is also adopted in later philosophical texts, and we can see how classical authors, like Aristotle, have later been read through such a lens.[40] This same opposition then entered modern languages via Arabic and Latin.[41] But no such contrast is to be found in the classical authors themselves. For Aristotle, who elevated the notion of ἐνέργεια to a robust philosophical concept, the relevant opposite of πάσχειν (being affected) is not ἐνεργεῖν (being active), but ποιεῖν (acting),[42] and he finds nothing

[39] Διάθεσις μέση stands for the middle voice. This is common in all sorts of ancient scholia – on Homer, Pindar, as well as the tragedians. It is commonly used by Aristonicus in *De signis Odysseae* (see e.g. 1.404.2–3, 4.47.2–3 and 7.33.2), cf. also Dionysius Thrax (?), *Ars grammatica* 1.1.46–9. Later, it is common in the work of Apollonius Dyscolus and Aelius Herodianus. Here is a good example from Dionysius of Halicarnassus, showing how the adjective ἐνεργητικόν was gradually replacing the adjective ποιητικόν in the role of the opposite of παθητικόν at the time: 'When [Thucydides] switches the passive and the *active* voice of verbs (τὰ εἴδη τῶν παθητικῶν καὶ ποιητικῶν), here is how he expresses himself: "Nothing in the treaty prevents (κωλύει) either one or the other." For the *active* verb (ῥῆμα ἐνεργητικόν) "prevents" (κωλύει) is used instead of the passive "is prevented" (ἀντὶ τοῦ κωλύεται παθητικοῦ ὄντος).' (*Second Letter to Ammaeus* 7.1–5; cf. the quotation from the *De intellectu* in the following footnote).

[40] This can be observed in Ps.-Archytas, who uses the grammatical distinction (employed e.g. at *Fragments* 22.21–5) as a key for analysing the difference between the Aristotelian categories of ποιεῖν and πάσχειν (see especially 25.16–26.7, cf. 4.30–1, 5.5–7, 5.21, 5.28–9; but see also 24.8 where πάσχειν is characterized, in a perfectly Aristotelian way, as a κίνασις κατ' ἐνέργειαν). The grammatical use of the παθητικόν–ἐνεργητικόν opposition is also common in Galen (see e.g. *Hipp. Epid.* 3, 679.2–3, 679.15–16, 682.9–11), who does not hesitate to replace ποίησις by ἐνέργεια in his recognizably Aristotelian analysis of acting and being affected (see e.g. *PHP* 6.1.5–6). The author of *De Intellectu* (*Mant.* 2), i.e. Alexander of Aphrodisias or someone from his school, builds on this opposition explicitly in his reconstruction of Aristotle's account of νοῦς and νοεῖν – in a way that leads him to *deny* unambiguously what Aristotle repeatedly *asserted*: 'It is being productive (τὸ ποιητικόν) that is proper to νοῦς, and thinking (τὸ νοεῖν) is not being affected (πάσχειν) for it but being active (ἐνεργεῖν)' (112.4–5). See further e.g. Plotinus, *Enn.* 1.1.5.1–7 or 3.6.1 and 4.6.2, who starts from the claim that sense-perceptions are not πάθη but ἐνέργειαι (we shall see in Section 5.3 that this contrast seems to have its source in Alexander's interpretation, in his own *De Anima*, of Aristotle's account of perception). See, in this context, Rashed 2020: 213–22 on Boethius as a possible precursor of 'the assimilation of acting (ποιεῖν) to activity (ἐνέργεια)', codified later by Plotinus, *Enn.* 6.1.15–22.

[41] In both Arabic and Latin, words of the same root are standardly used to translate Greek words deriving from both ἐνεργεῖν and ποιεῖν, namely words of the root *f ʿ l* on the one hand (*bi-l-fiʿl* for ἐνεργείᾳ, *faʿʿāl* for ποιητικός) and words derived from *agō* on the other (*in actu* for ἐνεργείᾳ, *activus* for ποιητικός – but also for ἐνεργητικός). The two groups of meanings seem to be inextricably intertwined in the modern opposition between 'active' and 'passive'.

[42] See *Soph. Ref.* 22, 178a4–27, which suggests that this was the standard way of identifying the opposite of πάσχειν in Aristotle's time. For the Platonic background see e.g. *Phaed.* 97c8–d1, *Gorg.* 476d5–6, *Resp.* 344c2–3.

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strange in treating both πάσχειν and ποιεῖν as two kinds or aspects of ἐνέργεια (i.e. activity).[43]

From what has been said, one might think that this observation is somewhat trivial or purely of linguistic interest. Yet, what comes next shows that this is not the case. Aristotle does not merely subsume the notion of being affected under the notion of activity conceived very broadly, in a way that includes all kinds of changes or processes (κινήσεις). Rather, his conceptual map contains a well-delimited space for cases of being affected that fall under the notion of activity *but not* under the notion of change (κίνησις).[44] Indeed, I shall argue that these coordinates on his conceptual map are not only not empty, but that a major achievement of *An.* 2.5–3.8 consists exactly in locating the primary perceptive (and thinking) acts there, and explaining how this is possible. These acts are to be classified as *complete passive activities*, and we must divest ourselves of the ancient heritage of opposing 'activity' and 'passivity', if we are to appreciate this key notion.[45]

The completeness of perceiving (and even more so thinking) as a kind of being affected stretches the notion of passivity beyond what we standardly understand by it. Furthermore, the tension here is not just linguistic. It is first and foremost philosophical in the sense that it does not primarily concern Aristotle's use of the Greek verb πάσχειν, but, rather, his understanding of passivity itself. This understanding has hardly any parallel in modern philosophy, which has strongly emphasized spontaneity as a defining feature of human cognition.[46] In this respect, the present inquiry, albeit limited to perception, can also be understood as a case study of the original Aristotelian notion of passivity.

0.5 Outline and Argument

The work is organized into seven chapters. Chapters 1–3 provide a reconstruction of Aristotle's concept of complete passive activities, which he developed to capture, on the most general level, the receptive nature of the

[43] See e.g. *Phys.* 3.3, 202a36–b23 or *An.* 3.2, 425b25–426a27. Cf. now Wolt 2023 who uses this premise to argue for the later authorship of the *Magna Moralia*.

[44] Contrast James 1997: 30–7, for example, who takes Aristotle's notion of passivity to be essentially bound to both (a) capacity and (b) change.

[45] Johansen 2002 helpfully distinguishes several senses in which, on Aristotle's understanding, perception can be described as not just 'passive' but also 'active'. Yet, in all these cases 'activity' is considered as something over and above 'passivity'.

[46] The modern opposition between spontaneity and passivity (as revealed e.g. in Pippin's 1987 analysis of Kant's thought) does not seem applicable to Aristotle.

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primary perceptual (and thinking) acts. Chapters 4–7 explore how the idea of perception as a complete passive activity can be accommodated by Aristotle's hylomorphism.

In Chapter 1, I argue that Aristotle's novel notion of passivity ('preservative πάσχειν'), developed in *An.* 2.5, is key to his entire inquiry in the treatise, including his later analysis of the soul–body relationship and his concept of receptivity. That notion is yet to be properly understood. Most often it has been interpreted as either capturing just the material side of perception (*Material Interpretation*), or as being depleted of any genuine passivity (*Deflationary Interpretation*). The only existing alternatives in the literature consist either in taking the notion as defining specifically the passivity of the soul (*Psychic Interpretation*) or in denying that any such notion is introduced by Aristotle at all (*Aporetic Interpretation*). I argue that Aristotle's first general account of perception in *An.* 2.5 is systematically *pre-causal* in the sense that it is impossible to infer directly from it anything specific about the respective roles of the body and the soul (against both *Material Interpretation* and *Psychic Interpretation*). Furthermore, I contend that Aristotle develops a robust conception of passivity here that successfully encapsulates, on the most general level, what perception consists in (against *Deflationary Interpretation* and *Aporetic Interpretation*).

More specifically, I bring out the underestimated role that the *completeness* of perception, manifested most perspicuously in its ability to pass the so-called tense test (*Metaph.* Θ.6, *EN* 10.4), plays in Aristotle's account. In opposition to the view, which has been influentially advocated by Myles Burnyeat, that completeness has no place in Aristotle's scientific account of perception, I argue that it plays a pivotal role. The task is precisely to understand how perception can be both passive and complete, and how completeness is manifested in the specific kind of passivity characteristic of perception. I argue that Aristotle's interest in this question is centrally motivated by the need to explain how his assimilation model of perception can account for the difference between continued perceiving and merely having an after-image, or, more generally, between perceiving and appearing. Moreover, I suggest that Aristotle's novel notion of preservative πάσχειν is intended as a way out of the overarching puzzle in which, by Aristotle's lights, all of his predecessors were caught.

This last point is then fully developed in Chapter 2. I argue that an important lesson about the aim of Aristotle's first general account of perception is learnt by attending closely to the manner in which he sets his agenda within the context of a dialogue with earlier views, as analysed

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by Aristotle in *De Anima* 1, as well as in Theophrastus '*De Sensibus*. I focus primarily on Aristotle's engagement with the idea that, in perception, like is affected by like (*LAL*), as well as on his interest, throughout *An.* 2.5, in investigating what is true about this idea. Scholars have almost unanimously identified the truth of this view with the 'Democritean' notion of *generic likeness* as a universal condition of any acting and being affected (*GC* 1.7). Yet, there are several reasons why this cannot be what Aristotle has in mind. I argue that what he most likely has in mind is the commitment of a great majority of predecessors (as Aristotle sees them) to the idea that the perceiver is (in a full-fledged sense) *like* the perceived object by which she is *being affected* in perception. The two elements of this commitment seem jointly inconsistent with another widely shared assumption that only *unlike* things can act upon each other. Aristotle's point, I argue, is that while none of his predecessors was able to make these three tenets mutually consistent, an adequate account of what exactly perception is must be able to alleviate the tension among them.

This is because the key feature of perceptual affection consists exactly in its completeness – that is, the fact that the perceiver is being affected by a perceptual object while *already* having been affected by it and so assimilated to it. In perception, like is affected by like. I argue that this is the aspect of truth in the traditional view that like is known by like (*LKL*) that Aristotle wants to save from it (*Acquaintance/Contact Requirement*). However, he also thinks that there is something true about the competing view (associated with Anaxagoras) according to which what knows must be *impassive* (*Unbiasedness/Externality Requirement*). I propose that we can read Aristotle's first general account of perception in *An.* 2.5 as showing, in the most general terms, how the truths of the two competing camps can be incorporated into a consistent account. The key to successfully performing this task is nothing other than the notion of preservative πάσχειν. This larger context also shows why Aristotle thinks that the passivity of perception, if understood correctly, implies an impassivity on the part of the perceiver.

Chapters 1 and 2 are structured in such a way as to give the reader a full picture of the content and the relevance of Aristotle's concept of complete passive activities, without involving too many of the notoriously difficult details of *An.* 2.5. Chapter 3 completes the task by delving into these difficulties and offering a comprehensive interpretation of the key passages of *An.* 2.5. Furthermore, this chapter also sets the concept of complete passive activities within the larger context of Aristotle's account of change (κίνησις) in *Physics* 3 and activity (ἐνέργεια) in *Metaphysics* Θ. The reader

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who is not interested in either of these endeavours can feel free to jump from Chapter 2 directly to the final section of Chapter 3.

In Chapter 3, I show how the central passage of *An.* 2.5 (417a21–b16) establishes both the completeness of perception as well as the compatibility of this completeness with perception's passivity. Aristotle's core claim here is that there is a kind of capacity that is already a fulfilment of its subject and that the perceptive capacity is one of these, despite being a *passive* capacity. In this way, Aristotle identifies the ground of the two major differences between perception and passive processes – namely, the inexhaustibility of the perceptive capacity and the object-directedness of perception. I argue that, by developing the notion of complete passive activities, Aristotle fills a theoretical gap left open elsewhere in his corpus, most strikingly in *Metaph.* Θ.6, which contains the ideas both of perception being passive and of it being complete but without making any attempt to secure the consistency of the two perspectives. The concept of complete passive activities is far from obvious from Aristotle's perspective, but in *An.* 2.5 it is shown to be a consistent notion that is crucial for understanding the perceptive (and the thinking) capacity of the soul. I conclude that Aristotle's first general account of perception provides a *programmatic definition* (comparable with the 'most general account' of the soul offered in *An.* 2.1). It captures what perception must be like and what conditions a successful account of it needs to fulfil, but it does not identify the *explanantia* of perception and, thus, does not succeed yet in ensuring that the highly demanding picture of perception sketched here is not a mere chimera.

The question of explanation, and particularly of the perceptive soul as the primary cause of perception, becomes central in Chapters 4–7. In Chapter 4, I first spell out how demanding Aristotle's notion of perception really is. I contend that he is committed to a specific version of *direct realism*, according to which perceivers have an unmediated access to external objects whose qualities they receive, and he holds that the perceivers cognize these objects, in principle, as the objects are on their own. This involves making two contentious claims: (1) according to Aristotle, perceiving the bearers of perceptual qualities involves no *synthetic* acts but, instead, falls squarely under the notion of complete passive activity; and (2) Aristotle endorses an *uncompromised realism* according to which perceptual qualities are fully real even when they are not perceived. Moreover, there is a third, closely connected, claim: (3) Aristotle cannot embrace representationalism of the kind standardly ascribed to him, for his account excludes the existence of any standing material representations on the part of the perceiver.

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Furthermore, in Chapter 4, I analyse Aristotle's conception of mediation, as one of the two key factors (together with the 'discriminative mean') introduced in *An.* 2.7–11. I argue that the media are, by Aristotle's lights, *qualitative conductors*, meaning that their functioning consists in passing the affection they receive immediately over to something else. This involves a *dynamic* conception of change, akin to the notion of complete passive activities, but without really falling under it. Chapter 4 produces two key results:

(a) I make a case for reconsidering the notorious question of what, according to Aristotle, happens in the body of a perceiver when they perceive. The existing discussion in the literature is governed by the following disjunction: either at the time of perceiving *F* the organ is literally or 'analogically' like *F* (materialism), or no material processes whatsoever are essentially involved in perception (spiritualism). I argue, first, that neither of these options satisfies the demands encapsulated in the concept of complete passive activities. Neither of them, that is, succeeds in accounting for the difference between continued perceiving and a mere after-image. Second, I argue that *tertium datur* and that this alternative is exactly what Aristotle is developing in the *De Anima*. The perceptive organs undergo *material processes*, exactly like those undergone by the media even in the absence of any perceiver (against spiritualism). Yet, these processes must not result in any persisting material likeness to the perceived object (against materialism), for that would make it impossible for the perceiver to be further affected by the object, and so to continue perceiving it. This also tells against the plausibility of existing representationalist interpretations. What the material processes result in is rather a *phenomenal likeness*: the presence of a quality in the perceiver, which, however, remains a quality *of* the external perceptual object, as its proximate matter remains outside the perceiver.

(b) I draw out two key questions for Aristotle's explanatory account of perception. (1) What exactly is the difference between perceiving, on the one hand, and the kind of affection caused by perceptual objects in non-perceptive entities (such as the media), on the other? (2) How is the soul expected to account for this difference? Discrimination (κρίνειν) turns out to be the key notion for spelling out the difference. But there are three basic options for answering the first question: either perceiving is something over and above being affected (*Isolation*); or perceiving is composed of being affected plus something else (*Composition*); or again, perceiving is a different kind of being affected (*Specification*). I defend *Specification*, which implies that discrimination does not refer to another event or an

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additional component, but that it, instead, describes perceptual πάσχειν exactly under the aspect distinguishing it from all non-complete passive activities. I also argue that the weight of the second question has rarely been appreciated, particularly by existing non-reductive materialist interpretations.

This second question is then fully developed in Chapter 5. I there identify the core puzzle concerning Aristotle's account of the perceptive soul and analyse three possible ways of resolving it. The puzzle consists in Aristotle's apparent commitment to a triad of tenets that seem mutually inconsistent – namely: (1) the perceptive soul is the primary cause of perception; (2) perception is passive; and (3) the perceptive soul is impassive. These claims appear to be mutually inconsistent in virtue of the assumption that the soul can be the primary cause of φ-ing only if it is the proper subject of ψ-ing and φ-ing consists in ψ-ing (*Cause/Subject*). The three possible ways of resolving the puzzle, accordingly, require either inferring that perception cannot really be passive, or inferring that the perceptive soul must, after all, be passive, or rejecting *Cause/Subject*. The first two solutions dominate the history of the reception of Aristotle's work and can be traced back to Alexander of Aphrodisias and Themistius, respectively. A brief historical excursus is helpful here in bringing out the limitations of each approach.

Each of these two views has difficulties beyond the fact that they explicitly deny one of the three tenets that Aristotle seems emphatically to affirm. Alexander's approach suffers from making the involvement of the perceptive soul in perception rather mysterious. Themistius' approach, on the other hand, undermines the very point of Aristotle's criticism of Plato on the soul's self-motion. In the final section, I sketch out a third approach that can be loosely connected with the Latin Averroist notion of the so-called *sensus agens*. The central idea is that we are free to reject *Cause/Subject* once we appreciate Aristotle's claim that the soul is an efficient cause of perception (*An.* 2.4, *PA* 1.1) – that is, once we realize that Aristotle, apparently, intends to extend the model of unmoved movers even to perception. I make a case for taking this third approach seriously, despite the marginal role it has hitherto played in the reception of Aristotle and the unsatisfactory nature of the existing versions of the view.

Chapters 6 and 7 are, to a large extent, aimed at developing a viable version of the third approach. However, they also provide, less speculatively, novel comprehensive interpretations of (a) Aristotle's conception of perceptual discrimination and (b) his second general account of perception as a reception of forms without the matter in *An.* 2.12. In Chapter 6,

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I provide reasons for rejecting the widely held view according to which Aristotle believed that discrimination (κρίνειν) is a three-place predicate and that the most basic perceptual acts consist in noticing *differences* between two or more perceived qualities. There is much that speaks against this interpretation, which builds on the idea (critiqued in Chapter 4) that we perceive modal-specific qualities independently of their bearers. I argue that perceptual κρίνειν is for Aristotle more like sifting, winnowing on a sieve: it consists in identifying the quality of an external object as distinct from any other quality of the given range that the object could have. Moreover, there is a semantic layer of κρίνειν (directly connected to what is conventionally called *sensus iudicialis*) whose significance for Aristotle's account has not hitherto been appreciated. Classifying perception as a case of κρίνειν means claiming that the senses possess the ultimate epistemic authority to tell (or reveal) what things in the world are really like. The account of perception in the *De Anima* can, then, be understood as a way of showing, first, how conflicting intuitions about the kind of authority involved here can be reconciled and, second, how this remarkable cognitive feat can be achieved, throughout the animal kingdom, independently from reason.

The notion of a discriminative mean (μεσότης) introduced in *An.* 2.11 is pivotal for answering the second question and merits its own discussion. Accordingly, I first draw out how Aristotle embeds discrimination within the assimilation model from *An.* 2.5. Here, the dynamic nature of perception, which has gone under-appreciated by both sides of the materialism–spiritualism debate, becomes important again. This is the case because the capacity for being assimilated to perceptual objects that is characteristic of perceptive organs cannot be a spiritual capacity, nor can perception involve the material fulfilment of that capacity. Rather, despite being materially affected, the organs remain materially unlike the perceptual objects. The only likeness established in the organ is a result of discrimination. The notion of discriminative mean provides the most general model of how this likeness is achieved. I argue that Aristotle adapts his concept of a homeostatic mechanism, which he developed primarily for nutrition and metabolic processes in general, in order to explain just how perception occurs. The perceptive soul functions as the controlling factor of the countervailing reactions that constantly neutralize the agencies of perceptual objects exercised, via the media, on perceptive organs. In this way, perceptual objects are constantly *measured* in the perceptive organs as on a kind of qualitative balance scale. This is exactly how phenomenal likeness is generated – it is the quality of the perceptual object being measured in

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the perceptual organ, and in such a way being present in it. This explanatory model of discrimination provides a promising framework for capturing the role of the perceptive soul as the primary cause of a complete passive activity without compromising its impassivity. While the model is certainly not free from difficulties, I show in the final chapter that the main worries, at least, can be addressed.

Independently from this more speculative proposal, Chapter 6 provides a comprehensive interpretation of Aristotle's account of perceptual discrimination. One upshot is that while discrimination is grounded in the assimilation model, it extends beyond this model, since perception is a *holistic assessment* of external bearers of qualities. Accordingly, it is not the case that *all* their aspects must be causally efficacious in order for them to be discriminated. That is primarily true of privative aspects (such as darkness or silence) and of aspects within the perceiver's blind spots (such as temperatures equal to the perceiver's own bodily temperature). Even these, on Aristotle's understanding, fall under the ultimate, perfectly objective authority of heathy perceptive organs.

In Chapter 7, I tie up the loose ends of the proposed homeostatic model of the soul's causality, and I close the study with an analysis of two famous passages: Aristotle's second general account of perception in *An.* 2.12 and his final summary, which pertains to both perception and thought, in *An.* 3.8. I start by explaining how Aristotle can hold that perceptual objects are unmoved causes despite the fact that, in many cases at least, they are obviously affected and changed by perceivers and media. My contention is that, even when the perceiver affects the perceived object, she is perceiving it as it is on its own and not just as it is 'for her'. She succeeds in doing so because the changing quality that is constantly present in her perceptual organ is a quality *of* the external object itself. One difficulty for the homeostatic model of perceptual discrimination is how Aristotle can extend the model from touch, where it seems most intuitive and apparently works best, to non-tangible modalities (this difficulty being symmetrical with the worry regarding how Aristotle can extend the notion of mediation to the contact senses). The physiological details are admittedly murky, but this will be the case for any interpretation and there is no principled reason that speaks against making such an extension.

The more serious worry pertains to the kind of agency ascribed to the perceptive soul in the homeostatic model. What does it really mean for the perceptive soul to be the controlling factor? And, more specifically, how can it play this role without already having cognitive access to how the organs are affected? Given that what Aristotle proposes is an account of the

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most rudimentary cognitive acts, the latter option would be a deplorable *petitio principii*. I propose, instead, to see the role of the perceptive soul as an extension of the homeostatic model developed primarily for nutrition (in *An.* 2.4 and beyond), which, in turn, is an application of Aristotle's art analogy from *Physics* 2 (and elsewhere). The role of the soul is modelled on the role of an art, which determines not just the end, but also the means leading up to that end in any given situation. In the case of nutrition, the relevant end determined by the nutritive soul is the preservation of the body in its natural state. This involves a control exercised over the current state of the body in each situation, which is clearly neither deliberative, nor cognitive. In line with Aristotle's famous claim that 'art does not deliberate' (*Phys.* 2.8), it seems that we should see deliberation and cognition in general as shortcomings, which are set aside in the case of a living body where there is nothing like the gap between the artisan and her instrument. The point of the homeostatic model is that the basic cognitive acts are underlaid by a more basic *non-cognitive* operation of the living body, which seems to be an entirely plausible assumption. The essential difference from nutrition consists in the fact that homeostasis becomes only a means for achieving something quite different – namely, discrimination, which is a complete passive activity where a quality of the external agent is received while still being possessed by that agent.

The scholarly debate regarding Aristotle's second account of perception in terms of receiving forms without the matter in *An.* 2.12 has been, as is the case with so many other interpretative issues, governed by the divide between materialist and spiritualist approaches. The account has accordingly been interpreted as saying that no material particles are received in perception (literalism), that the same ratio is received in a different pair of contraries (the analogical interpretation), or that no material processes are involved (spiritualism). I argue that none of these approaches can successfully explain the details of the text and that all of them miss the main point. That is because they all silently assume precisely what Aristotle is denying here – namely, that the form in question is received as a form *belonging to the perceiver herself*. Aristotle's point, in contrast, is that perceiving consists exactly in receiving forms whose proximate matter remains outside. They remain forms *of the external objects* acting on the perceivers, and this is exactly what perceiving such objects amounts to. Aristotle's account of receptivity is thus firmly set within the framework of his novel notion of passivity.

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CHAPTER 1

Accounting for Receptivity

1.1 The Passivity of Perception

Among the numerous passages attesting to Aristotle's willingness, in the *De Anima* and beyond, to classify perception as a kind of being affected (πάσχειν),[1] one of the most telling comes at the outset of his inquiry into the thinking part of the soul in *An.* 3.4:

> If thinking is indeed like perceiving,[2] (**i**) it will either be a kind of being affected by the object of thought or something else like this. Thus (**ii**) [νοῦς] needs to be something impassive (ἀπαθές) but (**iii**) receptive of form and (**iv**) in capacity such [as its object]. (*An.* 3.4, 429a13–16)

It is significant that, when summarizing his account of perception in this new context, the very first feature that Aristotle underscores is its passivity.

This fact has, unfortunately, been somewhat obfuscated by difficulties surrounding the point behind Aristotle's disjunction in (i). Perhaps, one might think, he wants to say that thinking is *not really* a kind of being affected, but only resembles it.[3] And perhaps he is implying that this was already true for perception.[4] These readings, however, are undermined by how Aristotle proceeds in the chapter. When he comes to formulate a puzzle about thinking as a kind of being affected at 429b22–6, he simply drops the second disjunct. Furthermore, in his response to the puzzle, he

[1] Cf. Section 0.1, n. 4.

[2] For our present purposes we can leave aside the question of the status of this hypothesis, which is crucial for the interpretation of *An.* 3.4–8. Some scholars have argued that Aristotle only introduces it in order to refute it later (see e.g. Lowe 1983: 28 or Jaulin 2020: 77). Others have taken it to have a constructive role, though merely as a heuristic tool (see e.g. Corcilius 2024a). Still others have recognized a genuine similarity here (see e.g. Polansky 2007: 436–7, and, earlier, Polansky 2000: 60; cf. also Caston 2000: 138–9 and Magee 2003: 124–5).

[3] Some interpreters have, on these grounds, identified this as the first contrast between perception and thought, see e.g. Hicks 1907: 476, Ross 1961: 291, or Shields 2016: 298.

[4] This seems to be how, for instance, Alexander of Aphrodisias read Aristotle, as becomes apparent in his *An.* 84.3–6 (cf. Section 5.3).

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reaffirms the classification (again without any mention of the second disjunct).[5] This suggests that the disjunction is neither intended to draw a contrast between perception and thought, nor meant to call their classification as cases of being affected into question. To understand the point behind the disjunction, we must return to Aristotle's account of perception. I shall argue that he is referring us all the way back to *An.* 2.5.

As soon as passivity is in place in (i), Aristotle further infers from it a series of three characteristics pertaining to νοῦς in (ii)–(iv). The last two of these features are rather clearly drawing on Aristotle's second general account of perception in *An.* 2.12.[6] What is significant here is that *receptivity* is introduced as following from, or further building on, the relevant notion of *passivity*. We shall see that this order encapsulates something important about the relation between Aristotle's two general accounts of perception in *An.* 2.5 and 2.12.

The case of (ii) – that is, *impassivity* – is somewhat more puzzling. There is no passage within Aristotle's account of perception in *An.* 2.5–3.2 that explicitly establishes the claim that 'that which can perceive' (τὸ αἰσθητικόν) is impassive. Moreover, the whole idea of inferring impassivity on the part of perceivers (or thinkers) from the passivity of perception (or thinking) seems paradoxical.[7] This is what has led to the scholarly suggestion that we see here, again, a contrast between perception and thought.[8] But this suggestion is even more powerfully disproved by what follows in *An.* 3.4. Aristotle returns to discuss impassivity at 429a29–b5 in order to argue that 'the impassivity of that which can perceive and that which can think is not the same' (429a29–30). This is a rather obvious qualification of (ii), which shows that the claim made in (ii) was not yet intended to draw out a contrast between perceiving and thinking. This is further confirmed by the logic of Aristotle's second inferential step in the quoted passage: impassivity is derived together with (iii) and (iv), which

[5] See *An.* 3.4, 429b29–430a2. Cf. *Metaph.* Λ.7, 1072a30 where Aristotle takes for granted that 'νοῦς is moved by the object of thought'.

[6] See *An.* 2.12, 424a17–19, 23–4 (discussed in Section 7.4).

[7] The paradox cannot be dissolved simply by retranslating the adjective ἀπαθές as 'devoid of any property' (for which see e.g. Crubellier forthcoming). This characteristic could, indeed, be more easily inferred from πάσχειν. According to Aristotle, if *X* is to be affected by *F* it must, indeed, prior to the affection, be devoid of *F* and of any property that could hinder *F*'s acting. But this abstract meaning of ἀπαθές is relatively rare in Aristotle (see Bonitz 1870: 72). And there is no attested occurrence of the noun ἀπάθεια with this abstract meaning whatsoever (cf. Bonitz 1870: 71–2), which makes this reading of (ii) particularly unlikely, given its echo in terms of ἀπάθεια at 429a29–30.

[8] See e.g. Shields 2016: 297: 'The disanalogy: Reason is, nonetheless, unaffected (*apathes*; 429a15).' Cf. Ross 1961: 40.

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clearly draw on established major features of perception. This underscores the question about where Aristotle believes impassivity has been established.[9] I shall argue that in (ii) Aristotle still has *An.* 2.5 in mind, though in this case we cannot fully understand his point without comprehending how his first general account of perception is set within a dialogue with his predecessors (as developed in Book 1), including Anaxagoras and his theory of an impassive νοῦς.

Let us now turn to examine how Aristotle's first general account of 'all perception' (416b32–3) is introduced in *An.* 2.5. He starts from the observation that perception 'comes about in being changed (κινεῖσθαι) and being affected (πάσχειν), as has been said', for (γάρ) 'it seems to be an alteration (ἀλλοίωσίς τις)' (416b33–4).[10] The thought here is not altogether transparent, but it seems safe to say at least that it indicates the central focus of Aristotle's first general account. Throughout the chapter, he is engaged in investigating how the notion of being affected as well as the related notions of being changed and being altered apply to perception, and how they contribute to capturing what exactly perception is. The notion of being affected is omnipresent in *An.* 2.5 and the chapter contains the only explicit passage in *De Anima* – and, indeed, in the Aristotelian corpus as a whole – distinguishing *different kinds* of being affected (417b2–5).[11] Moreover, the chapter closes (418a3–6) with nothing other than a full-fledged account of perception as a kind of being affected by, and assimilated to, the perceptual object. Furthermore, immediately before this closing passage, Aristotle insists (at 417b32–418a3) that, after drawing the requisite distinctions, it is admissible, and indeed necessary, to use the notions of 'being affected' and 'being altered'

[9] The notion of ἀπάθεια is first introduced in *An.* 1.2 (405b19–23) as a characteristic of the Anaxagorean νοῦς (for the modal profile of its impassivity, cf. *Phys.* 8.5, 256b20–7). At *An.* 1.4, 408b24–30 it is νοῦς (and the perceptive capacity) that is claimed to be ἀπαθές in the sense of resistant to perishing (there is, to be sure, no way of inferring this from passivity). At *An.* 1.5, 410a23–5, and 2.4, 416a32, the adjective figures in Aristotle's formulation of the thesis that like *cannot be affected* by like.

[10] It is not easy to capture exactly the intended meaning of 'coming about in' (συμβαίνειν ἐν) here (cf. *Cael.* 3.7, 306a20–3; *Meteor.* 2.5, 361b31–2). For a similar phrase expressing the traditional characterization of perception as a kind of alteration, see Theophrastus, *Sens.* 2, 499.7–8 (cf. 23, 506.5–6 and *Metaph.* 5b5–6). Cf. Burnyeat 2002: 76–9 for an interpretation of συμβαίνειν ἐν as an '"is" of classification' in contrast to an '"is" of composition' (as proposed by Sorabji and others). I find Burnyeat's criticism of the latter reading convincing. But the notion of 'classification' needs to be clarified, which I endeavour to do in Sections 1.3 and 3.4.

[11] Accordingly, the chapter can be understood as explaining what is elsewhere often tacitly assumed – namely, that perception is *a kind of* 'being affected' and 'being altered' (or 'being affected' and 'being altered' *of a kind*). See e.g. *Phys.* 7.2, 244b10–12; *Insomn.* 2, 459b4–5; *MA* 7, 701b17–18 (cf. also *Soph. Ref.* 22, 178a4–27).

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(ἀλλοιοῦσθαι) as 'proper terms' (κύρια ὀνόματα) when talking about perception, claiming that this should be done despite the fact that the usual narrow notions of 'being affected' and 'being altered' have turned out to be unsuitable.[12] It is here, I shall argue, that we find the background necessary for understanding Aristotle's disjunction in (i) above.

While one can hardly deny that *An.* 2.5 provides the central source for understanding the sense in which perception is passive, there have been widely diverging views on what exactly this passivity amounts to. We can distinguish four main approaches:

MATERIAL INTERPRETATION. Some interpreters have thought that 'being affected' refers only to a necessary condition or to the material component of perception, such as any bodily changes presupposed by, or involved in, the activity of perceiving.[13]

DEFLATIONARY INTERPRETATION. Other scholars have claimed that 'being affected' in the relevant sense captures only the *transition* from not perceiving to perceiving and, in general, from not φ-ing to φ-ing, where φ-ing does not need to be passive in any sense whatsoever (as supposedly manifested by the example of housebuilding at 417b9).[14]

PSYCHIC INTERPRETATION. Still other scholars have understood the notion of being affected as capturing the specifically 'psychic' aspect of perception in contrast to its 'bodily' element.[15]

APORETIC INTERPRETATION. Recently, it has been argued that *An.* 2.5 does not say *anything* positive about the passivity of perception whatsoever: it only formulates a dilemma constituted by two different and apparently incompatible descriptions of perception as a kind of being affected by, and assimilated to, the perceptual object on the one hand, and as a non-kinetic activity (ἐνέργεια) on the other.[16]

[12] The passage is discussed in Section 3.4.

[13] See e.g. Sorabji 1974: 53–6, and Sorabji 1992: 208–9; cf. Sorabji 2001: 51, who describes this reading as the *communis opinio* before Burnyeat's seminal paper on *An.* 2.5. For its ancient predecessors, see Section 5.3.

[14] This is the reading proposed by Burnyeat 2002, which has been adopted by numerous modern scholars, including Sorabji 2001 (see references in n. 21).

[15] See Lorenz 2007 (following, effectively, a long and influential tradition that can be traced back at least to Themistius, more on which in Section 5.4). The idea is also endorsed e.g. by Johansen 2012b: 166, and Carter 2018: 53–8 (cf. Carter 2019a: 104); cf. also Charles 2000: 111. Notice that the *Psychic Interpretation* of passivity does not amount to a spiritualist interpretation of Aristotle's account of perception. On the contrary, it was proposed by Lorenz as an alternative to Burnyeat's spiritualism, which draws on the *Deflationary Interpretation* of passivity (which, in turn, can be spelled out in terms other than spiritualist ones).

[16] See Anagnostopoulos 2023.

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I shall argue that none of these approaches can correctly capture the strategic role ascribed to the notion of being affected in *An.* 2.5. That's because interpreters have expected both too much and too little from this chapter. On the one hand, they have expected too much when looking for answers to questions about the respective roles of the body and the soul here (*Material*, *Deflationary*, and *Psychic Interpretation*).[17] On the other hand, they have expected too little when taking the notion of passivity developed here to be just one horn of a dilemma (*Aporetic Interpretation*), when taking it to concern only the material side of perception (*Material Interpretation*), or, again, when deflating this notion to such an extent that nothing genuinely passive remains (*Deflationary Interpretation*). I shall argue that although *An.* 2.5 operates at a preliminary stage of inquiry, which makes it impossible to draw any firm conclusion from it about the respective roles of the body and the soul, Aristotle succeeds in outlining here the essence of perception as a specific – namely, complete – kind of passive activity.

To draw out this ground-breaking achievement, I focus on three main issues: (1) Aristotle's way of distinguishing different kinds of πάσχειν in the core part of *An.* 2.5; (2) the role played in the whole chapter by the idea that perception is a non-kinetic (i.e. complete) activity; and (3) the way in which Aristotle takes his first general account of perception to surpass his predecessors' earlier accounts and to solve difficulties inherent in them. In the remaining three sections of the present chapter, the three issues are introduced one by one, with a focus on what is both exegetically and philosophically at stake in each case.

1.2 Passivity and Preservation

At a key juncture of *An.* 2.5 Aristotle distinguishes between two kinds of πάσχειν:[18]

[17] A comparison with Aristotle's treatment of nutrition in *An.* 2.4 may help explain why this is mistaken. Aristotle's solution to the initial puzzle at 416b3–11 leaves the respective roles of the soul and the body entirely undetermined, with the only takeaway being that what nourishes itself needs to be an ensouled body (416b9–11). The specific role of the soul is only distinguished from the role of the body later at 416b20–3.

[18] According to the *Aporetic Interpretation*, Aristotle instead distinguishes πάσχειν from what is not really πάσχειν, but rather a preservation. I shall, in contrast, defend the traditional view that two kinds of πάσχειν are distinguished here. For a later application of the notion of preservative πάσχειν, see *An.* 2.10, 422a34–b10 (discussed in Section 6.4).

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> And neither is being affected (τὸ πάσχειν) simple. But one kind of it (τὸ μέν) is a destruction (φθορά τις) by what is contrary (ὑπὸ τοῦ ἐναντίου), whereas another kind (τὸ δέ) is rather a preservation (σωτηρία μᾶλλον) of what is in capacity (τοῦ δυνάμει ὄντος) by that which is in fulfilment (ὑπὸ τοῦ ἐντελεχείᾳ ὄντος) and like it (καὶ ὁμοίου) just as capacity relates to fulfilment (οὕτως ὡς δύναμις ἔχει πρὸς ἐντελέχειαν). (*An.* 2.5, 417b2–5)

There are several interpretative questions about how the kind of πάσχειν that 'is rather a preservation' (we can call it 'preservative πάσχειν') is introduced here and characterized. To address these worries appropriately, we shall need to analyse not only the sentence but also its larger context (417a21–418a3) in detail in Chapter 3. For now, I only wish to sketch two main existing readings and offer an alternative approach.

The deflationary reading[19] is based on interpreting the preposition ὑπό as introducing not the efficient cause (i.e. τὸ ποιοῦν), as one would expect, but the final state to which the πάσχειν in question leads (i.e. the *terminus ad quem*).[20] Understandably, the reader who takes this interpretative path then tends to take Aristotle's point about likeness as saying that the starting point and the end-point of preservative πάσχειν are *very much* like each other, just as, for instance, the housebuilder who is not active is very much like the housebuilder who is actively housebuilding. The two are separated not by a genuine change, but merely by an innocuous transition.[21] These two interpretative decisions jointly imply that preservative πάσχειν involves, in itself, no genuine passivity whatsoever.

On the other hand, existing non-deflationary readings[22] differ in taking ὑπό as introducing the efficient cause and in understanding the point about likeness as spelling out a commonality between the patient and the

[19] This reading underlies the *Deflationary Interpretation*, but it is also endorsed within the *Aporetic Interpretation*.

[20] See especially Burnyeat 2002: 54–6, who is drawing here on Alexander's *Quaest.* 3.2–3 (see especially 3.3, 83.32–84.5 and 86.18–23; cf. 3.2, 81.22–5).

[21] Rather than the transition being, say, from white to red, it is e.g. from potential thinker to actual thinker (Burnyeat 2002: 55–6). The idea, then, is that the potential thinker is preserved by (ὑπό) the actual thinker or by 'being a thinker in fulfilment'. And this is supposed to be exactly what preservative πάσχειν means: to 'be affected' in the relevant sense means *nothing other* than to bring a 'second' capacity that one already has into fulfilment. Some such reading is adopted by many recent interpreters, see e.g. Polansky 2007: 234–6, Caston 2005: 267–8, Herzberg 2007: 113, Shields 1997: 328, Johansen 2012: 24, 290, 293 (cf. already Johansen 1997: 11–12), and Rapp 2017b: 71–2. A termini-reading is also endorsed by Heinaman 2007, Bowin 2011 (cf. Bowin 2012a and Bowin 2012b), or Anagnostopoulos 2023.

[22] These can underlie both the *Material* and *Psychic Interpretation*.

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agent as a condition of the latter acting on the former. Typically, Aristotle is taken to be speaking here about a *generic* or a *potential* likeness between the two.[23] The upshot of this interpretation is that, except for the term 'preservation', everything Aristotle says about the second kind of being affected is a perfectly general description applicable to any πάσχειν whatsoever (as implied by *GC* 1.7).[24]

Each of these approaches faces exegetical difficulties. The widespread deflationary understanding of ὑπό appears to be very unlikely.[25] Furthermore, both approaches rely on a very unusual understanding of likeness. Nowhere else in the *De Anima* does Aristotle mean by 'likeness' a likeness of two *termini*, or a merely potential or generic likeness. One passage in *An.* 2.5 (416b35–417a2), to be sure, has been widely read as introducing the concept of a generic likeness; but we shall see (in Sections 2.1 and 2.2) that this standard reading faces serious problems. Indeed, throughout *An.* 2.4–5, and beyond, Aristotle always speaks of 'likeness' in terms of a full-fledged likeness between the agent and the patient *resulting* from πάσχειν, and he always describes the state preceding πάσχειν simply in terms of unlikeness.[26]

More importantly, I shall argue that neither of the two approaches allows us to appreciate the philosophical contribution of the quoted passage to the overall argument of *An.* 2.5. Under existing non-deflationary readings, the passage fails to specify the notion of preservative πάσχειν in a way that would bring us any closer to understanding what perception is (given that what is said about it holds equally well for any other instance of πάσχειν). Under the deflationary approach, on the other

[23] For the former, see e.g. Hicks 1907: 356 (cf. Thomas Aquinas, *In An.* 2.11, §366). For the latter, see e.g. Ps.-Simplicius, *In An.* 122.23–5 or Brentano 1867: 79–81, cf. Charles 2021: 120–9 and Kelsey 2022: 59–63. Lorenz 2007: 181–8 clearly accepts a non-deflationary reading of ὑπό, but without spelling out his understanding of the likeness involved.

[24] Some interpreters take even the preservation to be 'a perfectly general point about being affected', as is the case in Kelsey 2022: 62. This view leads Kelsey, understandably, to place the quoted passage in brackets as a parenthetical remark.

[25] We do not find a single parallel use of ὑπό in the *De Anima*. Indeed, as far as I can see, fifty-three out of fifty-six uses are unambiguously introducing the efficient cause. Just a few lines after our passage, the very same expression, ὑπὸ τοῦ ἐντελεχείᾳ ὄντος, is qualified by διδασκαλικοῦ (417b13), confirming that what Aristotle refers to is, indeed, the efficient cause (here the teacher) as the source of the patient's (here the learner's) fulfilment, and *not* this fulfilment itself. In the remaining two cases in *An.* 2.5 (417a9, 418a3–4), too, τὸ ἐντελεχείᾳ ὄν refers unambiguously to the efficient cause (here the external perceptual object); cf. *An.* 2.11, 424a1–2; 2.12, 424a22–3; 3.7, 431a1–7.

[26] See especially *An.* 2.5, 417a20 where Aristotle makes it as explicit as he can that, by likeness, he means what results from being affected, *not* what precedes it (what precedes is unambiguously described as unlikeness). This is confirmed at 418a4–6. See also *An.* 2.4, 416a32 and b7; cf. 3.3, 428b14 and 429a4–5.

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hand, preservative πάσχειν loses any contact with the passivity of perception whatsoever. The troubles implied by this move become evident in Myles Burnyeat's seminal paper. Burnyeat, who successfully elevated the *Deflationary Interpretation* to something of a *communis opinio*, insisted at the same time (rightly I believe) that receptivity of perception is the leading concern of Aristotle's first general account.[27] Yet, it is difficult to understand how Aristotle can account for perception's receptivity after deflating the notion of preservative πάσχειν. Burnyeat's idea is, roughly, that Aristotle first introduces the notion of preservative πάσχειν at 417b2–5 to capture a mere transition from a second capacity to its fulfilment, and then distinguishes two different kinds of such transitions: those that *can* and those that *cannot* be described as 'alterations of a kind'.[28] It seems very unlikely, though, that Aristotle wished to undertake this cumbersome conceptual manoeuvre.[29]

[27] Aristotle's central aim is to 'do justice to the receptivity of perception' (Burnyeat 2002: 69; see also 45, 58, 71–3). There is barely any trace of the deflationary reading in antiquity beyond Alexander's *Quaest.* 3.2–3. In Themistius' *In An.* preservative πάσχειν is understood as labelling the specific way in which 'that which can perceive' is affected by, and assimilated to, perceptual objects in contradistinction to the way in which non-perceptive objects are affected by, and qualitatively assimilated to, objects around them (see *In An.* 56.34–57.9). Such a reading of 417b2–5 seems to be also behind the account of perception in Alexander's own *De Anima*. Within 38.19–40.3, drawing directly on *An.* 2.5, we do not find any of the distinctive features of the deflationary approach adopted in *Quaest.* 3.2–3. Rather, Alexander seems to be assuming that the chapter has explained the specific sense in which perceivers are affected and altered by perceptual objects in contrast to how non-living entities and plants are affected. Moreover, this is how all other Greek commentators known to us seem to have understood the passage, too (see Philoponus, *In An.* 301.3–303.29, Ps.-Simplicius, *In An.* 122.22–7, and Sophonias, *In An.* 67.6–17).

[28] Burnyeat 2002: 57–9.

[29] There is no obvious reason why Aristotle should then want to introduce something like preservative πάσχειν (which is not a genuine kind of πάσχειν) in the first place. Why is e.g. μεταβάλλειν, which serves as a neutral word fit for transitions (cf. 417a30–b2), not sufficient, and why does Aristotle not simply distinguish between μεταβολαί that are, and μεταβολαί that are not, alterations? Furthermore, the sharp contrast in meanings between πάσχειν and ἀλλοιοῦσθαι, implied by Burnyeat's reading, is surprising, for throughout the chapter Aristotle treats the two terms as intimately bound together, from their introduction at 416b33–5 (see especially the closing lines: 417b32–418a6). A central pillar of support for the deflationary reading has been found in Aristotle's reference to housebuilding at 417b8–9: if the notion of preservative πάσχειν is here applied to the transition from not building to building (i.e. to a productive activity *par excellence*), as is often presupposed, then the notion clearly cannot involve any genuine passivity. However, I shall argue (in Section 3.5) that Aristotle's point in these lines is very different and has no such implications, thereby undermining the passage's support for the deflationary reading. An additional motivation behind Burnyeat's strategy is his understanding of the contrast between perception and thought at 417b16–29, which he takes to imply that perception is, and thought is not, receptive/qualitative (see Burnyeat 2002: 57–9 and Burnyeat 2008a: 22–4). This is a thorny issue that cannot be decided without an in-depth analysis of *An.* 3.4–5 (a task I reserve for elsewhere). For now, it suffices to note that the opening of *An.* 3.4 (as discussed in Section 1.1) speaks against Burnyeat's reading.

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I shall argue that, in the quoted passage, Aristotle speaks of a genuine case of being affected and that he describes it in a much more informative way than is presupposed by existing non-deflationary readings. He claims that, in preservative πάσχειν, 'that which is in capacity' is both *preserved* by 'that which is in fulfilment' (i.e. the agent) and is *assimilated* to it. Being affected by – and assimilated to – something else means for the subject here being preserved and, indeed, fulfilled as the sort of thing it is. In other words, it is for the subject exactly what, say, singing a song is for a singer or building a house is for a housebuilder. In this way, the quoted sentence outlines the very essence of perception as a receptive cognitive act.[30]

One important implication is that when the perceiver is affected by, and assimilated to, a perceptual object, her perceptivity is thereby in no way diminished: she can just as easily be affected by and assimilated to any other object or, indeed, the very same one. This is, arguably, how preservative πάσχειν contrasts with its destructive counterpart (such as being heated), which results, instead, in a transition from one state to its contrary and thereby modifies the ways in which the subject can and cannot be affected. When, for instance, a stone has been heated in a sauna from 20°C to 80°C, it is now *easier* for it to be assimilated to a pot of water at 90°C than it was before, but it is *more difficult* for it to be assimilated to a pot of cryogenic liquid at –200°C; moreover, it will now be *impossible* for this stone to be affected by (and assimilated to) the surrounding air at 80°C. When, in contrast, a perceiver has been affected by, and assimilated to, a blue object in the relevant way, it does not thereby become any more difficult for her to be affected by, and assimilated to, a yellow object, or any easier for her to be affected by, and assimilated to, a purple object. Moreover, such a perceiver can also continue being affected by (and assimilated to) the same blue object that she has already perceived. This is the respect in which perceiving is like singing a song or building a house: a builder who is building (or has built) Speusippus' house becomes thereby – qua builder at least – no less capable of building Aristotle's house. However, perceiving is not entirely like housebuilding or singing. Unlike these, perceiving consists, essentially, in being affected by, and assimilated to, something else.

[30] There is a notorious question about the scope of preservative πάσχειν, for at 417b12–16 Aristotle seems to apply it to learning. I shall argue (in Section 3.6) that he does in fact do so, but that this application presupposes a transformation of the notion, which is originally, and primarily, introduced to capture activities like perception and, apparently, thought.

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The suggestion, therefore, will be that the notion of preservative πάσχειν is intended exactly to draw out this double contrast, and thereby to capture, on the most general level, the essence of perception as a receptive cognitive act. Perception is contrasted both (1) with non-kinetic (complete) activities, like housebuilding, which are productive (or spontaneous) rather than passive, and (2) with passive changes (κινήσεις) as incomplete activities, like being heated. Unlike activities such as housebuilding or singing, perception is essentially *passive*. However, unlike passive changes such as being heated, perception is a *complete*, *non-kinetic* activity. The essence of perception can, then, in the most general terms, be encapsulated in the notion of a *complete passive activity*, and the primary contribution of *An.* 2.5 consists exactly in working out this notion. The deflationary reading fails to appreciate (1),[31] while the existing non-deflationary readings fail to appreciate (2).

If this is right, then Aristotle's account can be understood as incorporating two distinct intuitions about perception, each of which appears to capture something essential about it but both of which prima facie appear to be mutually incompatible – namely, that: (a) perception consists in being affected by, and assimilated to, perceptual objects; and (b) the perceiver must be, and must remain, unlike all perceptual objects and impassive with respect to them in order to remain unbiased and to perceive the object as real and external to herself. These, as we shall see, are effectively the two main competing intuitions that Aristotle identifies in the views of his predecessors.

However, before turning to Aristotle's predecessors, we must first consider how the notion of completeness is introduced and handled in *An.* 2.5.

1.3 Passivity, Completeness, and Continued Perceiving

The passage that distinguishes two kinds of πάσχειν belongs to the core part of *An.* 2.5 (417a21–418a3), where Aristotle draws two sets of distinctions and determines how the notions of being affected and being qualitatively changed are, and are not, to be used with respect to perception. Immediately before Aristotle starts drawing these complex

[31] This holds not only for Burnyeat 2002 and interpreters who follow his understanding of the preservative πάσχειν. It is also true, for instance, of Kosman 1994: 204–5 (cf. Kosman 1984: 132 and Kosman 2013: 72–5), who treats *An.* 2.5, 417b2–5 as another 'version of the distinction between motion and activity'.

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distinctions, he explicitly raises the topic of *completeness*, while signalling that something about how he is, or will be, handling it here is provisional:

> We are speaking (λέγομεν) [or: Let us speak (λέγωμεν)][32] first as if being affected, being changed (τὸ κινεῖσθαι), and being active (τὸ ἐνεργεῖν) were the same thing. Because change (κίνησις) is a kind of activity (ἐνέργειά τις), albeit an incomplete one (ἀτελής), as has been said elsewhere. (*An.* 2.5, 417a14–17)

This statement is followed by a formulation of the assimilation model (417a17–21) according to which the patient is unlike the agent insofar as it is being affected (πάσχει) and is like it insofar as it has been affected (πεπονθός). In his seminal paper, Myles Burnyeat drew far-reaching consequences from the quoted passage. He took it as laying down a key methodological constraint that remains in place throughout Aristotle's treatment of perception. According to Burnyeat, because this inquiry is a part of Aristotle's 'physics', and his 'physics' is exclusively about changes (κινήσεις) – that is, incomplete ἐνέργειαι[33] – Aristotle invites us 'to suppose that there is no such thing as complete or unqualified actuality . . . There is only the incomplete actuality exhibited by a process of change that is defined by and directed towards an end-state outside itself.'[34] The request is 'extraordinary' (as Burnyeat himself describes it) because elsewhere – including *An.* 3.7 and *Sens.* 6 – Aristotle is keen to stress that perception *is* a complete activity.[35] Indeed, these other passages could easily make one believe that completeness is an *essential* feature of perception that should in some way figure in any successful account of it. According to Burnyeat, however, such a position is excluded exactly by the fact that physics is limited to considering changes. The worry then becomes whether physics can speak about perception at all. It can, replies Burnyeat, but only if it 'merges' 'the (instantaneous) transition to perceiving and perceiving [itself]'.[36] On this view, it appears that two errors are expected to cancel each other out. I shall argue, though, that this magic is not needed because neither error is actually committed by Aristotle.

Burnyeat attempts to justify the first error by pointing to Aristotle's focus on 'the causality of perception': this, he contends, can be analysed without taking into account 'the point that there is no moment of

[32] On this alternative, see n. 41.
[33] Burnyeat 2002: 73, cf. Burnyeat 2008b: 259–65.
[34] Burnyeat 2002: 47, cf. 56 ('there is no hint of *that* distinction anywhere in II 5').
[35] For references, see Sections 2.5 and 2.6.
[36] Burnyeat 2002: 72–3. Cf. e.g. Charles 2021: 129: 'The transition from being a potential seer to an actual seer is seeing.' For a criticism of this move, see Heinaman 2007: 160–6.

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perceiving at which its goal is not achieved', allowing the latter to be delegated to works other than the *De Anima* – and, indeed, outside Aristotle's 'physics' altogether.[37] I shall argue for the exact opposite: the point about completeness of perceiving, which is emphasized in *An.* 3.7 and *Sens.* 6, is essential to Aristotle's analysis of the causality of perception, and already plays a crucial role in the first general account of perception in *An.* 2.5.

That this is, in fact, the case has not been fully appreciated, I contend, particularly because one question directly relevant for the causality – and indeed the very nature – of perception has not been taken sufficiently seriously. The question can be put straightforwardly: how does the case of *continued perceiving* differ from the case of merely having an after-image or *phantasma* of the object I was perceiving a moment ago?[38] The reason why this question matters to Aristotle is that it represents an instance of a more general issue, which is, arguably, central to his account of perception – namely, that of distinguishing between a case of genuine perceiving and a mere appearance. Moreover, the reason why the question of continued perceiving is so pressing is that it seems particularly difficult for any assimilation model of perception – including the one that Aristotle himself starts to develop in *An.* 2.5 – to account for the difference of perception from a mere after-image or *phantasma*. If perceiving *X* is explained as a way of being affected by, and assimilated to, *X*, and if the relevant likeness is not something that is progressively achieved through time but rather something that exists from the very first moment of directing one's senses towards *X*, then it is not obvious how exactly we should account for the difference between the scenario in which I continue perceiving *X* and the alternative scenario in which *X* is already gone but is still appearing to me. Surely, I have a likeness of *X* in me in both cases; so what is the difference? A related question could be raised for Aristotle's account of perceptual blind spots:[39] why is it that perceptual assimilation does not produce such a blind spot? To appreciate the weight of these questions, it is worth noting that continued perceiving is not a special case: *all* cases of perceiving are *eo ipso* cases of continued perceiving. This is directly implied by the

[37] Burnyeat 2002, 73, cf. Burnyeat 2008b: 259–65.

[38] Cf. *An.* 3.2, 425b23–5: 'Each perceptive organ is receptive of the perceptual object without the matter; that is why perceptions or rather [καί] *phantasiai* of the perceptual objects are present in the perceptive organs even when these objects have gone away.' The question is exactly how the *phantasiai* remaining in the perceptive organs are distinguished from perceptions produced by the objects when they are present. Cf. e.g. *Insomn.* 2, 459b7–22.

[39] See *An.* 2.11, 423b31–424a10 (discussed in Sections 6.4 and 6.5).

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completeness of perception, and that is one of the reasons why Aristotle can hardly leave this feature out when analysing the causality and the nature of perception. This is an essential feature of perception and one that contains a considerable challenge for the kind of account that Aristotle is developing in the wake of his predecessors.

I shall suggest that this straightforward – but far from simple – question about continued perceiving is present in the background of Aristotle's concern regarding the traditional view that like is perceived – and is in general known – by like (*LKL*), and particularly with the implication of this view that in perception like is affected by like (*LAL*). This is because *like being affected by like* is exactly what distinguishes continued perceiving from just having an after-image or *phantasma* (or a blind spot): in both cases, I have a likeness of the object in me, but only in the former case am I also being affected by that object, so that like is affected by like. The problem is that the notion of being affected as developed by Aristotle in *GC* 1.7 seems a priori to exclude this option, because things that already *are* like each other, according to this account, can no longer *act* upon each other. This, I shall argue, is at least a part of the difficulty that motivates Aristotle to draw the distinctions that he does at 417a21ff. These distinctions should help us understand exactly how the assimilation model summed up before this passage (at 417a17–21) and applied to perception at the very end of the chapter (418a3–6) can really work without collapsing cases of continued perceiving into mere appearances.[40]

This issue is also to be identified in the background of the quoted passage that signals the provisional nature of Aristotle's initial discussion at 416b33–417a21 (rather than of his treatment of perception as a whole, as Burnyeat would have it).[41] In sharp contrast to Burnyeat's reading, I submit, it is exactly the observation that perception is *not* an incomplete activity at 417a16–17 (quoted above)[42] that allows us to understand and

[40] The importance of the question of how perception differs from a mere appearance is emphasized by Bolton 2005. His response to the concern is that both states have the same material cause but differ in their efficient causes (which straightforwardly implies a difference in form). However, I worry that this purely causal account of the difference does not fully appreciate the weight of the question.

[41] The question of the scope of this passage is connected to a textual issue: the manuscripts are divided between an exhortation (λέγωμεν: 'let us speak') and a description of the present state (λέγομεν: 'we are speaking'). Yet, the textual issue is not decisive; rather, the question of the scope must be decided on the basis of the content and context of the passage. For a helpful discussion of the textual issue, see Anagnostopoulos 2023: 82–3, with whom I share a preference for the indicative. However, even if one opts for the subjunctive, the scope of Aristotle's exhortation may well be limited by 417a21, where he introduces the need for distinctions (δέ here clearly corresponds to μέν at 417a14).

[42] This is also almost a verbatim quotation of *Phys.* 3.2, 201b31–2.

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appreciate the motivation for and legitimacy of speaking as if being affected and being active were the same thing. The point is that, in an important sense they *are*, indeed, the same. It would be a non-starter for any account of perception, by Aristotle's lights, to assume that the perceiver is first being affected by the perceptual object over time interval t_1 before then perceiving it over time interval t_2. If the perceiver is no longer being affected by the perceptual object at the time at which she is perceiving it, how does perceiving differ from just having an after-image of the object? Being affected and being active cannot – in the specific case of perception – be dissociated in any temporal way. Rather, they must be the same at least in terms of their temporal extension.

If this is right, it has an important implication for the ways in which the assimilation model (introduced immediately at 417a17–21) can, as well as the ways in which it cannot, be applied to perception. When Aristotle says – drawing on *GC* 1.7 – that (1) what is being affected (present tense) is unlike the agent and (2) what has been affected (perfect tense) is like it, (1) and (2) must not, arguably, be contrasted in temporal terms – as they standardly are in other cases of being affected (such as those discussed in *GC* 1.7) where the completion of being affected by *X*, and so assimilation to *X*, excludes the possibility of being further affected by *X*. Aristotle's provisional identification of being affected and being active (417a14–17), in other words, brings out what is essential for our correct understanding of the assimilation model (417a17–21) if it is to be successfully applied to perception. In the case of perception, being affected (πάσχειν) passes the tense test together with the activity (ἐνεργεῖν), at least in the sense that having been affected by, and so assimilated to, a perceptual object does not exclude being further affected by that object. This is the key condition needed to account for continued perception. Furthermore, it also turns out to be a key condition of accounting for how an external object can be *present to* the perceiver – that is, for the fact that rather than turning the perceiver's organ into a similar perceptual object, the external object makes itself perceived by her.[43]

Under the proposed interpretation (further developed in Sections 2.5 and 2.6), the message of 417a14–17 is, thus, much more positive and constructive than it is usually taken to be. However, Aristotle clearly says that the identification of πάσχειν and ἐνεργεῖν, as introduced here, is only provisional. The identification's provisional nature, I shall argue, is intended to be overcome exactly by the distinctions that are later drawn

[43] See Sections 2.4, 2.5, 3.1, and 4.2.

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at 417a21ff., so that only at the end of the chapter (418a3–6) will the reader be in a position to understand fully how the assimilation model can correctly be applied to perception. With this in mind, we can see that the identification of πάσχειν and ἐνεργεῖν at 417a14–17 is provisional in at least three respects. First and foremost, while the passage – under the suggested reading – indicates that the perceptual πάσχειν passes the tense test, it is far from obvious how this could be the case. In fact, with an understanding of the notion of πάσχειν inherited from *GC*, it seems impossible for something to have been affected by, and assimilated to, *X*, and yet still be able to be affected by *X*. Second, the identification is provisional because the middle term (i.e. change) is a false one. While the identification itself contains an important truth, Aristotle can provide only a preliminary, and strictly speaking false, reason for it, because he has not yet introduced the appropriate notion of being affected as independent from the notion of change. Finally, the identification is also provisional because, while being affected and being active have, apparently, the same temporal extension in the case of perception, they are not strictly speaking the same. Rather, while they are numerically the same, their being differs, and Aristotle owes us an account of this difference.

We shall see (in Sections 3.2 and 3.5) that the distinctions given in 417a21ff., and the notion of preservative πάσχειν in particular, help Aristotle overcome these deficiencies. Rather than introducing an inadequate merging between the transition to perceiving and perceiving itself, Aristotle explains at 417b2–12 just how perceiving as a *complete* activity can also be a *passive* one.

1.4 Aristotle's Interlocutors

The proposed interpretation therefore provides a fresh perspective on Aristotle's concern with the view – present throughout *An.* 2.5 – that, in perception, like is affected by like (*LAL*). Standardly, interpreters take *LAL* to be true for Aristotle insofar as it points to the condition of generic likeness.[44] Yet, that has nothing to do, specifically, with perception. Accordingly, on such a reading it is difficult to understand why Aristotle makes the question of the truth and falsity of *LAL* central to his argument in *An.* 2.5. Indeed, on such a reading, it turns out that the notion of preservative πάσχειν can hardly contribute *anything* to our understanding of *LAL*. However, if this is the case, the closing lines (418a3–6) appear to

[44] As it is incorporated into Aristotle's general account of being affected at *GC* 1.7, 323b23–33.

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be just a dull repetition of the assimilation model from 417a17–21. If, in contrast, the truth of *LAL* is understood along the lines sketched out in the preceding section, it captures a non-trivial insight into the very essence of perception as a receptive cognitive act and we can easily understand how the distinctions presented in 417a21ff. are needed to secure this insight. Moreover, under this interpretation we can better appreciate Aristotle's engagement with the anonymous thinkers to which *LAL* is ascribed at 416b35–417a2. There is little doubt that these are (some of) the proponents of the traditional view that like is known by like (*LKL*). Yet, the connection Aristotle sees between *LKL* and *LAL* merits further investigation.

This question opens up the larger issue of how Aristotle's presentation of his first general account of perception in *An.* 2.5 draws on – and responds to – the critical discussion of his predecessors in Book 1. The importance of this question for the interpretation of *An.* 2.5 was already emphasized by Burnyeat in his seminal paper.[45] However, Burnyeat's understanding was framed by the influential idea, promoted in the 1960s by G. E. L. Owen and Suzanne Mansion, according to which Aristotle's search for principles is a *dialectical* undertaking starting from 'reputable opinions' (ἔνδοξα) as the relevant kind of 'what appears to be the case' (φαινόμενα).[46] This idea has recently come under attack,[47] and, with respect to the *De Anima* specifically, it has been emphasized just how sharply Aristotle's dealings with his predecessors differ from a purely dialectical procedure.[48] Jason Carter has offered an analysis of Aristotle's concern with his predecessors in *An.* 2.5 based on safer methodological grounds and on a meticulous reconstruction of Aristotle's argumentation in Book 1.[49] Carter has shown that, throughout the *De Anima*, while

[45] See Burnyeat 2002: 32–46. His contribution in this respect is highlighted by Sorabji 2001: 49. Before Burnyeat, the connection to Book 1 was stressed e.g. by Witt 1992: 181–2.

[46] See Owen 1961 and, in the same volume, Mansion 1961; cf. e.g. Barnes 1980, Nussbaum 1982, Irwin 1989: 26–50, Bolton 1990, Kraut 2006; with respect to *An.*, see e.g. Baltussen 1996 or Polansky 2007: 22–4 (in general), 62–7 (concerning Book 1), 224–5 (concerning ἔνδοξα in *An.* 2.5). Ferejohn 1999 brings this tendency to its extreme when he manages to analyse the 'dialectical' engagement of *An.* 2.5 without any reference to Book 1.

[47] See especially Salmieri 2009, Primavesi 2010: 50–8, Frede 2012, Shields 2013.

[48] See Carter 2019a: 21–46, and King 2021a, who both emphasize that while a dialectical discussion is neutral with respect to the truth of the proposition, Aristotle's engagement with his predecessors in *De Anima* is from the outset directed at truth. His engagement with δόξαι (there is no mention of ἔνδοξα in *De Anima*) of his predecessors is instrumental in this endeavour, but it is certainly not *the* method Aristotle employs. Cf. also Bolton 2021: 66–73.

[49] Carter 2019a: 141–67. Another recent study of Aristotle's concern with his predecessors in his account of perception is Kalderon 2015. However, Kalderon focuses primarily on the reception of forms without the matter in *An.* 2.12. Ferro 2022: 31–44 reclaims the label of 'dialectic' for

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developing his own view, Aristotle is deeply engaged in a discussion with his predecessors and that understanding this engagement can be a great help in reconstructing Aristotle's own position – without this taking anything away from the scientific rigour of Aristotle's thought.[50]

I shall argue in Chapter 2 that a yet more nuanced picture of Aristotle's engagement with his predecessors is needed in the specific case of *An.* 2.5. I take it that what has not been sufficiently appreciated here is the deeply *aporetic* nature of this engagement. One of my central contentions will be that, while Aristotle explicitly refers in *An.* 2.5 only to *LKL* (or, more precisely, to its *LAL* implication), he is effectively addressing it together with another view, since *LKL* represents one of two horns of the key puzzle that Aristotle is dedicated to resolving in Book 2. Given that *LKL* is relevant for him exactly as being productive of one horn of a *problem* that he thinks his own theory must be capable of resolving – namely, a problem with *explaining* perception – he could not properly address *LKL* without also responding, albeit implicitly, to the view that is productive of the other horn of that problem. This other view, I shall argue, is Anaxagoras' idea that what knows *X* needs to be neutral and impassive with respect to *X*. Taken together, the two views articulate exactly the two, seemingly incompatible, intuitions that are to be incorporated into Aristotle's own notion of preservative πάσχειν (as suggested in Section 1.2). Roughly, they say that (a) in order to know something, one needs to be affected by it as like by like, and that (b) in order to know something, one needs to be neutral and impassive with respect to it, and the object must remain external.

It helps to bear in mind, in this connection, what Aristotle says about the importance of puzzles (ἀπορίαι) for scientific inquiry and the role that one's predecessors play in formulating and helping one navigate such puzzles. The discussion of Aristotle's predecessors in *An.* 1 is not motivated by a detached historical interest in what people were thinking in the past, or by a triumphalist urge to show that everyone before him was wrong.

Aristotle's undertaking in *An.* 1, and he seems right in emphasizing the preliminary status of Aristotle's discussion as largely an 'internal refutation'.

[50] Bolton 2021: 67–73 contends that the argument of *An.* 2.5 cannot be understood as a way of resolving a conflict between ἔνδοξα, partly because what Aristotle is concerned with is *explanation* and '*why questions* do not raise dialectical problems' (p. 68). That seems right. But this should not lead us to think that Aristotle's engagement with his predecessors plays no role here. He seems to believe that analysing earlier views can be useful at a preliminary stage of addressing *why questions* (cf. Carter 2019a: 19–56). Bolton has a point in observing that under the usual interpretation of the opening of *An.* 2.5 there is no obvious conflict to be resolved; but that may be because the usual interpretation of the opening is incorrect.

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In fact, *An.* 1.2 contains one of Aristotle's clearest statements of what he takes himself to be doing when engaging with the thoughts of those who came before him:

> Since we are inquiring into the soul, and thus need to work through the puzzles (διαπορεῖν) whose solution (εὐπορεῖν) would be a mark of progress, it is necessary for us to consider the opinions of those predecessors who made certain claims about the soul, so that we may take over what has been said rightly by them (τὰ μὲν καλῶς εἰρημένα λάβωμεν) and so that, if anything has been said wrongly (μὴ καλῶς), we may avoid the error (εὐλαβηθῶμεν). (*An.* 1.2, 403b20–4)

The necessary first step in discovering the account of the soul as the first principle of embodied life, as in any such endeavour, is to identify the *problems* that impede us from arriving at a full understanding of the soul – the central questions that our account is supposed to answer and the key puzzles that it is supposed to resolve.[51] A helpful way of identifying these key puzzles, Aristotle believes, is critically reviewing the opinions of those who already made serious attempts at providing some such account in the past. In the most prominent views developed by one's predecessors over the course of centuries, and in the arguments that have been provided in their defence, it is likely that at least the proverbial grain of truth has been crystalized – although these views tend to contradict each other and their respective 'truths' often seem mutually incompatible. In another methodological reflection (at *GC* 1.7, 323b17–18), Aristotle provides a succinct analysis of the usual situation: the conflicts arise because 'where one needs to grasp a whole (δέον ὅλον τι θεωρῆσαι), each of the sides happens to capture only a certain part (μέρος τι τυγχάνουσι λέγοντες)'.[52]

Aristotle's goal, then, is to preserve what is true (and genuinely well-argued) in each of his predecessors' relevant views (τὰ καλῶς εἰρημένα λαβεῖν) and to prevent himself from falling into the difficulties that the

[51] See also Aristotle's general account of the usefulness of ἀπορίαι in *Metaph.* B.1, 995a24–b4; cf. *Metaph.* M.1, 1076a10–16 and *Top.* 1.2, 101a35–b4. The importance of the ἀπορίαι in *An.* 1 comes from the fact that each inquiry is subject-specific (cf. *An.* 1.1, 402a16–18), and it thus raises specific kinds of challenges. It is, then, important to understand not just the general principles of searching for scientific definitions (as outlined in *APo.* 2), but also the specific challenges connected to searching for the essential definition of the soul and its constituent parts.

[52] For the dialectical background of Aristotle's concept of ἀπορίαι and of 'working oneself through a puzzle' (διαπορεῖν), see Rossi 2017 and Rapp 2017a. For the use of ἀπορίαι in Aristotle's *Metaphysics*, see Madigan 1999, Crubellier and Laks 2009, Laks 2009, and Buddensiek 2017. Cf. Gelber 2017 for ἀπορίαι in Aristotle's *GA*.

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proponents of these views were getting into (τὰ μὴ καλῶς εὐλαβηθῆναι) – whether they were themselves aware of it or not. The project, in other words, is to provide a resolution, showing how the respective truths of conflicting (and often fallacious) theories can be combined into a single coherent account that finally manages to 'grasp the whole'. It would be a caricature of Aristotle's procedure if we imagined that the goal could be achieved on purely dialectical grounds or, say, by simply listing all the relevant claims of one's predecessors and discarding the false ones. The hope is rather that a serious engagement with our predecessors will allow us to identify the key problems that must be dealt with and solved in order to develop a successful account. But the solution cannot, of course, be found by further thinking about one's predecessors and what they said. Rather, the solutions can be found only by inquiring deeper into the matter itself than one's predecessors did. The fact that this inquiry, if successful, will finally make us capable of showing how the truth of each side can be taken on board while overcoming the errors and the apparent incompatibilities of our predecessors' views only means that our account passes a very useful test that critical discussion of our predecessors provided. One reason why such a test is useful is that it allows one seriously to claim that significant progress has been achieved.

In *An.* 1, Aristotle identifies two main issues concerning the soul that his predecessors had been interested in addressing: (a) how the soul can be what makes animals capable of perception and of knowing in general, and (b) how the soul can be what makes animals capable of self-motion.[53] The main stretch of *An.* 1.2 (404b7–405b30) and most of *An.* 1.5 (409b23–411a26) is dedicated to the first of these issues. Aristotle's analysis of this question, I contend, can be subsumed as a whole under one central puzzle formulated towards the end of *An.* 1.2 (at 405b12–23).[54] Aristotle identifies here two main views on the nature of knowing, which directly bear on how the soul, as the first principle of knowledge, should be conceived. Each of these views appears to be well justified, but they seem to contradict one another and each of them leads to apparently unsolvable difficulties. To summarize the situation very roughly: one of the two sides (the majority view) says that the subject

[53] This is how the discussion is set up at *An.* 1.2, 403b25–8, and this pair of issues is then recalled several times throughout Book 1 (1.2, 404b7–10, 404b27–9; 1.5, 411a24–6; cf. 1.2, 405a17–19 and 23–5) and beyond (see especially 2.2, 413a22–25; 3.3, 427a17–19; 3.9, 432a15–17). On two occasions in Book 1 (1.2, 405b10–12; 1.5, 409b18–21), Aristotle adds a third issue – namely, the incorporeality of the soul.

[54] The passage is quoted and discussed in Section 2.2.

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knows the object on account of being like it (*LKL*) and being affected by it (*LAL*); the opposing side (Anaxagoras) says that the subject knows the object on account of being unlike it and impassive (ἀπαθές) with respect to it. The former looks attractive because, in order to know something, it seems necessary that one have some kind of likeness of it within oneself and that one be continuously in touch with it (call this the ACQUAINTANCE/CONTACT REQUIREMENT). The latter looks attractive because, in order to know something, it also seems necessary to remain neutral and unbiased with respect to it and to other potential objects of knowing, and it seems necessary that the object remain external and untainted (call this the UNBIASEDNESS/EXTERNALITY REQUIREMENT).

If Aristotle believes that each of these views contains an important true insight, what is the way out of the puzzle? So far, Aristotle's account of perception has not been explored from the perspective of this question.[55] And yet, it is not just Aristotle's explicit reflection on the use of puzzles (quoted above) that suggests he is willing – and believes it is important – to give an answer to this question. There is, additionally, a passage in Theophrastus' *De Sensibus* 19 suggesting, as we shall see (in Section 2.7), that, in Aristotle's school, any satisfactory account of perception was expected to explain how the truth of *LKL* (and *LAL*) can be combined with the truth of the view that the perceiver needs to be impassive with respect to her object.

In Chapter 2, I show, step by step, how the key puzzle from *An.* 1.2 brings us to a deeper understanding of Aristotle's first general account of perception and how it sheds light on the notion of preservative πάσχειν in particular. It is this background that will also help us understand Aristotle's implicit inference (at *An.* 3.4, 429a13–16) from the passivity of perception to an impassivity on the part of the perceiver.

[55] Not even by Jason Carter, who, like other scholars, discusses just *LKL* in the context of *An.* 2.5 (see Carter 2019a: 143–67) and takes Anaxagoras' account to become relevant only for Aristotle's discussion of νοῦς in *An.* 3.4 (see Carter 2019a: 168–90 and Carter 2019b). Kalderon 2015 does not mention Anaxagoras or the Anaxagorean view from *An.* 1.2, 405b19–23 at all. Kelsey 2018 pays close attention to the conflict between *LKL* and Anaxagoras' view staged at *An.* 1.2, 405b12–23, but he interprets *LKL* as being relativist rather than capturing something like the *Acquaintance/Contact Requirement* for a genuine knowing. For the relation to Protagorean relativism, see Sections 4.3 and 6.2.

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CHAPTER 2

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&W**$_1$] 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 δέ τινες καὶ τὸ ὅμοιον ὑπὸ τοῦ ὁμοίου πάσχειν. τοῦτο δὲ πῶς δυνατὸν ἢ ἀδύνατον, εἰρήκαμεν ἐν τοῖς καθόλου λόγοις περὶ τοῦ ποιεῖν καὶ πάσχειν.
>
> (*An.* 2.5, 416b35–417a2)

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

> [**R&W$_3$**] 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 ἔστιν 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&W$_2$**] 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 πεπονθός 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, ἐνεργείᾳ seems clearly to have the same meaning as ἐντελεχείᾳ 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 ἐνέργεια 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, ἐντελεχείᾳ) on the one hand and as being 'in activity' (ἐνεργείᾳ) on the other. Indeed, it is very important for Aristotle to insist that a perceptual object is what it is in actuality/fulfilment (ἐντελεχείᾳ) *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 ἐνεργείᾳ 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 ἐντελέχεια-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 ἐντελέχεια-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&W$_1$ or the text Aristotle was referencing there.

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> πάντα δὲ πάσχει καὶ κινεῖται ὑπὸ τοῦ ποιητικοῦ καὶ ἐνεργείᾳ ὄντος. διὸ ἔστι μὲν ὡς ὑπὸ τοῦ ὁμοίου πάσχει, ἔστι δὲ ὡς ὑπὸ τοῦ ἀνομοίου, καθάπερ εἴπομεν· πάσχει μὲν γὰρ τὸ ἀνόμοιον, πεπονθὸς δ' ὅμοιόν ἐστιν. (*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&W$_1$. Standardly, Aristotle's reference to *Generation and Corruption* in R&W$_1$ 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 εἴδει) 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&W$_1$ 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&W$_1$ 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.

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(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.

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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$_1$ 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 τοὺς 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.

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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

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> 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 it[20] – 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.

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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 contrarieties 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' αὑτὸ 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).

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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.

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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 ἀλλοιώσει 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).

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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&W$_1$, 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 ἀπορροίᾳ γίνεται).

[35] Cf. *GC* 1.8, 324b25–9.

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(ἁρμόττειν), 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 ἁφῇ). That is why he used the term "fitting" (ἁρμόττειν).'[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 ζῴῳ 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 (πάντῃ)

[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.

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> 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 πάντῃ). 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 symmetricity 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).

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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&W$_1$, 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 ἔξω), 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 (ἔκαιε ἂν ἑαυτό) 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.

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> 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 ἐνεργείᾳ should not be rendered 'in actuality' here (as is commonly done). I take ἔστιν ἐνεργείᾳ 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 ἐντελέχεια. 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.

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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 symmetricity 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.

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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 (πεπονθός), it is like. (*An.* 2.5, 417a18–21)

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The problem is that, if we understand the difference between πάσχει and πεπονθός in the second sentence here (and then again in R&W$_3$) 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 (πάσχει) 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 (πεπονθός) 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 (πάσχει)'.[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 (πάσχει) 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&W$_1$ and in the first sentence of R&W$_2$, 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.

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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 (πεπονθέναι) would be no hindrance for the continuation of the agent's action and the patient's affection (πάσχειν): 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/altered 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.'

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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

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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&W$_2$: 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: IIIα2 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&W$_2$; 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

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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&W$_2$, 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&W$_2$: 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&W$_2$.

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).

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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 πολύ), 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.

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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 it[70]). 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.

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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 (πότιμον) is perceived by the salty (ἁλμυρόν), 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).

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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.

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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 ὄψεως 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)' .

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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 πάσχειν.

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CHAPTER 3

Complete Passive Activity

3.1 Why Distinctions Are Needed

The first few lines of *An.* 2.5 outline several key conditions with which any successful account of perception must comply. First, it must account for the fact that a perceiver can be activated only by an external perceptual object, and, indeed, that she needs to be affected by the object for as long as she is perceiving it. Furthermore, it must accommodate the salient differences that distinguish perception from processes such as burning, as the capacity for perceiving is clearly not exhausted in the way that the capacity for burning is and the activity of perceiving is essentially object-directed. These criteria cannot be satisfied, I argued, without new conceptual distinctions pertaining, first of all, to the notions of being affected and likeness. Most of *An.* 2.5 is, indeed, engaged in drawing such distinctions. In the present chapter, we shall concentrate on how the distinctions Aristotle draws at 417a21–418a3 accumulate to form his first general account of perception as a complete passive activity, which lays the groundwork for the rest of his inquiry into perception.

Let us begin, though, with the preliminary distinctions, drawn immediately after the puzzle at 417a2–9, and with briefly reflecting on how these may already be preparing Aristotle's account:

> But since **(i)** we talk about perceiving (τὸ αἰσθάνεσθαι) in two senses (διχῶς) – in one sense we say that what is capable of hearing and seeing (τό δυνάμει ἀκοῦον καὶ ὁρῶν) hears and sees (ἀκούειν καὶ ὁρᾶν), even when it happens to be sleeping, whereas in another sense [we apply these terms to] that which is active (τὸ ἐνεργοῦν) – **(ii)** we can also talk in two senses about perception (ἡ αἴσθησις): perception in the sense of capacity (ὡς δυνάμει) [i.e. the sense or perceptivity], and perception in the sense of activity (ὡς ἐνεργείᾳ); and similarly **(iii)** [we can talk in two senses]

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> about perceptual object (τὸ αἰσθητόν), too:[1] perceptual object in capacity (τό δυνάμει ὄν) [i.e. perceptible] and perceptual object in activity (τὸ ἐνεργείᾳ) [i.e. perceived]. (*An.* 2.5, 417a9–14)

Aristotle's observation about the two senses of 'perceiving' in (i) may sound trivial, but the wider context shows it need not be. He has, just previously, claimed that that which can perceive 'does not perceive (οὐκ αἰσθάνεται) [on its own], just as (καθάπερ) the combustible [material] does not burn on its own' (417a7–8). Now, he seems to be qualifying that claim by saying that, while combustible material does, indeed, in no true sense 'burn' on its own (in the absence of fire), we standardly say that a perceiver does 'perceive' on her own (e.g. a sleeping person still 'sees' and 'hears' in the sense of being neither blind nor deaf).

Similarly, we might say, with (ii), that perceivers are endowed with αἴσθησις even when they are not actively engaged in perceiving, whereas the combustible material is hardly endowed with burning until something sets it aflame.[2] This suggests that perceivers relate to perceiving in a very different way than combustible materials relate to burning: there is a much more stable and advanced kind of capacity involved in the former case, which is significantly closer to the exercising of the activity. Such a difference seems directly relevant for the observed contrast between combustible materials, on the one hand, which are progressively consumed by burning, and perceivers, on the other, which are not exhausted by perceiving over time. Although our passage stops short of spelling out this connection, the conceptual distinctions drawn here help a perceptive reader to see where the preceding analogy with burning falls flat. However, further distinctions will be required to articulate the difference between the two kinds of capacities.

More speculatively, one can read Aristotle's point about the perceptual object in (iii) as preparing the grounds for understanding how the object-directedness of perception distinguishes it from processes such as burning.

[1] τὸ αἰσθητόν is clearly attested by Alexander's *Quaest.* 3.2, 83.6, which outweighs (as first observed by Torstrik) the authority of extant manuscripts reading τὸ αἰσθάνεσθαι. The manuscript reading (followed e.g. by Hicks 1907, Jannone and Barbotin 1966, and more recently Miller 2018) turns the final sentence into a redundant repetition. With τὸ αἰσθητόν the sentence makes an important point (recalled in *An.* 2.7 and 3.2, on which see Sections 4.2 and 4.3) and so should not be excised as a gloss (as was suggested by Rodier 1900, followed by Burnyeat 2002: 48 n. 54).

[2] Cf. *An.* 2.5, 417a32–b2 and *Metaph.* Θ.3, esp. 1047a7–10 (see also *Protr.* 79 and 81). See also the formulation of the puzzle at 417a2–6 as to 'why there is not perception (αἴσθησις) of the senses (αἰσθήσεων) themselves and why these do not produce perception (αἴσθησις)'. The noun αἴσθησις is used here in two different meanings. By distinguishing them in (ii) Aristotle is gaining a control over the ambiguity which the adherents of *LKL* lacked.

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Aristotle has compared the need, on the side of perceivers, for the presence of external perceptual objects (417a3–4) with the need, on the side of the combustible material, for the presence of a fire in fulfilment (417a9). Now, once the combustible material is set on fire by the activity of a fire in fulfilment – that is, once it starts burning – it does not depend for its burning on the activity of the original fire anymore; indeed, its burning no longer has any occurrent (non-historical) relation to that fire other than being another instantiation of fire in the universe. This is significantly different from the case of perceiving, which is essentially object-directed. In perception, the perceptual object serves not only as the efficient cause of perceiving in the sense of bringing about the episode of perception, but also as the formal cause of perception in the sense that the perceiver's activity is essentially *of* that object. My suggestion about the relevance of (iii) is that distinguishing between the fulfilment (ἐντελεχείᾳ) of a perceptual object (e.g. being red) and the activity (ἐνέργεια) of that object (e.g. making itself seen) can help us understand that the latter is intrinsically intertwined with the activity of the perceiver in a way that is absent in the case of fire and burning. Whereas the activity of the agent there (i.e. setting on fire) is over once the respective activity of the patient (i.e. burning) begins, the relevant activity of perceivers (i.e. perceiving) is not only initiated by, but also coincides throughout with, the respective activity of the perceptual objects (i.e. making themselves perceived). Again, when read in this way, the distinction in (iii) provides resources for seeing the limits of the preceding analogy between perceiving and burning; but further distinctions will be required to understand properly how the two kinds of relations to the agent differ.

I argued (in Sections 1.3 and 2.5) that Aristotle's identification of being affected with being active in the following passage (417a14–17) is intended to prepare us for the idea that, in perceiving, the perceiver is affected by an object to which she has already been assimilated (the element of truth within *LAL*). However, Aristotle also acknowledges that this provides us with only a provisional understanding of how the assimilation model (spelled out at 417a17–21) can apply to perception. This raises a concern about whether the alleged truth of *LAL* can be coherently captured at all. What makes it the case that, for perception, being affected passes the tense test together with being active? And how exactly can the two notions be combined in a general account of perception? Only if we can answer these questions will we be in a position to understand properly the disanalogies between perception and processes such as burning that have been sketched out above. Furthermore, only if we can answer these questions will we (as

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argued in Sections 1.4 and 2.7) be in a position to see how Aristotle can resolve the conflict between *LKL* and Anaxagoras.

3.2 The Perceptive Capacity as a Fulfilment

In the first set of his distinctions at 417a21–b2, Aristotle lays down what has come to be known as his 'triple scheme', or *Dreistufenlehre*. Here, I limit myself to outlining how these distinctions help to ground the key disanalogies between perception and processes such as burning. We should not be misled by the fact that, at 417a21, all of a sudden, Aristotle turns from considering 'that which can perceive' to considering 'that which knows' (ἐπιστῆμον). This does not mark a change of topic or a digression; rather, Aristotle seems to think that the case of a knower provides a useful model for understanding other phenomena – in this case, perception. In contrast to approaches that analyse the *Dreistufenlehre* as a general ontological scheme, I shall emphasize how much the passage is targeted specifically on capturing the essential features of perception.[3]

My first observation is that, when Aristotle announces (right after introducing the assimilation model at 417a17–21), that 'distinctions need to be drawn about capacity and fulfilment, for we have been speaking simply (ἁπλῶς) about them' (417a21–2), his primary focus seems *not* to be on the plurality of ways in which each of the two terms can be used. After all, Aristotle has already distinguished between two kinds of fulfilment at *An.* 2.1, 412a22–8, and so has *not* been talking 'simply' about fulfilment in the sense of having only a single meaning of the term available. Rather, what simplicity seems to mean is a way of speaking about capacity and fulfilment *as mutually exclusive notions*.[4] Such an exclusivity may seem to have been implied by the analogy with burning at 417a6–9.[5] One could also understand the preliminary distinctions at

[3] The parallel passage at *Phys.* 8.4, 255a30–b12 (where a similar analysis of the knower serves as a model for clarifying the changes of the four elements) may lead one to think that *An.* 2.5, 417a21–b2 is intended as an all-embracing classification, applying equally well to living and non-living phenomena, such as heating and the locomotion of elements. However (as has also been noted by Polansky 2007: 231; cf. Menn forthcoming a: IIIα2), the latter cases are only claimed to be 'similar' in *Phys.* 8.4. An obvious dissimilarity consists in the fact that what corresponds to the transition from the first to the second capacity here involves a substantial change (cf. the echo at *GA* 2.1, 735a9–11, in the context of whether embryos have souls). Contrast e.g. Kosman 1969: 50–6 (cf. Kosman 2013: 62–7) treating *An.* 2.5, 417a21–b2 as a universal scheme.

[4] Cf. Bonitz 1870: 77 for a distinction between two meanings of ἁπλῶς λέγεσθαι: (1) *X* is said in a single way rather than many ways; (2) *X* and *Y* are each spoken about separately and on their own rather than in their interrelation or combination (cf. e.g. *Phys.* 2.3, 195b15–16).

[5] Cf. also the contrast at 417a17–18.

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417a9–14 as if the perceiving and perception 'in capacity' were capturing a *pure* capacity simply opposed to fulfilment. If that is correct, then the point of the so-called triple scheme is not so much about there being different kinds of fulfilment and different kinds of capacities; rather, the key point is about recognizing that there is a kind of capacity *that is already a fulfilment*. This matters not just because it is an interesting ontological category, but because Aristotle's inquiry cannot move forward until we understand that the perceptive capacity is itself already a fulfilment of that which can perceive.[6]

This will be crucial for overcoming the way in which being affected and being active were identified at 417a14–17. This identification could only be provisional because the activity of perceiving is *not* incomplete, and so is not a change in terms of *Phys.* 3.1–2: it is complete in the sense of passing (at least a weakened form of) the tense test.[7] In the relevant passage from *Phys.* 3.2 (quoted almost *verbatim* at 417a16–17), Aristotle goes on to specify *the reason* why change is only an incomplete activity:

> change is an activity (ἐνέργεια), but an incomplete (ἀτελής) one; and the reason (αἴτιον) is that that which is in capacity (τὸ δυνατόν), and whose activity the change is, is incomplete (ἀτελές). (*Phys.* 3.2, 201b31–3)

If the perceptive capacity is to be classed with capacities that are fulfilments – that is, *complete capacities* – then the provisional identification of perception with a change will be undermined.[8]

When introducing the notion of a capacity that is already a fulfilment, Aristotle captures a feature that has been, since Plato, taken to characterize a certain class of human capacities. These capacities are usually those acquired by learning and typically arts, such as medicine, housebuilding, or carpentry. Aristotle's primary intention is, apparently, to extend this class of capacities to include perception (as suggested most clearly at 417b16–18 and b29–32). The art itself lacks nothing, and its exercise does not aim at its own (or the artisan's own) improvement or good;

[6] Cf. 417b29–32, discussed in Section 3.4. [7] See Sections 2.5 and 2.6.

[8] Cf. *An.* 3.7, 431a4–7. Contrast Kosman 1969: 56–7 (cf. Kosman 2013: 66), who analyses the incompleteness at *Phys.* 3.2, 201b31–3 as a characteristic of *all* beings in capacity. In making this connection between 417a21–b2 and *Phys.* 3.2, 201b31–3, I follow Anagnostopoulos 2017: 181–4 (cf. n. 10). For Aristotle's definition of change, see Kosman 1969, cf. e.g. Waterlow 1982: 93–131, Hussey 1983: 58–62, Coope 2009. Anagnostopoulos 2010 (cf. Anagnostopoulos 2017: 177–82) offers an attractive alternative to the standard reading, one of the virtues of which is the avoidance of rendering ἐνέργεια as 'actuality' (cf. Section 2.1, n. 3, and Section 2.4, n. 46). The present discussion of *An.* 2.5, however, does not depend on which interpretation of Aristotle's definition of change we adopt.

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rather, it aims at the improvement or good of its object.[9] It is, in other words, complete, and its exercise is not a change in the artisan (rather, it is usually productive of a change in the object). Such a capacity, which is already a sort of fulfilment, must surely be first acquired, and the acquisition undoubtedly *is* a change in the learner; but once the capacity has been acquired, its employment is no longer a change.[10] As Aristotle puts it at *An.* 2.4, 416a34–b3: a carpenter is not affected qua carpenter in any way; what he undergoes is only a transition from inactivity to activity.[11] This also implies that the exercise of such a capacity cannot exhaust it – unlike other capacities, such as the capacity to heat something. The exercise of the heating capacity effectively exhausts it because (1) what heats can, owing to generic likeness, be itself cooled by what it acts on, and because (2) it standardly *is* cooled, owing to the fact that the conditions of *A* heating *B* coincide with the conditions of *B* cooling *A*.[12]

At 417a21–b2, Aristotle further develops this point from *An.* 2.4, particularly in the last sentence where the capacity that is a fulfilment, on the one hand, and the capacity that is not, on the other hand, are contrasted with respect to how each is brought to fulfilment:

[9] See Socrates' description of the art of medicine, which is extended to other arts, at an important juncture of his discussion with Thrasymachus at *Resp.* 342a–e.

[10] I am *not* saying that the activity of a doctor, carpenter, or housebuilder passes the tense test (for such a reading, see e.g. Waterlow 1982: 183–6 or Kosman 1969: 56; for a criticism of it, see Heinaman 1985: 149–54). Anagnostopoulos 2017: 173–6 and 204–8 argues convincingly that two distinct criteria are in play: (i) a 'subject criterion' at *Phys.* 3.2, 201b31–3 and *An.* 2.5, 417a21–b2 and (ii) a 'telic structure criterion' in *Metaph.* Θ.6 and *EN* 10.4. For further discussion of the relation of the two criteria, see Section 3.5.

[11] Cf. *Phys.* 7.3, 247b7–9 (cf. 248a3–6): 'there is no coming to be of the use [of an acquired knowledge] – that is, the activity – at least if one does not assume that there is also coming to be of looking and touching'. Acquired knowledge is characterized in *Phys.* 7.3 as a 'perfection/completion' (τελείωσις), see 246a13–b3. Cf. *Metaph.* Θ.8, 1050a23–b1.

[12] Aristotle's thought at *An.* 2.4, 416a34–b3 is thus akin to the one at *GC* 1.7, 324a24–b13 (cf. 1.10, 328a18–22): it is not just that producing a table does not mean undergoing a change for the carpenter; the point is that he undergoes no change qua carpenter at all when producing a table because the primary agent is not a form in matter. In this, a carpenter sharply differs from fire. Anagnostopoulos 2017: 185–204 argues convincingly that in *Phys.* 3.1–3 Aristotle intends to exempt agency in general, including the activity of non-living agents such as fire or a warming pan, from being a change. However, this generalization threatens to blur something that Aristotle takes to hold essentially of knowledge and arts, namely that their exercise in no way *exhausts* them. A warming pan, in contrast, exhausts its heat in warming the bed, for – owing to (1) and (2) – it cannot warm the bed without, effectively, being cooled by it. In *Phys.* 3.1–3 Aristotle seems fine with ignoring this specific feature of arts, for he is interested in a more general characteristic that holds of agents in general; in *An.* 2.5, in contrast, he seems willing to emphasize exactly this feature when taking complete capacities such as arts to be a model for understanding the perceptive capacity (cf. Section 2.1).

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> So, both the former are in capacity [i.e. can be] knowers, but one [can be a knower only] after having been altered by learning and having made the transition often from the opposite state, whereas the other [can be a knower (or a perceiver) after having made the transition] in another way from having perception or knowledge of letters, but not being active, to being active.[13]
>
> ἀμφότεροι μὲν οὖν οἱ πρῶτοι κατὰ δύναμιν ἐπιστήμονες, ἀλλ' ὁ μὲν διὰ μαθήσεως ἀλλοιωθεὶς καὶ πολλάκις ἐξ ἐναντίας μεταβαλὼν ἕξεως, ὁ δ' ἐκ τοῦ ἔχειν τὴν αἴσθησιν[14] ἢ τὴν γραμματικήν, μὴ ἐνεργεῖν δέ, εἰς τὸ ἐνεργεῖν, ἄλλον τρόπον.
>
> (*An.* 2.5, 417a30–b2)

The transition to fulfilment, characteristic of artisans, and of knowledgeable persons in general, is here contrasted with another kind of transition to fulfilment characteristic of those who have not yet acquired the knowledge in question, but who are able do so. Clearly, neither of the two fulfilments considered at 417a21–b2 is itself a change; if there is a candidate for being a change, it is the first kind of transition to fulfilment (i.e. learning). However, the present passage also already suggests a contrast between learning and processes like burning. What makes learning special is exactly that it is the transition to a fulfilment that *is* a capacity. Learning can, accordingly, be described as a change consisting exactly in overcoming the definitional incompleteness of changes; it is a change through which the subject (τὸ δυνάμει ὄν or τὸ δυνατόν) is fulfilled or completed so as to become capable of being active in a non-kinetic, complete way. It is thus no surprise that Aristotle returns to learning at 417b12–16 and suggests that it is a case of 'being affected' and 'being altered' only in a very special sense. In addition, it is no surprise that, at 417b16–18 (and b29–32), he goes on to claim that this kind of transition has already taken place for the

[13] For syntactic difficulties in this passage, see Burnyeat 2002: 83–7. I believe that Aristotle's thought becomes fairly transparent once 'κατὰ δύναμιν [εἰσι]' is rendered as 'can be'. This provides an alternative to both Burnyeat's construal and the one suggested by Emily Kress (adopted by Anagnostopoulos 2023: 90). While both these ways of construing the text assume that κατὰ δύναμιν qualifies ἐπιστήμονες, I take it to qualify, effectively, the (tacit) copula: Aristotle's point is not about what kind of (potential) knowers the first two are, but about how (i.e. under what conditions) they can be knowers (in fulfilment). Nothing in the following discussion, though, depends on this syntactic issue.

[14] In his paraphrasis of this passage Themistius says τὴν ἀριθμητικήν instead of τὴν αἴσθησιν (*In An.* 55.28). But given that this is just a paraphrasis, not a quotation, and that this reading is not attested anywhere else, the manuscript reading seems preferable. The switch to 'having perception' (cf. 417a12–13) is, admittedly, awkward, but it is understandable, given that the case of 'knowers' has served as a model for understanding the perceptive capacity, which is what Aristotle has really been up to.

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perceptive capacity of a new-born animal: the perceptive capacity is, already upon birth, a fulfilment of its subject (i.e. a complete capacity). This, I argue, is the key claim for which the distinctions at 417a21–b2 serve to prepare us.[15]

Now, if Aristotle's aim was simply to *confront* the assimilation model of perceiving as a kind of being affected by and assimilated to perceptual objects with the perspective on perception as an activity of something complete, in a sort of antinomy, he could stop here. But this is not what he does. Rather, in what follows, he turns to the notion of being affected and draws an additional set of distinctions pertaining to it (as well as to the related notion of being altered). His aim, I shall argue, is to show what the latter perspective (i.e. perceiving as a complete activity) tells us about the former (i.e. perceiving as being affected and assimilated), and how the former needs to be transformed, if it is to be reconciled with the latter.[16]

3.3 Kinds of Passivity

Aristotle's distinction between two kinds of being affected at 417b2–5 has often been understood as further developing the preceding contrast between two kinds of transition (417a30–b2).[17] The idea has been that preservative πάσχειν simply overlaps with the transition from not being active to being active. However, there are at least two reasons for resisting this reading. First, the notion of preservative πάσχειν seems to be reapplied at 417b12–16 to the first kind of transition (such as learning).[18] Second, at 417b2–12, the notion of preservative πάσχειν does *not* seem to overlap with the idea of transition from not being active to being active. Rather, it contains the idea that something else is the agent (so it cannot apply to productive activities, such as building a house); moreover, it appears to be intended to capture the way in which something is affected

[15] One might object to the proposed reading by observing that, at 417a21–b2, Aristotle does not *explicitly* apply the notion of ἐντελέχεια to the 'second capacity' (he uses it only once at 417a29 in the sense of the 'second fulfilment'). However, if he did not intend to classify the 'second capacity' as a fulfilment as well, his call for distinctions concerning capacities *and fulfilments* at 417a21–2 would be idle. The use of ἐντελέχεια in the sense of 'first fulfilment' has, after all, already been established at *An.* 2.1, 412a22–8. Moreover, it is hard to understand what Aristotle could be talking about at 417a31–2 (on any construal) if not a transition to fulfilment, i.e. to a 'first fulfilment'.

[16] Cf. Section 2.5.

[17] At *In An.* 55.29–56.1, Themistius identifies preservative πάσχειν with the second case and destructive πάσχειν with the first case. Cf. Gill 1989: 222, Sisko 1996: 143, Everson 1997: 91, Sisko 1998: 335, Burnyeat 2002: 54–5, Makin 2006: 152–3, Lorenz 2007: 181–8, Polansky 2007: 235, Anagnostopoulos 2017: 184, Anagnostopoulos 2023: 91.

[18] For further discussion, see Section 3.6.

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throughout the entire time of being active, or so I shall argue. This last point will become important: if it is correct, then the passage turns out to bear directly on the phenomenon of continued perceiving (as introduced in Section 1.3) and the object-directedness of perception (emphasized in Sections 2.4, 2.5, and 3.1), on the question of how the truth of *LAL* (as interpreted in Section 2.5) can be distilled from traditional errors, and so, finally, on how Aristotle can solve the key puzzle about knowing (as analysed in Sections 1.4 and 2.7).

Here is the relevant passage again, this time supplied with (admittedly excessive) clarifications indicating how I think the text is best construed and understood:

> Now, being affected is also not simple. But one kind of it is a destruction by what is contrary, whereas another kind of it is rather a preservation **(i)** of that which is in capacity **(ii)** by that which is in fulfilment and **(iii)** [a preservation of it] as [being made] like [that which acts on it], **(iv)** [it is a preservation of it] in the way in which capacity relates to fulfilment.
>
> οὐκ ἔστι δ' ἁπλοῦν οὐδὲ τὸ πάσχειν, ἀλλὰ τὸ μὲν φθορά τις ὑπὸ τοῦ ἐναντίου, τὸ δὲ σωτηρία μᾶλλον **(i)** τοῦ δυνάμει ὄντος **(ii)** ὑπὸ τοῦ ἐντελεχείᾳ ὄντος, **(iii)** καὶ ὁμοίου, **(iv)** οὕτως ὡς δύναμις ἔχει πρὸς ἐντελέχειαν.
>
> (*An.* 2.5, 417b2–5)

In Section 1.3, I suggested, against the deflationary reading, that we should understand the preposition ὑπό as introducing the efficient cause rather than the *terminus ad quem*. Moreover, against both the existing non-deflationary readings, I suggested that we should take the likeness in question to be a full-fledged likeness (rather than a potential or generic likeness) *resulting* from being affected. The upshot is that τὸ δυνάμει ὄν is preserved by the agent precisely in its being assimilated to it. That is: being assimilated to the agent is, for τὸ δυνάμει ὄν, a way of being preserved as what it is. In what follows, I fill in the details of this account, particularly concerning the construal of (iii) and (iv).

Let us begin with a question about (iii) – that is, καί ὁμοίου. Is Aristotle adding a piece of information here about τὸ δυνάμει ὄν, about τὸ ἐντελεχείᾳ ὄν, or about σωτηρία?[19] Perhaps it is best to say that the new feature is

[19] Given the symmetrical nature of likeness, we can leave aside the question of whether τὸ ἐντελεχείᾳ ὄν is said to be like τὸ δυνάμει ὄν, or the other way round. The text can be construed as comparing τὸ δυνάμει ὄν with τὸ ἐντελεχείᾳ ὄν even without the bold transposition into ὑπὸ τοῦ ἐντελεχείᾳ ὄντος τοῦ δυνάμει ὄντος proposed by Ross 1961. It is sufficient to put a comma after ἐντελεχείᾳ ὄντος, as is done by Ross 1956. Moreover, there is no principled reason for not following Alexander

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meant to concern all three of the terms: it is a likeness between the first two that tells us *what kind of* σωτηρία defines the non-destructive πάσχειν. The mention of likeness thus fits well into what we can call the full grammar of preservation: *something* is preserved *by* the agency of something else having *a certain effect* on the former. Not all cases of preservation, to be sure, need to involve all three of these aspects. In many cases, *X* will simply be preserved untouched by *Y* (as when *Y* wards off some influence on *X*) and this seems to be the most usual sense of preservation. It is in this sense, for instance, that the inert atmosphere will 'preserve' what is in it, or my head will be preserved from the sword's blow by my shield.[20] But, in some cases, *Y* preserves *X* while having a certain effect on *X* that needs to be further specified. In this way, for instance, Aristotle says that the tyranny is preserved when being made more like the rule of a king.[21] Similarly, I suggest that καὶ ὁμοίου in our passage adds a third characteristic of the preservation with which the second kind of πάσχειν is identified: τὸ ἐντελεχείᾳ ὄν preserves τὸ δυνάμει ὄν exactly when making it like itself.

It is not difficult to see why the third characteristic needs to be spelled out. If ὑπό introduces the efficient cause, Aristotle is clearly saying that the second meaning of πάσχειν is a σωτηρία (rather than a destruction) of *X* by *Y*. But this, on its own, could well mean that *X* is preserved by *Y* entirely untouched, just as *X* would be preserved without encountering anything at all (as my shield preserves my head from the sword's blow). This clearly cannot be the meaning of σωτηρία in our passage if it is true that the πάσχειν qua σωτηρία is intended to capture how an activity (such as the activity of perceiving) is produced by an agent (such as the perceptual object) in something (such as the perceiver) *in which it was not before*. Accordingly, saying that τὸ δυνάμει ὄν is preserved in the sense of remaining entirely untouched (in line with Anaxagoras' ἀπάθεια) and just as it was before would be to no avail, because this would not be an instance of πάσχειν whatsoever.

As a result, rather than being preserved entirely untouched, we can see that τὸ δυνάμει ὄν is preserved in receiving the fulfilment that existed

of Aphrodisias, who takes Aristotle the other way round: as comparing τὸ ἐντελεχείᾳ ὄν with τὸ δυνάμει ὄν (see *Quaest.* 3.3, 84.1 and 86.19–23).

[20] Moreover, the subject and the object of preservation in many cases coincides, so the difference between the first and the second aspect will also disappear: animals often do something simply as a way of preserving themselves. See e.g. *An.* 2.4, 416b16–17; 3.12, 434b11–18; *Sens.* 1, 436b19–437a1.

[21] τῆς τυραννίδος σωτηρία τὸ ποιεῖν αὐτὴν βασιλικωτέραν (*Pol.* 5.11, 1314a35). Cf. the less-explicit example at *Rhet.* 1.4, 1360a18–23.

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previously only in τὸ ἐντελεχείᾳ ὄν that now acts upon it. Thus, it is preserved *by* τὸ ἐντελεχείᾳ ὄν *in* being made like it.[22] Through this third characteristic, the σωτηρία already acquires the specific meaning requisite for capturing the receptive nature of perception: τὸ δυνάμει ὄν is preserved by τὸ ἐντελεχείᾳ ὄν in the very act of being assimilated to it.

But what does Aristotle mean then when he adds (iv) οὕτως ὡς δύναμις ἔχει πρὸς ἐντελέχειαν? It could be explaining the sense in which τὸ δυνάμει ὄν is made like τὸ ἐντελεχείᾳ ὄν: the former is assimilated to the latter in the sense in which a δύναμις is turned into the corresponding ἐντελέχεια. The idea here would apparently be that the result of the acting of τὸ ἐντελεχείᾳ ὄν on τὸ δυνάμει ὄν – characterized in terms of the latter being like the former, that is, being like *something else* – is in fact the latter's *proper* fulfilment (ἐντελέχεια).[23] Alternatively, one could take (iv) to depend on σωτηρία. On this reading, Aristotle would be further specifying the notion of preservation. Not only is it a preservation of τὸ δυνάμει ὄν in the very act of its being assimilated to τὸ ἐντελεχείᾳ ὄν; rather than just being preserved as it was, τὸ δυνάμει ὄν is fulfilled as what it *ought to be*: in being assimilated to something else it reaches its intrinsic goal.

Be that as it may, the contrast with the 'destructive' πάσχειν should by now be sufficiently clear. What undergoes this πάσχειν is not preserved, and a fortiori not fulfilled, as what it was; rather, it becomes something different, contrary to what it was before, and this modifies how it can now be affected. Although Aristotle does not explicitly mention perception at 417b2–5, his primary aim in the wider context of *An.* 2.5 is, apparently, to stress precisely the fact that perception cannot consist in a destructive πάσχειν – not least because if that which can perceive was affected in this way it would become like the perceptual object in a sense that would diminish (or destroy) its ability to engage in perception. It would be brought 'closer' to some objects of the given range and 'distanced' from other ones. Moreover, it would be prevented from being further affected by the object to which it has been assimilated: in this way, like could *not* be affected by like, and so no continued perceiving, and indeed no perception at all, could take place. In this respect, that which can perceive must be *impassive*: resistant to 'destructive' πάσχειν.

[22] καί need not be understood copulatively; it can also be read adverbially as 'even', or 'also'. On such a reading, the second kind of being affected is a preservation of τὸ δυνάμει ὄν not just as being untouched but a preservation of it 'even in its being made like τὸ ἐντελεχείᾳ ὄν'.

[23] This is close to how Philoponus (*In An.* 302.28–32) understands the final phrase, except that he takes 417b2–5 to talk about a likeness that *precedes* preservative πάσχειν.

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The hope seems to be that by classifying perception as a case of 'preservative' πάσχειν we can escape – provided that the notion can successfully be fleshed out – both kinds of difficulties raised by Aristotle against his predecessors. The proposed solution appears to be that (a) that which can perceive is not absolutely impassive, as Anaxagoras' νοῦς, but rather can be affected by and assimilated to the perceptual object acting on it; however, (b) it is assimilated to the object in such a way that its perceptivity is preserved untouched (unbiased), so that it is capable of being further affected by the same external object and thus of continued perceiving. Perceiving is brought about by way of assimilation, but in such a way that it in no way diminishes the perceptivity of the subject.[24]

3.4 Kinds of Alteration

At 417b5–9, further developing the notion of preservative πάσχειν,[25] Aristotle returns to the model of the knower and explains exactly in what sense the notion of alteration does, and in what sense it does not, apply to the 'second fulfilment' of the knower (i.e. the activity of 'thinking' or 'understanding') and the transition to it. Although Aristotle does not say it in so many words, he seems to be taking for granted here what he will explicitly assert in *An.* 3.4 (429a13–18, 429b22–6) – namely, that thinking (νοεῖν, or here θεωρεῖν) is, like perceiving, a case of πάσχειν (to wit, preservative πάσχειν).[26] Aristotle begins from the 'coming to be' involved in the transition from having knowledge to thinking (and *mutatis mutandis* from having perception to perceiving):

> For that which has scientific knowledge comes to be theorizing, and this [coming to be] is either not a case of being altered (for the advance is into itself – that is, into fulfilment), or it is a different genus of alteration.
>
> θεωροῦν γὰρ γίνεται τὸ ἔχον τὴν ἐπιστήμην, ὅπερ ἢ οὐκ ἔστιν ἀλλοιοῦσθαι (εἰς αὑτὸ γὰρ ἡ ἐπίδοσις καὶ εἰς ἐντελέχειαν) ἢ ἕτερον γένος ἀλλοιώσεως.
>
> (*An.* 2.5, 417b5–7)

[24] If the likeness acquired in a preservative πάσχειν is qualified in this way, one might ask what it implies for the unlikeness as a condition of this πάσχειν and for the capacity to undergo this πάσχειν. We shall return to this question in Sections 6.4 and 6.5.

[25] See γάρ at 417b5.

[26] Although a set of disanalogies applies, as *An.* 2.5, 417b16–29 and then 3.4, 429a18–b22 make clear.

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The move from preservative πάσχειν to alteration should not surprise us, as we have seen that the notion of preservative πάσχειν essentially involves a notion of assimilation (wherein τὸ δυνάμει ὄν is made *like* τὸ ἐντελεχείᾳ ὄν), and Aristotle is now bringing this aspect into focus. He does so by formulating a disjunction: when that which has knowledge comes to be actively theorizing, this coming to be (picked up by ὅπερ) is either not a case of being altered, or, if it is to be understood as being altered, the sort of alteration at issue here is of an entirely different kind.[27]

Aristotle's two disjuncts are unlikely to represent two different options between which we are supposed to decide. Rather, they seem to articulate two different ways of using the word 'alteration'. We already know that the assimilation involved in preservative πάσχειν cannot be a change between contrary states. Instead, in being assimilated to τὸ ἐντελεχείᾳ ὄν – that is, to something else – τὸ δυνάμει ὄν is fulfilled as what it itself is, without becoming different (i.e. without becoming, for instance, more 'distant' from some objects and 'closer' to others). The first disjunct is further reinforcing this point by developing the notion that the 'advance is into itself' – that is, being assimilated to something else (i.e. τὸ ἐντελεχείᾳ ὄν) is for τὸ δυνάμει ὄν (exemplified now by that which has knowledge) an advance into itself;[28] and this cannot be an alteration in the standard sense of becoming different. It is, however, essential for the preservative πάσχειν that, in contrast to the case of productive arts, the advance into itself consists here exactly in being assimilated to something else. Hence the need for the second disjunct. We can either say that there is no alteration at all (if we retain the standard notion of alteration), or we can claim that

[27] Despite my sympathies for Heinaman's heterodox insistence that 417b2–12 cannot be *simply* about transitions (see Heinaman 2007: 167–81), I do not think that Aristotle can be understood as talking about activity *rather than* transition at 417b5–7 (for such a claim, see also Gill 1989: 222–6). This presupposes that ὅπερ picks up θεωροῦν rather than γίνεται, but that would imply a distasteful categorial incongruence: Aristotle would be, literally, asking whether the thinking subject is an alteration or not. The standard reading of these lines thus needs to be retained. Heinaman and Gill, however, have a point when it comes to 417b8–9, as we shall see in Section 3.5.

[28] This expression seems to be modelled to contrast with the way in which being affected was characterized (namely as γένεσις εἰς τοὐναντίον) in the passage from *GC* 1.7 (324a9–14), which, I suggested in Section 2.2, Aristotle is most likely referring to at 416b35–417a2. It may also remind an attentive reader of Aristotle's argument in *An.* 1.3 to the effect that, if the soul were to undergo a change in its own right, it would have to 'step out of (its) substance' (ἐξίσταιτ' ἂν ἐκ τῆς οὐσίας, 406b13–14). Now, Aristotle has introduced a different notion of being affected and being altered that is rather the opposite of ἐξίστασθαι ἐκ τῆς οὐσίας, namely ἐπίδοσις εἰς αὑτὸ καὶ εἰς ἐντελέχειαν. The question thus arises whether this newly introduced affection and alteration can belong to the soul or not. In *An.* 2.5, however, Aristotle does not tell us. The question will become central in Chapter 5.

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there is a different genus of alteration. The former option would be insufficient for Aristotle's purposes, but the latter is yet to be developed.[29]

Aristotle's present aim seems limited to making conceptual room for a kind of assimilation to something else that is an advance into itself and thus needs to be contrasted with the standard notion of alteration as becoming different. That this is, in fact, the case is supported by the reoccurrence of a very similar disjunction at 417b12–16 (further discussed in Section 3.6), and again at the outset of *An.* 3.4: at 429a14–15, thinking (νοεῖν) is said to be, like perceiving, 'either a kind of being affected or something else like that'. The fact that, later in *An.* 3.4, Aristotle characterizes thinking simply as 'a kind of being affected' strongly suggests that he does *not* intend to exclude the first disjunct from consideration.[30] Rather, the disjunction is aimed at contrasting the intended notion of being affected with 'destructive' πάσχειν: were we to stick to this standard notion of being affected, we would have to say that perception and thinking are 'something else' and that this is only 'like' being affected. However, building on the distinction between different kinds of πάσχειν at 417b2–5, Aristotle can take the bolder line and maintain that thinking *is*, after all, a kind of being affected. The disjunction at 417b5–7 seems to be making the very same point with respect to 'being altered'.[31]

Accordingly, what is progressively being shown in *An.* 2.5 is why the meanings of the two key notions must be extended beyond the ways in which we typically understand them as well as how this can be achieved. This task turns out to be essential for capturing the receptive nature of perception (and thinking) as a way of taking things in.[32] Towards the end

[29] We shall see in Chapters 4–7 how the latter is developed by a set of key notions introduced in *An.* 2.6–12: mediation, discrimination, and the reception of forms without the matter.

[30] See 429b24–5 with 429b29–430a2 (cf. Section 1.1).

[31] At 417b12–16, introducing a similar disjunction for learning, Aristotle even switches between being affected and alteration across the two disjuncts. Burnyeat's idea that preservative πάσχειν is a more general notion, allowing for cases that are alterations, as well as those that are not, is, then, unlikely (cf. Section 1.2).

[32] One could compare this extension with the move undertaken in the first half of *Metaph.* Θ.6 (cf. Δ.7, 1017a35–b9 and Θ.8, 1050a3–b2), where the notion of ἐνέργεια is extended from its original meaning of 'activity' (or more narrowly 'change') to a broader meaning in which it can apply, for example, to a finished house (existing 'in actuality') in contrast to the material from which it is built (and which is a house only 'in capacity'). For Aristotle's move here, see Frede 1994: 179–85, Menn 1994: esp. 105–13, Menn forthcoming a: IIIα2, Makin 2006: 128–50, Charles 2010, Beere 2009: 178–208, and Johansen 2012a. As noted in Section 2.5 (nn. 56 and 59), the way Aristotle proceeds in *Metaph.* Θ.6 (assuming that the second half of the chapter was incorporated by Aristotle himself) leaves unresolved the question of the compatibility of the two different descriptions of phenomena like seeing offered in the two halves of Θ.6, respectively (cf. Anagnostopoulos 2011: 408–10): it is first introduced as an example of change in the first half (presumably a passive change of the perceiver) and then it is contrasted with changes as a complete activity in the second half.

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of *An.* 2.5, Aristotle seems to announce that this extension has successfully been performed. He first reminds us that perceivers are endowed with a complete capacity (417b29–32, cf. 417b16–18) and then he adds an explicit reflection on the usage of the two key notions:

> **(i)** Since the distinguishing feature of each of these [i.e. the two kinds of capacity] is nameless, but it was determined that they differ and how they differ, **(ii)** it is necessary to use the notions of 'being affected' and 'being altered' as proper terms.
>
> **(i)** ἐπεὶ δ' ἀνώνυμος αὐτῶν ἡ διαφορά, διώρισται δὲ περὶ αὐτῶν ὅτι ἕτερα καὶ πῶς ἕτερα, **(ii)** χρῆσθαι ἀναγκαῖον τῷ πάσχειν καὶ ἀλλοιοῦσθαι ὡς κυρίοις ὀνόμασιν.
>
> (*An.* 2.5, 417b32–418a3)

By saying that it was determined how the two kinds of capacity differ, Aristotle is apparently referring to 417a21–b12 as a whole, as is suggested by the consequent (ii). Aristotle can legitimately be taking 417b2–12 as a part of determining how the two kinds of *capacity* differ, because that which can perceive is characterized by a complete *passive* capacity and, from 417a21–b2, it is still far from obvious that a complete capacity can be passive. This crucial finding is only established at 417b2–12. Accordingly, when Aristotle says that the distinguishing feature of each kind of capacity is nameless, this also involves the recognition that there is a lack of specific terms for 'preservative' πάσχειν (as contrasted with 'destructive' πάσχειν) and for alteration as an advance into itself (rather than as a way of becoming different).

With this reading of the antecedent (i), it becomes much clearer how the consequent (ii) is meant to follow. The consequent contends that, since there are, regrettably, no specific terms, but it is impossible to define perception without the notions of being affected and being altered, it is necessary that we use the only available terms – namely, the generic ones. Moreover, as long as we keep in mind the fact that their meaning has been extended at 417b2–12 beyond the ways in which they are typically understood, we shall be using these terms as proper terms rather than,

My suggestion is that Aristotle takes up this task in *An.* 2.5 and argues that, to reconcile the two perspectives on perception, we must undertake another extension, this time concerning the notions of being affected and being altered. The extension here starts from an analogy between perceiving and processes like burning. But something more than mere analogy seems to be at issue: in contrast to the case of ἐνέργεια in the first half of *Metaph.* Θ.6, the notion of πάσχειν is not extended in *An.* 2.5 *across different categories*; so nothing prevents there being a common genus of πάσχειν under which both perceiving and processes like burning fall as different kinds of it.

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say, mere metaphors.[33] Armed with these distinctions (that is, effectively, with the διορισμός for which Theophrastus calls in *Sens.* 19),[34] we shall finally be in a position to understand how 'perception comes about in being changed and being affected' and in what sense it can (and cannot) be analysed as 'an alteration' (416b32–4). The closing lines (418a3–6) can therefore, finally, fulfil the promise made at the beginning of the chapter.

3.5 Non-Altering Passive Activity

With the aforementioned disjunction in hand, Aristotle proceeds to say more about alteration at 417b8–9. These lines have often been read as supporting the idea that he intended to reject the second disjunct at 417b5–7, and indirectly also as supporting the deflationary reading of preservative πάσχειν:

> Thus, it is not right to say about that which is thinking, when it is thinking, that it is undergoing alteration, any more than [this is right about] the housebuilder when he is housebuilding.
>
> διὸ οὐ καλῶς ἔχει λέγειν τὸ φρονοῦν, ὅταν φρονῇ, ἀλλοιοῦσθαι, ὥσπερ οὐδὲ τὸν οἰκοδόμον ὅταν οἰκοδομῇ.
>
> (*An.* 2.5, 417b8–9)

If a thinker is no more altered when thinking than a housebuilder is when building a house, then it may seem that the notion of alteration is not applicable to thinking at all (for, as we know, in Aristotle's view a housebuilder undergoes no alteration whatsoever, not even in any refined sense). Moreover, if Aristotle's mention of housebuilding here is understood as somehow falling under the notion of preservative πάσχειν, then this notion can, apparently, have no other meaning than the deflationary one of a transition from a complete capacity to its fulfilment – for it is only in this way that it can be applied to a productive activity such as

[33] For the meaning of κύριον ὄνομα, see *Poet.* 21–2 (especially 1457b1–3, 1458a18–23, and 1458b17–19). The contrary of κύριον ὄνομα is ξενικὸν ὄνομα, including foreign words (γλῶτται) and metaphors. Cf. *Rhet.* 3.2, 1404b5–8; *Soph. Ref.* 17, 176a38–b7; *Meteor.* 4.2, 379b14–17. The language of a distinguishing feature (διαφορά) that has no established name but has been successfully explained suggests that Aristotle takes preservative πάσχειν and alteration as an advance into itself to be genuine kinds of the higher genera of being affected and being altered, respectively. Contrast e.g. Alexander of Aphrodisias, *Quaest.* 3.3, 85.34–86.2, 86.28 (cf. Anagnostopoulos 2023: 89–90, 95). It is difficult to see why Aristotle would say that it is necessary to use these notions 'as if they were' proper terms, if they were in fact entirely unfitting. Why use them at all, then, rather than sticking, for example, to the innocuous notion of transition (μεταβάλλειν) and saying that it is in *no* sense an affection or an alteration whatsoever?

[34] Cf. Section 2.7.

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housebuilding. I shall argue that the quoted passage does not support either of these interpretative moves. In order to understand it correctly, we need, first of all, to appreciate the perspective from which housebuilding and thinking are being compared here.

This perspective, I contend, is determined by the specific temporal aspect of thinking under consideration in these lines. Aristotle does not seem to be talking about the transition from not thinking to thinking but, rather, about the continued activity of thinking, as is strongly suggested by the repetition of ὅταν with the subjunctive.[35] If this is correct, then we can understand why it proved so difficult to decide whether the distinctions at 417b2–9 concern transitions or activities.[36] The reason is that Aristotle speaks of both. Although the point of 417b5–7 apparently concerns the transition to theorizing, the point of 417b8–9 turns out to be rather about the continued activity of thinking. Understanding the reasoning behind this change of perspective seems crucial for successfully coming to grips with Aristotle's argument at 417b2–9 as a whole.

Let me begin by adding a caveat concerning the standard view that, at 417b5–7, Aristotle talks about the transition to theorizing rather than theorizing itself.[37] If the proposed interpretation of 417b2–7 is correct and Aristotle defines preservative πάσχειν here as a way of being preserved as what one is in the very act of being assimilated to something else, then this puts the notion of transition being described here in a novel perspective. We should not expect that Aristotle's account at 417b2–7 is limited to the first moment of the activity in question (say, the opening of one's eyes); rather, what he describes seems to be taking place throughout the duration of the subject's being involved in the perceptual activity. This would confirm that being affected and being active cannot be dissociated in any temporal way (as flagged in Section 1.3); but it does not imply that the one cannot be *conceptually* distinguished from the other, and it provides even less reason to think that Aristotle 'merges' 'the (instantaneous) transition to perceiving and perceiving [itself]', as Burnyeat would have it.[38]

It thus seems fair to say that, throughout 417b2–7, Aristotle focuses on the transition to activity – so long as we remain open to the idea that τὸ δυνάμει ὄν is making this transition *incessantly* as long as the activity is going on. At 417b8–9, however, Aristotle switches to a different

[35] As stressed by Heinaman 2007: 178–80 against most interpreters who take for granted that throughout 417b2–12 Aristotle talks simply about transitions.
[36] Cf. Section 1.3. [37] Cf. n. 27. [38] Burnyeat 2002: 72–3.

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perspective, concentrating on thinking (and *mutatis mutandis* perceiving) as an activity exercised continuously over a certain period of time. One could say that, while at 417b2–7 Aristotle is developing the notion of preservative πάσχειν, 417b8–9 is, strictly speaking, no longer about being affected but, rather, about being active: the preservative πάσχειν and the respective ἐνεργεῖν are numerically the same but differ in being and, at 417b2–9, Aristotle effectively captures their difference in being. At 417b5–7, he focuses on coming to be actively theorizing, whereas at 417b8–9 he discusses the activity of thinking as such – and these are clearly not the same thing. As soon as we realize that there is this switch of perspective, we cease to be confronted with the problem that most interpreters have found here – namely, that Aristotle seems to be first admitting (in the second disjunct of 417b5–7) that *X* is a kind of alteration and then plainly denying (at 417b8–9) that *X* can be any alteration whatsoever, while, moreover, suggesting that the latter can be somehow inferred from the former.[39] The inference starts to make much better sense once we take the switch of perspective into account.

In comparison with the content of 417b2–7, Aristotle's claim at 417b8–9 is, in fact, not that striking. In a way, he is simply spelling out what we already know from 417a21–b2: the fulfilment of a second capacity is not a change. The art of housebuilding is a case in point: it produces changes in the material, but the housebuilder qua housebuilder does not undergo any change; housebuilding does not mean for her becoming different. I argued (in Section 3.2) that Aristotle's primary aim at 417a21–b2 is to classify the perceptive capacity as being *complete*. But this seems prima facie difficult given that the perceptive capacity is *passive* rather than productive. What happens at 417b2–9, as I see it, is roughly this: (a) Aristotle explains at 417b2–7 what kind of passivity is involved; and (b) he insists at 417b8–9 that this kind of passivity is compatible with the capacity in question being complete like the art of housebuilding.

How exactly does it *follow*, then, from the notion of preservative πάσχειν developed at 417b2–7 that the activity in question is not itself an alteration? Let us recall that what is affected in the preservative way is, in its very assimilation to the agent, preserved and, indeed, fulfilled as what it itself already is; and that this involves no change to a contrary state. While, say, the perceiver perceiving a certain object is incessantly being affected by and assimilated to this object, there is no progressive changing, no acquiring of the quality as a quality of its own. If the patient were to acquire the quality of

[39] See διό at 417b8.

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the agent as a quality of its own (so that it could retain the quality even when the acting is over), it would thereby lose its ability to be further affected by that agent. It can, therefore, have the quality in itself only dynamically, so to speak, and only for as long as the acting – and the activity – is going on. Once the acting (and so the activity) is over, there is no lasting result.[40] Accordingly, it is legitimate to infer that engaging in the activity of perceiving does *not* mean that the perceiver becomes different – any more than building a house means becoming different for a housebuilder.

Let me conclude this section by commenting on two different ways of contrasting changes with 'complete' activities.[41] If the proposed reading of 417b2–9 is on the right track, then at 417b8–9 thinking (and *mutatis mutandis* perceiving) is concluded to be a complete activity in a somewhat different sense than it is claimed to be a complete activity in *Metaph.* Θ.6 and *EN* 10.4. Thinking and perceiving are complete activities because their subjects are complete just as the subject of housebuilding is complete – that is: they are understood as being complete activities by the *subject criterion*, rather than the *telic structure criterion*, as Andreas Anagnostopoulos calls them.[42] As shown by the example of housebuilding, something can well qualify as a complete activity by the subject criterion, while failing by the telic structure criterion (i.e. by not passing the tense test). At the same time, it has now been confirmed that nothing can pass the tense test without satisfying the subject criterion. On similar grounds, Anagnostopoulos calls the subject criterion 'more precise' and 'more fundamental'.[43]

I agree that this is the case as far as we are concerned with drawing the general line between changes and non-kinetic activities.[44] However, I am less sure that the same assessment also holds when we are concerned with the specific nature of perception (and thinking), as Aristotle is in *An.* 2.5. Here, the subject criterion is – in an important sense – not sufficiently precise, for it does not allow us to distinguish *passive* non-kinetic activities from other non-kinetic activities. Furthermore, it is also questionable whether the subject criterion is more fundamental in this context. When

[40] Perception often results in a *phantasma*, of course (as explained at *An.* 3.3, 428b10–429a8). However, this is a different phenomenon. Acquiring a *phantasma* cannot mean being altered qua perceiver (as e.g. having my eye turned blue, or my ear sounding would).

[41] As introduced in Section 3.2. [42] See Anagnostopoulos 2017: 173–6 and 204–8.

[43] Anagnostopoulos 2017: 172, 205, 208.

[44] In classifying housebuilding as a change, for instance, the telic structure criterion is not wrong but is, rather, imprecise because what it rightly detects is the numerical identity of housebuilding with a change (while overlooking their difference in being).

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the perceptive capacity is simply claimed to be a complete capacity, it is far from obvious how this is compatible with perception being essentially passive. Without the distinctions provided by 417b2–9, it would seem that we are only confronted with an antinomy between perception's completeness (on the basis of the subject criterion) and its passivity.[45] However, as I have argued, Aristotle does not simply want to confront us with this kind of antinomy. He also wants to indicate how the passivity of perception needs to be conceived if the antinomy is to be overcome. He does so by introducing the notion of preservative πάσχειν (implying alteration qua advance into itself) and by showing how this kind of passivity is compatible with completeness in the sense of the subject criterion. Now, the notion of preservative πάσχειν has appeared to be essentially informed by the telic structure criterion: it is exactly such a kind of being affected that can pass the tense test (and thereby incorporate the truth of *LAL*). If this is correct, it means that the idea of perception as an activity that is complete according to the subject criterion can certainly be *conceived* independently from the telic structure criterion. If this is done, though, it can figure only as one horn of an antinomy, for this obviates the question of perception's passivity. It is only with the aid of the telic structure criterion, extended from 'being active' to 'being affected', I submit, that activities like perception can be shown to be complete while being passive – that is, to be *complete passive* activities.

Be that as it may, the crucial point can be made independently from whether the subject criterion is more precise and more fundamental in the case of activities such as perception: the two criteria point jointly, from two complementary perspectives, to what seems to be Aristotle's main claim in *An.* 2.5 – namely that there are complete passive activities, distinct from both passive changes and non-passive complete activities, and that perception is one of them.

3.6 Activity and Acquisition

At 417b9–16, Aristotle steps back from complete passive capacities to provide a comparison with another kind of passive capacities that are not complete, although the way they are fulfilled can be contrasted with destructive πάσχειν, too. In the first sentence, Aristotle contrasts activities such as thinking or perceiving with the process of being taught:

[45] Which is exactly what Anagnostopoulos 2023 argues.

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> So, on the one hand, that which leads [what is in capacity] from being in capacity into fulfilment in the sense of knowledgeable thinking should not be called (after)[46] teaching but something different.
>
> τὸ μὲν οὖν εἰς ἐντελέχειαν ἄγον ἐκ δυνάμει ὄντος κατὰ τὸ νοοῦν καὶ φρονοῦν οὐ διδασκαλίαν ἀλλ᾽ ἑτέραν ἐπωνυμίαν ἔχειν δίκαιον.
>
> (*An.* 2.5, 417b9–12)

Aristotle turns our attention to what he calls 'that which leads into fulfilment' (τὸ εἰς ἐντελέχειαν ἄγον). The referent of this phrase can be understood in two ways: either as picking up on 'that which is in fulfilment' from 417b4 (i.e. as *the agent* of the activities in question that leads τὸ δυνάμει ὄν to fulfilment by assimilating it to itself and so producing this fulfilment in it)[47] or as referring to *the acting* of this agent on the patient.[48] However we understand τὸ ἄγον, what Aristotle is saying must be that the name of the agent should not be derived from 'teaching' or that its agency must not be called 'teaching' – apparently because what it does is essentially different from teaching.[49] The problem seems to be that, in contrast to the case of teaching, as the ποίησις corresponding to learning, there is no proper name for the ποίησις that corresponds to 'knowledgeable thinking' (νοεῖν καὶ φρονεῖν) or to 'perceiving' (αἰσθάνεσθαι).[50] It must be emphasized, nonetheless, that this is an essentially different kind of ποίησις.

Aristotle presents this point as something following on from, or summarizing, what has been said so far,[51] and we are now in a position to understand what he means. He has already distinguished at 417a30–b2 between learning and the transition to thinking, stressing that the former

[46] See n. 49 for an explanation of how to understand the text both with and without the supplemented word.

[47] Just as it is picked up again at 417b13. For this understanding of that which ἄγει τὸ αἰσθητικὸν εἰς ἐνέργειαν, cf. *Sens.* 4, 441b19–23 (referring probably to our section of *An.* 2.5).

[48] In the second case, the neutral ἄγον seems parallel to the neuter ὅπερ at 417b6 referring to γίγνεσθαι. So, either way, Torstrik's emendation – changing ἄγον into ἄγειν – seems unnecessary.

[49] Taking τὸ ἄγον as referring to the agent seems, in itself, the more natural choice. However, this produces some difficulties with understanding the rest of the sentence, particularly the claim that this agent does not have the notion of διδασκαλία, but something else, as its ἐπωνυμία. Clearly, 'teaching' is not a potential *name* of an agent, which seems to support the alternative construal of τὸ ἄγον. But perhaps the expression ἐπωνυμίαν ἔχειν is used in a more relaxed way, meaning that the name of the agent in question is not *derived from* διδασκαλία – that is, it is not διδασκαλικόν. Cf. *Phaed.* 102b and 103b, where other things (e.g. something large) take the ἐπωνυμία of the Forms (e.g. largeness) themselves (see further *Crat.* 409c, 398b–c, or *GA* 5.3, 783b12–17; cf. *Soph.* 229a–b defining the διδασκαλική).

[50] Accordingly, the situation is analogical to the one described at *An.* 3.2, 426a12–15 with respect to the agency of colours and flavours (in contrast with the agency of sounding things that does have a proper name). At *An.* 3.2, 426a9–11 perceiving is explicitly described as a πάθησις.

[51] Cf. μὲν οὖν at 417b9.

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involves an alteration in the sense of being brought into a different lasting state. This contrasts sharply with what we have just learnt about passive activities like thinking (or perceiving), which have no such lasting result. Accordingly, although we have no name for the respective ποίησις, we must insist that it is something essentially different from teaching.

However, this leaves the status of learning somewhat unclear. On the one hand, it can be sharply contrasted with the case of perceiving and thinking. But, on the other hand, it is hard to resist the impression that learning cannot be simply identified as a case of destructive πάσχειν.[52] The following sentence seems to be focused on addressing exactly this concern, and it can be understood as subsuming learning under an expanded category of preservative πάσχειν (despite its difference from complete passive activities, which has just been stressed):

> On the other hand, that which, starting from being in capacity, learns and acquires scientific knowledge by the agency of that which is in fulfilment and capable of teaching is either not to be described as being affected, or there are two ways of being altered, one which is a transition to privative states and the other which is a transition to [positive] dispositions and to nature.
>
> τὸ δ' ἐκ δυνάμει ὄντος μανθάνον καὶ λαμβάνον ἐπιστήμην ὑπὸ τοῦ ἐντελεχείᾳ ὄντος καὶ διδασκαλικοῦ ἤτοι οὐδὲ πάσχειν φατέον [[ὥσπερ εἴρηται]][53] ἢ δύο τρόπους εἶναι ἀλλοιώσεως, τήν τε ἐπὶ τὰς στερητικὰς διαθέσεις μεταβολὴν καὶ τὴν ἐπὶ τὰς ἕξεις καὶ τὴν φύσιν.
>
> (*An.* 2.5, 417b12–16)

Aristotle's aim seems to be twofold: he is, on the one hand, resisting the identification of learning with destructive πάσχειν, while, on the other hand, emphasizing its difference from the preservative πάσχειν as it was introduced at 417b2–9. Learning does not mean transitioning to a privative state: it is *not* a case of 'destruction'. Rather, Aristotle says something very similar about learning to what he has said about preservative πάσχειν at 417b5–7 – namely, that it leads to a positive disposition (ἕξις) in which,

[52] See e.g. Johansen 2012b: 159: at 417b14–16 'Aristotle is reapplying the notion of an advance to the thing itself to the alteration from first-level to second-level capacity in learning.' Cf. Heinaman 2007: 174: 'As it will turn out, 417b2–16 will explain that both contemplation and the learning referred to previously at 417a31–32 . . . are refined forms of alteration.' See also Charles 2009: 23; cf. Burnyeat 1984: 136 and Bowin 2012a: 262–5.

[53] With Förster 1912 and Ross 1961 (cf. already Rodier 1900), I believe the words ὥσπερ εἴρηται (contained in most manuscripts, but omitted by SUX, and not attested before Sophonias) should probably be excised.

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apparently, the very nature of the subject finds its fulfilment.[54] However, this very characterization also contrasts with how preservative πάσχειν was analysed at 417b2–9: learning involves acquiring a new quality of one's own as a lasting result, whereas perceiving and thinking emphatically do not involve the perceiver or thinker acquiring any quality of their own as a lasting result.[55]

In other words, learning is not quite as preservative as perceiving and thinking (I can indefinitely and repeatedly perceive the same thing, but once I have learnt something, I cannot learn it again, unless I have forgotten it). However, learning still possesses a preservative feature in the sense that τὸ δυνάμει ὄν is in no way harmed (or 'destroyed') by it – rather, its very nature is fulfilled through being affected. Indeed, this is exactly how a complete capacity is acquired: the result of learning is a completion or perfection (τελείωσις) that enables the subject to engage in a complete activity (whether this activity is passive or not).[56] This explains what Aristotle means when, in the immediately following lines (417b16–18), he compares the acquisition of the perceptive capacity in embryogenesis with learning.

3.7 A Programmatic Definition of Perception

The notion of preservative πάσχειν can, accordingly, be conveniently expanded to capture also what happens in learning. However, the comparison with embryogenesis turns our attention back to what has been the main goal behind introducing preservative πάσχειν, and behind *An.* 2.5 as a whole – namely, capturing, on the most general level, the receptive nature of perception as a way of taking things in. We have seen that the notion of preservative πάσχειν can serve this purpose only once it has been successfully distinguished from both passive changes and non-passive

[54] Aristotle seems to be drawing on his distinction between state (διάθεσις) and disposition (ἕξις) as two kinds of qualities from *Cat.* 8, 8b26–9a13. However, he here sharpens the contrast by characterizing state as privative and connecting disposition with nature. Both characterizations seem jointly intended to contrast learning with destructive πάσχειν.

[55] Unless, again, we count *phantasmata* (cf. n. 40). The contrast would be further reinforced if we take the distinction between two τρόποι of alteration at 417b14–16 *not* to overlap with the two γένη of alteration implied by the second disjunct of 417b5–7, but as a further subdivision within the ordinary kind of alteration in the sense of becoming different.

[56] Cf. *Phys.* 7.3, 246a13–15 (with 247b4–7, 10–12): 'Whenever something acquires its virtue (ἀρετή), then it is called perfect/complete (τέλειον); for then it is in the highest degree (μάλιστα) in accordance with [its] nature (κατὰ φύσιν).'

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complete activities. Perception itself is a complete passive activity. Establishing this claim is the key result of *An.* 2.5.[57]

We have also seen what role this notion plays in Aristotle's engagement with his predecessors. Introducing the notion of preservative πάσχειν would be to no avail if Aristotle characterized it in terms of a generic likeness presupposed by any πάσχειν whatsoever or if he deflated it of any genuine passivity. The notion of complete passive activities, in contrast, does exactly what is needed to resolve the main dilemma about knowing raised in *An.* 1.2.

By introducing this concept, Aristotle is able to capture the sense in which like perceives like, as well as the way in which like is affected by like in perception, while overcoming the difficulties of the traditional *LKL* position (as exposed, once more, in the puzzle at 417a2–9). Furthermore, this allows him to incorporate the truthful aspects of *LKL* without having to rely on the provisional identification of 'being affected' and 'being active' from 417a14–17 – rather, it frees him to show how an activity can be passive without being incomplete. Finally, it prepares us for the closing passage of the chapter (418a3–6), which applies the assimilation model explicitly to perception. The notion of complete passive activities provides the ground for understanding the present and the perfect aspect of being affected in a temporally non-exclusive way. This is possible only as a result of the fact that, for the entire duration in which the subject is being affected by and assimilated to the relevant object, the subject is preserved. In other words, the subject is *impassive* in the sense of never being turned into a contrary state by the object, and thereby never acquiring a new quality of its own. If the subject is a perceiver, this is how she succeeds in retaining her untainted ability to perceive. By developing the notion of preservative πάσχειν, Aristotle thus allows two seemingly incompatible intuitions about knowing (i.e. the *Acquaintance/Contact Requirement* and the *Unbiasedness/Externality Requirement*) to be successfully incorporated into his first general account of perception. On this basis, Aristotle's

[57] Is this also true of perception in non-human animals? One reason to doubt this is the essentially practical use non-human animals make of perception according to Aristotle (see e.g. the two kinds of odours in *Sens.* 5, 443b17–445a16 and *EN* 3.10, 1118a18–23). I would respond that the way perception is *used* has no bearing on how it is *defined*. That is, admittedly, a claim that would demand larger discussion, which cannot be provided here. I only point out that there is no conflict in assuming that a complete activity provokes, or becomes the basis of, an incomplete one (when, say, I react to my seeing of a bear by running away). That said, I do not wish to underplay the way in which perception is embedded, according to Aristotle, in the self-preservative activity of animals. This embeddedness will be emphasized in Chapter 7. Besides this, human beings, of course, also use perception for the sake of νοῦς. (Thanks to an anonymous referee for pressing me on this issue.)

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account finally shows how we might arrive at grasping the whole that his predecessors managed to glimpse only in isolated parts.

We still require, however, a better understanding of the notion of impassivity (ἀπάθεια) at stake here. It clearly cannot be the absolute impassivity claimed by Anaxagoras for νοῦς as excluding any πάσχειν whatsoever. Such an impassivity would make any account of how thinking, and a fortiori perceiving, comes about impossible (as Aristotle points out at *An.* 1.2, 405b21–3 and again at 3.4, 429b22–6). However, it does not seem to be the abstract kind of impassivity that Aristotle refers to in *An.* 1.4 (408b18–30), either. Here, he makes a point, akin to the argument of *Metaph.* Z.8 (1033b3–1034a8), that the soul itself (whether it is the perceptive or the rational soul) cannot qua form be what, properly speaking, 'suffers' when we become incapacitated owing to malady or old age. While the former (Anaxagorean) impassivity seems too strong, the latter seems too weak, because it considers *any* form whatsoever (including forms of things undergoing destructive πάσχειν and including productive arts) to be impassive.[58]

To appreciate more fully just how the notion of preservative πάσχειν can be spelled out in terms of impassivity and thus be presented as overcoming the conflict between *LKL* and Anaxagoras' view, it is helpful to recall the way in which Aristotle defines impassivity in *Metaph.* Δ.12 and Θ.1.[59] Impassivity is not simply a privation or the incapability of being affected; it is rather a *power for resisting* a certain kind or range of acting, particularly if such an acting would mean for the patient changing towards something worse. This kind of resistance can be a necessary condition for acting in some way, but apparently – and here we return to the main point of *An.* 2.5 – it can also be a necessary condition for being affected in some way, particularly if the kind of being affected in question is such as to become the patient's own fulfilment.[60]

[58] For Aristotle's commitment to the impassivity of the perceptive soul, and its role within his account of perception, see Chapter 5.

[59] See *Metaph.* Δ.12, 1019a26–32 (cf. 1019b10–11) and Θ.1, 1045b13–14, and also *Phys.* 7.3, 246b19–20 (cf. 247a3–4) where both impassivity and passivity are treated as two possible manifestations of an excellence. For further discussion of impassivity, see Section 6.5.

[60] See *Metaph.* Δ.12, 1019a20–6, which introduces a more demanding concept of a passive capacity as a capacity for being affected 'towards the better' and as a capacity for being affected 'excellently': these two classes could be compared with *An.* 2.5, 417b12–16 and b2–9, respectively. The more demanding kinds of passive capacities seem directly connected with impassivity as the power to resist being affected towards the worse (1019a26–32): such a power seems to be a prerequisite for the demanding kinds of passive capacities.

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This, I submit, is exactly how perception is to be understood according to Aristotle and Theophrastus. It presupposes an ἀπάθεια that is the 'preservative' aspect of the perceptive πάσχειν seen, as it were, from the other side. That which can perceive is able to resist any change towards a contrary state (i.e. to resist acquiring a colour or an odour as a quality *of its own*) that would diminish or destroy its perceptivity. This impassivity is what allows the perceiver to be affected by, and assimilated to, the perceptual object in the way that for her means her own fulfilment qua perceiver while preserving her ability to perceive in an untainted manner. The quality received by the perceiver must remain, as we shall see, a quality *of* the external perceptual object. This, I suggest, is the kind of impassivity that Aristotle feels entitled to infer from the notion of preservative πάσχειν at *An.* 3.4, 429a14–15.[61] Moreover, this aspect of preservative πάσχειν provides a key to understanding why Aristotle appears to oscillate between classifying perception as a case of being affected, as a quality, and as a relatum: perception is exactly such a kind of *being affected* that the perceiver is, throughout the entire time, *like* the perceptual object – in a way that makes perception a *relatum* of it.

If this proposed reconstruction of Aristotle's first general account of perception is on the right track, it ought to be stressed that *An.* 2.5 itself leaves many questions open, despite the fact that it has often been taken to be the ultimate source for their answers.[62]

First, it does not contain any definitive statement on whether perception involves a literal assimilation of the sensory organs, and 'ordinary' changes in general, or not. The straightforward literalist reading of *An.* 2.5, which would identify preservative πάσχειν and ἀλλοίωσις at 417b2–9 with physiological processes involved in perception, seems misguided, as Aristotle's aim here is to capture the very essence of perception, making the stakes much higher. However, it also seems mistaken to take this fact as implying that, according to Aristotle, perception involves no 'ordinary' changes whatsoever. There is nothing in *An.* 2.5 to exclude literal assimilation from being somehow involved in perception – and, indeed, it is hard to resist the impression that at least perceiving temperatures does, according to Aristotle, *somehow* involve an instance of literal cooling or heating of the perceiver's body. Yet, *An.* 2.5 also seems to imply important constraints on how exactly this might be the case.

It is, first of all, hardly possible for such a literal, and hence 'destructive', heating or cooling to constitute the essence of perception. Moreover, such

[61] Cf. Section 1.1. [62] See Section 1.1.

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a literal cooling or heating can be, at most, local: if I were *in toto* assimilated to the object cooling or heating my body, then I would obviously lose my ability to be affected by, and so perceive, it.[63] Moreover, even on a local level, additional work must be done to explain just how a literal assimilation is compatible with the requisite unlikeness that allows the perceiver to continue being affected by the perceptual object in question and, thereby, to perceive it. This, to be sure, raises a difficulty not only for literalism, but also, as we shall see, for the idea that, for the duration of perceiving, the sense organ is like the perceptual object in the sense of embodying the same ratio in a different pair of contraries.[64] What needs to be explained is how the perceiver can be assimilated to the perceptual object while retaining the unlikeness requisite for being further affected by the same or any other object of the given range. This question is yet to be explored. For now, it is sufficient to stress that spiritualism does not provide a viable alternative: if the only thing that counts in perception is a spiritual change, then it is equally unclear how something that has already been 'spiritually' assimilated to the perceptual object can continue being 'spiritually' affected by it.

A related point concerns the 'Democritean' generic likeness. If the proposed reconstruction points in the right direction, then *An.* 2.5 says nothing about this sort of likeness. That does not mean, however, that generic likeness plays no role in Aristotle's account of perception. Rather, in *An.* 2.7–11, Aristotle clearly takes it on board. Each perceptive organ needs to be a specific instantiation of the genus under which the perceptual objects accessible through it fall: it needs to be exactly in the middle between the two extremes. This notion of the mean (μεσότης, introduced in *An.* 2.11), which has directly to do with the 'Democritean' generic likeness, will be crucial for how the notion of preservative πάσχειν should be fleshed out.[65]

All of this, finally, relates to the question of how exactly *the perceptive soul*, as the primary cause of perception, is involved in this activity – a question that has received much less attention than the one concerning the role the body plays in perception, despite the fact that it is no less tricky and no less central for understanding Aristotle's account. *An.* 2.5 does not contain any clear statement on this point (any more than

[63] Cf. Freeland 1992: 232.
[64] See Caston 2005: 303–7. For further discussion of this reading, and of the literalism-spiritualism debate in general, see Chapter 4.
[65] For more on this question, see Chapter 6.

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An. 2.4, 416a21–b11 contains any clear statement about the role of the nutritive soul).[66] But we shall see that this question becomes crucial for the task of fleshing out the notion of complete passive activities in *An.* 2.6–3.2.[67] It contains a dilemma that comes to the fore as soon as the result of *An.* 2.5 is confronted with Aristotle's argument in *An.* 1.3–4 against the idea that the soul could itself be undergoing a change. This dilemma will be worked out in Chapters 4 and 5 and addressed in Chapters 6 and 7.

If the proposed reconstruction is on the right track, then *An.* 2.5 does not provide answers to any of these pressing questions. Aristotle's first general account of perception is too preliminary to do that. It is pre-causal in the sense of leaving it open exactly how the respective roles of the soul and the body in perception are to be laid out. It captures, in most general terms, the nature of perception, but without saying anything about its causes. The chapter's relation to the further discussion in *An.* 2.6–3.2 is rather like the relation of *An.* 2.1 to *An.* 2.2–3.11: in a sense, the most general account describes only what the inquiry proper should accomplish.[68] However, it would be a misunderstanding if this led us to disparage the achievement of *An.* 2.5 (or, for that matter, *An.* 2.1). The range of open questions may appear daunting, but we have been left with a well-argued, novel, and attractive notion of what exactly we should be looking for in any satisfactory answers to these questions. And this is no small accomplishment.

[66] Cf. Sections 1.1 and 2.4, and – more fully – Section 5.4.
[67] Just as it becomes crucial at *An.* 2.4, 416b20–3.
[68] For *An.* 2.1, see Corcilius 2025 (the chapter formulates 'a job description of the soul within a hylomorphic science of living things', p. 40); cf. Johansen 2012b, 9–46 (the chapter provides 'a check that the essential definition of the soul is of the right general kind', p. 40).

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CHAPTER 4

The Flesh and Bones of Perception

4.1 What Is Achieved in Perceiving

If it is correct that Aristotle's first general account in *An.* 2.5 lays out the programme of his inquiry into perception and its first principles, as I have argued thus far, then this has two implications. By capturing, on the most general level, what kind of phenomenon perception is, the chapter effectively circumscribes what a successful account of its first principles would have to provide. But while offering an indispensable orientation about the goal of the inquiry, it falls short of reaching that goal in several respects (underlined in Sections 1.1 and 3.7). In *An.* 2.5, Aristotle tells us, in the most general terms, what perception is, but without saying anything specifically about the involvement of the perceptive body, or about the way in which the perceptive soul should be understood to account for the phenomenon of perception. Indeed, *An.* 2.5 on its own may easily give rise to doubt about whether perception, as it has been characterized here, is *possible* at all; and many of Aristotle's predecessors and contemporaries would surely have been sceptical.[1] The aim of the remaining four chapters is to address these looming questions by exploring how the programme laid out in *An.* 2.5 is carried out in *An.* 2.6–3.2.

Before introducing the wider context of Aristotle's inquiry into perception in *An.* 2.7–12 and the key factors that are supposed to make perception, as understood by Aristotle, possible (in Sections 4.4 and 4.5), and before raising the questions concerning the respective roles played in perception by the perceptive organs and the perceptive soul (in Sections

[1] As noted by Caston 2018: 35–6, Aristotle's perceptual realism is certainly not naïve in the sense of representing a prelapsarian phase of thinking overcome by the modern scientific revolution. Rather Aristotle's perceptual realism is already a response to sceptical approaches to perception represented by Parmenides, Protagoras, Democritus, and to some extent Plato (cf. Lee 2011). Many of his interlocutors would object that Aristotle expects too much from perception. For further discussion of this context, see Section 6.2.

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4.6 and 4.7), it will be worth pausing to reflect on how much exactly Aristotle thinks is achieved in perception. I have argued that his first general account of perception in *An.* 2.5 as a complete passive activity is already aimed at contrasting continued perceiving from having a mere after-image (or acquiring a blind spot), and at capturing, on the most general level, the specific object-directedness characteristic of perception. It is essential for the activity of perceiving *X* that the perceiver (already) has a likeness of *X* in herself, while (still) being affected by *X*; and this is possible only because the likeness of *X* in the perceiver does not become a quality of the perceiver herself – rather, it seems to be present in her exactly as a quality possessed by *X* that is an object in the external world. This account, as we shall presently see in more detail, encapsulates a specific kind of direct realism according to which perceivers have an unmediated access to external objects whose qualities they receive and which they cognize, in principle, as they truly are on their own.

This characterization contains two main points that call for explication and defence. (1) I maintain that Aristotle's account of perception as a complete passive activity aims at capturing the way in which perceivers access the external bearers of modal-specific qualities – without presupposing anything like an additional synthetic act and/or assuming that the bearers are perceived only coincidentally.[2] (2) I maintain that perceivers have, in principle, access to the very qualities that the outside objects bear independently of whether they are being perceived or not.[3] This contrasts with the view that, according to Aristotle, outside objects possess, on their own, the modal-specific qualities (like colours) merely on the level of a first fulfilment – that is, they only possess *powers* for producing these qualities upon encountering a perceiver. In addition to these two points, I shall seek to show later (in Section 4.6) that (3) the directness of Aristotle's realism cannot be accounted for in terms of any *static representation*.

The first two points (developed in Sections 4.2 and 4.3, respectively) raise questions that are beyond the scope of the present inquiry. I limit

[2] Indeed, this implies that no act of synthesis is needed for perceiving an object that is, for example, both hot and red or both red and blue, either (cf. Section 6.6). This goes directly against Kant's idea that 'we cannot represent [that is, also, perceive] anything as connected in the object (*im Objekt verbunden*) without having connected it ourselves' (*Critique of Pure Reason*, § 15). Aristotle's account of perception, in contrast, presupposes objective connections on the level of the most primitive, purely receptive, cognitive acts.

[3] I say 'in principle' to make clear that this second point is distinct from Aristotle's infallibilism. What matters here is only that, for example, the colours as we perceive them are real qualities of external objects belonging to them independently of whether they are perceived or not.

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myself to what is crucial for the subsequent discussion, while remaining as non-committal as possible on what is not.

4.2 Perceiving the Bearers of Perceptual Qualities

In *An.* 2.5, Aristotle characterizes perceptual objects as 'particulars' existing out in the external world: 'the agents [of perceiving] are external, I mean the visible and the audible' (417b20–1); 'the perceptual objects are among particulars and external things' (417b27–8).[4] It is natural to take Aristotle here to be identifying perceptual objects with the bearers of perceptually relevant qualities, as he clearly does in his final summary (in *An.* 3.8) of the work he has accomplished in *An.* 2.5–3.7, where his example of an αἰσθητόν whose form is received in perception is 'a stone' (431b29–432a1).[5] However, perhaps the expressions in *An.* 2.5 can also be read as referring to the qualities themselves.[6]

That may be suggested by Aristotle's claim in *An.* 2.6 that only 'the exclusive objects (τὰ ἴδια) are perceptible in the primary sense (κυρίως)' (418a24–5). These were distinguished from the 'common' and the 'coincidental' objects and described as nothing other than *the qualities* defining each sense modality: 'I call exclusive (ἴδιον) [to each sense] that which cannot be perceived by any other sense and which does not allow for deception, as, for instance, sight is of colours, hearing of sounds, and taste of flavours' (418a11–13).[7] Interpreters often infer from here that, according to *An.* 2.6, the bearers of perceptual qualities are not only not perceptible 'in the primary sense' but are not even perceptible 'in their own right' (καθ' αὑτό); they can at most be perceived 'coincidentally'.[8]

[4] This seems to be implied already at 417a2–9 (cf. Sections 2.4 and 3.1), although Aristotle does not use the notion of 'perceptual object' there.

[5] See also e.g. *Sens.* 6, 446b17–26, where the examples of things perceived by hearing, smelling, and seeing are, respectively, a bell, a particular amount of frankincense, and a fire. Cf. *APo.* 1.31, 87b29–30 ('what is perceived must be a this (τόδε τι) here and now'); *APo.* 2.19, 100a16–17 ('what is perceived is a particular (τὸ καθ' ἕκαστον)', cf. *APr.* 1.27, 43a26–7); *Cat.* 7, 7b39–8a1 ('when perceptual object is taken away, body (τὸ σῶμα) is taken away, for body is among perceptual objects').

[6] Thanks to an anonymous referee for pressing this point.

[7] Cf. *An.* 2.6, 418a23–4.

[8] See e.g. Barnes 1993: 193 ('We see individuals incidentally; i.e. to see *a* is to see an *F* (where *F* is some sensible quality) which in fact is *a*'); Ebert 1983: 197–8, who recommends Aristotle's account of exclusive perceptual objects as a way of overcoming 'our belief that colours somehow "stick" to their objects' (cf. Price 1996: 300–1); Gregoric 2007: 139–40, 199–201, who treats 'physical objects' as 'paradigmatic accidental perceptibles'; Marmodoro 2014: 156–88, who identifies an abyss between Aristotle's account of modal-specific perception (i.e. perception of qualities themselves) and the 'perception of objects'; or Johnstone 2022: 162–3, 169, 173, who suggests that 'particular bodies' are 'the paradigm cases of incidental perceptibles'. Cf. Stein 2010: 25–33, who provides a

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However, there are good reasons to think that this cannot be Aristotle's view.[9] Indeed, closer attention reveals that not even *An.* 2.6 excludes the bearers of perceptual qualities from being perceptible in their own right.

When spelling out the above-quoted claim that the exclusive objects do not allow for error, Aristotle says the following about the individual senses:

> Each of them κρίνει[10] about these [i.e. the exclusive, primary objects] and is not deceived about colour (ὅτι χρῶμα) or about sound (ὅτι ψόφος), but about what the coloured thing (τὸ κεχρωσμένον) is and where it is, or what the sounding thing (τὸ ψοφοῦν) is or where it is. (*An.* 2.6, 418a14–16)

It is admittedly not entirely clear how the expression 'about colour' (ὅτι χρῶμα) should be construed.[11] Still, the way in which Aristotle continues suggests that more than perceiving the qualities themselves is involved here. In order to commit perceptual error concerning where a coloured thing is located or what kind of thing it is, the perceiver already needs, arguably, to have perceptual access not just to the colour in question, but also to its bearer; otherwise, it is unclear how she could – more or less correctly – perceive *its* identity or *its* position, rather than merely the identity or position of the colour.

The quoted passage is admittedly non-conclusive. However, the assumption that we perceive the bearers in their own right comes out more clearly in Aristotle's characterization of coincidental objects, such as the son of Diares, a few lines later:

> [One] perceives this [i.e. the son of Diares] coincidentally (κατὰ συμβεβηκός), because it happens to belong (συμβέβηκε) to the white (τῷ λευκῷ) that [one] perceives [in its own right]. (*An.* 2.6, 418a22–3)

rich discussion of how Aristotle can 'fill the gap' between 'a representation of [white] in the perceiver' on the one hand and 'a perception to the effect that there is a white table in front of me' on the other. See also Gasser-Wingate 2021: 108–19 who, taking for granted that only the qualities themselves are perceived in the primary sense according to *An.* 2.6, rightly identifies a conflict between this account and what Aristotle says about perception outside the *De Anima*.

[9] For three different ways of making this point, see Charles 2020, Corcilius 2022, and Arsenault forthcoming.

[10] The question of how to translate κρίνειν in this particular passage is delicate and I return to it in Section 6.2. I render κρίνειν by default as 'discriminating', but see Chapter 6 for how exactly to understand that notion.

[11] It is unlikely that Aristotle means 'that the perceived quality is a colour' (he thinks that the senses are more reliable than that; cf. Johnstone 2015: 315). Instead, he may mean something like 'that there is a colour'. Yet, he could also mean, somewhat more specifically, 'that a certain colour belongs to what is perceived' or 'that what is perceived has a certain colour'. This last construal would make the transition to what follows much easier.

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'The white' (τὸ λευκόν) here is unlikely to mean the white colour. It is something of which 'the son of Diares' can be predicated, and a colour is hardly a viable candidate for such predication. 'The white' seems rather to refer to the white *thing* out there in the world, of which I can meaningfully ask, 'Oh, isn't that the son of Diares?'[12] And that white thing is said to be perceived without qualification – that is, apparently, in its own right. This suggests that even in *An.* 2.6 Aristotle is unwilling to endorse the view that qualities themselves are perceived independently of their bearers and that perceiving the latter presupposes an additional step, such as an act of synthesis.[13]

It must be admitted that, throughout his discussion of individual sense modalities in *An.* 2.7–11, Aristotle repeatedly speaks of perceiving modal-specific qualities themselves.[14] This, however, need not mean that he takes these qualities to be perceived independently of their bearers. Indeed, the negative answer is suggested by the fact that Aristotle also freely speaks of perceiving the bearers of modal-specific qualities in a way that seems not to be just coincidental.[15] One such passage comes at the very outset of *An.* 2.7:

> For the visible (τὸ ὁρατόν) is colour and this is what is *upon* that which is visible in its own right (τὸ ἐπὶ τοῦ καθ' αὑτὸ ὁρατοῦ) – in its own right not in the sense of account (τῷ λόγῳ), but rather in virtue of having in itself the cause of being visible. (*An.* 2.7, 418a29–31)

[12] Johnstone 2022: 156, 161 speaks of the son of Diares 'coinciding with the color white' (cf. Gasser-Wingate 2021: 105: 'coinciding with some pale surface'), but it is hard to see what kind of coincidence this could be. Cf. also Cashdollar 1973: 163, who claims that in coincidental perception 'quality is … a subject … of which other categories [typically a substance] are predicated'. None of the passages on coincidental perception implies, however, that this kind of μετάβασις εἰς ἄλλο γένος is committed by perceivers. On coincidental perception, see Everson 1997: 187–93, Herzberg 2010: 137–55, Rabinoff 2015 (with Rabinoff 2018: 18–24), Polansky and Fritz 2018, Gasser-Wingate 2021: 111–19, Perälä 2022; cf. also Scheiter 2012: 261–4.

[13] Cf. e.g. Marmodoro 2014: 82–4, who offers a reading of *An.* 2.6 under which what the senses primarily perceive are simply 'instance[s] of the perceptible quality', which are themselves merely 'embedded in a spatiotemporal location'.

[14] See e.g. *An.* 2.7, 419a8–9, 419a22–3; 2.8, 420a27–9; 2.9, 421a13–15, 421b21–2; 2.10, 422a14–17, 422a23, 422b7–8; 2.11, 422b32–3, 423a8–9, 423a17–19, 423b27–9.

[15] See e.g. *An.* 2.7, 419a1–7 ('a mushroom, a horn, the heads, scales, and eyes of fish … the cause on account of which these are seen requires another discussion'); 2.9, 421b3–8 ('smelling is of the smellable and the non-smellable; some things are non-smellable because they can have no odour whatsoever, whereas others are non-smellable because they have an indistinct or bad odour'); 2.10, 422a10–11 ('the object of taste is a body in which a flavour is contained'); 2.10, 422a27–33 ('taste is of the tastable and the untastable, and the untastable is that which has an indistinct or bad flavour, or a flavour that is destructive of the taste'); 2.10, 422a34 ('the object of taste is wet'); 2.11, 424a12–15 ('touch is of the tangible and the non-tangible, and the non-tangible is that which has an entirely indistinct διαφορά of tangible qualities, such as the air'). Cf. 3.2, 425b18–19 ('what is seen is a colour or that which has a colour').

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This must come as a surprise for those who read *An.* 2.6 as expressing Aristotle's commitment to the view that bearers of modal-specific qualities are perceptible only coincidentally. Aristotle clearly states here that besides colour itself, its bearer is also visible – and visible in its own right.[16] This is so, apparently, because it belongs to colour's visibility to make visible something else – namely, its bearer. I take Aristotle to be articulating the idea, presupposed throughout his treatment of perception, that what a modal-specific quality does to the perceiver receiving it essentially involves making her perceive the external bearer of it.

At the beginning of *An.* 2.8, building on the distinction between the perceptual object in capacity and the perceptual object in activity introduced at *An.* 2.5, 417a13–14,[17] Aristotle seems to have a similar idea in mind, although the case of sound turns out to be somewhat trickier:

> Sound (ψόφος) is of two kinds: one is something in activity (ἐνεργείᾳ τις) [or: an activity], the other is in capacity (δυνάμει) [or: a capacity];[18] for we say that some things do not have a sound (ἔχειν ψόφον), for instance, sponge or fleece, while other things do have a sound, for instance, bronze and all the things that are solid and smooth because they can sound (δύναται ψοφῆσαι). (*An.* 2.8, 419b4–8)

What 'can sound' is the bearer of a sounding quality, such as a bell. When it sounds, it produces a sound that, via the medium, comes to be present in the perceiver. From this, it is admittedly not yet clear that the bell itself belongs to what we hear in its own right. However, that this is the case is strongly suggested by how Aristotle further develops the model – and extends it to other sense modalities – at *An.* 3.2, 425b25–426a27, where he draws on his general analysis of agency from *Phys.* 3.3.[19] The claim here is that the sound in activity or 'the sounding' of that which has a sound coincides, in the perceiver, with her hearing. Sounding is the acting of the

[16] The construction (ἐπί with genitive) seems underdetermined as to whether it is the coloured body or its surface which is claimed to be visible in its own right. Aristotle, to be sure, does locate colours in surfaces (ἐν τῷ τοῦ σώματος πέρατι, see *Sens.* 3, 439a30–b1, b6–12) and surfaces may well be what he is referring to in our passage (note, though, that this can still imply that the coloured body is visible in its own right, too; cf. Arsenault forthcoming). However, he may also mean, more vaguely, the body upon which the colour exists by being located in its surface (just as something is ἐπὶ γῆς by having its downward surface located (more or less) in the same position as a part of the surface of the earth).

[17] Cf. Section 3.1.

[18] ἐνεργείᾳ and δυνάμει is the reading of manuscripts EC (and a few others in the latter case), whereas the remaining manuscripts read δύναμις and ἐνέργεια.

[19] See also *Sens.* 3, 439a6–17.

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external object on the perceiver, whereas hearing is the perceiver's being affected by that object via the medium (425b26–8):[20]

> for there are beings that have the sense of hearing (ἀκοὴν ἔχοντα) but are not [actively] hearing, and objects that have sounds (τὸ ἔχον ψόφον) do not always [actively] sound; but when that which can hear (τὸ δυνάμενον ἀκούειν) is active and that which can sound (τὸ δυνάμενον ψοφεῖν) [actively] sounds, then hearing in the sense of activity (ἡ κατ' ἐνέργειαν ἀκοή) comes about together with sound in the sense of activity (ὁ κατ' ἐνέργειαν ψόφος); one can call the former hearing (ἄκουσις) and the latter sounding (ψόφησις). (. . .) So, the activity of that which can sound (τὸ ψοφητικόν) is a sound or sounding (ψόφος ἢ ψόφησις) . . ., for sound (ψόφος) . . . is of two kinds . . . (*An.* 3.2, 425b28–426a1, 426a6–8)

Aristotle's identification of the agent with the bearer of the sounding quality suggests that the bearer is, indeed, what the perceiver hears in its own right and no less primarily than she hears the sound itself.[21] The perceiver hears it owing to the sound of this bearer coming to be present – as *its* sounding or *its* sound in activity – in the perceiver and coinciding with her activity of hearing. This model dovetails with the idea that the quality received by the perceiver in perceiving remains a quality of the external agent and that perception consists in receiving forms that remain forms of the external objects.[22]

This analysis leaves many questions concerning Aristotle's account of αἰσθητά open.[23] What matters for our purposes here, however, is only that

[20] Cf. *Phys.* 3.3, 202b21–2. For a reading of *Phys.* 3.3 that commits Aristotle to numerical identity between acting and being affected, see e.g. Coope 2004. For a reading that takes acting and being affected to be numerically distinct, see e.g. Marmodoro 2007. For a reading according to which Aristotle remains, at least in *Phys.* 3.3, neutral on this issue, see Charles 2015.

[21] Cf. O'Callaghan 2020 for an overview of the contemporary discussion concerning the hearing of sounds vs the hearing of their sources. For a defence of the idea that we hear the sources of sounds no less primarily than the sounds themselves, see e.g. O'Callaghan 2007: 57–71, Kulvicki 2008, Scruton 2009, or Nudds 2010; see also the discussion in Kalderon 2017: 79–136.

[22] See Section 3.7 for the former and Section 6.4 for the latter. One can argue that sounds are immediately perceived as sounds *of* their sources, and yet allow, as most interpreters do, that in the media they take on more of a life of their own than colours do. For an interesting defence of a 'distal' interpretation of Aristotle's account of sounds against the usual 'medial' interpretation, see Johnstone 2013: 640–6. I return to a discussion of how sounds may differ from colours in the following section (see n. 30).

[23] To name just a few of them: (1) What exactly are the perceived bearers of modal-specific qualities? (Are they substances, as argued by Corcilius 2022, or are they rather 'bodies' in the category of quantity, as argued by Arsenault forthcoming?); (2) What exactly is the kind of relationship between perceiving modal-specific qualities and perceiving their bearers? (Can some kind of priority be ascribed to the latter, say, in terms of the bearers being perceived *by means of* their qualities? And does definitional dependency of qualities on bearers play an essential role here?); (3) Can the capacity to perceive bearers be ascribed to the individual sense modalities as such (as argued by Charles 2020) or only to the perceptual capacity as a whole (as argued by Corcilius 2022)?

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the perception of the bearers of modal-specific qualities is an essential part of what perception achieves at the most rudimentary level of being a complete passive activity. If that is correct, then this finding reveals a facet that puts additional pressure on Aristotle to explain how perception so defined is possible at all.

4.3 Uncompromised Realism

Further light can be shed on what is at stake here by briefly reflecting on the kind of perceptual realism that Aristotle embraces. I limit myself to pre-empting one possible misunderstanding of the account developed in *An.* 3.2.[24] This account implies, as we have seen, that the activity of the external perceptual object and the activity of the perceiver always exist and cease to exist *together*. Yet – as Aristotle insists against the Protagorean approach of the 'ancient physiologists' – this is not to say that the existence (or the nature) of these perceptual objects depends on the existence of perceivers; rather, what depends on perceivers is only whether the perceptual objects are actively perceived or not.[25] In other words, what exists in the perceiver is merely the external object's activity of being perceived under the given qualitative aspect that (numerically) coincides with the perceiver's passive activity of perceiving it.[26]

Aristotle's point against Protagorean relativism here, however, has often been understood differently. It has been read as if Aristotle was himself effectively accepting a kind of 'moderate Protagoreanism' that conflicts with, or at least essentially tempers, the *realism* about perceptual qualities that he seems emphatically to endorse elsewhere. The idea is, roughly, that according to Aristotle what the external objects acting on perceivers possess on their own – in the absence of perceivers – are not full-blown colours, sounds, or flavours, as perceivers experience them, but only the *powers* to cause perception of these qualities when a perceiver comes into the appropriate relation with them.[27] That is, they merely have these qualities in *capacity* and come to have them in fulfilment only for as long as they are actively

[24] More on Aristotle's perceptual realism in Section 6.2.

[25] *An.* 3.2, 426a20–7.

[26] The same model is spelled out at *Sens.* 6, 446b17–26, where Aristotle analyses the error behind a similar Protagorean claim that two perceivers cannot perceive the same thing. He distinguishes between the first mover, which is the numerically identical object of perception for all perceivers, and the exclusive object (τὸ ἴδιον), which is for each perceiver numerically distinct. He analyses the latter as 'a kind of change and affection'. For a discussion of this passage, see Corcilius 2022: 130–2.

[27] See Irwin 1989: 313, according to whom Aristotle assumes here that 'the relevant actuality of the object is its becoming red, and so he concludes that its becoming red consists in its being perceived as red' (cf. Taylor 1990: 140–1). See also Gottlieb 1993: 115: 'What is actually being perceived

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being perceived.[28] If this were Aristotle's point, we would expect him to discuss what constitutes the power of perceptual objects to cause perception. On account of which actual characteristics of the perceptual object is it capable of causing the perceiver to perceive these qualities? What is it that the perceiver is assimilated to when perceiving, for instance, a colour? What Aristotle actually says, however, shows how far he is from any interest in tempering his realism in *An.* 3.2. What causes the passive activity of perceiving (together with the productive activity of being perceived), he maintains, is nothing other than the colour or the flavour of an external object.[29] There is not even the slightest hint in this passage at the idea that what a rose is endowed with on its own could be anything short of the full-blown red colour as experienced by perceivers.[30]

What leads interpreters to read *An.* 3.2, 425b25–426a27 as Aristotle's adoption of a kind of (moderate) relativism, I take it, is the tacit assumption that Aristotle is using the notion of ἐνέργεια here as equivalent to ἐντελέχεια: as if perceptual objects were in fulfilment (or 'in actuality') coloured or flavoured only when they are actively seen or smelled; and as if, when not perceived, they were themselves coloured or flavoured only in capacity. But this reading runs roughshod over a key distinction that Aristotle has already

cannot exist if there is no perception', because it is only 'the causal bases of perception which exist independently of perception' (113). Cf. Marmodoro 2014, on whose account see more in n. 32; and Campeggiani 2020: 253: 'Properly structured sensory organs bring forth smells, sounds, and so forth, thus actualising material objects qua bearers of sensible qualities.' For further references and a critical discussion of moderately Protagorean approaches to *An.* 3.2, see Caston 2018: 48–58.

[28] Cf. also Ganson 1997, who thinks that Aristotle ascribes actual qualities like colours to external objects independently of whether they are perceived or not and makes them causally responsible for our perception of them, but that he denies the idea that these qualities exist on their own in such a way as we perceive them (i.e. what Ganson calls 'the transparency thesis').

[29] See *An.* 3.2, 426a14–15.

[30] Should we say the same about a lyre and the sound with which it is endowed? The case of sounds is clearly different in that their mediation presupposes a change undergone by the sounding object – a stroke. That raises the question whether the sources we hear are the bodies, the events (for a contemporary discussion of this, see Kalderon 2017: 87–94), or perhaps the bodies-undergoing-changes. Aristotle might well not have had a firm view on this, as perhaps attested by his hesitation between calling 'sound in activity' the activity of being heard in *An.* 3.2 and the mediating wave in the air in *An.* 2.8. If activity in the latter case is taken to be equivalent to fulfilment, then it is natural to take 2.8 as implying that what we hear in its own right are only sounds in the media and not their sources (cf. e.g. Charles 2021: 192). However, there are good reasons to resist this equivalence and to conclude that, according to Aristotle, we hear not only sounds, but also their sources, in their own right. These should quite possibly be conceived, unlike the bearers of colours, as being more like events or bodies-undergoing-changes. The crucial point here is that this would not bring Aristotle any closer to even a moderate relativism (cf. Section 7.1). The main point will still hold that, according to Aristotle, these events or bodies-undergoing-changes are in principle exactly such as we perceive them. (Thanks to an anonymous referee for pressing me on this question.)

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drawn in *An.* 2.5[31] and it, effectively, abandons a basic tenet of Aristotle's first general account of perception. What we learnt in *An.* 2.5 is that perceptual objects are perceptual in capacity (i.e. 'perceptible') *only as already being what they are in fulfilment*, for only as having colours or flavours in fulfilment, independently of whether they are perceived or not, are they capable of acting on perceivers, assimilating them to themselves, and so making themselves actively perceived.[32] The distinction between perceptual objects in capacity and in activity that Aristotle is spelling out at *An.* 3.2, 425b25–426a27 was introduced in *An.* 2.5 clearly as concerning objects that already are what they are in fulfilment, independently of whether they are perceived or not. If these objects did not possess colours or flavours in fulfilment they would precisely lack the power of making themselves perceived – just as nothing can heat anything else if it is itself not already hot.[33] The entire discussion of *An.* 3.2, 425b25–426a27 concerns the activity (ἐνέργεια) of perceptual objects (ἐντελέχεια is never mentioned); and what some interpreters thought was being qualified here, namely the claim that this activity already presupposes fulfilment on the side of perceptual objects, is, rather, duly presupposed throughout.

If this is correct, it further underscores the significance of the task of showing just how perception in this demanding sense can be realized *in concreto*.[34]

[31] See Sections 2.4 and 3.1.

[32] Marmodoro 2014: 91–102, 125–41 applies the distinctions of *An.* 2.5 to Aristotle's account in 3.2, but in a rather surprising way that leads her to qualify Aristotle's 'objective realism' as being 'subtle'. First, she recognizes a ('first') fulfilment of perceptual objects independent of their activity of being perceived, but she identifies it with their acting on the media (as if the 'powers' characteristic of perceptual objects were merely 'first capacities'; cf. Kosman 1975: 513–14). Second, she takes the activity of perception to have as its content not the qualities that belong in fulfilment to external perceptual objects independently of whether they are perceived or not, but a certain fulfilment of the 'powers' possessed by perceptual objects that does not exist beyond the activity itself, claiming that 'for Aristotle perceptible qualities are in the world such as we perceive them, *but only while we perceive them*, because they require a perceiver in order to reach their fullest actualization'; 'the world is truly colorful, but only if – and as long as – we are looking at it' (Marmodoro 2014: 102, 153, my emphasis). Cf. e.g. Freeland 2021: 161–2.

[33] See also *Metaph.* Γ.5, 1010b30–1011a2; cf. *Phys.* 8.5, 257b6–10. Some scholars want to resist the Protagorean interpretation by insisting that a rose, before being perceived, is already red in actuality (ἐντελεχείᾳ/ἐνεργείᾳ), but is not yet in actuality αἰσθητόν. That is surely correct. But it doesn't seem to be the kind of contrast Aristotle is drawing on in *An.* 3.2: 'sounding' (ψόφησις) isn't a good name for the actuality of a sound *qua perceptible* (that would rather be 'being perceived'). Fortunately, the contrast between the actuality (ἐντελέχεια) of a perceptual object (e.g. having a certain sound or being red) and its activity (ἐνέργεια) in the perceiver (e.g. sounding or its nameless analogue in the case of colour, cf. 426a12–15) can do the same job. In the case of distal senses, to be sure, this activity needs to pass via a medium and so can apparently also take place independently of perception (e.g. an object can be sounding in the air even though nobody hears it, cf. *An.* 2.8, 419b5–13).

[34] For an insightful overview of some of the difficulties involved here, see Charles 2020: 33–8.

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4.4 Perception and Mediation

In *An.* 2.5–6, Aristotle remained silent regarding two key factors essentially involved in perception and, thus far, I have done so as well. The first of these factors is introduced immediately after the sentence from the beginning of *An.* 2.7 quoted above, and it would be no exaggeration to describe it as the main topic of *An.* 2.7–11 as a whole: *mediation*. One reason why the media are important is obvious given Aristotle's rejection of any *actio per distans*: clearly, perceivers smell and hear and see objects that are distant (and sometimes *very* distant); so it is obvious that there must be something in between the perceptual object and the perceiver *mediating* the agency of the former on the latter. However, there appears to be a deeper reason why Aristotle takes media to be indispensable, which leads him to extend the notion of mediation to the contact senses. Hence Aristotle's prima facie surprising claim that the perceptive organ of tasting is not the tongue, and the perceptive organ of touching is not the skin or the flesh; rather, in both cases, it is something deeper within – namely, the heart.[35] Unfortunately, none of the passages where Aristotle argues that media are indispensable quite spells out what this deeper reason is. It seems that media play an essential part in realizing perception as a presence of a quality of its external bearer in a perceiver affected by it or as a reception of forms without the matter, but we are left to speculate about what exactly their role consists in here.

The task is difficult partly because, towards the end of *An.* 2.7–11, Aristotle introduces the second key factor in the realization of perception whose relation to mediation is far from obvious: *the discriminative mean*. The thought is, roughly, that discrimination (κρίνειν) is an essential ingredient or essential characteristic of perception that is performed by – or on account of – the mean (μεσότης) between the two extremes defining each sense modality. It is no clearer than in the case of the media what exactly this mean is or what role it plays.

Be that as it may, there is a remarkable symmetry within the structure of *An.* 2.7–11. *An.* 2.7, on the one hand, introduces the notion of a medium,

[35] This claim is announced at *An.* 2.7, 418a30–1 and is properly argued for at *An.* 2.11, 422b34–423b26. It is rather striking that there is no trace of the claim in *An.* 2.10; on the contrary, Aristotle speaks throughout this chapter as if the tongue were the perceptive organ of taste.

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whose existence (albeit not its role) is obvious in the case of sight (and the remaining two distal senses of hearing and smell), and it announces the need to extend this notion to the contact senses. The final section of *An.* 2.11, on the other hand, introduces the notion of a discriminative mean, primarily for touch (in whose case, apparently, it is most obvious), and extends this notion immediately to the remaining four sense modalities. When Aristotle, in *An.* 2.12, again picks up the task of saying, in the most general terms, what perception is, the main progress that he takes himself to have made since *An.* 2.5 seems to consist exactly in introducing these two key factors.

However, the precise roles of each are something that we shall need to explore, beginning with the notion of mediation. It is telling that *An.* 2.12 closes with a puzzle about the way in which the media are affected, suggesting that Aristotle himself found the question of what exactly the media *do* in perception to be a difficult one. We shall come to that difficulty presently; but let us start from a more general worry that arises immediately on turning from *An.* 2.5 to *An.* 2.7.

The concept of preservative πάσχειν (as reconstructed in Chapters 1–3) naturally raises the following doubt: how could *X* be already assimilated to *Y* while still being affected by *Y*? The notion of the transparent medium introduced in *An.* 2.7 might seem to contain an answer. Colours are characterized as being that which can move what is transparent in fulfilment (418a31–b1) and the transparent is characterized as that which is not visible in its own right but, rather, owing to the colour of something else (418b4–6). It is itself colourless and, as such, is capable of receiving the colours of other things (418b26–7). Indeed, it can somehow receive the colour of the coloured object that acts on it (419a13–15, 27–8) without acquiring any colour of its own; and so it can be further affected by the same, or indeed any other, colour. So, in his account of the transparent media, Aristotle might seem to be giving us a concrete example of preservative πάσχειν.

However, what at first appears to be a helpful illustration turns out to be more of a problem. Aristotle speaks here about non-living bodies that are external to perceivers,[36] and it would mark a flagrant failure if his general account of perceiving were to apply to mere mediation. The danger, in other words, is that the media are asked to do too much, so that it is not

[36] A similar account will hold for the media of hearing and smelling (418b26–7, 419a25–30).

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obvious why they themselves fall short of perceiving.[37] In fact, the same kind of worry may be provoked by Aristotle's treatment in *An.* 2.8 of 'sounds in activity' as present in the medium: we have seen that, in *An.* 3.2, 'sounds in activity' are said to coincide with the activity of hearing (as, indeed, one would expect from *An.* 2.5, 417a9–14); so it could seem from *An.* 2.8 that the auditory medium itself must hear.[38]

This kind of worry may seem too absurd to be taken seriously, but it is a worry very similar to the one that Theophrastus, as we have seen, raises for Empedocles and that is echoed in *An.* 1.5.[39] Nobody wants to say, of course, that a glass of water sees the coloured objects around it,[40] but Aristotle and Theophrastus seem to have found a useful test here for putative accounts of perception: if an account implies something like this, it is clearly not sound. Now, there is a reason to be concerned about whether Aristotle's own account perhaps has such an unintended implication; and we will see that the worry he raises at the end of *An.* 2.12 can be read as articulating exactly this kind of concern.[41]

However, let me first emphasize one thing that will become important later (in Section 4.7). It may seem that there is a straightforward solution to the canvassed worry: the glass of water does not perceive because, clearly, it does not have a perceptive soul. It is important to realize, though, that no such solution is available to Aristotle, as it is, in effect, circular. First of all, if such a solution were available, it would also be available to someone like Empedocles and there would be no point in raising this kind of objection against other thinkers' accounts. The reason why it is not available is intimately connected to the very nature of Aristotle's endeavour in the *De Anima*: the basic parts or capacities of the soul are meant to be defined as the first principles of the respective phenomena of life; and

[37] This danger is registered for example by Shields 2016: xxxviii. Aristotle's insistence that something can be perceived only through a medium is, of course, not sufficient to settle the worry: a glass of water is affected by coloured objects through the surrounding air.

[38] Cf. n. 30 and 33.

[39] See Section 2.3. Cf. also a similar objection against Democritus at *Sens.* 2, 438a10–12 and against Diogenes in Theophrastus, *Sens.* 48–9.

[40] With the apparent exception of Parmenides ridiculing the common intuitions about knowing (Theophrastus, *Sens.* 4).

[41] The same kind of concern, as was raised above for the account developed in *An.* 2.5, could also be raised for the account of perception as a reception of forms without the matter in *An.* 2.12 (discussed in Section 7.4). It is not, at least prima facie, obvious exactly why this description does not apply to what happens in the media. On some existing interpretations, the account clearly *does* apply to it (see e.g. Silverman 1989: 286 or the literalist interpretation as developed by Everson 1997: 99–101), and this may also seem to be implied by *An.* 3.12, 435a2–4, where the wax metaphor from *An.* 2.12 describes the way in which perceptual objects affect both media and perceivers.

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Aristotle is very explicit in *An.* 2.4 about the fact that one cannot define such a capacity without first defining the respective activity.[42] Hence, if the putative definition of perceiving turns out to imply that the media themselves perceive, there will remain no room for denying that they themselves possess perceptive souls. That said, it is obvious that the presence of the soul is, indeed, what makes the difference. The point is that we must first understand the difference itself, as a precondition of understanding how the soul (being the kind of entity it is) can make this difference.

It is usually tacitly assumed that Aristotle's account of perception successfully passes this test. However, on closer scrutiny, it turns out that there are (and have been since antiquity) very different intuitions about what kind of solution his position really offers. In a first approximation, we can see the main differences articulated in three different understandings of how Aristotle is addressing the final puzzle of *An.* 2.12.

Aristotle's initial question is 'whether something incapable of smelling can be affected by an odour' and similarly for the other (distal) senses (424b3–5). If, for instance, odour is understood as being what is smellable, then it would seem that being affected by odour is nothing other than smelling (424b5–9). However, this equation is obviously fallacious at least in the case of tangible qualities, such as heat: these clearly act on non-living things as well as on perceivers (434b12–13). Accordingly, we should not be deterred from allowing this to happen in the case of distal senses, too. And it is not difficult to deduce why this is the case: Aristotle's account of perception has ascribed a very important role to mediation, and even if it did not, it is clear that seeing, hearing, and smelling involve some kind of being affected by colours, sounds, and odours that is *not* yet a case of perceiving – namely, the kind of being affected undergone by the media. Aristotle urgently needs to distinguish this kind of being affected from the kind that defines perception, especially since the former conspicuously resembles the latter.

In the final lines of *An.* 2.12, Aristotle provides at least a few hints towards his intended resolution of this worry:

> Or is it the case that not all bodies can be affected by odour and sound, and those [among the non-living bodies][43] which are affected by them are indeterminate and do not remain, as for instance the air (for it only has an odour as a result of a certain affection)? What is the smelling then besides

[42] See *An.* 2.4, 415a14–23 (responding to 1.1, 402b11–16). [43] Cf. 424b12–13.

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being affected in a way? Or is it so that while smelling is [[also]] perceiving, the air, instead, when it has been affected, easily becomes perceptible?

ἢ οὐ πᾶν σῶμα παθητικὸν ὑπ᾽ ὀσμῆς καὶ ψόφου, καὶ τὰ πάσχοντα ἀόριστα, καὶ οὐ μένει, οἷον ἀήρ (ὄζει γὰρ ὥσπερ παθών τι); τί οὖν ἐστι τὸ ὀσμᾶσθαι παρὰ τὸ πάσχειν τι; ἢ τὸ μὲν ὀσμᾶσθαι [[καὶ]][44] αἰσθάνεσθαι, ὁ δ᾽ ἀὴρ παθὼν ταχέως αἰσθητὸς γίνεται;

(*An.* 2.12, 424b14–18)

As it stands, Aristotle's answer is ambiguous. When he says that smelling is something '*besides* being affected in a way', he could have any of the following three positions in mind:

[COMPOSITION] smelling is somehow composed of 'being affected in a way' *plus* something else as two distinct elements;
[ISOLATION] smelling is something else altogether than 'being affected in a way';
[SPECIFICATION] 'being affected in a way' is on its own an insufficient characterization, and if we are to define perceiving, such as smelling, then we need to specify *what kind of* 'being affected' it is.

Composition would suggest itself as perhaps the most intuitive reading were we to accept the καί at 424b17 (although, textually, this is a dubitable choice; see n. 44). If this reading is correct, it would imply that, according to Aristotle, something can perceive only when it is affected, but perceiving is not just a kind of being affected. Rather, for perception to take place, something else *in addition to* πάσχειν must be combined with it.[45]

[44] This καί has been identified in the second recension of Parisinus 1853 (E) by Bussemaker and accepted into the text by Torstrick, followed e.g. by Ross 1956. The original recension of Parisinus 1853 (E) contains an additional αι in the place of this καί (. . .ὀσμᾶσθαιαιαἰσθά|νεσθαι. . .), which led to the idea that the καί in the second recension was in fact a correction of this redundant αι (so Kosman 1975: 509–511). Despite this argument and the silent drop of the καί in Ross 1961, the καί continues to be broadly accepted (see. e.g. Shields 2016, Reeve 2017, Miller 2018). Now Förster reports in his apparatus that Bussemaker was in fact mistaken in his report of the second recension. And, indeed, what we find in the manuscript seems to be just a comma – albeit an exceptionally large one. Presumably, the comma is used simply to separate the subject and the predicate. (I owe this analysis to Justin Winzenrieth.) Hence all we have is the redundant αι in the original recension, which is immensely more likely to have originated as a dittography than by a drop of κ. The interpretation of 424b14–18 defended below fits naturally the text without καί, but it could also accommodate a text with καί, so that even if the καί were to remain an open issue for some readers, it doesn't really matter for the present purposes.

[45] This understanding goes back at least to Philoponus, *In An.* 444.11–445.12 (although he, of course, doesn't read καί), and we shall see in Section 5.3 that it may well have been Alexander's understanding, too, if he did not endorse *Isolation*; cf. e.g. Torstrik 1862: 161–2. There have been attempts to find decisive support for this understanding in the παρά at 424b17, for which see Sorabji 1992: 219–20 (cf. Sorabji 1974: 68). But Johansen 1997: 279 n. 30 seems to be right that this preposition itself cannot decide the issue; cf. also Burnyeat 1992: 24. Scaltsas 1996: 35 spells this reading out in terms of smelling being composed of encoding motions in the medium, on the

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Isolation may, on the other hand, seem attractive to the spiritualist.[46] However, this reading admits of being developed in different ways that are less friendly to spiritualism, because saying that smelling is something quite different from being affected – namely perceiving – does not imply that it involves no ordinary affections.[47]

Be that as it may, these are not the only possible readings of the last two quoted sentences. With or without καί, these sentences can also be read in line with *Specification*.[48] What does 'smelling' mean besides 'being affected in a way'? Well, 'smelling' (also) means 'perceiving', and this is not the way in which media are affected. On this view, a distinction must be drawn between these two kinds of being affected that can seem so similar. Support for this third reading may be found in the first quoted sentence: the non-living things that can be affected by odours, sounds (and presumably colours) – that is, effectively, the media – are affected in a way that bears the mark of their *indeterminacy* and *instability*. Presumably, it is exactly in these two respects that the preservative πάσχειν – capturing the essence of perceiving – differs.

I believe that *Specification* is, indeed, the preferable reading. However, I do not think that the question can be decided on the basis of the present passage alone. Rather, in preferring one of the readings over the others, general considerations about the kind of explanatory account Aristotle intends to develop for perception begin to come into play, and these will have to be evaluated in a wider context. I shall take up this task in Section 4.7.

4.5 The Operation of the Media

Regardless of this larger question, the quoted passage provides valuable clues concerning Aristotle's understanding of the operation of the media.

one hand, and perception, on the other. Cf. Caston 2002: 755–6 and Caston 2020: 32, who insists that the kind of being affected and receiving forms without the matter described in the first half of *An.* 2.12 'only constitutes a necessary condition of perception, not a sufficient one'.

[46] See Burnyeat 1992: 25 (following Kosman 1975: 509–11 in dropping the καὶ), who takes the text to support his view that perception does not involve any ordinary change.

[47] So e.g. Scaltsas 1996: 35, according to whom saying that smelling is something different from physical change does not exclude that it involves 'encoding motions' in the medium.

[48] Themistius *In An.* 79.21–6 seems to read the passage in this way. Aryeh Kosman argues explicitly against *Isolation* and *Composition*, and he suggests a reading along the lines of *Specification* (without καί), which, however, he spells out in staunchly 'materialist' terms as *identifying* awareness with bodily affections (Kosman 1975: 518–19). We shall see that this is certainly not the only version of *Specification* available. Charles 2021: 118–93 develops a more promising way of spelling out Aristotle's account of perception along these lines, insisting that to perceive some object just *is* for the perceiver to be affected by it in the appropriate – inextricably psycho-physical – way. But inextricability is not a necessary implication of *Specification*, either.

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Besides the mention of indeterminacy and instability, Aristotle also says that, when the air has been affected, then instead of perceiving, it 'easily becomes perceptible'. This latter description, apparently, concerns the case of odours (i.e. the case when the air has come to 'have an odour'). It seems that what Aristotle is describing here is, effectively, *a failure* of mediation: once the air acquires an odour *of its own*, it ceases to be capable of *mediating* this – or any other – smell; rather it itself becomes an object of smelling.[49] Aristotle does not say whether some analogue of this failure can also occur in the case of sounds or colours.

Be that as it may, the characteristics of indeterminacy and instability were clearly introduced as being more general: they were explicitly said to concern sounds too, and there is no obvious reason for not taking the point as concerning colours, as well. Presumably, these two characteristics determine what happens in the case of a *successful* mediation. Themistius understood them as implying a contrast between the essentially *flowing* and *evanescent* nature of the media's affections, on the one hand, and the *persisting* assimilation of the perceiver (even if just for a few seconds) on the other hand.[50] As far as I can tell, this is a reasonable interpretation, although it raises questions about the persisting quality acquired in perceptual assimilation – questions that will need to be addressed later.[51] Setting them aside for now, however, the passage seems to capture a – or maybe *the* – characteristic feature of how the media are affected by perceptual objects: when affected, the medium *immediately* sends the impulse further. Before the relevant quality of the object could come to

[49] For a contrast between acquiring the quality in question as its own (here flavour) and mediation/perception, see also *An.* 2.10, 422a10–15.

[50] See Themistius, *In An.* 79.21–6, claiming that perceiving is characterized by 'the form without the matter coming to be present in that which perceives and remaining in it for some time (μένειν χρόνον τινά)' (cf. *In An.* 57.8). Themistius, however, spoils the contrast by adding 'even if that which has acted upon it has gone away'. This addition makes the kind of enduring in question apply indiscriminately to continued perceiving and retaining a *phantasma*.

[51] It should be noticed that Aristotle is remarkably consistent in avoiding any talk of the media (when functioning properly) having been affected by, and assimilated to, perceptual objects, or acquiring a certain quality: his descriptions are limited to a talk of capacities (e.g. being receptive of colours) and present tenses (e.g. being moved by a colour). This contrasts with the repeated emphasis on the perceiver having been affected by and assimilated to perceptual objects and being like them. The contrast is surprisingly denied by Everson 1997: 97–8, 129, 131, 136, despite the fact that it seems perfectly compatible with literalism. Apparently, what leads Everson to do so is a reflection on Aristotle's general account of acting according to which the agent must already possess the quality in question in fulfilment (see Everson 1997: 136). By taking only this constraint into account, however, he leaves aside the other, no less pivotal concern coming from the same general account – namely, that to continue being affected by the perceptual object, and so to continue mediating it, the medium must remain unlike it. Aristotle's account of the media must somehow negotiate between *both* constraints.

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be present in the medium as a quality of the medium itself, the medium imposes this quality on something else – most often another portion of the medium, which does exactly the same, and so on.[52] In other words, when functioning well, the media are – more or less perfect – *qualitative conductors*. I shall say more about the degree of their perfection in Section 4.6.

The qualitative conductivity of the media helps us to see how they are capable of being further and further affected by the same or any other quality of a given range, or other ranges, in which they are conductive.[53] However, it also helps us to see how this kind of being affected differs from the preservative πάσχειν capturing the nature of perception and, thus, why this conductivity of the media cannot amount to perceptivity. It is, strictly speaking, never true about the media, if they are functioning well, that they *have been* affected by, and assimilated to, the perceptual objects acting on them – that is, that they *are like* these objects. The quality of the perceptual object acting on a medium is never *present in* the latter; rather it is always being *transmitted through* it – as long as the medium is functioning well.[54] Furthermore, we know from the case of odours what happens when the media cease to function well: the quality of the perceptual object comes to be present in the medium, but not as a quality *of* the perceptual object acting on it; rather, the quality comes to be present in it as a quality *of the medium itself*, and that is not a case of perceiving on the medium's part, but simply a failure to mediate.

This being said, one can press the question of what exactly is happening within the medium when it is functioning as a qualitative conductor. A potential answer is that the qualities are *encoded* in it, either in the sense that their defining ratios are embodied in a different pair of contraries,[55] or in the sense that they are 'encoded in the movement of

[52] Cf. Aristotle's discussion of echoes at *An.* 2.8, 419b25–33 and his suggestion that this phenomenon is always involved in the mediation of sounds – and not only sounds, but also colours (and possibly odours, too). The idea seems to be that, when the impulse arrives at a point of contact between the medium and something else that is neither a medium nor the respective perceptive organ, what happens is that the last bit of the medium only changes (i.e. reverses) the direction of mediation (or, alternatively, the mediated quality simply gets lost, if the boundary is not capable of 'echoing' it).

[53] The same portion of the medium must be capable of simultaneously forwarding one affection in direction d_1 and the very opposite affection in direction d_2.

[54] Contrast Bradshaw 1997: 154, who argues that instead of 'sensible forms' being present in the medium, 'supra-sensible' or 'higher-level' forms are present in it. This idea, however, shares most of the difficulties with the spiritualist account of mediation (further discussed in Section 4.6).

[55] This seems to be the idea of Silverman 1989: 280–2. See also Shields 1997: 319–20 and Johnstone 2012: 177–8. For Aristotle's account of perceptual qualities in terms of ratios, see Sorabji 1972 (who does not presuppose any encoding), Barker 1981, Ward 1988, or Bradshaw 1997.

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the medium' rather as, according to Aristotle, the human form is encoded in the movements of the sperm.[56] The latter, however, is in danger of explaining *obsurum per obscurius*. It seems hardly acceptable to think that a colour or an odour is encoded by a literal locomotion of the air; and if 'movement' is given a more relaxed interpretation, it is far from clear how the second option differs from the first one. However, assuming that the quality is encoded in a different pair of qualitative contraries seems, from a theoretical point of view, to be entirely idle: it contributes in no way to *explaining the qualitative conductivity* characteristic of the media.[57] It thus seems wiser to simply take this conductivity to be a primitive feature of the media that cannot be explained (away) by encoding or anything else.[58]

This is not to deny that some encoding may be involved in certain kinds of mediation. Aristotle may well have empirical reasons for thinking that it is. Among the distal senses, hearing seems to be the most obvious candidate for such an encoding. The varying speeds of the wave motions, which according to Aristotle mediate sounds, are naturally understood as effectively encoding them. Here, the qualitative conductivity seems to be, effectively, analysed in terms of 'vibrations' (i.e. apparently, forwards and backwards spatial movements).[59] However, if the proposed reading of the final lines of *An.* 2.12 is on the right track, then this cannot be a universal principle: there seems to be no encoding in the case of smell, because otherwise the quality acquired by the air when mediation goes wrong would have to be something other than odour, contrary to the fact and to what Aristotle says. By analogy, there seems to be no reason to assume any encoding for colours, and the same holds for the hot and cold. The only other sense for which the

[56] As suggested by Scaltsas 1996: 33–6 (cf. Glidden 1984), followed by Marmodoro 2014: 149–53 and Corcilius 2022: 141–3. Cf. e.g. *GA* 2.1, 734b34–735a4, which starts from the model of an art whose λόγος is present in the movements of the artisan's tools. For encoding in general, cf. Baumrin 1976: 258, Ackrill 1981: 66–7, or Bynum 1987: 176–7.

[57] Encoding cannot explain the fact that the medium can continue being affected by the same perceptual object – for, if it really came to embody the ratio of that object in a different pair of contraries as a quality of its own, then it would become unable to be further affected by it in the same way.

[58] Victor Caston, for one, does not presuppose any encoding in the media; rather, he seems to be committed to a literalist understanding of mediation. He interprets the account of perceiving as receiving forms without the matter (in *An.* 2.12) exactly in terms of receiving the same ratio in a different pair of contraries, while insisting that this applies specifically to perceptive organs in contrast to the media, see Caston 2005, 315.

[59] See *An.* 2.8, 420a25–6. For an insightful discussion of the mediation of sounds, see Johnstone 2013: 632–40.

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assumption that an encoding of some sort takes place seems attractive, if not necessary, is taste – at least as long as we take for granted Aristotle's teaching (from *An.* 2.7 and 11) about the heart being the proper organ of touch and taste: what happens on the tongue appears to be a *transformation* of the affection that is further mediated by the flesh in an encoded form. But even this is no more than an educated guess, and we cannot be sure that Aristotle consistently adopted that idea.[60] The point is that he could only have empirical reasons for assuming an encoding for some specific kinds of mediation but not others, while having theoretical reasons to prevent this move as far as possible,[61] particularly because his general account of mediation seems at any rate committed to something like the idea of qualitative conductors.

So much for the operation of the media. Let me now restate the main question that our discussion of the closing lines of *An.* 2.12 led up to in the preceding section: if Aristotle's suggestion is, indeed, that the media, when functioning well, are qualitative conductors, how exactly should we understand the way in which the quality of the perceptual object *remains* in the perceiver throughout the duration of her perceiving that object? This question seems to be at the heart of the recent controversy surrounding Aristotle's account of perception. But, in fact, the debate has mostly concentrated on just one aspect of this more general question, namely on how *the body* of the perceiver is involved. Is the organ literally assimilated to the perceptual object? Or does it embody the ratio defining the relevant quality in a different pair of contraries? Or does it, rather, undergo no material (or physiological) alteration whatsoever? In Section 4.6, I sketch out what light can be shed on this question by the proposed interpretation of Aristotle's first general account. In Section 4.7, I then formulate an even more pressing, and more fundamental, question about the way in which qualities of perceptual objects are present in perceivers. This other question focuses, in turn, on the role of *the soul* in perception: on how exactly the soul makes the

[60] A part of the problem here is that, as noted above (n. 35), *An.* 2.10 is strikingly innocent of the idea announced in *An.* 2.7, and defended in 2.11, according to which the tongue is not the organ of taste. The same seems to hold of *Sens.* 4 (see especially 441b19–23). See also *PA* 2.8, 653b24–6, where Aristotle clearly takes flesh to be more than a medium. For more on what happens in the case of the tongue, see Section 6.4.

[61] If some encoding takes place, it raises an additional uneasy question for Aristotle's account as to why, upon the arrival of the affection at its destination in the perceiver's body, it should produce a perception of the original quality *F* rather than of the encoding quality *G*. Cf. Corcilius 2022: 146 for this kind of concern.

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difference, according to Aristotle. This will become the central question of the following chapters.[62]

4.6 Beyond Spiritualism and Materialism

Let me begin with a brief reflection on the difficulties raised by the closing lines of *An.* 2.12 for the spiritualist account of mediation.[63] According to this account, 'the medium takes on the quality of the sense-object only insofar as the quality appears to a perceiver'; it is only changed *phenomenally*.[64] This idea is entirely different from the concept of qualitative conductors; indeed, it seems that the spiritualist needs to presuppose that media are some very special kind of qualitative conductors in addition to this idea.[65] Moreover, if what is transmitted through the medium is merely a phenomenal change, then it is hard to see what a failure to mediate this change could mean other than coming *to perceive* the perceptual object acting on the medium. So, on the spiritualist account, no such failure is possible. But what is then Aristotle talking about at *An.* 2.12, 424b16 and 18? The spiritualist answer is striking: it is something entirely different from, and indifferent to, mediation. A piece of fried bacon acts on the surrounding air simultaneously in two disconnected ways: it changes the air phenomenally insofar as I perceive the smell, and it changes the air literally insofar as the air, for a while, acquires an odour of its own.[66] Besides violating *lex parsimoniae*, this interpretation makes Aristotle, strikingly, deny that there is any intrinsic relation between the phenomenal strength of the perceived odour and the likeliness that the air will come to

[62] These chapters will also fill in the picture of the role of the body sketched out in Section 4.6 (see especially Sections 6.4 and 7.4); but this will no longer be the central concern.

[63] See Burnyeat 1992, Burnyeat 1995, and Burnyeat 2001; cf. Broadie 1993. For a full spiritualist account of mediation, see Johansen 1997: 116–47.

[64] Johansen 1997: 146.

[65] Once it is insisted that the change undergone by the media is not merely a relational change (see Johansen 1997: 136–45), the question reoccurs as to just how the medium can continue being changed by the perceptual object: if at time *t* it already *is F* (even if just 'phenomenally'), it seems that at *t* it can no longer be affected by the perceptual object *F* in the relevant way, and so the mediation fails.

[66] See Johansen 1997: 273–4 and Burnyeat 2001, 134–9. This dualism of the effects that perceptual objects have on the media is sometimes also embraced by interpreters who do not endorse spiritualism, see e.g. Marmodoro 2014: 152, who insists that 'the same body may be both affected qua body by the perceptual form and "disturbed" qua medium by that form'. But it is difficult to understand how this could happen simultaneously (see, for a similar point, Scaltsas 1996: 33).

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possess that odour itself. This is a disquieting outcome.[67] However, it is neither the only nor the main reason to reject spiritualism.[68]

If, against spiritualism, we accept the idea that, for Aristotle, there is an intrinsic connection between the mediating role of the air and the case of it coming to possess an odour of its own (as a failure to mediate), we can ask whether this is not intended to serve as a model example of a much more general, but usually not *observable*, phenomenon. Perhaps Aristotle envisioned smaller or larger vibration-like *oscillations* occurring throughout the train of the perceptual affections. I see no principled reason why he should exclude the possibility that what ostensibly sometimes happens in the case of strong odours for a time observable by the senses happens regularly (or at any rate fairly often) in the case of all sorts of perceptual qualities in the external media and/or in the body of the perceivers, but only for much shorter periods, like a fraction of a second – perhaps as the maximum/minimum of a quasi-sinusoidal (qualitative) process – so that the event is not observable by the senses and has no effect on the quality of one's perception. The amplitude and the period of these oscillations would simply manifest the relative *imperfection* of the media as qualitative conductors, meaning that, at a micro-level, not noticeable by the senses, the media regularly *do* acquire the mediated qualities as qualities of their own – but only for a tiny fraction of a second and non-statically (they never cease acquiring/losing these qualities), which makes the oscillations harmless with respect to the media's operation. Clearly, there would be great differences between various external media (and bodily parts like the flesh) concerning the nature of these oscillations. It could well turn out

[67] See Sisko 1996: 142–8 for a similar analysis of the agency of the intense perceptible objects. Cf. Broackes 1999: 91–6, 104–10, who defends the idea that media are affected in the same way irrespective of whether any perceiver is present or not. I worry that the inextricabilist interpretation in Charles 2021 turns out to be all too similar to spiritualism. If I understand correctly, the idea is that the affection of the medium cannot be defined without a reference to perception as its ultimate goal. This claim is, on its own, striking, as it commits Aristotle to analysing the changes undergone by the air when something is sounding as definitionally inseparable from perceiving, even when the sound is not heard by anybody. But the difficulty becomes, again, most pressing in the case of odours (and, *mutatis mutandis*, the contact senses). The event of something coming to possess the odour of something else is surely a purely physical event that can be described without any reference to perceivers. Yet, if this is so, it seems to commit the inextricabilist interpreter (no less than the spiritualist) to there being two simultaneous processes involved in the air being affected by an odour that an animal perceives.

[68] For a set of reasons, see Caston 2005: 265–92. For a detailed analysis of smelling (and mediation of smells) arguing convincingly that it essentially involves material changes, see Johnstone 2012. I shall add one more substantial reason below.

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that the only *perfect* conductor is a perfectly transparent medium.[69] But none of this would change anything about the overall picture of the media's operation as qualitative conductors. It would, rather, make their operation less mysterious and would underline what is in any case suggested by Aristotle's mention of the air becoming odorous, as well as by his description of the processes of smelling and tasting – namely, that this working is a thoroughly material and perceiver-independent process, distinguished from other processes primarily by the exceptional throughput (i.e. the remarkable conductivity of the substratum). This is what might make it *seem* that no material process is taking place, although this impression turns out to be mistaken even in the case in which the conductivity appears to be perfect.

All of this has a direct bearing on the notorious question of what happens in the perceiver's body when the affection, transmitted by the medium, arrives at her organs. Do they take on the quality in the literal sense of becoming, for instance, red or fragrant? Or do they come to embody the ratio defining that quality in a different pair of contraries? Or is all that happens simply a case of perceiving that cannot be analysed any further? I want to argue that, if the interpretation of Aristotle's first general account of perception offered in Chapters 1–3 is on the right track, then none of these answers can be quite right. While spiritualists unjustly deny the material nature of *the processes* that lead to perception, the critics of spiritualism tend to reify *the likeness* resulting from these processes in a successful perception.

Victor Caston's paper 'The Spirit and the Letter' has rightly been considered to contain the most authoritative summary of the so-called spiritualist-literalist debate, together with providing an attractive alternative. I wish to argue that although this paper does an excellent job in showing that 'spiritualism' and 'literalism' are far from monolithic positions, and that, moreover, they are far from jointly exhaustive of the interpretative options, it tacitly excludes one promising set of options. Caston shows convincingly that Burnyeat's disjunction between

[69] Indeed, it is even *more* than a perfect conductor, because, on Aristotle's account, it can mediate the action of colours over any given distance *in no time at all*. Still, even in the case of colours, Aristotle seems at least open to the idea of a failed mediation, especially when the light is weak and the medium is dense; compare the phenomena discussed in *Meteor.* 1.5. At the other end of the spectrum, we find heat and cold, whose mediation often fails to such an extent that it does not allow for a genuine perception: when, for instance, my hand has been touching a snowball for some time, it has itself become colder than it was before, and I am now likely to be feeling the coldness of my own hand, or simply feeling cold, rather than properly perceiving the coldness of the snowball.

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spiritualism and literalism is all too narrow. However, in doing so, he confronts us with another disjunction. Either we accept the so-called Broad Church Reading ('If a subject *S* comes to perceive a perceptual quality *F* at time *t*, then *S* undergoes some physiological change in the relevant organ at *t such that it becomes like F*'),[70] or we are condemned not just to High Church Spiritualism, which denies that 'natural changes are a necessary condition for perception',[71] but directly to Burnyeat's New Age Spiritualism, which denies that material or physiological changes can be involved in perception *at all* ('S does not undergo any physiological change in the relevant organ at t, or indeed any real alteration, but only "quasi-alteration"').[72] That is, on Caston's view, either we accept that at the time of perceiving *F* the organ is materially like *F*, or we are condemned to denying that any material or physiological process is involved whatsoever.[73]

Clearly this disjunction would constitute a genuine *tertium non datur* only if one's allowing for a material (physiological) change or process involved in perception meant, *eo ipso*, accepting the idea that at the time of perceiving *F*, the relevant organ *is* like *F* in a material (physiological) sense. To be sure, Caston's paper is persuasive in showing that being materially *F* does not necessarily mean being literally *F*: it can also mean embodying the same ratio (say, the ratio defining red colour), in a different pair of contraries (say, the pair of being viscous and being runny), that is, being literally *G*, and only in that sense being like *F* – receiving *F*-ness in a *transduced* form.[74] But do we really need to commit Aristotle to a material likeness, in order to avoid the pitfalls of spiritualism? If the proposed analysis of mediation in terms of qualitative conductors is on the right track, it suggests that this is not necessary: the transparent air through which I see a red rose *is being continuously affected and changed* (κινεῖται) by its red colour without ever coming to *be* red in the sense of acquiring the red colour as a persisting quality of its own.[75]

[70] Caston 2005: 264 (my emphasis). [71] Caston 2005: 259.

[72] Caston 2005: 263. The medium, as we have seen, does not undergo any material change, on the spiritualist account, either.

[73] Cf. Caston 2000: 168–9 where spiritualism is presented as the only alternative to the assumption, shared by the literalist and 'representationalist' (i.e. analogical) interpretations, that the perceptive organ 'literally exemplifies' the perceived characteristic.

[74] See Caston 2005, 303–7 and now also Caston 2020, 29–34 (cf. Caston 1998: 254–7). For the example, see Caston 2005: 314. Cf. e.g. Freeland 2021. Caston's account has affinities to earlier 'structuralist' alternatives to literalism and spiritualism, as found in Silverman 1989, Ward 1988, Price 1996, or Bradshaw 1997.

[75] The same holds for the rose's fragrance: when the air acquires the fragrance as a quality of its own, as it sometimes seems to do, I shall no longer be smelling the rose but rather the redolent air.

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Furthermore, not only is it the case that material likeness is not implied, but, rather, its possibility seems to be excluded; for if the air came to *be red* at *t*, it would cease to properly function at *t* as the medium of vision. And what holds about the medium will hold *mutatis mutandis* about the organ of vision: if it came to *be* materially red at *t*, it, too, would cease to be capable of *being* materially *affected* by red at *t*, and so it would cease to be capable of *perceiving* red at *t*. For if the organ were materially red at *t*, this would mean losing the perceptual contact with the object that was acting on the perceiver in causing this likeness, but that could no longer act on her. What is happening at *t* would at most be a case of having a *phantasma* of the object in question (or having an acquired blind-spot for it), but not a genuine case of perceiving it.

The 'analogical reading' proposed by Caston, as ingenious as it is, changes nothing about this predicament. If the material effect of the transparent medium on the organ consists in changing it towards *G* (say, the ratio defining red colour embodied in the pair of being viscous and being runny) then, once the organ has come to *be G* at *t*, it will no longer be capable of being affected and changed towards *G* by the medium at *t*, and so it will no longer be capable of perceiving red at *t*: the perceptual contact will be lost.

Another way of making this point would be to say that Caston's objection against Canonical Literalism[76] can, in fact, also be turned against the position that he himself recommends. The objection is that Canonical Literalism presupposes an actual replica of the perceptual object existing at the time of perceiving in the perceiver,[77] but that Aristotle rejects this kind of replica in his polemic against the traditional *LKL* position. I think this is perfectly correct. However, if the analysis of Aristotle's involvement with *LKL* provided in Chapter 2 is on the right track, it follows that the reason for rejecting the traditional version of *LKL* applies equally well to the view advocated by Caston exactly because, like literalism, it commits Aristotle to the claim that at the time of perceiving *F* the organ *is* materially like *F*, the only difference being that the likeness is spelled out in terms of *G* embodying the same ratio as *F*.[78] The problem is that if we assume that, for a perceptual object *F*, assimilating the perceiver to itself means making it *G*, then once the perceiver's sensory organ already *is G* it cannot be

[76] Caston 2005: 293–5.

[77] '[I]t becomes true to say that the organ is *F* in just the same sense that the object is – it contains another instance of *F*' (Caston 2005: 295).

[78] Cf. Caston 2005: 303–4.

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further affected by the perceptual object *F* in the specified way and continued perception becomes impossible, or at least indistinguishable from having a *phantasma*.

This line of argument[79] is likely to be resisted by readers who approach Aristotle with the assumption that perceiving *F* must involve some kind of standing material *representation* of *F* in the perceiver.[80] If this assumption were correct, then my argument would simply be asking for the impossible. However, this assumption is exactly what I intend to call in question. If the reconstruction of Aristotle's first general account of perception provided in Chapters 1–3 is correct, then it strongly suggests that Aristotle's account does not allow for any standing material representations, for these would mark exactly the end of perceiving.

Let me emphasize that, if the kind of argument sketched in the preceding paragraphs against the *materialist assumption* characteristic not only of literalism but of the Broad Church Reading as a whole is cogent, then it certainly does not support spiritualism. Against spiritualism, I have agreed that the media and the perceptive organs are, according to Aristotle, materially affected and changed by the perceptual object; and I have emphasized that these affections may even have the form of imperceptible oscillations and that they fairly often result in the media or the organs *being* materially like the perceptual objects for a certain period of time. I have only insisted that this material likeness cannot be what mediation and, a fortiori, perception are *grounded in*; rather, such a likeness is a mark of imperfection and, if it is not to turn mediation and perception into a failure, it must not last for more than a fraction of a second.

Moreover, the argument made above seems to apply, *mutatis mutandis*, to spiritualism no less than it applies to materialism. If the media and the organs of perception are only affected and altered 'phenomenally' or 'spiritually', one can raise the very same concern about this phenomenal affection. If the organ, upon being phenomenally affected by *F*, comes to

[79] Further developed in Sections 6.4 and 7.4.

[80] For a pronouncedly representationalist alternative to literalism and spiritualism, see e.g. Stein 2010, who argues that Aristotle's theory 'describes perceptions as a kind of representation which are nonetheless the result of causal interaction with external particulars' (Stein 2010: 24). The role of causality here seems close to Caston's idea of 'the backing of the world' or the 'seal of reality' characteristic of perceptual representations (see Caston 2005: 307 and Caston 2020: 38–44). Caston 2000: 168–9 labels his analogical reading 'representationalism'. A representationalist reading of Aristotle is also defended e.g. by Modrak 1987: 99–107, Everson 1997: 193–203, or, recently, Ganson 2020 (contrast Kalderon 2020); cf. also Robinson 1978 (who goes as far as ascribing sense data to Aristotle). For contrast, see Broadie 1993, Esfeld 2000, Kalderon 2015, or Charles 2021: 173–4, 187–93.

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be phenomenally *F* at *t*, then, apparently, it cannot continue *being* phenomenally *affected by F* at *t*, and so it cannot be *perceiving F* at *t*, because the perceptual contact with *F* has thereby been lost.

In any case, my present aim is not to insist that I have here produced a knock-down argument against the three reputable positions in the scholarly literature (i.e. literalism, spiritualism, and the analogical reading). Rather, I contend, more modestly, that these three positions do not exhaust the logical space of possibilities and that there is an attractive alternative directly suggested by the reading of *An.* 2.5 developed in Chapters 1–3, which is intelligible and sustainable independently of the complexities of Aristotle's first general account of perception.[81]

The thought can be summarized as follows. There is a grain of truth in spiritualism that has not been sufficiently appreciated by its opponents: (a) the way in which a perceiver *is like* the perceptual object she is perceiving cannot be captured in terms of a material or physiological likeness (whether literal or analogical). Indeed, (b) there is an important sense in which Aristotle's account excludes any such likeness, for the perceiver can *be perceptually assimilated* to the perceptual object only if she continues *being affected* by it (otherwise the likeness could at most constitute a *phantasma* or a blind spot), and this presupposes that the perceiver remains in the relevant respect *unlike* her perceptual object. The problem of spiritualism, as developed by Burnyeat and Johansen, is its radicality in denying not only material *likeness* but also any material (physiological) *affection and change*. What all three positions have in common, I submit, is an all-too-static conception of the likeness in question. We need an account explaining how something along the lines of 'phenomenal likeness' comes to be present in the perceiver, dynamically, as a result of material (physiological) affections *instead of* these resulting in a material (physiological) likeness. Such an account would allow us to understand how the perceiver can be like the object she is perceiving in the requisite way and can at the same time continue being affected by it owing to her preserved unlikeness. This is possible exactly because the relevant organ

[81] Charles 2021: 118–93 (further developing the analysis offered in Charles 2009) argues for a similar conclusion. However, there are important differences. For one, Charles 2021: 147 admits that although perception neither is nor involves a 'destructive' affection resulting in an 'ordinary' assimilation of the perceiver to the perceptual object (that is, what he calls a '[Type 1] change', referring to *An.* 2.5, 417b2–3), it 'can be described accidentally in [Type 1] ways'. If so, then the same pattern of argument, raised above against both the materialist and the spiritualist approaches, can be reapplied to Charles' inextricabilist account: while being inextricably psycho-physical, the perceptual likeness appears to be still conceived in an all too static way (cf. n. 67; for additional differences, see Section 4.7).

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remains materially unlike the perceptual object, as the material affections are turned in it into a phenomenal likeness – a dynamic presence of the perceptual object's quality.

The key question, then, is how exactly this can happen. This concern contains the query about how the operation of the media is supposed to help in producing phenomenal likeness – that is, why it could not be produced if perceptual objects were directly acting on perceptive organs.[82] However, the core of the question is what exactly happens in the perceptive organ and what allows the material (physiological) affections to be turned into a phenomenal likeness in it.[83]

4.7 Discrimination and the Role of the Perceptive Soul

This last question is, in fact, just a special instance of a more general issue faced by *any* interpretation of Aristotle's causal account of perception: how do the changes or affections transmitted from perceptual objects by the media to perceivers – whatever they are – cause or occasion the activity of perceiving these objects? This is, effectively, the same question that we have already encountered at the end of *An.* 2.12, where Aristotle asked what smelling is 'besides being affected in a way' and replied that 'while smelling is [[also]] perceiving, the air, instead, when it has been affected, easily becomes perceptible' (424b16–18). As noted in Section 4.4, two prominent ways of understanding this reply, and of construing Aristotle's account as a whole, are based, respectively, on *Isolation* – treating the smelling (and perceiving in general) as being an additional element over and above being affected by perceptual objects – and on *Composition*, treating perception as being composed of being affected plus an additional element. The shared idea between both these interpretations is that Aristotle's account of being affected by, and assimilated to, perceptual objects takes us, at most, to a necessary condition or one ingredient of perceiving. Very often, this necessary condition or ingredient is then understood as a certain kind of material/physiological likeness present in the perceptive organ (whether conceived literally or analogically).[84] This approach is then open to the objection raised in the preceding section

[82] This query is taken up in Sections 7.1 and 7.2.

[83] I take these to be perfectly legitimate questions worth pursuing. Accordingly, what I am recommending is very far from the Neo-Scholastic position according to which intentionality 'is something *sui generis*, which cannot be further analysed or explicated', against which Caston 2020: 17 (cf. 28) protests.

[84] See e.g. Caston 2020: 27–8.

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against the 'materialist' interpretations of Aristotle's account. However, *Isolation* and *Composition* can also be fleshed out in a way that is immune to that objection: 'being affected' can be understood as being thoroughly *mediative*, meaning that no body involved in perceiving – the media and the organs alike – ever comes to *be like* the perceptual object; rather, the sole role of the body in perceiving is to *mediate* the agency of perceptual objects.[85]

The alternative to *Isolation* and *Composition*, as we have seen, is to understand Aristotle as insisting that smelling (and perceiving in general) is *a different kind of being affected* from the one undergone by the media (*Specification*). Prima facie support for this alternative is the frequency with which Aristotle maintains in the *De Anima* that perceiving *is* a kind of being affected – a claim that is extended to thinking in *An.* 3.4.[86] The approach to the role of the perceptive organs canvassed in the preceding section can be understood as a first step towards developing this reading of Aristotle's reply: the kind of being affected undergone by perceivers differs from the one undergone by media in that it does *result in a likeness* – namely, a phenomenal likeness: a dynamic presence of a quality *of* the external perceptual object in the perceiver.[87]

In order to make progress in clarifying and evaluating these options, I submit, we must get to grips with another major characterization of perception encountered in the *De Anima* – namely, as a case of κρίνειν. It has been convincingly argued by Theodor Ebert that κρίνειν must not be translated as 'judging', and that it rather has to do with discriminating/discerning, singling out, or telling things apart.[88] We shall soon need to determine the meaning of perceptual discrimination more precisely (in Sections 6.1–6.3, and 6.6) and to analyse the passage (*An.* 2.11, 423b31–424a10) where Aristotle introduces the key notion of the discriminative mean (in Sections 6.4 and 6.5). For now, however, it will be sufficient to recall one of Ebert's insights, namely that, unlike 'judging', κρίνειν is for Aristotle a success verb.[89] It is a key characteristic of what is achieved in perception, capturing its veridical nature (cf. *An.* 2.6,

[85] This seems to have been the understanding of Alexander of Aphrodisias (cf. Section 5.3).
[86] For perceiving as a kind of being affected, see references in Section 0.1, n. 4.
[87] The difference between this reading and the one sketched out at the end of the preceding paragraph may, at first, seem negligible; but we shall see in the following chapters that it has weighty consequences, especially when it comes to the role of the perceptive soul.
[88] Ebert 1983: 183–90. As I have done above, I continue using 'discrimination' as the established label for κρίνειν but without thereby subscribing to the details of Ebert's (or any other) account.
[89] Ebert 1983: 184. This assessment seems to be right and important for the *De Anima*, although it is not true without qualification. Elsewhere, Aristotle occasionally talks of incorrect κρίνειν (see e.g.

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418a14–16): in perceiving, animals reliably discern things or tell those that are *F* from those that are non-*F*, at least with respect to their modal-specific qualities.

One issue that will need to be explored is how this characterization of perception relates to the one that dominated Aristotle's first general account – that is, the claim that perception is a kind of being affected by a perceptual object. One way of approaching this question is along the lines of *Isolation* or *Composition* as against *Specification*: it may seem that Aristotle's characterization of perception as a case of discrimination captures exactly the other element over and above 'being affected'.[90] Some such approach has often been adopted by scholars since at least Alexander of Aphrodisias – despite the fact that the underlying assumption (particularly if understood in terms of *Isolation*) is in a prima facie tension with Aristotle's repeated claim that perceiving *is* a kind of being affected and although it leads, as we shall see (in Section 5.3), to other considerable difficulties.

In any case, this is certainly not the only way of understanding Aristotle's talk of κρίνειν. It can be (and has occasionally been) taken, instead, as a way of contrasting the kind of being affected experienced by perceivers with the kind of being affected undergone by the media (and indeed by all imperceptive beings), along the lines of *Specification*.[91] On this reading, that which can perceive is, unlike the media, affected by perceptual objects in a 'discriminative' way so that its being affected by them *is* a case of discriminating them.[92] This would be just an alternative way of spelling out the same difference as has already been described above in terms of, on the one hand, being affected without determinacy and stability (i.e. merely as qualitative conductors) and, on the other hand,

Pol. 3.9, 1280a13–14) and at *Insomn.* 2, 460b22 he uses κρίνειν in a sense very close to false judgement.

[90] The classical formulation of such a view is Ebert 1983: 181–2, who suggests that we should understand discrimination in terms of 'what is done in perceiving' over and above 'what may be undergone' in it (a 'use' of the perceptive capacity as something over and above its 'exercise'); cf. Bernard 1988. See also Corcilius 2014: 31 who introduces perceptual κρίνειν as 'an active doing', an 'ingredient' of perception over and above its 'passive components' (cf. pp. 37 and 48).

[91] The classificatory question of whether κρίνειν is something over and above πάσχειν should be distinguished from the explanatory question whether perception, according to Aristotle, needs to involve a non-passive activity on the side of the perceiver. More on this in Sections 5.5, 6.4, and 7.2.

[92] See Johansen 2002: 181, who offers an account of how 'a passive affection' can 'also be described as an act of discrimination'. Cf. e.g. de Haas 2005: 336 (cf. 341): 'Reception and discrimination are one and the same event, though the being of each is different.' Or Charles 2021: 118–93: 'To discriminate such an object is to be materially affected in such a way that we are perceptually aware of its redness' (p. 135 *et passim*).

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being affected in a way that results in a continuing 'phenomenal' likeness – that is, a dynamic but continuous presence of a quality *of* the external perceptual object in the perceiver. The key passage for evaluating the merits of these interpretative options is, arguably, the final part of *An.* 2.11 (discussed in Sections 6.4 and 6.5), where Aristotle's account of the discriminative mean is introduced in a direct connection to his claim that perceiving *is* a kind of being affected by and assimilated to perceptual objects (423b31–424a2).

If we leave aside for a while the question of whether discrimination is better treated as an additional element over and above being affected or as the distinguishing feature of how perceivers are affected by perceptual objects, one thing is clear: under this description, perceiving is already characterized unambiguously as belonging to living beings endowed with a perceptive soul.[93] In other words, when perception is described as a case of discrimination, there is no danger anymore of unwillingly ascribing perception to non-living things, such as the media. However, an explanatory account of perception will also have to say how perception qua discrimination is possible, and that means spelling out (at least on the most general level to start) how it fits into the assimilation model of perception, as outlined in *An.* 2.5. Without this, one would risk falling back into the Anaxagorean difficulty as described at *An.* 1.2, 405b19–23.[94] In other words, discrimination is a useful label for what Aristotle thinks is achieved in perception; the question is now *what exactly* discrimination consists in and *how* it is achieved – that is, just how it comes to be that perceivers discriminate perceptual objects, rather than merely being turned into similar perceptual objects by them or becoming qualitative conductors of their agency. This question is intimately connected, if not identical, to the question of what difference the perceptive soul makes, and how.

This question which will be central for the following three chapters is different from, albeit not unrelated to, the notorious question about the role of the perceptive organs in perception. Answers to the latter question usually presuppose some basic assumptions concerning the status and the role of the perceptive soul, and the other way round: the understanding of the perceptive soul and its role that we arrive at is likely to determine the way in which we take the perceptive organs to be involved. Most

[93] It is exactly the absence of a discriminative mean that Aristotle uses at *An.* 2.12, 424b1–2 as the reason that explains why plants cannot perceive (cf. Section 7.4).

[94] See Sections 2.2 and 2.7 on Anaxagoras, and Section 5.3 on the new threat.

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notoriously, perhaps, Myles Burnyeat has insisted – against what he saw as a noxious fashion of assimilating Aristotle's conception of soul to modern functionalism – that 'to be truly Aristotelian, we would have to stop believing that the emergence of life or mind requires explanation'.[95] What he meant is that the only thing Aristotle can say about why, for instance, perceptive beings are perceptive is exactly that they are perceptive – that is, endowed with a perceptive soul – period.[96] This position leaves as little room for spelling out the role of the perceptive soul as it does for spelling out the role of the perceptive organs. The opponents of spiritualism have mostly concentrated on defending the claim that Aristotle is willing to say more about what happens in the perceptive organs than the spiritualists allow for (i.e. that these organs are what perceivers perceive by).[97] But comparably little attention has been paid to the perceptive soul.[98] As if, after spelling out the kind of material/physiological changes in the perceptive organs, the only thing Aristotle could add was: 'and these constitute perception because the organs are endowed with a perceptive soul'. That, however, leaves the relation of perceptual awareness to body and bodily processes no less mysterious than on the spiritualist interpretation – as long as no account of how exactly the former should 'supervene' on the latter is available.[99]

These results are surprising, given that what we are studying is Aristotle's treatise *On the Soul*, for which a key task is exactly determining as far as possible the way in which the soul is the principle of life and

[95] Burnyeat 1992: 29. [96] Cf. Caston 2020: 18–19 for a cogent criticism of this approach.

[97] The claim that the idea of a 'Priority of the Inanimate' is simply foreign to Aristotle (Broadie 1993: 148–50) cannot be sustained, because it is one of the ideas he is responding to (see Caston 2005: 275–80).

[98] One notable exception is Lorenz 2007, who advocates the *Psychic Interpretation* of *An.* 2.5 based on the idea that what Aristotle defines here is exactly the way in which the perceptive part of the soul is affected by and assimilated to perceptual objects.

[99] Cf. Charles' cogent criticism of non-reductionist materialist accounts (akin to Jaegwon Kim's criticism of non-reductive materialism, as developed in Kim 1989, Kim 1992, Kim 1998: 1–27, or Kim 2005: 7–69) as being in danger of 'collapsing into a version of spiritualism': 'Aristotle must have thought, if the non-reductionist account is correct, that [Type 1] purely material changes ground the perceiver's awareness of flavour. How do they do so? There is no obvious sign that Aristotle attempted to answer this pressing question. We are confronted … by an unnerving silence at just the point where, as interpreted by the materialist, a theory is most required' (Charles 2021, 149). There is, I would add, a very good reason why the kind of answer expected on the existing non-reductionist accounts is never provided by Aristotle: if the organ was allowed to be assimilated in the ordinary way to the perceptual object, not only would there be no way for this assimilation to ground perceptual awareness but, moreover, perceptual awareness would become impossible because the perceptual contact would be lost. That said, I think that Charles' talk of 'silence' is somewhat exaggerated. I shall argue that Aristotle does provide an account of how the kind of being affected undergone by the media is turned into the kind of being affected that is perceiving.

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its characteristic activities, including perceiving. The question cannot be simply discarded by pointing to Aristotle's famous – allegedly 'Rylean' – doctrine that it is not the soul itself that perceives, but the animal endowed with a soul.[100] Just as this doctrine does not forbid us from asking about the nature of the changes occurring in the ensouled body, so it does not forbid us from asking about the nature of the soul's involvement, either; what it forbids, arguably, is only understanding this involvement in terms of the soul *itself* perceiving, and so being moved by perceptual objects. In fact, as we shall see, this famous passage only highlights the need for spelling out the soul's involvement in a non-circular and informative way: to understand perception, we must understand what difference it makes for the 'changes' or 'motions' transmitted through the body to extend 'up until the soul' (without, apparently, becoming changes or motions *of* the soul itself), as this is exactly what constitutes the difference between perception and mere mediation. Aristotle cannot succeed in defining the perceptive soul, as the first principle of perception, without spelling out, at least in the most general terms, both this difference and the way in which the soul accounts for it. Nor, however, is this an easy task.[101]

One can, again, compare Aristotle's treatment of nutrition.[102] While it would surely be absurd to say that the nutritive soul, as the first principle of nutrition, is itself nourished or that it nourishes itself, Aristotle finds nothing absurd in ascribing to the nutritive soul a fairly precise role in nutrition: it is *that which nourishes* (τὸ τρέφον) the body by the nutriment.[103] Aristotle's comparison with carpentry (416b2–3) signals that the nutritive soul is an agent of a very special kind; it is one of 'the agents that do not have the form in matter', and so are impassive.[104] This gives us an informative account of *how* the nutritive soul is supposed to

[100] See *An.* 1.4, 408a34–b18 (quoted and discussed in Section 5.2).

[101] One can worry that Charles' inextricabilist interpretation of Aristotle's account as a 'simple theory' of perception tends to trivialize this task, as if the only thing Aristotle has to say was exactly that perception is an inextricably psycho-physical kind of being affected by perceptual objects. One concern is that this approach risks leaving behind Aristotle's stated commitment to the definitional priority of activities over capacities (see *An.* 2.4, 415a14–23 and in general *Metaph.* Θ.8, 1049b12–17). Is it possible to capture, on the inextricabilist account, the difference between the ways in which, say, the air on the one hand and the perceiver on the other are affected by perceptual objects without already referring to the perceptual capacity present in the latter but not in the former? Another concern will be spelled out in Section 5.3, pertaining to Charles' commitment to the idea that the perceptive soul is itself affected by perceptual objects.

[102] Cf. Sections 0.3, 1.1, and 3.7.

[103] *An.* 2.4, 416b20–3 (cf. *PA* 2.7, 652b11–12).

[104] See *GC* 1.7, 324b4–6 and 1.10, 328a18–22; cf. Section 2.1.

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play the role of the first principle of nutrition (although the details are not entirely easy to tease out).[105]

Now, what corresponds to this account in the case of perception? The question here is significantly more difficult, and one reason for this is the following.[106] Aristotle seems to define perceiving as a kind of being affected by and assimilated to perceptual objects; but in *An.* 1.3–4 he determinately opposed the assumption, adopted by virtually all of his predecessors, according to which the soul is responsible for animal locomotion – and apparently also cognition – on account of it itself undergoing the relevant kind of changes (either moving itself or being moved by perceptual objects). It is not difficult to see how Aristotle's account of nutrition is consistent with this denial – he can draw on his account of unmoved movers and impassive agents already developed elsewhere. But how can he make his account of perception as a kind of being affected by and assimilated to perceptual objects similarly consistent? That is far from obvious. Indeed, this question leads to a dilemma that, arguably, lies at the heart of Aristotle's inquiry, or is at any rate closer to it than the notorious question about the role of the body. This worry asks: how can the perceptive soul be the first principle of perceiving as a kind of being affected by, and assimilated to, perceptual objects, while itself remaining unmoved?[107]

This question will be explored in the following chapter, and it will provide the framework for the subsequent inquiry into Aristotle's account of perceptual discrimination and reception of forms without the matter in Chapters 6 and 7.

[105] I return to the question in Section 7.3. [106] Cf. Section 0.3.

[107] The difficulty is well-captured by Witt 1992: 183: 'does his [i.e. Aristotle's] explanation of psychological processes assign the primary causal role to soul, while at the same time leaving soul unaffected by them?' Lorenz 2007: 211–19 finds the key to this dilemma in the notion of preservative πάσχειν and assimilation introduced in *An.* 2.5 – a strategy that can, as we shall see (in Section 5.4), be traced back to antiquity. A very different solution (to be discussed in Section 6.5), based on *An.* 2.11, 423b31–424a10, is proposed by Corcilius 2014 (cf. Corcilius 2022: 143–6). No paper has brought the question to such a sharp relief as Menn 2002, emphasizing Aristotle's general commitment to the impassivity of the soul (on the challenges that this contains for Aristotle's account of perception, see especially pp. 128–37).

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CHAPTER 5

The Passivity of Perception and the Impassive Soul

5.1 An Inconsistent Triad of Tenets?

In the *De Anima*, Aristotle seems emphatically to endorse three tenets concerning the role of the perceptive soul that prima facie appear to be mutually incompatible.

The soul is 'the principle (ἀρχή) of living beings' (*An.* 1.1, 402a6–7), and because living beings are distinguished from the non-living primarily by moving in characteristic ways and by knowing the world around them, the soul is to be understood, primarily, as the principle of these two activities (*An.* 1.2, 403b24–8). They can, and should, be further subdivided: first, into 'motion with respect to nutrition, diminution, and growth' (also characteristic of plants) on the one hand, and locomotion (specific to animals) on the other; and, second, into perception (characteristic of all animals) on the one hand and thinking (specific to rational animals) on the other.[1] The soul is then to be studied as 'the principle of the [four] enumerated phenomena' (*An.* 2.2, 413b11–12), for – to repeat once more – the 'soul is the cause and the principle of the living body' (*An.* 2.4, 415b7–8). This is the basic framework within which Aristotle's inquiry into perception is set, as Aristotle reminds us in its closing sentence: 'Concerning the principle on account of which the animal is said to be capable of perception (αἰσθητικόν), let it be determined in this way' (*An.* 3.2, 427a15–16). Hence, according to Aristotle:

> [CAUSALITY OF SOUL$_P$] The perceptive soul is the first principle of perceiving: it is primarily on account of having perceptive soul that animals, unlike non-living natural bodies and plants, can engage in perception.

[1] See *An.* 2.2, 413a20–5 (with Section 0.3, n. 27).

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It is more difficult to say how exactly this claim should be developed – that is, to spell out what difference exactly the soul's presence makes and in what way. The difficulty of this question is underlined by Aristotle's distinction (at *An.* 2.4, 415a8–28) between three senses in which the soul is the cause of life to the ensouled body.[2]

It is by pondering these questions that one can arrive at what appears to be a tension between two other tenets that Aristotle endorses in the *De Anima*. We are by now sufficiently familiar with the first of these:

[PASSIVITY OF PERCEPTION] Perceiving is a kind of being affected by and assimilated to perceptual objects.

We have seen that Aristotle has ascribed a crude version of this claim to most of his predecessors[3] and that he explains how it is to be correctly understood in *An.* 2.5. It is a claim that is repeatedly reaffirmed throughout his inquiry into perception in *An.* 2.6–3.2 and – building on its results – within his inquiry into thinking in *An.* 3.4–8.[4] We are also familiar with at least two strategies for deflating this tenet, either by interpreting the preservative πάσχειν in *An.* 2.5 as referring to any transition from a second capacity to its fulfilment (*Deflationary Interpretation*), or by understanding the perceptual affection and assimilation as only a necessary condition or the material component of perception (*Material Interpretation*). Furthermore, we are also acquainted with the strategy of reading *An.* 2.5 as delimiting exactly the sense in which the perceptive soul itself can be affected by perceptual objects (*Psychic Interpretation*). We shall now see how these strategies of reading *An.* 2.5 underlie different approaches to Aristotle's causal account of perception.

Let us begin from observing that the two tenets introduced thus far – the *Causality of Soul*$_P$ and the *Passivity of Perception* – combine very naturally into the idea that

[PLATONIC FORMULA] Perception is a 'change of the soul [occurring] through the body' (κίνησις διὰ τοῦ σώματος τῆς ψυχῆς).

[2] We shall return (in Section 5.5) to Aristotle's surprising insistence here that the soul is also an efficient cause of perception (415b23–5).
[3] See *An.* 1.5, 410a25–6 and 1.2, 405b10–23 (with Sections 2.2 and 2.3).
[4] See Section 0.1, n. 4 for references concerning perception.

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The formulation comes from *Somn.* 1, 454a7 and is echoed at *Phys.* 7.3, 248a6–9.[5] I call it the *Platonic Formula* because it seems to draw directly on how Plato describes perception in several of his dialogues:

> motions (κινήσεις) produced by all these [perceptual objects] are carried through the body (διὰ τοῦ σώματος φερόμεναι) to the soul (ἐπὶ τὴν ψυχήν) and fall upon it (προσπίπτοιεν) (*Tim.* 43c4–6)
>
> both humans and non-human animals are from the moment of birth by nature capable of perceiving all the affections (παθήματα) that penetrate through the body to the soul (διὰ τοῦ σώματος ἐπὶ τὴν ψυχὴν τείνει) . . . (*Theaet.* 186b11–c2)[6]

By accepting this formula, one becomes committed to the claim that:

[PASSIVITY OF SOUL$_P$] The perceptive soul is passive: it is itself the subject of the change (κίνησις) caused by perceptual objects.

There is, to be sure, nothing obviously wrong with or inconsistent about the *Platonic Formula* or the *Passivity of Soul$_P$* themselves. The difficulties arise from the fact that in *An.* 1.3–4 Aristotle introduces a battery of arguments against both. He argues that the soul in general cannot be the proper subject of any change, and so that:

[IMPASSIVITY OF SOUL$_P$] The perceptive soul is impassive.

This tenet appears to constitute an inconsistent triad in conjunction with the *Causality of Soul$_P$* and the *Passivity of Perception*. This is so at least as long as we are committed to the following claim:

[CAUSE/SUBJECT] The soul can only be the primary cause of φ-ing by being the proper subject of ψ-ing in which φ-ing consists.

Cause/Subject makes the following implication valid: if perception consists in being affected (*Passivity of Perception*) and the perceptive soul is the primary cause of perceiving (*Causality of Soul$_P$*), then the perceptive soul must itself be affected (*Passivity of Soul$_P$*).

[5] Cf. also *Sens.* 1, 436b6–8 (although here Aristotle's formulation is much more cautious). At *APr.* 2.27, 70b7–11, Aristotle seems to be taking for granted a more general assumption (deriving apparently from Plato's *Philebus*) that some changes are common to body and soul in the straightforward sense that both body and soul are their proper subjects.

[6] See further *Phil.* 33d2–7, 34a3–5, *Tim.* 43d–44c, 45c–d, 67b.

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If this implication is in fact valid, then it transpires that there are no more than two ways of dealing with the apparent inconsistency.[7] One can either deny the *Passivity of Perception* or affirm the *Passivity of Soul* at least in the case of perception. In other words, one can either infer by *modus tollens* that, despite what Aristotle seems to be affirming throughout *An.* 2.5–3.8, perception *cannot* be passive, or one can infer by *modus ponens* that, despite what Aristotle seems to be arguing for in *An.* 1.3–4, the perceptive soul *cannot* be impassive. The third possibility would be to reject *Cause/Subject*, and so the validity of the implication based on it, and to insist that the whole triad of the *Causality of Soul*$_P$, the *Passivity of Perception*, and the *Impassivity of Soul*$_P$ can, in fact, be endorsed in a consistent way. But one would have to explain how this is to be achieved.

This analysis is admittedly very abstract and preliminary, and much depends on how exactly each of the three tenets is spelled out. If, for instance, one understands the *Passivity of Perception*, along with the *Material Interpretation*, as concerning only a necessary condition or the material constituent of perception, then there will not seem to be any inconsistency to address. This interpretative manoeuvre, however, is far from innocent, for Aristotle's repeated claim that perception *is* a kind of being affected seems to say something more than what Material Interpretation is ready to take on board. Indeed, if the argument of the preceding chapters is on the right track, it provides strong reasons for resisting this move.

One can also object that there is no need to choose among the three options sketched out above: one's interpretation can surely combine them in various ways. I do not want to deny that. However, the truth is that most existing interpretations can be characterized as leaning either towards qualifying/denying the *Passivity of Perception* or towards endorsing a certain *Passivity of Soul*$_P$. I hope to show that the abstract scheme introduced above is helpful insofar as it provides a basic orientation about the main directions in which one can go in seeking to resolve what emerges as a key difficulty of Aristotle's account.

In the remainder of this chapter, I shall explore this difficulty and the three possible ways of resolving it in more detail. I begin by saying more on how the claim that the soul cannot be the subject of any motion or change (underlying the *Impassivity of Soul*$_P$) is developed in *An.* 1.3–4 and why the strategy consisting in rejecting *Cause/Subject* is attractive but difficult (Section 5.2). I then discuss the remaining two strategies as developed by

[7] Assuming that there is no room for doubting the *Causality of Soul*$_P$.

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the first ancient proponents known to us, focusing on the difficulties encountered by their interpretations (Sections 5.3 and 5.4). It will turn out that the scheme outlined above captures the structure of an actual historical disagreement between Alexander of Aphrodisias and Themistius that continues to dominate the discussion even today. In Section 5.5, I briefly reflect on an unorthodox medieval interpretative tradition that may help us identify the ground on which *Cause/Subject* can meaningfully be rejected even in the case of perception.

5.2 The Impassivity of the Perceptive Soul

At the outset of *An.* 1.3, Aristotle promises to show that not only is the view according to which the soul is self-moved (endorsed by Platonists and Aristotle's other predecessors) false, but, more generally, that the very idea of 'a change (κίνησις) belonging to it [i.e. the soul] is utterly impossible' (406a2–3). He then goes on to develop an intricate argument throughout *An.* 1.3–4 against any attempt at ascribing change (κίνησις) to the soul itself. He begins with a battery of general arguments against the idea of the soul undergoing a change (1.3, 406a12–b15) before then objecting in more detail to Democritus' and Plato's versions of that idea (1.3, 406b15–407b12).[8] Next, in a kind of digression, he formulates a more general objection against Plato's account 'and, indeed, most of existing accounts of the soul' that do not pay sufficient attention to the kind of 'community' that each kind of soul must have with the specific kind of body that it ensouls, likening the soul, for the first time, to *art* (1.3, 407b12–27). Then, as a sort of antithesis to this negligence (typical for the idea of a transmigratory soul), Aristotle discusses the notion of the soul as a harmony of the body (1.4, 407b27–408a19).[9] Only then does he return to the leading question of whether the soul can be the subject of a change (1.4, 408a29–34) and he continues addressing it in a pair of dense and difficult passages (1.4, 408a34–b18, 408b18–30), the first of which will be the focus of our discussion below. The entire argument is then finally closed at *An.* 1.4, 408b31–2 when Aristotle reaffirms that (a) 'the soul cannot undergo any change whatsoever', and that, therefore, (b) it

[8] For a painstaking reconstruction of the two dialectical contexts, see Carter 2019a: 59–78 and 79–102.

[9] For a convincing reconstruction of Aristotle's argument, and the role ascribed to Empedocles therein, see Betegh 2021 (cf. also Carter 2019a: 123–39 and Vogiatzi 2020). For the ἁρμονία account as an antithesis to Plato's theory, cf. *An.* 1.4, 408a29–30.

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also cannot move *itself* in any other way than coincidentally – that is, by being in the body that it moves.[10]

It is interesting for our question that perception plays a discreet but pivotal role in this intricate argument, despite the fact that the official discussion of it has been reserved for *An.* 1.5.[11] This is because perception is singled out as the best candidate for a change (κίνησις) belonging to the soul itself: 'One would most reasonably assume that the soul undergoes a change (κινεῖσθαι) by the agency of (ὑπό) perceptual objects, if it can undergo a change at all' (*An.* 1.3, 406b10–11).[12] Aristotle returns to this observation at the outset of the so-called Rylean passage (*An.* 1.4, 408a34–b18),[13] where perception (together with passions and, a bit surprisingly, discursive thinking) is introduced again as a phenomenon in whose case it would be more reasonable than in the case of locomotion to assume that the soul is itself undergoing a change. But Aristotle argues that this need not be the case. Although the passage is firmly set in the context of *An.* 1.3–4 and Aristotle's argument is mostly a negative endeavour aimed at showing that a conclusion widely endorsed by his predecessors is not necessary, it turns out to be important for understanding his own overall strategy. Indeed, different approaches to this passage are intimately connected to different ways of resolving the dilemma outlined in the preceding section. Hence, it will be worth discussing the text in some detail.

After summarizing the established claim that the soul can be moved in place only coincidentally insofar as the body – in which it is – is moved in place (*An.* 1.4, 408b29–34), Aristotle formulates and addresses the following difficulty:

> One could more reasonably be in doubt (ἀπορήσειεν ἄν) as to whether the soul need not undergo a change (περὶ αὐτῆς ὡς κινουμένης) with a view to the following cases. We say that the soul is sad (λυπεῖσθαι) and rejoices (χαίρειν), that it takes courage (θαρρεῖν) and is afraid (φοβεῖσθαι), and also that it is angry (ὀργίζεσθαί), that it perceives (αἰσθάνεσθαι) and thinks discursively (διανοεῖσθαι). Now each of these [phenomena] seems to be a kind of change (κινήσεις εἶναι δοκοῦσιν). And from this one could come to the conclusion that the soul itself undergoes a change (αὐτὴν κινεῖσθαι). But this [conclusion] is not necessary (τὸ δ' οὐκ ἔστιν ἀναγκαῖον). (*An.* 1.4, 408a34–b5)

[10] For a detailed analysis of the whole argument, see Ferro 2022: 47–119.
[11] In line with *An.* 1.2, 403b24–8 (cf. Section 1.4).
[12] Cf. Carter 2019a: 75.
[13] See Barnes 1971: 33–4 for the label (cf. e.g. Frede 1992). I return to why this label is misleading below.

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The inference, which is here applied to (a) passions, (b) perception, and (c) discursive thinking, closely resembles the above-mentioned implication based on *Cause/Subject*. The main difference is that instead of the *Causality of Soul*, we find here another premise based on how we *talk* about the soul: 'we say that the soul φ-es'. The rest is identical: assuming that φ-ing is a kind of undergoing a change, it seems to follow that the soul itself undergoes a change – contrary to Aristotle's earlier argument (1.3, 406a12–b15). Now, why should we ascribe any importance to how we talk about the soul? What makes this kind of talk ('the soul φ-es') at least remotely plausible for Aristotle is apparently nothing other than the *Causality of Soul.* If this is endorsed in conjunction with *Cause/Subject*, as Aristotle takes his predecessors to have widely done, then the conclusion (implying the *Passivity of Soul*) seems, indeed, unavoidable.[14] This background becomes important for understanding how the argument unfolds.

In the first step, Aristotle begins to explain why the conclusion is, in fact, not necessary at least for (a) passions and (c) discursive thinking:[15]

> For, even granting completely **(i)** that being sad and rejoicing and discursive thinking are changes and each of them is a case of undergoing a change, **(ii)** that [they are cases of] undergoing a change by the agency of the soul, as, for instance, to be angry or to be afraid is for the heart to be changed [by the agency of the soul] in such and such a way,[16] **(iii)** that [even] discursive thinking is perhaps something like this or something else [of this kind], and **(iv)** that some of these [phenomena] come about in certain parts undergoing a change in place, others in [certain parts undergoing] an alteration (it is for another inquiry, though, to decide in which way exactly this or that [phenomenon] comes about), **(v)** still: to say that the soul is angry is the same as if one were to say that the soul weaves or builds a house.
>
> εἰ γὰρ καὶ ὅτι μάλιστα **(i)** τὸ λυπεῖσθαι ἢ χαίρειν ἢ διανοεῖσθαι κινήσεις εἰσί, καὶ ἕκαστον κινεῖσθαί τι τούτων, **(ii)** τὸ δὲ κινεῖσθαί ἐστιν ὑπὸ τῆς ψυχῆς, οἷον τὸ ὀργίζεσθαι ἢ φοβεῖσθαι τὸ τὴν καρδίαν ὡδὶ κινεῖσθαι, **(iii)** τὸ δὲ διανοεῖσθαι ἤ τι τοιοῦτον ἴσως ἢ ἕτερόν τι, **(iv)** τούτων δὲ συμβαίνει τὰ μὲν κατὰ φοράν τινων κινουμένων, τὰ δὲ κατ' ἀλλοίωσιν (ποῖα δὲ καὶ πῶς, ἕτερός ἐστι λόγος), **(v)** τὸ δὴ λέγειν ὀργίζεσθαι τὴν ψυχὴν ὅμοιον κἂν εἴ τις λέγοι τὴν ψυχὴν ὑφαίνειν ἢ οἰκοδομεῖν.
>
> (*An.* 1.4, 408b5–13)

[14] On this conjunction as a typical error committed by Aristotle's predecessors, see *An.* 1.2, 403b25–31.

[15] Aristotle mentions only four out of five previously enumerated passions, but the argument would work equally well for the omitted θαρρεῖν.

[16] Cf. *An.* 1.1, 403a26–7.

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We can leave aside for now the complications relating to the case of discursive thinking (διανοεῖσθαι) and focus instead on Aristotle's argument concerning passions. We are invited to grant (at least for the sake of argument) that (i) each of them is a kind of 'undergoing a change' (κινεῖσθαι), apparently (iv) a kind of being altered, and that (ii) the soul is directly involved in them, namely as their primary efficient cause. Having done so, we should realize that this does not produce the conclusion that the soul undergoes a change, because (v) saying that the soul is angry and the like comes much to the same result as if one were to say that the soul itself weaves or builds.

Along with most interpreters, I believe that the idea of the soul weaving or building in (v) is intended to sound absurd.[17] However, unlike many readers, I do not think that Aristotle's point is that we should evade the puzzle from 408a34–b5 by simply rejecting the first premise ('the soul φ-es'). Rather, I take the thrust of the argument to be that the first premise requires reformulation in an appropriate way along the lines of the *Causality of Soul*, as Aristotle suggests in what immediately follows (see (vi) quoted below). This does not constitute on its own a solution to the puzzle, but it is an important step forward, at least for phenomena (a) and (c). Put very roughly, it allows Aristotle to accept the *Causality of Soul* without thereby committing himself to *Cause/Subject*. Once the first premise of the initial puzzle from 408a34–b5 is reformulated in this way, it can be spelled out – as an alternative to *Cause/Subject* – in terms of the soul being the efficient cause of the phenomena in question along the lines of (ii). In this way, Aristotle effectively subsumes the causal role of the soul in these phenomena under the model of unmoved movers (to which he already referred at *An.* 1.3, 406a3–4 as something taken for granted): we can accept that (i) φ-ing consists in being changed, and that (ii) the soul is the primary cause of it, without endorsing the conclusion that the soul itself is being changed; rather, it is an unmoved mover of the phenomena in question.

Indeed, as we shall see, this is exactly what Aristotle is suggesting in the remainder of the passage (408b13–18). However, there is more going on here. Thus far, (b) perception has been left aside, and for good reason, because it seems implausible to describe it as a change caused by the soul (i.e. a case of κινεῖσθαι ὑπὸ τῆς ψυχῆς). Rather, it clearly appears to be a change caused, first and foremost, by the perceptual object. So, the role of the soul in perception *cannot* be subsumed under the model of unmoved

[17] *Pace* Carter 2018.

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movers in any straightforward way; in this sense, the passage confirms what has already been claimed at *An.* 1.3, 406b10–11: 'One would most reasonably assume that the soul undergoes a change by the agency of perceptual objects [i.e. in perceiving], if it can undergo a change at all.' But in the closing lines of the present passage, Aristotle returns to perception and insists that, in whatever way the role of the soul is to be exactly spelled out, we should resist, even in this case, the conclusion pressed on us by *Cause/Subject* – apparently because it is wrong even in the case of perception. Aristotle begins from a suggestion for reformulating the first premise of the puzzle from 408a34–b5:

> **(vi)** For perhaps it is better not to say that the soul takes pity or learns or discursively thinks, but that the man [does so] on account of the soul. **(vii)** And this[18] is not [to be understood] as if a change was [taking place] in the soul, but [rather in the sense that] **(vii.1)** in some cases the change extends up until the soul, **(vii.2)** while in other cases it starts from the soul; for instance, **(vii.1′)** while perception is from these [i.e. perceptual objects], **(vii.2′)** recollection is from the soul towards the changes or the states of rest in the perceptive organs.
>
> **(vi)** βέλτιον γὰρ ἴσως μὴ λέγειν τὴν ψυχὴν ἐλεεῖν ἢ μανθάνειν ἢ διανοεῖσθαι, ἀλλὰ τὸν ἄνθρωπον τῇ ψυχῇ· **(vii)** τοῦτο δὲ μὴ ὡς ἐν ἐκείνῃ τῆς κινήσεως οὔσης, ἀλλ' **(vii.1)** ὁτὲ μὲν μέχρι ἐκείνης, (vii.2) ὁτὲ δ' ἀπ' ἐκείνης, οἷον **(vii.1′)** ἡ μὲν αἴσθησις ἀπὸ τωνδί, **(vii.2′)** ἡ δ' ἀνάμνησις ἀπ' ἐκείνης ἐπὶ τὰς ἐν τοῖς αἰσθητηρίοις κινήσεις ἢ μονάς.
>
> (*An.* 1.4, 408b13–18)

Aristotle's claim in (vi) was influentially interpreted as denying – in a Rylean spirit – that the soul can be the subject of any φ-ing whatsoever.[19] But I take this idea to have been successfully disproven. What Aristotle says is only that no phenomenon *that can be defined as, or is in part constituted by, undergoing a change* can be ascribed to the soul itself.[20] However, this category of phenomena clearly does not exhaust all possible kinds of φ-ing: even if we leave thinking (νοεῖν) aside, which, according to

[18] Aristotle distinguishes explicitly between two different senses of the dative ('on account of') later at *An.* 2.2, 414a4–14.

[19] See Barnes 1971: 33–4.

[20] While passions are apparently defined as certain ways of undergoing a change, weaving and housebuilding – as productive activities – are surely not to be defined as such. However, they are complex activities constituted in part by changes on the side of the weaver or the builder. I cannot weave without moving my hands and I cannot build a house without undergoing some change either (be it just the bodily changes involved in giving orders).

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Aristotle, is emphatically *not* a change or motion,[21] his theory of agency allows one to insist, comfortably, that *X* φ-es without implying that *X* is the subject of a change.[22] In the case of locomotion or passion, for instance, 'on account of the soul' will be spelled out as 'by the agency of the soul' – that is, 'on account of the soul *moving* the body'. Here, the way in which the soul is the primary cause of φ-ing is understood in terms of the soul being the proper subject of ψ-ing, which, however, is *not* a case of undergoing a change. Thus, Aristotle does not reject – but rather *presupposes* – the idea of the soul as a subject.

I do not mean to suggest that this idea is clearly formulated here or easy to tease out.[23] But the notion of the soul as an unmoved mover of the body is not new in our passage. In fact, Aristotle introduced it at the very outset of his discussion in *An.* 1.3–4 as an alternative to *Cause/Subject* when applied to locomotion. Here, he presented the notion as something that has already been established elsewhere:[24] 'that it is not necessary for that which moves [i.e. the soul as the primary cause of animal self-motion] to be itself undergoing a change has been said before' (*An.* 1.3, 406a3–4).[25] So, once the role of the soul in phenomena (a) and (c) is subsumed under the model of unmoved movers in (ii), Aristotle's preliminary work is basically done.[26] What is novel and, indeed, unique about our passage – in the context of *An.* 1.3–4 and beyond – is Aristotle's suggestion in (vii) that the same kind of analysis should be extended,

[21] This line of objection is suggested by the immediately following passage (*An.* 1.4, 408b18–30). See Shields 1988 for a convincing refutation of the Rylean reading along these lines (cf. Shields 2007: 156–60 and Shields 2009: 285–9); see also Menn 2002: 100–2. For Aristotle's denial that undergoing a change could be constitutive of thinking (as it arguably is of perception), see Roreitner 2024b.

[22] Cf. Witt 1992: 180–1 and Menn 2002: 100–2. This line of thought is also emphasized by Carter 2018: 39–43, who goes one step further and argues that, according to Aristotle, the soul is itself the subject of weaving and housebuilding. Although I agree with Carter that Aristotle is not done with the puzzle by simply denying the first premise, I do not think that he is willing to accept the claim in (v) as it stands; rather, as suggested above, he points to the need of reformulating the first premise along the lines of the *Causality of Soul* – as is effectively done in (vi). This allows him to deny that the soul is the proper subject of weaving and housebuilding (as complex activities constituted in part by changes on the side of the subject, cf. n. 20), without thereby committing himself to the more radical (Rylean) claim that the soul – as a cause of weaving and housebuilding – is not the proper subject of any φ-ing whatsoever.

[23] I return to the question of how this model is to be understood in the rudimentary case of nutrition in Section 7.3.

[24] See primarily *Phys.* 8.4 and *Metaph.* Λ.6–7; cf. *Phys.* 3.1, 201a25–7; *GC* 1.7, 324a24–b24; *GC* 1.10, 328a18–22; *Metaph.* Z.7, 1032a27–b23; *GA* 1.22, 730b5–23.

[25] For the idea rejected here as a sort of *communis opinio*, see *An.* 1.2, 403b28–9, 404b7–8.

[26] Cf. *An.* 2.4, 416b20–3 where the role of the soul in nutrition is subsumed under this model as well, with the nutritive soul being characterized as 'that which nourishes' the body, analogously to the art of carpentry as the unmoved mover of the carpenter's activity (cf. 416b2–3).

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mutatis mutandis, to perception – although we know that this is the most difficult case.[27] One reason why it is difficult is that, in this case, Aristotle cannot simply refer to any model already developed elsewhere – owing to perception's passivity, it cannot be straightforwardly analysed as a case of the body undergoing a change by the agency of the soul as its unmoved mover. Nevertheless, Aristotle maintains in (vii) that, after reformulating the first premise along the lines of the *Causality of Soul* (purified from *Cause/Subject*), we can accept the characterization of perception as 'undergoing a change' – namely, as we know from *An.* 1.3, as 'undergoing a change by the agency of perceptual objects', *and yet* we can resist the conclusion that the soul itself undergoes a change. Aristotle insists that not even in the case of perception does the change take place 'in the soul'.

This important statement will be crucial for any attempt at resolving the apparent inconsistency outlined in Section 5.1. However, the achievement of (vii) ought not to be overestimated. It is largely programmatic: while claiming very clearly that the characterization of perception as a kind of undergoing a change by the agency of perceptual objects does not commit one to the view that the soul itself undergoes a change, Aristotle's assertion comes short of even hinting at what the alternative account of the soul's role in perception could be. He analyses perception as a change extending up until the soul (μέχρι τῆς ψυχῆς), but he does not say how the soul itself is involved. Furthermore, it is unsafe to read much into the preposition here, for Aristotle is, effectively, just mimicking Plato, while insisting that the conclusion drawn by Plato from this analysis of perception is a *non sequitur*.[28] In the *Timaeus*, Plato spoke of changes coming from both coloured and sounding objects as 'extending up until the soul' (μέχρι τῆς ψυχῆς);[29] and he also described them as 'falling upon the soul', implying apparently that these changes are received by the soul so as to become changes of the soul itself, in line with the *Platonic Formula*.[30] In (vii) Aristotle seems to be claiming that we can take over the former characterization, while rejecting the latter. But at the present stage of inquiry, this

[27] Indeed, as we have seen, Aristotle seems not to have always believed that this is feasible, as revealed by the fact that, in *Somn.* 1 and *Phys.* 7.2–3, he openly endorses the *Platonic Formula*.

[28] Contrast Corcilius 2014: 45–6, who insists that we should read 'up until' literally as implying that the soul is literally in a place (or has a position) and is contiguous with the incoming motions. For a discussion of this point, see Section 6.5.

[29] See *Tim.* 45d1–3, 67b2–4 (cf. *Leg.* 673a3–5, 893a5–7). See also *Theaet.* 186b11–c2 (ἐπὶ τὴν ψυχήν).

[30] See *Tim.* 43c4–6 and Section 5.1 for further references.

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claim can be doing nothing more than laying down a *key desideratum*, as there is not even the slightest hint at any alternative account of the soul's involvement. This, after all, is not very surprising given that we are still in the aporetic Book 1.

Although we should certainly not overestimate the achievement of (vii), it would be equally mistaken to underrate its significance. This is *the* passage in which Aristotle addresses the most reasonable candidate for a case of the soul itself undergoing a change flagged at *An.* 1.3, 406b10–11 and, as such, it is the only passage that certifies the generality with which he formulates the conclusion at *An.* 1.4, 408b30–1 that 'the soul cannot undergo any change whatsoever' (restated again at 1.5, 411a24–26). Although Aristotle does not spell out how the soul is responsible for perception as the unmoved principle 'up until which' the changes extend, he seems to be staking a lot on the feasibility of this model. Effectively, his stake is on a robust *Impassivity of Soul*$_P$.

If the canvassed reading of *An.* 1.3–4 is on the right track, then it puts considerable pressure on the question of the *consistency* of Aristotle's account – particularly when combined with a non-deflationary understanding of the *Passivity of Perception*. By accepting these two tenets, Aristotle seems to be committed to rejecting *Cause/Subject* in the case of perception too. The problem is to see how he can do so. This difficulty, however, has been rarely recognized as such, because, since antiquity, interpreters have most often tended to compromise either the *Passivity of Perception* or the *Impassivity of Soul*$_P$ – apparently because they believed that, in the specific case of perception, it is impossible to abandon *Cause/Subject* entirely. This, to be sure, is exactly what Aristotle *seems* to be doing in *An.* 1.3–4 (particularly in (vii)); but interpreters have often tended to interpret the upshot differently, as if Aristotle was not aiming at overcoming *Cause/Subject*$_P$, but at either essentially qualifying the *Passivity of Perception* or accepting the implication that some kind of *Passivity of Soul*$_P$ is unavoidable.

In the following two sections, I examine more closely these two strategies, which can be traced back to Alexander of Aphrodisias and Themistius, respectively.[31]

[31] These two sections draw on an earlier study of how the dilemma outlined in Sections 5.1 and 5.2 was approached in the late-ancient reception of Aristotle's *De Anima* (Roreitner 2023), to which I refer the reader for further details.

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5.3 Perception Is Not Passive (Alexander of Aphrodisias)

Alexander of Aphrodisias seems to have been largely in agreement with the reading of *An.* 1.3–4 sketched out above – at least insofar as Aristotle's commitment to the *Impassivity of Soul*$_P$ is concerned. On this point, Alexander takes the message of *An.* 1.3–4 to be unambiguous. The soul 'cannot undergo any change in its own right (ἀκίνητον καθ' αὑτήν)',[32] and this concerns any conceivable kind of change (κίνησις), the perceptual change included: 'For neither the [changes] in perception and imagination …, which are alterations, nor the spatial [motions], are changes of the soul itself (τῆς ψυχῆς εἰσι κινήσεις καθ' αὑτήν), but rather of the compound.'[33] Nothing is taken away from this conclusion by Aristotle's analysis of perceptual κινεῖσθαι and πάσχειν in *An.* 2.5–3.2: in whatever way these notions are to be spelled out, they cannot be ascribed to the soul itself.[34]

However, it is far from clear on such a reading how the soul can be involved in perception. Alexander thinks that this question can be answered only if we realize that the identification of perceiving as a kind of undergoing a change by the agency of perceptual objects (accepted in *An.* 1.3–4) is strictly speaking incorrect. The perceptual changes or affections are only *bodily preconditions* of perceiving proper – they are how perceiving 'comes about'. Perceiving itself, however – and this is crucial – cannot be classified as any kind of being changed or affected. In this sense it is *not* passive, although Aristotle might *seem* to be characterizing it that way. Alexander is very clear about this point when correcting Aristotle's numerous assertions that perceiving *is* a kind of being affected. The fact that Aristotle begins from such a claim in *An.* 3.4 (429a13–18), for instance, is interpreted by Alexander in the following way: neither νοῦς nor the perceptive soul is itself affected (*An.* 84.3–4),

> for even though perceiving (τὸ αἰσθάνεσθαι) comes about through bodily affections (γίνεται διά τινων παθῶν σωματικῶν), perceiving itself (αὐτό τὸ αἰσθάνεσθαι) is not being affected (πάσχειν), but discriminating (κρίνειν). (*An.* 84.4–6)[35]

[32] *An.* 17.9–10. [33] *Mant.* 3, 115.26–8; cf. *An.* 23.6–11; *Mant.* 1, 105.1–2; 3, 117.9–14.

[34] At *An.* 38.19–40.3, Alexander seems to understand the πάσχειν discussed in *An.* 2.5 as capturing the way in which bodily organs are affected by perceptual objects. This differs from the reading developed in *Quaest.* 3.2–3 (cf. Section 1.2). Both texts agree, though, that no genuine πάσχειν can be ascribed to the soul itself.

[35] Cf. *In Sens.* 167.21–2: 'even though perception appears to come about by means of an affection (διὰ πάθους τινὸς γίνεσθαι), it is itself surely a discrimination (κρίσις)'.

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We must distinguish between 'perceiving itself' (i.e. what perceiving essentially *is*) and the preconditions of perceiving (i.e. how it *comes about*) according to Alexander because, while the story of 'coming about' will be a story of being affected and changed, perceiving itself must be defined as something else – namely, discriminating (κρίνειν). And this distinction leads us directly to Alexander's answer to the question about the role of the perceptive soul: while the perceptive organs are affected by perceptual objects, the soul discriminates them without itself being in any way affected. Alexander repeats this point time and again, especially in a long stretch of his own *De Anima* (60.19–65.2) drawing on Aristotle's *De Anima* 3.2, 426b8–427a16.

This passage contains, among other things, Alexander's considered way of spelling out the model laid out at *An.* 1.4, 408a34–b18,[36] which holds that the media 'hand over' (διαδιδόναι)[37] the changes or affections to the peripheral organs, which in turn 'hand them over' to the central organ, although the central organ does not 'hand them over' to anything else, but rather 'sends' (διαγγέλλειν) them to the soul. This terminological difference seems to signal that the soul does *not* take these changes over, but rather discriminates (κρίνειν) them and thereby discriminates the perceptual objects causing these changes.[38] Throughout the passage, Alexander's point seems to be that because perceiving itself does not consist in being affected, nothing prevents us from ascribing it, under its essential (or formal) definition as a case of discrimination, to the soul itself.[39]

A part of the motivation behind this claim may come from the Hellenistic and post-Hellenistic intuition about being active (ἐνεργεῖν) as

[36] Alexander uses here the key phrase μέχρι τῆς ψυχῆς (63.13–17).

[37] This is another Platonic catchword; see e.g. *Tim.* 45d1–3, 67b2–4.

[38] For 'sending', see *An.* 64.17–20 and 63.28–64.4; cf. *Mant.* 15, 142.31–143.3 and 141.33–36. For 'handing over', see e.g. *An.* 39.20–1, 48.12–21, 64.8–11; cf. *An.* 39.21, *In Sens.* 21.12–16, 59.10–15, 128.22–4, 134.22–3, 135.8–11. Alexander's expression 'sending and handing over to the senses' at *In Sens.* 130.20–1 seems to reflect the ambiguity of 'the senses' referring indistinctly to the perceptive organs and the capacity of the soul active in them.

[39] Alexander's reading of *An.* 1.4, 408a34–b16 is thus not 'Rylean' (*pace* Caston 2012: 110). Significantly, when referring to the 'Rylean passage' at *An.* 23.5–24.3, Alexander never mentions 'discrimination', or even 'perception': it is seeing, hearing, and the like that he characterizes as belonging to the compound rather than the soul. However, he goes on immediately (*An.* 24.3–17) to consider the soul as the cause of living, which is what opens space for specifying the way in which it is involved in various activities (cf. 24.12–13 where the soul is described as 'what produces the motions of life', τῶν ζωτικῶν κινήσεων ποιητική). It is thus entirely consistent with Alexander's interpretation of the 'Rylean passage' when he later describes the soul's involvement in perceiving in terms of discrimination (κρίνειν) and claims that this is what perceiving essentially is.

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the opposite of being affected (πάσχειν):[40] as an activity – and, indeed, a complete activity – perception cannot be itself a case of being affected. But it is Alexander's acceptance of *Cause/Subject*$_P$ that seems to lie at the core of his strategy. Taking Aristotle's classification of perceiving as a kind of being affected as it stands would imply that the perceptive soul is itself affected by perceptual objects, and that cannot be so. Thus, Aristotle's classification must not be taken as it stands – in fact, it does not tell us anything about what perception is, it only captures the way in which perception 'comes about'.

This strategy encounters obvious exegetical difficulties when it comes to Aristotle's numerous assertions to the effect that perception *is* a kind of being affected by and assimilated to perceptual objects; so it is hard to resist the impression that Alexander is engaged in a project of *correcting* Aristotle. But Alexander's strategy is also confronted with philosophical difficulties; indeed, it helps to bring out difficulties that are not immediately obvious, but that any approach endorsing the *Impassivity of Soul*$_P$ as defended in *An.* 1.3–4 must face.[41] To put it bluntly, any such approach must face the following question: if the perceptive soul is to remain impassive, how can it ever 'get the message' that the perceptive organs are 'sending' to it? That is, first, how can it 'understand' the message, and, second, how can it 'know' at all that some such message is 'being sent' to it right now? Or, in a less metaphorical language: how does it come to be that the perceptive soul discriminates an external perceptual object and that it discriminates exactly the perceptual object that is now acting on the organs, if the soul is itself in no way affected by it? The concern here is directly related to the one raised by Aristotle against Anaxagoras:[42] it is unclear how something entirely impassive can come to know or discriminate anything and, a fortiori, to discriminate this or that particular object right now.

One may think that there is a simple response to this kind of query: we discriminate the object acting on our organs because discrimination is *the form of* perceiving whose *matter* is exactly the perceptual affections received by the organs.[43] However, in fact, this is just another way of *formulating the question*, for once discrimination as an 'activity' is contrasted with the 'affections' reserved to the body, the question is exactly *how* one can be 'the

[40] This is eloquently expressed at *Mant.* 2, 112.4–5, as quoted in Section 0.4, n. 40.

[41] These difficulties are especially repressed under the Rylean approaches to Aristotle. However, these approaches seem to be mistaken (see Section 5.2) and Alexander does not endorse any such approach (see n. 39).

[42] See Sections 2.2 and 2.7. [43] Cf. e.g. Heinaman 1990.

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form of the other.[44] Furthermore, since discrimination clearly has to do with the soul (as the primary cause of perception), the question is what difference the soul makes – that is, how it is responsible for the fact that the affections caused by perceptual objects and transmitted through the body lead to a discrimination of those objects rather than, say, just to a (failed) mediation. Alexander's answer seems to be that it is the perceptive soul itself that discriminates affections and, through these, the perceptual objects. But this only begs the question. The most charitable reading of Alexander's claim seems to be that the soul is *primarily responsible for* the fact that the bodily affections acquire the form of discrimination; again, though, the question is exactly *how*.

At this point, readers who lean towards a Rylean understanding of Aristotle may wish to say that I am making too much of Alexander's talk of 'sending' and that his assertions to the effect that the perceptive soul itself discriminates, as numerous as they are, should be taken with a pinch of salt: strictly speaking it is, of course, the man who discriminates on account of the perceptive soul. That is fair enough. Perhaps Alexander omitted any talk of 'sending' in his lost commentary on Aristotle's *De Anima*, and perhaps he even refrained from ascribing the activity of discrimination to the perceptive soul itself (although I doubt the latter). The point is that simply refraining from this would bring Alexander no closer to a satisfying solution; it would merely make the key question less apparent. Let us take for granted that it is not the soul itself that discriminates, but an individual man 'on account of the soul'.[45] This is a loss, not a gain, because, before, we at least had a name for how the soul is involved (albeit not a very helpful one).[46] If we just say that the *man* discriminates on account of the soul, we must then ask: on account of the soul *doing what*? Aristotle is confident that he has an answer to this question with regard to animal locomotion, and, *mutatis mutandis*, to passions or nutrition (although the details are somewhat thorny): the animal moves itself because *the soul moves its body without itself being moved*. But what does the soul do when the animal perceives? It is a Rylean error to think that one can save Aristotle by simply ignoring this question.

[44] Cf. again Charles' criticism of non-reductive materialist accounts as failing to provide any answer to this kind of question (e.g. Charles 2021: 148–51).

[45] This is, in fact, likely to be Aristotle's view: see Sections 6.4 and 6.5.

[46] Ascribing the discriminative activity to the soul itself risks falling prey to the fallacy that Aristotle thought to be endemic to earlier philosophy. What seems to happen is that, in searching for the soul as the ultimate *explanans* of a certain phenomenon, one in fact only adds to the number of explananda by making the soul itself another instance of this phenomenon (cf. Section 0.3).

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When we take the question seriously, the most intuitive way of answering it, on the same level of generality, will surely be this: the animal perceives because *the soul is changed or affected by the perceptual object*. But this is exactly what Aristotle seems to forbid us from saying in *An.* 1.3–4. It is to Alexander's credit that he has very much emphasized this point and it is also to his credit that his texts bring out just how difficult it then becomes to reconstruct Aristotle's account consistently. In the following section, we turn to the family of strategies that start exactly from rejecting this point.

5.4 The Perceptive Soul Is Not Impassive (Themistius)

The alternative starting point can be expressed by saying that 'the soul [of the perceiver] is involved in being affected along with the organs': the soul gets the message in the straightforward sense of receiving the changes or affections into itself as a proper subject of them. This allows one to take Aristotle's classification of perception as a kind of being affected quite literally: perceiving, indeed, *is* a kind of being affected and altered by perceptual objects, but a very special kind of it, owing exactly to the fact that 'the soul is affected along with the organs'. On account of this passivity of the soul, we may say, perception becomes a discriminative kind of being affected, a way of being affected by perceptual objects such that these objects are discriminated in it.

The quoted phrase comes from Themistius[47] and encapsulates what is distinctive of his approach to the seemingly inconsistent triad of tenets. Like Alexander, he seems to be taking *Cause/Subject*$_P$ for granted. Unlike Alexander, he takes perception to be essentially passive. This unavoidably leads him to conclude that the perceptive soul cannot be as impassive as it first seems to be from *An.* 1.3–4. Themistius' interpretation is interesting because (unlike many later interpreters) he is acutely aware of how precarious it is, both exegetically and philosophically. Indeed, it can be shown that his reasons for compromising the *Impassivity of Soul*$_P$ go beyond purely interpretative concerns and are motivated by developments in the philosophy of perception close to Themistius' own lifetime.

Throughout his paraphrasis of *An.* 1.3–4, Themistius is responding to a Neo-Platonist account of perception that 'a critic of Aristotle' has defended against Aristotle's argument. The catchword of this opposing account is that perception is 'a self-motion of the soul'. The thrust of the critic's

[47] *In An.* 104.27–8: συναπολαύει πως τοῖς αἰσθητηρίοις τοῦ πάθους.

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objection is that Aristotle was wrong to treat perception as a phenomenon that 'most reasonably' suggests that the soul undergoes a change *by the agency of something else*, namely of perceptual objects. Rather:

> they [i.e. the critic and his associates] will say that it [i.e. the soul] is moved (κινεῖσθαι) *by its own agency* with the motions (κινήσεις) of the soul . . . and that these motions come from the soul's essence and that it cannot be moved with these motions *by anything else* . . . (*In An.* 17.9–15, trans. R. B. Todd, modified)

The relevant changes or motions (κινήσεις) 'of the soul' coming 'from the soul's essence' are spelled out as 'discriminations' (κρίσεις).[48] Furthermore, the critic is reported to have likened perception to walking, where the walker stands for the soul and the ground on which she walks stands for the perceptual objects.[49] In Themistius' eyes, this account is 'ridiculous' and it only shows that the idea of an entirely impassive perceptive soul is a non-starter. Themistius agrees that perception involves a 'motion' (κίνησις) of the soul, and so he thinks that the only way to defend a genuinely Aristotelian account of perception against the Neo-Platonist speculation is by insisting that in perception both the body and the soul are 'being moved' *by perceptual objects*.[50]

When Themistius comes to the 'Rylean passage', he acknowledges that his interpretative approach faces difficulties. He is perfectly aware that his great predecessor, Alexander of Aphrodisias, took the passage as expressing Aristotle's commitment to the *Impassivity of Soul*$_P$, and that the 'critic' seems to have followed Alexander's lead. Themistius, however, opposes this interpretative claim by referring to later chapters of *De Anima*, particularly *An.* 2.5 introducing the preservative πάσχειν and *An.* 3.7 where – on Themistius' reading – Aristotle characterizes perception as 'a different kind of motion/change (κίνησις)'.[51] In those later chapters, according to Themistius, Aristotle distinguishes between two kinds of 'being moved', one of which can indeed be ascribed only to bodies, while the other defines exactly the way in which one can talk about the soul itself being moved by perceptual objects. The exegetical proposal is that, in *An.* 1.3–4, Aristotle is considering only the first kind of motion. His endorsement of the *Impassivity of Soul*$_P$ here thus requires strong qualification:

[48] See *In An.* 16.19–21. [49] *In An.* 17.33–36. [50] See *In An.* 17.29–39.
[51] See *In An.* 28.34–29.3, which refers to *An.* 3.7, 431a4–7. The point is, regrettably, lost in Todd's translation because he understands the ambiguous phrase ἄλλο εἶδος κινήσεως at 431a6 differently from Themistius, translating 'a kind distinct from movement'.

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> Clearly, then, he [i.e. Aristotle] cannot be directly contesting [here] that the soul is moved (μάχοιτο ἂν οὐ προηγουμένως[52] πρὸς τὸ κινεῖσθαι τὴν ψυχήν), but only that it is moved with motions of the body (πρὸς τὸ [[μὴ]] κινεῖσθαι τὰς τοῦ σώματος κινήσεις). These [issues] might be settled without difficulty in this way, although it is not very easy to gain full insight into them. (*In An.* 29.3–7, trans. R. B. Todd, modified)

To put it bluntly, whereas Alexander argued that *An.* 1.3–4 necessitates a qualification of Aristotle's claim in *An.* 2.5ff. that perception is a kind of being affected, Themistius argues that *An.* 2.5ff. develops such a notion of being affected and being moved that it allows us to qualify the claim from *An.* 1.3–4 that the perceptive soul is unmoved and impassive and to meaningfully assert, in Aristotle's name, that the soul itself *is* moved by perceptual objects.

Recent scholars have added further support to this approach developed first by Themistius. It was argued that in *An.* 2.5 Aristotle is explicit about intending to define precisely the kind of being affected and being altered *applicable to the perceptive soul*: the subject of his discussion is τὸ αἰσθητικόν, and τὸ αἰσθητικόν means the perceptive capacity of the soul.[53] I have already suggested that (a) comparison with *An.* 2.4 warrants caution in expecting *An.* 2.5 to say something specific about the role of the soul (Sections 1.1 and 3.7) and that (b) the first occurrence of the expression τὸ αἰσθητικόν in *An.* 2.5 suggests that Aristotle means more broadly 'that which can perceive', prior to any hylomorphic analysis into the perceptive body and the perceptive soul (Section 2.4). As regards the wider context of Aristotle's use of the expression τὸ αἰσθητικόν: (c) it is noteworthy that even in *An.* 2.1–3, which is cited as the crown witness of this approach, Aristotle does not shy away from using the adjective αἰσθητικόν to refer to perceptive bodies;[54] (d) when Aristotle uses parallel expressions (τὸ γευστικόν, τὸ ἁπτικόν, and the like) in *An.* 2.7–11 and applies the assimilation model to them, he seems always to refer to perceptive

[52] This is the position of προηγουμένως suggested by the Arabic translation (in Greek manuscripts it comes after κινεῖσθαι). The Arabic translation also supports Heinze's deletion of μή in what follows. For the Arabic translation, see Lyons 1973; the present passage is helpfully analysed by Browne 1986: 225.

[53] See Lorenz 2007: 192–6; cf. Carter 2018, 53–8 and Carter 2019a, 161–7. For a different attempt at qualifying Aristotle's commitment to the impassivity of the soul, see Tweedale 1990.

[54] On one occasion (*An.* 2.1, 412b22–5), Aristotle uses the expression to refer to the 'whole perceptive body qua perceptive' (τὸ ὅλον σῶμα τὸ αἰσθητικὸν ᾗ τοιοῦτον), which is said to be related to the whole perceptive capacity (ἡ ὅλη αἴσθησις) as the parts of the former are related to the parts of the latter. On another occasion (*An.* 2.3, 415a6–7), τὰ αἰσθητικά mean 'the animals endowed with perception'. Cf. e.g. *Cat.* 7, 8a6–8 where τὸ αἰσθητικόν is introduced obviously with the meaning of 'the perceptive being', i.e. the animal.

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bodies;[55] (e) when summing up the inquiry of *An.* 2.5–3.2 Aristotle does so in terms of asking about the principle on account of which the animal as a whole is said to be perceptive (αἰσθητικόν).[56] Interestingly, the forefather of this approach, Themistius, agrees with these findings.[57] There are, to be sure, other passages in the *De Anima* that may seem to suggest that Aristotle does, after all, allow the perceptive soul itself to be affected by and/or assimilated to perceptual objects,[58] but I shall argue that none of them actually implies this.[59] For now, I want to add a few comments on why the Themistean approach is problematic, specifically with respect to Aristotle's argument at *An.* 1.3–4.

First, Themistius' solution stands or falls with his distinction between psychic and bodily motions/changes (κινήσεις). But not only is this distinction absent from *An.* 1.3–4, it also appears to be philosophically dubious. It threatens to assimilate soul to bodies in the way in which Plato arguably did and that Aristotle was eager to overcome. Moreover, some of Aristotle's arguments in *An.* 1.3 can be turned against Themistius' view, beginning with the argument at 406a12–22: something can be itself moved and altered only if it is itself *in a place* – but it is a category mistake to ascribe a place to the soul.[60]

Second, Themistius' interpretation of *An.* 1.3–4 threatens to undermine the core of Aristotle's argument against Plato – exactly along those lines intended by 'the critic of Aristotle'. Aristotle complains that, by ascribing motion/change (κίνησις) to the soul, Plato *assimilates it to bodies* (so that his account can be treated on a par with that of Democritus).[61] But this

[55] This is clear at *An.* 2.11, 423b29–31 (discussed in Section 6.4). See also *An.* 2.10, 422b3–5 with b15–16; or *An.* 2.9, 422a6–7.

[56] *An.* 3.2, 427a15–16. It can be further argued that, when Aristotle builds on his analysis of τὸ αἰσθητικόν at *An.* 3.4, 429a13–29 to contend that νοῦς is not compounded with a body, he must be taken to mean *not* the perceptive part of the soul, but the perceptive part of the *animal*, which comprises both a soul and a body; cf. Caston 2000: 145–6.

[57] At least he seems to take τὸ αἰσθητικόν to refer, within *An.* 2.5, broadly to perceptive beings, and not specifically to their souls, see *In An.* 56.39–57.9.

[58] See *An.* 2.8, 420a30–1; 2.10, 422b2–3; 2.12, 424a17–19, 22–3; 3.2, 426a3–5, 426b31–427a2; 3.8, 431b21–432a3; 3.12, 435a8–10.

[59] See Sections 7.4 and 7.5 and the Appendix.

[60] The soul is in a place only coincidentally insofar as its body is in a place in its own right; cf. *Phys.* 4.5, 212b7–14.

[61] See *An.* 1.3, 406b25–8; for the anti-Platonic point of *An.* 1.3–4, see Menn 2002: 84–102. Aristotle's strategy here resembles his attack on Plato and the Academy in his *Metaphysics* (see B.2, 997b4–12; Z.16, 1040b30–1041a5; M.9, 1086b7–13). Plato promises to lead us to purely immaterial ἀρχαί and to the soul as a non-bodily primary cause of life and, in both cases, Aristotle thinks that this is a commendable aspiration. However, in his view, Plato fails on both counts to deliver on what he promised: he conceives of the immaterial ἀρχαί as replicas of perceptual objects with an added prefix αὐτο-; and, similarly, he conceives of the soul as a quasi-bodily agent.

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objection loses most of its power once Aristotle is read as himself relying on a distinction between psychic and bodily motions with regard to perception. Plato obviously wants to ascribe *psychic* and not bodily motions to the soul (as 'the critic' duly stresses). Accordingly, if Aristotle's point in *An.* 1.3–4, as Themistius argues, is just that the soul cannot be moved with *bodily* motions, then his criticism of Plato is undermined, because Plato would fully agree.[62] This might be a welcome result for someone like Themistius who aspires, to a large extent, to reconcile Plato and Aristotle, but it does not offer a very charitable reading of *An.* 1.3–4.

One could attempt to resist this conclusion in the following way.[63] In *An.* 1.3–4, Aristotle's criticism is not directed against the idea of ascribing *bodily* motions or changes to the soul (as Themistius says somewhat ineptly), but rather against the idea of ascribing *ordinary* changes to the soul. This is what Plato does and what Aristotle prevents. It is by failing to distinguish the kind of changes applicable to the soul from the ordinary changes that Plato assimilates the soul to the body. But, while Aristotle prevents ascribing ordinary changes to the soul, he is free to ascribe non-ordinary changes to it as defined in *An.* 2.5. In this way, Aristotle would not be simply relying on a distinction between bodily and psychic changes. Rather, he would be developing a distinction between two kinds of changes that are defined independently of whether they belong to the body or to the soul. Thus, his criticism of Plato could stand insofar as the latter lacks Aristotle's technical distinction between two kinds of change.

Against this line of defence, one can imagine someone like Alexander raising two kinds of objections. First, Aristotle's argument in *An.* 1.3–4 would still be somewhat disappointing. Several of the concepts introduced here would, to say the least, lose their power. The distinction between undergoing a change in its own right and undergoing a change coincidentally would play no significant role in the case of perception, for both the body and the soul would be undergoing a change in their own right, albeit a different kind of change in each case. Indeed, the point of the 'Rylean passage' concerning perception would verge on an empty truism: stating that a perceptual change reaches *up until* the soul but is not a change *of* the soul would simply mean that when it enters the soul it is no

[62] Aristotle could still, to be sure, insist that the soul as such need not be moved *in order to move the body*, and that it cannot be *essentially* in motion. But he would be inaptly overstating his point when claiming that the very idea of 'a change (κίνησις) belonging to it is utterly impossible' (406a2–3).

[63] I owe thanks to Hendrik Lorenz for a discussion of this option.

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longer a change of the body but becomes a change of the soul. The way Aristotle proceeds would be utterly confusing: instead of pointing out (as Themistius would want him to) that there is no difficulty in saying that in perception the soul itself is undergoing a change, once we realize that this is a special kind of change, Aristotle would have to be understood as gratuitously misleading the reader by flatly denying any change to the soul, without bothering to indicate that he means only *a certain kind of* change.[64]

Second, some of Aristotle's arguments in *An.* 1.3–4 would still threaten to undermine his own position. It is not clear why the non-ordinary changes should be exempt from the requirement that the subject of a change itself be in a place. After all, Aristotle never lifts the demand raised in *GC* 1.6 that the subject of being affected must *be in contact* with the agent; and being in contact presupposes being in a place.[65] However, we have seen that, by Aristotle's lights, it is absurd to conceive of the soul as itself being in a place.[66] Moreover, at *An.* 1.3, 406a30–b3, Aristotle seems to anticipate the move that Themistius recommends, and he argues against it. If the alleged changes of the soul are to explain the changes of the body produced by the soul (as all sides agree), then, Aristotle argues, they must be *the same kind of* changes, otherwise talking about 'changes' of the soul is idle.[67] Aristotle's reasoning here will apply *mutatis mutandis* to perception: if the involvement of the soul in perception is to be analysed in terms of the soul itself undergoing the changes transmitted by the body, then what is transmitted through the body and what is received by the soul must be the same kind of change; otherwise, the assumption will be idle or will beg the question. Aristotle can thus be understood as anticipating the idea of distinguishing between 'bodily' and 'psychic' changes – and denouncing it as a piece of sophistry.[68]

[64] Cf. Ferro 2022,:125–43 for a reading of *An.* 1.4, 408a34–b18 as a refutation of the Platonic assumption that the soul's causal role in explaining phenomena of life (including perception) involves *sui generis* motions of the soul itself. Contrast the 'interactionist' reading of the passage endorsed by Robinson 1983: 131.

[65] See *Phys.* 5.3. [66] See again *An.* 1.3, 406a12–22.

[67] 'Furthermore, since it [i.e. the soul] clearly moves the body, there is a good reason to assume that it moves [the body] with the same kind of motions (κινήσεις) with which it is moved itself. And if so, then it is also true to say, the other way round, that the soul is moved with the same kind of motion that the body is moved with.'

[68] Are there no cases of one kind of change producing another kind of change that are taken for granted by Aristotle himself, such as the idea of an alteration producing expansion, leading to locomotion? My answer is: yes, there are innumerable cases of this kind, but the 'transformation' of one kind of change into another takes place within one and the same entity, for example the *pneuma* that is expanded by *itself* being heated. On this model the perceptive soul itself would still need to

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Accordingly, *An.* 1.3–4 contains serious reasons against adopting the Themistean strategy. What Themistius seems to be doing is effectively returning – or at any rate coming very close to – the conception, encapsulated in the *Platonic Formula*, that Aristotle set out to overcome in *An.* 1.3–4. Another, independent, reason against adopting this strategy is provided by *An.* 2.5 itself, at least if the interpretation of it developed in Chapters 1–3 was on the right track. By spelling out the role of the soul in terms if it being itself, together with the body, the subject of the relevant kind of change resulting in a likeness to the perceived object, Themistius is effectively giving up on understanding the dynamic nature of this likeness. If what happens at time *t* of perceiving *F* is that both the organ and the soul *are F*, there remains nothing that could explain how the perceiver can be further affected by *F* at *t*, and so perceptual contact will be lost.[69]

Alexander's approach to *An.* 1.3–4 appears to be more faithful to the programme formulated in this portion of the treatise than Themistius', and he succeeds, unlike Themistius, in avoiding the problem of losing perceptual contact. However, his interpretation gets into other kinds of difficulties of its own, sketched out in the preceding section. Moreover, I shall contend that it is in fact not sufficiently faithful to Aristotle's programme, either. This is the case because Aristotle not only aims at advocating the *Impassivity of Soul*$_P$ but also intends – as rightly emphasized by Themistius – to account for the *Passivity of Perception*. So, Aristotle's programme turns out to be more ambitious than either of the two sides recognizes, as shown by his rejection (most explicit in the 'Rylean passage') of *Cause/Subject* – even for the case of perception.

5.5 The Soul as an Efficient Cause of Perception

The dilemma that divides Alexander and Themistius did not disappear with antiquity. A very similar set of questions can be seen in the medieval debate concerning the so-called agent sense. Inspired by an *obiter dictum* in Averroes' *Long Commentary on De Anima*,[70] some Latin thinkers defended

undergo a bodily change by which it would be changed 'psychically'. (I am grateful to Jason Carter for this objection.)

[69] Alternatively, the idea could be that the organ retains its mediating neutrality, while the soul comes to be *F* at *t*. That would explain why the organ can continue being affected but would still fail to explain the soul's continued involvement. As long as this involvement is conceived in terms of the soul itself being affected, perception would *become impossible* once the soul had been assimilated to the perceived object. Thus, the same kind of problem arises here on the level of the soul as it did on the level of the perceptive organs for both the materialist and spiritualist approaches in Section 4.6.

[70] *LC* 221.40–57 (Crawford); the key portion is cited in n. 78.

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the existence of a *sensus agens*, parallel to the 'agent intellect' (from *An.* 3.5), as a necessary causal ingredient in any act of perceiving. The argument could proceed quite far along the lines already familiar to us from Section 5.3.[71] The soul, as the proper cause of perception, cannot simply be itself affected by the body,[72] so perceiving (*sentire*) cannot be itself any kind of 'being affected' (*pati*). Rather, it must be a kind of acting (*agere*) – that is, 'producing perception' (*efficere sensationem*) or judging (*iudicare*) – for which 'being affected' – that is, receiving the perceptual *species* – is only an enabling condition. The soul is thus a productive cause (*causa activa*) of perception.[73] The most striking difference between this view and Alexander's position is the systematic employment of the idea of the perceptive soul as a *sensus agens*, that is, as *an efficient cause* of perception. However, in the form just outlined, this approach seems to face similar kinds of difficulties to those faced by Alexander: we would like to know what exactly the soul is doing as the primary cause of perception, but the only answer we seem to get is that it produces perception, which makes the approach look suspiciously circular.[74]

On the opposite side of the medieval debate, we find thinkers such as William of Auvergne and Thomas Aquinas who have little patience with the idea of an agent sense. They claim, instead, that the only agent of perception is the external perceptual object, and perception just *is* a way of being affected by and assimilated to it (albeit a very special way).[75] This insistence on the *Passivity of Perception* then standardly leads to compromising the *Impassivity of Soul*$_P$ in a way that is also already familiar to us. Indeed, in his commentary on *An.* 1.3–4, Aquinas seems basically to be

[71] What follows is a drastically simplified and schematic outline of the argumentative strategy put forward at the beginning of the fourteenth century by John of Jandun. For the relevant texts, see Jandun's *Questions about Aristotle's On the Soul* and Pattin 1988: 111–234. For a reconstruction of Jandun's position, see MacClintock 1956. For an overview and the Averroist background, see Brenet 2014. For Jandun's connection to Augustinianism, see Silva 2020. There were, to be sure, also other, quite different, readings of Averroes' remark. Giles of Rome, for one, thought that Averroes could have had celestial bodies, like the Sun, in mind – although that is hardly an agent *sense*.

[72] For this principle in Jandun's thought, see Brenet 2014, 161.

[73] See e.g. Pattin 1988: 148.31–149.58; cf. Jandun, *QAn.* 2.14, col. 123–4 and 2.31, col. 199.

[74] The picture is further complicated by Jandun's assumption of a passive sense next to the agent sense (e.g. in *QAn.* 2.16 *passim*), implying that the perceptive soul becomes, in one of its aspects, the proper subject of being affected – something that Alexander would never allow.

[75] For a list of references to Aquinas and his followers on this point, see Pattin 1988: 7–15. Some passages in Aquinas suggest that there is an active ingredient in perception that is distinct from its passivity. For the historical setting of this Middle View, see Martin 2022: 160–263 (on Aquinas in particular, see pp. 179–86). This tendency is even more pronounced in William of Auvergne; see e.g. Silva 2019.

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repeating Themistius' points. When it comes to the 'Rylean passage', he insists, like Themistius, that Aristotle cannot intend to deny without qualification that the soul can be moved. What he must mean, instead, is that it cannot be moved with any 'motion of a natural kind' (*motus secundum esse naturale*) such that only bodies can undergo. If this is the point, it leaves open the option, to be developed in later chapters, that the soul is in fact moved with 'motions of a spiritual kind' (*motus secundum esse spirituale*).[76]

This medieval debate is, obviously, even further beyond the scope of the present study than the ancient debate briefly summarized in Sections 5.3 and 5.4. The reason for bringing it up is not only to show how the ancient dilemma continued to divide interpreters of Aristotle; the thesis of the so-called 'agent sense' is also interesting for us because it introduces into the discussion a new element – with a more solid support in Aristotle than is often recognized – which may open a path out of the dilemma that has concerned us in this chapter. It is worth noting that Jandun's version of *sensus agens*, sketched out schematically above, takes a recognizably different direction from the famous passing remark of Averroes. In Jandun's view, the reception of perceptual *species* is explained purely in terms of the agency of perceptual objects, while the role of the agent sense is limited to producing a 'perceptual cognition' of them.[77] Averroes, in contrast, introduced the idea of a second agent of perception – distinct from the perceptual object – as a possible response to a doubt one may have about the very idea of a *species* or 'intention' as a different mode of presence, in the perceiver, of the form that is materially present in the perceptual object. Averroes' doubt can in fact be taken as an additional potent objection against the Themistean strategy: saying that an ensouled organ, or even the soul itself, receives the form in a different mode of being (i.e. 'psychically' or 'spiritually') merely begs the question, because this difference of being cannot be explained by a difference of what the form is received in. What needs to be accounted for, instead, is how its mode of being is *transformed* in the first place, so that it can be received in a

[76] Aquinas, *In An.* 1.10, §159 (cf. 2.24, §§553–5). For the heavy influence that Themistius' *In An.* (translated by William Moerbeke in 1267) had over Aquinas' commentary (finished in 1268), especially on *An.* 1, see Verbeke 1957: vii–xix and Gauthier 1984: 274–82 (cf. Fryde 1994). The Themistean background can shed light on the dilemma whether, according to Aquinas, perceptual forms are received by the organ or by the perceptive capacity of the soul (for a classical statement of this dilemma, see Cohen 1982, cf. Tweedale 1992). Themistius, as we have seen, holds that perception can occur only when the form is received *by both*; and Aquinas seems to unreservedly follow Themistius on this point – at least in his *In An*.

[77] See e.g. Pattin 1988: 164.8–14.

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different kind of substrate.[78] It is exactly because we must explain how there can be something like a *species* or 'intention' that is received by a perceiver that we need to posit, according to Averroes, another agent – besides the perceptual object – which is responsible for this transformation. This is the case because, on his view, only something *actual* in the relevant respect, and not a merely *potential* substrate, can actualize the potentiality on the side of perceptual objects for becoming a species.[79]

More than two centuries after the main debate, Jacoppo Zabarella still finds it appropriate to dedicate an entire section of his commentary on Aristotle's *De Anima* to the question of the *sensus agens*.[80] Furthermore, he seems to come at least somewhat closer to Averroes' original position than Jandun in insisting that the form of the perceptual object is properly *received* only once the soul has acted upon it and 'absorbed' it into its discriminative act.[81] Unfortunately, Averroes' passing remark does not allow us to extract any full-fledged account, and he himself acknowledges the difficulty of the task.[82] Moreover, the parallel with the 'agent intellect' from *An.* 3.5, decisive for the whole Latin debate down to Zabarella, seems unfortunate in suggesting that there are two different *kinds of sense*: a

[78] See *LC* 221.44–50 (Crawford): 'And one cannot say that this difference derives from a difference of subject (*accidit per diversitatem subiecti*), so that intentions come about on account of a spiritual matter (*propter materiam spiritualem*) which is the sense, not on account of an extrinsic agent (*propter motorem extrinsecum*). For we should stick to the view that the cause of a difference of matter (*diversitas materie*) is a difference of forms (*diversitas formarum*) rather than a difference of matter being the cause of a difference of forms.'

[79] Jandun parts with this idea, arguing that the agent sense has nothing to do with the reception (this contrast is helpfully brought out by Brenet 2014). A part of Jandun's reasons for rejecting this version of *sensus agens* may be a worry that it would bring Aristotle's account too close to a kind of Protagorean relativism according to which the object of perception is a common product of the perceiver and the thing acting upon her (cf. Pattin 1988, 148.31–5). If this is, indeed, the worry, it is a good one; but there may be better ways of avoiding the relativist consequences (more on this in Chapter 6).

[80] See his *Liber de sensu agente* (Zabarella 1605: fols. 106–30 = Zabarella 1619: 505–98; the first part of this book is not a commentary, but a systematic discussion of the question of *sensus agens*, see Zabarella 1605: fols. 106–12 = Zabarella 1619: 505–30).

[81] 'So once the form of a colour has been received in the eye (the efficient cause of this being the external material colour), [an act] emanates from the very nature of the soul (*emanet ab ipsa natura animae*), in order to absorb into its substance that form and to become spiritually that colour (*ut in sua substantia imbibat illam speciem, & fiat spiritualiter color ille*), and this is called perceiving. In this way, the soul is an efficient cause of perception through emanation (*sensionis causa effectrix per emanationem*), and this act emanates from the soul (*haec operatio emanat ab anima*) but is received (*recipitur*) both in the soul itself and in the whole ensouled eye.' (Zabarella 1605, fol. 112 = Zabarella 1619: 528D–E, cf. 529B–C).

[82] See *LC* 221.55 (Crawford): 'But Aristotle was silent about this [agent/consideration] in the case of perception because it is not obvious (*quia latet*).'

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passive and an agent one.[83] What makes Averroes' famous remark nonetheless interesting for our purposes is that we can disregard the idiosyncrasies of the Latin reception and see Averroes' reflection as providing an alternative framework for addressing the dilemma that has concerned us in the present chapter.

Averroes' insistence that a difference of substrate cannot explain a difference of what is received in it, and that a second agent is required already on the level of reception, can be read as perfectly neutral both on whether the soul is itself affected, and on whether perception is essentially passive. Accordingly, the idea of a second agent may allow us to develop Aristotle's account of perception in a way that would avoid compromising either the *Impassivity of Soul*$_P$, or the *Passivity of Perception*.

In fact, as noted above, there is solid support in Aristotle for the idea of a second agency involved in perception and ascribed to the perceptive soul. There are two passages in which Aristotle seems to describe the soul as an efficient cause of perception characterized as a kind of alteration. One of them comes as a part of Aristotle's official statement in *An.* 2.4 on the different senses in which the soul is to be understood as the cause of life in ensouled bodies:

> And the soul, for sure, is also that from which as first (ὅθεν πρῶτον) the locomotion starts. Such a capacity (δύναμις) does not belong to all living things. But there is also an alteration (ἀλλοίωσις) and a growth that are due to the soul (κατὰ ψυχήν). For perception appears to be a kind of alteration (ἀλλοίωσίς τις) and nothing can perceive which has no share in soul. And similarly with growth and ageing, for nothing ages or grows naturally without nourishing itself and nothing nourishes itself which has no share in life. (*An.* 2.4, 415b21–7)

Not surprisingly, Zabarella puts much emphasis on this passage as a key support for Aristotle's commitment to the idea that the perceptive soul is an efficient cause of perceiving.[84] It is also not surprising that interpreters following the Themistean strategy are usually silent about this passage.[85] It seems impossible for the soul to be the subject of an alteration of which

[83] This is the main point on which Zabarella (rightly, I think) criticizes Jandun. Zabarella's view is that there is a single sense that both acts and is affected; see Zabarella 1605: fol. 112 = Zabarella 1619: 530A–D.

[84] Zabarella 1605: fols. 87–8 = Zabarella 1619: 438D–E.

[85] When Themistius and Aquinas come to the passage they duly repeat what Aristotle says, but without adding a single word of clarification, let alone drawing implications from the statement. The passage is mentioned by Lorenz 2007: 212 n. 66, in the context of his argument that, in *An.* 2.5, Aristotle ascribes 'quasi-alterations' to the perceptive capacity of the soul itself, but without explaining how exactly it is supposed to fit within that argument.

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it is an efficient cause, at least if we stick to Aristotle's account of agency in *Phys.* 3.3 as an activity of the agent *in* the patient (and unless we commit Aristotle to Jandun's idea of two distinct kinds of sense).

The context of the quoted passage from *An.* 2.4 is worth emphasizing. Aristotle begins from his official quadripartition of causes and, excluding material causality as a role that would be inappropriate for the soul, he works through the other three kinds one by one. It is obvious that he wants to communicate something by insisting that over and above being a formal and a final cause,[86] the soul is also an efficient cause and is so even in the case of perception. Nor should we be discouraged by Aristotle's cautious formulation that perception is a kind of alteration that is 'due to the soul' (κατὰ ψυχήν) – as if he were backing away from classifying the causality in question as genuinely efficient.[87] First, he uses exactly the same phrase to capture the relation of the soul to growth, and he treats growth and diminution (together with nutrition) here as directly parallel to perception as far as the kind of causality of the soul is concerned. This confirms that 'being due to the soul' is nothing short of describing the soul as an agent acting on the body, for this is unambiguously the role that Aristotle will ascribe to the soul in nutrition later in *An.* 2.4 (416b20–3).[88] Second, Aristotle repeats the same point in *PA* 1.1, where his expression contains no such ambiguity: the perceptive part of the soul is characterized as a principle of change (κινήσεως ἀρχή) – namely, a qualitative change (ἀλλοιώσεως). Against the background of *An.* 2.4, it appears very likely that the kind of qualitative change Aristotle has in mind is just the one that perception was identified with at 415b24 (and elsewhere).[89]

Given Aristotle's general reticence in the *De Anima* with regard to spelling out the precise role of the soul in the relevant activities,[90] the

[86] Discussed at 415b7–15 and 415b15–21, respectively.

[87] In line with the strategy of effectively reducing the efficient causality of the soul to a kind of formal causality, for which see e.g. Frede 1992. For a critical discussion, see Fernandez and Mittelmann 2017: 143–53; cf. Miller 1999b and Witt 1996. More on this in Section 7.3.

[88] Cf. *PA* 2.7, 652b11–12.

[89] 'However, it is not the case that all soul is an origin of change (κινήσεως ἀρχή), nor all its parts; rather, of growth the origin is the part which is present even in plants, of alteration the perceptive part (ἀλλοιώσεως δὲ τὸ αἰσθητικόν), and of locomotion some other part (φορᾶς δ' ἕτερόν τι), and not the thinking part' (*PA* 1.1, 641b4–7, trans. J. Lennox, slightly modified; cf. Le Blond 1945: 157 n. 60). The only alternative to identifying the alteration in question with perception itself would be to interpret it in terms of the thermic *reactions to* perception (for which see *MA* 8–9 and an illuminating discussion in Corcilius and Gregoric 2013: 65–74); but those are already a part of the self-moving mechanism of the animal, and so it would be strange for Aristotle to raise a separate question regarding the part of the soul responsible for locomotion (φορᾶς δ' ἕτερόν τι . . .).

[90] Even in the case of nutrition, where the situation seems to be relatively clear, Aristotle's pronouncement is limited to a single succinct sentence: τὸ μὲν τρέφον ἐστὶν ἡ πρώτη ψυχή (*An.*

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present passage (combined with *PA* 1.1) should be taken very seriously as providing strong evidence of his considered view on the matter. However, this has rarely been done, which seems largely to be because of the difficulty inherent in the issue. The idea of understanding the soul as an efficient cause is challenging and controversial on its own,[91] and the difficulties multiply exponentially when we start to ask specifically about the way in which Aristotle intended to apply the model of impassive efficient causes to the perceptive soul, particularly because an efficient cause of perception has already been identified in the perceptual object. Accordingly, it is not very surprising that little has been written on the matter since Zabarella.

On the one hand, we find accounts in which an efficient causality is ascribed to the soul in relation to perception, but not in the sense of making the perceptive soul an efficient cause of perception itself. Thomas Johansen developed such a view, wherein the perceptual range of each sense is being actively adjusted (when, for instance, on a bright day one enters a dark cave),[92] and he offered a minimalistic interpretation of how the soul is *indirectly* an efficient cause of perception, drawing on *An.* 2.5, 417b16–18. From the observation that the development of the perceptual apparatus is initiated by the sperm, but once the heart has been formed it is the individual soul that governs and completes this development, Johansen infers that 'the sense-object only brings to the final stage of activity a series of changes in the animal of which the animal has itself, from conception on, been the efficient cause'.[93] Moreover, Klaus Corcilius and Pavel Gregoric have offered a detailed account of how perception can be the efficient cause of thermic alterations around the heart that lead to animal locomotion.[94]

On the other hand, some scholars have affirmed that, according to Aristotle, the perceptive soul is, indeed, an efficient cause of perception itself, but without spelling out the details or at least showing how this could be done.[95] The only exception in this respect, to my knowledge, is a

2.4, 416b21–2). In the case of perception, no passage within *An.* 2.5–3.2 *obviously* answers the question about the role of the perceptive soul. In Sections 6.4 and 6.5, though, I argue that the key clue is contained at *An.* 2.11, 423b31–424a10.

[91] More on this in Section 7.3. [92] Johansen 2002.

[93] Johansen 2012b: 128–45 (for the quotation, see p. 142).

[94] Corcilius and Gregoric 2013: 54–78.

[95] See Diamond 2015: 140–1, who suggests that we should look for a model of the soul's efficient causality in Aristotle's account of the discriminative mean in *An.* 2.11 (as I shall also suggest we do in Chapters 6 and 7), but without spelling out what kind of model that could be (moreover,

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paper by Klaus Corcilius: although he does not explicitly refer to the idea of the soul being an efficient cause of perception, he does offer a detailed, non-circular account of, as he puts it, the soul's 'causal role in the production of phenomenal content'.[96] One advantage of Corcilius' account over Zabarella's (which is based on the ambiguous notions of 'emanation' and 'absorption')[97] is that it draws on Aristotle's own notion of a discriminative mean, as introduced in the final passage of *An.* 2.11.[98]

The aim of the cursory overview of the history and the textual basis for the idea of an agent sense provided in this section was to suggest that this idea may open a perspective on our dilemma that is yet to be systematically explored. It is true that the idea can easily collapse into a position akin to Alexander's, with all its difficulties and perhaps even more, but this need not be the case. The mark of progress on this topic, I submit, would be if we succeeded in spelling out the agency of the soul in a non-circular way. That is, if we succeeded in describing – in at least as informative a way as that which is provided by the conception of the soul as the unmoved mover of locomotion, passions, and nutrition – the soul's role in perception. The task would be to explain *by doing what* the soul is responsible for animal perception without compromising either the *Impassivity of Soul* or the *Passivity of Perception* and without taking anything away from the status of perceptual objects as the

Diamond 2015: 21 seems to assume that the soul itself receives perceptual objects and he does not explain how this could be compatible with its role as an efficient cause). Aristotle's claim that the soul is an efficient cause of perception is also emphasized by Patricio Fernandez and Jorge Mittelmann when they maintain that 'the craft analogy is applicable to perception, making it fit within a general "instrumentalist" picture of soul' (Fernandez and Mittelmann 2020: 269). Unfortunately, they do not explain the way in which it is supposed to fit, and one might wonder whether their commitments elsewhere leave any room for it to do so. They suggest that we should read *An.* 2.4, 415b21–7 in light of *An.* 2.5, 417b2–12, which they interpret in a deflationary way as implying that 'the so-called alteration will consist only in the faculty's transition from inactivity to activity' (p. 269 n. 32). Accordingly, what the soul seems to be an efficient cause of is, apparently, just the transition of its perceptive capacity from inactivity to activity. That may still fit the characterization of efficient causality as primarily 'a relation between a psychic capacity and its acts' (Fernandez and Mittelmann 2017: 164), but, if so, it seems to make this characterization too broad to successfully express any specifically efficient kind of causation. One would expect, in line with *Phys.* 3.3, at the very least, that the 'acts' will be acts of the agent *in something else* (or in itself *as something else*); but once the alteration is reduced to the faculty's own transition, it seems impossible to comply even with this minimal requirement.

[96] Corcilius 2014: 48; cf. Corcilius 2022: 146. [97] See n. 81.

[98] Cf. Miller 1999a, who emphasizes the idea of the perceptive soul as being an efficient cause of perception. He identifies its agency with discrimination along the lines of *Composition* (cf. Section 4.4). Discrimination, on Miller's epigenetic account, seems to be a primitive act of the soul that eschews explanation. However, there are reasons to doubt that discrimination is, in Aristotle's view, uniquely psychic (cf. Caston 1999: 221).

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primary agents of perception. This is exactly what Chapter 7 will attempt to do.

However, before embarking on this endeavour, we must further prepare the ground by inquiring into Aristotle's notion of discrimination (κρίνειν) and of the 'discriminative mean' in Chapter 6.

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CHAPTER 6

Perception as a Discriminative Activity

6.1 The Logic of Discrimination

We have seen (in Section 4.7) that Aristotle's notion of perceptual discrimination (κρίνειν) conveniently encapsulates the difference between how (i.e. with what result) perceivers and non-perceptive entities, respectively, are affected by perceptual objects – that is, exactly the difference for which the perceptive soul is supposed to account. But we have also seen that different views are available regarding how exactly discrimination is intended to fit within the assimilation model of perception as it is worked out primarily in *An.* 2.5. Furthermore, we have seen that these differences go hand in glove with differences in understanding how the perceptive soul fits in – that is, *in what way* it is supposed to be the sought-after first principle of perception. It is now time to dig deeper into the notion of perceptual discrimination (Sections 6.1, 6.2, and 6.3) and the account of it offered in *An.* 2.11 (Sections 6.4 and 6.5). The proposed interpretation of the latter will then lead us directly (in Sections 7.2 and 7.3) to a more concrete elaboration of the third potential approach to the role of the perceptive soul outlined in Section 5.5.

Let us begin from the question of *meaning* ascribed in the *De Anima* to κρίνειν. Theodor Ebert showed decisively how misleading it is to translate the verb as 'to judge'. By 'judging' we primarily understand 'passing judgment on' something, or 'contending' – 'asserting' something in a way that can turn out to be either right or wrong. However, κρίνειν never means that – at least not in the *De Anima*.[1] Even in what Ebert (following Bonitz)[2] calls the 'judicial sense' (*sensus iudicialis*) of κρίνειν, it is better rendered as, for instance, 'deciding' a case.[3] Furthermore, according to Ebert, this is just a special use of κρίνειν; its 'primary sense'

[1] But see Section 4.7, n. 89. [2] Bonitz 1870: 409. [3] Ebert 1983: 185–7.

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has even less to do with 'judging': what it means is rather 'to discriminate' or 'to discern'.[4]

In addition to these general observations, Ebert also made two claims that relate more specifically to Aristotle's account of perception, suggesting that: (a) meanings dependent on the *sensus iudicialis* in Aristotle's 'psychological writings' are exceptional and insignificant for the question of 'what is done in perceiving';[5] (b) in its primary 'discriminative' meaning, κρίνειν is a 'three-place predicate . . . "S discriminates x from y" . . . symmetrical as to the second and the third place'.[6] Scholars have largely accepted both of these claims,[7] but each of them can be called into question.

The second claim implies that 'what is done in perceiving' is primarily discriminating two qualities *from each other*. One criticism of this implication runs as follows: it would seem that this meaning of discrimination cannot be 'cognitively basic', because it does not account for how we cognize each of the two qualities in the first place.[8] One could come to Ebert's aid by biting the bullet and insisting that there is simply no more primary sense of cognizing *x* than discriminating it from some *y* and vice versa. But that idea is objectionable.

Let us consider the kind of scenario on which the phenomenon of 'change blindness' has been explored.[9] Assume that someone replaces the colour *y* from which, on Ebert's view, I am discriminating the colour *x* with another colour *z*. One can argue that, irrespective of whether I notice the change, on Aristotle's view, it will make no difference for the content and the meaning of my discrimination of *x*. If this is correct, there is something wrong with accepting *y rather than z* into the formula of discrimination (before the change). It is wrong, I contend, not because *x* was not discriminated from *y*, but rather because it was equally well discriminated from *z*, even though *z* was not actively perceived. One upshot is that, if discrimination is to be analysed as a three-place formula, then this formula *cannot* be 'symmetrical as to the second and the third

[4] Ebert 1983: 187–9.

[5] Ebert 1983, 189–90. Ebert goes far beyond Bonitz's distinction in contrasting the 'primary sense' of κρίνειν and the meanings that are dependent on the judicial sense.

[6] Ebert 1983, 190–5 (see p. 193 for the quotation).

[7] For explicit discussions, see de Haas 2005: 326–8 and Perälä 2018; cf. e.g. Bernard 1988: 268, Sorabji 1993: 35–6, or Polansky 2007: 255–6.

[8] See Corcilius 2014: 39–40. For a much milder reservation, see Caston forthcoming: n. 72, who expresses doubts about the idea that perceptual discrimination is always a discrimination of two things from each other. Cf. also Perälä 2018: 261, who accepts the triadic structure of discrimination, but suspends judgement on whether all cases of αἰσθάνεσθαι are discriminations.

[9] For an overview, see McConkie and Loschky 2003 or O'Regan 2003. For the philosophical relevance of this phenomenon, see O'Regan and Noë 2001.

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place'. This observation accords with the etymology of κρίνειν. The original meaning (IE **krei-*) seems to be sifting or winnowing on a sieve.[10] This suggests that *y* need not be noticed, and that there need be no determinate *y* at all. If κρίνειν originally means something like 'to select the valuable part (the grain) from an indiscriminate mass',[11] then it is natural to expect that *y* involves *all* colours, while none of them is necessarily being perceived.

There are reasons to think that Ebert would reject this thought experiment. He insists that there is a 'specific type of propositions involved in the propositional attitudes resulting from perception of special sensibles'.[12] The information contained in the basic acts of perceptual discrimination is non-copulative in the sense of involving exclusively items of the same 'ontological group', namely the modal-specific *qualities* themselves. Ebert argues that this information is entirely free from our everyday 'belief that [for instance] colours somehow "stick" to their objects'.[13] In other words, he emphatically endorses the idea that, according to Aristotle, we primarily perceive the modal-specific qualities alone, and that these are only attached to their putative bearers somehow additionally – namely, by our 'beliefs'. This allows Ebert to insist that a change in one part of the perceptual field necessarily involves changes in other parts. If, in contrast, we accept the idea (defended in Section 4.2) that, according to Aristotle, we also perceive, at least equally primarily, the bearers of perceptual qualities, then it becomes natural to believe that the change from *y* to *z* will have no consequences for our discrimination of *x*.

We shall later consider further reasons for rejecting Ebert's formula. However, before inquiring deeper into the logic of perceptual discrimination, we must first discuss the other claim flagged above – that is, Ebert's marginalization of the judicial sense of κρίνειν, which has not hitherto been questioned by scholars.

6.2 The Judicial Sense of Perceptual κρίνειν

According to Ebert, there is one single passage in the *De Anima* in which the meaning of perceptual κρίνειν is determined by the judicial context. This is the passage from *An.* 2.6, already quoted in Section 4.2, where

[10] See e.g. Beekes 2009: 780–1; cf. Kahn 2003: 381–3.
[11] Kahn 2003: 383.
[12] Ebert 1983: 195–8 (for the quotation, see p. 196).
[13] Ebert 1983: 197.

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Aristotle contrasts for the first time the infallibility of modal-specific perception with the fallibility of other kinds of perceiving:

> each of them [i.e. the senses] κρίνει about (περί) these [i.e. the exclusive objects] and is not deceived about colour or about sound, but about what the coloured object is and where it is, or what the sounding object is or where it is. (*An.* 2.6, 418a14–16)

Recent translations tend to give κρίνειν in this passage the discriminative meaning, partly as a result of Ebert's influence, it seems. However, Ebert himself took this passage to be the *exception* to the rule, arguing that κρίνειν here cannot be rendered in terms of 'discriminating/discerning'.[14] The idea seems to be that one can very well say that 'S judges *about/of x*',[15] but it is not obvious what 'S discriminates/discerns *about/concerning x*' would mean,[16] and the preposition περί cannot be simply ignored.[17] Ebert, in any case, analysed this passage convincingly as employing κρίνειν in a well-established meaning derived from the judicial context, such that the best translation would be 'each sense *decides about* these'.

Ebert is drawing here on a group of passages from Aristotle's *Politics*, listed already by Bonitz, in which Aristotle uses the expression κρίνειν περί with the genitive in the sense of having the authority to decide some issue. More specifically, such an authority is standardly ascribed to the judge in matters that are not unambiguously determined ('decided') by the law.[18] The question of authority (who is κύριος, who is entitled to ἄρχειν, who is ὁ κρίνων or κρινῶν) often comes to the fore in these contexts[19] – so much so that on some occasions the correct translation of κρίνειν seems to be just 'to have (judicial) authority', as in a curious fragment from the *Protrepticus* where Aristotle says that the rational part of the soul 'by nature governs and has (judicial) authority over us' (κατὰ φύσιν ἄρχει καὶ κρίνει περὶ ἡμῶν).[20] Unlike in nature, political matters often feature more options about how the

[14] Ebert 1983: 189–90 (the only other exception in the *De Anima* being allegedly at 1.2, 405b8, which has nothing to do with the nature of perception); cf. de Haas 2005: 331.

[15] As the passage was commonly translated before Ebert's work, see e.g. Hicks 1907 and Ross 1961: 238 ('judges of'), Hamlyn 1993 ('judges about'); cf. Jannone and Barbotin 1966 ('juge-t-il de').

[16] Cf. Reeve 2017 ('discerning about these'), Polansky 2007: 251, Miller 2018 ('discriminates concerning these'), or Corcilius 2017 ('unterscheidet . . . betreffs dieser').

[17] Cf. Wallace 1882, Rodier 1900 ('discerne [correctement] ses sensibles'), Smith 1931 ('which it discerns'), and Shields 2016 ('discerns these').

[18] See e.g. *Pol.* 3.16, 1287b15–18; cf. 3.15, 1286a27–9.

[19] See e.g. *Pol.* 3.16, 1287b23–5; cf. 3.11, 1282a18; 4.4, 1291a39–40; 4.14, 1298a30–1; 4.15, 1299a25–7, 1300b38–40; 7.4, 1326b12–18; 7.9, 1329a3–6.

[20] *Protr.* 60.1–2 (which is cited neither by Bonitz nor by Ebert).

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authority to decide various issues can be distributed.[21] However, Aristotle does not, of course, take the question of distribution to be arbitrary; there is a certain normativity involved, which implies that the judge, for instance, is *correctly* recognized as the authority to decide certain kinds of issues. So, the question of who is ὁ κρίνων or κρινῶν in a given matter is often to be understood as asking about the ultimate authority to which one *ought to* defer should any uncertainty arise.[22]

Ebert argues that, in *An.* 2.6, Aristotle 'makes each sense, as it were, sit as a judge, an arbiter upon its corresponding special sensibles'.[23] This is an important observation that has not, I think, been sufficiently appreciated. It can, however, be further shown that (1) *An.* 2.6 is *not* the single exception: there is at least one other important passage in the *De Anima*, overlooked by Ebert, which draws clearly on the judicial sense. Moreover, (2) the clear-cut dividing line drawn by Ebert between 'the primary sense' of κρίνειν on the one hand and meanings derived from its 'judicial sense' on the other is misleading. Rather, the judicial overtones come more or less into the foreground throughout the *De Anima*, without ever entirely disappearing; recognizing this fact is important if we are to understand correctly what is at stake when Aristotle characterizes perception as a case of κρίνειν.[24]

The quoted passage from *An.* 2.6 deserves detailed attention because it is *the* passage in which Aristotle introduces the notion of κρίνειν into his account of perception (only two other passages mention κρίνειν in the rest of Book 2). However, this term does not appear suddenly or unexpectedly. Aristotle has already employed the notion of κρίνειν when addressing *LKL* in *An.* 1.5,[25] and this is hardly accidental because Theophrastus uses κρίνειν fairly often for what his predecessors thought (or should have

[21] See e.g. *Pol.* 4.15, 1300b38–1301a1.

[22] Cf. e.g. *Soph. Ref.* 25, 180b26–7.

[23] Ebert 1983: 190.

[24] One reason Ebert 1983: 190 gives (cf. de Haas 2005: 331) for taking the occurrence of κρίνειν in *An.* 2.6 to be peculiar and not directly relevant to the core account of perceptual discrimination is that he believes it applies only to 'special sense objects', whereas in the case of 'the common sensibles . . . it is always possible to appeal to another sense against the verdict of the first'. This argument is based on Ebert's assumption that the basic account of perceptual κρίνειν must apply to all three kinds of perceptual contents as distinguished in *An.* 2.6 (see Ebert 1983: 195–6; cf. de Haas 2005: 336, Perälä 2018: 265, or Charles 2020: 22–3 *et passim*). It is telling, however, that there is no single passage in *An.* in which Aristotle would actually apply κρίνειν to common or coincidental objects.

[25] There are two other passages in Book 1 (*An.* 1.2, 404b21–7 and 405b8) employing κρίνειν or its derivatives (the second of which is identified by Ebert as the only other judicial 'exception'). However, neither of them is directly relevant to our question: the first passage seems to be only reporting a Platonist διαίρεσις (cf. *An.* 3.3, 428a3–5), while the second does not concern perception at all.

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thought) is achieved in perceiving.[26] In *An.* 1.5, Aristotle raises an objection against the assumption that, if the perceiver is to know (γνωρίζειν) – that is, to κρίνειν – two opposites, such as black (dark) and white (pale), she must contain them both. In the Empedoclean picture, for instance, it means that she must contain passages of both water and fire. This assumption, Aristotle argues, is idle, for one of the opposites would be sufficient:

> But even if it were necessary to compose the soul out of the elements, it would by no means be necessary to compose it out of all. For one member of the contrariety is sufficient to κρίνειν both itself and what is contrary to it. For by the straight we know (γινώσκομεν) both it and the bent, because the straight edge (ὁ κανών) is the judge (κριτής) of both, while the bent is [the judge] neither of itself nor of the straight. (*An.* 1.5, 411a2–7)

The idea seems to be that the straight edge,[27] so to speak, 'makes' (or serves to make) authoritative, and, indeed, objective assessments whether something is straight or bent – much like a judge is the ultimate authority in deciding whether something is just or unjust. This agrees with the original meaning of κρίνειν as sieving: the sieve has an undisputable, perfectly objective authority with regard to isolating grain. *Mutatis mutandis*, Aristotle expects a successful theory of perception to explain how the senses can be the ultimate and infallible authority with regard to modal-specific qualities.[28] Moreover, he seems to be implying that at least some proponents of the *LKL* principle were already attempting to offer this kind of explanation, albeit not successfully.

So, what kind of authority exactly is being ascribed to the senses here? Theophrastus' *De Sensibus* articulates a contrast between two different understandings of perceptual κρίνειν as a part of the overarching contrast between *LKL* and the idea that contrary is known by contrary (*CKC*).[29] The Empedoclean version of *LKL*, as construed by Theophrastus, provides a perfectly *objective* and *impartial* account of perceptual κρίνειν: the

[26] See the very first sentence introducing Empedocles' doctrine at *Sens.* 7, 500.19–23, which is restated for criticism at *Sens.* 15, 503.25–9; cf. 19, 504.26–7; 20, 505.4–5. See also *Sens.* 25, 506.23–8 on Alcmaeon and 45, 512.7–10 on Diogenes. Quite a different account of perceptual κρίνειν is ascribed to Anaxagoras; see *Sens.* 28, 507.14–19; 33, 508.24–7; 34, 509.3–4.

[27] Democritus probably called both the senses and νοῦς κανόνες in his eponymous work, cf. Sextus, *M* 7.138–9 (cf. Lee 2005: 229–33); for a similar use of κανών, see Aristophanes, *Birds* 1001–9. For Aristotle, κανών sometimes becomes virtually synonymous with μέτρον; see e.g. *EN* 3.4, 1113a31–3.

[28] Cf. *Metaph.* A.1, 981b10–13. Cf. also Aristotle's objectivist proto-version of the Knowledge Argument at *Phys.* 2.1, 193a7–9.

[29] For references, see n. 26.

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passages of water are such that only effluences of water fit into them and the passages of fire are such that only effluences of fire fit into them, so that there is effectively no room for error or anything 'subjective' with regard to identifying the black (dark) and the white (light) colour of external objects. The Anaxagorean version of *CKC*, in contrast, makes perceptivity directly dependent on the actual state of the subject: we perceive and discriminate, for instance, the drinkable out in the world by the briny in us (and so only as long as there is something briny and thirsty in us). Anaxagoras, to be sure, still ascribes a remarkable authority to the senses in determining the objective features of things (the account is not relativist or sceptical); only the range of accessible features becomes dependent on the current state of the perceiver's body, because we perceive only what *we lack*.[30]

This background provides a further reason for Aristotle's focus on *LKL* in the *De Anima*:[31] in contrast to *CKC*, it can be presented as attempting to develop an account of perceptual κρίνειν that is *entirely* objective and impartial, a task that Aristotle is interested in taking over. As presented by Theophrastus, the Anaxagorean *CKC* would not be helpful in this respect, because it does not appreciate the impartiality of the rudimentary perceptual κρίνειν. That seems to be why Aristotle makes a different contrast central to the discussion he undertakes of his predecessors' views on knowing – namely, the contrast with the Anaxagorean account of νοῦς as entirely impassive.[32] It is that position, and not *CKC*, which provides a genuine alternative to *LKL* with regard to accounting for the objective and impartial cognition achieved in perceiving. This alternative is not absent in Theophrastus' presentation – but only marginal attention is paid to it. Theophrastus alludes to an alternative interpretation of Anaxagoras on κρίνειν when discussing Clidemus in chapter 38. Here, the idea seems to be that none of the senses really κρίνει anything; they only send the affections further to something else, namely νοῦς, which alone is capable of κρίνειν.[33] Again, the account seems to be modelled on a judicial

[30] See especially *Sens.* 28, 507.14–21. For a sceptical interpretation of Anaxagoras, see Sextus, *M* 7.90 (i.e. B 21); cf. Aëtius 4.9.1 (i.e. A 96), Sextus, *PH* 1.33.2–6 (i.e. A 97/1), Cicero, *Academica* 2.31.100 (i.e. A 97/2).

[31] Complementary with the reasons spelled out in Chapter 2. This is not to say that Aristotle was not attentive to the fact that different people in different circumstances notice different things (for a systematic treatment of Aristotle's approach to this phenomenon, see Cagnoli Fiecconi 2021). The point is that this is not relevant for the definition of the primary perceptual acts.

[32] See *An.* 1.2, 405b10–23 and Sections 2.2 and 2.7 for a discussion.

[33] 'Only about the organs of hearing [does Clidemus say that] they do not κρίνειν themselves, but rather send [what they received] further to νοῦς, so he does not, like Anaxagoras, make νοῦς the principle of everything' (*Sens.* 38, 510.9–11; cf. Section 2.3). Compare the Platonic contrast

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situation in which certain questions are deferred to a judge for decision. The presumption is, in any case, that the cognition achieved by Anaxagorean νοῦς is at least as objective and impartial as the one provided by *LKL*. That seems to be why Aristotle contrasts in the *De Anima* precisely this kind of account with *LKL*: both accounts can be presented as agreeing on *what* is achieved in perceiving – namely, a perfectly objective and impartial cognition – but disagreeing on *how* it is achieved.[34]

If this observation is correct, then it sheds additional light on the two intuitions that we identified (in Sections 1.4 and 2.7) behind the two horns of the key puzzle in *An.* 1.2. They can now be spelled out as two intuitions about the source and the nature of the judicial authority to be ascribed to perceivers. The *Unbiasedness/Externality Requirement* can be seen as drawing on the idea that, for something to have judicial authority over a certain question, it is necessary for that thing to be absolutely unbiased and not to be involved in it in any way whatsoever. It seems to be the same kind of intuition as the one occasionally articulated by Aristotle that no one rightly κρίνει things concerning himself. This is, for instance, why medical doctors are often unable to treat themselves properly.[35] The *Acquaintance/Contact Requirement*, on the other hand, would be drawing on a very different intuition about the source of a judicial authority – namely, that in some areas at least, it is not possible to decide the question without being intimately acquainted with the matter, for it is only by having, or being able to have, personal experience with what is at stake that one is able to arrive at the requisite understanding.[36] One model for this intuition about the source of judicial authority would be the idea of σύμβολα (which Aristotle associates with Empedocles).[37] To decide on some matter, I already need, so to speak, to have one of the σύμβολα in my possession (say, a past impression of a scar) because that is the only way to identify the decisive σύμβολον (a scar) in the matter under consideration. Similarly, the fire in the eye is like one half of a die (*tessera hospitalis*) that

between perceiving *by* and perceiving *through*, as analysed by Burnyeat 1976, and Alexander's account of perception as summed up in Section 5.3.

[34] For a very different understanding of the contrast, which interprets *LKL* as articulating a relativist view of perception, see Kelsey 2018.

[35] See e.g. *Pol.* 3.9, 1280a16–22 and 3.16, 1287a41–b3. On an unbiasedness/externality requirement concerning a good judge, cf. also Plato, *Resp.* 409b–c.

[36] Cf. von Fritz 1946: 19: 'when we see an angry or sad person . . ., we have . . . the impression . . . that there is something in us which responds to it and that . . . we understand the mood or the emotion of the person in its individual quality because, at least potentially, it is also in ourselves'.

[37] See e.g. Herodotus, *The Histories* 6.86.28–9; Euripides, *Medea* 613; or Plato, *Symp.* 191d. In Aristotle, see e.g. *EE* 7.5, 1239b31; *Pol.* 3.9, 1280a36–40; *GC* 2.4, 331a23–36; or *Meteor.* 2.4, 360a21–7. For Empedocles (in the context of animal generation), see *GA* 1.18, 722b6–11.

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perfectly fits into the other half, represented by all the fire found in the external world, so that perceptual discrimination is like a case of a guest-friend (ξένος) recognizing his guest-friend (ξένος).

The two intuitions are thus very different, but what they have in common is their concern with the kind of authority that can decide a matter under consideration in a perfectly just manner – that is, to assess it objectively as it truly is. Aristotle shares this concern (unless we say he is projecting it onto his predecessors) and seems to think that there is something right about both intuitions, although each of them was muddied by errors committed by earlier thinkers. The demand of unbiasedness, on the one hand, must not be absolutized in the Anaxagorean manner, because that would cripple the alleged judge from any contact with the thing on which she is supposed to decide. The 'symbolic' idea of κρίνειν, on the other hand, reifies the requisite likeness in such a way that it leads to unacceptable results, as exposed in *An.* 1.5. Aristotle already suggests an amendment in the quoted passage (411a2–7): the judicial authority must be rather like that of the straight edge which allows us to identify reliably not only straight but also bent things. This amendment, as we shall see, is then further developed in the final section of *An.* 2.11. Aristotle's aim here is, arguably, to provide an account of perceptual κρίνειν that would preserve what is true about each disputing side, while preventing their respective shortcomings.

More could be said about the 'judicial' overtones of perceptual κρίνειν. They become even more prevalent against the background of Aristotle's engagement, particularly in *Metaph.* Γ.5–6 (and Κ.6), with the 'narrow' Protagoreanism, as developed and discussed in Plato's *Theaetetus*, which is largely about the judicial authority of the senses.[38] The Protagoreans, on the one hand, insist that every perceiver contains a perfect criterion (κριτήριον) and measure (μέτρον), which makes her an ultimate infallible authority (κριτής, ὁ κρίνων) in the matter of what is perceived, albeit only insofar as it is perceived *by her* and so *appearing* to her.[39] Socrates, on the other hand, draws into question the very authority of the senses to decide about truth.[40] Aristotle emphatically asserts that the senses, in a healthy

[38] For the distinction between 'narrow' and 'broad' Protagoreanism, see Fine 1994: 213–14.

[39] See *Theaet.* 160c4–d4, 161d4–7, 167a7–8, b3–4, 178b2–8.

[40] Socrates refutes the pretension of the measure doctrine to provide a universal account of knowledge (the 'broad' Protagoreanism), and Aristotle follows him steadfastly on this point. However, with regard to the cases of the warm or the sweet, Socrates undeniably shows much more sympathy for Protagoras (see e.g. *Theaet.* 171d9–e3, 179c2–7). I agree with Lee 2005: 112–17 that the collapse of the Secret Doctrine at *Theaet.* 182d–183a is *not* intended as a decisive refutation of 'narrow'

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condition, *are* a perfect criterion (κριτήριον) and measure (μέτρον) for deciding (κρίνειν) about truth, the assessments of which cannot be further questioned in any meaningful way (*contra* Socrates), while insisting that what the senses access is an objective, and not merely a relative, truth (*contra* Protagoras).[41]

The senses, in a healthy condition, are an objective and impartial authority, albeit only in the narrowly limited domain of modal-specific qualities. Indeed, Aristotle insists that the senses are the ultimate authority (κυρίον) in this domain in a sense that Socrates wishes to reserve for expert knowledge. Although our senses may lead us astray in causing us to believe, for instance, that the wine that is so sweet tonight will still be sweet tomorrow, there is no error possible about the perceived sweetness of sweet things itself:

> the sweet, such as it is when it exists, has never changed; [the sense of taste] is always right about it, and that which is going to be sweet is of necessity just such a nature. (*Metaph.* Γ.5, 1010b23–6)[42]

Protagoreanism. When Socrates finally expresses some reservations about it, this amounts to a doubt whether a notion of truth is applicable to perception *at all*: because perception does not concern the 'being' of things, it cannot, apparently, be properly speaking 'true' (*Theaet.* 186a–e, cf. Narcy 1996: 239–42, Lee 2005: 155–7). The question of whether Plato does or does not accept something along the lines of the Protagorean account of perception is, of course, a controversial one, dividing the two influential readings of the *Theaetetus* that are represented by Cornford 1935 and Burnyeat 1990, respectively. For an alternative reading, see Sedley 2004, according to whom the Protagorean account is not as such accepted by Plato but is intended to 'foreshadow' the physical account presented at *Tim.* 45b–46c, 67c–68d.

[41] See *Metaph.* K.6, 1062b35–1063a5 (adapting the Protagorean notions from *Theaet.* 178b2–8 by purging them of their relativist flavour) and *Metaph.* Γ.6, 1011a3–9 (where Aristotle seems to block the kind of argument from second-order κρίνειν raised against Protagoreanism at *Theaet.* 170d4–10; cf. *Metaph.* Γ.5, 1010b3–11). As Lee 2005: 162 puts it: 'We have here a concession and an objection. Protagoras is correct in so far as a certain kind of perception, perception of "special", or "proper" (*idion*) objects, is always correct. But it doesn't follow that all appearances are true, because appearing is not the same as perceiving.' For μέτρον, see also *Metaph.* I.1, 1053a35–b3. For a recent discussion, see McCready-Flora 2015.

[42] See *Metaph.* Γ.5, 1010b11–30 as a reaction to Socrates' argument from the future against Protagoras at *Theat.* 178b–179b. In the first part of this passage, Aristotle explicitly agrees with Plato's Socrates that the case of expert knowledge refutes 'broad' Protagoreanism. However, in the second part, he goes far beyond anything Plato ever wrote by making a similar claim about the senses being the ultimate authority (κυρίον) when it comes, say, to what it is – and indeed what it *ever will be* (and always was) – for something to be sweet. Aristotle seems to be correcting Socrates' claim here that the vine-grower is the authority with respect to 'the future sweetness' as Socrates maintains (*Theaet.* 178c9–d2; cf. 186a): what he should have said is rather that the vine-grower is the expert and authority with respect to the *wine* and how it acquires its qualities from the vines out of which it is produced. As far as these qualities themselves are concerned, however, there is no authority besides the healthy sense of taste. Moreover, even the vine-grower's expert knowledge depends depends on this condition. There are good reasons to think that, at *Metaph.* Γ.5, 1010b11–30, Aristotle is directly reacting to *Theaet.* 178b–179b: there is no other passage within *Metaph.* Γ.5–6 or K.6 in which Aristotle uses the language of κυριότης and, similarly in the *Theaetetus*, this language is practically limited to the mentioned passage (it is used at 178c9–d2, 178d9 and 179b6–9; none of

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Aristotle's account of perceptual κρίνειν and its first principle in the *De Anima* can, then, be understood as effectively addressing an obvious objection that one may raise against his optimistic epistemology of perception as outlined in *Metaph.* Γ.5–6 and Κ.6. The grievance is that such an objective and impartial κρίνειν is, on the level of perception at least, simply impossible, and that no such authority can meaningfully be ascribed to the senses.[43] In the *De Anima*, Aristotle blunts at least one edge of this criticism by identifying the first explanatory principles on the basis of which this kind of perceptual κρίνειν can be scientifically explained.

If this is, indeed, the background against which the notion of κρίνειν in *An.* 1.5 should be understood, then it confirms the centrality of the judicial sense of the verb. However, even without this wider context, the passage quoted from *An.* 1.5 is sufficient to suggest that it is more difficult than Ebert claimed to distinguish between the meanings of κρίνειν that are and those that are not derived from the *sensus iudicialis*. In the first sentence, κρίνειν can very well be translated as 'to discriminate', but in the second sentence the word κριτής (in whatever way it is translated) clearly evokes the judicial context. Thus, the passage strongly suggests that there is *a continuity* between the two meanings that Ebert wanted to separate.[44] This continuity agrees well with the original meaning of κρίνειν as sieving, which is a (non-propositional) kind of discrimination involving a perfectly objective authority.

Aristotle's judicial use of κρίνειν in *An.* 2.6 is, thus, far from being an exception that could be put aside when we attempt to understand his account of perceptual κρίνειν and of 'what is done in perceiving'. The notion of κρίνειν introduced here rather encapsulates the task that Aristotle wishes to accomplish in what follows, including, crucially, the account of the 'discriminative mean' in *An.* 2.11.

6.3 Discrimination of the Imperceptible

As noted above, Aristotle's use of the κρίνειν vocabulary in the *De Anima* is surprisingly sparse given how important a concept it is to his theory (as is broadly agreed by interpreters). Within *An.* 2.7–3.2, there are no more than two occurrences of it, besides the passage on the discriminative mean

the remaining three occurrences at 161d5, 169e2, and 206b8 is directly relevant to Aristotle's discussion in *Metaph.* Γ.5). The striking notion of necessity in the quoted passage from *Metaph.* Γ.5 seems to be responding directly to *Theat.* 160b5–8.

[43] One could raise this objection from all sorts of positions, be it Platonic, Protagorean, Democritean, or (proto-)sceptical.

[44] The same seems true of *An.* 2.6, 418a14–16.

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in *An.* 2.11 and the final section of *An.* 3.2 (on which, see Sections 6.4 and 6.6, respectively). These two occurrences are worth briefly commenting on here because they have a direct bearing on the question of the logic of perceptual discrimination, as well as on how the verbs κρίνειν and αἰσθάνεσθαι relate to each other. More specifically, these passages suggest that κρίνειν is a *broader* notion.

In both passages (*An.* 2.10, 422a20–31 and 3.2, 425b20–2), Aristotle employs the verb κρίνειν to articulate a thought that he elsewhere expresses without mentioning κρίνειν. The idea is that, for instance, sight is *of* both the visible and the invisible, hearing is *of* both the audible and the inaudible, and so on. Aristotle makes this claim four times within *An.* 2.7–3.2 and he never phrases it in terms of, say, sight *seeing* the invisible.[45] However, in both passages in which he employs κρίνειν, he affirms that sight *discriminates* (κρίνει) – or that we *discriminate* (κρίνομεν) by sight – 'the invisible', namely darkness. This nuance should not be overlooked: the notion of discriminating under individual sense modalities seems to be broader than the notion of perceiving under them – as understood throughout *An.* 2.5–12 where, for instance, 'perceiving by sight' is equivalent to 'seeing'. It is true that at *An.* 3.2, 425b20–2, Aristotle employs the notion of 'perceiving by sight' in a broader sense than 'seeing' that appears to be co-extensive with the notion of 'discriminating by sight'.[46] However, this seems to be an innovation vis-à-vis *An.* 2.5–12. Throughout these early chapters, 'perceiving by sight' is treated as equivalent to 'seeing', and so it would be wrong to say that sight perceives darkness, although sight is *of* darkness and *discriminates* it. One of the four passages making this claim (*An.* 2.11, 424a10–15) immediately follows Aristotle's account of perceptual discrimination at *An.* 2.11, 423b31–424a10, and so the described mismatch between perception and discrimination is not unlikely to have a bearing on it.

Before considering that passage, however, let me add two preliminary observations concerning the logic of perceptual κρίνειν. First, the two passages insisting that sight discriminates darkness speak against the idea of κρίνειν as a three-place predicate: when I am 'discriminating' darkness, I am obviously not discriminating it from any actively perceived colour or light that would, thus, be symmetrically discriminated from

[45] Besides *An.* 2.10, 422a20–31 and 3.2, 425b20–2, see 2.9, 421b3–8; 2.11, 424a10–15; cf. 2.8, 420a15–19.

[46] His claim is introduced as spelling out *a specific sense of* perceiving by sight (τῇ ὄψει αἰσθάνεσθαί, *An.* 3.2, 425b20).

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darkness. Second, in the first of these passages (*An.* 2.10, 422a20–31) the meaning of κρίνειν seems, once more, to be directly connected to the judicial context. Again, the question is about distributing authorities, and the claim that 'sight κρίνει this [i.e. darkness] as well' could plausibly be paraphrased as 'sight is also the authority to decide whether it is dark'. Indeed, given that this is the first occurrence of κρίνειν after *An.* 2.6, Aristotle's claim is naturally read in direct connection with it: sight is *not only* the authority to decide about colours, *but also* the authority to decide about invisibility (darkness), and similarly for the other sense modalities. If this is correct, then the passage confirms that the *sensus iudicialis* plays a more central role in Aristotle's argument than is usually assumed.[47]

6.4 Discrimination within the Assimilation Model

Let us now finally turn to the part of *An.* 2.11 in which Aristotle introduces the notion of a 'discriminative mean'. Most of *An.* 2.11 has been dedicated to defending the thesis that flesh is not the organ, but merely the medium of touch. The concept of the 'discriminative mean' is then introduced in the context of tactile blind spots.[48] Aristotle argues for the existence of these blind spots (at 423b26–424a4) drawing on the classification of tangible qualities as distinguishing features of bodies qua bodies (i.e. qualities that all bodies necessarily have to some degree),[49] combined with the assimilation model of perception as developed in *An.* 2.5. The fact that Aristotle proceeds in this way is convenient for our purposes because the passage explicitly embeds the account of perceptual discrimination within the assimilation model:

> **(i)** The perceptive organ responsible for them [i.e. the tangible qualities], that is, that which is capable of touching and in which the perceptive capacity called touch is primarily present, is a bodily part that is such in

[47] It is also telling, then, to compare this passage with that in *An.* 3.2 claiming that 'we κρίνομεν by sight also darkness': here, the translation 'we discriminate' seems very natural, but the passage is making exactly the same point as the one from *An.* 2.10, so there is a clear continuity between the judicial 'deciding' on the one hand and 'discriminating' on the other. If that is right, then these cannot be contrasted as two different meanings of κρίνειν. Rather, it confirms the suggestion made above that judicial overtones are essential to Aristotle's employment of κρίνειν throughout the *De Anima*, even in the cases where 'discriminating' (or 'discerning') is the most natural translation.

[48] Cf. Theophrastus, *Sens.* 2, 499.9–10.

[49] Aristotle mentions only hot, cold, wet, and dry and does *not* include hard and soft, apparently because these latter properties are emergent and do not belong to the element themselves (see *Meteor.* 4.4–5, 382a8–27).

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> capacity [as the tangible objects are in fulfilment]. For perceiving is a kind of being affected, and so, what the agent is like in fulfilment, such it is making the other thing [i.e. the perceptive organ] which is [such] in capacity. **(ii)** That is why we do not perceive what is equally warm and cold or hard and soft [as our body] but only the extremes because the perceptive capacity is a sort of mean of the contrariety in perceptual objects. And that is why one [or: it, i.e. the perceptive organ] discriminates the perceptual objects. For what is in a mean state is capable of discriminating, because with respect to each [object] it comes to be the other extreme. **(iii)** And just as that which is going to perceive what is white and what is black must be neither of them in fulfilment, while being in capacity both (and similarly also for the other senses), so also in the case of touch it [i.e. that which is going to perceive hot and cold] must be neither hot nor cold.
>
> **(i)** τὸ δὲ αἰσθητήριον αὐτῶν τὸ ἁπτικόν, καὶ ἐν ᾧ ἡ καλουμένη ἁφὴ ὑπάρχει αἴσθησις πρώτῳ, τὸ δυνάμει τοιοῦτόν ἐστι μόριον· τὸ γὰρ αἰσθάνεσθαι πάσχειν τι ἐστίν· ὥστε τὸ ποιοῦν, οἷον αὐτὸ ἐνεργείᾳ, τοιοῦτον ἐκεῖνο ποιεῖ δυνάμει ὄν. **(ii)** διὸ τοῦ ὁμοίως θερμοῦ καὶ ψυχροῦ, ἢ σκληροῦ καὶ μαλακοῦ, οὐκ αἰσθανόμεθα, ἀλλὰ τῶν ὑπερβολῶν, ὡς τῆς αἰσθήσεως οἷον μεσότητός τινος οὔσης τῆς ἐν τοῖς αἰσθητοῖς ἐναντιώσεως. καὶ διὰ τοῦτο κρίνει τὰ αἰσθητά. τὸ γὰρ μέσον κριτικόν· γίνεται γὰρ πρὸς ἑκάτερον αὐτῶν θάτερον τῶν ἄκρων· **(iii)** καὶ δεῖ ὥσπερ τὸ μέλλον αἰσθήσεσθαι λευκοῦ καὶ μέλανος μηδέτερον αὐτῶν εἶναι ἐνεργείᾳ, δυνάμει δ' ἄμφω (οὕτω δὲ καὶ ἐπὶ τῶν ἄλλων), καὶ ἐπὶ τῆς ἁφῆς μήτε θερμὸν μήτε ψυχρόν.
>
> (*An.* 2.11, 423b29–424a10)

The first thing to notice about this passage is that, although the account of the discriminative mean in (ii) is developed specifically with respect to touch, it seems to be intended to apply generally to all sense modalities, as suggested by the generalization in (iii) and confirmed by Aristotle's later uses of μεσότης.[50] Just as the notion of mediation was introduced as applying primarily to sight and hearing and then extended, somewhat surprisingly, to all other senses, so the notion of the discriminative mean is introduced as applying primarily to touch before being extended to the remaining sense modalities.[51]

Another salient feature of our passage is the exceptional clarity with which Aristotle distinguishes the material and the formal aspects of

[50] See especially *An.* 3.7, 431a17–20, which insists that there is a numerically identical μεσότης for all sense modalities (more on this passage in Section 6.6).

[51] For touch as a μεσότης, see also *An.* 3.13, 435a21–b3 and *Meteor.* 4.4, 382a16–20 (for a mean disposition of sight, cf. *GA* 5.1, 780a22–5). For more on the questions raised by the extension, see Sections 6.5 and 7.2.

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perceivers – that is, the bodily perceptive organs on the one hand, and the perceptive capacity of the soul, on the other. In (i) he explicitly distinguishes between the organ (αἰσθητήριον) of touch and the sense of touch (ἁφή), which is what makes the organ capable of touching (ἁπτικόν). The assimilation model from *An.* 2.5 is then clearly applied to the perceptive organ rather than the perceptive capacity, which aligns perfectly with *An.* 1.3–4.[52] This suggests that Aristotle is willing to tell us something important about the respective roles of the body and the soul.[53]

Furthermore, there is no reason to assume that he is any less careful in this respect in (ii) and (iii). Yet, most translators and interpreters disregard the difference between μεσότης τις and τὸ μέσον in (ii): most often they are translated by the same word,[54] and even when not, the difference usually plays no role in interpretation.[55] Because it is αἴσθησις (apparently in the sense of the perceptive capacity, as a generalization of ἁφή) that is identified with μεσότης, however, (i) makes it natural to expect that the intended example of τὸ μέσον would be *the organ* as determined by the μεσότης, just as the organ of touch is ἁπτικόν owing to the ἁφή operative in it.[56] This is not to say that μεσότης could not be treated in a more relaxed manner as a case of τὸ μέσον; rather, the point is that the present context strongly suggests that Aristotle expects the reader to be sensitive to the difference between that which is in a mean state and the mean itself.[57]

[52] See *An.* 2.9, 422a6–7; 2.10, 422a34–b5, b15–16.

[53] In the rest of *An.* 2.5–11, Aristotle usually talks of 'that which can perceive' (or 'touch', 'taste', 'smell' . . .) without spelling out the respective roles of the body and the soul (cf. Sections 1.1 and 5.4).

[54] See e.g. Hicks 1907: 414–5, Oates 1936: 394, Corcilius 2014: 40 (cf. Corcilius 2022: 144), Shields 2016: 47, 246–7, Reeve 2017, Perälä 2018: 267–8.

[55] Polansky 2007: 333 n. 16 draws a difference between the two notions, but applies both to the perceptive capacity as well as to the perceptive organ. Hamlyn 1993: 112–13 distinguishes between the perceptive organ as 'the mean' and its 'mean state', but he takes it for granted that both terms in Aristotle's text (μεσότης and τὸ μέσον) refer to the same thing – namely, the organ. Johansen 2002: 180 distinguishes between 'a mean' and 'what is in the middle', but without drawing any implications from that distinction. Grasso 2020: 257 distinguishes between 'a mean' and 'the middle', but the difference does not seem to play any role in his interpretation. Contrast Theodore Tracy's careful reading reported in the following footnote.

[56] Cf. Tracy 1969: 206 (cf. 221), who spells out μεσότης in terms of 'form disposing and activating its matter in a state of equilibrium', and takes τὸ μέσον to refer to 'this "middle state" or equilibrium' of the organ that enables it to discriminate. Unfortunately, Tracy does not explain what discrimination amounts to or how it takes place (cf. n. 97).

[57] Here are some parallels that highlight the contrast in functions between the abstract noun μεσότης and the corresponding adjective: 'With regard to anger also there is an excess, a deficiency, and a mean (μεσότης). Although they can scarcely be said to have names, yet since we call the intermediate person (τὸν μέσον) good-tempered let us call the mean (τὴν μεσότητα) good temper; of the persons at the extremes let the one who exceeds be called irascible, and his vice irascibility, and the man who falls short an inirascible sort of person, and the deficiency

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The final phrase of (i) clearly recalls the assimilation model from *An.* 2.5, and it has been interpreted in very different ways, depending on the literalist, spiritualist, or analogical understanding of the role of the perceptive organs from which interpreters have begun. However, the present passage brings into focus again how each of these approaches falls flat.[58] It is notoriously difficulty for spiritualism to account for the phenomenon of blind spots introduced in (ii) as a consequence of the assimilation model: if only a 'spiritual' acting is involved in perception, the claim that 'that is why we do not perceive what is equally warm and cold' would be a clear non sequitur.[59] If, on the other hand, the assimilation model was just about acquiring literal likeness, then the change that is supposed to underlie perception would effectively make it impossible. On becoming literally like the perceptual object, the organ would become unable to be affected by it and thus, as Aristotle clearly implies here, unable to perceive it.[60] The change supposed to bring perception about would, in fact, only produce a perceptual *blind spot*.[61] Finally, the analogical reading does not fare any better on this point (as observed in Section 4.6). If the way in which a perceptual object *F* acts on the perceiver consists in making it *G* (i.e. making it embody the same ratio in a different pair of contraries) and if the result of this acting is that the organ comes to *be G*, then, again, the change that is supposed to underlie perception makes it effectively impossible, for it implies that the organ cannot be further affected by the perceptual object *F* in the required way, and so that the organ cannot perceive *F*.

The interpretation of Aristotle's first general account developed in Chapters 1–3 offers a viable alternative (spelled out in Section 4.6), and Aristotle's phrasing in the present passage provides additional support for it. The perceptual object *F is making* (ποιεῖ) *F*[62] the organ, which *is F in*

inirascibility' (*EN* 2.7, 1108a4–9, *Revised Oxford Translation*; cf. *Pol.* 4.11, 1295a35–9). 'With regard to justice and injustice we must consider what kind of actions they are concerned with, what sort of mean (μεσότης) justice (ἡ δικαιοσύνη) is, and between what extremes that which is just (τὸ δίκαιον) is in the middle (μέσον)' (*EN* 5.1, 1129a3–5, *Revised Oxford Translation*, modified; cf. *MM* 1.33.8). For an illuminating discussion of μεσότης and τὸ μέσον in the ethical context, see Brown 2014 (building on Brown 1997); cf. e.g. Hardie 1965, Young 1996, Hursthouse 2006, Rapp 2006, Fisher 2018.

[58] Cf. Sections 3.7 and 4.6.

[59] This is a classical objection against spiritualism, for which see already Sorabji 1992: 214–15.

[60] This seems to follow even under the homeostatic 'organic' reading proposed by Ducharme 2014, who maintains that perception consists in literal form replication, albeit just temporary because the organs 'strive' to return to their neutral state. Cf. already Tracy 1969: 200–22.

[61] Cf. Price 1996: 289, Magee 2000: 319, and Grasso 2020: 259–61.

[62] Whether this is to be understood literally or analogically.

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capacity (δυνάμει ὄν). Aristotle says nothing here about *the result* of this making. However, combining this claim with the assertion that perceiving *is* a kind of being affected has an important implication that could have hardly escaped Aristotle's notice: throughout the time of perceiving *F*, the respective organ must remain *F in capacity*; indeed, to continue being affected, and so perceiving, the organ must remain *unlike* the object (i.e. *not F* in fulfilment).

The present passage is not the only additional support for the proposed interpretation of the assimilation model. The same idea can, arguably, be found in a convoluted sentence from *An.* 2.10 describing how the tongue, as the alleged organ of taste, is affected by flavours:[63]

> ἀναγκαῖον ἄρα ὑγρανθῆναι τὸ δυνάμενον μὲν ὑγραίνεσθαι σωζόμενον μὴ ὑγρὸν δὲ τὸ γευστικὸν αἰσθητήριον. (*An.* 2.10, 422b3–5)

The syntax of this passage is uncertain and there are at least three ways to construe the sentence. The position of δέ calls for the insertion of a comma after σωζόμενον and suggests that this participle should be understood as a part of the μέν clause. This leaves the meaning of σωζόμενον underdetermined. (1) On one reading, it tends to be translated along the lines of 'without being harmed' and the sentence is taken to be saying at best something very vague.[64] But Aristotle is more likely to have something more precise in mind, namely, (2) that the organ is moistened in such a way that it is preserved *as being capable* of being moistened: that is, upon being moistened, it does not lose its capacity for being moistened.[65] The δέ clause ('not being moist') would then seem to be not simply describing the state *before* being moistened, but rather the state that needs to be preserved also when the tongue is being moistened. (3) Finally, a third construal that would elucidate this idea even more clearly would place a comma before σωζόμενον and take it already to be a part of the δέ clause. (This does not seem quite right stylistically, but it can hardly be excluded as a possibility in a manuscript of Aristotle's work.) The sentence would then be saying

[63] As noted in Section 4.4, one puzzling aspect of *An.* 2.10 is that, throughout the chapter, Aristotle speaks as if the tongue were the proper organ of taste, rather than a part of its medium, as he argues in *An.* 2.11. However, for our purposes, we can ignore this apparent inconsistency. What matters is the way in which Aristotle applies the assimilation model to the tongue here, as an example of a perceptive organ.

[64] See e.g. Hicks 1907 ('without losing its nature') or Jannone and Barbotin 1966 ('en gardant son intégrité'); cf. Themistius, *In An.* 71.35–6 and Philoponus, *In An.* 405.18–21.

[65] Cf. Grasso 2020: 268–9.

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that the organ of taste is moistened as something (a) that *can be* moistened (μέν), but (b) that, upon being moistened, is preserved as not moist (δέ).

What follows at 422b5–10 seems to support (2) or (3) against (1). Aristotle explains here that the tongue cannot properly taste anything if it is itself too moist: what happens then is that we do not really *taste*, but rather experience an after-taste on our tongue. This suggests that, although tasting involves the tongue being moistened, it must at the same time be preserved as itself *not being (too) moist*, because otherwise the moistening would eventually lead to the tongue becoming incapable of being moistened, and thus incapable of tasting, for it would acquire an (excessive) moisture (and, with it, apparently a flavour) of its own. Under (2) or (3), the passage fits perfectly with the interpretation of preservative πάσχειν proposed in Chapters 1–3,[66] as well as the reading of (i) in the quoted passage from *An.* 2.11 proposed above.

Returning to the 2.11 passage, I have been arguing that Aristotle describes here what happens in perceiving in terms of the perceptual object *making* the perceptive organ like itself, with the organ, however, having its *unlikeness preserved* as a condition of being further affected, and so of continued perceiving. If that is true, then (i) spells out only *a part* of the assimilation model as developed in *An.* 2.5: it does not say anything explicit about the likeness acquired by the perceiver for the time of perceiving. And there is a good reason for this omission: it is, I shall argue, because Aristotle is going to tell us something new and important about the likeness in (ii). Put very roughly: the perceptive organ must not be assimilated to the perceptual object in the sense of acquiring a material quality *of its own*, because only then can it receive a quality *of the external perceptual object*. My suggestion in the following section will be that the notion of the 'discriminative mean' in (ii) is intended precisely to explain how the latter kind of likeness (further spelled out in *An.* 2.12 in terms of forms without the matter) comes to be present in the perceptive organ without compromising its neutrality.[67]

[66] For the idea that the present passage draws on the notion of preservative πάσχειν from *An.* 2.5, see e.g. Polansky 2007: 318–19 and Grasso 2020: 269.

[67] If this suggestion is on the right track, then the notion of capacity employed in (i) is worthy of a special attention: it seems that the capacity involved here cannot be interpreted either as simply a capacity for being *materially* assimilated (in the literal or analogical way), or as simply a capacity for being *phenomenally* assimilated. Instead, it appears to essentially involve *both* of these aspects in a way that is yet to be determined.

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6.5 The Discriminative Mean

In (ii), Aristotle argues that the perceptive capacity (αἴσθησις), such as touch,[68] is a certain μεσότης of the respective contrariety; this is why something or someone κρίνει the perceptual objects: καὶ διὰ τοῦτο κρίνει τὰ αἰσθητά. The grammatical subject is not expressed, but it clearly refers to the same kind of thing as 'τὸ μέσον' in what follows: τὸ γὰρ μέσον κριτικόν. Usually, interpreters assume that the grammatical subject of κρίνει is the μεσότης from the preceding sentence; this leads them, understandably, to treat 'μεσότης' as a case of 'τὸ μέσον'. However, this is not the only possible reading.[69] The sentence with κρίνει can also be taken as an absolute construction, 'that is why one discriminates', playing the same role as the first person plural at the beginning of (ii) 'that is why we do not perceive'.[70] Alternatively, the grammatical subject may be τὸ ἁπτικόν from 423b30, to which Aristotle has already referred back by the demonstrative pronoun ἐκεῖνο at 424a2.

Both of these readings suggest that the intended instance of τὸ μέσον capable of κρίνειν on account of μεσότης is not this μεσότης itself. Rather, it is the organ in which this μεσότης – that is, the perceptive capacity (αἴσθησις) in question – is primarily present, as outlined in the first sentence of (i).[71] This reading is supported by the beginning of (iii) where Aristotle talks of 'that which is going to perceive white and black' (τὸ μέλλον αἰσθήσεσθαι λευκοῦ καὶ μέλανος). He says that this must be neither black nor white in fulfilment but both in capacity, and he clearly compares this with what he has already said in (i) about the *organ* of touch (it is neither hot nor cold in fulfilment). Accordingly, τὸ μέλλον αἰσθήσεσθαι must be the perceptive organ. Now, there would be a strange shift if Aristotle were not also referring to the organ in the preceding sentence concerning τὸ μέσον. Rather, throughout the whole passage, he seems to be carefully distinguishing between that which can perceive, can touch, can κρίνειν, on the one hand, and that on account of which it can do so, on

[68] Or, perhaps each kind of touch – for, unlike other senses, touch is of more than one range of qualities (cf. *An.* 2.11, 422b23–7).

[69] It should also be noted that this is not a very natural reading, either, given that μεσότης did not figure in the main sentence but in a subordinate absolute genitive construction.

[70] The switch from the first-person plural to the impersonal third-person singular is stylistically awkward but is certainly not unique in Aristotle's work. For another example we need to wait less than two Bekker pages: 'Since we perceive (αἰσθανόμεθα) that we are seeing (ὅτι ὁρῶμεν) . . ., it is necessary to perceive (ἀνάγκη αἰσθάνεσθαι) that one is seeing (ὅτι ὁρᾷ) either . . . or . . .' (*An.* 3.2, 425b12–13).

[71] The same can also be said, in a secondary manner, about the perceiver who possesses the organ.

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the other. The passage thus seems to be perfectly in line with the 'Rylean passage' in treating discrimination as something performed by an animal on account of its soul.[72] And this is no accident for, I shall argue, Aristotle is telling us something very important here about *how* the soul makes the animal capable of discriminating and perceiving.

Aristotle claims that the perceptive capacity is 'a sort of mean'. This claim has been interpreted in various ways – of which I shall mention only two.[73] According to Klaus Corcilius, Aristotle characterizes the perceptive soul here as a neutral value of each range, which is 'a metaphysical given' for Aristotle[74] and is localized in a non-metaphorical way 'somewhere in the heart'.[75] As such, the soul can serve literally as the end point of perceptual motions transmitted, according to *An.* 1.4, 'up until' the soul.[76] Upon their arrival at this spatial point in the heart, 'a sort of *contact* between body and soul' is established and thus also a literal 'contiguity of the soul with the incoming ... motions'.[77] Such a juxtaposition generates *a contrast* between the neutral value (i.e. the soul) and the value of the incoming motion. Because the former value is neutral, the contrast just *is* the manifestation of the incoming value: it *is* the perceptual object in activity – the form without the matter of the external object acting on the senses. It is in this context that Corcilius suggests an alternative to Ebert's three-place model of perceptual discrimination: the perceptive soul qua mean discriminates the quality of the perceptual object *from itself*.[78] Much can be said in favour of this account. It accomplishes what has rarely been achieved by providing a concrete model of the perceptive soul's causality that is neither circular nor compromises the soul's impassivity. I shall, accordingly, discuss this view further below.

In a recent paper, Roberto Grasso offers a different interpretation of μεσότης. He claims that it refers to *a state of the perceptive organ resulting* from two opposite agencies cancelling each other out: (1) the agency of the perceptual object assimilating the organ to itself and (2) the counterbalancing agency of the organ. (2) neutralizes (1), and so retains the organ in its

[72] See Section 5.2. This is not to say that Aristotle is always so cautious. See e.g. *An.* 3.3, 427a20–1 where *the soul* is said to discriminate something in both perception and thought. In passages like these, I take it, Aristotle expects us to apply the lesson of the 'Rylean passage' on our own.

[73] See Grasso 2020: 261–4 for a critical overview of other existing interpretations.

[74] Corcilius 2014: 48. [75] Corcilius 2014: 44, 48; cf. Corcilius 2022: 142.

[76] Cf. Corcilius and Gregoric 2013: 54–78. However, see Gregoric forthcoming for a non-literal understanding of Aristotle's analogy between the perceptive soul and a point at *An.* 3.2, 427a9–14.

[77] Corcilius 2014: 46; cf. Corcilius 2022: 145–6.

[78] Corcilius 2014: 42; see also de Haas 2005: 335–6 for the idea that what is 'compared' is the incoming sensible form and the mean; cf. Polansky 2007: 255–6.

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neutral state. The μεσότης is just this state 'that results from opposite extremes' – a 'zero vector sum'.[79] I shall argue below that Aristotle does indeed have a homeostatic mechanism in mind in our passage; however, I do not share Grasso's view that the passage is simply about physiology.[80] As noted above, Aristotle seems to be promising to tell us something about the role of the soul. And, indeed, it is difficult to read the sentence about μεσότης as not concerning the perceptive soul. It is αἴσθησις that Aristotle identifies with 'a sort of mean', and although the word αἴσθησις can also refer to the activity of perceiving and is occasionally used to denote the ensouled organ, the present context strongly suggests that Aristotle has the perceptive capacity in mind (see 423b31).[81] It is difficult to see how the claim that αἴσθησις is a mean could be read as a claim about the preserved physiological state.[82]

However, if Aristotle *does* have the perceptive capacity in mind, how should we interpret its status 'as a sort of mean' and its role in perceptual discrimination? One problem with the first mentioned interpretation is that, as on most other interpretations, it disregards the difference between 'μεσότης' and 'τὸ μέσον'. If I am right about Aristotle's intention behind this difference, then it is *not* the perceptive capacity itself that is said to discriminate. Rather, Aristotle is saying that the organ (or the living being endowed with this organ) discriminates on account of the perceptive capacity operating in it 'as a sort of mean' and so determining the organ as 'being in a mean state'. If this is the case, then there is some hope that we need not take the perceptive capacity as 'a sort of mean' to be a static constant whose mode of presence in the perceptive organ cannot be further analysed. Instead, a story can be told regarding how the μεσότης determines the organ as τὸ μέσον and thus makes it capable of discriminating. One reason for preferring this interpretation, I submit, is that it need not assume that the soul is non-metaphorically located in a spatial point 'somewhere in the heart'.[83]

[79] See most clearly Grasso 2020: 272, cf. 267.

[80] This is also the view of Ducharme 2014.

[81] For the different meanings of αἴσθησις, see Section 7.4.

[82] In fact, Grasso himself renders αἴσθησις in our passage as 'the sense', and he seems to understand it in terms of the perceptive capacity rather than the organ, see Grasso 2020: 257 n. 1 (cf. 261 n. 12).

[83] Neither Aristotle's adoption of the Platonic catchphrase 'up until the soul' in *An.* 1.4, nor his comparison with a geometrical point at *An.* 3.2 427a9–14 is sufficient to commit him to this view. One can have a strongly cardio-centric reading of Aristotle (as, for example, Alexander of Aphrodisias does) and still insist that the soul is present in the heart in a very different way: for example, as Alexander says (cf. Section 5.3), by being indivisibly present throughout the whole organ (presumably this was also the way in which Alexander read *MA* 9 and 11, 703b26–35).

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Such a non-metaphorical *localization* of the soul, which underlies the idea of a *contact* between the body and the soul and a *contiguity* between the soul and the incoming motion, seems to be at odds with the spirit of *An.* 1.3–4. Aristotle's very first argument against the soul itself undergoing a change was that it would imply that the soul is in a place.[84] That was considered to be patently absurd, and Aristotle never suggests that the idea of the soul itself having a position (θέσις), like a point, is more acceptable than that of it having a place (τόπος). Moreover, Aristotle's definition of touch in *Phys.* 5.3 implies that only extended entities, not points, can be in touch with other beings.[85] And, although his commitment to there being a touch between the mover and the moved leads him to introduce the notion of a non-reciprocal touching in *GC* 1.6 as a way of accounting for the case of unmoved movers,[86] it is not at all obvious that this should be understood in terms of the unmoved mover *having a determinate position*.[87] Accordingly, ascribing such a position to the soul would still be objectionable as a way of assimilating it to spatial entities (although not bodies) and would thus go against the thrust of *An.* 1.3–4.[88]

In my understanding of the passage, Aristotle is proposing an entirely different model of the soul's involvement in perceptual discrimination. The soul figures in it as 'a sort of mean' not in the sense of a static constant, literally contiguous with the incoming motions, but rather in the sense of dynamically determining the perceptive organ as being in a

[84] See *An.* 1.3, 406a12–22 (cf. Ferro 2022: 96).
[85] *Phys.* 5.3, 226b21–3.
[86] *GC* 1.6, 323a28–33.
[87] Neither the example in *GC* 1.6 nor anything in the *De Anima* suggests this.
[88] As support for the claim that Aristotle assumes non-metaphorical contact and juxtaposition between the perceptive soul and the incoming motions, Corcilius 2014: 46–7 cites *Phys.* 7.2, 244b2–245a11, where Aristotle says that the perceptual qualities, such as flavours, are adjacent (ἅμα) to the senses, such as γεῦσις. But the passage is not without ambiguities, and Aristotle may well want to say nothing more than that the flavoured *body* must be in contact with the *body of* the perceiver, so that *coincidentally* the quality of the former and the capacity of the latter are also 'adjacent' (because the bodies *in which* they exist are adjacent in their own right). Aristotle also says here that colours are adjacent to light and that light is adjacent to sight. However, given Aristotle's theory of light as a disposition (ἕξις) or fulfilment (ἐντελέχεια) of the transparent medium developed in *An.* 2.7 (and *Sens.* 3), it seems impossible that by 'being ἅμα' he means a literal non-coincidental spatial contiguity. It is clear that light is not in a place (and that it does not have a position) in its own right – but only coincidentally on account of being a disposition/fulfilment of the illuminated air that is itself in a place. If we do not assume that Aristotle adopts an entirely different theory of light in *Phys.* 7 than he does in *An.* and *Sens.*, it is difficult to see how the passage in *Phys.* 7.2 could imply that sight is non-coincidentally in a place or has a position. If, instead, we do assume that there are two different theories of light presupposed in *An.* and *Phys.* 7, then it is not clear why we should take *Phys.* 7 to be helpful for interpreting *An.*'s account of perception. Another reason for caution is Aristotle's adoption of the *Platonic Formula* in *Phys.* 7.2–3 (248a6–9; cf. Section 5.1), which goes beyond anything that he accepts in *An.* (the passages that might suggest the opposite – some of which are quoted by Corcilius 2014: 47 n. 42 – are discussed in Sections 7.4 and 7.5 and in the Appendix).

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mean state and so being discriminative, as it 'comes to be the other extreme' with respect to each object. This account can fill precisely the gap in the assimilation model left open in (i): it contains the key to understanding the sense in which the perceiver *is* assimilated to the perceptual object acting on her, while *remaining neutral*, and thereby capable of being further affected.

The persisting neutrality of the organ is, I suggest, captured exactly by its description as τὸ μέσον.[89] The most obvious case, which Aristotle seems to have primarily in mind here, is that of perceiving the heat and the cold. The cold air acts on my body by literally cooling it down. If I were a plant or a kettle of water, this acting would result simply in the lowering of my temperature, not in perception. The reason for this would be exactly my lack of the requisite mean, as Aristotle says in *An.* 2.12: the reason why plants do not perceive, although they are cooled and warmed, is that 'they do not have a mean (μεσότης)'; they 'are affected with the matter', rather than receiving the forms of perceptual objects.[90] Having the requisite mean, I contend, implies precisely that the air acting on my body does *not* result in the lowering of my temperature, but rather in something else. Presumably, my temperature remains *exactly* the same (with smaller or larger local oscillations) owing to a homeostatic reaction that counterbalances the agency of the external object acting on me.[91] This homeostatic mechanism is what guarantees that I can continue being affected by the same object and thus can continue perceiving it.[92]

[89] If we imagine all colours as having values between *x* (corresponding to black) and *y* (corresponding to white), all of which are 'measured' by white (cf. *Metaph.* I.2, 1053b29–34), the mean in question can hardly be the geometrical, the arithmetical, or the harmonic mean (it is neither the grey nor the sallow, cf. *Cat.* 10, 12a18–20; nor is it the purple or the red, identified, apparently, as corresponding to the fifth and the fourth among colours at *Sens.* 3, 439b25–440a6). Rather, as Johansen 2002: 181 puts it, the mean is 'the point at which the two extremes cancel each other out'. In this sense, a certain temperature, for instance, can serve as the mean for touch (almost) as well as transparency does for sight.

[90] *An.* 2.12, 424a32–b3. For a discussion of this passage and the notion of receiving forms without the matter, see Section 7.4. Cf. *An.* 3.13, 435a19–b4; for homeostatic readings of this passage, see Murphy 2005: 333–8 and Grasso 2020: 278–80.

[91] In terms of the mean, Aristotle also describes a more general homeostatic mechanism possessed by animals; see e.g. *PA* 2.7, 652b7–27; *GC* 2.7, 334b15–29; cf. *Meteor.* 3.1 (cf. *PA* 3.4, 666b20–667a4; *HA* 1.17, 496a4–27; 3.3, 513a27–b1; and *Somn.* 2, 458a10–19, where the principle of the mean leads Aristotle to infer that the middle ventricle of the heart serves as the centre and origin of the self-preservative and perceptual activity of animals; cf. also *Iuv.* 1, 467b25–468a4). For further analysis, see Tracy 1969: 178–200 and King 2001: 74–129, who focuses on *Long.*, *Iuv.*, and *Resp.* (cf. Terzis 1995, who claims to reconstruct the role of homeostasis in Aristotle's account of emotions).

[92] This idea turns out largely to agree with Grasso 2020, with the main difference being whether μεσότης is to be understood as referring to (a) the neutral state of the organ *resulting from* the

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But there is more to be said. It is not just that my organ remains in its neutral state: when doing so, 'it comes to be the other extreme' with respect to the perceptual object acting on it, *and so* it discriminates this object. Aristotle seems to be capturing here the sense in which the perceiver *is assimilated* to the perceptual object acting on her, while remaining neutral with respect to it. The sense of 'coming to be' that Aristotle has in mind can hardly be a mere Cambridge change. He cannot mean just that τὸ ἁπτικόν 'comes to be the other extreme' with respect to anything we might wish to compare it with (just as something tepid 'becomes' warm in comparison with ice, and cold in comparison with boiling water). This would not explain why τὸ ἁπτικόν is κριτικόν, which is exactly what Aristotle is trying to explain. Rather, it seems, when affected by something cold, τὸ ἁπτικόν 'comes to be the other extreme', and *exactly* the other extreme, in the sense that, to remain a μέσον, it must undergo a certain amount of internal heating that corresponds exactly to the amount of cooling caused by the external object.

The key point here is that the counterbalancing reaction is – in a way that is yet to be explored – *governed by the perceptive capacity* that serves, in this precise sense, as the mean of the organ that defines the normative state in which the organ is always retained (or to which it returns as quickly as possible). This homeostatic mechanism provides a model for the involvement of the soul in perceiving that is not circular, does not compromise the soul's impassivity, and need not ascribe a literal spatial position to the soul. Rather, the perceptive soul can be understood as being a kind of unmoved mover, which 'meets' the incoming motions not by becoming literally contiguous with them, but by its 'acting' on the organ, with the result that this 'acting' is directly determined by the agency of the perceptual object. This, I submit, is how the relevant quality comes to be present in the perceiver exactly as a measured quality *of the external object* rather than as a quality of the perceiver herself.[93]

An important point to notice about this model is that the soul cannot be *absolutely* impassive (like Anaxagoras' or Aristotle's divine νοῦς). Crucially,

counterbalancing reaction, or to (b) the perceptive capacity as the principle *responsible for* this counterbalancing. The latter seems to be further supported by the closeness of μεσότης at *An.* 2.12, 424a32–b3 to 'the principle capable of receiving forms of the perceptual objects'.

[93] We can surely perceive more than one quality of the same range by a single organ at a given time. This does not conflict with the proposed account. We need only to realize that the organ (unlike the soul) is a spatially extended entity that can 'come to be the other extreme' with respect to a plurality of qualities *in spatially differentiated parts* of it. Cf. Alexander's view that the perceptive soul is indivisibly present throughout the perceptive organ (Section 5.3). This is not to say that the case of simultaneous perception of homogeneous qualities is a trivial matter for Aristotle. For a discussion of some of the issues involved in it, see Gregoric 2007: 141–4.

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it is *coincidentally affected* by perceptual objects insofar as its organ is affected. Moreover, its activity is occasioned by the agency of the perceptual object and, indeed, is fully determined by it to the extent that the counterbalancing reaction does nothing more and nothing less than perfectly neutralize the agency of the perceptual object. In this sense, the activity can be described as receptive: it consists in nothing other than 'receiving' (in an inverted form comparable to a wax imprint) the quality of an external perceptual object. However, it is crucial that the reception does not take place *in* the perceptive soul itself. The soul does not 'absorb' the quality of the object into itself, not even in the etiolated sense of undergoing a kind of 'spiritual' alteration. Rather, the quality is received *in the soul's very acting on the organ*, and so the soul is not affected in any non-coincidental way that would compromise its impassivity.[94] We shall return to this point in Sections 7.4 and 7.5 when discussing the passages in *An.* that may *seem* to compromise the perceptive soul's impassivity.

It is interesting, for the overall reconstruction, to note that the notion of μεσότης, when interpreted in the proposed way, can be directly related to the notion of ἀπάθεια that Aristotle ascribes to 'that which can perceive' in *An.* 3.4, drawing on *An.* 2.5. Characterizing the perceptive capacity as a mean comes very close to describing it in terms of an impassivity of the organ along the lines of *Metaph.* Δ.12 and Θ.1 – that is, in terms of a power for resisting a certain (detrimental) kind of being affected, which is a prerequisite, or even a constituent, of a capacity for being affected in an excellent way.[95] It is exactly because the organ resists – in a determinate way owing to the soul – undergoing the change that non-perceptive entities would normally undergo when so affected that it is assimilated to the perceptual object in the requisite way (i.e. that it receives a quality of the external perceptual object not as a quality of its own but exactly as a quality *of that object*).

This goal is achieved by means of a homeostatic mechanism, through which the agency of perceptual objects is very precisely *measured*.[96] The quality comes to be present in the ensouled organ as a result of this measurement: as a precisely determined *proportion* (λόγος) defining the quality in question. We could compare the way of measurement that

[94] Contrast Johansen 2002: 181, who takes *An.* 2.11, 423b31–424a10 to describe 'the manner in which the sense faculty deviates from its mean when it is affected'.

[95] See Section 3.7. The perceptive capacity seems, thus, to have the role of 'that which brings about standstill' (τὸ στατικόν, *Metaph.* Δ.12, 1019a34–5).

[96] For the close relation between measuring (μετρεῖν) and discrimination (κρίνειν), see the Protagorean background sketched out in Section 6.2.

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Aristotle appears to have in mind here with weighing:[97] τὸ ἁπτικόν is like a qualitative balance scale with one pan turned towards the perceptual objects and the other pan turned, so to speak, towards the soul; it resembles the beam of a balance scale continually brought to equilibrium by a mechanism governed by the soul as its unmoved mover. This weighing, in which the 'weight' of the perceptual object is continually determined, *is* the activity of perceiving – as a way of being affected by the perceptual object that *is* a case of discriminating that object.

The metaphor of weighing in the last paragraph was intentionally embellished as a way of emphasizing one question raised by the proposed account, namely: how exactly should we understand the alleged agency of the soul? It must, of course, not be understood as turning the soul into a quasi-bodily agent – that would be an obvious failure by the criteria set out in *An.* 1.3–4. Rather, as the nutritive soul, it is an impassive agent, much like an art[98] – with the difference that it resembles not so much the art of carpentry but rather a measuring art.[99] That, of course, does not fully answer the question, which will need to be discussed in its own right in Section 7.3. For now, however, the point is only that there is no prima facie reason for rejecting such an account of the perceptive soul as an efficient cause.[100] What needs to be discussed is how exactly the model Aristotle develops for the nutritive soul can be adapted to perception.[101]

Another question that must be addressed (in Section 7.2) is how far the proposed account can be extended from touch to the other sense modalities. Assuming that it works fairly well for the heat and the cold, one might

[97] I owe the comparison to Stephen Menn. The same model of κρίνειν is, in connection with the Peripatetics but in a different way, applied by Sextus, *M* 7.226 (the senses, here, function as a balance scale for νοῦς). The simile is also employed by Tracy 1969: 207, but it is not quite clear how it is supposed to work on his model where the organs come to acquire a quality of their own for the duration of perceiving: if there is any 'weighing' going on, it is only when the object ceases to act on the organ (and the organ returns to its equilibrium), which would, absurdly, imply that while I am observing *x* I do not discriminate *x*, and that discrimination of *x* takes place only once I stop observing *x*. The comparison is also used by Bradshaw 1997: 155, but in a way that openly compromises the impassivity of the soul. It is also used, in a very different way, by Johansen 2012b: 84.

[98] See *An.* 2.4, 416b20–3. Cf. *An.* 1.3, 406a3–4 for Aristotle's conviction that the notion of an unmoved mover has already been established elsewhere, and so can be taken for granted.

[99] Cf. Menn 2002: 130, who refers to Plato's account of μετρητικὴ τέχνη at *Prot.* 356d–e. The question is (a) how exactly such a measuring art relates to the productive arts, and (b) in precisely what way it provides a model for the involvement of the perceptive soul.

[100] Cf. Section 5.5.

[101] This model clearly needs to be adapted if we are not to lose sight of the essential passivity of perception, which sharply distinguishes it from nutrition.

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wonder whether there is a way of making it plausible for other perceptual objects, as suggested by (iii) in the quoted passage from *An.* 2.11.

If we assume, for now, that these questions can be satisfyingly answered, we can see what kind of solution Aristotle provides in *An.* 2.11 to the key puzzle from *An.* 1.2 when rephrased in terms of κρίνειν (as proposed in Section 6.2). The judicial authority of perceivers is not based on any 'symbolic' relation to their objects – that is, it is not based on a *static likeness* preceding perception (as in the model of a guest-friend recognizing his guest-friend). Rather, to possess the requisite judicial authority, the senses need to be more unbiased than that: the perceiver must be, and remain throughout the duration of perceiving, neutral with respect to the perceived object and any other perceptual object within the given range.[102] However, this neutrality does not preclude the perceiver being in contact with the perceived object, and, indeed, being intimately acquainted with it, by means of a *dynamic likeness* constantly re-established by a measuring homeostatic reaction to the agency of the perceived object. The perceptive organ measures the perceived object not as a static straight edge (κανών), but rather by constantly *receiving*, so to speak, the perfect measure of the object from the object itself.

This may explain why Aristotle can say both that the perceiver *measures* perceptual objects and that she *is measured* by them.[103] The perceiver measures the objects in the sense that, without the homeostatic reaction governed by the soul there would be no perceptual measuring whatsoever. However, the perceiver is also measured by these objects insofar as she does not contain any fixed measure (like κανών) of them: she is rather *receiving* the measure from the objects themselves throughout the activity of

[102] Tangible qualities represent a partial exception to this rule, because no body can be entirely neutral with respect to them. However, the existence of a blind spot changes nothing about the main principle (see Section 6.6).

[103] See *Metaph.* Δ.15, 1020b30–1021a14 for the former and *Metaph.* l.1, 1053a30–b3 with l.6, 1057a9–12 for the latter. Prima facie, the two accounts appear to be incompatible, as observed by Menn forthcoming a: Appendix to Iγ2a (cf. Broackes 1999: 99–100). The former employs a notion of measure as related per se to the thing measured ('the thing measured will remain unchanged in itself if we measure it in spans instead of cubits, unlike Protagorean sense-objects, which alter when they are "measured" by a new perceiver'), whereas the latter employs a notion of measure as that to which the thing measured is related per se ('being in conformity or not with that standard (e.g. being equal or unequal to the appropriate length for that kind of thing, or lying flat against a straightedge or curving away from it) is an intrinsic attribute of the thing measured, while for the standard to be "in conformity" or not with the thing is not an intrinsic attribute of the standard'). The co-existence of both accounts in the *Metaphysics* is puzzling, not least because each seems to contain a counterargument to the other. However, the passage in *Metaph.* l.1 is actually moving from one account to the other, which suggests that the tension was not unnoticed and that, instead, Aristotle took the two accounts to be, ultimately, compatible.

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perceiving them, as they constantly determine, by their agency, the precise counterbalancing reaction governed by the soul.

6.6 The Single Mean and the Core of Perceptual Discrimination

Let us now step back from the details of the proposed reading of *An.* 2.11, 423b25–424a15. The interpretation of this passage offered in Sections 6.4 and 6.5 fits well with the overall picture of perceptual discrimination in the *De Anima* that I have been developing. What matters for now is that the passage neither supports the three-place model of perceptual discrimination, nor does it necessarily imply the alternative two-place model proposed by Corcilius in which the soul qua neutral value discriminates the quality of the perceptual object *from itself*. Instead, what Aristotle has in mind when he speaks of discriminating darkness, for instance, is an act of singling it out as being distinct from all potential objects of vision, that is, colours – plus apparently (intense) light in which no colour can be seen. This will also hold for colours themselves and for the other modal-specific qualities: when a colour is discriminated, it means that it is identified as just being *this* colour and no other; as on a sieve, it is discerned from the background of all potential colours (and objects of sight in general).

One can worry at this point whether the case of discriminating darkness and the case of discriminating colours can really fall under the same notion of discrimination. After all, we have seen that in *An.* 2.11 Aristotle embeds the account of perceptual discrimination firmly in the assimilation model and spells it out in terms of coming to be the other extreme. But it is obvious that none of this happens in the case of darkness. So, how could 'discrimination' mean the same thing here?

I think the answer is contained in the passages that have often been taken to support the three-place model of discrimination. The question at *An.* 3.2, 426b12–14 is what makes us capable of discriminating various qualities – of the same or of different modalities – *in relation to each other* (πρὸς ἕκαστον), and so to 'perceive that they differ'. On the most general level, I take Aristotle's answer to be that it is because the perceptive capacity is a *single* capacity.[104] Later in *An.* 3.7, the claim is formulated in yet stronger terms: that 'up until' which all the perceptual motions, of various modalities, extend is a *numerically single mean* (μία μεσότης) with

[104] See *An.* 3.2, 426b18–19, 20, 21.

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more than one being.[105] Thus, when Aristotle identified a perceptive capacity such as touch as 'a sort of mean of the contrariety in perceptual objects', what he was describing was, effectively, just one of the beings (or aspects) of a more complex entity numerically identical for all sense modalities, and beyond.[106]

The idea of a numerically single mean seems to be directly connected to Aristotle's account of perceiving the bearers of perceptual qualities, as discussed in Section 4.2. Furthermore, it can help us understand the discrimination of what is imperceptible. Suppose that I am standing on a mountain in the midst of a cloudy moonless night, and I am, in Aristotle's terms, perceptually discriminating darkness. What happens, I take it, is this: I am perceiving the air around me by touch and smell, while perhaps also hearing how it moves; that is, I am perceiving this curious three-dimensional thing that is the air surrounding me, and I am perceiving it by the single mean active in me under several modalities at once. In the case of the three aforementioned modalities, the discriminated qualities of the air are all acting on me; and even one of them would be sufficient to make me perceive this thing (i.e. the surrounding air), because even one of them is sufficient to activate the single perceptive mean. As long as this mean is activated, albeit just by a single quality (say, the cold), it produces a holistic discrimination of its bearer. If the air makes no noise, then it cannot be heard, but it can be discriminated (under the auditory modality) as silent; and if there is no light present in it, it cannot be seen (or nothing can be seen through it), but it can be discriminated (under the visual modality) as dark; and so on. Thus, to return to our question: it seems true that all episodes of perceptual discrimination can be fitted into the assimilation model with the organ 'coming to be the other extreme' and so receiving a quality not as a quality of its own but as a quality of the external object acting on the perceiver; but it does not follow that the perceiver is assimilated to *all* the features of the perceptual object that she discriminates. There is sufficient room for discrimination of what is imperceptible, without any need to assume that this is an entirely different kind of discrimination or that it lacks any connection to the assimilation model.[107]

[105] *An.* 3.7, 431a19–20 (καὶ μία μεσότης, τὸ δ' εἶναι αὐτῇ πλείω); cf. *An.* 3.1, 425a30–b2; *Sens.* 7, 449a5–13.

[106] Cf. *An.* 3.7, 431a10–11, which defines the experience of pleasure and pain as 'being active in virtue of the perceptive mean (τὸ ἐνεργεῖν τῇ αἰσθητικῇ μεσότητι) with respect to what is good and bad as such'.

[107] When I discriminate the darkness of the air outside it is exactly because no countervailing reaction takes place in the visual modality, while I am affected by the air and countervail its agency under a

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This consideration also sheds some light on the phenomenon of tactile blind spots and on why, after presenting the account of the discriminative mean, Aristotle returns, in the final lines of *An.* 2.11 (424a10–15), to the topic of discrimination of what is imperceptible with an emphasis on what is non-tangible. One kind of the non-tangible is 'that which has an entirely indistinct διαφορά of tangible qualities, such as the air'. Now, air can surely have a very strong tangible διαφορά, for instance, when it is very cold;[108] but it can also have no thermal διαφορά at all when it has the same level of heat as the perceiver's body.[109] This applies to other objects as well. When a pot of water has exactly the same temperature as our body, we cannot *feel* it, for it coincides with our blind spot; but it is nonetheless an object *of* touch and we can, in line with *An.* 2.10, *discriminate* its temperature by touch. When I put my hand into the pot and am affected by its humidity, I use touch to discriminate not only this humidity but also the water's non-tangible tepidity.[110]

What leads scholars to interpret Aristotle's account of perceptual discrimination in terms of a three-place model is primarily the final part of *An.* 3.2, where he discusses the question of how we discriminate various qualities *in relation to each other* (ἕκαστον τῶν αἰσθητῶν πρὸς ἕκαστον κρίνομεν, 426b13–14), which implies that 'we perceive that they differ'.

different modality, and so am in a constant perceptual engagement with it which allows me to distinguish its visual quality from all potential colours (as well as intense light).

[108] For the case of 'excesses' that are 'destructive' and the way in which they are discriminated, see Section 7.3.

[109] Most of us, needless to say, would experience this, subjectively, as a pretty hot day. However, this evaluation may have nothing to do with the objective status of discrimination; it may simply be the result of the fact that we are used to constantly countervailing the cooling agency of the outside air (of a certain intensity). Accordingly, if there is nothing or very little to countervail, we feel hot (presumably because we miss the usual opportunity for getting rid of some of our inner heat), but that subjective feeling should be distinguished from perceptual discrimination itself: even when I feel pretty hot, I am still able to appreciate the fact that the outside air is somewhat cooler than my body.

[110] One might insist that the meaning of 'by touch' cannot be exactly the same in the case of the tangible humidity and the case of the non-tangible lukewarmness: the former is discriminated by touch itself, whereas the latter is discriminated by touch in virtue of its integration with the other senses. The point is that this contrast does not, by Aristotle's lights, turn the latter into a common or coincidental perceptual object: it is still discriminated *by touch*. 'Privative' objects, like intangible temperature or darkness, seem to be special cases of exclusive objects (ἴδια). Another question is whether discrimination of these objects can be analysed into an awareness of the inactivity of the respective sense plus an assurance that this inactivity is not caused by some harm on the side of the perceiver (for such an analysis, see Gregoric 2021: 123–8). I don't see much evidence that Aristotle was attracted by this kind of analysis (he never mentions any reflexive awareness of *inactivity* being involved). I am more inclined to think that, for him, this discrimination is *an activity* of the respective sense (albeit an activity performed in virtue of its integration with the other senses) of which we are reflexively aware just as we are aware of the standard cases of modal-specific perceptual acts.

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What Aristotle analyses here, I take it, is not a special case, but rather something that happens in all (or nearly all) cases of perceiving: we standardly perceive the external object simultaneously under a plurality of its qualitative aspects, which implies that we also, in a way, perceive that these qualities differ from each other (otherwise there would be no perceived plurality at all). In this sense, it is true that in perception we standardly discriminate between actively perceived qualities (of a single modality, as well as of different modalities). However, it does not follow that the basic, and explanatorily primary, kind of discrimination is conceived by Aristotle as a three-place predicate. We have already seen several pieces of evidence telling against this assumption. Moreover, the way in which Aristotle introduces his inquiry into simultaneous perception in *An.* 3.2 provides no support for such a claim, either. Rather, if anything, it provides an additional piece of evidence *against* it. Aristotle writes:

> Each sense, being present in the perceptive organ qua perceptive organ, is of the underlying perceptual object and discriminates the διαφοραί of the underlying perceptual object, as, for instance, sight [discriminates] white and black, and taste [discriminates] sweet and bitter, and this is similar also in the case of the other senses. But since we discriminate both white and sweet and [we discriminate] all [perceived qualities] in relation to each other, there is something by which we also perceive that they differ.
>
> ἑκάστη μὲν οὖν αἴσθησις τοῦ ὑποκειμένου αἰσθητοῦ ἐστίν, ὑπάρχουσα ἐν τῷ αἰσθητηρίῳ ᾗ αἰσθητήριον, καὶ κρίνει τὰς τοῦ ὑποκειμένου αἰσθητοῦ διαφοράς, οἷον λευκὸν μὲν καὶ μέλαν ὄψις, γλυκὺ δὲ καὶ πικρὸν γεῦσις· ὁμοίως δ' ἔχει τοῦτο καὶ ἐπὶ τῶν ἄλλων. ἐπεὶ δὲ καὶ τὸ λευκὸν καὶ τὸ γλυκὺ καὶ ἕκαστον τῶν αἰσθητῶν πρὸς ἕκαστον κρίνομεν, τινὶ καὶ αἰσθανόμεθα ὅτι διαφέρει.
>
> (*An.* 3.2, 426b8–14)

Aristotle's phrasing here is, admittedly, somewhat ambiguous. Elsewhere in the *De Anima* he speaks, for instance, of black and white both as διαφοραί of colour and as διαφοραί of visible bodies.[111] These are, then, two candidates for the intended 'underlying perceptual object' in our passage. Given that the two remaining passages in the *De Anima* using this latter expression refer unambiguously to the quality rather than the body,[112] it seems safer to assume that this is also what Aristotle has in mind here. In any case, the term διαφορά does not refer to a *difference*

[111] For the first usage of διαφορά, see *An.* 2.9, 421a13; 2.10, 422b14; 2.11, 422b31–2; cf. *An.* 2.6, 418a13–14. For the second usage, see *An.* 2.8, 420a26–7; 2.11, 423b27–9, 424a12–15; cf. 3.13, 435a21–4.

[112] *An.* 2.11, 422b32–4; 3.2, 425b13–15.

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between two qualities; rather, it refers to what is specific about one quality in contrast to the other qualities of the same kind.[113] The only alleged source of support for the three-place model in the quoted passage thus can be taken to be found in Aristotle's description of sight as '[discriminating] white *and* black' and of taste as '[discriminating] sweet *and* bitter'. It has been argued that what Aristotle has in mind here are cases of discriminating the actively perceived white colour *from* the actively perceived black colour, and so on.[114] However, there is hardly any support for this reading, which would be very difficult to reconcile with the preceding passages on κρίνειν (as we have seen). Rather, even the present passage suggests that Aristotle has something else in mind. First, it would be prima facie awkward if he was claiming that we can discriminate sweetness only from an actively perceived bitterness, implying that no simple perception of sweetness was possible but that our experience is always literally bittersweet.[115] Furthermore, the μέν ... δέ structure of the quoted passage suggests that Aristotle intends to consider the discrimination of multiple qualities in relation to each other (implying a perception of their difference) separately from the basic case of discrimination, which is taken for granted as something that has already been analysed before.[116]

The key meaning of κρίνειν in the basic account, as I have argued, was that of singling out or identifying the quality of the given range possessed by the perceptual object acting on the perceiver – that is, deciding, with the ultimate authority, what the perceived object is like, not *for* the perceiver, but *on its own*.[117] This has nothing to do with distinguishing two perceived qualities from each other. Rather, we should think of contexts like the wind passage from the *Theaetetus*.[118] There may arise disagreements about what some perceptual object is like (what colour it has, whether it is cold or warm, and so on), where the question becomes

[113] Much in the same way that the *differentia* in a canonical definition does not refer to a difference between two entities but rather to the feature that distinguishes the *definiendum* from other objects of the same genus. This fact is acknowledged by Perälä 2018: 262–3.

[114] Perälä 2018: 263. [115] Against this, see e.g. *Metaph.* Γ.5, 1010b23–6 (quoted in Section 6.2).

[116] Cf. *An.* 3.7, 431a17–22. Cf. also *An.* 3.3, 427a20–1 where the object of discrimination, in both perception and thinking, is described in the singular as 'one of the beings' (τι τῶν ὄντων).

[117] This will arguably hold, *mutatis mutandis*, for thinking (for a characterization of thinking as a case of κρίνειν, see *An.* 3.3, 427a20–1 and 3.9, 432a15–18). In the only passage that explicitly discusses thinking as a case of κρίνειν – namely, *An.* 3.4, 429b10–22 – the question is *not* how we discriminate the essence of flesh *from* flesh, for instance (as assumed by some ancient commentators, starting with Themistius, *In An.* 96.8–21; cf. e.g. Perälä 2018: 289–90 n. 70). Rather, the question is what has the authority to identify flesh (as distinct from bone and sinew), and what has the authority to identify the unique essence of flesh.

[118] *Theaet.* 152b–c.

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what authority we should call on. Aristotle's emphatic answer is that the ultimate, objective, and impartial authority with regard to modal-specific aspects of perceptual objects is the perceptive organ in a healthy condition.[119]

In *An.* 2.11, Aristotle seems to come closest to explaining how this authority is grounded and how it is exercised. In the following chapter, we shall explore the loose ends of this account and ask how it builds up to Aristotle's second general account of perception in *An.* 2.12.

[119] Cf. *GA* 5.2, 781a18–20. It is telling that there is no single passage in the *De Anima* where Aristotle would talk about 'discrimination' of common or coincidental objects (cf. n. 24). This fact confirms the observation that the notion of perceptual κρίνειν remains here closely bound to Aristotle's infallibility thesis, as it was first introduced at *An.* 2.6, 418a14–16. The only two passages in the *De Anima* where κρίνειν is used as potentially fallible are *An.* 1.2, 404b21–7, where Aristotle seems to be reporting a Platonist διαίρεσις, and *An.* 3.3, 428a1–5, where this διαίρεσις is recalled. I am, of course, not saying that Aristotle ascribed this narrow meaning to the verb κρίνειν as such. There is plenty of evidence to the contrary. See e.g. *Insomn.* 2, 460b22 where the verb is used to express a potentially false judgement on the side of the perceiver, and *Mem.* 2, 452b8, which talks about estimating the length of time. Moreover, for our purposes, a relatively weak interpretation of Aristotle's infallibility thesis is entirely sufficient (see *An.* 3.3, 428b18–19 for a qualification on Aristotle's part; cf. *Meteor.* 3.4, 375a22–8): it is sufficient for the notion of κρίνειν to work as proposed if we assume with Aristotle that the modal-specific objects are correctly perceived *in normal circumstances*, and, so, are correctly perceived for the most part. This qualification takes nothing away from the senses being the ultimate authorities in their domain (artisans, too, are sometimes hindered by circumstances that prevent them from properly actualizing their art, without this in any way undermining their status as the ultimate authorities in their respective domains).

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CHAPTER 7

Reception of Forms without the Matter and Its Unmoved Causes

7.1 Perceptual Objects as Unmoved Causes

If the account of perceptual discrimination outlined in the preceding chapter is on the right track, we can finally begin to see how Aristotle may be able to account for the receptivity of perception – as one of the two most salient marks of animal life – by means of unmoved causes, and so how he may be able to flesh out, in causal terms, the first general account of perception as a complete passive activity from *An.* 2.5 without compromising the impassivity of the soul defended in *An.* 1.3–4. Integral to this endeavour is the notion of the discriminative mean that encapsulates why perceivers, when affected by perceptual objects, are neither straightforwardly assimilated to them, nor simply mediate their agency, but, precisely, *perceive* them.

Before revisiting the question of the impassivity of the perceptive soul and its involvement in perception from this new perspective (in Sections 7.3, 7.4, and 7.5), let us briefly focus, first, on the other unmoved cause, namely the perceptual object (Section 7.1),[1] and, second, on how the homeostatic account of discrimination can apply to non-tangible modalities (Section 7.2).

Aristotle's classification of perceptual objects as unmoved movers seems to presuppose, first of all, that perceivers in no way *produce* the content of their perception (as the Protagoreans maintain in a radical way).[2] What perceivers perceive are the external perceptual objects as they are. This does not mean, of course, that perceptual objects cannot be changing while being perceived. They clearly often are, and it is not uncommon for the perceivers themselves to be the causes of these changes – most patently in

[1] Cf. Sections 2.1, 3.1, and 4.2.

[2] And as, for instance, the ancient atomists – and in fact most modern thinkers – would maintain (albeit in a milder version) when distinguishing between primary and secondary qualities. For Aristotle's engagement with Protagoreanism, cf. Sections 4.3 and 6.2.

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the case of the hot and the cold. When perceiving a warm cup in my hand, my hand is surely cooling the object in return. How, then, can Aristotle maintain that the object is an unmoved mover? Its case seems prima facie to contrast with that of an artisan, such as a medical doctor, who may surely be exhausted after her day in the office, but without this taking anything away from her expertise. The lowering of the cup's temperature, in contrast, clearly does transform its perceptible features: it is being changed, under the cooling agency of my hand, into a different kind of perceptual object and so it ceases, during the time of being perceived, to be the perceptual object it was at the beginning. One might therefore assume that Aristotle's classification of perceptual objects as being unmoved movers like artisans is ungrounded.

One possible line of response would be to emphasize the special status of the hot and the cold. Unlike colours, sounds, or odours, the hot and the cold are perceived by direct contact with the perceiver's body. Moreover, unlike flavours, they are properties of bodies qua bodies, so that there can be no neutral organ or medium for them. Furthermore, unlike the hard and the soft (and like the wet and the dry), they are highly unstable. Perhaps, for Aristotle's claim, it is sufficient to insist that *in all the other cases* being perceived does not involve any change in the perceptual object qua such (not even flavours of food, when it is consumed in tasting, are thereby transformed into different flavours).

However, even in the case of the hot and the cold, we might argue that Aristotle is willing to insist that the perceptual object *is* an unmoved mover in a sufficiently robust sense. Given the dynamic nature of perception, the fact that the perceptual object is changing (under the agency of my body) while I am perceiving it need not take anything away from its status as an unmoved mover, as long as my perception is exactly tracking this change over time.[3] If this is achieved, then one can insist that although the perceived object is undergoing a perceptually relevant change while being perceived, and although this change is produced by my body, it remains the entire time unmoved qua *perceptual object*. It means that the whole time I am perceiving precisely this external object as it is on its own – which now means exactly as undergoing this change – and not just as it is for me. I achieve this by having the changing quality constantly in my

[3] Another question is whether I can actually succeed in doing this in a concrete case. The fact that my hand is not only cooling the cup, but that the cup is also heating my hand, so that the hand's temperature changes, suggests that, in many cases, I cannot. This, however, is entirely attributable to my failure to preserve my body in the appropriate condition, which is parallel to the case of being affected by perceptual objects that are too strong.

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organ as a quality *of* the external object itself. The object is changed while being perceived, but not changed by perception; and it is never changed in such a way that it loses its ability to be perceived as it truly is.

7.2 Homeostasis in Non-Tangible Modalities

In the case of the distal senses, the media apparently enhance the immobility of perceptual objects, so that these standardly remain unchanged while being perceived. However, this can hardly be the main function of the media. Rather, it seems that mediation primarily facilitates, or even enables, what happens in the perceptive organ proper, and that is, as we know from *An.* 2.11, discrimination, or, as Aristotle will add in *An.* 2.12, reception of perceptual forms without the matter. I suggested (in Section 4.5) that Aristotle's media are best understood as qualitative conductors, and that seems to be correct also in the case of the hot and the cold. When I feel the coldness of an ice cube, it is certainly not because parcels of my flesh are one after the other frozen to −10°C. Rather, the flesh, in Aristotle's view, is somehow capable of conducting the cooling agency without acquiring the respective temperature as a quality of its own.[4] It is, apparently, in this mediated form that the organ needs to receive the agency of the object, in order for the object to be discriminated, rather than replicated, in it.

If we connect these findings with the account of the discriminative mean offered in Sections 6.4 and 6.5, the upshot will be that the mediation of the object's agency is what facilitates, or even enables, the homeostatic reaction of an adequate accuracy necessary for a proper discrimination to take place. It is only when the agency is mediated by a qualitative conductor that it can be successfully 'measured' with the requisite level of precision and reaction time. One question about this mechanism was whether the proposed account of the discriminative mean can be extended from perception of the hot and the cold to the other sense modalities at least as successfully as the account of mediation was extended from sight and hearing to the contact senses in *An.* 2.7 and 11.

This question involves, among other things, the controversial issue of how, according to Aristotle, the work is divided between the periphery and the centre of the perceptual apparatus. The way Aristotle extends the account of perceptual discrimination to other sense modalities at *An.*

[4] That is not to deny that parts of the flesh can become somewhat colder or somewhat warmer; this, I take it, will mark their relative failure to mediate.

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2.11, 424a7–10 suggests that he assumes discrimination to take place at the level of the peripheral organs, such as the eye, which is neither white nor black, but can, when illuminated, receive all colours in the same way as media receive them. It is hard to imagine how the requisite colourlessness could be realized in the heart, which, moreover, can hardly be illuminated (the *pneuma* seems not to be the solution here).[5] The analogue of what is neither black nor white in the case of hearing would apparently be the motionless air in the peripheral auditive apparatus.[6] However, later in *An.* 3.7 Aristotle is explicit about the fact that the mediation somehow continues further beyond the eye; his claim that there is a numerically single mean for all sense modalities is at least suggestive of the idea that all discrimination takes place in the heart.[7] I am not entirely sure whether this tension can be fully resolved. The truth seems to be that, in the *De Anima*, Aristotle does not offer a consistent picture about the relation of the periphery and the centre of the perceptual apparatus: the clearest example is perhaps his inconsistency in treating the tongue as the medium of taste in *An.* 2.7 and 11, while treating it as the organ of taste in *An.* 2.10.[8]

For our purposes, it is the following observation that matters: what happens on the level of peripheral organs (including tongue) must be either the discrimination itself, or a transformation of the incoming motions involving some kind of encoding (so that, for instance, the same ratio is further transmitted in a different pair of contraries).[9] If the latter is correct, then the extension of the homeostatic account from touch to other sense modalities becomes rather straightforward. Once we allow, say, the tongue to be capable of transforming the agency of a flavour into a 'motion' realized in a different pair of contraries from sweet and bitter, such that the heart can receive it (as seems necessary), then there appears to be no difficulty with assuming that another motion in the same pair of contraries, capable of neutralizing the incoming motion, can also be produced in the heart. The same will hold *mutatis mutandis* for the three distal senses.

[5] For more on the question, see Roreitner 2020.
[6] See *An.* 2.8, 419b33–420a15.
[7] See *An.* 3.7, 431a17–20. This is one of the passages in the *De Anima* that speaks against the contrast between 'the heart view' of the *Parva Naturalia* and the 'entelechy view' of the *De Anima* as defended by Nuyens 1948 (for attempts to show how the two views are in fact compatible, see Block 1961, Hardie 1964, Lefèvre 1972, Tracy 1974, and Corcilius and Gregoric 2013). However, that is far from proving a perfect doctrinal consistency between the *Parva Naturalia* (with *Phys.* 7.2–3) and the *De Anima*. One counterexample is Aristotle's insistence on the impassivity of the perceptive soul in the *De Anima*, as argued by Menn 2002 (cf. e.g. Heinaman 1990: 85–8).
[8] Cf. Sections 4.4, 4.5, and 6.4.
[9] For the latter option, cf. e.g. Freeland 2021: 170.

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If, in contrast, we assume that discrimination takes place on the periphery, then the extension is less obvious, but certainly not impossible. As has been noted by Roberto Grasso: 'if there are causal agencies that make relevant media of perception (such as air, water, and flesh) become *F*, there should be no objection to the existence of symmetrically contrary causal agencies that can counterbalance the first agency in bodies that are materially homogenous to the media of perception'.[10] If we take the example of sound, there is no principled reason why the auditory apparatus should not be capable of exactly counterbalancing – either in the air contained in it or on the membrane to which the auditory channels lead[11] – these incoming motions.[12] The details of what happens in the perceptual apparatus are admittedly murky; but this is the case on all accounts. Moreover, these details clearly lie beyond the scope of the *De Anima*. The point is that there is no principled reason for Aristotle, once he accepts a homeostatic account of discrimination for the hot and the cold, not to extend it to other sense modalities – regardless of whether discrimination is meant to take place at the periphery or in the centre of the perceptual apparatus.

What seems to be more pressing is the second question raised in Section 6.5 – namely, how the perceptive soul is supposed to regulate the mechanism. In what sense can it be described as the efficient cause of perception, and how far can the model developed in *An.* 2.4 for the nutritive soul be adapted to it? More specifically, one might have the following doubt: is it not the case that the proposed homeostatic account of the most primitive perceptual discrimination is based on a *petitio principii*? The suggestion was that, rather than being itself affected, the soul governs the countervailing reaction to the acting of the perceptual object on the organ. But how does the soul *know* in which way the organ is being affected? Are we not

[10] Grasso 2020: 281.

[11] See *GA* 2.6, 743b35–744a5; *PA* 2.7, 652b30; *PA* 2.10, 656b13–19; *HA* 1.16, 494b29–31, 495a8–18; *HA* 3.3, 514a17; *HA* 3.13, 519b2–6; *Sens.* 2, 438b10–15.

[12] Grasso 2020: 281 suggests that this works 'according to a principle analogous to the "destructive interference" between two waves of equal frequency and opposite phase'. Alternatively, one could exploit Aristotle's comparison between the perceptive capacity and τόνος at *An.* 2.12, 424a31–2: perhaps the way in which the organ counterbalances the incoming motion is simply by retaining the τόνος that the motions tend to untune; or perhaps the auditory apparatus functions as a sort of multidimensional monochord as an instrument for measuring sounds (it is not certain that Aristotle knew about monochords, but it is not unlikely; see Creese 2010: esp. 81–104). By retaining the appropriate τόνος in all its parts, the auditory apparatus allows all incoming motions to 'resonate' in it and thus be measured, rather than being conducted further, reflected back as an echo, or simply disappearing. For one suggestion concerning vision, see Grasso 2020: 281–2.

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already presupposing what we are trying to explain?[13] This set of questions will be addressed in the following section.

7.3 The Agency of the Perceptive Soul

Let us return to Aristotle's claim in *An.* 2.4 that the soul is an efficient cause of perception understood as a kind of alteration, much as it is an efficient cause of growth and diminution.[14] The parallel between perception and growth here is striking. Prima facie, it may seem that they have nothing in common: after all, growth, and nutrition in general, consists in *(re)producing* the animal's body, whereas perception is receptive, a kind of *being moved* or *affected* by perceptual objects. I want to suggest, however, that despite these obvious differences Aristotle's parallelism between the efficient role of the soul in perception and nutrition contains an important clue for understanding his account of perceptual discrimination.

First, in line with Aristotle's definition of efficient cause as the principle of motion or rest/coming to rest (στάσις, ἠρέμησις),[15] the agency of the nutritive soul can be understood as fundamentally directed at 'rest' in the sense of preserving the living body as such, in its natural condition:[16] it consists in 'preserving the substance'.[17] Making the body larger or smaller seems secondary.[18] Furthermore, even reproduction can be understood as a preservation of the body's substance or form, albeit *in something else*.[19] Indeed, Aristotle's objections to his predecessors, at the first stage of his inquiry into nutrition (415b28–416a18), all turn around this stabilizing – preservative – function of the soul. The body 'would be torn asunder if there were nothing preventing [it], and if there is something like this, then it is the soul – that is, the cause of growth and nutrition'; the soul 'holds

[13] The proposed account thus faces a similar kind of difficulty as Alexander's account (as was argued in Section 5.3), which is no surprise, for some such difficulty must be faced by any interpretation that takes seriously Aristotle's commitment to the impassivity of the soul.

[14] *An.* 2.4, 415b21–7 quoted and discussed in Section 5.5.

[15] See e.g. *Phys.* 2.3, 194b30–1, 195a23–4; *Metaph.* Δ.2, 1013a29–30, 1013b24–5; Θ.8, 1049b5–8; Λ.4, 1070b24–5; cf. *Metaph.* Δ.12, 1019a34–5. See also Aristotle's definition of natural beings (at *Phys.* 2.1, 192b14–15) as 'those which have in themselves the principle of change and of rest' (cf. *Phys.* 2.1, 192b20–3), which is recalled at *An.* 2.1, 412b15–17.

[16] *An.* 2.4, 416b17–19. [17] *An.* 2.4, 416b14.

[18] As Menn 2002: 118 puts it, the nutritive capacity 'is primarily a power of maintaining the thing at its natural size, and only incidentally a power of augmenting the thing when it is too small (or diminishing it when it is too big); nutrition rather than growth is the deeper phenomenon'.

[19] Cf. *An.* 2.4, 416b23–5 and 415a25–b7. For the relation between nutrition and reproduction, see Coates and Lennox 2020 and Lennox 2021b, cf. also Lefebvre 2021.

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[the body] together'.[20] The fire, on the other hand, can certainly 'augment itself' by consuming more and more combustible material, but what distinguishes a genuine growth of a living body from the augmentation of fire is the *limit* set to the body's augmentation by the form, and, again, nothing other than the soul can be responsible for this.[21]

Such an emphasis on preservation, stability, 'holding together', and 'setting a limit' does not imply, of course, that the nutritive soul cannot also be understood as the principle of motion or change. The preservation of the living body as such can be achieved only by a complex structure of changes and, while the nutriment can, in a sense, be seen as an efficient cause, too (as demanded by Aristotle's argument in *Phys.* 8.4–6), the primary agency belongs to the soul. According to Aristotle's considered account, it is the soul that nourishes the body by means of the nutriment.[22] This claim draws on Aristotle's art (or 'craft') analogy: the nutritive soul is the ultimate efficient cause of nutrition and preservation of the living body in a sense analogical to that in which the carpentry is the ultimate efficient cause of furniture production.[23] This is a central tenet of Aristotle's natural philosophy in general,[24] which has several far-reaching implications for his account of the soul in particular, directly pertaining to its immobility as emphasized in *An.* 1.3–4.[25]

For our present purposes, what matters is mainly one point summed up in the aphorism that 'art does not deliberate'.[26] This claim cannot be intended to deny that the agency of an art is regularly realized through the artisan's conscious deliberation, volitional acts, and so on; rather, the point seems to be that qua agency *of the art itself* it is not deliberative, and, indeed, not volitional, nor conscious. In other words: when analysing the

[20] *An.* 2.4, 416a6–9; cf. *An.* 1.5, 410b10–13, 411b5–10.

[21] *An.* 2.4, 416a15–18. On growth, see also *GC* 1.5 (cf. R. King 2001: 49–58 and R. King 2021: 54–7); on the 'limit' of growth, cf. *GA* 2.6, 743b27–744a17 (and Carbone 2021).

[22] *An.* 2.4, 416b20–3. For a helpful analysis of how *An.* 2.4 (and *GC* 1.5) is compatible with the argument of *Physics* 8, see Johansen 2012b: 128–37.

[23] See *An.* 2.4, 416b1–3. The art analogy was introduced at *An.* 1.3, 407b24–7; cf. also 2.4, 415b15–21. See further *Phys.* 2.2, 194b5–9; 2.8, 199b33–5; *PA* 1.1, 641a8; 2.7, 652b13–15; *GA* 1.22, 730b5–23; 1.23, 730b24–33; 2.1, 734b36–735a5; 2.4, 740b24–34; 2.6, 743b20–5. Cf. *GA* 2.6, 744b16–27; *EE* 7.9, 1241b17–19. For the art as a primary efficient cause, see *Phys.* 2.3, 195b21–5; *GC* 1.7, 324a24–b13; 1.10, 328a18–22; *Metaph.* Z.7, 1032a27–b23; Λ.4, 1070b26–34. For the historical background of Aristotle's art analogy, see Coughlin 2024.

[24] See especially Broadie 2007, Sedley 2008: 173–81 (cf. Sedley 2010: 11–18), and Witt 2015; cf. Charlton 1984: 120–6.

[25] See especially Menn 2002; for a helpful overview of the discussion, see Fernandez and Mittelmann 2017.

[26] *Phys.* 2.8, 199b27–30. On this passage, see Broadie 2007: 94–5, Sedley 2008: 177–81 (cf. Sedley 2010: 14–17), and Witt 2015: 117–19.

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artistic agency, we can put the conscious psychological processes on the part of the artisan in parentheses as being subsidiary to the basic causal model of an art producing its artefact. That is why, despite all their differences, art *can* provide an apt analogy for the workings of nature(s), with nutrition serving as a paradigmatic case.[27]

One implication of the art analogy is, arguably, that the nutritive soul not only determines the normative natural state of the body as the goal of nutrition but also has control over which changes will lead to that goal in each given situation depending on the current state of the body.[28] The soul determines not only the goal to be reached but also how exactly the bodily processes are to be directed *right now*, to reach that goal. The concrete process of preservation governed by the soul will obviously be different in the case of an internal disease, of exhaustion after a long run, or of a battle injury. There is a sense in which each nutritive soul (or each soul qua nutritive), as a sort of elephant-building or tiger-building art, always produces exactly the same result, namely the persisting living body in question. However, doing this means different things in different situations depending on the current state of the body; the soul therefore requires control over how to get from the given state to the natural state (as far as possible). It is obvious that this kind of control cannot involve any consciousness or volition, for all animal consciousness and volition already presuppose it.[29] This observation, I argue, contains a clue for addressing the worry whether the proposed homeostatic account of perceptual discrimination is not based on a *petitio principii*.

With regard to perception, the first thing to notice is that the notion of preservation, which was central to Aristotle's analysis of nutrition, plays an important role in his discussion of perception, too. It figures, as we have seen, at a key juncture of the first general account (417b2–5), and it is explicitly reapplied to tasting at *An.* 2.10, 422b3–5.[30] Moreover, if the suggestions made in the preceding chapters are on the right track, the notions of the mean (*An.* 2.11–12) and of impassivity (*An.* 3.4) are intimately related to this notion of preservation. Prima facie, though, the preservation achieved in nutrition and the preservation involved in

[27] For an analysis of how the art analogy is developed into Aristotle's account of nutrition in *An.* 2.4, see Menn 2002: 117–28; cf. Gill 2021: esp. 28–30, 38–9.

[28] For a recent account of forms as not only 'sources' but also as 'controllers' of changes, see Charles 2021: 68–79.

[29] Moreover, something like this control is also manifested in plants, despite the fact that they lack any form of perception according to Aristotle.

[30] For the latter passage, see Section 6.4.

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perception are very different: in the former case, it is the soul that preserves the body, whereas, in the latter case, the perceptive organ is said to be preserved by the perceptual object. And there are other important differences as well. One can argue, nevertheless, that the two notions of preservation are not simply homonymous. It turns out that the preservative character of perceptual πάσχειν is not something that the perceptual object can be credited with as such; indeed, the perceiver can be affected by perceptual objects in such a manner only due to the preservative activity of the soul, and this activity can helpfully be compared with the activity of the nutritive soul.

A preliminary perspective on the connection between the two notions of preservation is offered by Aristotle's treatment of the place of the contact senses within the overall economy of animal self-preservation. Aristotle makes this intimate connection explicit in his claim in *An.* 2.3 that 'touch is the perception of the nutriment' for it is tangible bodies by which animals nourish themselves, and so it is by touch – or by taste in animals in which taste is separated from touch – that animals identify nutriments.[31] Later, in *An.* 3.12, Aristotle adds that touch also contributes to self-preservation on an even more rudimentary level by identifying things that need to be avoided because they would destroy the body, such as fire.[32] In this context, discrimination of what is imperceptible becomes important again,[33] particularly with respect to 'excesses' (ὑπερβολαί) – that is, objects that are imperceptible in the sense of being 'destructive' of the healthy state of the perceptive organ. At the end of *An.* 2.11 (424a14–15), Aristotle refers explicitly to excessively tangible objects, with the most obvious example being, again, fire. Fire falls under the more general category of objects that are imperceptible because their agency cannot be counterbalanced, and so they disrupt the organ's proper balance, making it thereby (temporarily) imperceptive.[34] However, in contrast to the case of deafening sounds or blinding light, the message here is not just to block one's ears or close one's eyes, for the object's destructivity to the sense is at the same time its destructivity to the living body as a whole: identifying something perceptually as destructive to touch is a clear signal for the whole body to withdraw. In other words, the failure to counterbalance the agency of a tangible object (in a way that would result in a

[31] *An.* 2.3, 414b6–14; cf. 3.12, 434b18–22; *Sens.* 1, 437b15–18.
[32] *An.* 3.12, 434b11–18; cf. *Sens.* 1, 437b14–15.
[33] Cf. Sections 6.3 and 6.6.
[34] See also *An.* 2.12, 424a28–32; 3.2, 426a30–b8; 3.4, 429a31–b3. Cf. *Insomn.* 2, 459b13–18, which describes how an after-image gradually changes 'colour' before disappearing – as if the too-strong motion were being step-by-step counterbalanced.

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standard perception) is *eo ipso* a case of discriminating that object as destructive for the entire living body.

A similar set of considerations can be found in Aristotle's analysis of the sense in which the taste is also of what is 'untastable' (ἄγευστον), where 'untastable' is spelled out as 'that which has an indistinct or bad flavour, or a flavour that is destructive of the taste'.[35] In what follows, Aristotle explains why the topic of discrimination of what is imperceptible was introduced at this point; it is because distinguishing between drinkable and undrinkable (and, apparently, edible and inedible) is the most basic function of taste:

> The principle (ἀρχή) seems to be the drinkable and the undrinkable (τὸ ποτὸν καὶ ἄποτον), for taste is somehow of both. But in one case [the experience is] bad (φαύλη) and destructive (φθαρτική) [[of taste]], in the other case [it is] according to nature (κατὰ φύσιν). (*An.* 2.10, 422a31–3)[36]

Here, Aristotle seems to identify the most basic and rudimentary function of taste as a kind of *testing* of prospective nutriments. If the object is such as to destroy the balance of the sense of taste (it is 'untastable'), this means that it would also be destructive for the living body as a whole, and thus it should be avoided. If, on the other hand, what results is 'according to nature', it suggests that the animal will also be capable of transforming the tested object as a nutriment into its own blood and making it a part of its own substance (i.e. its body will be preserved by it in its natural state, just as the organ of taste is preserved by it).[37]

By emphasizing these connections between perception and animal self-preservation, I do not mean to suggest that, for example, taste should be *defined* with a reference to nutriment. That would be an utter failure for Aristotle's project of identifying the basic capacities of the soul as definitionally separable from each other.[38] What these passages highlight is rather a continuity and structural parallelism between the working of the contact senses and the self-preservative mechanism of the animal. When

[35] See *An.* 2.10, 422a20–34 (the quotation comes at a30–1; this is the passage that introduces the discrimination of the imperceptible for the first time and is also the most extensive passage on the topic).

[36] At 422a32, I read ἀμφοτέρου (rather than ἀμφότερα) with Trendelenburg; τῆς γεύσεως ('of taste') at 422a33 is omitted by WyP and it may well be a gloss. The grammar is not entirely transparent, but the main idea seems clear enough.

[37] It seems to be no accident that the quoted passage is immediately followed by the account of tasting that explicitly involves the notion of preservation introduced in *An.* 2.5. See *An.* 2.10, 421a34–b10, as discussed in Section 6.4.

[38] Cf. Corcilius and Gregoric 2010 and Johansen 2012b: 47–72.

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I taste a cake or bile, the basic act of perceptual discrimination consists in identifying it as sweet or bitter, not as edible or inedible; thus, perception *is* in definition separable from nutrition. The point is that perceptual discrimination, of this rudimentary kind at least, can be seen, to some extent, as being a refinement of the self-preservative mechanism underlying nutrition. I say 'to some extent' because perception is clearly a different kind of activity; this does not, however, exclude a continuity with nutrition as far as its underlying mechanism goes.[39]

If these observations are on the right track, then they suggest that the causal model developed by Aristotle for the nutritive soul can, indeed, be used, up to a point, for better understanding the role of the perceptive soul (or soul qua perceptive) – as is suggested by Aristotle's parallel at *An.* 2.4, 415b23–8. We can think of the perceptive soul as controlling the counterbalancing reaction of the perceptive organ in a way parallel to how the nutritive soul preserves the body in its natural state. Clearly, the homeostatic mechanism will have to be much more precise, prompt, and nuanced, particularly as we climb up the natural ladder from touch and taste to smell, hearing, and especially sight. However, as argued in the preceding section, there is no principled reason to think that such agencies are impossible. Similarly, as has been argued now, there is no principled reason against ascribing such agencies to the soul as their primary efficient cause. Given the difficulties faced by other accounts of the soul's involvement in perception, the relative lack of clarity about the precise details should not discourage us from exploring the proposed hypothesis on the level of generality appropriate to the *De Anima*.

The main concern was that the account of the perceptive soul as governing the countervailing reactions involves a *petitio principii* in assuming that the soul can determine the reaction in such a way as to exactly counterbalance the agency of the perceptual object. Does this not presuppose that the soul has already 'measured' or 'cognized' the intensity of the incoming motion? If so, we would be presupposing a kind of cognition in explaining the purportedly basic cognitive acts. However, the parallel with the nutritive soul shows that, in fact, there is no such circularity involved here. What is presupposed is no 'cognition': it is, at least, no more 'cognitive' than what allows the nutritive soul to govern the processes

[39] Aristotle's comparison with polygons at *An.* 2.3, 414b19–32, according to which the nutritive capacity is 'in capacity present in' the perceptive capacity just as the triangle is in capacity present in the quadrangle (b29–32), can be read along these lines. Decomposing quadrangles into triangles is the standard geometrical way of understanding something about the former.

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effecting the preservation of the living body as a whole. As observed above, the nutritive soul determines not only the goal but also the concrete processes that will lead to that goal in the given situation, depending on the current state of the body. Accordingly, the nutritive soul has some control over the current state of the body, which clearly does not involve anything cognitive, deliberative, or volitional.[40] Nothing more than this kind of control over the perceptive organ is necessary for the soul to be capable of governing the homeostatic mechanism underlying, arguably, perceptual discrimination. This means that the basic perceptual acts – as the rudiments of animal cognition of the external world – are undergirded by more basic, unconscious workings of the living body. But that is hardly an objectionable finding. The point is that, on the proposed account, Aristotle is *not* committing the error of conceiving this unconscious working of the body governed by the perceptive soul as being cognitive in its nature. It is no more cognitive than the working of the body governed by the nutritive soul; what distinguishes it is that it *results in* a cognition. Indeed, it results in the most basic cognitive acts: the rudiments of animal consciousness.

This certainly does not imply that cognition or consciousness is *reduced* to material processes or to a complex of more primitive living activities. The fact that the homeostatic mechanism in question underlies perceptual discrimination (rather than being, say, just a part of the process of preserving the living body in its natural state) is explained by nothing other than the *perceptive* soul governing this mechanism. We could never understand perception without taking the perceptive soul, and the specific goal inherent in it, into account. This brings us to how perception essentially differs from nutrition – despite all the parallels and continuity emphasized above.[41] To put it bluntly, the most fundamental difference consists in the fact that an entirely new goal is set by the perceptive capacity: while preservation is the final goal of nutrition, in perception preservation serves only as a means for achieving something quite

[40] One way of making sense of this 'control' might begin from Aristotle's insistence that the soul *is* the substance of the living body (*An.* 2.3, 415a12–15; cf. 2.1, 412a19–21, 412b10–11; 2.2, 414a14–19). What an art can achieve only via the artisan's continuous *cognition* of the outside material that is being transformed into an artefact, the nutritive soul is able to achieve without any cognition or consciousness involved, exactly because it is the very substance of that upon which it acts. The point is that, in the living being, the product of the 'art' is not external to what is endowed with the 'art' (and what serves as the instrument of the 'art'): the gap between the artisan and the artefact disappears (cf. *Phys.* 2.8, 199b28–9), and with it also the need for cognition (and deliberation).

[41] I thank Thomas Johansen for pressing me on this point.

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different – namely, discrimination. Nutrition is directed exactly at countervailing the influences of the external world on the living body and so preserving it in its natural state, whereas in perception the agency of the external object is countervailed (in a more precise and immediate way) not because this kind of enhanced balance is desirable on its own, but precisely because it is a way of discriminating the agents. What defines the very achievement of nutrition is used in perception as only a means for achieving something quite different. The irreducible contribution of the perceptive capacity, I submit, consists exactly in directing a similar kind of mechanism to an entirely different end.[42] Moreover, this redirection involves an irreducible enrichment of the governing agency of the soul: it not only 'produces' a precisely measured reaction but does so in such a way as to make the measurement explicit, that is, to make it emerge as a 'phenomenal likeness', a presence of a quality *of* the agent in the perceiver, or – to put it bluntly – as *a perception* of the agent.[43]

These observations also show why conceiving the involvement of the perceptive soul in terms of efficient causality, parallel to that of the nutritive soul, need not compromise the essential passivity and receptivity of perception. It is true that, on the proposed model, we have a pair of agents in the case of both nutrition and perception (namely the object and the soul); however, their interrelation is entirely different in each case, which implies an essential difference in the kind of activities that nutrition and perception, respectively, are. In nutrition, on the one hand, the agency of the nutriment is systematically reduced to the scheme of like joining like, as the 'final nutriment' is incorporated into the animal's own body. In perception, on the other hand, everything serves the overarching purpose of being affected by the perceptual object in the requisite way (that is, receiving its quality exactly as a quality *of that object*). In nutrition, the object is assimilated to the living body, whereas in perception the

[42] The fact that preservation becomes instrumental here makes it no more dependent on cognition than it was in the case of nutrition. The point is, again, that the instrument in which the work of the 'art' is realized is not external to what is endowed with the 'art', and so – because there is nothing like the gap between the artisan and her instrument – there is no need for cognition in order for the instrument to be controlled in the requisite way.

[43] It is obvious that the phenomenal likeness cannot be simply identified with the acting of the perceptual object on the organ (the likeness is rather what this acting *results in*, due to the activity of the soul). However, it is probably also not to be straightforwardly identified with the opposing agency of the soul. Rather, we should understand it as the result of the latter countervailing the former. Perhaps it can be described as a kind of tension constantly produced by the two agencies cancelling each other out. In this tension, the ratio (λόγος) defining the incoming affection (and the quality of the external object) comes to be present in a new – discriminative – way. (Thanks to an anonymous referee for pressing me on this point.)

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perceptive organ is assimilated to the object. Accordingly, despite the continuity and structural similarity in the underlying mechanism, nutrition is, vis-à-vis its object, an essentially productive activity, whereas perception is an essentially passive and receptive activity.

The proposed account of basic perceptual discrimination and of the perceptive soul as an efficient cause of it, thus, provides an attractive alternative to existing interpretations. It explicates, in a non-circular way, how the soul makes the animal perceive, without compromising either the soul's impassivity or the essential passivity of perception.[44] Moreover, the proposed model does not presuppose any literal contact between the soul and the body, thereby preventing any assimilation of the perceptive soul to spatial entities. The soul 'meets' the incoming motions by 'acting' on the organ in the way art 'acts' on and 'uses' its instrument. This presupposes a certain 'commonality' between the art and the instrument, as Aristotle insists at *An.* 1.3, 407b13–27: carpentry needs a saw and a chisel, while a flute is of no use for it. However, this kind of commonality is clearly not reciprocal in the sense of implying that the art or the soul could itself be affected by its instrument; nor does it imply that the soul is literally located in a determinate point of the body (any more than the art of flute-playing is located in a determinate point of the flute-player's body or her instrument). Rather, it is like a measuring art using the perceptive body as its instrument, while being a part of the body's very essence, and so not being external to it. This allows the soul to achieve what is unthinkable for an art – namely, producing cognition and consciousness of the external world acting on the body.

If this is correct, then there remains one last major exegetical question on the table. This concerns the passages in *An.* 2–3 that may seem to suggest that Aristotle did, after all, allow the perceptive soul to be itself affected by and assimilated to perceptual objects, so that the Themistean approach ultimately ought to be preferred, despite all of its problems.[45] In the remainder of this chapter, I discuss the two most important passages of this kind and argue that, in both, Aristotle has something quite different in mind. Because this involves nothing less than (a) Aristotle's second general account of perception in *An.* 2.12 and (b) his final summary in *An.* 3.8 of the findings concerning the perceptive and the thinking soul, this will also be a good occasion for taking stock.

[44] It thus provides at least one possible way of carrying out the programme outlined in Section 5.5.
[45] Cf. Section 5.4.

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7.4 The Perceptive Soul, Receptivity, and Forms without the Matter

I count seven passages in *An.* 2–3 that may prima facie suggest that Aristotle, after all, does allow the perceptive soul itself to be affected by and/or assimilated to perceptual objects.[46] In all but one of them, the grammatical subject of Aristotle's pronouncement is αἴσθησις in general, or more particularly γεῦσις or ὄψις.[47] In considering these passages, it is worth bearing in mind that these expressions can be used in at least three different ways:

α_{COMP} They can refer broadly to *the senses* including their bodily organs, as in the puzzle of *An.* 2.5, 417a2–9 (see αἰσθήσεις at 417a3), but also later, most clearly perhaps in the opening argument of *An.* 3.1: 'Concerning the simple bodies, the perceptive organs (αἰσθητήρια) are constituted merely of two of them, namely of air and water: the pupil (κόρη) is of water, the auditive organ (ἀκοή) of air, and the olfactory organ (ὄσφρησις) of both.'[48]

α_{CAP} But αἴσθησις can also refer more specifically to *the perceptive capacity* in virtue of which the organ is perceptive.

α_{ACT} And it can, finally, refer to *the activity of perceiving*, too, as it clearly does in the opening of *An.* 2.5 (416b32–4).[49]

This is not to suggest that we can deal with all problematic passages by simply saying that Aristotle may have α_{COMP} in mind, and thus that there is nothing to worry about. There are contexts in which he undoubtedly uses the αἴσθησις language in the precise sense of α_{CAP}. The clearest example is perhaps in the final part of *An.* 2.11, where (as we have seen in Sections 6.4 and 6.5) Aristotle draws a sharp distinction between the organ, the perceptive capacity (αἴσθησις) responsible for the organ's perceptivity, and the activity of perceiving. The second general account of

[46] See *An.* 2.8, 420a30–1; 2.10, 422b2–3; 2.12, 424a17–19 with 22–3; 3.2, 426a3–5, 426b31–427a2; 3.8, 431b21–432a3; 3.12, 435a8–10. I am leaving aside *An.* 2.5 and the meaning of τὸ αἰσθητικόν therein, as it has already been discussed (see Sections 1.1, 2.4, 3.7, and 5.4).

[47] The only exception is *An.* 3.8, where at one point Aristotle refers to τῆς ψυχῆς τὸ αἰσθητικόν (431b26). This passage, however, mentions neither 'being affected' nor 'being changed'; rather, it is about the presence of forms 'in' the soul.

[48] *An.* 3.1, 425a3–5, cf. a7, which says that the earth is to the greatest extent admixed in the organ of touch (ἁφή). Significantly, when Theophrastus paraphrases this passage (as quoted by Priscianus, *Metaphr.* 19.22–5), he writes ὄψις instead of κόρη. Cf. *An.* 2.11, 423b17–20 and Alexander of Aphrodisias, *Mant.* 2, 107.1–3. For this meaning of αἴσθησις, see also the list of passages given by Bonitz 1870: 21.

[49] Cf. 417a3–4.

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αἴσθησις in *An.* 2.12, which immediately follows, clearly works with this nuanced picture, and the same is true about the summary of *An.* 3.8. It is these two *loci classici* that provide the decisive test.[50]

Let us begin with the former:

> **(i)** Concerning all αἴσθησις in general it must be maintained that αἴσθησις is that which is capable of receiving perceptual forms [or: objects][51] without the matter, just as the wax receives the signet of a ring without the iron and the gold: it takes on the golden or the brazen signet, but not qua gold or bronze. **(ii)** And similarly the αἴσθησις of each [modality] is affected by that which has a colour or a flavour or a sound, not insofar as each of these is said, but as such and such and according to proportion. **(iii)** The perceptive organ is that in which this kind of capacity is primarily present. [The organ] is thus [numerically] the same [as the capacity], but [their] being is different; for that which perceives is apparently a certain magnitude, but, surely, neither what it is to be perceptive nor αἴσθησις is a magnitude; rather it is a proportion and a capacity of that [i.e. the perceptive organ].
>
> **(i)** Καθόλου δὲ περὶ πάσης αἰσθήσεως δεῖ λαβεῖν ὅτι ἡ μὲν αἴσθησίς ἐστι τὸ δεκτικὸν τῶν αἰσθητῶν εἰδῶν[52] ἄνευ τῆς ὕλης, οἷον ὁ κηρὸς τοῦ δακτυλίου ἄνευ τοῦ σιδήρου καὶ τοῦ χρυσοῦ δέχεται τὸ σημεῖον, λαμβάνει δὲ τὸ χρυσοῦν ἢ τὸ χαλκοῦν σημεῖον, ἀλλ᾽ οὐχ ᾗ χρυσὸς ἢ χαλκός· **(ii)** ὁμοίως δὲ καὶ ἡ αἴσθησις ἑκάστου ὑπὸ τοῦ ἔχοντος χρῶμα ἢ χυμὸν ἢ ψόφον πάσχει, ἀλλ᾽ οὐχ ᾗ ἕκαστον ἐκείνων λέγεται, ἀλλ᾽ ᾗ τοιονδί καὶ κατὰ τὸν λόγον. **(iii)** αἰσθητήριον δὲ πρῶτον ἐν ᾧ ἡ τοιαύτη δύναμις. ἔστι μὲν οὖν ταὐτόν, τὸ δ᾽ εἶναι ἕτερον· μέγεθος μὲν γὰρ ἄν τι εἴη τὸ αἰσθανόμενον, οὐ μὴν τό γε αἰσθητικῷ εἶναι οὐδ᾽ ἡ αἴσθησις μέγεθός ἐστιν, ἀλλὰ λόγος τις καὶ δύναμις ἐκείνου.
>
> (*An.* 2.12, 424a17–28)

First, we must ask exactly what this is an account *of*. At the end of (iii) Aristotle clearly means by αἴσθησις the perceptive capacity (α_{CAP}) as the source of perceptivity for 'that which can perceive' (τὸ αἰσθητικόν) or 'that which perceives' (τὸ αἰσθανόμενον), which is described here unambiguously as a spatially extended entity (i.e. the perceptive body). If αἴσθησις takes this

[50] For the five remaining passages, see the Appendix.

[51] It is hard to decide whether 'perceptual objects' or 'perceptual forms' is the correct reading (see the following footnote). The truth is that in the two later passages drawing on (i) Aristotle paraphrases the thought both ways: 'receiving each perceptual object without the matter' (*An.* 3.2, 425b23–4); and 'receiving the forms without the matter' (*An.* 3.12, 434a29–30). It is, thus, desirable to accommodate both readings.

[52] The word εἰδῶν is attested by manuscripts EVWy and commentators starting with Themistius, *In An.* 77.29 (cf. Ps.-Simplicius, *In An.* 165.29–30, Philoponus, *In An.* 437.2–3), but it is omitted by manuscripts SUXPE$_a$ (where E$_a$ stands for the original recension of Parisinus 1853).

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meaning throughout the whole passage (as it did at *An.* 2.11, 423b31 and 424a4), then Aristotle is describing the perceptive capacity itself as being receptive in (i) and as being affected by perceptual objects in (ii).

The passage can then be taken as supporting the idea that the assimilation model developed in *An.* 2.5 is to be applied to the perceptive soul itself (*Psychic Interpretation*).[53] However, in (iii) Aristotle sharply contrasts αἴσθησις in the sense of perceptive capacity with τὸ αἰσθανόμενον (and, by implication, τό αἰσθητικῷ εἶναι with τὸ αἰσθητικόν), which can be read as a warning (in the spirit of *An.* 1.3–4) against taking the assertions about αἴσθησις, as the unextended source of perceptivity, in terms of the assimilation model developed for τὸ αἰσθητικόν (i.e. a spatially extended entity). Something similar is suggested by what comes immediately before in *An.* 2.11, where the assimilation model was explicitly applied to the organ of touch, described as τὸ ἁπτικόν, *rather than* to the capacity of touch (ἁφή) present in it.[54]

We shall return to these considerations below. But we should first note that the idea of taking αἴσθησις already in (i) and (ii) as referring narrowly to the perceptive capacity of the soul is by no means necessary or self-evident. It is also possible that Aristotle is speaking in (i) and (ii) of αἴσθησις more broadly along the lines of α_{COMP}: αἴσθησις could be understood as picking out, collectively, 'the senses' or 'that which can perceive' prior to their analysis into the bodily and psychic aspects, which would then be spelled out only in (iii). It is unsurprising that this approach has often been adopted by interpreters searching for evidence of Aristotle's view on the role of the perceptive organs.[55] Furthermore, the approach is

[53] See Lorenz 2007: 193–4, cf. Polansky 2007: 345–9 and already Ps.-Simplicius, *In An.* 165.34–166.31. It is worth noting that one need not take αἴσθησις in (i) and (ii) along the lines of α_{CAP} to derive a similar kind of reading. This is testified by other late ancient commentators, who took αἴσθησις here more broadly than Ps.-Simplicius (along the lines of α_{COMP}), but also understood the point as directly concerning the perceptive soul. This is either because the kind of reception and affection described in (i) and (ii) presupposes that the soul 'is affected along with the body', as Themistius maintained (see Section 5.4), or because receiving forms without the matter means that only the form of αἴσθησις, i.e. the perceptive soul, is affected (see Philoponus, *In An.* 438.6–10).

[54] See Section 6.4.

[55] This understanding of αἴσθησις is typical for the literalist interpretation; see Slakey 1961 and references in n. 61. But see also Caston 2005: 300–7 and Caston 2020: 18–37. Cf. e.g. Hicks 1907: 415. It is less obvious how the spiritualist interpreters understand αἴσθησις in (i) and (ii). Burnyeat 1992: 21–2 speaks, with reference to (i) and (ii), about both what 'the effect on the organ' is like and how forms 'act on the corresponding faculties in us'; Johansen 1997: 189 paraphrases αἴσθησις in (i) and (ii) as 'the sense-faculty'. I take it that the idea must be close to Philoponus (see n. 53): αἴσθησις in (i) and (ii) means broadly that which can perceive (α_{COMP}), but Aristotle's claim here is that only the form of it, i.e. the perceptive capacity, is affected and altered by perceptual objects.

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supported by the fact that when Aristotle later recalls the account of *An.* 2.12, he restates it in terms of the perceptive organ being receptive of perceptual objects without the matter (*An.* 3.2, 425b23–4).[56]

Alternatively, one could take Aristotle as first characterizing in (i) and (ii) the activity of perception (α_{ACT}), and then drawing inferences in (iii) concerning the perceptive capacity (α_{CAP}) as what is primarily responsible for it. This would align with Aristotle's general methodology.[57] Support for this reading may be found in *An.* 2.5, where the first thing Aristotle says about αἴσθησις, the general account of which he wants to provide, is that 'it comes about in being moved and being affected'.[58] Although it is prima facie somewhat strange to describe the activity of perception as 'what is receptive' (τὸ δεκτικόν) and 'is affected' (πάσχειν), there are passages in which Aristotle is willing to say that the activity of perception 'is moved' in a certain way: what he means is that perception is a kind of being affected.[59] Moreover, given the dynamic nature of perceptual likeness, it would make perfect sense to characterize the activity itself as receptive of the form (as the form is received only for the duration of perceiving).[60]

None of these preliminary observations is conclusive, but they jointly call for caution when we try to derive definite views about the involvement of the perceptive soul from the quoted passage. That said, I shall argue that the proposed homeostatic account of perceptual discrimination (from *An.* 2.11) allows us to understand Aristotle's claims in (i) and (ii) as not compromising the impassivity of the soul in any way, *even if* they are taken to concern the perceptive capacity of the soul itself. I first offer an interpretation of Aristotle's account in (i) and (ii) which remains neutral on what exactly the referent of αἴσθησις is supposed to be. I then discuss the consequences for the role of the perceptive soul when αἴσθησις is interpreted as the perceptive capacity.

[56] Cf. *An.* 3.12, 434a29–30, 435a1–10, where even mediation, and a fortiori the affection of perceptive organs, is covered by the wax simile.

[57] Cf. *An.* 2.4, 415a14–23 (responding to 1.1, 402b10–16).

[58] A distinction between α_{CAP} and α_{ACT} is then drawn explicitly at 417a12–13 (cf. Section 3.1). There is a parallel in Aristotle's inquiry into nutrition in *An.* 2.4 introduced and closed as a treatment of τροφή understood as the activity of nourishing oneself (see 415a23–4 and 416b30).

[59] See *An.* 2.8, 420a30–1 and *An.* 3.2, 426b31–427a1, as discussed in the Appendix.

[60] Cf. *An.* 3.4, 429a15, where it seems like τὸ νοεῖν (and by implication τὸ αἰσθάνεσθαι) is the grammatical subject of being δεκτικόν τοῦ εἴδους. Both alternative readings of (i) and (ii) – in terms of α_{COMP} or α_{ACT} – presuppose that ἡ τοιαύτη δύναμις at the beginning of (iii) is taken to mean something like 'the capacity responsible for this' rather than straightforwardly picking up on αἴσθησις as used in (ii).

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The key question is how 'receiving perceptual forms [or: objects] without the matter' should be understood. Indeed, this has been one of the central questions in the debate between literalism and spiritualism. Roughly, the literalist interpretation takes Aristotle to mean that the perceptive organ acquires a literal likeness to the perceptual object without taking material particles of it into itself.[61] The spiritualist interpretation, by contrast, reads the phrase as claiming that 'no physiological change is needed' for perceptual awareness to take place.[62] The contrast between the two approaches becomes very clear in a later passage explaining why plants cannot perceive:

> **(iv)** (. . .) The cause is that they do not have a mean (μεσότητα) and [or: that is] the principle capable of receiving forms of the perceptual objects (τοιαύτην ἀρχὴν οἵαν τὰ εἴδη δέχεσθαι τῶν αἰσθητῶν), but rather they are affected with the matter (πάσχειν μετὰ τῆς ὕλης). (*An.* 2.12, 424b1–3)

The claim that plants 'are affected with the matter' is interpreted by the respective approaches as saying either that plants are heated 'by letting warm air or other warm matter into their system',[63] or that plants are heated 'in both form and matter' in the sense of, simply, becoming hotter. The analogical reading again provides an attractive alternative to this dichotomy: in perception, the organ does not become literally like the perceptual object (as plants do when being heated); rather it comes to embody the same ratio in a different pair of contraries. This is, allegedly, what plants are claimed to be incapable of in (iv).[64]

These three kinds of approaches, however, do not exhaust the interpretative options (as argued in Section 4.6), and the alternative developed in the preceding chapters also proves fruitful with regard to Aristotle's second general account of perception in *An.* 2.12.

We can begin by observing that there are difficulties in accounting for the details of Aristotle's explanation of why plants do not perceive in (iv) in both the materialist and the spiritualist readings.[65] Even if we accept, with literalism, the curious idea that 'being affected with matter' means something like receiving warm air into oneself, it is difficult to explain Aristotle's claim that plants lack the 'principle capable of receiving forms of the

[61] See e.g. Sorabji 1974: 74 n. 28, Sorabji 1992: 210–16, cf. Everson 1997: 87–9 and 99–102 and Hamlyn 1993: 114–15.
[62] Burnyeat 1992: 22, cf. e.g. Johansen 1997: 189, and Murphy 2005: 295.
[63] Cf. Hicks 1907: 419. For a critical assessment of this idea, see e.g. Magee 2000: 324–6.
[64] See Caston 2005: 300–7, Caston 2020: 28–37. Cf. Bradshaw 1997: 156.
[65] For a detailed critical discussion of the literalist reading, see Murphy 2005.

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perceptual objects'. Surely, when a plant lets the warm air in, it is warmed by it, and so it does receive the form of the hot, albeit mediated by a reception of hot matter. And similarly for the analogical reading: a plant is surely capable of receiving the form of the hot, albeit not 'transduced'. So how could Aristotle deny that simple capacity to plants? His claim about plants is no less mysterious on the spiritualist reading. According to Burnyeat, 'receiving the form of something just means becoming like it'. But that is surely what happens to the plant when it is heated: it becomes *like* the hot object 'in both form and matter'.[66] So, again: how could Aristotle deny that plants can receive forms of perceptual objects?

The common assumption behind all three readings seems to be that when Aristotle says that plants lack the 'principle capable of receiving forms of the perceptual objects' he is tacitly qualifying the claim, along the lines of (i), so as to mean that plants are unable to receive the forms of perceptual objects *without the matter*.[67] However, this is not what Aristotle is saying in (iv). It would be preferable to find an interpretation of the two – obviously parallel – expressions that does not necessitate importing the two additional words into the second passage.

The most promising interpretation of the second formulation, I submit, is to emphasize the possessive function of the genitive and understand the claim as saying not that what plants lack is the ability to receive forms *from* perceptual objects, as the standard reading has it, despite this making the claim patently implausible, but as saying literally that what plants lack is the ability to receive forms *of* the perceptual objects themselves, meaning that they cannot receive forms that would still *belong to* external perceptual objects.[68] Plants can clearly receive many forms *from* various perceptual objects acting on them: when a plant is heated it receives, from the hot object acting on it, the form of the hot and acquires it as a form of its own. What no plant can do is receive a form without appropriating it: a plant is unable to receive the form of the hot as still being a form *of* the hot object out there acting on it. That is why plants are unable to perceive.

If this reading of Aristotle's deceptively simple claim about plants is correct, then it also sheds light on what he must mean in (i) when characterizing αἴσθησις as 'that which is capable of receiving perceptual

[66] Burnyeat 1992: 23–4.
[67] Cf. e.g. Ross 1961: 265–6 (inspired, apparently, by Philoponus, *In An.* 440.30–441.2) and Polansky 2007: 252–3.
[68] This interpretative option is lost once τὰ εἴδη τῶν αἰσθητῶν is paraphrased, in line with 424a18–19, as 'sensible forms' (see e.g. Shields 2016: 251–2; cf. Charles 2021: 160: 'objects of sense').

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forms [or: objects] without the matter'. Interpreters have often wondered – and disagreed on – whether the matter that is subtracted in this formula is the matter of the perceptual object or the matter of the perceptive organ.[69] The literalist interpretation opts unequivocally for the first option: the point, it maintains, is that the perceiver receives the form of the perceptual object without receiving its matter; it is taken for granted, though, that the perceiver receives this form in her own matter (which is the very same kind of matter according to literalism) as a form of her own.[70] The analogical reading agrees that the perceiver is claimed to receive the form in her own matter as a form of her own, while insisting, however, that this is a different kind of matter. The spiritualist interpretation, in contrast, emphasizes the second possible meaning of 'without the matter' and takes Aristotle's point to be not just that no matter is received or that the form is not received in the same kind of matter, but, more radically, that the form is received in no matter at all: it is received as a purely formal aspect of the perceiver, without this involving any material change.

The common assumption behind these three families of approaches, again, is that receiving the form in question means acquiring it *as a form of one's own*. But it is not obvious that this is the case. In fact, the dilemma sketched out in the preceding paragraph may be a false one. The point of the subtraction of matter is likely to be deeper than allowed for by the literalist and analogical interpretations, but also less mysterious than the spiritualist interpretation maintains. The claim that perceptual forms are received 'without the matter', I submit, is intended to deny precisely what all three sides tacitly presuppose – namely, that receiving perceptual forms means adopting these as forms of one's own. The matter Aristotle is here concerned about, I take it, is primarily the matter of the perceptual object, but the point is not that the form in question comes to constitute another compound (be it of the same or an analogical kind) on the part of the perceiver. What the literalist and analogical interpretations do not appreciate is that the matter that must remain outside the perceiver remains to be the matter of the form received by her. If the form were to produce a new compound on the side of the perceiver, it would not be received *without the matter* in the intended meaning. Accordingly, Aristotle also says something important here about the matter of the perceiver, namely that it does not acquire the form in question as a form of its own. That,

[69] The dilemma is succinctly captured by Shields 2016: 249.

[70] The same reading of 'without the matter' is often adopted also by interpreters rejecting literalism; see e.g. Lear 1988: 115–16.

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however, by no means implies that perception involves no material affection or change in the perceptive organs, as spiritualism would have it.

The outlined approach not only makes Aristotle's later claim about plants intelligible (without interpolations) but also fits well with the details of the wax analogy in (i). We will be in a better position to understand the analogy once we realize that by 'receiv[ing] the signet (τὸ σημεῖον) of a ring' Aristotle does *not* mean receiving a certain shape that is the shape of (a part of) the ring and comes to be (in an inverted form) also the shape of the wax. Although it is undeniable that this happens, it is, arguably, not the aspect of the sealing event that Aristotle wishes to capture by the words 'receiv[ing] the signet of a ring'.[71] The wax is claimed to take on or receive 'the golden or the brazen signet, but not qua gold or bronze'. The final phrase ('not qua gold or bronze') is usually read as relating to the golden or the brazen signet (the signet is received not qua a piece of gold or bronze).[72] Alternatively, the phrase could be connected with the wax: the wax receives the golden or the brazen signet, but not as gold or bronze would receive it. On either construal, it is unlikely that Aristotle wants to direct our attention to how the shape of the signet is appropriated by the wax. It is *the golden/brazen signet* which is said to be received, not its abstract shape. It comes to the same thing then whether this golden/brazen signet is described as being received, but without the gold/bronze out of which it is made, or whether it is described as being received by the wax, but not as a piece of gold/bronze would receive it. In either case the point seems to be that the signet *itself* or *its* form is received without its proximate matter: the form of the signet comes to be present in the wax while its matter remains outside where the signet itself is located. The idea seems to be that wherever the letter with that seal on it goes, it has the golden or the brazen signet present in it, which provides authority to whatever is written in the letter – as if the owner of the ring were speaking to the reader directly.[73]

The upshot is, again, that Aristotle neither speaks of material replication of form (either literal or analogical), nor does he deny the involvement of

[71] In this way, Aristotle's use of sealing in *An.* 2.12 differs from his use of the same metaphor in *Mem.* 1 (450a29–32), where the word τύπος seems to correspond to the shape of the wax itself and is apparently intended to capture what a *phantasma* retains from the respective αἴσθημα.

[72] See e.g. Hicks 1907: 416, Ross 1961: 265, Caston 2005: 301, Polansky 2007: 341–3, Caston 2020: 19, and Corcilius 2022: 149–50.

[73] Accordingly, I think that there is more to the wax analogy than recognized by Brentano 1867: 81. However, there are also substantial dissimilarities between the *comparatum* and the *comparandum* and so caution is certainly warranted against taking the analogy too literally; cf. n. 74. For difficulties encountered by existing interpretations of the simile, cf. Grasso 2013.

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material affections and changes in perception. He rather defines perception in terms of receiving forms *of* the outside perceptual objects. Now, saying that the received form remains to be a form of an external perceptual object (its proximate matter remains out in the world) does not imply that this form is not simultaneously something *of* the perceiver herself. It is *her relation* to the object. More to the point: it constitutes *her activity* of perceiving that object – namely, a complete passive activity (i.e. a case of *being affected* by the object and assimilated to it, albeit only for the duration of her perceiving it). Given, moreover, that the assimilation is completed throughout the time of perceiving, the form can also be described as a kind of *quality* of the perceiver, albeit neither in a materialist nor in a spiritualist sense. It is, I submit, the very quality of the outside object revealing itself in the perceiver.

In fact, the simile suggests, against the spiritualist reading, that receiving the form of a perceptual object without its matter will necessarily involve some material affections on the perceiver's side, just as the presence of the golden or the brazen signet in the wax can only result from a material imprint.[74] The reason why Aristotle does not say anything about the material affections here is apparently that he has already said what he had to say about them in *An.* 2.7–11, culminating in his account of perceptual discrimination at 423b31–424a10. There he explained – on the reading proposed in Sections 6.4 and 6.5 – that perception essentially involves material affections, which, however, must result in no persisting material likeness.[75] Rather, the perceptive organ needs to be retained in a neutral state, as τὸ μέσον, and it is exactly as being retained in this state – that is, as countervailing the agency of the perceptual object (due to the perceptive capacity active in it as its μεσότης) – that it discriminates the object. At 424a6–7, Aristotle has already analysed the discrimination in question in terms of 'coming to be the other extreme'. This, I proposed, should be read as receiving the quality not as a quality of the organ itself but exactly as a quality *of* the external perceptual object: it is the result of measuring the agency of that object (by means of counterbalancing it)

[74] The wax simile is, of course, only a simile with various dissimilarities to the case of actual perception. Most importantly, the imprint in the wax needs to be interpreted by someone, whereas the form of a perceptual object in a perceiver apparently *is* the activity of perceiving (cf. *An.* 3.2, 425b25–426a27 with Sections 4.2 and 4.3). Moreover, while the wax imprint persists independently from the signet, the perceptual likeness is gone once the object ceases to act on the perceiver (what may remain in the organ are only *phantasmata*). Caston 2020: 22–37 disregards these dissimilarities and so, as far as I can see, takes the simile all too literally.

[75] Although oscillations may well occur, cf. Sections 4.4 and 4.5.

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that can be spelled out in terms of *the ratio* defining the quality in question coming to be present in the perceiver without its proximate matter.

This context also helps us to understand what Aristotle is adding in (ii): 'And similarly the αἴσθησις of each [modality] is affected by that which has a colour or a flavour or a sound, not insofar as each of these is said, but as such and such and according to proportion.' The final part of the sentence is, clearly, further spelling out the notion of receiving perceptual forms (or objects) without the matter. It is not obvious how this could support either the literalist or the spiritualist interpretation. But Victor Caston has identified a key support for his analogical alternative here, interpreting Aristotle's thought as contrasting literal assimilation (being affected by that which has a colour insofar as it has a colour) and transduction (being affected by the same object insofar as it has 'a more general characteristic that is not identical with the color . . . even though essential to it' – that is, insofar as its colour is an embodiment of a certain ratio).[76] However, although the notion of a ratio or proportion (λόγος) may seem suggestive of this reading, it is difficult to understand the phrase 'as such and such (ᾗ τοιονδί)' in the required sense – that is, as referring not to the quality in question itself (like the red colour), but to a 'different kind of quality' consisting in 'some essential feature of that quality'.[77]

More typically, the contrast that Aristotle draws in (ii) has been understood straightforwardly as a contrast between being affected by a perceptual object qua honey or rose on the one hand and qua being sweet or red on the other.[78] This traditional reading fits well enough with the proposed interpretation: Aristotle would simply be insisting that αἴσθησις receives only a quality of the perceptual object while the subject in which the quality inheres (i.e. the proximate matter of it) remains outside.[79]

One might worry, though, that this goes well beyond what is actually said in (ii). Rather, on the standard reading, Aristotle seems to be formulating here a perfectly general characteristic of acting and being affected. When, say, a kettle is heated by the stove, it is surely not affected by the stove qua stove, but exactly qua being hot. Hence the contrast would seem to hold for any qualitative affection whatsoever. If the formulation is to

[76] Caston 2020: 34 n. 51, cf. Caston 2005: 305–7.
[77] See Caston 2020: 37. For a similar kind of doubt, cf. Corcilius 2022: 149–50 n. 55.
[78] See Philoponus, *In An.* 437.17–19, Aquinas *In An.* 2.24, §554, and, more recently, e.g. Ross 1961: 265, Polansky 2007: 343–4, Shields 2016: 249, and Charles 2021: 157–8 (the example of honey goes back at least to Philoponus, whereas contemporary interpreters prefer red roses).
[79] See Corcilius 2022: 147–8 n. 52 for such an interpretation.

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capture something peculiar to perception, then the phrase ἢ ἕκαστον ἐκείνων λέγεται must be referring to the perceptual object under a more specific description. And Aristotle provides examples of such a description: 'that which has a colour, or a flavour, or a sound'. His claim would, then, be that αἴσθησις is not affected by that which has a colour insofar as it is so described, but only 'as such and such' (ᾗ τοιονδί).[80]

But what could that mean? Here is a tentative suggestion: perhaps the contrast is meant to be brought out by the verb 'having' or 'possessing' (ἔχειν) in the following sense. Presumably, αἴσθησις is not affected by that which has a colour in the way that would result in it becoming another object *having* or *possessing* that colour; the result is only being such and such for the time of perceiving, but without acquiring the quality as a quality of its own. The final phrase 'according to proportion' would then be further spelling out the way in which the quality is present in the perceiver, drawing apparently on the account of perceptual discrimination from *An.* 2.11. The quality is, for the duration of perceiving, present in αἴσθησις as the ratio defining the quality in question without its proximate matter.

The suggestion is admittedly speculative, and it may be safer to stick to the traditional reading as spelled out above. Be that as it may, if our overall interpretation of (i) and (ii) is on the right track, then what implication does the passage have for Aristotle's commitment to the impassivity of the soul? Let us assume, for the sake of argument, that by αἴσθησις Aristotle is referring throughout to the perceptive capacity of the soul.[81] This would mean that the perceptive capacity is itself characterized here as 'that which is capable of receiving' perceptual forms (or objects) and as 'being affected by' perceptual objects. What would that imply for the soul's impassivity? My claim is that if we read the passage with the account of perceptual discrimination from *An.* 2.11 in mind (as we are presumably expected to do), there is no reason to worry about impassivity.

As regards the account of receiving forms without the matter in (i), we have already seen (in Section 6.5) that the 'acting' of the perceptive soul

[80] This is also claimed by Caston (see the references in nn. 77 and 78); cf. Caston 2005: 301–2 for a criticism of the traditional reading. Cf. *An.* 3.4, 429a16: νοῦς is 'in capacity such [as its object], but not it' (δυνάμει τοιοῦτον ἀλλὰ μὴ τοῦτο). If it is true that Aristotle is reapplying the present contrast in this later passage, it confirms that the traditional understanding is inadequate, for what would τοῦτο refer to if the object in question is the very essence of a substance?

[81] If in (i) and (ii) he is rather speaking of the perceptive organs (α_{COMP}) or the activity of perception (α_{ACT}), there arises, as noted above, no difficulty for the impassivity of the soul whatsoever.

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qua μεσότης can be understood as a way of *receiving* the agency of the object insofar as the counterbalancing reaction is thoroughly determined by it and perfectly mirrors it: this is exactly how the form possessed by a perceptual object is received while remaining in the possession of that object.[82] This interpretation also explains why Aristotle elsewhere describes the perceptive organ (or the animal) – rather than the perceptive capacity of the soul – as being receptive of perceptual objects, or forms, without the matter.[83] This is because although the form is received by the agency of the soul, this reception takes place, strictly speaking, in the perceptive organ which is the proper subject of both the acting of the perceptual object and the countervailing reaction.

It is somewhat more difficult to understand why Aristotle should want to describe in (ii) the perceptive capacity of the soul as *being affected* by the perceptual object. This would clearly have to mean something different from what he described at *An.* 2.11, 423b29–424a2 when saying that the organ of touch can be affected, for instance by a hot object because it is in capacity such as the object is in fulfilment. The organ of touch can, as a body, come to have the same degree of heat as the object (even though this may imply the death of the animal in question), but it would be absurd to assume that the soul can be more or less hot.[84] Here again the account of perceptual discrimination from *An.* 2.11 provides a clue. If asked how the perceptive capacity could be itself described as being affected by perceptual objects, Aristotle would respond, I suggest, that this can capture how the perceptual object *occasions* an activity of the soul, and, indeed, *determines exactly* what this activity is concretely. This, to be sure, does not involve the soul being affected *in its own right*. That is the privilege of bodies, as Aristotle seems to be reminding us in (iii); but the soul *is* being affected coincidentally insofar as it is the soul of a body affected in its own right. Being affected coincidentally does not mean becoming the proper subject of any change, but it is far from irrelevant: indeed, the soul can be the primary cause of perceiving only insofar as it is coincidentally affected by perceptual objects. Aristotle's account of discrimination and receptivity in *An.* 2.11–12 can be read as a sketch of how coincidental affection is just enough to make the perceptive soul the first principle of a complete passive activity.

[82] Cf. *An.* 2.12, 424b1–3. [83] See *An.* 3.2, 425b23–4; 3.12, 434a29–30.
[84] The situation is, accordingly, similar to that of *An.* 2.10, 422b2–3 (for which see the Appendix) if we take γεῦσις there as referring to the capacity of taste.

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7.5 The Perceptive Soul and Perceptual Objects

Let us conclude by briefly discussing Aristotle's final summary of *An.* 2.5–3.7 in 3.8. This is the only passage in the *De Anima* in which he unambiguously describes the soul itself, not exactly as being affected by or receiving the forms of perceptual objects, but as itself *being* these objects *in a potential and formal way*. This description suggests that when actively perceiving some object the perceiver's soul *actually formally contains* or *is* the form of that object. That claim seems prima facie to contradict my insistence on locating the affection and reception of perceptual forms in the ensouled organ rather than in the soul itself.

However, we must examine more closely what Aristotle actually says here:

> Now, as a way of summing up what has been established about the soul, let us move to saying that the soul is in a way all the beings (ἡ ψυχὴ τὰ ὄντα πώς ἐστι πάντα). For beings are either perceptible (αἰσθητά) or thinkable (νοητά), and scientific knowledge is in a way the objects of knowledge (τὰ ἐπιστητά) and αἴσθησις is the perceptual objects (τὰ αἰσθητά); but it needs to be explored in what way (πῶς). Scientific knowledge and αἴσθησις, then, are to be divided in accordance with their objects (εἰς τὰ πράγματα), the [scientific knowledge and αἴσθησις] in capacity in accordance with the objects in capacity (ἡ μὲν δυνάμει εἰς τὰ δυνάμει) and the [scientific knowledge and αἴσθησις] in fulfilment in accordance with the objects in fulfilment (ἡ δ' ἐντελεχείᾳ εἰς τὰ ἐντελεχείᾳ). The perceptive part (τὸ αἰσθητικόν) and the knowing part (τὸ ἐπιστημονικόν) of the soul are these in capacity (δυνάμει ταῦτά ἐστι): one [is in capacity] the object of knowledge (τὸ μὲν ἐπιστητόν), the other [is in capacity] the perceptual object (τὸ δὲ αἰσθητόν). And necessarily they are either the things themselves (αὐτά) or the forms (τὰ εἴδη). But they are surely not the things themselves, for the stone is not in the soul, but rather its form. So, the soul is like the hand (ἡ χείρ), for the hand is the instrument of instruments (ὄργανόν ἐστιν ὀργάνων) and [similarly] νοῦς is the form of forms (εἶδος εἰδῶν) and αἴσθησις is the form of the perceptual objects (εἶδος αἰσθητῶν). (*An.* 3.8, 431b20–432a3)

This complex passage cannot be discussed exhaustively here.[85] I limit myself to making a few observations relating directly to our question. Drawing on his polemic against the *LKL* principle at *An.* 1.5, 409b23–410a13, Aristotle rejects the absurd idea that, when I perceive or think of a stone, the stone itself is present in my soul. However, he

[85] For two recent discussions, see Crubellier 2020 and Corcilius 2024b.

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retains something important from the intuition behind *LKL* – namely, the idea that *the form* of the stone is somehow present 'in' my soul, at least for the duration of my knowing or perceiving it. Aristotle does not make it entirely clear whether he has a case of perceiving or a case of scientifically knowing a stone in mind. But, for our purposes, we can apply the claim to perception, while, for the sake of simplicity, taking the form in question to be a colour of the stone.[86] What does Aristotle mean by claiming that the form is 'in the soul'? What he says is that it is there in capacity even when I am not perceiving the stone, and in fulfilment when I am perceiving it. How is this compatible with the account of the perceptive capacity as a μεσότης? I suggest that being a μεσότης is for the perceptive capacity exactly being in capacity the form of any perceptual object (of each range). When the stone acts on the perceiver, the μεσότης comes to be its form in fulfilment, for *its acting* on the organ, determined by the agency of the stone, *is* that form – or *results in* the presence of that form – in the organ. Because the fulfilment of the soul – that is, its acting and the result thereof – is located in the organ,[87] there is no conflict between saying that the form is in the organ and that it is, in the proposed sense, 'in the soul'.[88]

This reading is supported by Aristotle's memorable analogy with the hand as 'the instrument of instruments' introduced, apparently, to clarify the sense in which the form of a perceptual object is 'in the soul' or – what seems to amount to the same thing for Aristotle – the sense in which the soul *is* the form of the perceptual objects, namely the form of all perceptual objects in capacity and the form of each perceived object in fulfilment. In *PA* 4.10, Aristotle says that the hand, because it is 'an instrument for instruments', is many instruments rather than one,[89] and that it *comes to be* the instrument it is using.[90] This clearly does not mean that the hand is as

[86] See Section 4.2 for the sense in which perceptually receiving a colour is a case of perceiving its bearer.

[87] Cf. *An.* 2.1, 413a5–6: 'the fulfilment of some [parts of the soul] is [the fulfilment] of the [bodily] parts themselves'.

[88] Besides the passages already referred to, this reading is further supported by the contrast Aristotle draws out in *An.* 3.4 between perception and thought. As an upshot of the argument at 429a18–27, he insists in the following lines that the description of the soul as 'the place of forms' is true, but that this is only so in the case of the thinking soul – apparently because the perceptual forms are, strictly speaking, received in the perceptive organ rather than in the soul itself.

[89] 'And the hand would seem to be not one instrument, but many; indeed it is, as it were, an instrument for instruments (ὄργανον πρὸ ὀργάνων). Accordingly, to the one able to acquire the most arts, nature has provided the most useful of instruments, the hand' (687a20–3, trans. J. Lennox).

[90] 'For the hand becomes (γίνεται) a talon, claw, horn, spear, sword, and any other weapon or instrument – it will be all these (πάντα ἔσται ταῦτα) thanks to its ability to grasp and hold them all (διὰ τὸ πάντα δύνασθαι λαμβάνειν καὶ ἔχειν)' (687b3–5, trans. J. Lennox).

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such affected or changed by the instrument; rather, the hand is what allows the instrument to fulfil its proper function. When taking hold of a spear or a sword, the hand itself comes to function in a spear-like or a sword-like manner; in this way it allows the spear or the sword to be fulfilled as what it is. I take this to be the core of the analogy. Just as for a sword to be fulfilled as a sword means for it to be taken hold of by a hand and used, say, to cut someone's throat, so for a perceptual object to be fulfilled as a perceptual object means for it to be 'taken hold of' by a perceptive soul and be measured in a perceptive organ. However, just as it is not the hand itself that is cut by the sword, so it is not the soul that is as such affected by the perceptual object: rather, it is the soul's activity *in* the perceptive organ that makes it become the form of a concrete perceptual object in fulfilment (while of course remaining the form of all perceptual objects in capacity).

If this is correct, then there is no stronger sense in which the soul itself is receptive or passive implied by *An.* 3.8 than was offered in *An.* 2.11 and 2.12. Hence, the perceptive soul's receptivity in *An.* 2 and 3 is perfectly compatible with its impassivity as defended in *An.* 1.3–4. If this is the case, then we can see how the perceptive soul can be the primary unmoved cause of perception as a complete passive activity in which an outside object – the other unmoved mover of perception – is discriminated, with an ultimate authority, as what it is truly like.

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Conclusion

If the argument of this book has been on the right track, Aristotle affords, within his study of the first principles of animal life, pride of place to the classification of the primary perceptual acts as complete passive activities. This is not a claim about the nature of sense-data or about the sensing of mere qualities. It is, rather, a claim about perception in a rudimentary but robust sense of directly accessing the external bearers of modal-specific qualities. These rudimentary perceptual acts are cases of κρίνειν; they – and only they – reliably identify those qualities as distinct from any other perceptual feature that the objects could have. It is this explanatorily primary layer of perceptual experience that Aristotle wishes to analyse under the concept of complete passive activities.

His claim is not just that these acts involve passive processes. He, to be sure, never intended to deny that they do. However, when he identifies perception as a kind of being affected, he means what he says. To appreciate this classification, we must shed some of our deeply ingrained intuitions about 'passivity' and 'activity'. The idea that there are complete activities that are essentially passive may sound paradoxical to us, and it is certainly not to be taken for granted. However, Aristotle believes that we cannot move forward in understanding what perception is without seeing how complete passive activities are possible. This is the case because perceiving consists in being assimilated to something else, but without losing causal contact with it, as is the case with a mere appearance. Continued perceiving, and thus any perceiving whatsoever, is, in Aristotle's view, possible only if perceivers preserve their unlikeness vis-à-vis the perceived objects acting on them. The qualities they receive must not become their own; they ought to remain qualities *of* the perceived objects out in the world. Perceiving, to put it bluntly, is receiving forms without the matter.

This admittedly abstract analysis encapsulates Aristotle's novel ontology of perception, which underlies his inquiry into the first principles thereof. Perception is essentially a way of relating to external reality. But it is also

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irreducibly qualitative. Although the qualities of perceived objects must not become qualities of the perceiver herself, they do come to be present in her. And they come to be present in her in a new way that cannot simply be explained away. In contrast to contemporary defenders of *qualia*, however, Aristotle is not so much interested in the subjective or private character of perceptual experience – that is, in the irreducibility of 'what it is like' to perceive this or that. One might say that perception is, for him, *objectively qualitative* in the sense that the qualities constituting it remain qualities *of* the external objects, while coming to be present in the perceiver: perception, and only perception, is how these qualities (and so their bearers) reveal themselves in a perceiver, without anything subjective or personal interfering. It is exactly the notion of complete passive activities that, by Aristotle's lights, successfully integrates this simultaneously relational and qualitative nature of perception.

This all implies that perception is, on Aristotle's view, a more dynamic phenomenon than is usually acknowledged by scholars. And this has direct consequences for the much-debated question of the role of the perceptive body. It is wrong to foist onto Aristotle the assumption that *either* the perceiver acquires a material likeness to the perceived object (be it literal or analogical) *or* that perception involves no material processes whatsoever. This kind of disjunction is exactly what makes us blind to the core idea. Material processes are, no doubt, essentially involved in perception; but, if perception is not to end in failure, those processes cannot result in any standing material likeness. The resulting likeness is dynamic (it is, so to speak, established in each moment anew) and is fundamentally cognitive, or 'phenomenal' if you wish: it is how a quality of an outside object reveals itself. It should be clear by now that accepting 'phenomenal' likenesses into the picture does not mean turning Aristotle into a spiritualist. It is merely a way of acknowledging that the primary perceptual acts cannot be explained away or reduced to ordinary material processes. That is, of course, something entirely different from saying that these acts have no essential link to any material process. In fact, once we take Aristotle's causal account of these acts seriously, we can see that he is willing to give much more of an explanation of perception than is allowed for by most existing non-reductive materialist readings.

The primary cause of perception is, for Aristotle, nothing other than the perceptive soul. But it does not play this role by being itself the proper subject of the perceptual object's acting. That would involve the illicit assimilation of the soul to bodies, and so of the *explanans* to the *explananda*, in a way that would effectively beg the question. Nor does

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perception just vaguely 'supervene' on material processes. Rather, I argued, Aristotle conceives of the perceptive soul as the controlling factor of a very precise homeostatic mechanism. That mechanism can be approached as a refinement of the most fundamental self-preservative activity of living, but directed to an entirely new purpose – namely, receiving qualities possessed by outside objects: not devouring things, but taking them in as they are on their own. This turns perception into an essentially different kind of activity: the most rudimentary complete passive activity.

Given Aristotle's willingness to use his analysis of perception as the starting point of his inquiry into the thinking part of the soul, we can expect that the proposed analysis of complete passive activities will also bear fruit there. However, because thought has an entirely different kind of correlative object (namely, the very essences of things) and because it is, by Aristotle's lights, not a bodily activity, the flesh and bones of it – if that language can be retained at all – will have to be very different. Elucidating them is a task that must await another study.

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APPENDIX

Five Passages not Implying the Passivity of the Perceptive Soul

In Sections 7.4 and 7.5, I argued that the two most important passages that could prima facie suggest that Aristotle makes the perceptive soul the proper subject of being affected by and assimilated to perceptual objects (i.e. *An.* 2.12, 424a17–28 and 3.8, 431b20–432a3) are in fact better read in a different way. In that context, I mentioned five other passages within *An.* 2–3 that can make a similar impression on the reader. In this appendix, I explain why none of these actually implies any genuine passivity on the part of the perceptive soul.

In *An.* 2.8 and 3.2, we find Aristotle saying that a certain kind of object 'moves αἴσθησις' in a certain way.[1] This could prima facie sound like a straightforward endorsement of the *Platonic Formula*. But we are lucky enough to have a larger context here which shows very clearly that this is not what Aristotle means. In the second passage, he says that the object κινεῖ τὴν αἴσθησιν ἢ τὴν νόησιν – that is, the activity of thinking; and, a bit further on, he spells the thought out by saying, as often, that perceiving (ἡ αἴσθησις) and thinking (ἡ νόησις) are kinds of being affected by the forms of the respective objects.[2] So what the objects are said to move is clearly αἴσθησις in the sense of the activity of perceiving (α_{ACT}), along the lines of the ubiquitous idea of perception as a kind of being affected or moved by perceptual objects: there is nothing to be learnt about the role of the perceptive soul from here. And it is natural to assume that Aristotle uses the expression κινεῖ τὴν αἴσθησιν with the same meaning in the earlier

[1] '[F]or high [is that which] moves αἴσθησις (κινεῖ τὴν αἴσθησιν) over a short time to a great extent, whereas low [is that which moves it] over a long time to a small extent' (*An.* 2.8, 420a30–1, quoted and discussed in Section 2.6). 'For if it is sweet, it moves αἴσθησις or νόησις (κινεῖ τὴν αἴσθησιν ἢ τὴν νόησιν) in a certain way, if bitter, then in the opposite way, and if white, then in an altogether different way' (*An.* 3.2, 426b31–427a1).

[2] *An.* 3.2, 427a8–9.

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passage (i.e. at *An.* 2.8, 420a30–1) as well: here, too, αἴσθησις seems to mean the activity of perception as an internal (effected) object of κινεῖν.[3]

Later at *An.* 3.12, 435a8–9, Aristotle says that ὄψις 'is moved by' the air, rather than 'going out' to its object.[4] The meaning of ὄψις here is unclear: it cannot be synonymous with κόρη, but it is also strange to interpret it as the perceptive capacity properly speaking (what would it mean for it to 'go out'?). One option is to understand ὄψις as the activity of seeing that can reasonably well be described as 'going out' of the eye and that, as we have seen, can also be described as 'being moved by' the visible object. Indeed, ὄψις in this sense seems to be exactly the object of the optics.[5] Another option would be to interpret ὄψις as the organ of vision more broadly conceived (α_{COMP}), so that it can be identified, for instance, as fire. That would fit well with how Aristotle describes the theory under consideration elsewhere.[6] His alternative then would be an organ (like the eye-jelly) that remains in the perceiver and is, instead, moved by the perceptual object. Either way, there is nothing to be learnt about the role of the perceptive soul from this passage.

One passage that looks more promising comes in *An.* 2.10 where Aristotle asserts that 'the γεῦσις is in a way affected (πάσχει τι) by the tastable qua tastable' (422b2–3). This would not be very striking on its own, for we know that γεῦσις can mean different things, including the organ of taste. But the assertion is a part of the passage applying the assimilation model from *An.* 2.5 to tasting.[7] Aristotle explicitly applies it here to the perceptive organ (τὸ αἰσθητήριον) of taste, described as that which is capable of tasting (τὸ γευστικόν), and this creates an expectation that when he uses the expression γεῦσις in the same context, he should mean *the capacity of taste* rather than the organ. It is thus striking to hear that γεῦσις is 'in a way affected' by the tastable. The truth is, however, that Aristotle does not fix the meaning of γεῦσις here by spelling out its relation to the organ (as he does at *An.* 2.11, 423b29–424a1 and 2.12, 424a24–8). So, perhaps the correct understanding is α_{COMP}, after all. Alternatively,

[3] For instances of κινεῖν with an internal object (κίνησιν) in the *De Anima*, see e.g. 3.9, 432a17 (active voice) and 2.8, 420a16–17 (passive voice).

[4] 'Therefore, also in the case of reflection it is better than saying that ὄψις goes out and is reflected back to say that the air is affected by the shape and colour . . . Hence it [i.e. the air] in turn moves ὄψις (τὴν ὄψιν κινεῖ), as if a seal in wax were to be passed through to the uttermost limit' (*An.* 3.12, 435a5–10).

[5] Cf. e.g. *Metaph.* M.2, 1077a4–6; M.3, 1078a14–15.

[6] See e.g. *Sens.* 2, 437b10–438a5.

[7] *An.* 2.10, 422a34–b10 discussed in Section 6.3; see also the summary at 422b15–16.

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Aristotle may mean α_{ACT}, which could be understood in light of the passages discussed above.

However, the main point is the following: even if we read Aristotle's assertion here along the lines of α_{CAP}, what the larger context suggests is that the meaning of πάσχειν should not be straightforwardly identified with that of *An.* 2.5, for what Aristotle does in the passage is to apply the assimilation model from *An.* 2.5 (including the notion of preservation) specifically to *the organ* of taste. This then leaves several options open for how we could understand the claim that γεῦσις (α_{CAP}) is in a way affected (if this were indeed what Aristotle means). It could mean that the perceptive capacity is affected *coincidentally* insofar as the organ is affected in its own right (in the way defined in *An.* 2.5); or it could mean that the capacity is affected in the sense that its activity is *occasioned by* the agency of the object, or, indeed, *precisely determined by* it, so that it can be described as receptive, although the soul is an efficient cause of perception. The three meanings can complement each other.[8] None of this is, of course, directly suggested by the present passage; but none of this is excluded by it, either. What matters is that the passage as a whole does certainly not suggest that the soul, according to Aristotle, is affected in its own right in the sense implied by the assimilation model from *An.* 2.5: even if it is true that a capacity of the soul is described here as being affected by the perceptual object, this is likely to mean something different.

No more suggestive is Aristotle's assertion at *An.* 3.2, 426a3–5 to the effect that 'it is necessary for both the sound (τὸν ψόφον) and the hearing in activity (τὴν ἀκοὴν τὴν κατ' ἐνέργειαν) to be ἐν τῇ κατὰ δύναμιν, for the activity of the agent and of the mover takes place in that which is affected (ἐν τῷ πάσχοντι ἐγγίνεται)'. Even if we leave aside the textual issue (*Codex Parisinus* 2014, followed, for example, by Ross, has τῷ instead of τῇ, which makes the whole passage entirely innocuous),[9] the larger context suggests that Aristotle is very unlikely to be making a point here about the perceptive capacity specifically (as contrasted with the perceptive organ). Just a few lines before, he spelled out the idea of 'that which sees' (τὸ ὁρῶν) being somehow coloured in terms of 'each perceptive organ (τὸ αἰσθητήριον) being receptive of the perceptual object without the

[8] Cf. Section 7.4.

[9] Alexander's *Quaest.* 3.7, 93.5 attests τῇ, so one would have to assume a very early corruption. Still, the fact that a change of a single letter (attested in the manuscript tradition) makes the passage entirely neutral on the role of the soul already signals that caution is warranted here.

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matter' (425b23–4). And in the same spirit he opened the passage about the numerically identical activity of what perceives and what is perceived by correlating 'that which has hearing (is capable of hearing)' with 'that which has sound (is capable of sounding)' (425b25–426a2) – that is, the perceptive animal (or its organ), with the external bearer of sound.[10] Immediately after the passage quoted above, Aristotle picks up on this correlation in terms of 'that which can hear' and 'that which can sound' (426a6–7), the former being 'that which is affected' and the latter being 'that which acts' (426a9–11). Throughout the passage, Aristotle thus seems to be localizing the activity of hearing in the hearing animal or its auditory organ. If he intended to claim that the activity is strictly speaking located in the auditive capacity itself, one would expect him to announce this important amendment in a much clearer and more consistent way. As the text stands, it seems most natural to take ἐν τῇ κατὰ δύναμιν as referring to the auditive organ (α_{COMP}), as ἀκοή unambiguously does at *An.* 3.1, 425a3–5.

But even if one wanted to interpret the phrase as referring specifically to the auditive capacity (α_{CAP}), this would not necessarily imply that this capacity itself is treated as the proper subject of πάσχειν here. The thought could equally well be that the activity/form comes to be, somehow, *in* the capacity of the soul when the body, of which it is a capacity, is affected.[11] Furthermore, even if one took Aristotle to be implying that the auditive capacity *is*, somehow, affected, the passage would not tell us anything about how to understand that claim in the context of the assimilation model as applied to the perceptive organ elsewhere in *An.* 3.2 and throughout *An.* 2.7–11. For both the idea of the perceptive capacity being affected, as well as the idea of the form of the perceptual object being present in that capacity, we would need to turn to other passages (as discussed in Sections 7.4 and 7.5), in order to understand what Aristotle may have in mind.

[10] Cf. Section 4.2. [11] Cf. *An.* 3.8, 431b20–432a3, as discussed in Section 7.5.

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References

Achard, M. 2004. *Epistémologie et pratique de la science chez Aristote: Les seconds analytiques et la définition de l'âme dans le De anima*. Paris: Klincksieck.

Ackrill, J. L. 1981. *Aristotle the Philosopher*. Oxford University Press.

1997. 'Aristotle's Distinction between Energeia and Kinesis', in *Essays on Plato and Aristotle*. Oxford University Press, pp. 142–62.

Anagnostopoulos, A. 2010. 'Change in Aristotle's Physics 3', *Oxford Studies in Ancient Philosophy* 39: 33–79.

2011. 'Senses of "'Dunamis" and the Structure of Aristotle's "Metaphysics" Θ', *Phronesis* 56: 388–425.

2017. 'Change, Agency and Activity in Aristotle', *Phronesis* 62.2: 170–209.

2023. 'Aristotle's First Moves Regarding Perception: A Reading of (Most of) *De Anima* 2.5', *Archiv für Geschichte der Philosophie* 105.1: 68–117.

Arsenault, M. forthcoming. 'Aristotle on the Objects of Perception'.

Baltussen, H. 1992. 'Peripatetic Dialectic in the *De sensibus*', in W. W. Fortenbaugh and D. Gutas (eds.), *Theophrastus: His Psychological, Doxographical, and Scientific Writings*. New Brunswick: Routledge, pp. 1–19.

1996. 'A "Dialectical" Argument in *De Anima* A 4: On Aristotle's Use of Topoi in Systematic Contexts', in K. Algra, P. W. van der Horst, and D. Runia (eds.), *Polyhistor: Studies in the History and Historiography of Ancient Philosophy. Presented to Jaap Mansfeld on his Sixtieth Birthday*. Leiden: Brill, pp. 333–43.

2000. *Theophrastus Against the Presocratics and Plato: Peripatetic Dialectic in the de Sensibus*. Leiden: Brill.

Barker, A. 1981. 'Aristotle on Perception and Ratios', *Phronesis* 26.3: 248–66.

Barnes, J. 1971. 'Aristotle's Concept of Mind', *Proceedings of the Aristotelian Society* 72: 101–14.

1980. 'Aristotle and the Methods of Ethics', *Revue Internationale de Philosophie* 34.133/134: 490–511.

1993. *Aristotle's Posterior Analytics*. 2nd ed. Oxford: Clarendon Press.

Baumrin, J. M. 1976. 'Active Power and Causal Flow in Aristotle's Theory of Vision', *Journal of the History of the Behavioral Sciences* 12.3: 254–9.

Beekes, R. 2009. *Etymological Dictionary of Greek* (2 vols.). Leiden: Brill.

Beere, J. 2009. *Doing and Being: An Interpretation of Aristotle's Metaphysics Theta*. Oxford University Press.

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Bernard, W. 1988. *Rezeptivität und Spontaneität der Wahrnehmung bei Aristoteles: Versuch einer Bestimmung der spontanen Erkenntnisleistung der Wahrnehmung bei Aristoteles in Abgrenzung gegen die rezeptive Auslegung der Sinnlichkeit bei Descartes und Kant*. Baden-Baden: Koerner.

Betegh, G. 2021. 'Thinking with Empedocles: Aristotle on Soul as *Harmonia*', *Oxford Studies in Ancient Philosophy* 59: 1–44.

Block, I. 1961. 'The Order of Aristotle's Psychological Writings', *American Journal of Philology* 82: 50–77.

Bolton, R. 1978. 'Aristotle's Definitions of the Soul: *De Anima* II, 1–3', *Phronesis* 23.3: 258–78.

1990. 'The Epistemological Basis of Aristotelian Dialectic', in D. Devereux and P. Pellegrin (eds.), *Biologie, logique et métaphysique chez Aristote*. Paris: Éditions du Centre National de la Recherche Scientifique, pp. 185–236.

2005. 'Perception Naturalized in Aristotle's *de Anima*', in R. Salles (ed.), *Metaphysics, Soul, and Ethics in Ancient Thought: Themes from the Work of Richard Sorabji*. Oxford University Press, pp. 209–44.

2021. 'Method and Doctrine in Aristotle's Natural Psychology: *De Anima* II.5', in P. Gregoric and J. L. Fink (eds.), *Encounters with Aristotelian Philosophy of Mind*. New York: Routledge, pp. 65–96.

Bonitz, H. 1870. *Index Aristotelicus*. Leipzig: Reimer.

Bowin, J. 2011. 'Aristotle on Various Types of Alteration in *De Anima* II 5', *Phronesis* 56.2: 138–61.

2012a. 'Aristotle on "First Transitions" in *De Anima* II 5', *Apeiron* 45.3: 262–82.

2012b. '*De anima* II 5 on the Activation of the Senses', *Ancient Philosophy* 32.1: 87–104.

Bradshaw, D. 1997. 'Aristotle on Perception: The Dual-Logos Theory', *Apeiron* 30.2: 143–61.

Brenet, J.-B. 2014. 'Agent Sense in Averroes and Latin Averroism', in J. F. Silva and M. Yrjönsuuri (eds.), *Active Perception in the History of Philosophy: From Plato to Modern Philosophy*. Dordrecht: Springer, pp. 147–66.

Brentano, F. 1867. *Die Psychologie des Aristoteles: insbesondere seine Lehre vom Nous Poietikos*. Mainz: Kirchheim.

Broackes, J. 1999. 'Aristotle, Objectivity and Perception', *Oxford Studies in Ancient Philosophy* 17: 57–113.

Broadie, S. 1993. 'Aristotle's Perceptual Realism', *The Southern Journal of Philosophy* 31, supplement: 137–59.

2007. 'Nature and Craft in Aristotelian Teleology', in *Aristotle and Beyond: Essays on Metaphysics and Ethics*. Cambridge University Press, pp. 85–100.

Brown, L. 1997. 'What Is "the Mean Relative to Us" in Aristotle's *Ethics*?', *Phronesis* 42.1: 77–93.

2014. 'Why Is Aristotle's Virtue of Character a Mean? Taking Aristotle at his Word (*NE* ii 6)', in R. Polansky (ed.), *The Cambridge Companion to Aristotle's Nicomachean Ethics*. Cambridge University Press, pp. 64–80.

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Browne, G. 1986. 'Ad Themistium Arabum', *Illinois Classical Studies* 11.1/2: 223–45.
Buddensiek, F. 2017. 'Aporia in Aristotle's *Metaphysics* Beta', in G. Karamanolis and V. Politis (eds.), *The Aporetic Tradition in Ancient Philosophy*. Cambridge University Press, pp. 137–54.
Burnyeat, M. F. 1976. 'Plato on the Grammar of Perceiving', *The Classical Quarterly* 26.1: 29–51.
1984. *Notes on Books Eta and Theta of Aristotle's Metaphysics*. Oxford: University of Oxford, Faculty of Philosophy.
1990. *The Theaetetus of Plato*. Indianapolis: Hackett.
1992. 'Is an Aristotelian Philosophy of Mind Still Credible? (A Draft)', in M. C. Nussbaum and A. O. Rorty (eds.), *Essays on Aristotle's De Anima*. Oxford: Clarendon Press, pp. 15–26.
1995. 'How Much Happens When Aristotle Sees Red and Hears Middle C? Remarks on *De Anima* 2. 7–8', in M. C. Nussbaum and A. O. Rorty (eds.), *Essays on Aristotle's De Anima*. Oxford: Clarendon Press, pp. 421–34.
2001. 'Aquinas on "Spiritual Change" in Perception', in D. Perler (ed.), *Ancient and Medieval Theories of Intentionality*. Leiden: Brill, pp. 129–53.
2002. '*De Anima* II 5', *Phronesis* 47.1: 28–90.
2008a. *Aristotle's Divine Intellect*. Milwaukee: Marquette University Press.
2008b. '*Kinesis* vs. *Energeia*: A Much-Read Passage in (but not of) Aristotle's Metaphysics', *Oxford Studies in Ancient Philosophy* 34: 219–92.
Bynum, T. W. 1987. 'A New Look at Aristotle's Theory of Perception', *History of Philosophy Quarterly* 4.2: 163–78.
Cagnoli Fiecconi, E. 2021. 'Aristotle on Attention', *Archiv für Geschichte der Philosophie* 103.4: 602–33.
Campeggiani, P. 2020. 'Aristotle on Perceptual Interests', *Apeiron* 53.3: 235–56.
Carbone, A. L. 2021. 'Why Do Not Animals Grow on without End? Aristotle on Nutrition and Form', in G. Korobili and R. Lo Presti (eds.), *Nutrition and Nutritive Soul in Aristotle and Aristotelianism*. Berlin: De Gruyter, pp. 85–100.
Carter, J. W. 2018. 'Does the Soul Weave? Reconsidering *De Anima* 1.4, 408a29-b18', *Phronesis* 63.1: 25–63.
2019a. *Aristotle on Earlier Greek Psychology: The Science of Soul*. Cambridge University Press.
2019b. 'How Aristotle Changes Anaxagoras's Mind', *Apeiron* 52.1: 1–28.
Cashdollar, S. 1973. 'Aristotle's Account of Incidental Perception', *Phronesis* 18.1: 156–75.
Caston, V. 1998. 'Aristotle and the Problem of Intentionality', *Philosophy and Phenomenological Research* 58.2: 249–98.
1999. 'Commentary on Miller', *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 15.1: 214–230.
2000. 'Aristotle's Argument for Why the Understanding Is Not Compounded with the Body', *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 16.1: 135–75.

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2002. 'Aristotle on Consciousness', *Mind* 111.444: 751–815.
2004. 'More on Aristotle on Consciousness: Reply to Sisko', *Mind* 113.451: 523–33.
2005. 'The Spirit and the Letter: Aristotle on Perception', in R. Salles (ed.), *Metaphysics, Soul and Ethics: Themes from the Work of Richard Sorabji*. Oxford University Press, pp. 245–320.
2012. *Alexander of Aphrodisias: On the Soul: Part I: Soul as Form of the Body, Parts of the Soul, Nourishment, and Perception*. London: Bloomsbury.
2018. 'Aristotle on the Reality of Colors and Other Perceptible Qualities', *Res Philosophica* 95.1: 35–68.
2019. 'Theophrastus on Perceiving', *Rhizomata* 7.2: 188–225.
2020. 'Aristotle on the Transmission of Information: Receiving Form without the Matter', in D. Bennett and J. Toivanen (eds.), *Philosophical Problems in Sense Perception: Testing the Limits of Aristotelianism*. Cham: Springer, pp. 15–55.
forthcoming. 'Aristotle on Perceptual Content'.
Charles, D. 2000. *Aristotle on Meaning and Essence*. Oxford University Press.
2009. 'Aristotle's Psychological Theory', *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 24.1: 1–49.
2010. '*Metaphysics* Θ.7 and 8: Some Issues Concerning Actuality and Potentiality', in J.G. Lennox and R. Bolton (eds.), *Being, Nature, and Life in Aristotle: Essays in Honor of Allan Gotthelf*. Cambridge University Press, pp. 168–197.
2015. 'Aristotle's Processes', in M. Leunissen (ed.), *Essays on Aristotle's Physics*. Cambridge University Press, pp. 186–205.
2020. 'Aristotle on the Perception of Objects', in G. Guyomarc'h, C. Louguet, and C. Murgier (eds.), *Aristote et l'âme humaine: Lectures de De anima III offertes à Michel Crubellier*. Leuven: Peeters, pp. 19–38.
2021. *The Undivided Self: Aristotle and the 'Mind–Body' Problem*. Oxford University Press.
Charlton, W. 1984. *Aristotle: Physics. Books I and II*. Oxford: Clarendon Press.
Coates, C. F and Lennox, J. G. 2020. 'Aristotle on the Unity of the Nutritive and Reproductive Functions', *Phronesis* 65.4: 414–66.
Cohen, S. M. 1982. 'St. Thomas Aquinas on the Immaterial Reception of Sensible Forms', *The Philosophical Review* 91.2: 193–209.
1992. 'Hylomorphism and Functionalism', in M. C. Nussbaum and A. O. Rorty (eds.), *Essays on Aristotle's De Anima*. Oxford: Clarendon Press, pp. 57–73.
Coope, U. 2004. 'Aristotle's Account of Agency in *Physics* III 3', *Proceedings of the Boston Area Colloquium of Ancient Philosophy* 20.1: 201–27.
2009. 'Change and Its Relation to Actuality and Potentiality', in G. Anagnostopoulos (ed.), *A Companion to Aristotle*. Chichester: Wiley-Blackwell, pp. 277–91.
Corcilius, K. 2008. *Streben und Bewegen, Aristoteles' Theorie der animalischen Ortsbewegung*. Berlin: De Gruyter.

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2014. 'Activity, Passivity, and Perceptual Discrimination in Aristotle', in J. F. Silva and M. Yrjönsuuri (eds.), *Active Perception in the History of Philosophy: From Plato to Modern Philosophy*. Dordrecht: Springer, pp. 31–53.
2015. 'Faculties in Ancient Philosophy', in D. Perler (ed.), *The Faculties: A History*. Oxford University Press, pp. 19–58.
2017. *Aristoteles. Über die Seele. De anima*. Hamburg: Meiner Verlag.
2020. '*De anima* III 7: The Actuality Principle and the Triggering of Mental Episodes', in G. Guyomarc'h, C. Louguet, and C. Murgier (eds.), *Aristote et l'âme humaine: Lectures de De anima III offertes à Michel Crubellier*. Leuven: Peeters, pp. 185–219.
2021. 'Aristotle's Theory of Animal Agency and the Problem of Self-Motion', in S. M. Connell (ed.), *The Cambridge Companion to Aristotle's Biology*. Cambridge University Press, pp. 176–94.
2022. 'The Gate to Reality: Aristotle's Account of Perception in *De Anima* II 12', in C. Cohoe (ed.), *Aristotle's On the Soul: A Critical Guide*. Cambridge University Press, pp. 122–54.
2023. 'The Undivided Self: Aristotle and the "Mind–Body Problem", by David Charles', *Mind* 132.525: 303–13.
2024a. 'Aristotle's Account of the Human Capacity for Thinking', in K. Corcilius, A. Falcon and R. Roreitner, *Aristotle on the Essence of Human Thought*. Oxford University Press, pp. 49–111.
2024b. '*An.* III 8: Concluding Theorems about Human *Nous*', in K. Corcilius, A. Falcon and R. Roreitner, *Aristotle on the Essence of Human Thought*. Oxford University Press, pp. 191–222.
2025. 'The Soul Itself in Aristotle's Science of Living Things', in D. Lefebvre (ed.), *The Science of Life in Aristotle and Early Peripatos*. Leiden: Brill, pp. 23–50.
Corcilius, K. and Falcon, A. 2022. 'Aristotle on Remembering and Memory: Toward an Interpretation of *Mem.* 1', *Medicina nei secoli* 34.1: 11–30.
Corcilius, K., Falcon, A., and Roreitner, R., 2024. *Aristotle on the Essence of Human Thought*. Oxford University Press.
Corcilius, K. and Gregoric, P. 2010. 'Separability vs. Difference: Parts and Capacities of the Soul in Aristotle', *Oxford Studies in Ancient Philosophy* 39: 81–120.
2013. 'Aristotle's Model of Animal Motion', *Phronesis* 58.1: 52–97.
Coren, D. 2019. 'Aristotle on Self-Change in Plants', *Rhizomata* 7.1: 33–62.
Cornford, F. M. 1935. *Plato's Theory of Knowledge: The Theaetetus and the Sophist of Plato Translated with a Running Commentary*. London: Kegan Paul.
Coughlin, S. 2024. 'Art and Nature in Aristotle's *Physics*: Some Antecedents in Early Greek Medicine', in H. Bartoš and V. Linka (eds.), *Aristotle Reads Hippocrates*. Leiden: Brill, pp. 126–168.
Creese, D. 2010. *The Monochord in Ancient Greek Harmonic Science*. Cambridge University Press.
Crubellier, M. 2020. 'L'âme comme la main: traduction et commentaire du chapitre III 8', in G. Guyomarc'h, C. Louguet, and C. Murgier (eds.),

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Aristote et l'âme humaine: Lectures de De anima III offertes à Michel Crubellier. Leuven: Peeters, pp. 221–53.

forthcoming. 'Aristotle on Human Thinking and Divine Thinking', in C. Bobonich, I. Ramelli, R. Roreitner, and T. Slabon (eds.), *Human and Divine Nous from Ancient to Renaissance Philosophy and Religion: Key Themes, Intersections, and Developments*. Leiden: Brill.

Crubellier, M. and Laks, A. 2009. 'Introduction', in M. Crubellier and A. Laks (eds.), *Aristotle's Metaphysics Beta: Symposium Aristotelicum*. Oxford University Press, pp. 1–23.

Diamond, E. 2015. *Mortal Imitations of Divine Life: The Nature of the Soul in Aristotle's De anima*. Evanston, IL: Northwestern University Press.

Ducharme, A. 2014. 'Aristotle's Mark of Sentience', *Apeiron* 47.3: 293–309.

Ebert, T. 1983. 'Aristotle on What Is Done in Perceiving', *Zeitschrift für Philosophische Forschung* 37.2: 181–98.

Esfeld, M. 2000. 'Aristotle's Direct Realism in *De Anima*', *Review of Metaphysics* 54.2: 321–36.

Everson, S. 1997. *Aristotle on Perception*. Oxford University Press.

Falcon, A. 2015. 'Aristotle and the Study of Animals and Plants', in B. Holmes and K.-D. Fischer (eds.), *The Frontiers of Ancient Science: Essays in Honor of Heinrich von Staden*. Berlin: De Gruyter, pp. 75–92.

2018. 'The Place of the *De Anima* in Aristotle's Explanatory Project', *Epekeina: International Journal of Ontology, History and Critics* 9: 1–15.

2019. 'Definition, Explanation, and Scientific Method in Aristotle's De Somno', *Manuscrito* 42: 516–43.

2020. 'Aristotle's Study of Animals in Context: The Peripatetic Study of Life Reconsidered', in P. König and J.-I. Lindén (eds.), *Aristoteles – Antike Kontexte, gegenwärtige Perspektiven. Akten der Tagung ‚Die aristotelische Philosophie im antiken Kontext' in Heidelberg, 7.–9. Januar 2016*. Heidelberg: Winter Verlag, pp. 185–202.

2021. 'La longévité comparée des plantes et des animaux selon Aristote', *Archives de Philosophie* 84.2: 13–28.

2024. *The Architecture of Science of Living Beings: Aristotle and Theophrastus on Animals and Plants*. Cambridge University Press.

Ferejohn, M. 1999. 'Perception and Dialectic in Aristotle's De Anima', in M. Sim (ed.), *From Puzzles to Principles? Essays on Aristotle's Dialectic*. Lanham, MD: Lexington Books, pp. 151–61.

Fernandez, P. A. and Mittelmann, J. 2017. 'ἡ κίνησις τῆς τέχνης: Crafts and Souls as Principles of Change', *Phronesis* 62.2: 136–69.

2020. 'When Life Imitates Art: Vital Locomotion and Aristotle's Craft Analogy', in C. G. King and H. Bartoš (eds.), *Heat, Pneuma, and Soul in Ancient Philosophy and Science*. Cambridge University Press, pp. 260–87.

Ferro, A. 2022. *Aristotle on Self-Motion: The Criticism of Plato in De Anima and Physics VIII*. Basel: Schwabe Verlag.

Fine, G. 1994. 'Protagorean Relativisms', *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 10.1: 211–43.

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Fine, K. 1999. 'Things and their Parts', *Midwest Studies in Philosophy* 23.1: 61–74.
2008. 'Coincidence and Form', *Proceedings of the Aristotelian Society* 82.1: 101–18.
Fisher, J. J. 2018. 'A Plausible Doctrine of the Mean', *The Review of Metaphysics* 72.1: 53–76.
Förster, A. 1912. *Aristotelis De Anima libri tres*. Budapest: Academiae Litterarum Hungaricae.
Frankfurt, H. G. 1977. 'Identification and Externality', in A. O. Rorty (ed.), *The Identities of Persons*. Berkeley: University of California Press, pp. 239–52.
Frede, D. 2012. 'The *Endoxon* Mystique: What *Endoxa* Are and What They Are Not', *Oxford Studies in Ancient Philosophy* 43: 184–215.
Frede, M. 1992. 'On Aristotle's Conception of Soul', in M. C. Nussbaum and A. O. Rorty (eds.), *Essays on Aristotle's De Anima*. Oxford: Clarendon Press, pp. 93–107.
1994. 'Aristotle's Notion of Potentiality in *Metaphysics* Θ', in T. Scaltsas, D. Charles, and M. L. Gill (eds.), *Unity, Identity, and Explanation in Aristotle's Metaphysics*. Oxford University Press, pp. 173–94.
Freeland, C. 1992. 'Aristotle on the Sense of Touch', in M. C. Nussbaum and A. O. Rorty (eds.), *Essays on Aristotle's De Anima*. Oxford: Clarendon Press, pp. 227–48.
2021. 'The Science of Perception in Aristotle', in S. M. Connell (ed.), *The Cambridge Companion to Aristotle's Biology*. Cambridge University Press, pp. 159–75.
Fritz, K. von. 1946. 'ΝΟΥΣ, Noein, and Their Derivatives in Pre-Socratic Philosophy (Excluding Anaxagoras): Part II. The Post-Parmenidean Period', *Classical Philology* 41.1: 12–34.
Fryde, E. B. 1994. 'The "Paraphrase" by Themistios of Aristotle's *De Anima*, and St Thomas Aquinas', *The English Historical Review* 109.433: 952–9.
Ganson, T. S. 1997. 'What's Wrong with the Aristotelian Theory of Sensible Qualities?', *Phronesis* 42.3: 263–82.
2020. 'Aristotle on Perception as Representation', in D. Bennett and J. Toivanen (eds.), *Philosophical Problems in Sense Perception: Testing the Limits of Aristotelianism*. Cham: Springer, pp. 57–67.
Gasser-Wingate, M. 2021. *Aristotle's Empiricism*. Oxford University Press.
Gauthier, R. A. (ed.). 1984. *Thomas Aquinas: Sentencia libri De anima*. Paris: Vrin.
Gelber, J. 2017. 'Uses of Aporiai in Aristotle's Generation of Animals', in G. Karamanolis and V. Politis (eds.), *The Aporetic Tradition in Ancient Philosophy*. Cambridge University Press, pp. 155–71.
Gill, M. L. 1989. *Aristotle on Substance: The Paradox of Unity*. Princeton University Press.
2021. 'Method and Nutritive Soul in Aristotle's *De Anima* II,4', in G. Korobili and R. Lo Presti (eds.), *Nutrition and Nutritive Soul in Aristotle and Aristotelianism*. Berlin: De Gruyter, pp. 21–42.

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Glidden, D. 1984. 'Aristotelian Perception and the Hellenistic Problem of Representation', *Ancient Philosophy* 4.2: 119–31.
Gonzalez, F. 2019. 'Being as Activity: A Defence of the Importance of Metaphysics 1048B18–35 for Aristotle's Ontology', *Oxford Studies in Ancient Philosophy* 56: 123–92.
Gottlieb, P. 1993. 'Aristotle Versus Protagoras on Relatives and the Objects of Perception', *Oxford Studies in Ancient Philosophy* 11: 101–19.
Graham, D. W. 1980. 'States and Performances: Aristotle's Test', *The Philosophical Quarterly* 30.119: 117–30.
Grasso, R. 2013. '*De Anima*', *Philosophical Inquiry* 37.1/2: 23–44.
2020. 'Blind-Spots in Aristotle's Doctrine of the Perceptual Mean', *Apeiron* 53.3, 257–84.
Gregoric, P. 2007. *Aristotle on the Common Sense*. Oxford University Press.
2021. 'Perceiving That We Are Not Seeing and Hearing', in P. Gregoric and J. L. Fink (eds.), *Encounters with Aristotelian Philosophy of Mind*. New York: Routledge, pp. 119–37.
forthcoming. 'From Simultaneous Perception to Perception of Objects: *De sensu* 7, *De anima* III.2 and 7', in K. Corcilius (ed.), *Text and Idea of Aristotle's De Sensu*. Tübingen: Mohr Siebeck.
de Haas, F. A. J. 2005. 'The Discriminating Capacity of the Soul in Aristotle's Theory of Learning', in R. Salles (ed.), *Metaphysics, Soul and Ethics: Themes from the Work of Richard Sorabji*. Oxford University Press, pp. 321–44.
Hamlyn, D. W. 1993. *Aristotle, De Anima: Books II and III*. 2nd ed. Oxford: Clarendon Press.
Hankinson, R. J. 2019. 'Can There Be a Science of Psychology? Aristotle's *de Anima* and the Structure and Construction of Science', *Manuscrito* 42.4: 469–515.
Hardie, W. F. R. 1964. 'Aristotle's Treatment of the Relation Between the Soul and the Body', *Philosophical Quarterly* 14.54: 53–72.
1965. 'Aristotle's Doctrine That Virtue Is a "Mean"', *Proceedings of the Aristotelian Society* 65.1: 183–204.
Harré, R. and Madden, E. H. 1975. *Causal Powers: A Theory of Natural Necessity*. Chichester: Wiley-Blackwell.
Heinaman, R. 1985. 'Aristotle on Housebuilding', *History of Philosophy Quarterly* 2.2: 145–62.
1990. 'Aristotle and the Mind–Body Problem', *Phronesis* 35.1: 83–102.
2007. 'Actuality, Potentiality and "De Anima II.5"', *Phronesis* 52.2: 139–87.
Herzberg, S. 2007. '*De Anima* II 5 und Aristoteles' Wahrnehmungstheorie', *Zeitschrift für Philosophische Forschung* 61.1: 98–120.
2010. *Wahrnehmung und Wissen bei Aristoteles*. Berlin: De Gruyter.
Hicks, R. D. 1907. *Aristotle, De Anima*. Cambridge University Press.
Hursthouse, R. 2006. 'The Central Doctrine of the Mean', in R. Kraut (ed.), *The Blackwell Guide to Aristotle's Nicomachean Ethics*. Chichester: Wiley-Blackwell, pp. 96–115.
Hussey, E. 1983. *Aristotle's Physics Books III and IV*. Oxford: Clarendon Press.

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Irwin, T. 1989. *Aristotle's First Principles*. Oxford University Press.
James, S. 1997. *Passion and Action: The Emotions in Seventeenth-Century Philosophy*. Oxford: Clarendon Press.
Jannone, A. and Barbotin, E. 1966. *Aristote: De l'âme*. Paris: Les Belles Lettres.
Jaulin, A. 2020. '*DA* III 4, 429a10–430a9', in G. Guyomarc'h, C. Louguet, and C. Murgier (eds.), *Aristote et l'âme humaine: Lectures de De anima III offertes à Michel Crubellier*. Leuven: Peeters, pp. 75–94.
Jaworski, W. 2011. *Philosophy of Mind: A Comprehensive Introduction*. Chichester: Wiley-Blackwell.
2014. 'Hylomorphism and the Metaphysics of Structure', *Res Philosophica* 91.2: 179–201.
2016. *Structure and the Metaphysics of Mind: How Hylomorphism Solves the Mind–Body Problem*. Oxford University Press.
Joachim, H. H. 1922. *Aristotle: On Coming-to-be and Passing-away*. Oxford: Clarendon Press.
Johansen, T. K. 1997. *Aristotle on the Sense-Organs*. Cambridge University Press.
2002. 'Imprinted on the Mind: Active and Passive in Aristotle's Theory of Sense Perception', in B. Saunders and J. van Brakel (eds.), *Theories, Technologies, Instrumentalities of Color: Anthropological and Historiographic Perspectives*. Lanham, MD: University Press of America, pp. 169–88.
2006. 'What's New in the *De Sensu*? The Place of the *De Sensu* in Aristotle's Psychology', in R. A. H. King (ed.), *Common to Body and Soul*. Berlin: De Gruyter, pp. 140–64.
2012a. 'Capacity and Potentiality: Aristotle's *Metaphysics* Θ.6–7 from the Perspective of the *De Anima*', *Topoi* 31.2: 209–20.
2012b. *The Powers of Aristotle's Soul*. Oxford University Press.
2014. 'Parts in Aristotle's Definition of Soul: *De Anima* Books I and II', in D. Perler and K. Corcilius (eds.), *Partitioning the Soul: Debates from Plato to Leibniz*. Berlin: De Gruyter, pp. 39–62.
2019. 'The Principle that "Like Perceives Like" in Theophrastus' *De sensibus', Rhizomata* 7.2: 226–48.
Johnston, M. 2006. 'Hylomorphism', *Journal of Philosophy* 103.12: 652–98.
Johnstone, M. A. 2012. 'Aristotle on Odour and Smell', *Oxford Studies in Ancient Philosophy* 43: 143–83.
2013. 'Aristotle on Sounds', *British Journal for the History of Philosophy* 21.4: 631–48.
2015. 'Aristotle and Alexander on Perceptual Error', *Phronesis* 60.3: 310–38.
2022. 'Aristotle on the Objects of Perception', in C. Cohoe (ed.), *Aristotle's On the Soul: A Critical Guide*. Cambridge University Press, pp. 155–73.
Kahn, C. H. 2003. *The Verb 'Be' in Ancient Greek*. 2nd ed. Indianapolis: Hackett.
Kalderon, M. E. 2015. *Form without Matter: Empedocles and Aristotle on Color Perception*. Oxford University Press.
2017. *Sympathy in Perception*. Cambridge University Press.

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2020. 'Reply to Ganson', in D. Bennett and J. Toivanen (eds.), *Philosophical Problems in Sense Perception: Testing the Limits of Aristotelianism*. Cham: Springer, pp. 69–75.
Kamtekar, R. 2009. 'Knowing by Likeness in Empedocles', *Phronesis* 54.3: 215–38.
Katsafanas, P. 2011. 'Activity and Passivity in Reflective Agency', *Oxford Studies in Metaethics* 6: 219–54.
Kelsey, S. 2018. 'An Aporia About *Aisthêsis*', in R. Radice and M. Zanata (eds.), *Aristotele e le sfide del suo tempo*. Milan: Unicopli, pp. 161–71.
2022. *Mind and World in Aristotle's De Anima*. Cambridge University Press.
Kenny, A. 1963. *Action, Emotion and Will*. London: Routledge.
Kent Sprague, R. 1996. 'A Missing Middle Term: *De Anima* II,2', *Phronesis* 41.1: 104–8.
Kim, J. 1989. 'The Myth of Nonreductive Materialism', *Proceedings and Addresses of the American Philosophical Association* 63.3: 31–47.
1992. 'The Nonreductivist's Troubles with Mental Causation', in J. Heil and A. R. Mele (eds.), *Mental Causation*. Oxford University Press, pp. 189–210.
1998. *Mind in a Physical World: An Essay on the Mind-Body Problem and Mental Causation*. Cambridge, MA: MIT Press.
2005. *Physicalism, or Something Near Enough*. Princeton University Press.
King, C. G. 2021. 'Δόξαι and the Tools of Dialectic in *De Anima* I.1–3', in P. Gregoric and J. L. Fink (eds.), *Encounters with Aristotelian Philosophy of Mind*. New York: Routledge, pp. 15–42.
King, R. A. H. 2001. *Aristotle on Life and Death*. London: Duckworth.
2021. 'Nutrition and Hylomorphism in Aristotle', in G. Korobili and R. Lo Presti (eds.), *Nutrition and Nutritive Soul in Aristotle and Aristotelianism*. Berlin: De Gruyter, pp. 43–62.
Korsgaard, C. M. 2009. 'The Activity of Reason', *Proceedings and Addresses of the American Philosophical Association* 83.2: 23–43.
Koslicki, K. 2006. 'Aristotle's Mereology and the Status of Form', *Journal of Philosophy* 103.12: 715–36.
2008. *The Structure of Objects*. Oxford University Press.
Kosman, A. 1969. 'Aristotle's Definition of Motion', *Phronesis* 14.1: 40–62.
1975. 'Perceiving That We Perceive: *On the Soul* III, 2', *The Philosophical Review* 84.4: 499–519.
1984. 'Substance, Being, and Energeia: The Argument of *Metaphysics* Theta', *Oxford Studies in Ancient Philosophy* 2: 121–49.
1994. 'The Activity of Being in Aristotle's Metaphysics', in T. Scaltsas, D. Charles, and M. L. Gill (eds.), *Unity, Identity, and Explanation in Aristotle's Metaphysics*. Oxford University Press, pp. 195–214.
2013. *The Activity of Being: An Essay on Aristotle's Ontology*. Cambridge, MA: Harvard University Press.
Kraut, R. 2006. 'How to Justify Ethical Propositions: Aristotle's Method', in R. Kraut (ed.), *The Blackwell Guide to Aristotle's Nicomachean Ethics*. Chichester: Wiley-Blackwell, pp. 76–95.

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Kulvicki, J. 2008. 'The Nature of Noise', *Philosopher's Imprint* 8: 1–16.
Laks, A. 1993. 'Mind's Crisis. On Anaxagoras' νοῦς', *The Southern Journal of Philosophy* 31 Supplement: 19–38.
2002a. 'Les fonctions de l'intellect', *Methodos* 2: 7–31.
2002b. 'La physique de la sensation aristotélicienne selon Théophraste (*Physique*, livre 5)', in M. Canto-Sperber and P. Pellegrin (eds.), *Le style de la pensée: recueil de textes en hommage à Jacques Brunschwig*. Paris: Les Belles Lettres, pp. 353–74.
2009. 'Aporia Zero (*Metaphysics* B 1, 995a24–995b4)', in M. Crubellier and A. Laks (eds.), *Aristotle's Metaphysics Beta: Symposium Aristotelicum*. Oxford University Press, pp. 25–46.
2019. 'The Lever, or How to Act at a Distance: A Backdrop to Theophrastus', *De sensibus', Rhizomata* 7.2: 168–87.
Le Blond, J. M. 1945. *Aristote, philosophe de la vie. Le livre premier du Traité sur les parties des animaux*. Paris: Aubier.
Lear, J. 1988. *Aristotle: The Desire to Understand*. Cambridge University Press.
Lee, M.-K. 2005. *Epistemology after Protagoras: Responses to Relativism in Plato, Aristotle, and Democritus*. Oxford University Press.
2011. 'The Distinction between Primary and Secondary Qualities in Ancient Greek Philosophy', in L. Nolan (ed.), *Primary and Secondary Qualities: The Historical and Ongoing Debate*. Oxford University Press, pp. 15–40.
Lefebvre, D. 2021. 'Looking for the Formative Power in Aristotle's Nutritive Soul', in G. Korobili and R. Lo Presti (eds.), *Nutrition and Nutritive Soul in Aristotle and Aristotelianism*. Berlin: De Gruyter, pp. 101–26.
Lefèvre, C. 1972. *Sur l'évolution d'Aristote en psychologie*. Louvain: Éditions de l'Institut supérieur de Philosophie.
Lennox, J. 2021a. *Aristotle on Inquiry. Erotetic Frameworks and Domain-Specific Norms*. Cambridge University Press.
2021b. '"Most Natural Among the Functions of Living Things": Puzzles about Reproduction as a Nutritive Function', in G. Korobili and R. Lo Presti (eds.), *Nutrition and Nutritive Soul in Aristotle and Aristotelianism*. Berlin: De Gruyter, pp. 3–20.
Lloyd, G. E. R. 1992. 'Aspects of the Relationship Between Aristotle's Psychology and his Zoology', in M. C. Nussbaum and A. O. Rorty (eds.), *Essays on Aristotle's De Anima*. Oxford: Clarendon Press, pp. 147–67.
Long, A. A. 1966. 'Thinking and Sense-Perception in Empedocles: Mysticism or Materialism?', *The Classical Quarterly* 16.2: 256–76.
Lorenz, H. 2007. 'The Assimilation of Sense to Sense-Object in Aristotle', *Oxford Studies in Ancient Philosophy* 33: 179–220.
Lowe, M. F. 1983. 'Aristotle on Kinds of Thinking', *Phronesis* 28.1: 17–30.
Lyons, M. C. (ed.). 1973. *An Arabic Translation of Themistius' Commentary on Aristoteles, De anima*. Oxford University Press.
MacClintock, S. 1956. *Perversity and Error: Studies on the 'Averroist' John of Jandun*. Bloomington: Indiana University Press.

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Madigan, A. 1999. *Aristotle: Metaphysics, Book B and Book K 1–2*. Oxford: Clarendon Press.
Magee, J. M. 2000. 'Sense Organs and the Activity of Sensation in Aristotle', *Phronesis* 45.4: 306–30.
2003. *Unmixing the Intellect: Aristotle on Cognitive Powers and Bodily Organs*. New York: Bloomsbury.
Makin, S. 2006. *Aristotle: Metaphysics, Book Theta*. Oxford: Clarendon Press.
Mansfeld, J. 1996. 'Aristote et la structure du *De sensibus* de Théophraste', *Phronesis* 41.2: 158–88.
Mansion, S. 1961. 'Le role de l'exposé et de la criticism des philosophies antérieures chez Aristote', in S. Mansion (ed.), *Aristote et les problèmes de méthode*. Louvain: Publications Universitaires, pp. 35–56.
Marmodoro, A. 2007. 'The Union of Cause and Effect in Aristotle: *Physics* III 3', *Oxford Studies in Ancient Philosophy* 32: 205–32.
2013. 'Aristotle's Hylomorphism without Reconditioning', *Philosophical Inquiry* 37.1–2: 5–22.
2014. *Aristotle on Perceiving Objects*. Oxford University Press.
Martin, A. 2022. 'The Gaze of the Mind: Cognitive Activity, Attention, and Causal Explanation in 13th–14th Century Latin Medieval Psychology'. Unpublished PhD thesis, McGill University.
Mayr, E. 2011. *Understanding Human Agency*. Oxford University Press.
McAninch, A. 2017. 'Activity, Passivity, and Normative Avowal', *Pacific Philosophical Quarterly* 98.1: 2–24.
McConkie, G. and Loschky, L. 2003. 'Change Blindness, Psychology of', in L. Nadel (ed.), *Encyclopedia of Cognitive Science*. Chichester: Wiley-Blackwell.
McCready-Flora, I. C. 2015. 'Protagoras and Plato in Aristotle: Rereading the Measure Doctrine', *Oxford Studies in Ancient Philosophy* 49: 71–127.
Menn, S. 1994. 'The Origins of Aristotle's Concept of Ἐνέργεια: Ἐνέργεια and Δύναμις', *Ancient Philosophy* 14.1: 73–114.
2002. 'Aristotle's Definition of Soul and the Programme of the *De Anima*', *Oxford Studies in Ancient Philosophy* 22: 83–139.
forthcoming a. *The Aim and the Argument of Aristotle's Metaphysics*. https://www.philosophie.hu-berlin.de/de/lehrbereiche/antike/mitarbeiter/menn/contents.
forthcoming b. 'The Origins of Aristotle's Concept of Ἐνέργεια: Ἐνέργεια and Κίνησις'.
Miller, F. D. 1999a. 'Aristotle's Philosophy of Perception', *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 15.1: 177–213.
1999b. 'Aristotle's Philosophy of Soul', *The Review of Metaphysics* 53.2: 309–37.
2018. *Aristotle: On the Soul and Other Psychological Works*. Oxford University Press.
Mingucci, G. 2021. 'In Search of the Essence of the Soul: Aristotle's Scientific Method and Practice in *De Anima* II.1–2', in P. Gregoric and J. L. Fink

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(eds.), *Encounters with Aristotelian Philosophy of Mind*. New York: Routledge, pp. 43–64.
Modrak, D. K. W. 1987. *Aristotle: The Power of Perception*. University of Chicago Press.
Mourelatos, A. P. 1978. 'Events, Processes, and States', *Linguistics and Philosophy* 2.3: 415–34.
Murphy, D. 2005. 'Aristotle on Why Plants Cannot Perceive', *Oxford Studies in Ancient Philosophy* 29: 295–339.
Narcy, M. 1996. 'ΚΡΙΣΙΣ et ΑΙΣΘΗΣΙΣ (*De anima*, III, 2)', in G. R. Dherbey (ed.), *Corps et âme: Sur le de Anima d'Aristote*. Paris: Vrin, pp. 239–56.
Natali, C. 2013. 'A Note on *Metaphysics* Θ.6, 1048b18–36', *Rhizomata* 1.1: 104–14.
Nudds, M. 2010. 'What Sounds Are', *Oxford Studies in Metaphysics* 5: 279–302.
Nussbaum, M.C. 1978. *Aristotle's De Motu Animalium: Text with Translation, Commentary, and Interpretive Essays*. Princeton University Press.
1982. 'Saving Aristotle's Appearances', in M. Schofield and M. C. Nussbaum (eds.), *Language and Logos: Studies in Ancient Greek Philosophy Presented to G. E. L. Owen*. Cambridge University Press, pp. 267–94.
Nussbaum, M. and Putnam, H. 1992. 'Changing Aristotle's Mind', in M. C. Nussbaum and A. O. Rorty (eds.), *Essays on Aristotle's De Anima*. Oxford: Clarendon Press, pp. 27–55.
Nuyens, F. 1948. *L'évolution de la psychologie d'Aristote*. Louvain: Éditions de l'Institut supérieur de Philosophie.
Oates, W. J. 1936. 'The Doctrine of the Mean', *The Philosophical Review* 45.4: 382–98.
O'Callaghan, C. 2007. *Sounds: A Philosophical Theory*. Oxford University Press.
2020. 'Auditory Perception', in E. N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*. Summer 2020 Edition. https://plato.stanford.ed/archives/sum2020/entries/perception-auditory/.
Oderberg, D. S. 2008. *Real Essentialism*. New York: Routledge.
O'Regan, J. K. 2003. 'Change Blindness', in L. Nadel (ed.), *Encyclopedia of Cognitive Science*. Chichester: Wiley-Blackwell, pp. 486–90.
O'Regan, J. K. and Noë, A. 2001. 'A Sensorimotor Account of Vision and Visual Consciousness', *The Behavioral and Brain Sciences* 24.5: 939–73 (discussion 973–1031).
Owen, G. E. L. 1961. 'Tithenai ta Phainomena', in S. Mansion (ed.), *Aristote et les problèmes de méthode*. Louvain: Publications Universitaires, pp. 83–103.
Pattin, A. 1988. *Pour l'histoire du sens agent. La controverse entre Barthélemy de Bruges et Jean de Jandun, ses antécédents et son évolution. Étude et textes inédits*. Leuven University Press.
Penner, T. 1970. 'Verbs and the Identity of Actions: A Philosophical Exercise in the Interpretation of Aristotle', in O. P. Wood and G. Pitcher (eds.), *Ryle: A Collection of Critical Essays*. London: Macmillan, pp. 393–460.
Perälä, M. 2018. 'Aristotle on Perceptual Discrimination', *Phronesis* 63.3: 257–92.

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2022. 'Aristotle on Incidental Perception', in J. Toivanen (ed.), *Forms of Representation in the Aristotelian Tradition*, vol. 1: *Sense Perception*. Leiden: Brill, pp. 66–98.
Pickering, R. F. 1977. 'Aristotle on Walking', *Archiv für Geschichte der Philosophie* 59.1: 37–43.
Pippin, R. B. 1987. 'Kant on the Spontaneity of Mind', *Canadian Journal of Philosophy* 17.2: 449–75.
Polansky, R. 2000. 'Analogy and Disanalogy of the Soul's Faculties in Aristotle's *De Anima*', *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 15: 57–86.
2007. *Aristotle's De anima: A Critical Commentary*. Cambridge University Press.
Polansky, R. and Fritz, J. 2018. 'Aristotle on Accidental Perception', in D. Sfendoni-Mentzou (eds.), *Aristotle: Contemporary Perspectives on his Thought: On the 2400th Anniversary of Aristotle's Birth*. Berlin: De Gruyter, pp. 125–50.
Price, A. W. 1996. 'Aristotelian Perceptions', *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 12.1: 285–309.
Primavesi, O. 2010. 'Dialektik und Gespräch bei Aristoteles', in K. Hempfer and A. Traninger (eds.), *Der Dialog im Diskursfeld seiner Zeit*. Stuttgart: Franz Steiner Verlag, pp. 47–73.
Putnam, H. 1975. 'Philosophy and Our Mental Life', in *Mind, Language, and Reality: Philosophical Papers*. Cambridge University Press, pp. 291–303.
Rabinoff, E. 2015. 'Aristotle on the Intelligibility of Perception', *Review of Metaphysics* 68.4: 719–40.
2018. *Perception in Aristotle's Ethics*. Evanston, IL: Northwestern University Press.
Rapp, C. 2006. 'What Use Is Aristotle's Doctrine of the Mean?', in B. Reis (ed.), *The Virtuous Life in Greek Ethics*. Cambridge University Press, pp. 99–126.
2017a. 'Aporia and Dialectical Method in Aristotle', in G. Karamanolis and V. Politis (eds.), *The Aporetic Tradition in Ancient Philosophy*. Cambridge University Press, pp. 112–36.
2017b. 'Aristoteles' hylemorphischer Seelenbegriff', in D. Kiesel and C. Ferrari (eds.), *Seele: Orient und Okzident*. Berlin: Klostermann, pp. 45–82.
Rashed, M. 2020. 'Les petites catégories', in M. Rashed and R. Chiaradonna (eds.), *Boéthos de Sidon Exégète d'Aristote et philosophe*. Berlin: De Gruyter, pp. 213–53.
Raz, J. and Ruben, D.-H. 1997. 'The Active and the Passive', *Proceedings of the Aristotelian Society* 71: 211–46.
Rea, M. C. 2011. 'Hylomorphism Reconditioned', *Philosophical Perspectives* 25.1: 341–58.
Reeve, C. D. C. 2017. *Aristotle: De Anima*. Indianapolis: Hackett.
Reinhardt, K. 1916. *Parmenides und die Geschichte der griechischen Philosophie*. Bonn: Verlag von Friedrich Cohen.
Robinson, H. 1978. 'Mind and Body in Aristotle', *The Classical Quarterly* 28.1: 105–24.
1983. 'Aristotelian Dualism', *Oxford Studies in Ancient Philosophy* 1: 123–44.

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2014. 'Modern Hylomorphism and the Reality and Causal Power of Structure: A Skeptical Investigation', *Res Philosophica* 91.2: 203–14.
2021. 'Aristotelian Dualism, Good; Aristotelian Hylomorphism, Bad', in P. Gregoric and J. L. Fink (eds.), *Encounters with Aristotelian Philosophy of Mind*. New York: Routledge, pp. 283–306.
Rodier, G. 1900. *Aristote: Traité de L'âme*. Tome II. Paris: Vrin.
Roreitner, R. 2020. 'Blood, πνεῦμα, or Something More Solid? Aristotle on the Material Structure of Perceptual Apparatus', in H. Bartoš and C. King (eds.), *Heat, Pneuma, and Soul in Ancient Philosophy and Science*. Cambridge University Press, pp. 288–309.
2023. 'The Perceptive Soul's Impassivity in Late Ancient Reception of Aristotle's *De Anima*', *Ancient Philosophy* 43.1: 219–49.
2024a. 'The Principles of Propositional Thought: The Unity and the Function of An. III 6', in K. Corcilius, A. Falcon, and R. Roreitner, *Aristotle on the Essence of Human Thought*. Oxford University Press, pp. 112–55.
2024b. 'Nous and Nature', in K. Corcilius, A. Falcon, and R. Roreitner, *Aristotle on the Essence of Human Thought*. Oxford University Press, pp. 223–47.
Ross, W. D. 1924. *Aristotle's Metaphysics: A Revised Text with Introduction and Commentary*. Oxford University Press.
1956. *Aristoteles, De anima*. Oxford: Clarendon Press.
1961. *Aristoteles, De anima*. Oxford University Press.
Rossi, G. 2017. 'Going through *aporiai*: The Critical Use of Aristotle's Dialectic', *Oxford Studies in Ancient Philosophy* 52: 209–56.
Ryle, G. 1954. *Dilemmas: The Tanner Lectures, 1953*. Cambridge University Press.
Salmieri, G. 2009. 'Aristotle's Non-"Dialectical" Methodology in the *Nicomachean Ethics*', *Ancient Philosophy* 29.2: 311–35.
Scaltsas, T. 1996. 'Biological Matter and Perceptual Powers in Aristotle's *de Anima*', *Topoi* 15.1: 25–37.
Scheiter, K. M. 2012. 'Images, Appearances, and *Phantasia* in Aristotle', *Phronesis* 57.3: 251–78.
Scruton, R. 2009. 'Sounds as Secondary Objects and Pure Events', in M. Nudds and C. O'Callaghan (eds.), *Sounds and Perception: New Philosophical Essays*. Oxford University Press, pp. 50–68.
Sedley, D. 1992. 'Peripatetic Dialectic in the *De sensibus*', in W. W. Fortenbaugh and D. Gutas (eds.), *Theophrastus: His Psychological, Doxographical, and Scientific Writings*. New Brunswick: Routledge, pp. 20–31.
2004. *The Midwife of Platonism: Text and Subtext in Plato's Theaetetus*. Oxford University Press.
2008. *Creationism and its Critics in Antiquity*. Berkeley: University of California Press.
2010. 'Teleology, Aristotelian and Platonic', in J. G. Lennox and R. Bolton (eds.), *Being, Nature, and Life in Aristotle: Essays in Honor of Allan Gotthelf*. Cambridge University Press, pp. 5–29.

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Shields, C. 1988. 'Soul as Subject in Aristotle's *De Anima*', *The Classical Quarterly* 38.1: 140–9.
1991. 'The First Functionalist', in J.-C. Smith (ed.), *Historical Foundations of Cognitive Science*. Dordrecht: Springer, pp. 19–33.
1997. 'Intentionality and Isomorphism in Aristotle', *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 11: 307–30.
2007. 'The Peculiar Motion of Aristotelian Souls', *Proceedings of the Aristotelian Society* 81: 139–61.
2009. 'The Priority of Soul in Aristotle's *De Anima*: Mistaking Categories?', in D. Frede and B. Reis (eds.), *Body and Soul in Ancient Philosophy*. Berlin: De Gruyter, pp. 267–90.
2013. 'The Phainomenological Method in Aristotle's *Metaphysics*', in E. Feser (ed.), *Aristotle on Method and Metaphysics*. London: Palgrave, pp. 7–27.
2016. *Aristotle: De Anima*. Oxford: Clarendon Press.
2019. 'Hylomorphic Offices', *Dialogoi: Ancient Philosophy Today* 1.2: 215–36.
2021. 'Hylomorphic Mental Causation', in P. Gregoric and J. L. Fink (eds.), *Encounters with Aristotelian Philosophy of Mind*. New York: Routledge, pp. 307–24.
Silva, J. F. 2019. 'The Chameleonic Mind: The Activity versus the Actuality of Perception', in E. Băltuță (ed.), *Medieval Perceptual Puzzles: Theories of Sense Perception in the 13th and 14th Centuries*. Leiden: Brill, pp. 38–72.
2020. 'From Agent to Active Sense: Was There an Augustinianism-Averroisant?', in V. Decaix and A. M. Mora-Márquez (eds.), *Active Cognition: Challenges to an Aristotelian Tradition*. Cham: Springer, pp. 79–101.
Silverman, A. 1989. 'Color and Color-Perception in Aristotle's *De anima*', *Ancient Philosophy* 9.2: 271–92.
Sisko, J. E. 1996. 'Material Alteration and Cognitive Activity in Aristotle's *De Anima*', *Phronesis* 41.2: 138–57.
1998. 'Alteration and Quasi-Alteration: A Critical Notice of Stephen Everson, *Aristotle on Perception*', *Oxford Studies in Ancient Philosophy* 16: 331–52.
2004. 'Reflexive Awareness Does Belong to the Main Function of Perception: Reply to Victor Caston', *Mind* 113.451: 513–21.
Skrzypek, J. 2017. 'Three Concerns for Structural Hylomorphism', *Analytic Philosophy* 58.4: 360–408.
Slakey, T. J. 1961. 'Aristotle on Sense Perception', *The Philosophical Review* 70.4: 470–84.
Smith, J. A. 1931. *The Works of Aristotle: De Anima*. Oxford University Press.
Sorabji, R. 1972. 'Aristotle, Mathematics, and Colour', *The Classical Quarterly* 22.2: 293–308.
1974. 'Body and Soul in Aristotle', *Philosophy* 49.187: 63–89.
1992. 'Intentionality and Physiological Processes: Aristotle's Theory of Sense-Perception', in M. C. Nussbaum and A. O. Rorty (eds.), *Essays on Aristotle's De Anima*. Oxford: Clarendon Press, pp. 195–225.
1993. *Animal Minds and Human Morals: The Origins of the Western Debate*. Ithaca, NY: Cornell University Press.

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2001. 'Aristotle on Sensory Processes and Intentionality: A Reply to Burnyeat', in D. Perler (ed.), *Ancient and Medieval Theories of Intentionality*. Leiden: Brill, pp. 49–61.

Stein, N. 2010. 'After Literalism and Spiritualism: The Plasticity of Aristotelian Perception', in G. van V. Riel and P. Destrée (eds.), *Ancient Perspectives on Aristotle's De Anima*. Leuven University Press, pp. 17–34.

Stratton, G. M. 1917. *Theophrastus and the Greek Physiological Psychology before Aristotle*. London: Routledge.

Taylor, C. C. W. 1990. 'Aristotle's Epistemology', in S. Everson (ed.), *Epistemology: Companions to Ancient Thought*, vol. 1. Cambridge University Press, pp. 116–42.

Terzis, G. N. 1995. 'Homeostasis and the Mean in Aristotle's Ethics', *Apeiron* 28.4: 175–90.

Torstrik, A. 1862. *Aristotelis De anima libri III*. Berlin: Weidmann.

Tracy, T. 1969. *Physiological Theory and the Doctrine of the Mean in Plato and Aristotle*. Berlin: De Gruyter.

1974. 'Heart and Soul in Aristotle', *The Society for Ancient Greek Philosophy Newsletter* 90: 1–18.

Tweedale, M. 1990. 'Aristotle's Motionless Soul', *Dialogue* 29.1: 123–32.

1992. 'Origins of the Medieval Theory that Sensation Is an Immaterial Reception of a Form', *Philosophical Topics* 20.2: 215–31.

Vendler, Z. 1967. *Linguistics in Philosophy*. Ithaca, NY: Cornell University Press.

Verbeke, G. (ed.). 1957. *Themistius: Commentaire sur le traité de l'âme d'Aristote. Traduction de Guillaume de Moerbeke*. Louvain: Publications universitaires.

Vogiatzi, M. 2020. 'Aristotle on the Soul as Harmony', *Elenchos* 41.2: 245–68.

Wallace, E. 1882. *Aristotle's Psychology*. Cambridge University Press.

Ward, J. K. 1988. 'Perception and λόγος in *de Anima* II 12', *Ancient Philosophy* 8.2: 217–33.

Waterlow, S. 1982. *Nature, Change, and Agency in Aristotle's Physics: A Philosophical Study*. Oxford University Press.

White, M. J. 1980. 'Aristotle's Concept of Θεωρία and the Ἐνέργια-Κίνησις Distinction', *Journal of the History of Philosophy* 18.3: 253–63.

Wildberg, C. 2004. '*On Generation and Corruption* I.7: Aristotle on *poiein* and *paschein*', in F. A. J. de Haas and J. Mansfeld (eds.), *Aristotle's On Generation and Corruption I. Symposium Aristotelicum*. Oxford University Press, pp. 219–42.

Witt, C. 1992. 'Dialectic, Motion, and Perception: *De Anima* Book I', in M. C. Nussbaum and A. O. Rorty (eds.), *Essays on Aristotle's De Anima*. Oxford: Clarendon Press, pp. 169–83.

1996. 'Commentary on Price', *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 12.1: 310–16.

2015. 'In Defense of the Craft Analogy: Artifacts and Natural Teleology', in M. Leunissen (ed.), *Aristotle's Physics: A Critical Guide*. Cambridge University Press, pp. 107–20.

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Wolt, D. 2023. '*Energeia* in the *Magna Moralia*', *Mnemosyne* 76: 65–94.
Young, C. M. 1996. 'The Doctrine of the Mean', *Topoi* 15.1: 89–99.
Zabarella, J. 1605. *In Tres Aristotelis Libros de Anima Commentarii*. Venice: Franciscum Bolzettam.
1619. *Commentarii: In III Aristot. Libros de Anima*. Frankfurt: Zetznerus.

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