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## Aristotle on Perceptual Interests

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**Abstract:** Traditional interpretations of Aristotle’s theory of perception mainly focus on uncovering the underlying mechanisms that are at stake when perceivers are affected by sensible qualities. Investigating the nature of sense perception is one of Aristotle’s main worries and one that he explicitly relates to the question of its causes (e. g. *Sens.* 436a16–17, 436b9) and its ends (e. g. *de An.* 434a30 ff.). Therefore I suggest that, in order to fully explain Aristotle’s view of perceptual phenomena, the possibilities, the constraints, and the goals defined by the embodied and situated engagement of perceivers with the external world must be taken into account. Accordingly, in this paper, I provide an affective reading of Aristotle’s theory of perception. I shall ask what, in addition to functioning sense organs and appropriate response mechanisms, the perceiver contributes to perceptual content. Specifically, I propose to shed light on the significance of perceptual experience for the perceiver and I aim to show that, according to Aristotle, one’s biological and personal qualities are perceptually relevant, meaning that they underpin perception, rather than coming into play after perception has occurred and its objects have been discerned. The paper is divided into two parts, respectively dealing with sensory affections and more complex affective phenomena. As regards the domain of primal sense perception, I will focus on smell as a representative example: since Aristotle identifies it as the least developed of human sensory faculties, it will serve as a revealing illustration of how sense perception is informed and qualified by what, drawing on contemporary philosophical terminology, I will call ‘perceptual interests’, viz. the affective sense of what is at stake in the living being’s interaction with the environment. I will then proceed to consider the way more complex affective phenomena underpin perception by examining the case of emotions and that of virtues of character. By showing how perception is affectively inflected and how emotion is rooted in perception’s bodily nature, I aim to sketch out the general lines along which I believe that the Aristotelian theory of perception should be approached.

**Keywords:** Aristotle, perception, embodiment, affectivity

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Sense perception is one of Aristotle's main concerns: he devotes nine chapters of the *de Anima* (II.5–III.2), as well as the treatise *de Sensu et Sensibilibus*, exclusively to its exploration. Sense perception is the minimal feature of animal life (*de An.* 413b2–4, 414a32–414b 1, 415a4–6, 434b22–24, 435a13–14; *Sens.* 436b10–12; *HA* 533a17) and the grounds on which most – if not all – human cognitive abilities are rooted.<sup>1</sup> Aristotle describes it as a kind of alteration that occurs when a living being capable of perceiving is moved and affected by an object of sense (*de An.* 416b33–35, 417a2–6, 417b17–21, 417b23–25). Specifically, perception occurs when a sensible object affects an ensouled being which is capable of form reception: perception is in fact defined as the capacity to receive sensible qualities without matter. Aristotle compares it to the process of wax receiving the seal of a signet ring without the iron or gold (*de An.* 424a17–20) and further qualifies the perceptual process by saying that it results in the sensory faculty and the sensible object becoming alike (*de An.* 418a3–6). Sense objects are necessary to actualize perception: in a minimal sense, this means that sensory faculties are only in potentiality when none of their objects is present (*de An.* 417a6–9, 417b24–25). Earlier philosophers were thus wrong to believe that perceptual qualities were properties of the perceivers rather than of external objects; on the other hand, neither do sensible qualities exist in actuality prior to perception (*de An.* 426a20–25).<sup>2</sup> Aristotle concludes that the actuality of the sensory faculty and that of sensible objects, although different in being, are one and the same (*de An.* 425b26–27, 426a15–17): in order for perception to actually occur, sensory organs must be affected by sensible objects and, even though the latter exist independently of perceivers (e. g. *Cat.* 7b36–38; *Metaph.* 1010b35–36; *de An.* 417b 27), their sensible properties are brought forth by the perceivers themselves (*Cat.* 6b35–36).<sup>3</sup>

<sup>1</sup> The inseparability of higher faculties from lower faculties is discussed at *de Anima* 413a20–b 29. At 414b20–33, Aristotle claims that the soul is a unity and, as a consequence of that, higher-order faculties are inseparable from lower-order ones. Cf. *de An.* III.3 for the idea that τὸ νοεῖν includes φαντασία, which in turn does not come about without αἴσθησις. On issues concerning the separability of νοῦς see Wedin (1988), Caston (2000), Magee (2003), esp. ch. 5, Van der Eijk (2005), ch. 7.

<sup>2</sup> Cf. Shields (2016), who takes this as a rejection of 'naïve realism' (267–70). Marmodoro (2014) discusses the issue in terms of Aristotle's 'subtle perceptual realism' (cf. ch. 3), whereas Irwin (1988) considers these remarks as 'aberrant' insofar as, in his view, they amount to a rejection of realism and of the veridicity of perceptual content (313–14). The most recent discussion is that of Caston (2018).

<sup>3</sup> Cf. *Cat.* 6b2–4 and *Metaph.* 1020b30–32 for the classification of perception and perceptibles as belonging to the category of 'relatives' (τὰ πρὸς τι). On ontological interdependence and reciprocal causation of perceptual and perceptible powers see Marmodoro (2014), ch. 1. Caston (2018) suggests that, even if perceptibles and perception are relatives and correlate, they are not 'coordinate in nature'.

Interpreters of Aristotle's theory of perception have long been investigating what kind of alteration is brought about by the perceiver being affected by sensible objects. In particular, debate has focused on whether the process through which perceivers obtain information concerning the outside world is purely physical or purely mental, whether the mental supervenes on the physical or the two are inseparable. Materialist interpreters have claimed that sense perception consists in a physiological alteration of the sense organ, which takes on the form of the sensible quality of the sense object by which it is affected (Slakey 1961; Matson 1966; Sorabji 1974).<sup>4</sup> The rival, spiritualist reading maintains that perception does not involve any physical change and ultimately consists in a purely mental change (Burnyeat 1992; Johansen 1997).<sup>5</sup> A number of other options, anchored in Aristotle's hylomorphism,<sup>6</sup> have been put forward between these two extremes. On some views, for example, perception is indeed a psychic change, but it supervenes on the physiological alteration of the sense organ: as such, it is determined by a physical change, but is not reducible to it (Shields 1988; Caston 1993, 1997, 2006; Everson 1997).<sup>7</sup> Other interpreters have defended a stronger version of hylomorphism by arguing not only that psychophysical states (including perception) as a whole are inseparable, both in existence and in account, from their formal and material components, but also that the latter are inseparable from the psychophysical states as a whole and from each other (Charles 2008, 2009).<sup>8</sup>

In spite of the significant differences just outlined, these approaches all share the fundamental concern of uncovering the underlying mechanisms that are at stake when perceivers are affected by sensible qualities. Investigating the nature of sense perception is one of Aristotle's main worries and one that he relates to the question of its causes ( $\tau\acute{\iota}$  ἔσται καὶ διὰ τί

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4 The best-known description of the physiological process of perceiving as 'a literal taking on' of the perceptible quality is that of Sorabji (1974), 72, n. 30, who nonetheless endorses a non-reductionist approach and claims that the physiological alteration is only the material cause of perception and that the latter must also have a formal cause.

5 This view finds an antecedent in Brentano (1867).

6 On Aristotle's hylomorphism see Williams (1986) and Shields (2016), esp. xiv-xxviii.

7 For a revised proposal of the supervenience thesis in functionalist terms see Shields (1993) and Wedin (1996).

8 On the difference between moderate hylomorphism (that entails only the downwards inseparability of the psychophysical state from its components) and strong hylomorphism (entailing downwards, upwards and horizontal inseparability) see Caston (2008), who argues in favour of the former.

συμβαίνει; e.g. *Sens.* 436a16–17, 436b9) and its ends (ἔνεκά του; e.g. *de An.* 434a30 ff.). Therefore I suggest that, in order to fully explain Aristotle's view of perceptual phenomena, the possibilities, the constraints, and the goals defined by the embodied and situated engagement of perceivers with the external world must also be taken into account. Accordingly, in this paper I propose to contribute to the ongoing debate by providing a 'thick' description of Aristotle's theory of perception. Thus, I shall ask what, in addition to functioning sense organs and appropriate response mechanisms, the perceiver contributes to perceptual content.<sup>9</sup> An affective reading of Aristotle's theory of perception aims to complement current understanding of how perception works – i.e. the way the perceiver is 'moved' or 'affected' by objects of perception – by drawing attention to the reasons why perceptual processes occur in the first place. Specifically, I propose to shed light on the significance of perceptual experience for the perceiver and I aim to show that, according to Aristotle, one's biological and personal qualities are perceptually relevant, meaning that they underpin perception, rather than coming into play after perception has occurred.<sup>10</sup> My argument is that an understanding of perception as a dynamic relation between perceivers and their environment provides us with a fruitful angle for inquiry into what Aristotle means when he says that the actuality of the object of perception and that of the senses are one and the same.<sup>11</sup>

The paper is divided into two parts, respectively dealing with sensory affections and more complex affective phenomena. As regards the domain of primal sense perception, I will focus on smell as a representative example<sup>12</sup>: since Aristotle identifies it as the least developed of human

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**9** The idea that 'perception essentially involves the way in which the subject *views* the object' has recently been put forward by Caston (manuscript, under review, 32: emphasis in original). I sympathize with his view that perception is a *de re* attitude and I will try to show that the discriminative capacity it entails has an affective nature.

**10** By saying this I do not wish to deny the causal efficacy of incoming sensual inputs and the passive nature of the material structure of well-functioning sense organs: in this respect, Aristotle's realism is unquestionable. I wish to argue that what I call the perceiver's perceptual interests play an equally important role, on which I aim to shed light in what follows.

**11** The *de Anima* itself does not provide us with many details concerning the way bodily processes support the soul and implement its operations. These are to be found in Aristotle's biological treatises, whereas the *de Anima* offers a more abstract analysis of the soul as first principle of biology. My goal is to tackle Aristotle's hylomorphic approach to soul-body relations from the viewpoint of his biological works.

**12** It could be objected that my remarks concerning the sense of smell do not apply to other kinds of sense perceptions. An anonymous referee has pointed out that, for example, the

sensory faculties, it will serve as a revealing illustration of how sense perception is informed and qualified by what, drawing on contemporary philosophical terminology, I will call ‘perceptual interests’, viz. ‘the affective sense of the stakes or costs involved in exchanges with one’s environment’ (Bower and Gallagher 2013, 121).<sup>13</sup> I will then proceed to consider the way more complex affective phenomena underpin perception by examining the case of emotions and that of virtues of character. By showing how perception is affectively inflected and how emotion is rooted in perception’s bodily nature, I aim to sketch out the general lines along which I believe that the Aristotelian theory of perception should be approached.

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*Metaphysics* begins with the statement that we esteem our senses not only ‘for their use’, but also ‘for their own sake’; ‘not only with a view to action, but even when no action is contemplated’. Aristotle also says that of all senses we prefer sight because it ‘best helps us to know things, and reveals many distinctions’ (*Metaph.* 980a22–28). This passage seems to suggest that Aristotle conceives of sense perception as independent from action and its affective implications. On the other hand, by means of the paragraph just quoted, Aristotle introduces his wider discussion of various forms of knowledge, from mere sensation in animals that do not have the faculty of memory to experience, art, and wisdom in humans. Within this framework, the senses are a source of knowledge of the particulars (981b10–13) and play a crucial role in the formation of memories and experience: hence, even when they are not immediately action-guiding, they still have the purpose of aiding higher forms of cognition. In other words, and in more general terms, souls are embodied and their embodiment always plays a role in what living creatures perceive and do. Accordingly, in the next paragraph I will claim that affects are experientially more conspicuous in the case of the less accurate senses, but they characterize the more accurate ones too: my general argument is that Aristotle’s account of perception does not admit of ‘pure’ (disembodied, affectless, purely ‘intellectual’) forms of cognition (for references concerning the inseparability of cognitive functions and issues related to the separability of νοῦς cf. note 1).

<sup>13</sup> I purposely avoid desire-related terminology because it is beyond the scope of this paper to engage with the ongoing debate on Aristotle’s account of desire. As long as Aristotle explains even the most elementary behaviours of pursuit and avoidance in terms of affections – and I aim at showing that he does – I do not need to enter the discussion on whether his notion of desire involves envisaging prospects or is inclusive of all reactions to sensory stimuli (for two alternative readings on the need for *phantasia* to prepare desire and for further references see Lorenz 2006; Pearson 2012). From what follows, in any case, it will be clear that I sympathize with Lorenz’s ideas of sensory representations and non-rational cognition. It is important to note that I understand perceptual interests both to inform basic, survival-related sensorimotor responses (such as that of sponges in *HA* 548b10–15: ‘sponges have sensation, so it is said. This is shown by the fact that if the sponge becomes aware that someone is intending to pull it off, it contracts itself and is then difficult to detach. It does the same when there is a high wind or a rough sea, to prevent itself from being torn away’ [trans. Peck]) and to encompass much more than purely biological needs, including personal interests and possibly even values.

## Smell

Smell is the weakest sensory faculty in human beings and significantly underdeveloped, compared to that of animals (*de An.* 421a9–10; *Sens.* 440b31–441a 2). For this reason, in the case of human smell, as opposed to other, more sophisticated and precise sense perceptions, the basic affective dimension of pleasure and pain immediately comes to the fore: ‘for humans smell things weakly and do not perceive any object of smell without its being painful or pleasant, because the sensory organ is imprecise’ (*de An.* 421a10–12, trans. Shields). Aristotle compares smell in humans to vision in hard-eyed animals: the latter, when they see, perceive differences in colours in terms of safety and fearfulness (*de An.* 421a13–15), and he claims that ‘so too is the human race when it comes to smells’ (421a15–16, trans. Shields). It seems that, when smelling, we make sense of the outer world in an essentially affective way: on the basic level of sense perception, perceptual content and affects such as pleasure and pain, or the sense of safety and fear, occur together.

This line of interpretation is supported by Themistius’ remarks in his commentary on Aristotle’s *de Anima*, where he acknowledges that, in humans, the cognitive scope of smell is narrower than that of the other sensory faculties, since its discriminatory capacity is less fine-grained, and establishes a connection between this and the reason why ‘we distinguish objects of smell as they are in relation to us, not as they [really] are’ (Them. *in de An.* 68,1, trans. Todd). By doing so, Themistius sheds light on the fact that sense perception – at least as far as smell is concerned – cannot be construed as impersonal, but depends on (and represents) the perceiver’s situation and perspective. This, if nothing else, explains why the phenomenal character of sense perception has a subjective nature, as Aristotle is often careful to emphasize. In the *Nicomachean Ethics*, for example, he acknowledges that pleasures

diverge to no small degree ... since the same things delight some while giving pain to others, and are painful and objects of loathing for the one group while pleasant and things to love for the other. This happens with sweet things too; the same things don’t seem sweet to the person with a fever and the one in good health, nor warm to those who are frail and those who are physically fit. (*EN* 1176a10–15, trans. Rowe)

Interestingly, though Themistius seems to believe there is a relation between smell being our weakest sense and the affections of pleasure and pain it involves,<sup>14</sup> he also observes that ‘neither the philosopher himself, nor any of

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<sup>14</sup> In fact, Themistius sets off by quite explicitly illustrating the alleged antithesis between accuracy and affects when he writes that ‘many animals have a more accurate sense of smell

his commentators, investigated why, although pleasure and pain also accompany objects of taste, taste is [still] more accurate than smell' (Them. *in de An.* 68,28–9, trans. Todd). Simplicius recalls Themistius' observation concerning taste and rejects it, claiming that taste

grasps certain tastes indifferently and without any pleasure or dislike, and, in those cases where pleasure or dislike follows, if the tasting is in accordance with nature, something more judgmental prevails rather than an affective attraction or repulsion through liking and dislike. (Simp. *in de An.* 151,11–17, trans. Steel)

In a way, both commentators' remarks are correct: affects are in fact constitutive of all kinds of sense perceptions within Aristotle's framework (e.g. *de An.* 414b1–6, 431a8–11; *EN* 1174b20–21, 1174b26–27)<sup>15</sup> and, in this respect, Themistius is right when he appreciates the affective features of taste as much as those of smell. Given the basic cognitive domain of human smell, its affective dimension is also basic and, as such, experientially conspicuous; nonetheless, a broader and more complex spectrum of affects bears on Aristotelian perception and 'something more judgmental', as Simplicius puts it, can surely be a feature of more elaborate affective phenomena. Distorting Aristotle's theory in a Neoplatonic fashion, Simplicius actually contrasts judgment and affections and claims that human beings cannot formulate correct evaluations through smell because the 'more striking impressions' that are needed due to the

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than us, as do dogs among land-based animals, and vultures among winged ones. So we do not even grasp as many varieties of objects of smell as of sounds or colours, and we perceive none of the objects of smell without experiencing pain or pleasure in contrast with sight and hearing, which perceive many colours and sounds without such affections. (This is a sign, some claim, that smelling is designed for [performing] only the function [of smelling], and that it has assumed no further accuracy beyond [performing] that function. This is also why we distinguish objects of smell as they are in relation to us, not as they [really] are). Animals with hard eyes also probably perceive colours [as humans do smells], and because of the thickness of their organ [of sight] the varieties of colours are not obvious to them except where something is frightening' (Them. *in de An.* 67,30–68,3, trans. Todd).

**15** For a systematic interpretation of Aristotle's view of the relation between sense perception and feelings of pleasure and pain – one with which the reading I provide in this paper is consistent – cf. Corcilius and Gregoric (2013). Cf. in particular their comments on *de Anima* 431a8–14: here Aristotle states that 'being pleased and being pained are the actualization of the mean of the perceptual faculty in relation to what is good or bad insofar as they are such', thus providing evidence for Corcilius and Gregoric's integrated reading of perception, pleasure, and desire and their claim that by 'feeling pleasure in perceiving some things and feeling pain in perceiving others, the animal distinguishes between things which are good for it and things which are bad for it, i. e. things which are conducive and things which are detrimental to the bodily state in accordance with the animal's nature. Simultaneously, the animal is drawn to the things which are good for it and repelled by those which are bad for it' (61–62).

weakness of this sense faculty inhibit their judgment capacity (e. g. *Simp. in de An.* 152,1–26). Reconstructing his views is beyond the scope of this paper, but it is worth noticing that, when it comes to animal perception and he can therefore dispose of his worries concerning the distinction between judgment and affections, Simplicius' interpretation seems to take affects into account:

it is not that ... animals sense only the frightening and the non-frightening and not colour or difference of colour ... If they are sometimes afraid, sometimes oppositely disposed, it is clear that they perceive different objects of sight ... *It is that they do not receive these without either being disturbed or being soothed*, of which he calls the one case frightening, the other not so. (152,34–153,4, trans. Steel; emphasis added)

At least in the case of animals, then, Simplicius is prepared to admit that evaluation is not consequent on perception, but involved and entangled in it.

On the other hand, as far as Aristotle is concerned, while it is certainly true that human beings, compared to lower animals, are endowed with a more complex *psychē*, their higher faculties draw on the more basic ones (as shown by the case, discussed below, of food-related smell, that proves the interconnection between the sensory and the nutritive soul), which they share with animals. On these grounds, Aristotle's description of human beings as capable of knowledge and wisdom is not incompatible with his appreciation of the relevance of the primary domain of perceptual cognition. In this respect, the main difference between animal and human perception is not, as Simplicius would want, that the former is entangled with affective states while the latter is, so to say, entirely 'cognitive'. Consider, e. g., the following passage from the *Nicomachean Ethics*, where Aristotle describes how pleasure belongs to the activity it completes, including (all kinds of) perception:

the former [*sc.* pleasures] are close together with them [*sc.* activities] and are so indistinguishable that there is room for dispute whether activity isn't the same thing as pleasure. It certainly does not seem likely that pleasure is thinking, or perceiving (for that is a strange idea); but because of their not being separated they appear to some people to be the same thing. (*EN* 1175b31–35, trans. Rowe)

Consider also Aristotle's definition of sense accuracy as the capacity to perceive from distance and to discriminate the qualitative features of the perceived object:

the fact that some animals are keen-sighted and others not is due to two sets of causes, for 'keen' (*τὸ ὀξύς*) here has practically two meanings (so it has when applied to hearing and smelling). Thus, keen sight means (a) ability to see from a distance, (b) distinguishing as accurately as possible the differences of the objects which are seen ... The same situation is found in connexion with two other senses – hearing and smell – as with sight. To hear and



to smell ‘accurately’ means (a) to perceive as well as possible all the differences in the objects perceived, (b) to hear and smell from a distance. (GA 780b14–781a18, trans. Peck)

Perceptual accuracy is not equated with rational discrimination: rather, especially as regards the capacity to appreciate differences in the quality of the perceived object, it depends upon the purity of the sense-organ (GA 781b1–4). Aristotle does not envisage any inconsistency between the keenness of perception and its affective features<sup>16</sup>: sense perception is necessary for the animal’s survival precisely because, by ‘telling many differences’ (*Sens.* 437a2), the senses inform the animal about those environmental features that are significant for it (at the most basic level, whether they are to be gone for or avoided).<sup>17</sup> What follows is that, when comparing animal and human perception, a distinction can rather be made as regards the affective states themselves, that are primal and overt – ranging from pleasant to unpleasant, fearful to non-fearful – in the case of animals (and, to a certain extent, of human smell), while they are more composite and subtler, possibly involving a degree of reflectiveness and even symbolic knowledge, in human beings. A closer look at Aristotle’s discussion of smell will shed further light on this point.

A telling example of the association between perception and affective sense-making occurs, in the *de Anima*, at 421b10–13, where Aristotle is concerned with the medium for smell and claims that fish can also smell:

water animals, those with blood and those without alike, also seem to perceive smell, just as those in the air do. For some of these come upon food from far away, having been guided by smell. (trans. Shields)

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<sup>16</sup> Aristotle’s basic account of perceptual discrimination is illustrated at *de Anima* 423b31–424a10, where he describes perception as ‘a sort of a mean between the contraries present in the perceptible objects’. Such a mean is capable of discrimination, insofar as the balanced structure of a sense organ changes its measure in accordance with what is perceived. Other relevant passages on perceptual discrimination are *de Anima* 426a27–427a16 and *de Sensu* VII. It is beyond the scope of this paper to provide an account of Aristotle’s theory of perceptual discrimination. For our purposes, it suffices to keep in mind that, as Aristotle argues in the *de Anima*, we discriminate between the features of the objects we perceive by virtue of the senses rather than of our reasoning capacity. Co-ordination of the senses and discrimination of perceptual features are achieved entirely at the level of sense perception. For this reason, perceptual accuracy, that is, the capacity to perceive the differences in the perceived objects, does not conflict with the role of affective states in perceptual processes as I illustrate it in this paper.

<sup>17</sup> For a discussion of the role of perception in promoting the animal’s survival cf. Caston (manuscript, under review), 40–43. Cf. Corcilius and Gregoric (2013) for a line of argument with which the one I propose here is consistent.

Perception is here described as the basic way fish navigate through their environment when looking for food: by moving towards what they smell as food,<sup>18</sup> they display a perceptual behaviour that is entangled with a seeking drive and motion through space. Aristotle thus seems to understand fish behaviour as informed by a precise perceptual interest: it is shaped by the need to satisfy hunger, and as such it has an explicit affective nature.<sup>19</sup> Moreover, the salience of smell as food does not intervene after perception, but sustains it from the beginning and turns perception itself into a specific course of action: *having become* ὑποσμος (ὑποσμα γινόμενα) – where smell is valenced as ‘food’ – the fish *aims at* food and *moves towards* it (πρὸς τὴν τροφήν). The same approach is endorsed in *Sens.* 444b8–15, where Aristotle explains that the reason why fish and insects such as bees or ants head towards food depends on ‘the nutritive kind of smell’ (τὸ θρεπτικὸν εἶδος τῆς ὀσμῆς).

It is on these bases that Aristotle formulates a distinction between two species of smellable objects: those to which pleasantness and unpleasantness pertain incidentally, as is the case with smells related to nutrition; and those that are pleasant in themselves, as is the case with the fragrance of flowers. Smells belonging to the first category are common to all animals and their perception in terms of pleasure and dislike heavily depends on basic biological needs and goals (cf. the phrases πρὸς τὴν τροφήν παρακαλοῦσιν and συμβάλλονται πρὸς ἐπιθυμίαν at *Sens.* 443b28–29; also cf. *EN* 1175a10–12, where Aristotle seems to establish a basic connection between the desire for pleasure and that for remaining alive: ‘that everyone desires pleasure one might put down to the fact that everyone also seeks to be alive’ [trans.

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**18** By saying that fish move towards what they ‘smell as food’ I do not mean to introduce intentional content *as distinct* from their seeking drive and perceptual behaviour; rather, I mean that the perceptual behaviour itself is infused with intentionality, that the latter is intrinsic to the structure of perception.

**19** Cf. Corcilius and Gregoric (2013): ‘perception causes appetite and revulsion whenever the object perceived is either good or bad for the animal. To be something good or bad for the animal, in the simplest case, means to be conducive or detrimental to the bodily state in accordance with the animal’s nature. An object which is good for the animal will in this way cause an appetite when perceived, and an object which is bad for the animal will cause a revulsion when perceived’ (65). The authors build on Aristotle’s idea that an animal’s bodily states are in accordance with nature when they are conducive to its preservation and proper functioning in order to explain appetite and revulsion in terms of heating and chilling (*HA* 589a8–9, *MA* 701b33–702a2). The point they make that is most relevant to my argument concerns the dependence of perceptual alterations on the state of the animal’s body.

Rowe]).<sup>20</sup> This idea is further expanded on in the *Nicomachean Ethics*, where Aristotle explains that pleasure is incidental to food-related smells because it is not caused by the smells *per se*, but rather by the nourishment they refer to:

It is not the scent of the hares that the hunting-dogs enjoy, but consuming them – the scent just told the dogs the hares were there; nor is it the ox’s lowing that the lion enjoys, but rather eating it up, and he merely sensed through the lowing that the ox was nearby, so appearing to enjoy the sound itself; similarly, what pleases him is not the sight of ‘a stag or a goat running wild’, but that he is to get a meal. (*EN* 1118a18–23, trans. Rowe)

It is by virtue of its dependence on bodily needs that the same smell which is pleasant to one who is hungry is unpleasant if smelled when one is sated (*Sens.* 443b21–24).<sup>21</sup> On the other hand, only human beings perceive smells that are pleasant in themselves (*Sens.* 443b26–444a4, 444a31–33); correspondingly, only human beings are capable of disgust when confronted with stinking objects just because they stink, even if they do not constitute any threat (444b28–30). What follows from Aristotle’s identification of two different categories of smell<sup>22</sup> is that human beings, besides sharing with animals a perceptual stance informed by basic interests (such as nutrition; ultimately, survival), also display perceptual preferences that do not directly depend on the primary biological stakes involved in their actual perceptual exchange with the environment. Perception of intrinsically pleasant smells is still affectively valenced: nothing of what Aristotle says suggests that the perception of the pleasantness of the fragrance

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**20** Cf. *EN* 1152b33–1153a2, where Aristotle describes coincidental pleasures as restorative, i. e. taking one from a defective condition to one’s natural state. The fulfilment of biological needs is an obvious example of the restoration of a previously impaired state. I agree with Corcilius and Gregoric (2013), 61, n. 12, that this is compatible with Aristotle’s criticism of Plato’s replenishment model of pleasure: the latter is attacked *qua* a general definition of pleasure, insofar as it does not account for those pleasures that *perfect* activities, i. e. that derive from the performance of excellent activities (*EN* 1174b14–1175a3, 1174b32–33). The problem with the replenishment model is not that it accounts for restorative pleasure as a process of coming to be in a natural, healthy state (and, as such, as being for the sake of the state in which it terminates), but that it falls short of acknowledging pleasure as an activity (whose end is within it) rather than a process.

**21** In addition to the detailed physiological explanation provided in *de Sensu* (see Johansen 1996), nutrition as the common denominator of flavours and smells might also be taken as a reason why we tend to discriminate odours in terms of taste (*de An.* 421a26–b3). However, the analogy of smell and flavours is not the only instance of cross-modal reference (e. g. *de An.* 420a29–31).

**22** Also see *EE* 1231a6–12, where Aristotle endorses Stratonicus’ way of defining smells related to nutrition as pleasant (ἡδύ) and those which are pleasant in themselves as fine (καλόν).

of flowers is other than the perception of the fragrance itself. Simply, human perception of the fragrance of flowers goes beyond the primal issues and costs related to survival and integrates subtler affective valences. Sometimes the latter are embedded in a wider social and cultural context, and these too can be conceptually informed: this is why, for example, when Aristotle illustrates the difference between non-rational and rational impulses towards pleasure in the *Rhetoric*, he lists visual desires in both groups, insofar as they can either originate merely on account of the body, in the same way as hunger and thirst do, or be sustained by beliefs (*Rh.* 1370a18–27). The pleasant is in both cases the object of sensation (*Rh.* 1369b33–34; cf. also 1370a27–28), i. e. an affection, a perceptual experience that is valenced in an embodied way. In the case of the intrinsically pleasant smells discussed above, their valence is not as strong as the one that leads fish towards food because the biological effort is not as urgent as nutrition. Nonetheless, the idea that the affective features of the perception of intrinsically pleasant smells are not only present, but also correspond to biological motivations is further supported by what Aristotle claims when he provides a physiological explanation of the reason why they are peculiar to man: their perception is beneficial to the body, insofar as they balance the coldness of the human encephalon, which is bigger and moister than that of other animals (*Sens.* 444a8–444b 2). The feeling of pleasure – generated as an affective feature of perception and thus inseparable from it – still depends on the body’s needs, and it is not the fragrance of flowers that is intrinsically pleasant, but our perception of it, because it is determined by the specific efforts we make as animals endowed with a larger and colder brain.

## Emotions and Enmattered Virtues

As mentioned above, perceptual interests can go beyond primal biological needs and be dictated by more complex determinants that are ultimately represented in an embodied way via the affective features of perception.<sup>23</sup> In this respect, emotions provide us with a representative illustration of the way perceptual content is deeply influenced by affective states.

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<sup>23</sup> In Aristotle’s own words, ‘to all those which possess them [sc. the senses] they are a means of preservation (σωτηρίας ἕνεκεν), in order that they may be aware of their food before they pursue it, and may avoid what is inferior or destructive, while in those that have intelligence also these senses exist for the sake of well-being (τοῦ εὖ ἕνεκα)’ (*Sens.* 436b19–437a1, trans. Hett).

In the *de Anima*, Aristotle defines emotions as enmattered accounts, making it clear that emotions are not purely intellectual responses, but are embodied and based on physical processes as well<sup>24</sup>:

it seems that all the affections of the soul involve the body – anger, gentleness, fear, pity, courage, as well as joy, and loving and hating. For at the same time as these, the body is affected in some way ... If this is so, it is clear that the emotions are enmattered accounts (λόγοι ἔνυλοι). (*de An.* 403a16–25, trans. Shields, slightly modified)

They are always accompanied by pleasure or pain or both (e. g. *EN* 1105b21–23, *EE* 1220b12–14; *Rh.* 1378a21–22) and these hedonic states consist in bodily alterations (cf. *EE* 1220b14, where both ἡδονή and λύπη are qualified as αἰσθητική; cf. also the association of λύπη with ταραχή at *Rh.* 1382a21, 1383b14, 1386b18–19, 23–24). Emotions thus amount to affective phenomena involving some kind of appraisal, but this is a form of appraisal that is neither abstractable nor separable in existence from bodily states<sup>25</sup>:

sometimes, in spite of violent and striking occurrences one feels no excitement nor fear [sc. if one is not in the right physical state], while at other times faint and feeble stimulations arouse these emotions, whenever the body is already agitated and in the condition it is when one is angry. Here is a still clearer case: even if no external cause of terror is present, sometimes one comes to experience the feelings of a man in terror. (*de An.* 403a19–24)

Aristotle is clear that our physical states can shape the way we select, perceive and evaluate external stimuli: therefore, the beliefs and appraisals that feature in our emotional reactions also depend on the body. Bodily feelings guide our value orientation by lowering or raising our thresholds for emotional reactions, so that we accentuate or downplay the salience of eliciting conditions on the basis of our own internal states.

On the other hand, emotions, once aroused, involve the body in the same way, so that they influence perceptions and evaluations of all sorts, lead us to emphasize certain features of the percepts we select, and may even affect the hypotheses which precede the perceptual recognition of external stimuli themselves. Thus, emotions are perceptually relevant because they influence the way

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<sup>24</sup> This is important to remark because, with the exception of David Charles (2008, 2009), who has made some progress in the acknowledgement of the embodied qualities of emotions in Aristotle, most interpreters of Aristotle's emotion theory provide an essentially disembodied reading of Aristotle's view of affective phenomena (cf. esp. Fortenbaugh 2002. For a defence of a belief-based interpretation of Aristotelian emotions, with a focus on their *logos* as the definitional feature, cf. also Leighton 1982; Nussbaum 1994, 2001; Konstan 2006).

<sup>25</sup> Cf. Charles (2008).

we perceive an object's relevance and value – and they do so *before* the object itself is identified:

we are easily deceived with respect to our perceptions when we are in emotional states. And different people according to different states, e.g. the coward in a state of fright, the amorous man in one of amorous passion. Thus, from a slight resemblance the former judges that he sees his enemies, but the latter that he sees his loved one. The more emotional his state, the slighter the resemblance that can give rise to these appearances. In the same way, all men become prone to deception while in states of anger as well as in every form of appetite, and the more so, the more they are in those states. That is also why animals sometimes appear on the walls to people in a fever, from a slight resemblance in the combination of lines. Sometimes, also, those appearances correspond to their state in such a way that if they are not seriously ill, they are aware of the illusion; whereas if their condition is more serious, they actually move themselves in accordance with the appearances. (*Insomn.* 460b3–16, trans. Gallop)<sup>26</sup>

The affective aspect of emotions generates both perceptual interests and expectations: the emotion of fear that excites the cowardly man motivates him towards self-defence and stimulates his alertness. Since emotions are psychophysical experiences, these motivational aspects come with the body and, in turn, contribute to the shaping of one's perceptions, so that – as in Aristotle's example – the smallest resemblance is perceived by the scared man as an army of approaching enemies. Even if the interplay between emotions and perception represents a particularly complex phenomenon (since emotions are affective episodes possibly involving causal attribution and evaluative attitudes), Aristotle analogises it with the way physiological factors (such as an abnormally high bodily temperature) influence one's perceptual experience. In the same vein, in the *de Anima*, Aristotle compares emotions to fever and other bodily disturbances in their capacity to determine our perceptual interests and translate them in cues for behaviour:

because instances of imagination persist and are similar to perceptions, animals do many things in accordance with them, some because they lack reason, e.g. beasts, and others because their reason is sometimes shrouded by emotion, or sickness, or sleep, e.g. humans. (*de An.* 429a4–8, trans. Shields)

So, in the same way as the pleasantness of food-related smells depends on us being hungry, emotions too shape perception: perceptual processes depend on

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<sup>26</sup> Cf. also *Rh.* 1377b31–1378a 1, even if here (as in the *de Anima* passage above) it is not sense perception, but judgments, that emotions underpin: 'opinions vary, according as men love or hate, are wrathful or mild, and things appear either altogether different, or different in degree' (trans. Freese).

one's perceptual perspective and the latter is informed and qualified by the perceptual interests that are generated both by one's basic affective states and by more complex ones.<sup>27</sup>

Such is the importance of affective states in underpinning perception that it is on the grounds of their correct association with specific activities that Aristotle believes ethical virtues are developed. As he does for the emotions, Aristotle provides an enmattered account of virtues as well (cf. *de An.* 403a15–17; cf. also *EN* 1178a14–15, where virtues are said to be consequential on the body: *συμβαίνειν ἀπὸ τοῦ σώματος*). In fact, virtues are dispositions (*ἕξεις*) in terms of which

we are well or badly disposed in relation to the emotions, as for example in relation to becoming angry, if we are violently or sluggishly disposed, we are badly disposed, and if in an intermediate way, we are well disposed – and similarly too in relation to the other things in question. (*EN* 1105b25–28, trans. Rowe; also cf. *EE* 1220b7–10, 18–20)

Aristotle goes on to say that

it is possible on occasion to be affected by fear, boldness, appetite, anger, pity, and pleasure and distress in general both too much and too little, and neither is good: but to be affected when one should, at the things one should, in relation to the people one

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<sup>27</sup> An anonymous referee rightly pointed out that the examples provided in this section are all about incidental objects of perception and asked whether this means that affective states only underpin co-incidental perceptions or whether they also underpin special and common perceptions. Aristotle's taxonomy of sensible objects is illustrated in *de An.* II.6, where his argument for the infallibility of special perception is also stated. This argument entails that, e.g., sight cannot be mistaken about whether there is colour or not (*de An.* 418a15–16). This does not rule out the possibility that we (through sight) might be mistaken about which colour we are perceiving, but Aristotle does not comment on that (even if, at *de An.* 418b19, while describing the perception of an exclusive object as true, he qualifies it as 'subject to falsity in the smallest degree'). What he does state explicitly is that special and common objects are embedded in the (co-incidentally perceived) entities that possess them: this means that we usually perceive them as located in some specific way rather than in abstraction, and this admits of misperception. Aristotle puts it this way: 'perception is perception of something's being an attribute of something; and already here it is possible to be mistaken ... perception is of the common objects which follow upon the attributes to which the exclusive objects belong ... concerning which there is already, most of all, deception in the realm of perception' (*de An.* 428b20–26).

From this perspective, I believe there is no reason why we should think of affective states and perceptual interests as underpinning only co-incidentally perceived entities: they also influence the perception of the attributes of such entities, especially insofar as these attributes can make a difference in some value-relevant way. For example, it is imaginable that the cowardly man who, from a very faint resemblance, thinks the enemy is approaching also overestimates how rapidly the enemy is moving through space or how many enemies there are.

should, for the reasons one should, and in the way one should, is both intermediate and best, which is what belongs to excellence. (*EN* 1106b18–23, trans. Rowe)

Virtues, insofar as they are correct dispositions towards the emotions, appear to hinge on the association of appropriate affective states with correct eliciting circumstances.<sup>28</sup> The reason why this is so depends on their enmattered nature. Let us take courage as an example. It is defined as ‘an intermediate state relating to fearing and being bold’ (*EN* 1115a6–7); a courageous man is the one who ‘withstands and fears the things one should fear and for the end one should, and in the way and when one should, and is bold in a similar way’ (*EN* 1115b17–19, trans. Rowe). Correspondingly, ‘the person who goes to excess in fearing is cowardly; for he fears the sort of things one shouldn’t and in a way one shouldn’t, and every other feature of this sort goes along with his disposition’ (*EN* 1115b33–35, trans. Rowe). The virtue of courage is supported by *thumos* (*EN* 1116b23–1117a5), to which Aristotle refers in physiological terms on more than one occasion (e. g. *PA* 650b33–651a2). It is on the grounds of a specific physiological state that it is possible to become courageous. Consider, e. g., *de Partibus Animalium* 650b27–30, where creatures with watery blood are said to be inclined to fear (cf. also 651a12–14), or *de Partibus Animalium* 667a10–21, where the dimension of the heart counts as a predisposition factor to either fearfulness or courageousness:

some hearts are large, some small, some are hard, some soft; and these tend by some means to influence the creature’s temperament. Illustrations of this are: animals whose powers of sensation are small have hearts that are hard and dense, those whose sensation is keen have softer ones; and those with large hearts are cowardly, those with small or moderate-sized ones, courageous (this is because in the former class the affection which is normally produced by fear is present to begin with, as their heat is not proportionate to the size of their heart, but is small and therefore hardly noticeable in the enormous space that it occupies; so that their blood is comparatively cold). The following creatures have large hearts: the hare, the deer, the mouse, the hyena, the ass, the leopard, the marten, and practically all other animals whose cowardice is either outright or else betrayed by their mischievous behaviour. (trans. Peck)

The virtue of courage can be neither achieved nor practised in separation from the physiological states it hinges on. One can be naturally predisposed to certain virtues on account of one’s embodied features (e.g. *APr.* 70b7–21,

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<sup>28</sup> *Phronēsis* too, that is involved by proper virtue (ἡ κυρία ἀρετή; for the distinction between natural virtue and proper virtue see *EN* 1144b15–17), has to do ‘with the compound’ (τὸ σύνθετον, *EN* 1178a20), as it emerges from affective training and habituation. Also cf. *EN* 1142a25–30, where *phronēsis* is described in terms of *aisthēsis* (not of proper sensibles *per se*, but of their significance).



in addition to the passages from *PA* just quoted). Nevertheless, Aristotle is not a determinist and believes there is room for education (*EE* 1220a39–1220b6). Education, which results from habituation (*EN* 1103a17–18, 1179b24–26), is to be obtained through customs, family discipline, and especially laws, that mould one's moral character and dispositions by the dispensation of pleasure and pain in the form of rewards and punishments (*EN* 1179b31–1180a24). In fact, excellence of character 'has to do with pleasures and pains' (*EN* 1104b8–9; *EE* 1220a38–39; also cf. *EN* 1104b16–18 or *EE* 1220a34–37, where the metaphor of education administered as a medicine through the laws is particularly significant in terms of embodied ethics; at *Nicomachean Ethics* 1104b3–5 pleasure and pain are discussed as indexes of one's dispositions, and at *Nicomachean Ethics* 1109b1–4 inclinations are described in terms of the pleasure and the pain they bring about). It is on account of the training to feel pleasure for the appropriate forms of conduct and displeasure for the inappropriate that one acquires virtuous dispositions and *phronēsis*: a courageous person is one who withstands frightening things χαίρων ἢ μὴ λυπούμενος, i. e. taking pleasure at his or her own conduct – or, at least, behaving courageously without distress (*EN* 1104b7–8). So for example, to return to the above discussed example of the coward from *de Insomniis*, it is because of his non-virtuous disposition towards the emotion of fear and the relevant affective states that, based on just a small resemblance (ἀπὸ μικρᾶς ὁμοιότητος), what he sees are approaching enemies. Ultimately, then, we become virtuous if we are 'brought up in a certain way from childhood onwards ... so as to delight in and be distressed by the things we should' (*EN* 1104b11–13, trans. Rowe; cf. *EN* 1179b24–26): 'it makes no small difference with regard to action whether someone feels pleasure and pain in a good way or a bad way' (*EN* 1105a6–7, trans. Rowe). In conclusion, virtues and the emotions they relate to are pervaded by affective states and it is also on account of the latter that we (learn to) perceive a certain conduct as virtuous or vicious, feeling pleasure and displeasure respectively.

## Conclusion

At *de Anima* 424b3–18, Aristotle compares the effect that affection by a sensible object brings about in beings incapable of perception and in those who are capable of perception. Specifically, he worries about what difference there is between a smell affecting air, and thus making it odorous, and a smell affecting a sentient being, and thus being smelled:

still, tangible things and flavours affect bodies. For if they did not, what would affect or alter things without soul? Then, will the other objects of sense also affect bodies? Or is it rather not the case that every body is capable of being affected by odour and sound, and that those so affected are indeterminate, and do not remain, like the air, for example (for it smells just as if it were affected in a certain way)? What, then, is smelling beyond being affected by something (παρὰ τὸ πάσχειν τι)? Or is smelling also perceiving (ἢ τὸ μὲν ὁσμάσθαι [καὶ] αἰσθάνεσθαι),<sup>29</sup> whereas the air which is affected quickly becomes something perceptible? (424b13–18, trans. Shields)

Consider Aristotle's discussion of 'being affected' (τὸ πάσχειν) at *de Anima* 416b33–35, where he defines perception as a kind of alteration arising from being moved and being affected and claims that there are different ways in which 'being affected' can be qualified. In the case of perception, undergoing a change brings about the fulfilment of the perceptual capacity itself (*alteratio perfectiva*), rather than a replacement of the perceiver's features with opposed features retrieved from the sensible object (*alteratio corruptiva*).<sup>30</sup> On these grounds, if – returning to *de Anima* II.12 – we refer the phrase 'being affected by something' (τὸ πάσχειν τι)<sup>31</sup> to the kind of change he has discussed at 424b13–16 (i. e. the way beings and entities incapable of perception are affected by external objects), we can paraphrase his question about what smelling (i. e. an act of perception) is παρὰ τὸ πάσχειν τι in the following terms: what is smelling, compared to *being affected by something in the way entities incapable of perception are affected*? Aristotle is once again qualifying the meaning of τὸ πάσχειν. Since in *de Anima* II.5 he has already explained what it means when it is referred to perception, here it suffices to say that smelling is perception (ἢ τὸ μὲν ὁσμάσθαι αἰσθάνεσθαι). His argument can thus be summarized as follows:

<sup>29</sup> The insertion of καί, that is present in codex Parisinus graecus 1853 and absent in the Laurentianus 87.20, is contested by Kosman (1975), 510–511. Burnyeat (1992) favours the omission and takes it to support his argument that perception does not entail any physiological process. While retaining or eliminating the καί has been considered irrelevant in terms of interpretive differences (Lear 1988, 155, n. 156; Polansky 2007, 355, n. 29), the meaning of the preposition παρὰ has been very much discussed: Burnyeat seems to understand it as 'in contrast with' (cf. his claim that Aristotle 'is not asking: What more is there to smelling than the being affected that goes on in perceiver when he perceives? But: What more than a case of being affected does the scent effect in our noses [ ... ]?', [1992], 25), whereas Sorabji translates it as 'besides' (1992), 220. Johansen accepts Sorabji's translation, but argues that this does not allow us to infer that smelling is a case of undergoing change (1997), 279, n. 30. Cf. also Caston (2002), 755–57.

<sup>30</sup> *de An.* 417b2–16.

<sup>31</sup> An alternative translation could be 'being affected in a certain way'.

- (1) both sentient beings and those which are incapable of perception can be affected by objects;
- (2) even so, the ways in which they are affected are different;
- (3) recall from *de Anima* II.5 that ‘being affected’ (τὸ πάσχειν) can have different meanings: when it comes to perception, it implies the fulfilment of the perceptual faculty, based on the reciprocal actualization of the faculty and its object<sup>32</sup>;
- (4) if so, what is smelling as opposed to the τὸ πάσχειν of plants and of other entities who cannot perceive?
- (5) smelling is perception, a mode of τὸ πάσχειν bringing forth actualization and fulfilment (as opposed to what happens to the air, which is affected in a way that transforms it into something else: ἀἴρ παθῶν ταχέως αἰσθητὸς γίνεται).

As opposed to plants or the air, sentient beings are capable of perception insofar as they are endowed with suitably structured sensory organs and appropriately functioning response mechanisms. But there is more to perception than that: sentient beings are living beings who actively interact with their environment and for whom sense perception is a means of self-preservation.<sup>33</sup> The perceptual faculty of living, sentient beings is grounded in the physical world both to the extent that its actualisation requires external objects to be present and insofar it is constrained by the living beings’ own organic structure. The latter determines the kind of stimuli they are sensitive to in at least two ways. Properly structured sensory organs bring forth smells, sounds, and so forth, thus actualising material objects *qua* bearers of sensible qualities. This actualisation in turns depends on the biological needs that embodiment entails, as well as on the embodied representation of personal interests and values. It is because of these needs and embodied representations – what I have called perceptual interests – that at *Physics* 244b12–245a 2 Aristotle claims that, as opposed to inanimate entities, animate beings register the changes they undergo (τὸ δ’ [τὸ ἔμψυχον] οὐ λανθάνει πάσχον). This registration amounts to the unitary actualisation of both the perceptual capacity of the perceiver and the potentiality of the perceptible to be perceived: the former perceptually enacts the latter by engaging with

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**32** Cf. *de An.* 425b26–426a 1: ‘The actuality of the object of perception and of the senses are one and the same, but their being is different. I mean, for example, actual sound and actual hearing. For it is possible for someone who has hearing not be hearing; and what has sound is not always making a sound. But whenever what is able to hear is in actuality hearing and whatever is able to sound is sounding, then actual hearing and actual sounding come about simultaneously. One could say of these that the one is hearing and the other sounding’ (trans. Shields).

**33** *Sens.* 436b19–20.

it in an embodied and affective way. It is on these grounds that, as Aristotle claims, the actuality of what is capable of perceiving and that of sensible objects are one and the same (*de An.* 425b26–27).

I have argued that the affective sense of what is at stake in the living being's interaction with the environment contributes to perception itself. One's perceptual interests act as sensitizers both in directing one onto certain external stimuli rather than others and in determining how one engages with them, downplaying or accentuating their features on the grounds of the expectations arising from one's emotional state and value orientation. According to Aristotle, this is true both when primal biological needs are concerned and when more complex preferences come into play. Perception is the action by virtue of which the perceiver engages with the external world: therefore, rather than by looking at it as a reified physical or mental process (or a combination of the two), its nature is better captured by making reference to the significance of perceptual engagement itself.

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