

Aristotle on Consciousness¹

VICTOR CASTON

Aristotle's discussion of perceiving that we perceive (*On the Soul* 3.2) has points of contact with two contemporary debates about consciousness: the first over whether consciousness is an intrinsic feature of mental states or a higher-order thought or perception; the second concerning the qualitative nature of experience. In both cases, Aristotle's views cut down the middle of an apparent dichotomy, in a way that does justice to each set of intuitions, while avoiding their attendant difficulties. With regard to the first issue—the primary focus of this paper—he argues that consciousness is both intrinsic and higher-order, due to its reflexive nature. This, in turn, has consequences for the second issue, where again Aristotle seeks out the middle ground. He is committed against qualia in any strong sense of the term. Yet he also holds that the phenomenal quality of experience is not exhausted by its representational content.

Over the last thirty years, philosophers have disagreed as to whether Aristotle even had a concept of consciousness.² Each side, it turns out, is right, though in a fairly uninteresting way. Aristotle clearly distinguishes being awake and alert from being asleep or knocked out, where the notion of consciousness comes close to that of perceiving.³ On the other hand, he does not use any single word to pick out the phenomena we have in mind—the terminology itself arises only much later⁴—and

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² Against: Hamlyn (1968) 1993, p. xiii; Hamlyn 1978, p. 12; Rorty 1979, pp. 38–61; Wilkes 1988, pp. 20–21. For: Kahn (1966) 1979; Hardie 1976; Modrak 1981; Modrak 1987, Ch. 6.

³ See esp. Kahn (1966) 1979 and Hardie 1976.

⁴ See Siebeck 1882; Jung 1933; Zucker 1928; Schwyzer 1957; Lewis, C. S. 1960; Cancrini 1970; Mayer 1994. For the development of the terminology during the early modern period, see Lewis, G. 1950; Aquila 1988; Davies 1990; Thiel 1983; Thiel 1991; Thiel 1994; Thiel 1996; Thiel 1997.

he does not share the epistemological concerns distinctive of the Cartesian conception of consciousness, such as privacy or indubitability.

Neither of these results should make us pause. For it is not clear that we have a single concept of ‘consciousness’, despite the word;⁵ and many of the topics we discuss under this label are clearly issues about which Aristotle has something to say. His treatment of perceiving that we perceive in particular has points of contact with a current debate over the nature of consciousness, between those who take consciousness to be an intrinsic feature of mental states and those who think it consists in a higher-order thought or perception. Aristotle’s view, I shall argue, cuts down the middle of this apparent dichotomy, in a way that does justice to each set of intuitions, while avoiding their attendant difficulties. His discussion has ramifications, in turn, for a related debate over the nature of ‘qualia’, between those who think that qualia belong to our experience and those who think they are merely represented as belonging to objects in the world. Here, too, Aristotle steers for a middle course, but his comments are more sketchy and underdeveloped.

In what follows, I shall focus almost exclusively on perceptual consciousness. But many of Aristotle’s views are clearly meant to extend to other mental states in a fairly obvious way. The qualifications required do not substantially alter the framework laid out here.⁶

After a brief overview of the issues surrounding higher-order theories of consciousness (section 1), we shall turn to a close examination of Aristotle’s views, beginning with his conception of perceptual awareness in general (section 2). I shall then offer a detailed analysis of his arguments in *On the Soul* 3.2 concerning how ‘we perceive that we see and hear’ (sections 3–6). These arguments have been systematically misconstrued in the past; once properly explicated, they offer a view that has distinct advantages over both higher-order and intrinsic theories of consciousness (section 7). The resulting sense in which consciousness is ‘transparent’ and ‘reflexive’ on Aristotle’s view is also distinctive (sections 8–9); and this has implications for his views about the phenomenal quality of perceptual experience (section 10). I shall conclude by considering various objections to these views and possible

⁵ See, e. g., Dennett (1969) 1986, p. 99 ff.; Wilkes 1984; Wilkes 1988; Lycan 1996, Ch. 1; Block 1994; Block (1995) 1997.

⁶ The main qualifications concern the *type or mode* of awareness we have of our own thinking: on this point, see the discussion below in nn. 49 and 50. A full treatment would require discussion of Aristotle’s views on the Divine Intellect, whose ‘thinking is a thinking of thinking’ (*ἡ νόησις νοήσεως νόησις*, *Metaph.* 12.9, 1074b34). But this is obviously a substantial topic in its own right and would take us far afield from many of the concerns addressed here.

replies available to Aristotle (section 11). A brief excursus on the inner sense(s) has been appended to the end of the article.

1. Consciousness and higher-order mental states

Aristotle’s views constitute a fresh contribution to current debates over the nature of consciousness. It is one of those cases where a distinctive view emerges from a close reading of an historical figure, given his own context and concerns, rather than one where a framework alien to his own is forced onto his claims. To show this, a certain amount of exegetical detail is naturally required. Therefore it may be helpful to survey the sorts of issues at stake first, so as to keep the larger picture in view. These are obviously not the only issues one might be interested in when thinking about consciousness, or even necessarily the most interesting ones. But they are the ones relevant to Aristotle’s concerns.

To begin with a gross truism: throughout Western philosophy, there has been a long-running concern with the relation between the soul or mind, on the one hand, and the body, on the other. Humans and animals seem different from most other things, in both their abilities and their behaviour; and so it is natural to ask whether that which distinguishes them—call it their ‘soul’—is in some sense continuous with the natural world around, or whether it marks an abrupt infusion of something wholly different into the world. At different times, different features have been picked out as what is distinctive. Over the past few centuries, one feature that has been repeatedly invoked is consciousness, a kind of awareness that we seem to have in many, if not all, of our mental states, over and above the primary intentional content these states possess: to use an overly familiar metaphor, it is as if, in addition to the information they carry, these states were suffused with a kind of light. Accordingly, consciousness has often been treated as if it were an intrinsic feature of such states, which is not further analysable (a characteristic that might in fact help to explain the frequent resort to metaphors). The qualitative character of such states—their ‘felt’ quality in consciousness—likewise seems inexpressible except by referring to the qualities of the objects those states happen to be about. This has suggested to some that consciousness involves a kind of ineliminable subjectivity, a feature that constitutes a primitive and irreducible feature of mentality.

Higher-order theories of consciousness suggest an alternative. A conscious state is one that we happen to be aware of; and we are aware of it, according to these theories, in virtue of *another* mental state that is of

or about the first mental state. Thus, if I am consciously looking at the Golden Gate Bridge, I not only see the Golden Gate Bridge; I am also aware *that* I am seeing the Golden Gate Bridge. According to higher-order theories, this is because I am in a second mental state that is directed at the first; and this second state is of a higher-order precisely because its content concerns a mental state and its content. Depending on the theory, this second, higher-order mental state will either be a kind of judgement or, on so-called ‘inner sense’ or ‘internal monitoring capacity’ views, a certain kind of perception.⁷ What makes a mental state conscious on any of these views, then, is not an intrinsic feature of that state, but one that depends on its relations to other mental states. If so, consciousness is no longer an unanalysable primitive, but something that possesses an ‘articulated structure’, whose elements can be further distinguished and specified.⁸ More precisely, consciousness on this view is just a special case of intentionality, where certain kinds of mental state are directed upon others, in a way that embeds their content. And this at least leaves the door open for a naturalistic approach to the mind. For now it can be argued that consciousness can be accommodated within a naturalistic scheme to exactly the same extent that intentionality can.

Such a move is not without its costs, of course. To begin with, the very feature that promises to make consciousness tractable, theoretically speaking—the suggestion that it is a *relational* feature, and not an intrinsic one—runs counter to a fairly deep-seated intuition that conscious states are not so much observed from without, as ‘illuminated’ from within. Second, such theories require us to posit many additional mental states to account for the conscious states we do have. Even if such proliferation is acceptable, it effectively rules out the possibility that *all* mental states are conscious states and hence the possibility that consciousness is an essential feature of mentality. For while higher-order mental states can themselves be conscious in virtue of still higher-order states, it seems that this regress cannot continue indefinitely; and so at some point we will reach a higher-order state that makes another state conscious without being conscious itself. Finally, it may be questioned whether such a theory provides a satisfying account of ‘qualia’ and the felt character of conscious states, especially if the higher-order

⁷ Recent theorists who have accepted these labels include D. M. Armstrong (1968, pp. 92–99, 323–38) and William Lycan (1987; 1996; (1995) 1997). The phrase ‘internal monitoring capacity’ comes from the latter; ‘inner sense’ is, of course, traditional. For a brief history of the term, and its connection with the Aristotelian tradition, see the excursus at the end of the article (pp. 800–4 below).

⁸ For example, Rosenthal 1986, pp. 330, 341, 343; Rosenthal 1993b, p. 198; Rosenthal 1997, p. 736.

state is held to be a kind of thought or judgement. Even when it is held to be a kind of perception, it is unclear whether it locates the qualitative aspect of experience in the right place.

Aristotle has much to say about these issues. To be sure, his primary concern is not whether consciousness, much less subjectivity, is an irreducible feature of mentality. But he does believe that the presence of higher-order awareness is something that distinguishes sentience and other forms of cognition from noncognitive changes; and he speaks directly and at length about how we perceive that we perceive. He offers several arguments on the subject, against the sort of higher-order view we have just been considering, while at the same time managing to co-opt its most attractive features. On Aristotle’s view, the awareness that we have of our own mental states is an intrinsic and essential feature of those states; and yet it is to be explicated in terms of intentionality. It therefore remains equally congenial to a naturalistic approach to the mind, an approach I would argue he himself favours.

2. Perceptual awareness

Perceiving for Aristotle is a natural change brought about by the perceptible qualities of objects in the environment. But he still worries whether this change is wholly distinct from other sorts of natural change or, if there are continuities, in just what way it differs. At the end of *On the Soul* 2.12, for example, he asks whether perceptible qualities can bring about any changes *other* than perception. A smell, by its very essence, is the sort of thing that brings about smelling (424b3–9). But it also can have an effect on inanimate bodies—not, he stresses, simply in virtue of concomitant properties that its material basis happens to have, but precisely in so far as it is a smell (b10–12). A smell, he concludes, can also make air *smelly*, that is, make the air something that can provoke further incidents of smelling (b14–16).

Such commonplaces, though, raise an obvious worry. Exactly what is the difference between making something smell and just making it stink? Whatever change the air does undergo, it is not sentient and so cannot smell anything. How, then, does this change differ from what happens in the nose of a animal? Or, as Aristotle puts it,

What, then, is smelling *besides* undergoing a certain change?⁹ (424b17)
His use of ‘besides’ (παρά) here sharpens the difficulty. It presupposes that a change is undergone (πάσχειν τι, b17) when someone smells *just*

⁹ Taking τι as an internal accusative, as in the previous line (παθών τι, 424b16). See also Hicks 1907, *ad* 424b17 and esp. 424a1.

as much as when the air takes on an odour (παθών τι, b16). Had Aristotle meant to contrast smelling with undergoing a change outright, he would have used ‘instead of’ (ἀντί).¹⁰ On the contrary, his worry stems precisely from the fact that undergoing a certain kind of change is *common* to both cases, that there is a univocal sense in which both can be said to change in this way. Otherwise, the problem evaporates. If perceiving is a special case of undergoing a change (Burnyeat (1992) 1995, p. 25), it can only be because of *what else* is true of the event, and not because it involves a distinct sense of ‘undergoing a change.’¹¹

The difference between these two changes must therefore be explained by some further difference. Here Aristotle limits himself to the following observation:

Isn't it that while smelling is *perceiving*, air becomes *perceptible* when it undergoes a sudden change? (424b17–18)

A pregnant response, at best. It is certainly not ‘all he needs to say’, since ostensibly it is just a restatement of the difference that gives rise to the problem, with genus substituted for species: ‘perceiving’ has taken the place of ‘smelling’ and ‘perceptible’ of ‘smelly’. Without importing a

¹⁰ It is important to see that this point is independent of the recent disagreement between Johansen and Sorabji. Sorabji argues (1992, pp. 219–20) that Aristotle's use of ‘besides’ (παρά) implies that smelling is itself a case of undergoing change. Johansen objects (1998, 279 n. 30), citing the following passage from *Nic. Eth.* 1.1: ‘It does not matter whether the ends of action are the activities themselves or something else besides these [παρὰ πάντα ἄλλο τι]’ (1094a16–17). In this sentence, ‘X is something besides Y’ does not imply that ‘X is also Y’: the second disjunct explicitly states that ends are ‘something other’ (ἄλλο τι) than the activities. Johansen concludes that we cannot therefore infer in *On the Soul* 2.12 that smelling is a case of undergoing change.

While Johansen is right that the use of παρά does not imply that ‘X is also Y’, it nevertheless does presuppose that there is a Y as well as an X. This is true even in the passage Johansen cites from the *Nicomachean Ethics*: according to the second disjunct there will be activities as well as ends distinct from them. But that is all that is needed. For it follows that a change *is* undergone when smelling occurs, whether (a) smelling is one and the same in number as this change, so that it is a smelling *as well as* a change (as Sorabji claims); or (b) smelling merely *accompanies* this change, as something else that occurs ‘alongside’ it. Although I would prefer the monism of (a) to the parallelism of (b), it does not affect my argument above, since (b) equally implies that a change of the relevant sort occurs. *Neither* reading is compatible with an interpretation that denies there is a change in smelling of a sort that can occur in inanimate things (for example Burnyeat 1992, p. 22).

On Aristotle's use of παρά in general, see Bonitz (1870) 1955, 562a31–44; Eucken 1868, pp. 58–62.

¹¹ As Sorabji has rightly pointed out (1992, pp. 219–20), this reading does not depend on Torstrick's insertion of καί, based on ms. E, which can easily be suspected of being an error resulting from dittography (see Kosman 1975, pp. 510–11). The point here depends on the use of παρά instead: whatever additional truths hold of perceiving and not of inanimate things, it will still be true that perceiving is either (a) a change of a sort that inanimate things can also undergo or (b) accompanied by such a change. See n.10 above. Burnyeat now acknowledges that perceiving involves the same sort of change as occurs in the medium, which is inanimate; the only difference between them is that the former occurs in a being with the power of perception and the latter does not (2001, pp.133, 149–50; cf. 1995, pp. 427–8). He still maintains, though, that both changes are quite different from ‘ordinary changes’: see esp. his recent 2002.

more comprehensive understanding of Aristotle's views of perception, we could not hope to find this statement illuminating. *That* the difference between perceiving and becoming perceptible has something to do with the difference between the animate and the inanimate is beyond doubt. The question is just what that difference consists in.

Obvious places to look include earlier in the same chapter or even earlier in the same book, in *On the Soul* 2.5. But there needn't be just one difference in any case. In *Physics* 7.2, Aristotle notes several distinctions between the animate and the inanimate relevant to the present discussion:

Whereas what is animate undergoes alteration in the ways that something inanimate does as well, what is inanimate does not alter in all the ways that something animate does. For [what is inanimate] does not alter in the manner of the senses; and *what is [inanimate] is unaware, while what is [animate] is not unaware, of undergoing change*. Nothing, however, prevents what is animate from being unaware as well, whenever the alteration does not occur in the manner of the senses.¹² (244b12–245a2)

Aristotle begins with the obvious point that inanimate things do not perceive objects in their environment. But he adds a further and more interesting difference. Animate things are ‘not unaware of undergoing change’ (οὐ λανθάνει πάσῃσιν) when alteration occurs in the manner of the senses, whereas nothing inanimate is aware of any such change (244b15–245a1).¹³ The participial construction with λανθάνειν assures us that this is not the same point as the first.¹⁴ Animate things are not only aware of objects in their environment through perception; they are also aware of undergoing this alteration itself. This isn't proprioception either: it is not a question of being aware of eye movement or the like, but of being aware of an alteration that in some sense *constitutes* perception (244b10–12). To be aware of the changes one undergoes ‘in the manner of the senses’ is to be aware in some sense of one's *perceiving*.

This is still more evident from *On Perception and Perceptibles* 2, where Aristotle uses this assumption to reject a view held by some of his predecessors. They believe that the eye is made of fire, on the

¹² Following the main version, *a*, as printed in Ross's edition (with slight alterations to his punctuation).

¹³ For the qualification concerning alterations not ‘in the manner of the senses’, cf. *On the Soul* 3.13, 435a22–b1; Plato *Phlb.* 33D–34A, 43AB.

¹⁴ The point is obscured in Wardy's translation, which takes πάσῃσιν to serve as the subject of λανθάνειν and supplies γινόμενον as a dependent participle: ‘*what is happening* escapes the notice of the thing affected if it is inanimate, while it does not if the thing is affected is animate’ (1990, p. 52; emphasis mine). Rendering λανθάνειν as ‘escapes notice’ also has the unfortunate consequence in the present context of suggesting that inanimate things *do* notice other things.

grounds that you can see it flash when you rub your eyes in the dark. But Aristotle thinks that such a view leads to absurdity:

But this view faces another difficulty, since if it is *not possible to be unaware of perceiving and seeing something seen*, then necessarily the eye will see itself.

Why, then, doesn't this happen when it is left alone?¹⁵(437a26–9)

If the eye were made of fire, as his predecessors claim, and this is something that we can see, then we should be able to see this even when we aren't rubbing our eyes. But we do not see any such thing, *since* we are not aware of it; hence, the eye must not be made of fire. This argument depends crucially on the assumption that it is impossible to be unaware that one is perceiving something while one is perceiving it (cf. 7, 447a15–17). This is not an assumption Aristotle's predecessors make, but one he imports into the discussion—he is not trying to catch them in a contradiction so much as show that their view is not in accordance with the facts. He is not entitled to reject their view, therefore, unless he himself accepts this assumption, as he evidently does.

Several features of Aristotle's position are worth noting. Consider the version of the thesis stated in *Physics* 7.2 (above p. 757). First, it is offered in a *fully general* form: it is meant to distinguish perception from any change, animate or inanimate, that does not enter awareness or 'reach the soul', to use Plato's language from parallel passages of the *Philebus* (*ἐπὶ τὴν ψυχὴν διεξελθεῖν*, 33D–34A, 43AB).¹⁶ In Aristotle's view, alteration 'in the manner of the senses' is *always* accompanied by this kind of awareness.¹⁷ In fact, he claims elsewhere that such awareness is temporally continuous and so present in every subinterval during which we perceive (*On Perception and Perceptibles* 7, 448a26–30).¹⁸

¹⁵ Following the majority of the mss.; Ross's emendations are entirely gratuitous.

¹⁶ Cf. also *Tim.* 43C: *διὰ τοῦ σώματος αἱ κινήσεις ἐπὶ τὴν ψυχὴν φερόμεναι προσπίπτουσι*. 45D: *τούτων τὰς κινήσεις διαδίδον εἰς ἅπαν τὸ σῶμα μέχρι τῆς ψυχῆς αἴσθησιν παρέσχετο ταύτην*. 64AB: *ἐπὶ τὸ φρόνιμον ἐλθόντα ἐξαγγείλη*. 67B: *μέχρι ψυχῆς πληγὴν διαδιδόμενῃ*. *Rep.* 9.584C: *αἱ γὰρ διὰ τοῦ σώματος ἐπὶ τὴν ψυχὴν τείνουσαι*. Similar expressions can also be found both earlier, in the Hippocratic treatise *On the Sacred Disease* (*ἐς δὲ τὴν σύνεσιν ὁ ἐγκέφαλος ἔστω ὁ διαγγέλλων*, 16.3 Grensemann; cf. 16.6). They also occur in Aristotle himself. Cf. *On the Soul* 1.4, 408b15–17: *ἀλλ' ὅτε μὲν μέχρι ἐκείνης* [sc. *ψυχῆς*], *ὅτε δ' ἀπ' ἐκείνης*. *On Perception and Perceptibles* 1, 436b6–7: *ἡ δ' αἴσθησις ὅτι διὰ σώματος γίγνεται τῇ ψυχῇ*.

¹⁷ He extends a similar view to quasi-perceptual cases: when one is using one's personal memory, for example, it is not possible to be unaware of remembering (*ἐνεργοῦντα δὲ τῇ μνήμῃ ... λαμβάνειν μνημιμένον οὐκ ἔστω*; *On Memory and Recollection* 2, 452b26–8).

¹⁸ This text together with a passage from the *Nicomachean Ethics* 9.9 (see below, p. 774) have led several scholars to wonder whether Aristotle anticipated Descartes's *cogito*: Bréhier 1942–3, Schuhl 1948; Braun 1956. The connections, though, are fairly distant (as Bréhier recognized): see also, for example, Oehler 1962, pp. 253–6 and 1997, pp. 25–8.

Second, if his remark is this general, Aristotle cannot plausibly mean that animals are continually aware of such changes as a result of deliberately observing them and directing their attention to them. His manner of expression confirms this. He says only that animals are 'not unaware' of such changes, the use of *litotes* suggesting that *introspection*, in any strong sense, is *not* at issue.¹⁹ The awareness in question forms a part of one's normal experience in an unobtrusive and effortless way.

Third, Aristotle appears to have *phenomenal* awareness in mind. Consider his claim that there are the changes in our bodies of which we are not, in fact, aware. Aristotle would not be in a position to make this claim if we were completely without empirical access to them. But such changes can of course be observed via the senses: by someone's putting her ear to my chest, for example, or through the more gruesome opportunities afforded by the operating theatre and battlefield. In fact, given a little ingenuity (or misfortune), one can even witness them in oneself. But there is still a sense in which we cannot *feel* or *experience* such changes.²⁰ When we perceive, in contrast, we not only have direct, internal access to the *information* that we are perceiving; our perceiving is itself something that does not 'escape our notice' (*οὐ λαμβάνει*).²¹ Sorabji is perhaps right to characterize this as Aristotle's '*most* Cartesian remark' ((1974) 1979, p. 48, emphasis mine; cf. p. 50). But it does not presuppose anything more than phenomenal awareness.

¹⁹ For a survey of different conceptions of introspection, see Lyons 1986.

²⁰ In speaking of 'phenomenal awareness,' I do not intend the discussion to be restricted to *perceptual* experiences (or quasi-perceptual ones, for that matter). In the *Posterior Analytics*, for example, Aristotle describes mistakes that 'can, as it were, be seen by thought, though we are not aware of it in a verbal form' (*οἷον ὄραν τῇ νοήσει, ἐν δὲ τοῖς λόγοις λαμβάνει* 1.12, 77b31). Similarly, when he considers Plato's theory of recollection, he rejects as absurd the consequence that we could have such knowledge without being aware of it (*λελήθασιν*; 2.19, 99b25–27). In this case, it is clearly phenomenal consciousness that is at issue, not 'access consciousness' (on which, see the next note). For Plato insists that we have access to such inborn knowledge even before we become aware of it; indeed, Socrates' elenctic method relies precisely on this fact. But until we have been questioned in the appropriate way, we do not become aware of it and so 'recollect' it.

²¹ Thus, I would maintain that Aristotle is concerned with what some theorists have called 'phenomenal consciousness,' as distinct from 'access consciousness' (see, e. g., Block (1995) 1997). Access consciousness, roughly speaking, is a matter of what information is available to a cognitive agent in such a way that it can be directly controlled for use in reasoning and action. But it seems that a cognitive system might utilize informational content in this way without experiencing it phenomenally (as a zombie or a robot might); hence, the need for a distinct notion of phenomenal consciousness.

3. Perceiving that we perceive

We needn't rely on hints and suggestions, though. Aristotle has much to say about perceptual awareness, most prominently in the opening arguments of *On the Soul* 3.2 (425b12–25). Starting from the assumption that we do in fact perceive that we see and hear, he asks what must be the case in order for this to be possible. In his view, only two lines of explanations are available, and one of them is open to objection. It will be useful to begin with a representative translation, such as Hamlyn's, and to keep the Greek alongside, as much will turn on its interpretation:

Ἐπεὶ δ' αἰσθανόμεθα ὅτι ὁρώμεν καὶ ἀκούομεν, ἀνάγκη ἢ τῇ ὄψει αἰσθάνεσθαι ὅτι ὁρᾷ, ἢ ἑτέρᾳ. ἀλλ' ἢ αὐτῇ ἔσται τῆς ὄψεως καὶ τοῦ ὑποκειμένου χρώματος, ὥστε ἢ δύο τοῦ αὐτοῦ ἔσονται ἢ αὐτῇ αὐτῆς. ἔτι δ' εἰ καὶ ἑτέρα εἴη ἢ τῆς ὄψεως αἰσθησις, ἢ εἰς ἀπειρον εἶσω ἢ αὐτῇ τις ἔσται αὐτῆς· ὥστ' ἐπὶ τῆς πρώτης τοῦτο ποιητέον.

Since we perceive that we see and hear, it must either be by sight that one perceives that one sees or by another [sense]. But in that case there will be the same [sense] for sight and the colour which is the subject for sight. So that either there will be two senses for the same thing or [the sense itself] will be the one for itself. Again, if the sense concerned with sight were indeed different from sight, either there will be an infinite regress or there will be some [sense] which is concerned with itself; so that we had best admit this of the first in the series. (425b12–17)

On Hamlyn's reading, Aristotle hopes to identify the capacity responsible for this sort of awareness, and he proceeds by dichotomy: as he

Such a distinction, however, raises the question of how Aristotle might respond to cases such as 'blindsight' is alleged to be or, better still, visual form agnosia (as in the case of D. F. in Milner and Goodale's recent study (1995, esp. Ch. 5)), where a cognitive agent is able to utilize visual information in the execution of certain motor tasks, but reports not seeing the relevant features or fails to recognize the objects or features as such—cases, that is, where an agent appears to have access to perceptual information, without having phenomenal awareness of the items in question. Given his distinction between the animate and the inanimate, Aristotle must deny that such cases constitute *perception*, since the subject is unaware (in the relevant sense) that he is undergoing the change in question. But he needn't deny that such information is in some sense present in the body and as such can affect behaviour. For while he maintains that all cases of perception and thought involve 'receiving form without the matter' (*On the Soul* 2.12, 424a17–24), it is not clear that he maintains, or should maintain, the converse. That is, while every case of perceiving and understanding involves receiving form without the matter, there may still be cases like an impression in wax or an image in a mirror, where a form is received without the matter and yet no cognition takes place. Receiving form without the matter would then be *necessary*, but *not sufficient*, for perception and understanding. If so, then the cases in question could be explained as ones where we receive form without the matter and so have the relevant information present in us, even though we lack phenomenal awareness of it.

Of course, we have no idea how Aristotle himself would have reacted, if confronted with such cases—they might genuinely lead him to reconsider his views on perception. My point here is simply that he *needn't*: there is room in his stated doctrines as they stand to accommodate the relevant distinctions. (I am grateful to Mike Martin for the reference to Milner and Goodale.)

states in the first sentence, either it is (*i*) the same capacity by which we originally perceive or (*ii*) a different one. It is a question, in effect, of whether this awareness is somehow built into our perceptual abilities from the start or results instead from some separate internal monitoring capacity—an 'inner sense,' if you will. Against the latter option, Aristotle then offers two arguments, each a kind of *reductio ad absurdum*. According to the first, option (*ii*) leads to an unacceptable duplication of roles; according to the second, an infinite regress.

But option (*i*) is not without its problems. Aristotle immediately goes on to pose an *aporia* concerning it, to which he offers two tentative solutions—as he must, if his previous objections to option (*ii*) are sound. Hamlyn renders this passage as follows:

ἔχει δ' ἀπορίαν· εἰ γὰρ τὸ τῇ ὄψει αἰσθάνεσθαι ἔστιν ὁρᾶν, ὁρᾶται δὲ χρώμα ἢ τὸ ἔχον, εἰ ὄψεταί τις τὸ ὁρᾶν, καὶ χρώμα ἔξει τὸ ὁρᾶν πρῶτον. φανερόν τοίνυν ὅτι οὐχ ἓν τὸ τῇ ὄψει αἰσθάνεσθαι· καὶ γὰρ ὅταν μὴ ὁρώμεν, τῇ ὄψει κρίνομεν καὶ τὸ σκότος καὶ τὸ φῶς, ἀλλ' οὐχ ὡσαύτως. ἔτι δὲ καὶ τὸ ὁρᾶν ἔστιν ὡς κεχρωμάτισται· τὸ γὰρ αἰσθητήριον δεκτικὸν τοῦ αἰσθητοῦ ἄνευ τῆς ὕλης ἔκαστον· διὸ καὶ ἀπελθόντων τῶν αἰσθητῶν ἔνεισιν αἰσθήσεις καὶ φαντασίαι ἐν τοῖς αἰσθητηρίοις.

But this presents a difficulty; for if to perceive by sight is to see, and if one sees colour or that which possesses colour, then, if one is to see that which sees, that which sees primarily will have colour. It is clear then that to perceive by sight is not a single thing; for even when we do not see, it is by sight that we judge both darkness and light, though not in the same way. Moreover, even that which sees is in a way coloured; for each sense-organ is receptive of the object of perception without its matter. That is why perceptions and imaginings remain in the sense-organs even when the objects of perception are gone. (425b17–25)

Aristotle does not offer any further elaboration or endorsement. But to all appearances, he seems to think at least one of these solutions is sufficient to save (*i*): that it is by means of sight itself that one perceives that one sees.

Despite their superficial plausibility, Aristotle's initial arguments (425b12–17) have been found puzzling;²² and so, in an effort to illuminate their exact nature, several recent commentators have appealed to the larger context.²³ But insufficient attention may have been paid to the passage itself, which contains a fundamental ambiguity in its terminology. The word that Hamlyn, and virtually every other modern

²² Hamlyn (1968) 1993, pp. 121–2; Kosman 1975, pp. 500–2; Osborne 1983, pp. 401–5.

²³ Kosman 1975; Osborne 1983.

translator,²⁴ renders as ‘sense’—namely, the Greek *αἴσθησις*—can signify either

- a. the capacity (*δύναμις*) of perception, i. e., the sense
- b. the activity (*ἐνέργεια*) of this capacity, that is, the perception or perceiving.

Aristotle places a great deal of emphasis on this distinction in his psychology. It is the central theme of an earlier chapter in the treatise, *On the Soul* 2.5, in which he lays the foundations of his theory of perception. And it figures prominently in the present chapter, just after the passage we are considering; indeed, Aristotle chastises his predecessors for not appreciating the difference (3.2, 425b26–426a26, esp. a20–26). The word ‘hearing’ (*ἀκοή*), he notes, can be understood in both ways, as can all the words used for perceptions and perceptibles (426a7–9). In some cases, there may be a word reserved specifically for the activity, such as ‘seeing’ (*ὄρασις*, 426a13–14).²⁵ But by itself the more common term, ‘vision’ (*ὄψις*), remains unmarked and so can signify either a capacity or activity.²⁶ This distinction holds on a more general level as well. Earlier in the treatise, Aristotle employs an analogy with vision and perception in order to clarify his definition of the soul (2.1, 412b17–413a1): the soul, like sight, is what a natural body capable of life first attains (412a21–28; cf. 2.2, 413b11–13), namely, a *capacity* for certain activities, in contrast with the activities themselves, like seeing, which constitute its higher attainment.

If we look back at our passage, the words for ‘perception’ and ‘vision’ (or pronouns referring back to them) occur in every clause. Yet a simple reading, based exclusively on one sense or the other, seems to be ruled out. Some occurrences are most plausibly construed as referring to a capacity. For example, in his first attempt to answer the *aporia*, Aristotle observes that ‘even when we are not seeing’ (*καὶ ὅταν μὴ ὁρῶμεν*) we can discriminate darkness *by sight* (*τῇ ὄψει*, b20–21), which can only be the capacity. Other occurrences must refer to an activity, though, as, for example, at the end of the passage, when Aristotle refers in the plural to *perceptions* (*αἰσθησεις*, b25) that persist in the organs

²⁴ For example, the translations of E. Wallace; J. A. Smith (Oxford translation); E. Rolfes; G. Roder; Hett (Loeb); E. Barbotin (Budé); W. Theiler; Lawson-Tancred (Penguin), as well as the paraphrases in W. D. Ross’s commentary (1961, p. 272) and Kosman 1975, p. 499.

²⁵ Cf. *On the Soul* 2.1, 412b27–413a1; 3.3, 428a6–7; *On Perception and Perceptibles* 3, 439a15–16; *On Dreams* 1, 458b3–4; *Metaph.* 9.8, 1050a24, 36.

²⁶ Against Horn 1994, p. 29. See Bonitz (1870) 1955, 553a55–554b7, esp. 553a55–b30.

after the objects have gone. Clearly, then, a correct reading of the passage must employ both senses. Aristotle switches between them as his argument requires, and, though potentially confusing, it need not involve equivocation.

But obviously this leaves wide room for disagreement. The best interpretation, I contend, against virtually all modern translations and commentaries, construes this passage predominantly in terms of *activities*—what I will call an ‘activity reading’ for short, even though it does not construe every occurrence as referring to an activity. The easiest way to see this is by considering more closely what is involved in traditional ‘capacity readings’.

4. The duplication argument (capacity reading)

The motivation for a capacity reading appears to come directly from context. Having finished his discussion of the individual senses, Aristotle begins Book 3 of *On the Soul* by considering whether the five individual senses are sufficient to account for other perceptual abilities we possess, such as perceiving common perceptibles, or discriminating the perceptible qualities of one modality from another, or (on the capacity reading) perceiving that we see or hear.²⁷ On this reading, Aristotle would be resisting here, as elsewhere, an unnecessary multiplication of capacities, preferring instead to ground different abilities in a single capacity.²⁸

But construing the passage in this way puts it at odds, *prima facie*, with other parts of his psychology. In *On Sleep and Waking*, Aristotle expressly denies that we perceive that we see *by the capacity of sight*:

There is a certain common capacity that supervenes on the others, by which one perceives that one is seeing and hearing. For it is surely not by sight that one sees that one sees; and it is certainly not by taste or sight or both together that one discerns, or is even capable of discerning, that sweet things are different from pale ones, but rather by a certain part common to all the sense organs. For while there is a single sense and a single principal sense organ, its

²⁷ Thus Hicks 1907, 434 *ad loc.*; Ross 1961, 274 *ad loc.*

²⁸ See *On the Soul* 3.9, 432a15–b13, for his general opposition to the unnecessary multiplication of capacities in psychology. Aristotle frequently attempts to consolidate different abilities into a single capacity: the ability to reproduce and the ability to digest, for example, are both said to belong to the nutritive capacity (2.4, 416a19); the capacity for *phantasia* (*τὸ φανταστικόν*) and for desire (*τὸ ὀρεκτικόν*) are each held to be ‘one and the same’ as the capacity for perception (*τὸ αἰσθητικόν*), though ‘different in being’ (*On Dreams* 1, 459a15–17; *On the Soul* 3.7, 431a12–14); and finally, while all the senses differ from one another in being, the capacity for perception is one and the same in number (*On Perception and Perceptibles* 7, 449a16–20).

being is different for the perception of each genus [of perceptible], such as sound and colour. (2, 455a15–22)

While seeing is proprietary to sight (*ἰδιον*, a14–15), perceiving that we see belongs to the perceptual system as a whole, which, though unified, can function in diverse ways.²⁹ It is not specifically in so far as one is exercising one's *visual* capacity, that is, that one perceives that one sees.

One might try to explain this discrepancy in a number of ways. One might appeal, for example, to one of a number of developmental hypotheses, depending on which passage one takes to express Aristotle's more mature, considered view.³⁰ Alternatively, one might question whether Aristotle takes any definite view in *On the Soul* 3.2 in the first place, construing his arguments instead as merely exploratory and dialectical.³¹ Or again, one might argue that in the end the two passages amount to much the same thing, though expressed in different ways.³² A capacity reading must, however, give *some* answer to this question. And it should not be one that makes Aristotle's considered view vulnerable to the arguments at the opening of *On the Soul* 3.2. A capacity reading thus poses problems for the view that Aristotle is ultimately committed to a distinct inner sense, by which we 'perceive that we see and hear' (see pp. 779, 787).

Assume a satisfactory answer can be found. The more pressing question is whether a capacity reading can make good sense of the arguments in *On the Soul* 3.2 themselves. Start with the first argument, concerning an unacceptable duplication (425b13–15). Suppose I am out one day, admiring the azure colour of the sky: I see it and luxuriate in the experience of it. On the capacity reading, the argument should then run roughly as follows:

1. [If a sense other than sight is involved,]³³ there will be a sense for both sight and the azure colour of the sky.
2. But if there is a sense for both sight and the azure colour of the sky, then there will be *two* senses that have azure as their object
3. But there cannot be two senses that have azure as their object.

If so, then we must reject the antecedent of (2), and with it the antecedent of (1):

- ∴ 4. No sense other than sight is involved.

Given the alternatives from which he starts, Aristotle can then easily conclude that the first sense must be 'of itself'.

Several features of this argument seem odd.³⁴ Why exactly should azure, an object of the first sense, sight, *also* be an object of the second, as (1) claims? After all, it starts from the assumption that the second sense is *different* from sight. What, then, is the basis for thinking that a different sense must share the same objects? Suppose, on the other hand, that azure is an object of this second sense as well. Why would the duplication mentioned in (2) be objectionable, as (3) claims? It seems that any reason for endorsing (1) will count against (3), and *vice versa*; and thus it is hard to imagine someone having motivation to accept both at once. But one must, if the argument is to offer a sound basis for endorsing (4). The intended conclusion, after all, is only a denial of the *antecedent* of (1). The conditional as a whole must nevertheless be true.

Most interpreters seek to defend (3) by appealing to Aristotle's own doctrines. As a colour, azure is a perceptible 'proprietary' (*ἰδιον*) to sight and so, by definition, cannot be the object of any sense other than sight (2.6, 418a11–13).³⁵ Yet this should only make it harder for a good

²⁹ According to Osborne 1983, the fact that Aristotle mentions the ability to perceive that we see and the ability to discriminate the objects of different sense modalities in close proximity to one another, in both *On Sleep and Waking* 2 and *On the Soul* 3.2 (426b8–427a16), is not accidental: his concern with perceiving that we see or hear is not about self-awareness, but only our ability to distinguish which modality is in use, to perceive that we are seeing, for example, *rather than* hearing. See also Horn 1994, 23–6. Against this view, see p. 771 below.

³⁰ For the view that *On Sleep and Waking* expresses Aristotle's ultimate view, see Block 1961; Block 1964, esp. p. 63. For the contrary view, see Torstrik 1862, pp. 166–7, note *.

³¹ Hicks 1907, pp. 434, 435; Kahn (1966) 1979, p. 11; Osborne 1983, p. 405.

³² Neuhaeuser 1878, pp. 62–4; Baeumker 1877, pp. 76–7; Rodier 1900, 2.265–6; Hamlyn 1968, p. 203; Kahn (1966) 1979, pp. 10–11, 13; Osborne 1983, p. 407; Modrak 1987, pp. 145–6.

³³ The restriction to cases where there is a *distinct* sense is not actually in Aristotle's text, but is supplied by many translations and commentaries: Alex. Aphr. *Quaest.* 3.7, 92.1–2 Bruns; Themistius *In De an.* 83.13 Heinze; Ross 1961, 275 *ad loc.*; cf. also the translations of Wallace, Rodier, Hamlyn, Tricot, Barbotin. The translations of Hicks and Smith are more faithful to the text: they represent the inference as following instead from the *initial* premiss—namely, that we perceive that we see—which is neutral between the options Aristotle is considering (see below, p. 771 and Osborne 1983, p. 401).

This difference does not affect the final conclusion of the argument, since the crucial inference still concerns the alternative where a different sense is involved. But it makes a difference as to the logical structure of the argument.

³⁴ See n. 22 above.

³⁵ Alexander *Quaest.* 3.7, 92.12–13; Hicks 1907, p. 435 *ad loc.*; Ross 1961, p. 275 *ad loc.*; Hamlyn (1968) 1993, p. 121; Kosman 1975, p. 500. One of the few exceptions is Osborne (1983, pp. 401–2), who rightly questions the introduction of this assumption into Aristotle's argument.

Aristotelian to accept (1) in the first place: on what principle can it be demanded that a sense and its *proprietary* perceptibles must be objects of the second sense? Not any of Aristotle’s own principles, on pain of contradiction; nor any intuitive one, given how recondite the question is to begin with.³⁶ In any event, the appeal to proprietary perceptibles does not suffice for rejecting the consequent of (2). Suppose the second sense is *also* a sense of sight, a possibility not obviously excluded here – in positing a *different* sense, one needn’t assume that it is different *in kind*. But then azure can be proprietary to *both* senses without contradiction, just as it in fact is for both eyes. We cannot validly infer, therefore, that no other sense is involved, nor that the first sense must sense itself, as Aristotle claims (425b15). On this reading, then, the inferences are both puzzling and inconclusive.

Consider the reading itself more closely, though. Taken literally, what (1) states is that there will be a single sense for both azure and the *capacity* of sight (τῆς ὀψεως, b14). That is, it is not the activity of sight that one perceives, according to this reading, but *the capacity itself*:

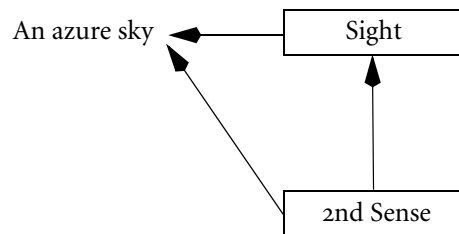


Diagram 1

So, too, in the upshot of the argument: once a duplication of capacities has been excluded, it is supposed to follow that the first sense will be a sense *of itself* (αὐτῆ αὐτῆς, b15). In line with this, one could perhaps even construe Aristotle’s opening remark that ‘we perceive that we see’ (b12) as claiming only that we perceive that we are *seeing creatures*, the sort of creatures that have the capacity to see, rather than that we are *exercising* this capacity *on a given occasion*, that we are in fact now perceiving. The latter is something Aristotle countenances elsewhere (τὸ αἰσθανόμενον ὅτι ἐνεργοῦμεν, ὥστε αἰσθανοίμεθ’ ἂν ὅτι αἰσθανόμεθα,

³⁶The intuitions most naturally invoked here would appeal to the activities involved. But at the moment we are considering a reading exclusively in terms of capacities. For a reading that combines intuitions about activities with a capacity reading, see below pp. 767–8.

Nic. Eth. 9.9, 1170a30–32; see below, p. 774). But on this way of construing the text, it would not be what was at stake here.

Though just possible as a reading of the Greek, this is surely an unnatural way of taking Aristotle. To perceive that we have a given capacity is a fairly reflective ability, presupposing a fairly rich conceptual repertoire—not something one could take for granted in all perceivers, or even all human perceivers, as Aristotle seems to at the beginning of the chapter. In fact, as he himself insists earlier in *On the Soul*, to arrive at an understanding of our capacities, one must *already* grasp the activities that correspond to them (2.4, 415a16–20). So even if one were to insist on such a strong capacity reading—call it the *extreme* capacity reading—one would still have to tell some story about how we apprehend the *activity* of perceiving as well.

Most translations in fact conform to an extreme capacity reading. But I doubt whether anyone has ever really considered it seriously. Most discussions assume that we perceive that we are seeing *on a given occasion* (b12); and that it is not sight, but *seeing* (τῆς ὀψεως, b14), that is perceived along with the colour seen. One can make these modifications, moreover, without completely foregoing a capacity reading. The argument’s main concern can still be over which capacities are required for such perceptions. All that has changed is that the *object* of such perceptions will be the activity of these capacities, and not the capacities themselves. Call this alternative the *moderate* capacity reading, a reading already developed at length by Alexander of Aphrodisias (*Quaestiones* 3.7, 91.24–93.22 Bruns):

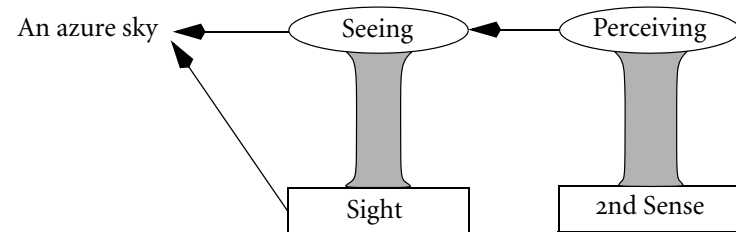


Diagram 2

Such a reading smooths over some of the difficulties of the previous one, while retaining the same general contour. As with the extreme capacity reading, the objection still turns on a duplication of capacities; and it still invokes the definition of proprietary perceptibles to rule out this possibility (92.12–13). But by introducing activities, the moderate

capacity reading gives (1) above a more intuitive appeal. One cannot be aware of seeing, at least not by *perceiving* it,³⁷ without also being aware of seeing something seen—precisely the assumption Aristotle makes in *On Perception and Perceptibles* (2, 437a26–9; quoted above, p. 758). Perceiving what is initially seen will thus be an integral part of perceiving one’s visual activity (92.8–10; cf. Them. *In De an.* 83.15–16).

As a reading of the Greek, however, the moderate version is quite strained. It requires us to take activities and capacities to be referred to in rapid alternation: *ὁρῶμεν* and *ἀκούομεν* at b12 signify activities; then *τῇ ὁψεί, ἑτέρῳ,* and *ἡ αὐτῇ* at b13 signify capacities; *τῆς ὁψεως* follows again in the very next line at b14, but this time it signifies an activity; and then we switch back again to capacities with *δύο* and *αὐτῇ* at b14–15. This alternation reaches its nadir in the argument’s very last phrase. According to the moderate capacity reading, the conclusion should be that the *sense* in question is itself the sense for its own perceptual *activity*. But the Greek simply reads: ‘it [will be] *of itself*’ (*αὐτῇ αὐτῆς*, b15; cf. b16). To read an alternation within this phrase would be too harsh; and the reflexive pronoun precludes it entirely. In this argument, then, Aristotle must be speaking either solely of capacities or solely of activities.

There is no reason to cling to a capacity reading. The advantages of the moderate version are due entirely to the introduction of activities, while its difficulties stem from the continued appeal to capacities. This holds true even more for the subsequent regress argument. It is possible, on the other hand, to read the first section (b12–17) solely in terms of activities, while making excellent sense of the arguments; and the brief shift to capacities that occurs later at b18 and b21, when Aristotle raises the *aporia*, is easily explained (see p. 789–90 below). I will therefore leave capacity readings aside from here on out. The activity reading, as we shall see, is simpler and philosophically more compelling.

5. The duplication argument (activity reading)

The only activity readings I have been able to find are (i) in Franz Brentano’s *Psychology from an Empirical Standpoint* ((1874) 1924, Book 2, Chs 2–4)—not, it should be noted, in his earlier *Psychology of Aristotle*, which adopts a moderate capacity reading (1867, pp. 85–6)—and (ii) in a dissertation by J. Herman Schell (1873). The dissertation, though, was written under Brentano’s direction contemporaneously with *Psychology from an Empirical Standpoint*; and, as Carl Stumpf was later to remark, Brentano could get so involved in directing a dissertation that he would

‘practically grab the pencil from your hand’ (1919, p. 143 f.). Brentano is setting forth his own theory of intentionality and consciousness in these pages. But he frequently credits Aristotle as his inspiration: much of the *Psychology*’s second book, in fact, can profitably be viewed as an extended meditation on *On the Soul* 3.2. Usually it is difficult to find more than a hint of Brentano’s ideas in the Aristotelian texts he cites. But in this case, I think he had genuine insight.

Consider the opening of *On the Soul* 3.2 again, but now construed entirely in terms of activities:

Since we perceive that we see and hear, it is necessarily either by means of the seeing that one perceives that one sees or by another [perception]. But the same [perception] will be both of the seeing and of the colour that underlies it, with the result that either two [perceptions] will be of the same thing, or it [sc. the perception] will be of itself. (425b12–15)

Aristotle’s interest, on this reading, is with the structure, if you will, of perceptual activity, as it is in the passage that immediately follows (425b26–426a26); and in both passages his aim is to show how the richness of perceptual encounters can be accounted for with a certain metaphysical economy. The duplication argument is a case in point. On Aristotle’s view, perceiving that we perceive is integral to the original perceiving. Treating it as a separate activity would produce a redundancy contrary to the phenomena.

On this reading, Aristotle speaks of ‘perceptions of perceptions’. Such nominalizations can easily lead to misunderstandings and so need to be handled with care. Two points should be kept in mind here about Aristotle’s usage:

First, Aristotle clearly intends such expressions to be cashed out in terms of *our* perceiving that we perceive. He begins the passage ‘since we perceive that we see and hear’ (*ἐπεὶ αἰσθανόμεθα ὅτι ὁρῶμεν καὶ ἀκούομεν*, 425b12) and immediately continues by asking whether we do this *by means of* the seeing or some other act (*τῇ ὁψεί ... ἢ ἑτέρῳ*, b13). It is not, therefore, mental states like perceptions that are aware, strictly speaking, but rather the animals themselves who have these mental states. (Compare his similar insistence that it is not the soul which perceives or thinks, but the person who has a soul: *On the Soul* 1.4, 408b11–15.) Aristotle can thus agree with current philosophers of mind who stress that only animals can be conscious in the sense of *being aware of* something or (in the current idiom) having ‘transitive consciousness’.³⁸ Even when we identify certain mental states as ‘conscious states’, *they*

³⁷ Against Hamlyn (1968) 1993, pp. 121–22; cf. Kosman 1975, pp. 500–1. See below, p. 771.

³⁸ For example, Malcolm 1984, p. 30; Armstrong 1984, pp. 116–17; Rosenthal 1993a; Rosenthal 1997, pp. 737–9; Dretske 1993, pp. 269–72; Dretske 1995, p. 98.

are not aware of what they are about, but only the animals who are in these states. Nevertheless, Aristotle can rejoin that it is precisely *in virtue of* certain mental states being directed at mental states that *we* are transitively conscious. So it is natural for him to speak in terms of ‘perceptions of perceptions’ and it need not confuse matters.³⁹

Secondly, in speaking of ‘perceptions of perceptions’, Aristotle is not limiting such perception to what has been called the ‘awareness of things’, as opposed to the ‘awareness of facts.’⁴⁰ On the contrary, as he states in the opening phrase, ‘we perceive *that* we see’: that is, we perceive a perception *as* being a certain kind of perception and *as* having a certain content. Awareness of it under just any aspect or other would not necessarily count (for example, as an event going on within my body such as could be observed with an autocerebroscope or rather, given Aristotle’s theory, an autocardioscope). The nominalized formulation, ‘a perception of’, therefore, need not be restricted to the awareness of things. It can apply to both types of awareness. Aristotle’s tolerance for this ambiguity can be excused on account of the argument’s focus on *how many* events there are, as opposed to the structure of its content.⁴¹ For this purpose, the nominalized formulation is not inappropriate.

On an activity reading, the argument can now be analysed as follows. The first inference is meant to flow directly from the initial assumption that we perceive that we see and hear, *whichever* of the two subsequent alternatives turns out to be the case.⁴² It is meant to be neutral between

³⁹ Rosenthal (1997, p. 738) objects to the ‘metaphor of reflexivity’ on the grounds that only ‘creature consciousness’ can be transitive. But defending his own view later on, he acknowledges that there is a sense after all in which we can speak of transitive *states* of consciousness, since of course it is *in virtue of* some state that the owner is transitively conscious (p. 743); in fact, such states are crucial to Rosenthal’s own analysis. A similar response can be made to his objection that such states would refer to themselves rather than the self (p. 744). It is in virtue of such states’ being directed at themselves that we are conscious of *ourselves* having them (cf. *On Perception and Perceptibles* 7, 448a26–30).

⁴⁰ Dretske 1993, pp. 264–9; 1994, pp. 264–6; cf. 1995, pp. 9–12, p. 99.

⁴¹ Aristotle’s use of ‘that’ clauses, on the other hand, may leave him open to the objection that his theory doesn’t really involve the *perception* of perceptions, but rather something more conceptual, like thought or belief—cf. Dretske 1995, pp. 108–9. A satisfactory answer to this objection will depend on the details of Aristotle’s analysis of perceptual content, where matters are unfortunately less clear. In general, Aristotle is comfortable using ‘that’ clauses in reporting the content of perceptions. But he also believes that nonhuman animals have perceptions while lacking the capacity for thought and concepts (on his understanding of these terms). Whether this tension can be resolved and if so, how, constitutes a genuine difficulty that would require proper treatment in its own right.

⁴² On this point, I agree with the translations of both Hicks and Smith (see n. 33 above). The phrases other translators are forced to insert here (e. g., ‘in the latter case’) misrepresent the actual structure of Aristotle’s argument.

them:

- 1’. Given that we perceive that we see, there will be a single perception of both our seeing and the azure of the sky.

Put more simply, perceiving that we see is a perception both of our seeing and of the object seen. There are perhaps circumstances, in which it is true to say that ‘I perceive that I see’ without my having perceived *what* I am seeing.⁴³ But Aristotle can simply respond that that is not the kind of awareness he has in mind here—(1’), that is, can serve to constrain the relevant sense in which Aristotle says we ‘perceive that we see’. It is not a matter of being *informed* that we are seeing, rather than merely dreaming; or discerning that we are seeing *rather than*, say, hearing.⁴⁴ It is perceiving that we are undergoing a visual experience with a particular content. Otherwise, (1’) will seem gratuitous.

At this point, Aristotle can then invoke his initial dichotomy: is this perception a different activity from the original act of seeing or is it the same?

- 2’. We perceive that we see either (i) by means of a distinct, new perception or (ii) by means of the initial perception, the seeing.

Applying this dichotomy to (1’) gives us the exact disjunction we find in Aristotle’s text:

- ∴ 3’. Either (a) there will be *two* perceptions of the same thing (namely, azure), or (b) the *one* perception will also be of itself.

Aristotle’s reasoning here is straightforward, though compressed. Perceiving that we are seeing azure is directed at the colour azure as much as seeing it is. Therefore, if (i) seeing and perceiving that we are seeing are distinct activities, then (a) there will be two perceptions directed at the same object.⁴⁵



Diagram 3

⁴³ See n. 37 above.

⁴⁴ As Osborne 1983 argues.

⁴⁵ Note that this objection holds whether there are two capacities involved or only one: it does not matter which capacities each activity issues from, so long as there are two activities with the relevant sort of contents. The activity reading thus addresses the problem of duplication more generally than capacity readings do.

On the other hand, if (ii) they are not distinct, then perceiving that we are seeing azure will be one and the same activity as seeing it; and so (b) a single activity will also be ‘of itself’. Aristotle can then arrive at his intended result by eliminating the first disjunct, (a):

- 4'. But there are not *two* perceptions of the same thing (namely, azure).

It does not matter whether the second activity is supposed to issue from a distinct capacity, such as an inner sense, or from the original capacity of sight. For alternative (a) is unacceptable on *phenomenological* grounds: we are not constantly undergoing a kind of double vision or, more generally, always attending reflectively to the content of our mental states.⁴⁶ By rejecting any duplication of activities, Aristotle opts for a more basic form of awareness. It does not consist in an activity extrinsic to our perceptions, but is rather something *intrinsic* to the original activity itself.

This reading finds external support from a parallel passage in Plato’s *Charmides*.⁴⁷ Under questioning, Charmides accepts a definition of temperance as a kind of self-knowledge, one that ‘does not know anything except itself and all other knowledge’ (167BC); and Socrates then goes on to challenge it by offering other mental states as counterexamples (167C–168A). One cannot, he argues, have a vision that ‘sees only itself and other visions, but no colour’ (ὄψεων ὄψις); nor, *mutatis mutandis*, in other cases:

hearing of hearings (ἀκοήν ... ἀκοῶν)

perception of perceptions (αἰσθήσεων αἰσθησις)

desire of desires (ἐπιθυμία ... ἐπιθυμιῶν)

intending intentions (βούλησις ... βουλήσεις βούλεται)

love of loves (ἔρως ... ἐρώτων)

fearing fears (φόβον, ὄς ... φόβους φοβεῖται)

belief of beliefs (δοξῶν δόξαν).

⁴⁶This is not to deny that in *some* cases we can have a kind of reflective awareness of this sort, but just to insist that it is *not always* the case. Aristotle certainly allows that there can be reflective awareness of one token mental state by means of another; but it is not the kind of awareness that constitutes consciousness on his view (see below, p. 786–7).

⁴⁷As noticed by both Shorey (1901, pp. 154–5) and Hicks (1907, p. 434), though it seems not sufficiently appreciated by either: neither recognizes the incompatibility of this passage with their own (moderate) capacity readings of Aristotle.

The plurals plainly indicate activities of a given type, not a plurality of capacities (either in oneself or in others). What Socrates denies is that these activities can be the object of the same type of activity while their own objects are not—precisely the assumption underlying the duplication argument’s first premiss, (1’), on an activity reading (see pp. 770–1 above). And the argument that immediately follows in the *Charmides* closely resembles the subsequent *aporia* Aristotle develops as well. Socrates remarks, ‘and so I suppose that vision, if it sees itself, will necessarily have a certain colour, since visions could not ever see anything uncoloured’ (168DE).⁴⁸ Such parallels cannot safely be ignored. Plato’s arguments in the *Charmides* clearly supply the germ for Aristotle’s duplication argument. But they also require an activity reading, and that is a strong reason for reading Aristotle the same way.

6. The regress argument (activity reading)

Now consider the regress argument. Here is how it would be translated on a straight activity reading:

Further, if the perception of seeing is a different [perception], either this will proceed to infinity or some [perception] will be of itself; so that we ought to posit this in the first instance. (425b15–17)

Although abbreviated, Aristotle’s reasoning can be easily spelled out. The argument would proceed as follows:

1. I perceive that I see and so have a perception of a perception.
 2. Any perception of a perception is distinct from the earlier one (namely, from the perception it is a perception of).
- ∴
3. Whenever one perceives, there will be an infinite chain of perceptions, each new one being a perception of the earlier one.
 4. But it is impossible to have an infinite chain of perceptions—any such chain would have to be finite.
- ∴
5. Some perception—namely, the last member of a chain of perceptions—will be a perception of itself.

⁴⁸Although Plato uses the word *δύναμις* (168D) in setting out the underlying principle, it is not used in the sense a capacity reading requires, since Socrates first applies this word to a mathematical case, *being greater than*, which does not admit of the activity/capacity distinction. His point rather is that psychological activities, like comparatives, are *relative*: a perception, for example, is always *of something*, just as what is greater is always greater *than something* (168B). Gadamer perhaps overstates the case (1966, p. 134), however, when he takes the *meaning* of the expression to be the same as what Aristotle classes as ‘relatives’ (τὰ πρὸς τι).

6. But there is no more reason for some perceptions rather than others to be perceptions of themselves.
- ∴ 7. The first perception is already a perception of itself and there is no need to posit a second.

As it stands, the argument is obviously invalid. (1) and (2) cannot produce the regress derived in (3) without additional premisses. Nevertheless, they may have been tacitly assumed by Aristotle, since both are generalizations of points made earlier in the passage.

The first is fairly formal. Aristotle must exclude ‘loops’ of perceptions: no perception can be a perception-ancestor, as it were, of itself. But this is guaranteed by an assumption from the duplication argument, once suitably generalized, namely,

- A. A perception of a perception is also of what the earlier perception is of.

But so generalized, the principle is plainly transitive, in which case loops will entail self-perception: if α is a perception of β , and β of γ , and γ of α , then it follows from (A) that α will be a perception of itself. But that is explicitly ruled out by (2) above; and hence there cannot be any loops. (A) is sufficient, therefore, to close off this loophole.

The second premiss Aristotle needs to derive (3) is more substantive, as it is this primarily that fuels the regress:

- B. Whenever we have a perception, we have a perception of that perception.

Without this assumption, there is no reason to posit a new perception at each successive level. Aristotle may view it, however, as an acceptable generalization of the opening of the chapter, when he claims that we perceive that we see and hear (b12). It is, at any rate, something he believes. He states it explicitly in *Nicomachean Ethics* 9.9:

The person seeing perceives that he is seeing, the person hearing [perceives] that he is hearing, the person walking [perceives] that he is walking, and similarly in other cases there is something that perceives that we are in activity, so that we will perceive that we perceive and think that we think. But [to perceive] that we perceive or [to think that] we think is [to perceive or think] that we are (for in this case to be is to perceive or to think).⁴⁹ (1170a29–b1; cf. *On Perception and Perceptibles* 7, 448a26–30)

(B) appears to be genuinely Aristotelian, then. In fact, Aristotle seems to accept an even more general version, which applies, among other things, to all occurrent mental states (*ὅτι ἐνεργουμένων*).⁵⁰ It is obviously controversial.

⁴⁹ Reading *ὥστε αἰσθανοίμεθ' ἂν ὅτι αἰσθανόμεθα καὶ νοοῦμεν ὅτι νοοῦμεν* at 1170a32 with the mss., rather than Bywater's emended version (1892, pp. 64–5), which replaces *αἰσθανοίμεθ' ἂν* with *ἂν αἰσθανώμεθ'* and *καὶ νοοῦμεν* with *κἂν νοώμεν*. Although frequently accepted, these emendations are not necessary either for grammar or sense; and they have profound doctrinal ramifications (which Kahn ([1966] 1979, 28–30, for example, tries to exploit). By inserting subjunctives, Bywater changes these phrases into general conditionals, in order to understand an *implicit αἰσθανόμεθα* both before *ὅτι αἰσθανόμεθα* and *ὅτι νοοῦμεν*, the latter being crucial for his reading, since it suggests that *all* consciousness for Aristotle, much as for Locke, is a function of *inner sense*, including the awareness of thoughts. But the text of the manuscripts makes a simple assertoric claim about our perceiving that we perceive and thinking that we think, in line with the claim in *Metaph.* 12.9, 1074b35, a text Kahn is implausibly forced to dismiss as ‘only ... a dialectical, aporetic discussion’, in order to bring it in line with Bywater's emendation (p. 29). It is surely better to stay with an intelligible manuscript reading, that connects easily with others in the corpus.

⁵⁰ Interestingly, Aristotle does not insist that we perceive all such states, nor that we have thoughts about all such states, but claims only that we perceive that we perceive and think that we think. This might lead one to conjecture that Aristotle accepts all instances of the following schema,

If one ψ 's, then one ψ 's that one ψ 's

where ‘ ψ ’ is replaced by a mental verb, like ‘perceives’ or ‘thinks’; and perhaps, even more strongly, that the *only* modality such higher-order cognitions can have will be the same as the first. But such a conjecture leads to absurdities, even in its weaker form. Not only would we have to taste that we are tasting and smell that we are smelling, which seems strange enough; we would also have to desire that we are desiring and imagine that we are imagining, neither of which has much to do with our being *aware* that we are desiring or imagining. Worse, it requires that whenever we doubt, we must doubt that we are doubting and whenever we disbelieve something, we disbelieve that we are disbelieving, both of which are plainly untrue.

But nothing Aristotle says requires such a hypothesis. It extrapolates crudely from the two examples he offers without reflecting sufficiently on his larger aims. To generalize his point to all occurrent mental states, he does not even need to go beyond the two modalities he mentions. The higher-order modality, that is, need only be *either* a perception *or* a thought, depending on which type of lower-order state is involved. Thus, for example, he might hold that

1. If one ψ 's, then one perceives that one ψ 's

when ‘ ψ ’ expresses a perceptual activity (or perhaps even a quasi-perceptual activity, such as visualizing), and

2. If one ψ 's, then one thinks that one ψ 's

when ‘ ψ ’ expresses a non-perceptual mental activity. Such restricted generalizations avoid all of the consequences just mentioned. First, they avoid any commitment to specific modalities and quality spaces for higher-order awareness, like tasting or smelling. More importantly, they preclude the alleged counterexamples on principled, rather than *ad hoc* grounds: (1) perceiving and thinking are cognitive states, unlike desiring; (2) they are affirmative, involving a kind of endorsement, unlike disbelieving, doubting, merely entertaining, considering, or imagining; and finally, (3) they are occurrent, unlike believing or knowing. Because such characteristics are necessary for the kind of awareness Aristotle is interested in, they help motivate a restricted generalization; and the different types of lower-order states involved motivate the combination of two such generalizations into a hybrid account.

7. Aristotle and higher-order theories

Faced with a similar regress, higher-order theories of consciousness maintain that one should simply abandon (B) and with it the claim that every mental state is conscious.⁵¹ Consciousness, on this view, is not an intrinsic feature of mental states. It is something *relational*: roughly, a mental state is conscious just in case a mental state of the right sort is *about*, or *directed at*, the first. Different versions of the theory will spell out ‘of the right sort’ differently. But all such views accept something like (2), since the higher-order state that makes a perception conscious—whether it is a perception of a perception or a thought about a perception—will be distinct from the original perception. But this is not thought to be problematic, since regress no longer threatens once (B) has been rejected. The central intuition behind such theories, as mentioned above (see p. 754), is that consciousness is a form of *intentionality*; and it is this alone, according to the view’s proponents, which permits an *informative explanation* of consciousness. Theories that take consciousness to be an intrinsic feature of mental states, they argue, have little choice but to take it as a primitive, irreducible attribute, about which little more can be said. But if consciousness is instead a special case of intentionality, as higher-order theories claim, it will possess an ‘articulated structure’: one mental state is related to another by being intentionally directed upon it. And this gives us the means to explain consciousness in terms of simpler elements, each of which is familiar and (allegedly) more tractable.⁵²

What is interesting about Aristotle’s position is that he is equally able to deliver what higher-order theories demand. For consciousness on his view is a matter of intentionality too. Not only are we aware of other things by means of intentional states; we can become aware of these states themselves by means of intentional states, thus making the former ‘conscious’ (in one sense of the word, at any rate).⁵³ A percep-

⁵¹ Brentano himself ((1874) 1924, 1.171, n. *) cites Herbart 1824–25, 1.1.2, §27, 1.95–6 and 2.1.5, sect. 127, 2.222. And it occurs frequently after that: for example, Russell (1913) 1992, p. 121; Grossmann 1965, pp. 14–18; Armstrong 1968, pp. 112, 324; Grossmann 1984, pp. 51–5; Rosenthal 1986, p. 340; Francescotti 1995, p. 242. But the response is much older. Its kernel can already be found in Hobbes’s second objection in the Third Set of Objections to Descartes’s *Meditations* (AT 7.173) and in Leibniz’s *Nouveaux essais sur l’entendement* 2.1.19, 5.107–8 Gerhardt.

⁵² See n. 8 above. Occasionally, Rosenthal recognizes that a reflexive account like Aristotle’s and Brentano’s can provide this benefit too (1991, 30 n. 14), but he complains that the theory is unmotivated. Against this, see p. 781 below.

⁵³ Dretske has recently called into question whether this is the pertinent sense of ‘conscious,’ thus challenging a higher-order account like Rosenthal’s. For Rosenthal, a mental state is not conscious unless it is the object of an appropriate higher-order state (1986; 1993b; 1997). For Dretske, a

tion, for example, is conscious only if there is a perception *of it*, only if we perceive *that* we perceive. But then Aristotle likewise relies on the notion of higher-order states and a ‘relational’ conception of consciousness. And this, in turn, allows him the kind of informative explanation that higher-order theories claim they alone can provide: because of the role of intentionality, consciousness will possess the sort of articulated structure that makes analysis and explanation possible. Yet Aristotle insists that this feature is *intrinsic* to the conscious state—precisely the thesis that higher-order theories reject and their opponents demand. How can he have it both ways?

Higher-order theories typically assume that the higher-order mental state is always a distinct *token* from the state it is directed upon.⁵⁴ After all, one might argue, no state can be of a higher-order *than itself*. But when we speak of ‘higher-order mental states’ there is an ambiguity between type and token; and what moves us to posit such states primarily concerns their *type*. The expressions ‘first-order’ and ‘higher-order’ refer to the type of *content* a mental state possesses, depending on whether or not it has the content of other mental states embedded within its content. Aristotle’s response to the regress argument distinguishes, in effect, between the question of how many types of content are instantiated and the question of how many token mental states there are. He agrees that there is a higher-order content—perceiving *that we perceive*—as well as the first-order content of the original perception. But this is independent of how many token mental states are

mental state can be conscious even if this is not the case, so long as the state is *itself* directed at something (Dretske 1993, esp. p. 270; 1995, pp. 100–1). But it is not clear whether they are simply arguing past each other here, by considering different senses in which a mental state might be conscious. Brentano ((1874) 1924, 1.143) correctly points out that there are two ways in which we can speak of a mental state as ‘conscious,’ by distinguishing *active* and *passive* senses of the term, depending on whether the state is *itself* an awareness of something (active) or whether there is an awareness *of it* (passive). Dretske gives pride of place to the former, Rosenthal to the latter. But apart from whether one of these constitutes ‘the’ primary sense of the word ‘conscious,’ many of their points are compatible with one another.

⁵⁴ For example, Rosenthal 1997, p. 738 (though cf. Rosenthal 1993b, pp. 212–13). Armstrong 1968 goes even further, arguing not only that the higher- and lower-order states are ‘distinct existences’ (p. 107), but that it is *logically* impossible for them to be the same (p. 324; cf. p. 112). A more moderate position can be found in Gennaro 1995, in so far as he makes the higher-order thought part of a complex state that includes the lower-order state as a proper part. But he still requires the two parts to be distinct and insists that the higher-order thought is *not* strictly speaking reflexive, but directed at a distinct part of the complex state (p. 28). The difference between these two versions of the theory turns on the question of which features entail a difference in states and which merely a difference in parts. But, as Rosenthal suggests (1986, p. 345), there does not seem to be a non-arbitrary way of choosing between these two ways of describing a higher-order theory; and so it is not clear whether the difference here is anything more than verbal. Making the relation reflexive, in contrast, would introduce a substantive difference, and both reject it.

involved.⁵⁵ And he believes that no other token state is required to make the original state conscious. The original state instantiates *both* lower- and higher-order contents:

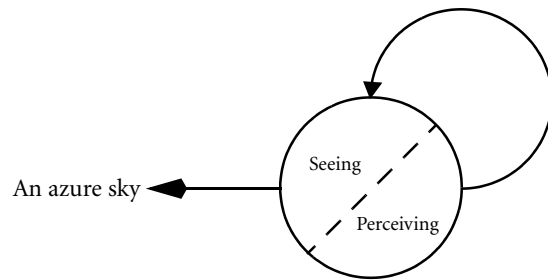


Diagram 4

Because a higher-order content type is involved, consciousness is still intentional and hence relational. But in so far as only one token is involved, it must be a *reflexive* relation: in addition to being directed upon an external object, such as an azure sky, the token activity will be directed upon itself.⁵⁶ Such awareness is *immediate*. It is unmediated by any further token activity, let alone a representation of itself; nor is there any transition between the perception and the awareness of it, and hence no inference or causal relation between them. The relation is more intimate: both aspects are *essential* to any token perception.

⁵⁵ Rosenthal (1993b, 212; 1997, 746) argues that the two must be distinct, because of the difference in their truth conditions. But this again only requires a difference in type, not in token.

⁵⁶ The sense in which I am using 'reflexive' here is related to its logical sense and as such must be carefully distinguished from the similar-sounding adjective, 'reflective.' I shall refer to a relation as 'reflexive' just in case

For any x and any y such that Rxy , it is the case that Rxx .

This is slightly weaker than what is technically referred to as a 'reflexive relation', in so far as the condition is only claimed to hold for the *domain* of the relation in question, rather than its entire field (or the entire universe of discourse, if total, rather than partial, reflexivity is at issue). But these conditions are still analogous; and for convenience, I shall speak simply of 'reflexivity', without this qualification. What is essential for our purposes is that any item that bears this sort of relation to other things also bears that same relation to itself. For example, the relation *is a divisor of* is reflexive in this sense: if x divides into y without remainder, it will also divide into itself without remainder; but y will not in general divide into x (so long as $y \neq x$).

'Reflective,' in contrast, is a folk psychological term used to characterize our general state of mind when we consider or 'reflect on' our own state of mind. But it need not imply reflexivity in the sense I have given above: a theory could consistently hold that reflection always involves distinct token mental states.

For these reasons, Aristotle cannot accept an 'inner sense' or internal scanner whose activities are distinct tokens from the activities they monitor.⁵⁷ The regress argument precludes any such view, by making awareness intrinsic to the original perceptual activity. That having been said, it no more follows that we perceive that we see *by sight* than it follows that we *see* that we see.⁵⁸ Aristotle always asserts that we *perceive* that we see, never that we see that we see.⁵⁹ In so far as this sort of awareness is common to all perception, Aristotle is right to ascribe it to the perceptual capacity as a whole in *On Sleep and Waking* (2, 455a15–22)—it is not something vision possesses in so far as it is specifically the activity of *sight*. The perceptual system *sees* in virtue of its visual part. But it perceives that it sees in virtue of the nature of perception more generally (cf. *On Perception and Perceptibles* 7, 449a10–11, a18–22).⁶⁰

These differences offer Aristotle several advantages over higher-order theories. To mention just three:

(1.) One of the costs of higher-order theories is that they are forced to reject the strong intuition that consciousness is somehow intrinsic to mental states.⁶¹ Aristotle's account, in contrast, preserves this intuition, without inviting the crude metaphors Ryle derided: Aristotle does not accept a 'phosphorescence-theory of consciousness' any more than higher-order theorists do (Ryle 1949, p. 178, cf. pp. 158–9); and perceptions are 'self-luminous' only in so far as we perceive them. What these metaphors are grasping after is just the intuition that our awareness is

⁵⁷ As appears to be maintained, for example, by Everson (1997, pp. 142–4, but esp. p. 176). For a more nuanced variant of the inner sense interpretation and the difficulties it encounters, see p. 787 below.

⁵⁸ Pace Grossmann (1984, p. 52), whose worry is really a descendent of the objection raised at the *Charmides* 168C–169A and repeated at *On the Soul* 3.2, 425b17–26. But Aristotle's answer shows that he does not take the objection to be compelling: the activity of seeing is perceived, even if it is not literally coloured and so not literally seen. See below, pp. 788–91.

⁵⁹ In the passage from *On Sleep and Waking* 2, Aristotle *denies* that we see that we see by sight (455a17); and when ascribing our awareness to the 'common capacity', he affirms only that we *perceive* that we see (a15–17). Even if one were to follow conversational implicature and take his denial to suggest that in some sense we do *see* that we see though not by sight, it needn't pose an insurmountable difficulty. The verb 'to see' often has wider, epistemic uses in Indo-European languages in a way that other perceptual verbs do not. Aristotle could not plausibly say that we 'taste that we taste' or 'smell that we smell' (i. e., smell that we are *are smelling*).

⁶⁰ Kosman argues that this is a matter of causal or functional dependence, that such awareness cannot be achieved 'in isolation from the powers of a whole living sentient being' (1975, pp. 517–18). Although this is no doubt true, Aristotle's argument in these passages is more modest, namely, that such awareness is not *peculiar* (*ἰδιον*) to sight, but *common* (*κοινόν*) to sensitive capacities generally; and so sight does *not* possess it *in so far as* it is sight, but only in so far as it is perceptive.

⁶¹ See above, p. 753–4. This is admitted by higher-order theorists themselves: Rosenthal 1986, pp. 331, 345; Rosenthal 1993b, p. 209; Gennaro 1995, p. 15.

not something extrinsic to the original states themselves. Higher-order theories reject this, on the grounds that this awareness is relational. But it does not follow: the intrinsic/extrinsic and relational/nonrelational distinctions cut across one another. Thus Aristotle is free to hold that this higher-order awareness is at once relational and intrinsic.

(2.) A common objection to higher-order theories runs as follows. When I am aware of a stone, it does not make the stone conscious; but then why should my being aware of a mental state make it conscious?⁶² The point here, it should be stressed, is not a causal one, since it can be rephrased without the causal suggestions of a verb like ‘makes.’ According to higher-order theories, a mental state is conscious in virtue of a mental state being directed at it. But a stone is not said to be conscious, even if a mental state is directed at it.

Higher-order theories seem to have only two responses available to them: (i) to concede that stones *are* ‘conscious,’ but insist that this must be understood as a relational, rather than an intrinsic property;⁶³ or (ii) to deny that stones are conscious, on the grounds that *only* mental states can be made conscious.⁶⁴ The first solution seems to miss the intuitive force of the objection, while the second seems *ad hoc*, in effect labelling the problem, rather than solving it.

Aristotle has a more satisfying response. Since the consciousness-making relation is a *reflexive* form of awareness (see n. 56 above), the only thing that *could* be made conscious by a mental state is that mental state itself. If stones had intentional states, they might also be eligible. But they don’t. Aristotle can therefore maintain that stones are not conscious in any sense and explain why on principled grounds. Not having intentional states of any sort, stones cannot have reflexively directed ones either.

(3.) Because higher-order theories maintain that the higher-order, consciousness-making state is a distinct token from the state it is directed upon, there is room for error to creep in. The higher-order state may not only misrepresent the character of the lower-order state; it may

even misrepresent the existence of such a state, by representing a lower-order state that does not in fact exist at all.

A higher-order theorist might just accept this as a necessity and try instead to make a virtue of it.⁶⁵ But it seems grossly counterintuitive to say that I am *aware* of a certain mental state, when no such state exists. Aristotle can answer more naturally that the reflexive nature of consciousness *presupposes* the existence of its object: the higher-order state and the lower-order state are not ‘distinct existences’ and so leave no room for error on this score.⁶⁶ The reflexive relation does not, on the other hand, guarantee infallibility about the character of the target state. If Aristotle accepts such infallibility, it will have to do with the particular type of intentional state he thinks is reflexively directed, and not its reflexivity as such.

None of this, in any case, requires Aristotle to maintain that *all* higher-order states are infallible, and indeed he does not. He takes some higher-order contents to be clearly subject to falsehood (those discussed on pp. 786–7 below). But they are not the reflexive contents that are constitutive of consciousness.

To take stock, then. Aristotle’s reflexive account of consciousness is designed as a way of preventing an infinite regress. There are other ways of doing this, as higher-order theories show. But Aristotle’s is the only one that preserves our intuitions about the intrinsic nature of consciousness, while also providing an informative explanation in terms of intentionality. Far from having an ‘idle air’ about it (Rosenthal 1993b, pp. 212–13), the reflexive view is *well-motivated*.

Such a view, on the other hand, is incompatible with an assumption widespread in recent discussions that ‘mental states are individuated by their content’, that if a mental state *A* and a mental state *B* differ in content, then *A* and *B* are not only of different types; they are different *tokens* as well. Aristotle can easily accept that different types are involved—his arguments presuppose it. But his solution rests precisely on the claim that a single token mental state can instantiate different content types, and so at the very least he would have to offer a different account of the individuation of mental states. It is not clear, however, that this is a liability. The view that mental state *tokens* are individuated by their content is not required by either of two prominent proposals

⁶² Goldman (1993) 1997, p. 113; Dretske 1995, p. 100; Stubenberg 1998, pp. 185–95.

⁶³ In responding to the objection, Rosenthal makes the following points: a mental state is ‘made’ intransitively conscious in so far as this *consists* in another state’s being transitively conscious of it, not because some change is effected in it; hence, being intransitively conscious is a relational, rather than intrinsic characteristic (1997, pp. 738–9). But the same points, *mutatis mutandum*, can be made about the stone. If Rosenthal’s response is supposed to refute the objection, it can only be because he *concedes* that the stone *is* conscious, while denying that it is objectionable, properly understood.

⁶⁴ See for example, Lycan (1995) 1997, pp. 758–9.

⁶⁵ See esp. Rosenthal forthcoming, sect. 5; also Rosenthal 1997, pp. 741, 744; Lycan 1996, pp. 17–23; Lycan (1995) 1997, pp. 756–8; Armstrong 1968, pp. 109–10; Armstrong 1984, pp. 135–7. Cf. Stubenberg 1998, p. 231.

⁶⁶ Against Armstrong 1968, pp. 106–7.

for individuating events;⁶⁷ and it is difficult to find any other reason in the literature for why contents should individuate tokens as well as types. It seems to be a dogma that has generally gone unquestioned—it would be implausible to parade such a theoretical position as an ‘intuition’. Abandoning such a view, then, need not be a costly move, especially if there are advantages in other quarters for doing so (as there are here).

8. Transparency

There still remains a significant question as to how such awareness is possible in the first place. According to one suggestion,⁶⁸ it falls straight out of Aristotle’s more fundamental views about perception, especially as expressed in the passage immediately following ours, where he claims that the activity of the perceptual capacity is ‘one and the same’ as the activity of the perceptible object (425b26–7, 426a15–16). But then, the suggestion runs, it follows that whenever we perceive an object, we will perceive that we perceive it, precisely because of this sameness. Aristotle’s concern, on this reading, is not self-awareness in any elevated sense, but simple perceptual awareness. Our perception of azure is *already* impregnated with awareness, an awareness that is ‘transparent’, allegedly, in just the sense described by G. E. Moore ((1903) 1922):

To be aware of the sensation of blue ... is to be aware of an awareness of blue ... [T]he moment we try to fix our attention upon consciousness and to see what, distinctly, it is, it seems to vanish: it seems as if we had before us a mere

⁶⁷ On Davidson’s view, for example, events are individuated by their causes and effects (Davidson (1969) 1980). Certainly *some* differences in content will imply causal differences, and this will hold for some higher-order contents as well. But there seems no reason, *prima facie*, to assume that this holds for the particular difference in content that Aristotle is interested in: the token event that instantiates the higher-order content might well have the same causes and effects as the token event that instantiates the lower-order content in question. On Kim’s view of events, in contrast, an event *x* and an event *y* are identical, just in case they involve the same time, constitutive object and constitutive property (Kim (1976) 1993). In this case, the time and constitutive object will be the same; and there seems to be no reason why the constitutive property could not be as well. For the fact that we use different descriptions—one specifying a higher-order content, the other a lower-order one—does not imply that different constitutive properties are at issue: as Kim stresses, we cannot just ‘read off’ the constitutive components of an event from sentences about that event ((1976) 1993, pp. 41–2). Therefore, even if the lower-order content type is the constitutive property, it doesn’t preclude the higher-order content type from being instantiated by the same event. That would require additional assumptions, such as that there cannot be any differences in content type without a corresponding difference in the constitutive property of the relevant event. But that’s precisely the sort of principle that is being put in question.

⁶⁸ Kosman 1975, pp. 514, 515–19; Modrak 1981, p. 163; Modrak 1987, p. 66; Osborne 1983, pp. 406, 410.

emptiness. When we try to introspect the sensation of blue, all we can see is the blue: the other element is as if it were diaphanous. (p. 25)

... the other element which I have called ‘consciousness’ ... seems to escape us: it seems, if I may use a metaphor, to be transparent—we look through it and see nothing but the blue ... (p. 20)

On this reading of Aristotle, the perception of a perception is supposed to be ‘transparent’ because there *isn’t anything else* to perceive: the perception of the perception just *is* the perception of the object.⁶⁹

A few moments’ reflection, however, reveals the argument behind this reading to be invalid. It is clearly meant to work by substitution. But there are difficulties in spelling it out and, more importantly, questions about substitution itself. Start with a simple version of the argument:

1. I am having a perception of azure.
2. The azure is the same as my perception of it.

∴ 3. I am having a perception of my perception of azure.

Here ‘my perception of azure’ is substituted for ‘azure’ in (1), apparently based on the sameness claim made in (2). But (2) is *not* an instance of Aristotle’s general claim in this chapter, namely, that the *activity* of the perceptible object is the same as the activity of the perceptual capacity. That claim at most supports

2’. The *activity* of azure is the same as my perception of azure.

In fact, Aristotle actually argues *against* (2) in the very passage in question: the perceptible object exists external to the perceiver, even when it is not in activity, and hence is independent of any perception of it. The object’s activity, in contrast, *is* the same as the perception of the object and so is present ‘in’ the perceiver (*ἐν τῷ αἰσθητικῷ*, 426a9–11), coming into being and perishing ‘at the same time as’ the perception (*ἄμα φθίρεσθαι καὶ σώζεσθαι*, 426a15–26). This is in line with Aristotle’s general commitment to some form of direct realism.⁷⁰ To get out of the starting blocks, then, the argument would have to appeal to (2’) rather than (2). But (2’) does not license substitution in (1), which speaks only

⁶⁹ Osborne departs slightly from Kosman on her formulation of this point, arguing that there is a difference between merely seeing a colour and seeing that a colour is acting on us (1983, pp. 405, 406–7 n. 26, though she is less circumspect at 410). On this point, she is correct, though it is at odds with her analysis; Kosman is right about the implications of the analysis. See below, p. 785.

⁷⁰ See esp. *On Perception and Perceptibles* 6, 446b17–26; *Metaphysics* 4.5, 1010b30–1011a2.

of azure and not the activity of azure. So a different initial premiss is needed, such as the following:

1'. I am having a perception of the *activity* of azure.

And it is not clear whether Aristotle would accept (1'). It certainly does not follow from (1), given the distinctions just mentioned. Independent evidence would therefore be needed to show that Aristotle was committed to (1') as well as (1).

Even if one grants some version of the premisses, however, the argument is still invalid.⁷¹ For us, the problem is one of the context into which we substitute: as Aristotle is using it, the phrase 'I am having a perception of *x*' creates a nonextensional context that is opaque to substitution, making the inference invalid.⁷² For Aristotle, the argument is invalid too, but it is not the context that causes the problem. On the contrary, he rejects the intersubstitutivity of coreferential terms *salva veritate* as a *fallacy*, the so-called 'fallacy of accident', regardless of the context in which these terms occur.⁷³ Suppose two terms are coreferential. Aristotle would express this by means of the following schema:

(S_n) *A* and *B* are 'one and the same in number' (τὸ αὐτὸ καὶ ἐν ἀριθμῷ).

Yet from such a claim, he contends, it does *not* follow that

(SUB) Anything that can be said of *A* can be said of *B* and *vice versa*.

In order for such inferences to be valid, it must further be the case that

(S_b) *A* and *B* are the same 'in being' (τῷ εἶναι, τῇ οὐσίᾳ).

Otherwise, *A* and *B* will constitute a unity only 'accidentally' or concomitantly (κατὰ συμβεβηκός). Now, while Aristotle does maintain

⁷¹ For a similar analysis of this fallacy in the case of thought, see Frank Lewis's excellent article (Lewis 1996), esp. pp. 42–3. Although the account of the fallacy I develop here differs from Lewis's on certain key points, I have learned a great deal from his work, both in the article just mentioned and his more extensive treatments of 'accidental sameness' and the fallacy of accident (Lewis 1991; Lewis 1982).

⁷² It is possible, of course, to construe 'I am having a perception of *x*' extensionally and so as transparent to substitution. But this would not suit Aristotle's purposes in the opening of the chapter, since he is ultimately trying to account for the fact that we perceive *that* we see and hear. The aspect under which the object is perceived is thus not incidental to his argument and so not transparent to substitution.

⁷³ *Soph. Ref.* 24, esp. 179a35–9; *Phys.* 3.3, 202b14–16. Aristotle explicitly rejects solutions that treat contexts like the present one as exceptions to intersubstitutivity at *Soph. Ref.* 24, 179b7–14, since he believes the fallacy in question can occur in *any* context, including those we take to be paradigmatically extensional.

that the activity of the perceptible object and the activity of the perceptual capacity *are* one and the same in number, he is careful to add that 'their being is *not* the same' (τὸ δ' εἶναι οὐ τὸ αὐτὸ αὐταῖς, 425b27, 426a16–17): what it is to be the activity of azure is different from what it is to be the activity of sight. According to Aristotle, then, the sameness mentioned in premiss (2') does not license substitution into (1'). The activity of azure and perceiving it are not 'one and the same' in the relevant sense.

To put the point briefly in our own terms: once again there is an equivocation between type and token. According to Aristotle, there is a single token event that is *both* an activity of azure *and* an activity of sight—it instantiates both *types* of activity. But it does not follow that if we perceive this token event *as belonging to one type*, we thereby perceive it *as belonging to the other*. So even if Aristotle accepts (1') and holds that we perceive the activity of azure, it does not follow that we perceive our perception of it. Perceiving that we perceive, therefore, does not fall out from Aristotle's analysis of the original perceptual encounter, even though it is something to which he is clearly committed. It depends instead on the duplication and regress arguments, at the beginning of *On the Soul* 3.2.

This is all to the best, since if perceiving azure and perceiving that I perceive azure were the same in a way that would license the inference—if, that is, they were one and the same in being as well as in number—it would not make the awareness in question 'transparent'. It would *dissolve* it entirely. We could no longer perceive that we perceive *as distinct* from perceiving the object: what it is to perceive one and what it is to perceive the other would be exactly the same, and there would be nothing to distinguish them. But then the arguments at the opening of *On the Soul* 3.2 could not even get started. For they presuppose that there is a difference between them. And that distinction is meant to hold even in the reflexive case: it is different for a perception to be *of itself* (αὐτῇ αὐτῆς, 425b15) than for it to be *of a colour* (τοῦ χρώματος, b14).

9. The indirectness of reflexive awareness

In any event, Moore means something slightly different when he speaks of 'transparency'. For on his view consciousness is a distinct element in sensation of which we can be aware. It is just that it is *elusive*: whenever we try to focus on it, what we become directly aware of is its object, and not the awareness itself. Aristotle can agree with this, though he uses a

different metaphor. Unlike God, who thinks only of his own thinking, we reflect on our mental states in a more indirect manner:

It seems that knowing, perceiving, believing and thinking are always of something else, but of themselves on the side [*ἐν παρέρρω*]. (*Metaph.* 12.9, 1074b35–6)

Aristotle combines two distinctions here of cardinal importance. He contrasts an intentional state's

- a. being directed *at something else* vs. being directed *at itself*
- b. being directed at something *primarily* vs. being directed at it '*on the side*'

While our intentional states are always directed at something else *and* directed at themselves, he claims, they are *primarily* other-directed: our intentional states are first and foremost a way of knowing about and engaging with the world (*On Perception and Perceptibles* 1, 436b18–437a3).⁷⁴ This is also Aristotle's point—if he is consistent, at any rate—when he claims in *Metaphysics* 4.5

For in point of fact perception is not of itself, but of something else besides the perception that is necessarily prior to the perception; for that which effects change is prior by nature to that which is changed. (1010b35–6)

Perception must be primarily of something distinct from itself, which produces the perception and hence is causally prior. Our awareness of this cognitive engagement, in contrast, is something that occurs only *ἐν παρέρρω*—in Ross's rendering, '*en passant*' (Ross 1961, p. 35)—something that does not belong to the main function or purpose of perception. To use Brentano's phrase, it is a 'bonus' thrown in (*als Zugabe*, Brentano (1874) 1924, Book II, Ch. 2, sect. 8, 1.180), something that supervenes on the central work.

Notice that Aristotle's remarks do *not* rule out introspection, that is, the awareness we have of our mental states when one of our token mental states is directed at another. In such cases, a mental state will still be primarily directed at something other than itself, in conformity with his claim above. And it is clear that Aristotle—unlike Brentano, who rejects introspection entirely (Brentano (1874) 1924, Book I, Ch. 2, sect. 2)—thinks that there are such cases. We can, for example, contemplate the content of a memory trace or other representation just on its own (*καθ' αὐτό*) or as being from another earlier experience (*ἄλλου*, *On*

⁷⁴ Oehler (1974, esp. pp. 497–8; cf. 1962, pp. 201–2) is right to emphasize these texts, even though he uses 'intentional' exclusively for *other*-directed states and hence as incompatible with reflexivity. But if *directedness* is the hallmark of intentionality, reflexive states are no less intentional for being directed at themselves.

Memory and Recollection 1, 450b20–451a14);⁷⁵ similarly, we can contemplate the content of a dream and consider whether it is in fact a dream (*On Dreams* 3, 462a5–7). But precisely because introspection involves an awareness that is *primarily* directed at another mental state, it cannot be the kind of awareness Aristotle has in mind here, which involves a mental state being directed at itself *on the side*. Only the latter sort of awareness, if any, could plausibly be held to accompany all mental acts. To claim this for introspection would be very far-fetched indeed.

The distinction is crucial. For, as we have seen, reflexive awareness is both intrinsic and immediate, occurring without the intervention of further acts, causal relations, representations, or inferences. And yet there remains a kind of *indirectness* about it. We are not aware of the act itself in the same way that we are aware of its primary object. Thus, while we can be said to *perceive* that we see, it will *not* be *exactly like* perceiving an object. For in perceiving an object, our gaze is always primarily directed at the world and so passes itself by. In ordinary experience, we glimpse our perceiving only peripherally, as it were.

This suggests that it would be a mistake to attribute a second kind of inner sense view to Aristotle. Earlier we rejected an inner sense interpretation on the grounds that it made the activity of the inner sense a *distinct token* from the activity of the external sense it perceives (see p. 779 above), and so is vulnerable to Aristotle's regress objection. But an advocate of inner sense might respond by appealing to his analysis of perception and argue that they are *not* distinct tokens: the activity of the inner sense, just like the activity of the external senses, is one and the same as the activity of its object, though different 'in being'. Yet if these two types of perception share the same analysis, then inner sense should afford the same kind of direct observation that the external senses do; and then the resulting awareness would not be indirect or 'secondary' in the way *Metaphysics* 12.9 demands. The awareness that accompanies all perception is *not* the primary function of a second sense, according to Aristotle, but a secondary function of the primary ones.

⁷⁵ For a discussion of this passage and others related to it, see my 1998, pp. 281–2, although it is put in terms which, in the present context, might cause confusion. I speak there of the introspective awareness of one state by another as *reflective* awareness, which must be strictly distinguished from what in the present paper I have described as *reflexive* awareness. The former is concerned with 'reflection' in the quite ordinary sense of thinking about one's own state of mind, in contrast with the world; the latter is used in a more strict, logical sense. See n. 56 above.

10. The phenomenal quality of experience

This leaves us with a difficulty, however. If perceiving that we see is not exactly like seeing an object—or, for that matter, like hearing or tasting or smelling or touching something—what makes it a *perception* at all? And more to the point, what makes our seeing *perceptible*?⁷⁶

Both of these questions, I take it, are behind the *aporia* Aristotle raises immediately after the regress argument (425b17–26). Plato's *Charmides* again forms the backdrop. Socrates suggests we compare cognition to other relations: the greater, for example, is always greater than something lesser; but it is impossible that the greater be either greater or less than itself (168AC). So, too, vision (*ᾠσις*) is always of something coloured; but it is incredible to think that *vision itself* could be something coloured and so seen (168C–169A). Aristotle frames the worry in terms of whether 'that which sees' (*τὸ ὁρῶν*) is coloured. But it is clear on an activity reading that he must have the same problem in mind. Neither the person who sees nor the eye pose a similar problem: both are obviously coloured and so can be seen in a straightforward sense.⁷⁷ The problem is rather with the perceptual activity of sight.⁷⁸ If this activity does not itself have a colour (or sound or flavour or smell or feel), in what sense is it *perceptible*?

Aristotle's answers are only stabs at a solution, not an exposition of settled views. He is openly struggling to find room within his theory to provide an adequate account of the phenomena. The fact that he has to reach for speculation is itself telling. For it suggests that he does not hold any of a range of views that readily supply an answer. Consider a sense-datum theory, according to which our experience contains objects that possess perceptible qualities quite literally; or even a more moderate view that abandons such objects, while keeping perceptible qualities as literal features of the experience, for example, as properties of the 'visual field', which is a mosaic of colours with shapes and positions. On either of these views, such qualities should be directly observ-

⁷⁶ One could alleviate this difficulty straightaway by denying that such awareness is perception after all, as Bernard (1988, pp. 215–19) does, for example. On his view, Aristotle *accepts* Philoponus's objections to such a claim, maintaining rather that such awareness belongs to *reason* or *intellect* (a position Bernard recognizes is Platonic—cf. *Th.* 184CD). But such a reading goes hard against the text, which is framed exclusively in perceptual terms that it never withdraws, but instead tries to reconstrue and qualify in a way that will escape the kind of objections Philoponus raises. Perhaps Aristotle *should* have accepted Philoponus's view. But that is another matter.

⁷⁷ Against Ross 1961, 275 and Hamlyn (1968) 1993, p. 123.

⁷⁸ Notice the use of the neuter *τὸ ὁρῶν*, which leaves it open what is being referred to: given Aristotle's use of neuter substantives, it could refer to either the person, the sense organ, the visual capacity, the visual act. Ross's emendation of *ὁρῶν* to *ὁρᾶν* twice in 425b19 in the OCT text is therefore unnecessary. For a similar view, cf. Horn 1994, 28 n. 22; cf. 30 n. 36.

able; and if Aristotle was working with either, he should not hesitate to say that visual experience either *is*, or includes parts that *are*, literally coloured, without qualification. But he does hesitate and only allows that vision is coloured in a way, 'as though it is coloured' (*ὡς κερχρωμάτισται*, b22–3). The same considerations equally rule out a view at the other extreme, sometimes ascribed to Aristotle, that seeing consists in the literal *coloration* of the eye (or of the central organ), which becomes coloured in exactly the same sense that external objects are coloured.⁷⁹ On any of these views, there is a direct response to the puzzle in the *Charmides*: there is a straightforward and literal sense in which vision is coloured—Socrates is simply wrong. Aristotle's preference for a vague and hedged remark effectively rules out all of these views.⁸⁰

This has consequences for recent debates over the nature of qualia. It does not matter whether we take qualia to be 'images on the silver screen' or part of 'the celluloid' instead (Stubenberg 1998, pp. 71–2), that is, whether we take qualia to be a mental feature *that* we experience, or a physical feature *of* the experience. Aristotle resists literally attributing the same perceptual qualities our perceptions are of to either the experience itself or its physical basis in the experiencer. He still believes that there is a sense in which our experience is genuinely perceptible and so has a phenomenal character that is accessible to consciousness; and for this reason he does not dismiss the puzzle in the *Charmides* out of hand. But it is not because our experience literally shares the same quality as the object. In what sense, then, is it perceptible?

Aristotle's first stab at a solution is suggestive, but not very promising. He begins by backing up and noting that not even a capacity like sight has just one sort of activity.⁸¹ When we are in complete darkness with our eyes open, we do not see something black; rather, we do not

⁷⁹ A view defended recently at book length in Everson 1997.

⁸⁰ Sorabji has recently argued (1992, p. 212) that on a literalist reading the qualification should be understood as follows: the eye jelly is transparent, but only takes on a 'borrowed colour' during the sensory process, just like the sea (*On Perception and Perceptibles* 3, 439a18–b18). This occurs, Sorabji explains (2001, pp. 52–3), when each comes to share the formal cause of a particular colour and so appears to be that colour, without undergoing any change in their material basis. Such a reading can thus make some sense of Aristotle's qualification, 'in a way'. But it does not account well for the hesitant nature of Aristotle's remarks throughout 425b20–25, since if Sorabji's reading is correct, there is still a direct response to the puzzle from the *Charmides*: for it would still be *literally* true that the organ is coloured and so capable of being seen.

⁸¹ Notice that in moving to talk of capacities here, Aristotle's primary concern is still activities: he is simply looking for a way to avoid thinking of the awareness that we are seeing as something we do by *seeing* the seeing, with all that that entails.

see *anything*. But we can still tell it is dark, and it is surely by sight that we do this (425b20–22). Of course, Aristotle needs a more robust ability than being able to tell whether our inner lights, so to speak, have been ‘turned off’—a metaphor he himself uses (*ὄσπερ λύχνου ἀποσβεσθέντος*, *On Perception and Perceptibles* 2, 438b13–16). He needs to be able to explain beyond this our awareness of the *contents* of our experiences as well. The claim that we have certain perceptual capacities that are not of perceptible qualities like azure is a welcome broadening of his account. But it is hardly enough to do the job.

His second attempt at a solution appeals to the details of his own theory of perception. But here again it does no more than gesture at an answer. Aristotle explains the suggestion that ‘that which sees is *in a way* coloured’ (b22–3) by appealing to the fact that each sense organ can receive the perceptible quality ‘without its matter’ (b23–4); and this in turn is supposed to explain how there can be perceptual effects and other traces after the perceived object has departed (b24–5). Aristotle then goes on to elaborate the sense in which the perceptible object is present in the act: its activity is ‘one and the same’ as the activity of perception, occurring simultaneously in the perceiver (425b26–426a26).

These doctrines make clear, at the very least, that a perceptual experience and certain subsequent experiences are *as of* a perceptible quality like azure: that is, that they are either *about* something azure (in the case of perception) or *represent* something azure (in the case of perceptual traces). But that only makes a point about their intentionality, the fact that they have content. In using these doctrines to explain how the experience *itself* is ‘in a way coloured’, Aristotle is attributing a property to the experience, a property that is in some way connected to its being about a colour and is somehow accessible to us. That is, he suggests that (i) the experience has some characteristic in virtue of which it is about this quality (or represents it) *and* (ii) this characteristic is itself, in some extended sense, perceptible.⁸² Only then has he succeeded in addressing the puzzle from the *Charmides*, which he would otherwise have to reject out of hand.

In taking this characteristic to be perceptible, though, Aristotle parts company with strict intentionalists too—theorists who take the phenomenal character of an experience to be *exhausted* by its intentional properties, identifying qualia instead with the perceptible qualities

⁸² In this respect, Aristotle’s conception of qualia has a number of similarities to Shoemaker’s earlier conception of qualia: see esp. Shoemaker (1990) 1996, pp. 98–9 (cf. 116); Shoemaker (1991) 1996, pp. 121, 132.

objects are *represented* as literally having.⁸³ By describing seeing as ‘in a way coloured’, Aristotle seems to think the phenomenal character of the experience goes beyond the fact that it is about (or represents) a colour. The seeing is *in some sense* ‘like’ or ‘similar to’ the perceptible quality it is about (or represents), in so far as it is something that *has to do with* colour. But it is *not* the same quality—it is rather the ‘mental paint’ used to represent coloured objects that gives our experience the phenomenal character it has, and this somehow is available to us.⁸⁴

Significantly, Aristotle can only tag this phenomenal quality by reference to the perceptible quality it is about—following Peacocke, he might perhaps say that the activity of seeing azure itself possesses an associated quality, azure’ (1983, Ch. 1). But in the end, he may not be able to say much more than this. He is referring here to what perceiving such qualities is like, and he finds that we can only express the character of such experience ‘on the side’, as it were, of reports of our primary intentional experiences of objects. That is simply part of the elusiveness of awareness.

Aristotle can thus agree with the intentionalist that nothing other than perceptible objects need literally have the perceptible qualities in question. But he can also agree with the proponent of qualia that the phenomenal character of our experiences outruns their representational content. His view thus cuts down the middle of another alleged dichotomy. Only in this way, he believes, can we preserve the appearances.

11. Objections and replies

Aristotle’s account of consciousness is bound to strike some as strange. But it is a view that has been held by non-Aristotelians, such as Descartes,⁸⁵ Arnauld,⁸⁶ Husserl,⁸⁷ and Sartre⁸⁸ (and perhaps even Burge⁸⁹),

⁸³ For example, Harman (1990) 1997; Dretske 1995, Ch. 3; cf. also Block 1996.

⁸⁴ See Block 1996. The phrase itself is due to Harman, who vigorously rejects it: see esp. 1989, p. 841; 1996, pp. 8, 14.

⁸⁵ In Descartes’s conversation with Burman (16 April 1648), he characterizes being conscious (*consciū esse*) as ‘thinking something and reflecting on one’s own thought’ (*quidem cogitare et reflectere supra suam cogitationem*); and he insists, against Burman, that one can have both the higher- and lower-order thought at the same time (AT 5.149). In his reply to the *Seventh Set of Objections*, he is still more explicit: ‘the first thought by which we attend to something no more differs from the second thought by which we attend to our earlier attending to that thing, than this second differs from a third by which we attend to our attending to our attending’ (AT 7.559). Descartes does admit, in a letter to Arnauld (29 July 1648), that the first thoughts of an infant are only direct and not reflexive (*directas, non reflexas*, AT 5.221). But this need only qualify his views on the extent of

as well as Aristotelians like Brentano.⁹⁰ Furthermore, most of these thinkers are also non-naturalists, which suggests that the sort of analysis offered here has been found attractive on its own, independent of any consequences it might have for mind-body issues. If it also makes room for a naturalistic approach (as I believe Aristotle himself favours), that is an added plus.

Many readers will still have reservations, however. In this section, I will try to answer some of the concerns that might be raised against such an account.

1.

One not uncommon suspicion is that the notion of reflexivity involved is incoherent, either because it leads to contradiction or is viciously circular, and so does not constitute a viable solution to the infinite regress. David Bell, for example, alleges that Brentano's account of consciousness leads to contradiction. According to Brentano, whenever a mental state is about something—whenever, that is, something forms the *content* of a mental state—the mental state ‘contains’ that item within itself as a part. If, then, a mental state is to be about itself, it must contain *itself*. But nothing can be both container and contained at once, since

consciousness and not its structure or nature, which would still consist in this reflexive awareness. For discussion of this view, see Lewis, G. 1950, 40–42; Aquila 1988, p. 544, pp. 546–7, pp. 558–61; Nadler 1989, pp. 119–20. Against this interpretation, Thiel has objected (1994, pp. 91–2) that, far from identifying higher- and lower-order thoughts, Descartes distinguishes them. He does indeed. But none of the evidence need commit him to anything more than a difference in *types*, thus leaving open the possibility of a token-identity view, such as is defended above.

⁸⁶ Arnauld (1683) 1780, pp. 204, 246. For discussion, see Nadler 1989, pp. 118–22. The idea appears to have had a wider currency among other Cartesians as well, such as Louis de la Forge, Antoine Dilly, Pierre Sylvain Regis, and François Lamy: see Lewis 1950, pp. 113–23; Davies 1990, pp. 18–19; Thiel 1994, pp. 100–1.

⁸⁷ Husserl (1893–1917) 1966, esp. Beilage IX, 119.36–40 and XII, 126.39–127.27; cf. sections 39, 44. For an interpretation of this text that differentiates Husserl's views from those of Brentano, see Zahavi 1998. It is worth noting that in his *Logische Untersuchungen*, Husserl elaborates Brentano's theory in order to criticize it (though largely on epistemological grounds): see Husserl (1900–01) 1975–84, Beilage, esp. sect. 3 ff.

⁸⁸ Sartre (1936) 1992; (1943) 1964, pp. 18–21, 116–19, 318–19, 394–5 (contrast pp. 197–9, on ‘reflective’ consciousness); 1948. For discussion, see Grossmann 1984, pp. 201–25; Wider 1997.

⁸⁹ Burge 1988, 654–6. For other related views, see Smith 1986 and 1989.

⁹⁰ Brentano (1874) 1924, 2.2–3, 1.141–220.

nothing can be a part of itself.⁹¹ A number of recent authors affiliated with Heidelberg have argued that all such accounts in general are subject to a vicious circularities and therefore must be abandoned.⁹² In Brentano's case, the relevant circularity is related to Bell's:⁹³ to have genuine *self-consciousness*, it is not enough for a mental state to be about, for example, its being a perception of azure; it must be about itself *as a whole*, as a case of self-consciousness. But this requires that it is *already* self-conscious, prior to being directed at itself, since if it were not self-conscious to begin with, no amount of reflexive directedness will make it a genuine case of *self-consciousness*. But then this account already has built in precisely what it is supposed to account for.⁹⁴

Each of these arguments, however, relies crucially on assumptions, explicit or implicit, to which Aristotle does not seem to be committed. In Bell's case, it turns on whether the notion of content implies, as the metaphor suggests, that what a mental state is about is (a) contained within that state (b) as a *proper* part. Otherwise, there is no contradiction: either content is not to be taken literally as a kind of containment, or it permits improper parts as well, in which case the whole mental state can be ‘contained’. Leaving aside whether Brentano is committed to both of these assumptions, it is clear that Aristotle is not. One could, perhaps, construe an object's being ‘one and the same’ as a perception or thought of it as that object's being ‘contained’ within that state. But even if one did, no problem arises over improper parts, since manifestly a whole mental state can be ‘one and the same’ as itself.

The assumptions behind the second circle are somewhat more elusive. The first turns on a particularly strong notion of what *self-consciousness* requires. It is worth emphasizing that Aristotle's account, as I have reconstructed it, is *not* intended as an account of self-consciousness in any strong sense, much less consciousness of a Self, but just con-

⁹¹ Bell 1990, pp. 21–3. Bell cites Findlay, who remarks that ‘[t]here can be no doubt that the theory of Aristotle and Brentano is the purest nonsense imaginable’ ((1933) 1963, p. 232). But the argument Findlay goes on to offer begs the question, by simply asserting that every mental state must be about something distinct from itself, and so is different from Bell's argument.

⁹² Henrich (1966) 1967; Henrich 1970; Pothast 1971; Cramer 1974; see also Tugendhat 1979 for a critique.

⁹³ I do not consider here one form of circularity that is stressed especially by Henrich ((1966) 1967, pp. 12–14, 23; 1970, pp. 266–8, 275) and Cramer (1974, pp. 563, 567, 569, 571), that traces back to Schmitz's succinct formulation (1964, pp. 250–51). It alleges that to be aware of oneself, one must know that it is *oneself* of which one is presently aware, and not something else; but this would require one already to have self-awareness in order to have self-awareness in the first place. This line of argument has been criticized within the school by Pothast (1971, p. 1. Teil, *passim*) and even more effectively by Tugendhat (1979, Chs 3–4).

⁹⁴ Pothast 1971, pp. 75–6; Cramer 1974, pp. 580–1, 592; Zahavi 1998, pp. 139–40.

consciousness, in particular perceptual consciousness. And for this, it is enough for an act to be about itself, for example, as a perception of azure; it need not be about itself *as* anything further.⁹⁵ The objection also depends crucially on a second assumption as well, namely, that a mental state's being directed at itself could only *detect* the fact that it is conscious of itself as an *independent* feature, rather than constituting that very feature. But that just begs the question against Aristotelian accounts, which hold that it is precisely in virtue of being directed at itself that a mental state is conscious.

There seems to be nothing incoherent in maintaining a reflexive account of consciousness of the kind we have considered here, without being committed to any of these assumptions. And if Aristotle is not committed to them, he is not vulnerable to these objections either.

2.

Someone might object that even if Aristotle's account is not viciously circular, the structure of consciousness he posits is still unnecessarily *rococo*, involving a complex and artificial combination of elements: each conscious state has two sorts of directedness, primary and secondary, of which the latter is always reflexive.

Aristotle, of course, is entitled to answer that it is only as complex *as is necessary* and not artificial at all. He can justly demand that the account be judged on the merit of the arguments, above all the regress argument. And he can return the challenge: see if you can find a simpler alternative that honours both our intuitions *and* the theoretical constraints imposed by this argument. If simplicity is to be purchased at the cost of abandoning deeply held intuitions, he would urge, it is not worth the price.

That may be enough to allay some unease about the account's complexity, though certainly not all. Is it possible to pinpoint precisely the source of such misgivings? It cannot be that a token event instantiates two types; or that a reflexive relation is involved; or that some contents are self-directed. There are uncontroversial examples for each of these characteristics.⁹⁶ The trouble must rather concern the specific claim that mental events instantiate two types of content, one of which embeds the other in a higher-order content. Just such an objection was

⁹⁵ See below, pp. 796–8.

⁹⁶ A red circle, for example, is both coloured and shaped, a single token falling under two types; the relation *is a divisor of* is reflexive in precisely the sense at issue here (see n. 56); and when I think that the very thought I am now having is about thinking, the content of my thought is self-directed.

made against Locke by John Sergeant in his robustly titled *Solid Philosophy Asserted* (1697):

But if I be *Conscious*, or *know that I know* when I know the Object *without me*, I must by the *same Act* know what's *within me* and what's *without me* both at once; and so my Act of *Direct Knowledge* would be *Reflex*; or rather, that *one Act* would be both *Direct* and *Reflex*, which makes it Chimerical.⁹⁷ (pp. 123–4)

Sergeant thinks that such a combination is fictitious, perhaps even impossible.⁹⁸ But if there is a contradiction here or some other incoherency, it has yet to be shown. All we have so far is counterassertion.

Perhaps one might question instead whether, just as a matter of fact, such beasts can be found. Are there any *other* instances of this type of complexity? There needn't be, of course, for Aristotle's account to hold—it could be that awareness is the only case of this sort. But it would be nice. It would relieve some of the pressure.

The following seems as though it might be such a case. Not all of us are fun. But we all like having fun. That is, when we enjoy doing something (and in so far as we enjoy doing it), we *enjoy* our enjoyment. What it is to enjoy Φ -ing is not, to be sure, the same as what it is to enjoy enjoying Φ -ing. But it doesn't follow that this higher-order enjoyment is a distinct *token* activity from our simple enjoyment of Φ -ing. The connection between the two, in fact, seems to be conceptually *necessary*. To imagine someone who genuinely enjoys an activity, but is *indifferent* to his enjoyment, who *fails* to enjoy it, seems repugnant to the very notion. It would be comparable to someone not liking having fun. Any grounds we might have for denying that someone enjoys his enjoyment undermines the initial claim that he was actually enjoying Φ -ing in the first place.

Note first that it isn't part of the claim that one necessarily *notices* such second-order enjoyment. Even with first-order enjoyment, one can be entirely in the 'flow'. One may be so absorbed in an activity that one only realizes later that one did enjoy it; in fact, it seems possible that one might enjoy something even if one *never* realized it. But then, by parity of reasoning, the same point should hold for the higher-order enjoyment: a failure to notice it is not conclusive evidence of its absence. Second, the conceptual connection suggested here does not

⁹⁷ Thiel 1994 has a brief discussion of the passage on p. 93. In the margins of his personal copy of *Solid Philosophy Asserted* (reprinted by Garland Publishing, 1984), Locke implausibly takes Sergeant to be claiming that we could never have two objects at once, which would make comparison impossible. For more on Sergeant, and Locke's replies, see Bradish 1929; Yolton 1951 and Krook 1993.

⁹⁸ Sergeant in fact prefers a distinct higher-order state, later in time (pp. 124–5).

preclude having *other* attitudes towards one's enjoyment in addition. It is admittedly possible to be repulsed by one's enjoyment in an activity. But that is not incompatible with enjoying one's enjoyment. Indeed, such higher-order enjoyment may be part of what repulses us.⁹⁹

If there *is* a conceptual link, though, the higher-order enjoyment cannot be a mere concomitant or causal consequence of the lower-order enjoyment. Rather, it would be something intrinsic and essential to someone's enjoying Φ -ing in the first place. It would be an example of a single token event, which instantiates two types of the relevant sort.

In the end, I am undecided as to whether there is in fact a conceptual connection between enjoyment and enjoying one's enjoyment. But even if there isn't, the following still seems right, namely, that there isn't anything *incoherent* in the hypothesis. If it is false, it is so because of the nature of enjoyment, and not because the resulting structure would be 'rococo'. And that's all that Aristotle really needs in the end. His argument rests on premisses which are either specific to the case of consciousness or common, a priori principles. If these are true and his reasoning is valid, then such structures must be exemplified.

3.

It might be objected that even if Aristotle's analysis avoids an infinite regress of token mental acts, it is still vulnerable to an infinite regress nonetheless. The higher-order perception in question is not simply a perception *of* the lower-order perception, that is, the perception of an event which *happens* to be a lower-order perception. It is a perception of it *as* a perception, indeed *as* a perception of some given object—Aristotle's duplication argument assumes that we perceive *that* we see, for example, the azure of the sky. But then the higher-order content *type* must be distinct from the lower-order content *type*. And this holds quite generally. Therefore, even though Aristotle maintains that there is only a *single token* activity involved—and so is entitled to reject premiss (2) of the regress argument (see p. 773 above)—he still appears to be committed to a corresponding claim about a plurality of *types*:

2'. Perceiving that we perceive is always distinct in type from the earlier perceiving.

But then, one might worry, a regress will threaten, though it will be a regress of contents, rather than mental states: having accepted (2'), Aristotle will have to posit a higher-order content, and then another, and so on *ad infinitum*. Thus, even if he is not committed to an infinite number of *token* activities, he will be forced to concede that each token

activity instantiates an infinite number of higher-order content *types*. And that surely is absurd.¹⁰⁰

It seems clear that a content or type regress does arise, *if* we must perceive that we perceive *at each successive level*. But nothing said so far requires that. In particular, the premiss used for the earlier regress, namely,

B. Whenever we have a perception, we have a perception of that perception.

is satisfied even if every perception were to instantiate *only two* contents, at the first- and second-orders. This can be shown straightforwardly. Suppose one perceives that one sees azure. On Aristotle's view, the perceiving will be 'one and the same' activity as the seeing it perceives, and so can correctly be described as being 'itself of itself' (*αὐτῆς αὐτῆς*, b15): there is a single token activity, which is directed at itself. There *is*, then, a perception of the second-order perception, in accordance with (B), *without* requiring a third-order perception. It does not follow, however, that one perceives this activity *as* a second-order perception. In fact, nothing follows about the *aspects* involved, either (a) with regard to what the object is perceived *as* or (b) with regard to the manner of perception (one need not *see* that one sees either). To think otherwise is to commit the same fallacy as the transparency argument above, just a step higher: from the fact that (i) we perceive that we see and (ii) this perceiving and this seeing are 'one and the same', it does *not* follow that we perceive *that* we perceive that we see. We may merely perceive that we see. Nevertheless, there is still a perception which is 'itself of itself'.

To generate a regress of content types, we need another premiss, analogous to (B), but framed in terms of contents rather than objects:

B'. Whenever we perceive that *p*, we perceive that we perceive that *p*.

Aristotle, I have argued earlier, is committed to (B). But is there any reason to think he is committed to the stronger (B')? It does not follow from (B). And none of the textual evidence seems to justify anything as strong as (B') either. *Nicomachean Ethics* 9.9 is committed only to our being aware of each activity we engage in. But that needn't involve anything more than an awareness of each *token* activity. The arguments at

¹⁰⁰ Ryle actually uses a similar regress in objecting to 'phosphorescence' theories of consciousness (1949, pp. 162–3). It is also clearly laid out by Cramer, who describes it as an 'intensive' regress, in contrast with an 'extensive' regress of mental states (1974, pp. 581, 583; cf. Pothast 1971, pp. 75–6).

⁹⁹ I would like to thank Dave Estlund and Jamie Dreier for valuable discussion on these points.

the opening of *On the Soul* 3.2 go somewhat further, in so far as they seem to commit Aristotle to the awareness of each token mental activity as falling under *some* content type, such as seeing azure. But he states this without further elaboration or clarification: in particular, he doesn't give any reason for thinking that, for *every* content type a token perceptual activity falls under, we must be perceive that activity as falling under *that* type—in short, (B'). If, however, Aristotle isn't committed to this principle, then he can allow that we might be aware of a perceptual activity, without being aware of certain contents it instantiates, such as perceiving that we see azure. But then the type regress fails.

4.

Finally, it might be objected that even if the previous points are granted, Aristotle is still committed to a form of Cartesianism, in so far as he holds the view that every mental activity is conscious; but such a view is implausible and ought to be rejected.

Does Aristotle think that every mental activity is conscious (in the sense that we have awareness of it)? Yes and no. There is certainly a sense in which every token mental activity is *closed* under the consciousness-making relation for Aristotle: each *token* mental activity instantiates a reflexive relation of awareness. But it does not follow that consciousness is *comprehensive*—we need not be aware of all the mental *types* that these tokens fall under. In particular, we need not be aware of certain higher-order contents: I can perceive that I am seeing azure without perceiving that I am perceiving that I am seeing azure. But then Aristotle can avoid the Cartesian claim that all mental *facts* are 'self-intimating'.¹⁰¹ The fact that an activity has a certain content does not entail that I am aware that it has that content, even if I am aware of that activity and aware of it as having *some* content or other.

But isn't it absurd enough to claim that we are aware of every *token* mental activity—to insist on 'token self-intimation', as it were, even without 'type self-intimation'? Not really. In the first place, Aristotle isn't making a claim about all mental *states* and so not about dispositional states in particular. He is only concerned with *activities* (*ἐνέργειαι*) in the strict sense of the term. Secondly, he need not make any strong epistemic claims with regard to the contents of these activities, such as that we have some kind of omniscience or privileged access. He need only maintain that we are aware (veridically) that each token activity takes place and that it have a certain content. And this restricted claim, even if it should turn out to be false, is not something

that can be ruled directly out of court. On the contrary, by insisting on this weaker claim, Aristotle can claim a key advantage over higher-order theories (see p. 778 above): he can preserve our intuition that consciousness is *essential* to mental activity, without his view collapsing into a Cartesian strawman.

Aristotle's conception is broader than Descartes in at least one regard, however. The general principle enunciated in *Nicomachean Ethics* 9.9 should apply to the cognitive activities of *any* sort, including the perceptual activities of animals, however rudimentary. One might seriously question how coherent Aristotle's account of perceptual content is when applied to lower animals. But however far it does extend, Aristotle's core claim is that consciousness will extend *just as far*, since the latter is essential to perception: anything genuinely capable of perception must, on his view, be capable of perceiving that it perceives. Descartes might well be able to accept this last claim. If so, then the difference between them will be due to whether animals can be genuinely said to perceive or not.

12. Conclusion

Aristotle's views on consciousness thus seem to cut down the middle of two contemporary debates: first, whether perceptual awareness is intrinsic to perception or relational (higher-order); and second, whether perception itself instantiates perceptible qualities or merely represents them. On the first, Aristotle holds that a single token perception can be about an external object *and* about itself. This sort of awareness is therefore *both* intrinsic *and* relational. On the second, Aristotle rejects the notion that our perceptions, or parts of them, literally embody the qualities they are about. But he also rejects a strict intentionalist stance: qualia are not merely the qualities objects are represented as having either. Rather, our perceptions have a phenomenal character, that has to do with the qualities they represent, but is not exhausted by representational content. Aristotle thus attempts to do justice to the intuitions on both sides, while avoiding their respective errors; and we might well regard this as a step forward, fully in keeping with his customary aim of saving the phenomena.

Department of Philosophy
University of California, Davis
California 95616-8673, USA

VICTOR CASTON

¹⁰¹ Ryle 1949, pp. 158–9; Armstrong 1968, pp. 101–2; Armstrong 1984, pp. 121–2.

Appendix: A brief excursus on the inner sense(s)

Contemporary inner sense theorists frequently cite Kant and Locke as sources for their own conception (see n. 7 above). Kant, for example, speaks of a single inner sense (*innerer Sinn*) that apprehends one's state of mind,¹⁰² 'one's self and one's inner condition'.¹⁰³ Locke identifies the mind's 'reflecting on its own Operations within itself' with 'internal Sense', from which we derive our ideas of 'Perception, Thinking, Doubting, Believing, Reasoning, Knowing, Willing, and all the different actings of our own Minds'.¹⁰⁴ Indeed, such acts seem to have this quasi-perceptual awareness as a necessary concomitant: ' 'tis altogether as intelligible to say, that a body is extended without parts, as that any thing *thinks without being conscious of it*, or perceiving, that it does so ... Consciousness is the perception of what passes in a Man's own mind'.¹⁰⁵

But neither the terminology nor the concept is original.¹⁰⁶ Kant could have encountered inner sense in Wolff (*sensus internus*),¹⁰⁷ for example, or other lesser figures.¹⁰⁸ Similarly, we find it not only in the works of Locke's contemporaries, such as Boyle¹⁰⁹ or Malebranche,¹¹⁰ but also

¹⁰² KrV A22/B37. Cf. *Anthrop.* sect. 24, Ak. 7.161–2.

¹⁰³ KrV A33/B49; cf. B68, 152–6. See also the recently discovered Leningrad fragment, with commentary, in Kant [c. 1790] 1988; and more generally, Mohr 1991.

¹⁰⁴ *Essay* II.i.4; cf. II.i.24 and Draft B, sections 19, 21.

¹⁰⁵ *Essay* II.i.19; cf. II.xxvii.9 and Draft B, section 21.

¹⁰⁶ I am particularly conscious here of poaching in others' forests. For the early modern period in particular, see the painstaking and detailed research of Udo Thiel on the concepts of consciousness and reflection (1983; 1991; 1994; 1996; 1997). Although inner sense is not his central focus, I have learned much from his work, especially regarding some of the lesser figures cited below (whom he often quotes generously).

¹⁰⁷ Wolff, *Philos. rat. sive Logica*, Pars II, 1.1.1, sect.31.

¹⁰⁸ Such as Meiners and Hissmann, who are examined in detail by Thiel 1997, as well as the others he mentions at 62–3. See also Thiel 1996.

¹⁰⁹ From the appendix to the first part of his *The Christian Virtuoso* (1690): '... the rational soul or human mind is, of all the incorporeal substances, that which we have the means, as well as interest, to know the best; since it is not only a familiar object, but so intimate, as to be the noblest part of ourselves; and that the chief, not to say the only thing that is essential to it, and in a sound sense constitutes its nature, is, that it is conscious to its own actions and operations, and that, at least for the most part, not as it knows the circulation of the blood in the veins, or the secretion of gall in the liver, by a ratiocination upon sensible phaenomena, but immediately by an internal sense or perception.' (*The Works of the Honourable Robert Boyle* (London, 1772), vol. 6, p. 688.)

¹¹⁰ For example, *Rech. de la Verité* 1.10, section 1 (= OC 1.54); 3.2.1, sect.1 (= OC 1.235); *Eclaircissement* 1 (= OC 3.10). Cf. *Rech. de la Verité* 1.12, sect. 5 (= OC 1.64); 1.13, sect. 4 (= OC 1.69; 3.1.1, sect.3 (= OC 1.219); 3.2.7, sect. 4 (= OC 1.257); 6.2.6 (= OC 2.239). On Malebranche and *le sentiment intérieur*, see Lewis, G. 1950, pp. 148–50, 157–62, 165–7, 183–7; Davies 1990, pp. 14–18.

before him in Gassendi,¹¹¹ La Forge,¹¹² Cudworth,¹¹³ Tillotson,¹¹⁴ Stanley,¹¹⁵ and Cumberland¹¹⁶—authors with whom we know Locke to have been familiar.¹¹⁷

Nor is this surprising. The term belongs to common philosophical parlance, itself the precipitate of a scholastic tradition reaching back to Aristotle. We already find Augustine speaking at length of an inner sense (*sensus interior*), by means of which we perceive that we perceive.¹¹⁸ And there are traces of still earlier antecedents. Plotinus once remarks that we are aware of appetite by means of an 'inner perceptual ability' (*τῆ αἰσθητικῆ τῆ ἔνδον δυνάμει*).¹¹⁹ The Stoics, more promisingly, speak of an 'inner feeling in virtue of which we are also aware of ourselves' (*ἐντὸς ἀφῆν ... καθ' ἣν καὶ ἡμῶν αὐτῶν ἀντιλαμβανόμεθα*).¹²⁰ Arguably, something similar was held by the Epicureans too¹²¹ and even before that by the Cyrenaics (*tactus interior, tactus intimus*), although the connection with consciousness is less than fully explicit.¹²² August-

¹¹¹ *Syntagma* (in the 1658 Lyons edition of the *Opera*), pars 2, sect. 3, VIII.i, 401a–b; see also VI.i, 2.334a, 336a, 337a; in Bernier, *Abrégé*, 2nd ed. (1684; 1st ed., 1674), 6.3.1, 191–5. Cf. *Disquis. metaph.*, Med. 2, dub. 6, inst. 4; in Bernier, 6.182, 184, 193–5.

¹¹² *Traité de l'esprit de l'homme* (1666), ed. Pierre Claire (Paris, 1974), p. 134. See Lewis, G. 1950, pp. 109–15; Davies 1990, p. 2, pp. 13–15; Thiel 1994, p. 100 nn. 90–93.

¹¹³ Ralph Cudworth, *A Treatise on Freewill* (ed. Sarah Hutton, Cambridge 1996), Ch. 19: 'We are certain by inward sense that we can reflect upon ourselves and consider ourselves, which is a reduplication of life in a higher degree. For all cogitative beings as such, are self-conscious.' (p. 201) Cf. also Ch. 11, p. 183. On Cudworth's conception of consciousness, see esp. Thiel 1991; also Davies 1990, p. 40–43.

¹¹⁴ Thiel quotes (1983, pp. 72–3) the following passage from Tillotson's third sermon on 2 Tim. 1:10, 'Of the Immortality of the Soul'. The soul 'is the Principle whereby we are conscious to our selves, that we perceive such and such Objects, that we see, or hear, or perceive any thing by any other Sense; it is that whereby we think and remember, whereby we reason about any thing, and do freely chuse and refuse such things as are presented to us. These Operations every one is conscious to himself of ... those several Operations which by inward Sense and Experience we are conscious to our selves of.' (*The Works of the most Reverend Dr. John Tillotson*, London 1728, 3.109).

¹¹⁵ Thomas Stanley, *History of Philosophy* (London, 1656), 2.217. Cf. Rabb 1985, 108 n. 1.

¹¹⁶ Richard Cumberland, *De legibus naturae* (London 1672), 6. See Gibson (1917) 1960, p. 242; Rabb 1985, p. 15–16.

¹¹⁷ See Harrison and Laslett [1965] 1971.

¹¹⁸ *De lib. arb.* 2.3.20–2.5.50; cf. *Confess.* 7.17.23. For discussion, see Mondolfo 1964; O'Daly 1987, pp. 90–91, 102–5.

¹¹⁹ Plot. 4.8.8.10–12.

¹²⁰ Aet. 4.8.7, = *Doxogr. gr* 395.16–19, = *SVF* 2.852.

¹²¹ *P. Herc.* 19/698, col. 9.9–10, 26.14–18. Cf. *Lucr. DRN* 2.434–41.

¹²² *Cic. Acad.* 2.20, 76. The case for such a connection is made by Sedley 1989, 130–31; Tsouna 1998, 18–20.

tine's characterization of inner sense, however, bears the closest resemblance to Aristotle's characterization of the common sense, especially as set forth in *On Sleep and Waking* 2 (see above, p. 763–4), a connection that persists throughout the rest of the medieval tradition. According to Augustine, the five senses each convey their information to this central sense, which enables us to discriminate between their various objects and adjudicate their conflicting reports, as well as perceive that we are perceiving; and all of this is explicitly said to belong to nonrational animal souls as well as rational human ones. Augustine believes it is crucial for the explanation of animal behaviour and in particular their ability to perceive danger and advantage.¹²³

Over the course of the medieval tradition, these functions are separated into different 'inner senses', whose number then proliferates. Typically there are five, located in different parts of the brain.¹²⁴ The inner senses as a group are then invoked to explain a broad range of cognitive functions that are shared by animals, including even a form of rudimentary reasoning. Perceiving that we perceive is only one function of one of these senses, typically the common sense.¹²⁵ Much work has already been done on the vicissitudes of the inner senses in the medieval period.¹²⁶

The later fortunes of this theory, however, and its simplification in the early modern period into a theory of a single inner sense, is a story that has not been fully told. Its evolution is not, in any case, a straightforward one. For while the tradition provides the notion of an internal

¹²³ O'Daly argues (1987, pp. 102–5) that Augustine's strongest antecedents come from within the Neoplatonic tradition. But Neoplatonists expressly reject the notion that any *sense* could be capable of such reflection, which they believe belongs only to incorporeal rational faculties: see n. 127 below. Likewise, one might be tempted to look for Stoic influence, given their notion of a central 'executive' faculty (*ἡγεμονικόν*) and their views about an animal's self-awareness of what is harmful and beneficial. But the parallels here are much more tenuous than those to the Aristotelian tradition.

¹²⁴ E. g., Avicenna *De an.* 1.5 and 4.1–3; Albertus Magnus, *De an.* lib. 2 tr. 4 q. 8 (158b–159b Stroick), cf. *De hom.* q. 36 a. 1 (35,320 Vivès ed.); Roger Bacon *Opus maius* pars 5 dist. 1 cap. 2–5, esp. 5; Thomas Aquinas *ST* 1a q. 78 a. 4, esp. ad 2.

¹²⁵ Avicenna, it should be noted, does not assign perceiving that we perceive to the common sense, but to either the estimative sense or the intellect (*De an.* 2.2, 130.76–9 Van Riet). This point is directly confirmed at *Kitab al-Mubahathat*, para. 421 (as translated by Pines 1954, p. 55) and indirectly by his claim that an animal must perceive that it wants something in order to move, something that would presumably belong to the estimative sense as well (*De an.* 4.4, 54.82–3), a view much like Augustine's at *De lib. arb.* 2.4,38–9. For further discussion of Avicenna's views on higher-order awareness, cf. Pines 1954, pp. 35–6, 39–40, 55; Rahman 1952, pp. 103–4. (I would like to thank Dr. Dag Hasse for the reference to Avicenna *De an.* 2.2 and helpful correspondence.)

¹²⁶ Wolfson 1935; Klubertanz 1952; Steneck 1974; Harvey 1975; Strohmaier 1988; Kemp and Fletcher 1993; Scheerer 1995, pp. 838–9, 842–4; Kemp 1996, pp. 45–63; Theiss 1997.

sense that is aware of certain mental activities, it does not yield a notion of a *single* capacity that monitors *all* mental activity. On the contrary, in so far as the inner sense is a perceptual faculty, its activity is typically restricted to lower-order perceptual activities. The awareness of higher cognitive activity is usually assigned to the rational faculties instead, which are held to be the only faculties capable of genuine 'reflection' upon themselves.¹²⁷

A more encompassing notion of awareness can, however, be found in certain Greek Neoplatonists, who speak of an 'attentive' power (*τὸ προσεκτικόν*) that belongs to the rational soul and extends to all forms of mental activity, from the highest to the lowest (Ps.-Philoponus *In De an.* 464.13–467.12):

They say that awareness of the senses' activities belongs to the attentive part of the rational soul. For the rational soul does not possess just five abilities (understanding, thinking, belief, will, and decision). They also add a certain sixth ability to the rational soul, which they call the 'attentive' ability. The attentive part observes the events that transpire within a person and says, 'I understood', 'I thought', 'I believed', 'I was angered', and 'I desired'. This attentive part of the rational soul ranges over all abilities in general, rational, irrational and vegetative. But if the attentive part is to range over all of them, they say, then let it also encounter the senses and say, 'I saw', 'I heard'. For to say these things is characteristic of that which is aware of their activities; if, then, the attentive part says these things, it is aware of the activities of the senses. For there must be a single thing that is aware of all of them, since the person is also a single thing. For if one thing were to be aware of these and another of those, it would be similar to what [Aristotle] says elsewhere: it would be as though you were perceiving this and I were perceiving that. That which is attentive, therefore, must be one. For the attentive part consorts with all abilities, both cognitive and vital. When it consorts with the cognitive abilities, it is called attentive; hence, when we wish to bring someone up short who is unfocused in his cognitive activities, we say to him 'mind yourself'. But when it encounters the vital abilities, it is said to be conscious; hence the tragedy speaks of 'the understanding that I am conscious of having done terrible things'. The attentive part is therefore that which is aware of the activities of the senses. (464.32–465.17)

¹²⁷ For example, Plot. 5.3.2; Porph. *Sent.* 41, 52.16–53.5 and 44, 57.3–4 Lamberz; Proclus *Elem. theol.* prop. 15; Ps.-Philop. *In De an.* 466.20–22; Thomas Aquinas *In De an.* lect. 8, ll. 34–6 (= sect. 109 Marietti). This argument is later revived by Gassendi (*Animadversiones in decimum librum Diogenis Laertii* (Lyons, 1649), 1.560–61; *Syntagma* pars 2, sect. 3, IX.ii, 2.441), and from there gains currency among British authors, such as Glanvill, Boyle, Charleton, and Stillingfleet (see Michael and Michael 1988, 595 n. 24; Michael and Michael 1989, 40–43, esp. 41 n. 38).

As a distinct faculty, the attentive part operates independently of the activities it monitors; and so some cognitive activities may go unnoticed¹²⁸ (cf. Plot. 1.4.10.24–34):

When reason is preoccupied with something, even if one's sight sees, we do not know that it sees, because reason is preoccupied. And after this, when reason has returned to itself, even though it is not seeing a friend, it now says that I saw him, as though it had retained a faint trace of what was seen, even if it was preoccupied, but now having regained presence of mind says, 'I saw'.

For to say that I saw belongs to reason. (466.30–35)

Here, if anywhere, we have the closest forerunner of the early modern notion of an internal monitor, if not an internal sense. And because it is explicitly nonperceptual, it is more naturally expressed in terms of higher-order judgements, precisely the point at which the metaphor of 'inner sense' strains.

On the other hand, there isn't much question of influence on the later tradition. It would be implausible to think that these texts were pivotal for early modern authors. Still, that may not matter as much as one might have thought. For the history of philosophy performs a valuable service when it examines the systematic connections between positions not causal ones. It is difficult, if not impossible, to establish genuine causal influences. But even if one could, they could never be as interesting as the limits and possibilities of the systematic concerns themselves.

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¹²⁸ For a discussion of the passage, see Bernard 1987; for the Neoplatonic background to this theory, see Lautner 1994; Blumenthal 1996, pp. 106–7. A more extensive translation of the passage in context can be found in Rahman 1952, pp. 111–14.

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