

ARISTOTLE, *DE ANIMA* 3. 2: HOW DO WE PERCEIVE THAT WE SEE AND HEAR?

The second chapter of book three of the *De anima* marks the end of Aristotle's discussion of sense-perception. The chapter is a long one and apparently rambling¹ in subject matter. It begins with a passage that is usually taken as a discussion of some sort of self-awareness, particularly awareness that one is perceiving, although such an interpretation raises some difficulties. This paper reconsiders the problems raised by supposing that the question discussed in the first paragraph is 'how do we perceive that we perceive?', and suggests an alternative interpretation which would solve many of the difficulties and have the additional merit of restoring unity to the sequence of notes which go to make up the whole chapter.

There are three parts to this paper: (1) a close look at the text of the first paragraph of chapter 2, 425b12–25, as regards the construction of the argument; (2) a brief discussion of the main difficulties identified by previous attempts to explain the passage; (3) an outline of the solution I am proposing and its relation to the material in the rest of the chapter.

I. ANALYSIS OF THE TEXT

At 425b12 Aristotle says that we perceive that we see and hear (and this seems to be taken as an empirical fact). He offers two alternative explanations for the example of seeing: either one perceives that one sees by the sense of sight or by another sense. These alternatives are clearly meant to be exhaustive. Aristotle then proceeds, 'but the same sense will be perceptive of both sight and the colour which is the object of sight' (425b13–14). This last sentence is taken by Kosman² to refer only to the latter alternative (if perception of seeing is by a sense other than sight): he takes it to mean 'if it is by some other sense than sight that we perceive that we see, then this other sense will have for its object both sight and that which is the object of sight' (Kosman, 500). This interpretation is also implicit in Hamlyn's comments.³ However there seems to be no reason why it should not simply refer to either case: whatever the sense is, sight or something else, it will be perceptive both of sight and of colour. That explains why the conclusion which Aristotle draws at 14–15 is a disjunction: either there will be two senses of the same object (that is if it is a different sense from sight, both will take colour as a sense-object) or it will be perceptive of itself (if it is sight itself – which naturally takes colour as its object, but must also take sight itself in this case).

By this stage in the argument (425b15) the original pair of alternatives still remains open,⁴ but some more details as to what each involves have emerged. It is usually observed⁵ that the idea of two senses perceptive of the same object violates the idea

¹ cf. Hamlyn (Aristotle's *De Anima* Books 2 and 3, translated with introduction and notes by D. W. Hamlyn, Oxford, 1968), 121: 'This chapter is a rambling one...'.
² L. A. Kosman, 'Perceiving that we perceive: *On the Soul* III. 2', *Philosophical Review* 84 (1975), 499–519.

³ Hamlyn, 121.

⁴ In this I disagree with Hamlyn (121): 'Here he eliminates the possibility that we know that we see by means of a different sense', and also with Kosman (500).

⁵ cf. Hamlyn, 121; Kosman, 500; Ross (Aristotle, *De Anima*, Oxford, 1961), 275.

of the correlation of senses and objects ('does violence to our notion of the proper object of a sense', Kosman, 500) and hence that Aristotle is here inclined to reject the second alternative in the original dilemma, the suggestion of perception by a different sense. However nothing is said about 'proper' objects, and in the previous chapter we had just been considering objects perceived by more than one sense; there is nothing in the text to suggest that Aristotle finds this alternative more uncomfortable than the idea of a sense αὐτῇ αὐτῆς. It seems more likely that he thinks both seem problematic: certainly the next sentence implies a change of subject in introducing a problem for the idea of a ἑτέρα αἴσθησις with the words ἔτι δέ. This sentence, 425b15, does raise a difficulty for perception by a different sense, but one which only casts the problem back to the difficulty of a sense perceptive of itself, αὐτῇ αὐτῆς: if the perception of sight is a different sense it will start an infinite regress, unless some sense is perceptive of itself, and since the regress is unacceptable we should propose the alternative at the first stage rather than a later stage; hence it will be best to opt for the sense αὐτῇ αὐτῆς.

At 425b17 the difficulty for perception by the same sense is raised. The phrase τὸ τῇ ὁψει αἰσθάνεσθαι refers back to the original dilemma where τῇ ὁψει αἰσθάνεσθαι was the expression used for perceiving by the same sense. The difficulty now expressed is that if this must mean *seeing*, ὁρᾶν, and the essence of *seeing* is seeing colour or coloured things,⁶ then whatever it is that one sees when one sees that one sees must be coloured. In order to count as seeing, ὁρᾶν, it must be seeing colour.

Aristotle regards this as a false aporia⁷ on two grounds. (a) First he questions the first premise, that the phrase τὸ τῇ ὁψει αἰσθάνεσθαι could only mean seeing, ὁρᾶν. There is another way in which one can be aware by sight when one is not seeing, perhaps particularly when one cannot see; one may have an awareness of light or darkness while not seeing colour. Hence awareness by sight need not mean seeing. (b) Secondly he questions whether there is any difficulty in supposing that it is a case of seeing, and hence of seeing colour, in that it has been argued that that which is seeing is, in a way, coloured and hence could itself be seen.

Finally Aristotle observes that it is because the sense-organ receives the form without the matter that there are perceptions and *phantasiai* in the sense-organs when the sense-objects are no longer present. This footnote seems to have little relevance to the matter in hand except that it raises the question of our awareness of our seeing when what we see is only a *phantasia* in the organ; Aristotle's suggestion may be that if the awareness in question was a perception of the form in the perceiving organ, this would be perceptible also in the case of *phantasia*.

The paragraph as a whole surely remains inconclusive. There were three options canvassed: that we perceive that we see (a) by a sense other than sight (ἑτέρῃ); (b) by the same sense, that is ὁψει, but not in the same way, that is not by seeing, ὁρᾶν; (c) by the same sense, ὁψει, and in the same way – in fact that we see that we see.

⁶ This was established in book 2, chapter 7.

⁷ The inferential particle τοίνυν is usually rendered 'therefore' or 'then' implying that the comment in b20 represents a conclusion drawn from the previous *aporia*; but this sense of the particle is in fact relatively rare (Denniston, *The Greek Particles*, 569 and 571); its normal use is conversational in introducing a new point, usually from a new speaker in dialogue. Denniston, 572: 'A rejoinder introduced by τοίνυν sometimes conveys a comment on, or criticism of, the previous speaker's words', e.g. Plato, *Republic* 358a. As a transitional particle it introduces a fresh point in the argument (Denniston, 575). We may therefore render Aristotle's words at b20 'well now, on the other hand, it is clear that perception is not a single thing'.

Aristotle certainly does not *draw* the conclusion that we see that we see. He does imply that there must at some stage be a stop to the regress of 'other' senses; but this does not entail the immediate acceptance of the 'same' sense at the first stage, nor does Aristotle indicate which of the two alternative accounts, (b) or (c), of perception by the 'same' sense would be preferable if it were to be a case of perception *αὐτὴ αὐτῆς*. The paragraph simply offers a preliminary survey of the options available, with some initial difficulties for each.

II. DIFFICULTIES RAISED BY THE TEXT

The major question which arises is what precisely is the phenomenon under discussion, and hence how to explain certain curious details of Aristotle's account. The usual conclusion is that the passage is concerned with some sort of reflective self-consciousness by which we can turn our attention to our own perceptual acts; in other words it is an attempt to explain the fact that we can actually be conscious *that we are perceiving* rather than simply conscious of the objects perceived. There are, however, several difficulties in matching this account with the assumptions inherent in Aristotle's argument, and while some of the difficulty may arise from dualistic interpretations of what self-consciousness would mean, some problems remain for any interpretation which regards self-consciousness as the subject.

The first difficulty lies in the sentence at 425b 13–14: ἀλλ' ἡ αὐτὴ ἔσται τῆς ὀψεως καὶ τοῦ ὑποκειμένου χρώματος. Whatever the sense is it must be perceptive both of the sense and of its object. This requirement is apparently obvious to Aristotle, but not so clear to current interpreters: why should a sense which perceives another sense also perceive the object? Why not have simply an αἰσθησις τῆς ὀψεως? Hamlyn, for example, observes⁸ 'but one can clearly be aware that one is seeing without being aware what one is seeing'. We should, however, note that this assertion directly conflicts with the comment of Themistius⁹ 'for it is not possible to state concerning sight that one is seeing without being aware what one is seeing'. Why does Hamlyn regard as clearly possible what Themistius regards as self-evidently impossible?

The answer surely lies in Aristotle's explanation of what it is to see; we can pinpoint it as follows. Hamlyn's surprise is at the addition of τοῦ ὑποκειμένου χρώματος, since his expectation is that what we are looking for is a sense perceptive of sight, τῆς ὀψεως. It is difficult to conceive what perception of ὄψις by itself would mean on Aristotelian terms. To perceive that one sees is not just to perceive sight but to perceive the specific process of seeing, which is the actuality of colour in a functioning sense-organ.¹⁰ It is in this connection that the second section of the chapter (425b 26–426a 26) becomes relevant. Aristotle argues in some detail that the actuality of the sense and of the sense-object are numerically one and the same, though logically distinct. Both the actuality of the sense-object and that of the sense-organ occur in the sense-organ and are one and the same thing.¹¹ When we perceive that we see we are perceiving

⁸ Hamlyn, 121.

⁹ *In De anima* 83. 15: οὐ γὰρ οἷόν τε ἀποφῆναι περὶ τῆς ὀψεως ὅτι ὁρᾷ μὴ γινώσκουσιν τὸ ὁρώμενον.

¹⁰ ὄψις is not in fact coextensive with ὄρασις, which represents a particular type of actualization of *opsis*, namely perception of colour, whereas *opsis* can be actualized in another way, 425b 20–22; see above, p. 402. Note that it is the sense-object (colour) which defines the actuality; cf. 425b 26–426a 26.

¹¹ 426a 2–11. The details of this argument rely on the discussion at *Physics* 3. 3, 202a 21 ff.

the *actualization* of ὄψις, the actualization being in this case seeing, ὄρασις;¹² but the perception of the actuality of the sense simply is perception of the actuality of the sense-object, the αἰσθητόν, for the two are one and the same. In this case the sense-object is colour (for which no word exists to denote the actuality).¹³ We may thus read back in 425b12 the point that when we perceive that we see we are perceiving one process, namely the actuality of both sight and its object, colour.

The second problem is why there should be an infinite regress at 425b15–16. What reason is there to suppose that we should be conscious that we perceive that we see? It is true that 'it is nowhere claimed to be a *requirement* of perception in general that we perceive that we perceive',¹⁴ but it is possible that the empirical claim at the start of the chapter rests upon our awareness of the fact that we perceive that we see. If we were unaware of the fact we should expect an argument on the basis of other evidence, that it must be the case that we perceive that we see and hear.

The third problem arises at 425b17–20. Why does seeing that we see involve seeing that which sees, τὸ ὁρῶν?¹⁵ What this problem clearly highlights is the dissatisfaction of modern commentators with the fact that Aristotle seems to be treating self-consciousness as a mode of *perception*. The assumption that in order to be aware *that* one is perceiving one should *perceive* the sense-organ that is doing the perceiving appears unjustified.¹⁶ Given that Aristotle *is* assuming that perception is the mode of awareness involved, and more particularly is considering the claims of perception by seeing in this case, he must be able to identify what there is about seeing that one might *see*. At the end of book 2, 424b16–18, the question was raised as to what perception was beyond a certain πάσχειν. The only satisfactory interpretation of the answer offered at 424b17, ἢ τὸ μὲν ὁσμᾶσθαι [καὶ] αἰσθάνεσθαι, must take the καὶ as merely emphatic if it is retained at all, on the grounds that there is no additional αἰσθάνεσθαι separate from the πάσχειν in the organ, but that αἰσθάνεσθαι simply is the πάσχειν when it occurs in a sense-organ with the potential for perceiving. Smelling is an affection that is also perceptive, whereas what the air undergoes is an affection that is not perceptive. Thus there is nothing that constitutes τὸ ὁρᾶν over and above the immediate process in the seeing eye; the fact that Aristotle assumes that to see that we see would involve seeing the organ that was seeing reinforces the conclusion that there could be no further perceptible 'faculty' that could be 'seen'.

More to the point, on the other hand, is the fact that the argument does not depend upon this assumption that what would be seen would be the seeing organ. It is a requirement that if the mode of perception is seeing, and seeing is of colour, then *something* must be coloured to be the object. It is clear that Aristotle finds it initially implausible that there should be something that is seen in this way, but clearly the best option, if that is to be the case, will be that it is the organ that is seen, since that can actually be said to be, in a way, coloured.¹⁷ It should be noted that Aristotle does

¹² 426a13.

¹³ 426a14.

¹⁴ Kosman, 501 (his emphasis).

¹⁵ There is a textual discrepancy here which enables some editors to read τὸ ὁρᾶν in place of τὸ ὁρῶν in one or both of the occurrences at 425b19, but this does not provide a satisfactory solution, since if the comment at 425b22–3 (which must refer to τὸ ὁρῶν) is to be any kind of solution to the difficulty in 425b19 it had better refer to at least a possible referent of the terms in b19, and preferably to the same term. In what sense could τὸ ὁρᾶν as distinct from τὸ ὁρῶν be perceptible?

¹⁶ cf. e.g. Hamlyn, 123.

¹⁷ 425b22–3. The sense in which the organ can be said to be coloured is controversial. See for example R. Sorabji, 'Body and Soul in Aristotle', *Philosophy* 49 (1974), 72 n. 22.

not propose to adopt this solution. It remains true, however, that the explanations offered, and the whole discussion couched in terms of perception as the mode of awareness of our own perceiving, fit very ill with the standard interpretations which take it that what is to be explained is a self-conscious awareness of perceptual acts.

Kosman¹⁸ proposes an alternative interpretation which has the advantage of avoiding many of the difficulties encountered by self-consciousness. He suggests that we should read the passage as an answer to the question posed at the end of the last chapter of book 2. The question there was 'what is perception besides a *πάσχειν* in the sense-organ; i.e. why does not the air sense the smell when it takes on a smell?' The answer at 424a17 was inadequate in that it suggested that the affection only constituted perception when there was some *αἰσθάνεσθαι*: the air does not sense the smell because it is not the sort of thing to perceive, whereas to smell, *ὁσμᾶσθαι*, is to perceive. On Kosman's view chapter 2 of book 3 takes up this question by asking what is this *αἰσθάνεσθαι* which we have such that we are conscious when we smell an onion, whereas the air is not. Seeing and hearing are modes of awareness – is that awareness in the individual sense itself or in some other sense?¹⁹ This gives a satisfactory explanation for the fact that Aristotle says we perceive that we see, rather than using a verb implying more general consciousness.

There are two main problems with Kosman's account.

(1) Aristotle does not actually answer the question. The paragraph as it stands is inconclusive. Kosman interprets it as opting for a conclusion that the perception in question is by sight itself and not by another sense, but this is not stated as the conclusion, nor is it decided which of the two alternative modes of perception by sight would be acceptable. Moreover the conclusion that it is by sight would be in direct conflict with the parallel passage in *De somno* 2, 455a12.²⁰ Indeed as an answer to the question posed at the end of *De anima* 2 this passage is unhelpful: even if Kosman were right that Aristotle intended to claim that the awareness in sight was by sight itself, this conclusion would not add to our understanding of what the perception actually is. It remains the case that the reason why the air does not sense the smell is that the air does not possess a sense of smell, and no explanation has been given of what constitutes the consciousness which it lacks.

(2) Kosman's interpretation fits awkwardly with the non-objective emphasis of the passage. The question which Kosman identifies amounts in effect to asking why one is aware of whiteness when one's sense-organ is affected by whiteness. The awareness in question is an awareness of the object, rather than awareness of a perceptual act (which already includes awareness in order to constitute perceiving). Aristotle's phrases *αἰσθανόμεθα ὅτι ὁρώμεν* and *αἰσθάνεσθαι ὅτι ὁρᾷ* do not readily refer to an awareness of a simple affection, *πάσχειν*, the awareness which *constitutes* my seeing white. *Ὅρᾷ* already constitutes perceptive awareness: it is mentioned as a type of *αἰσθάνεσθαι* *τῇ ὁψει* (425b17–18). *αἰσθάνεσθαι ὅτι ὁρᾷ* does not suggest the complete transparency which means that the awareness is simply an awareness of the object which is what Kosman advocates,²¹ since *ὁρασις* refers to the actuality of a sense.²² Kosman's case would be easier if the opening question were how we are aware that a colour has been actualized in our eye, rather than how we are aware that we see.

¹⁸ op. cit. (n. 2).

¹⁹ Kosman, 511.

²⁰ In the *De Somno* Aristotle explicitly states that it is not by sight that we see that we see (below p. 406). Kosman has to explain this as a denial that the awareness is in sight 'in isolation from the powers of a whole living, sentient organism' rather than a denial that it is in sight at all.

²¹ Kosman, 517–18.

²² 426a13.

III. PROPOSED INTERPRETATION AND PROBLEMS

There are difficulties in reconciling Aristotle's assumptions and the terms of his discussion with either a concern with reflexive self-consciousness or an explanation of the awareness in perception itself. The following interpretation explores a third option.

In *De somno* 2, 455a12 Aristotle asserts that there is a *κοινή δύναμις* by which one perceives that one sees and hears. This phrase, *ἥ καὶ ὅτι ὁρᾷ καὶ ἀκούει αἰσθάνεται*, must surely refer to the same phenomenon as is under discussion at 425b12 ff.²³ But in the *De somno* it does not stand as a problem on its own but is explained thus: 'for indeed it is not by sight that we see that we see and judge and are capable of judging that sweet things are different from white things'.²⁴ The latter part of this refers to the problem discussed in the last part of *De anima* 3. 2, 426b8 ff.; but it is all one problem in the *De somno*. Kosman is in trouble since the *De somno* rejects the possibility that it is by sight, *τῇ ὁψει*, that one sees that one sees, while he wants to maintain that the conclusion in the *De anima* is that sight is the faculty concerned. We should instead consider the possibility that the problem at the beginning of chapter 2 and that at the end are all one and the same problem in the *De anima* likewise, and that the first paragraph is intended to be inconclusive, a preliminary outline of the alternatives; the intervening material, 425b26–426b7, reviews some relevant considerations which lead to the subject being raised in a slightly different form at the third section of the chapter, 426b8–427a16.

The question is not how we perceive that we perceive²⁵ – how we are self-conscious – but rather how we are aware that we are seeing (as opposed to hearing, for example) or hearing (as opposed to tasting, for example). The answer that is really required is, of course, object-centred: when we see we are seeing colour, and when we taste we are tasting sweetness and we do not confuse the two. This is the answer which is under discussion in the third section of the chapter, but Aristotle begins with a preliminary run through the implications of the two alternatives that the awareness is by a different sense or by the same sense; in this passage he has regard to the fact that the sense in question must be perceptive not only of the object (*τοῦ ὑποκειμένου χρώματος*, 425a14) but also of the sense (*τῆς ὁψεως*) since it must judge that the process of seeing is different from that of hearing as well as that colour is different from sound. The preliminary paragraph thus canvasses three alternatives: either (a) there is a sense other than sight by which one perceives that one is seeing, but this seems to be in danger of an infinite regress unless at some stage the awareness is by the same sense; or (b) one perceives that one is seeing by the sense of sight, not by seeing but by some other sort of perception by sight; or (c) one perceives that one is seeing by seeing that one is seeing, but in that case there must be something coloured to be the object seen. The second section of the chapter then points out the inadequacy of considering only the perception of the actualization of the sense-organ, since this is identical with the actualization of the sense-object. Thus if we are considering perceiving the actualization of sight in the sense-organ we are also considering the perception of the actualization of the sense-object. Perceiving that we see amounts to perceiving that a colour is acting. In other words the process is transparent.²⁶

²³ cf. 425b12 *αἰσθανόμεθα ὅτι ὁρώμεν καὶ ἀκούομεν... ἡ τῇ ὁψει... ἡ ἑτέρῃ.*

²⁴ *οὐ γὰρ δὴ τῇ γε ὁψει ὁρᾷ ὅτι ὁρᾷ, καὶ κρίνει δὴ καὶ δύναται κρίνειν ὅτι ἕτερα τὰ γλυκέα τῶν λευκῶν... De somno 455a15 ff.*

²⁵ It is worth noting that Aristotle never says *αἰσθανόμεθα ὅτι αἰσθανόμεθα*.

²⁶ The difference between the thesis I am advocating here and that of Kosman is worth clarifying. He suggests that Aristotle's interest is in the awareness inherent in seeing: when I see

This amounts to a justification of the shift to an object-centred discussion of the problem in the last part of the chapter. 'How do we perceive that we see?' amounts to 'how do we perceive that it is white and not sweet?' and hence we can appreciate why the appropriate word for the awareness is *αἰσθάνεσθαι*. The matter concerns different sense-objects perceived.²⁷ It is only in the last section of the chapter that the problem approaches any solution. Since the different objects are proper to different senses it cannot be the individual senses that distinguish between white and sweet and hence between seeing and tasting. Thus it cannot be by sight that one sees that one sees, as the *De somno* asserts,²⁸ because there must be some common *κρίνον* to do the judging.

The conclusion of the chapter as a whole must therefore be that, of the three options outlined in the first paragraph, we must reject the two which allowed that the awareness that one was seeing was a function of sight itself; there must be some other judging faculty. This appears to leave the threat of an infinite regress at 425b16, and Aristotle never actually specifies how that difficulty might be resolved.²⁹

This interpretation reconstitutes *De anima* 3. 2 as a coherent unity with a clear question in mind. There are, however, a number of details which need to be considered.

(i) Why does the second section of the chapter use the example of sound and hearing instead of continuing with the example of seeing which was used in the first section? Aristotle is attempting to clarify the sense in which the actualities of sense and sense-object are simultaneous and numerically one, though conceptually distinct. In the case of hearing and sound he has four terms available, 426a1: *ἀκοή* and *ψόφος* are the sense and sense-object respectively; *ἄκουσις* and *ψόφησις* are their respective actualities. These are second actualities, in that *psophos* will be the first actuality of something capable of sounding: when the bell rings unheard it causes *psophos*, but only when it is heard is it actualized as a sense-object causing hearing, in which case it is causing *psopthesis*.³⁰ Aristotle uses sound as his example in this section for the sake of clarity in that there are sufficient different terms in Greek for the actualities involved.³¹ He notes that while this is true for sound, it is not true for sight since the

white there is more than just an affection of whiteness in my organ – I am also aware of white – and this awareness is an awareness that I am perceiving white. I am suggesting, on the other hand, that the awareness in question is the awareness of a distinction between different forms of perception: how I am aware not simply that I am perceiving (as on Kosman's account), but more specifically that I am *seeing*. To be aware that there are different modes of perception, and which one I am currently undergoing, requires that I must have a faculty capable of recognizing more than one mode of perception; this corresponds to a recognition of different sense-objects, and it is in this way that the process of awareness is transparent.

²⁷ 426b15 *ἀνάγκη δὲ αἰσθῆσαι· αἰσθητὰ γὰρ ἔστιν.*

²⁸ 455a12 ff.

²⁹ It is not difficult to see how the regress might be resolved, and it is perhaps unnecessary for Aristotle to specify that if there is a single common faculty which distinguishes whether one is seeing, hearing, tasting etc., we may stop the regress at that stage since there is no reason why that should not be perceptive of itself. It is only in the case of the individual special senses which cannot perceive each other's objects that judging has to be ascribed to a further faculty. On the other hand it is not clear that we do possess any faculty which discerns the common faculty, and Aristotle might stop the regress not by having a common faculty perceptive of itself but by having a faculty which is not itself perceived. Since perception of a sense is perception of the actualization of its objects, and the objects of the common sense are the objects of the various special senses, no *further* sense perceptive of those same objects can be distinguished.

³⁰ I am here assuming acceptance of the analysis of the potentialities and actualities involved in this passage outlined at length by Kosman, 513–14. His clarification of these details resolves most of the difficulties raised by Hamlyn, 123–5.

³¹ Some of the problems with interpretation of the passage in the past seem to be due to a shortage of technical terms for the English equivalents.

term for the actuality of colour is lacking, 426a11–14. It would thus have been unnecessarily complicated to use sight as the example in the basic explanation of the identity of the two actualities. The details concerning sight, which relate to the first paragraph, are given by analogy with hearing at 426a13–14. The important conclusion is that when we ask how we perceive that we see we are asking about perceiving the actuality of sight, *ὄρασις*,³² and not just the sense, *ὄψις*, when it is not being actualized. Thus we are enabled to tighten up the statement at 425b11–12, *ἡ αὐτὴ ἔσται τῆς ὄψεως καὶ τοῦ ὑποκειμένου χρώματος*. The sense in question would be of the *ἐνέργεια* of sight, that is *ὄρασις*, and since this *ἐνέργεια* is the same thing as the *ἐνέργεια* of the related sense-object it will also be a sense of the actuality of the sense-object, that is the nameless actuality of colour.

(ii) What is the relevance of the section concerned with *συμφωνία*, 426a27–426b7, to the scheme of the chapter as a whole? The initial problem stems from the difficulty of interpreting the text. It is far from clear precisely what Aristotle's argument is. Barker³³ has argued powerfully that it is not possible to maintain the traditional interpretation which reads the passage as arguing for a general conclusion that all hearing, and indeed all perception, is a proportion or ratio on the basis that some, or all, objects of hearing are ratios.³⁴ Instead he justifies preserving the order of words in the first sentence as they appear in the manuscripts³⁵ and argues that the conclusion need not be read as the general conclusion that every instance of hearing is a ratio, but only that the instance in question (namely when it is a harmony that is heard) will be a ratio.³⁶ Aristotle thus argues that if and when the sound heard is a harmony, then the actualized hearing of that sound will likewise be a proportion. This follows from the argument of the preceding paragraph.

It must be clear that this paragraph is concerned with actualized cases of perception, in which the actualities of sense and sense-object are identical in the requisite sense, and does not refer to the state of the *αἰσθησις* as a potentiality (which is the subject at 424a28–32 which appears to raise similar questions). The paragraph is best taken as a footnote to the point about the identity of the actualities of sense and sense-object.

³² 426a13.

³³ A. Barker, 'Aristotle on Perception and Ratios', *Phronesis* 26 (1981), 248–66.

³⁴ This traditional reading is represented primarily by W. D. Ross, *Aristotle, De Anima* (Oxford, 1961), 277–8, and Hamlyn, 125. Ross takes the argument as starting from a statement that the human voice (*φωνή*) is a *συμφωνία*; Hamlyn takes *φωνή* as a reference to any pitched sound. Neither of these is satisfactory as a bearer of the description *συμφωνία*, and it is clear that a single tone of medium pitch cannot reasonably be regarded as a ratio in any sense. In addition neither reading provides Aristotle with a valid argument in order to derive the general conclusion about *all ἀκοή* which Ross and Hamlyn require (cf. Barker, 250–2).

³⁵ *εἰ δ' ἡ συμφωνία φωνῆ τίς ἐστιν...* as opposed to the version in Ross' OCT which follows Priscian and Sophonias by printing *εἰ δ' ἡ φωνῆ συμφωνία τίς ἐστιν...*

³⁶ Barker, 255. Thus far I am entirely in agreement with Barker's analysis. On the use to which the conclusion is put by Aristotle in the latter part of the paragraph I have some remaining doubts. Barker suggests that the argument continues with reference to a restricted range of perceptions which are proportions analogous to sound, and hence are not perceived *as proportions* when one or other element is excessively strong (257–9). This part of Barker's analysis, and the sense in which the *ἀκοή* is 'destroyed' seem to me somewhat strained. Alternatively we may reverse the sense and read the sentence as an *argument* that other sense-objects are ratios comparable to harmonies. It is because (*διὰ τοῦτο*) the hearing of a ratio is itself a ratio that an extreme of high or low sound beyond the range of hearing (perhaps, rather than, on Barker's terms, extreme intensity of one element) destroys the actual hearing of the ratio in that the ratio which constitutes the hearing is not actualized. Aristotle argues that wherever an extreme at one end of a scale prevents the related perception from being actualized we may conclude that the perception and the object were a ratio, by analogy with hearing.

It is comparable in relevance to the point that the two actualities come and go together, 426a 15–19. The argument could be construed as follows: the actuality of the sense and the actuality of the sense-object are one and the same process taking place in the *aisthetikon* (426a 11); the two actualities can be distinguished only conceptually. The consequences of this identity, such that anything that applies to the one must apply to the other, can be illustrated by two instructive examples: (1) they are destroyed or preserved together (426a 15–19); (2) if the one is a proportion the other must be a proportion too, and similarly any excess in the sense-object will cause a corresponding excess in the sense. Incidentally this gives us another example of an occasion when the actuality of a sense is destroyed, and hence simultaneously the actuality of the sense-object likewise.

The context also occasions a note about pleasure. The passage as a whole concerning the relativity of sense and object, and particularly the criticism of the *φυσιολόγοι* (426a 20–26) who fail to distinguish between potential and actual sense-objects, is closely related to Plato's *Theaetetus* 156a–c.³⁷ In that context pleasure and pain and such feelings were included in the perceptions accounted for by the 'secret doctrine of Protagoras'. Here Aristotle points out that pleasure results from the actuality of the sense, but this is identical with the actuality of the sense-object. In this way pleasure is correlated with the other perceptions, but the point is carefully distinguished from the doctrine of the *Theaetetus* by being explicitly limited to the actualities of the senses and not their potentialities, 426a 23–25.

(iii) This is not the place for a detailed examination of the analogy with the geometrical point at the end of chapter 2. The relevant part of the paragraph is Aristotle's conclusion that there must be one faculty perceptive of the objects of the individual senses, and that the awareness of the difference between these objects cannot be in the individual senses themselves, 426b 17–21. The paragraph begins with a summary of the important point learnt from the previous passage, namely the identity of actuality of sense and object, both subsisting in the sense-organ, 426b 8–9. The individual senses judge between objects within their own range, e.g. black and white for sight, bitter and sweet for taste, 426b 10–11. But it is not the case that any individual sense can judge between white and sweet. It is here that the problem expressed in the opening sentence of chapter 2 is reformulated in terms of objects: we judge white and sweet and each of the *αἰσθητά* against each other, and since they are *αἰσθητά* it is by *αἴσθησις* that we do so, 426b 12–15.³⁸

At 426b 15 Aristotle says that it is clear that the flesh is not the ultimate sense-organ.

³⁷ The theory ascribed to οἱ πρότερον *φυσιολόγοι* at 426a 20 ff. corresponds closely with that recounted by Socrates at *Theaetetus* 156a–c, which derives the conclusion that everything is constantly changing from the transience of the actualities of sense-objects. Aristotle objects to the fact that the theory extends the relativity to potential sense-objects such as colours when not actualized (*Theaetetus* 156c 1). In the *Theaetetus* the theory is rather vaguely said to be a secret doctrine of Protagoras, or rather of a number of distinguished men. Aristotle's vague reference to οἱ πρότερον *φυσιολόγοι* could be a reference to this passage of the *Theaetetus*. Cf. Philoponus in *De An.* 475. 26, who erroneously refers to the *Protagoras* but must mean the *Theaetetus*.

³⁸ In each reference to perceiving the distinction between objects, the objects referred to are linked by καί: λευκὸν μὲν καὶ μέλαν (426b 10–11), γλυκὺ δὲ καὶ πικρὸν (426b 11), τὸ λευκὸν καὶ τὸ γλυκὺ (426b 13). This is surely parallel to the opening sentence at 425b 12, αἰσθανόμεθα ὅτι ὁρώμεν καὶ ἀκούομεν. In each case the implication is that we can tell the difference between the two, or simply pick out one of the two correctly. The fact that I can identify a particular colour as black implies that I know some other colour from which I can distinguish it; the fact that I can say that I am seeing (and not just that I am perceiving) implies that I am aware of a difference between seeing and some other sort of perception.

For it would be necessary for what judges to judge by touching. What is the point of this comment at this stage? It cannot be a point just about the sense of touch being not located in the flesh, since that belonged back at 423b20–26, and would not follow from the point that the things judged are sensibles, as the connection η καὶ δῆλον suggests that it is supposed to do. It seems likely that this is a point prompted by the passage of the *Theaetetus* on the same subject. At 184e Socrates asks if there is some one thing in us with which we get at on the one hand black and white by means of the eyes and on the other the other sensibles by means of the other organs. He then asks whether we can refer all these sorts of things to the body. He spells out what he means by saying that the instruments by which one perceives things which are hot, hard, light or sweet are parts of the body. It is not immediately clear what Socrates is driving at. One possibility might be that because all the different organs are parts of the body, if we want to find something in common which could judge all the different objects it would be the body. Hence the question ‘can we refer all these things to the body?’. It is possible that some such reading of the *Theaetetus* passage prompts Aristotle first to dismiss the suggestion that it is the flesh common to all the sense-organs which is able to discriminate objects of different senses. He observes that perception by means of the flesh would be touch and that involves contact between the flesh and the object.³⁹ Hence the flesh would be unable to judge the objects of distance senses and could not be the ultimate judging faculty for all senses. Aristotle uses the word $\sigma\acute{\alpha}\rho\kappa\varsigma$ where Plato had used $\sigma\acute{\omega}\mu\alpha$. It is worth noting that both Simplicius and Philoponus comment that Aristotle actually means $\sigma\acute{\omega}\mu\alpha$.⁴⁰

IV. CONCLUSION

The second chapter of *De anima* 3 raises and discusses two distinct aspects of a single problem: we are undoubtedly aware which sense is in operation whenever we perceive, and there is no temptation to doubt when I say that I saw the sunset yesterday that I might have mistaken an occurrence of hearing for an occurrence of seeing.⁴¹ The fact that I am aware of a distinction between seeing and hearing implies that a faculty which is aware of both must make the judgement between them. This is precisely the same problem as the question of judging between objects of different senses: the distinction between the senses is that they are senses perceptive of different objects. The central passage of the chapter explains precisely how the perception of the actualization of a sense and the perception of the actualization of its sense-object amount to one and the same thing and hence justifies the claim that the perception that I am seeing is entirely transparent, simply perception of colour or a coloured object. The *De anima* passage thus explains more fully why it is that the *De somno* treats as one question what appears at first to be two: ‘there is a common faculty by which one perceives that one is seeing and hearing; for indeed it is not by sight that

³⁹ In this respect the details concerning touch discussed in chapter 11 of book 2 do not affect the argument. Even if it is the case that a medium intervenes in the case of touch and taste as well as the other senses, it remains true that touch does not operate at a distance and the medium functions in a different way, 423b12–15.

⁴⁰ Simplicius in *De An.* 197. 11 ff., Philoponus in *De An.* 482. 30 ff. Both commentators give an interpretation compatible with that I am suggesting for this sentence. Philoponus had referred to the *Theaetetus* in an earlier note on the same page, 482. 16–18.

⁴¹ Discrimination between tasting and smelling is the one region where the boundary is unclear. Aristotle does not comment on the possibility of confusion here, and was perhaps unaware how much should be assigned to smelling.

one sees that one is seeing and judges and is capable of judging that sweet things are different from white things'.

Although the passage is clearly influenced by *Theaetetus* 184de it is notable that Aristotle starts from an assumption that the common faculty which unites the senses in the wooden horse will be a mode of perception whereas Plato draws the conclusion that reflection and judgement concerning the relationship of objects of different senses must be attributed to 'the soul by itself' and not to perception. Aristotle's discussion investigates in more detail how much of the judgement can be ascribed to perception itself, and the extent to which awareness of the difference between objects of different senses, and hence also awareness of the difference between the actualized senses, are inherent in the perception of the objects themselves.⁴²

King's College, Cambridge

CATHERINE OSBORNE

⁴² This paper originated as a contribution to a seminar in Cambridge and I am much indebted to the members of the seminar, and particularly to Geoffrey Lloyd and Myles Burnyeat who read a subsequent draft, for their constructive comments.