Response to Katerina Ierodiakonou, ‘Alexander of Aphrodisias on seeing as a relative’

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T1: Someone might raise the difficulty whether the perceptibles or the movements from the perceptibles arrive (‘Απορήσεις δ’ ἂν τις, εἰ ἄρα ἀφικνοῦνται τὰ αἰσθητά ἢ αἱ κινήσεις αἱ ἀπὸ τῶν αἰσθητῶν). (De Sensu 446a20)

T2: [Aristotle] now opposes an opinion presupposed by the ancients concerning seeing, that seeing comes about in accordance with an efflux from the <bodies> seen. For they held certain images (εἴδωλα) responsible for seeing, <images> which flow continuously from the <bodies> that are seen, being similar <to them> in shape and falling on the sight. Their number included Leucippus and Democritus and their followers […]. But Empedocles also says that seeing comes about in this way, as <Aristotle> mentioned a little earlier. (Alex. DS 3 56.10-16)

T3: Empedocles for example says that the light from the sun arrives first in the intervening space before it comes to the eye, or reaches the Earth. This might plausibly seem to be the case. For whatever is moved, is moved from one place to another; hence there must be a corresponding interval of time also in which it is moved from the one place to the other. But any given time is divisible; so that we should assume a time when the sun’s ray was not as yet seen, but was still traveling in the middle space (Ἐμπεδοκλῆς φησιν ἀφικνεῖσθαι πρῶτον τὸ ἀπὸ τοῦ ἡλίου φῶς εἰς τὸ μεταξὺ πρὶν πρὸς τὴν ὄψιν ἢ ἐπὶ τὴν γῆν; δόξειε δὲ ἂν εὐλόγως τοῦτο συμβαίνειν· τὸ γὰρ κινούμενον κινεῖται ποθὲν ποι, ὥστε ἄν συνήκη εἰναί τινα καὶ χρόνον ἐν ὧν ὁ κινεῖται ἐκ θατέρου ἐπὶ τούτου ἐγείρετο· ὃς ἂν δὲ τί ποι ἀνάμεσα ἀλλ᾽ ἔτε ἐφέρετο ἡ ἄκτις ἐν τῷ μεταξὺ). (De Sensu 6 446a25-32)

T4: […] whereas others think that nothing flows from the perceptibles or travels but that which is between the perceptible and the sense is somehow moved and disposed by <the perceptible> because it is of this nature, as he himself showed (i.e., in DA 2.7, 419a22-35) <in showing how> perceiving came about (τοῖς δὲ ἀπὸ τῶν αἰσθητῶν οὐδὲν ἀπορρεῖν οὐδὲ φέρεσθαι δοκεῖ, κινεῖσθαι δὲ πῶς τὸ μεταξὺ τοῦ τε αἰσθητοῦ καὶ τῆς αἰσθήσεως καὶ διατίθεσθαι υπ᾽ αὐτοῦ τῷ ταύτῃς εἶναι τῆς φύσεως, ός ἐδείξεν αὐτὸς γινόμενον τὸ αἰσθάνεσθαι). (Alex. DS 6 123, 19-22)

T5 For whether it comes about in this way or that someone might raise the difficulty as to whether the perceptible or the movement from the perceptible comes first in the medium (εἴτε γὰρ οὗτος εἴτε ἐκεῖνος γίνεται, ἀπορήσειν ἂν τις, εἰ ἐν τῷ μεταξὺ πρῶτον ἢ τὸ αἰσθητὸν ἢ ἂν ἀπὸ τοῦ αἰσθητοῦ κινήσεως ἔρχεται). (123, 24-26)

T6 All movement is ‘from somewhere to somewhere’ (DA 446a29) and in time. And all time is divisible. And so at the half-way-point of the time in which the <body> seen or the affection <generated> by it travelled the movement towards the eye that came to be in the medium would be at the half-way-point or at some between-point of the distance which it was travelling and through which it was being moved. And <it would> not yet <be> at the eye. […] <Aristotle> assumed that it was reasonable <for seeing> to come about like this if it came about by means of a movement, showing that if seeing were not to come about like this it will not be accompanied by movement (ἔλαβε δὲ τὸ εὐλόγον εἶναι οὗτον γίνεσθαι, εἰ δὲ κινήσεως γένοιτο, δεικνὺς ὦτι, εἰ μὴ οὗτος γίνοιτο τὸ ὄρον, ἐτί οὐδὲ μετὰ κινήσεως ἔσται). (124, 9-19)
T7 If seeing comes about by means of a movement (διὰ κινήσεως) → it is reasonable that seeing comes about ‘like this’ or in this way (οὕτω γίνεσθαι), i.e. ‘from somewhere to somewhere, and in time’.

Alexander notes T7 ‘shows that’:

T8: If seeing were not to come about from somewhere to somewhere and in time → it will not be accompanied by movement (ἔτι οὐδὲ μετὰ κινήσεως ἔσται) [= Alexander’s contrapositive].

T9: But even if this is true of the senses, nothing prevents perceptibles from being somewhere in that which is between before being at the senses with the result that the senses are not moved by them at the same time as their movement (ἀλλ’ οὖν εἰ καὶ οὕτως ἔχουσιν αἰ aἰσθήσεις, οὐδὲν κωλύει ὁτα ἕκτη πρὸ τοῦ πρὸς ταῖς αἰσθήσεσιν εἶναι ἐν τῷ μεταξό που εἶναι, ὡς μή ἀμα τῇ ἐκείνων κινῆσθαι καὶ τάς αἰσθήσεις κινεῖσθαι ὑπ’ αὐτῶν). (126, 3-5)

T10: And so is this true of colour and light? For it is not that the one sees and the other is seen because there is a relation (τῷ πῶς ἔχειν), as is the case with equal things. For there would be no need (ἔ δει) for each of the two to be somewhere’. (De Sensu 446b9-11)

T11: By means of this he establishes plausibly the claim that seeing does not come about by virtue of a relation between those seeing and the <bodies> being seen’ [i.e. as in the case of equals] (διὰ τούτου πιθανὸς τὸ μή κατὰ σχέσιν τῶν ὁρών τῶν πρὸς τὰ ὁρώμενα τὸ ὄραν γίνεσθαι συνίστησιν) (Alex. DS 6 127, 5-6)

T12: ‘As I said, he argued πιθανὸς’ (127, 12).

T13: In saying this [Aristotle] is advocating as being worthy of conviction the view (συνηγορῶν πιθανὸν ὄντι τῷ δοκεῖν) that visibles travel (φέρεσθαι) to the sight just as the other <perceptibles do>. (127, 21-3)

**Against Transmission in Seeing: The Equals Argument:**

Thesis: Seeing is accompanied by movement.

1. The equal is a relation.
2. If the equal is a relation → things that exist or come to be equal exist or come to be equal in virtue of being related by equality.
3. The same is true for the unequal, similarity, etc. [1-3 = Induction base]
4. Therefore, if R is a relation → things that exist or come to be R (i.e. related by R) exist or come to be in virtue of being related by R. [By induction on 1-3]
5. Seeing is a relation.
6. Therefore, things that exist or come to be related by seeing exist or come to be in virtue of being related by seeing. [By 4 & 5]
7. If things that exist or come to be related by R exist or come to be in virtue of being related by R → they do not come about from somewhere to somewhere and in time.
8. Therefore, seeing does not come about from somewhere to somewhere in time. [By 6 & 7]
9. If seeing does not come about from somewhere to somewhere and in time → it will not be accompanied by movement (ἔτι οὐδὲ μετὰ κινήσεως ἔσται). [= Alexander’s contrapositive]
10. Therefore, seeing is not accompanied by movement.
T14: As I said, he argued plausibly (πιθανῶς). For not all the things which either exist or come to be by virtue of their relation with each other exist in the same way. For that which is on the right has its relation dependent upon a particular position (πιθανῶς δέ, ὡς εἶπον, ἐπεξείρησεν· οὐ γὰρ πάντα τὰ κατὰ σχέσιν τὴν πρὸς ἄλληλα ἢ ὅντα ἢ γινόμενα ὁμοίως ἔστι· τὸ γὰρ δεξιὸν τὴν σχέσιν ἔχει ἐν ποιά θέσει). (127, 12-14)

T15: In saying this he is advocating as worthy of conviction the view (συνηγορῶν πιθανῷ ὀντὶ τῷ δοκεῖν) that visibles travel to the sight just as the other <perceptibles do>, and not because seeing is not one of the things that are in relation to something (for not all relatives are like things that are equal to each other. That which is on the right, as I said, is in relation to something and requires (χρείαν) a certain position, and the same is true of that which is in front and behind and upward and downward), but because sight cannot be one of these relatives which have no need of (δέεται) position and distance, since seeing seems to him to be dependent upon the particular relation (ἐν σχέσει γε ποι ᾷ) between that which sees and the <body> being seen. (127, 21-128, 2)

T16: Alternatively [or: Or better], seeing needs a relation but seeing does not consist in a relation (that which is on the right consists in the relation). There also <needs> to be a potentiality that is able to apprehend the <bodies> seen. For without this the relation is no use for seeing. (ἢ δεῖται μὲν τὸ ὁρᾶν σχέσεως τινος, οὐ μὴν ἐν τῇ σχέσει τὸ ὁρᾶν (τὸ δὲ δεξιὸν ἐν τῇ σχέσει): ἀλλὰ καὶ δύναμιν τινα εἶναι τὴν ἀντιληπτικὴν τῶν ὀρωμένων· ἄνευ γὰρ ταύτης οὐδὲν ὄφελος πρὸς τὸ ὁρᾶν τῆς σχέσεως). (128, 2-5)

T17: For this reason <that which is seen is seen> both in being transparent and by virtue of a relation, but seeing is not by virtue of a relation (διὸ τὸ μὲν ἐν τῷ διαφαίνειν καὶ κατὰ σχέσιν, τὸ δὲ ὁρᾶν οὐκέτι κατὰ σχέσιν). (128, 5-6)

T17 (KI): For this reason, <that which is seen is seen> both in being transparent [ἐν τῷ διαφαίνειν] and by virtue of a relation [καὶ κατὰ σχέσιν], and seeing is no longer by virtue of a relation [οὐκέτι κατὰ σχέσιν].

T18: Thesis: It is not possible to be doing (ποιεῖν) and to have done (πεποιηκέναι) the same thing at the same time.

(1) To be cutting (τέμνειν) is to be doing (ποιεῖν) something and to have cut (τετμηκέναι) is to have done (πεποιηκέναι) and to be setting on fire (καίειν) is a doing and to have set on fire (κεκαυκέναι) is to have done.

(2) So all things that are said in this same way signify a doing or a species of acting.

(MQ) [Missing question: seeing (ὁρᾶν) is a doing (ποιεῖν).]

(3) But it is possible to be seeing and have seen the same thing at the same time.

Therefore, it is possible to be doing and to have done the same thing at the same time.¹ (SE 22)

¹ In Aristotle’s taxonomy of fallacy, sophisms due to form of expression occur when a word sharing certain surface linguistic features with others is thereby treated as if it also signified the same category of thing – in Aristotle’s technical sense of a category. In this example the answerer is induced to accept that seeing – which Aristotle of course deems a form of being affected – is in fact a form of acting or doing: a ποιεῖν as opposed to a πάσχειν. The answerer is never asked whether seeing is a doing; but the audience and the answerer alike implicitly assent to this missing question on the basis of the linguistic similarity of ὁρᾶν to the other verbs in the sophist’s induction base. (Here especially the active voice of ὁρᾶν is the relevant feature of linguistic similarity to verbs ποιεῖν, τέμνειν, καίειν.) As T18 leads us to expect, the missing question is an act of omission of the questioner; the corresponding violation of refutation is that the terms upon which the refutation depends must signify the same thing, including where necessary the same kind or category of thing.