

Attila Hangai

## Alexander of Aphrodisias' Criticism of the Stoic Theory of Perception: *typos* and *typōsis*

Institute of Philosophy at Research Centre for the Humanities, Budapest, Hungary  
E-mail: hangai.attila@abtk.hu

**Abstract:** The Stoics identified *phantasia* with impression (*typos*) in the soul, or the impressing process (*typōsis*). Alexander of Aphrodisias directly engages with this account at *De anima* 68.10–21, and argues against the applicability of impression in a theory of perception in *Mantissa* 10, especially 133.25–134.23. I analyse Alexander's polemic account at *De anima* 68.10–21, demonstrate that it differs from Chrysippus' criticism of Cleanthes (contrary to commentators), and show how it fits in the context of his argument. From this analysis it will emerge how Alexander uses Stoic ideas to form his Aristotelian account. Then, I show that Alexander, by taking '*typos*' metaphorically, not only prefers the term '*enkataleimma*' over '*typos*' in his theory of *phantasia*, but keeps the '*typos*' terminology only to remain faithful to Aristotle's use (contrary to some commentators).

**Keywords:** Alexander of Aphrodisias, Stoicism, *phantasia*, impression, perception

### 1 Introduction

*Phantasia* is a fundamental psychological concept in antiquity with a rich and complex history.<sup>1</sup> In Aristotle it is probably an activity of the perceptual soul, a kind of link between sense-perception and thinking, making a diverse set of activities possible beyond perceiving (including remembering, dreaming, imagination, moving by desire, and experience) for humans and for non-rational animals. As such, *phantasia* is distinguished from perception and thought emphatically in its official treatment in *DA* III 3, yet its nature and status is left unspecified.<sup>2</sup> What is clear, though, is that *phantasia* is related to *phantasma*, a sort of impression; *phantasma* is plausibly an internal bodily process in the blood that is required for representation as the cause of *phantasia*.<sup>3</sup> In the Hellenistic schools *phantasia* is a central epistemological concept, closely related to the criterion of truth, but also important in explaining action and aesthetic imagination. Thus, to cover a wide range of mental states (including sense-perception and thought for the Stoics) *phantasia* might be called *appearance*. Alexander of Aphrodisias, defending an Aristotelian theory of *phantasia*, supplements the account of Aristotle's *De anima* with tenets from works on memory and dreaming (*Mem.*, *Insomn.*), and criticises Stoic views. In the paper I focus on one aspect of this polemics, relating to 'impressions', which remains on

---

<sup>1</sup> For an overview, see Watson (1988).

<sup>2</sup> Thus, some take the chapter to be incoherent – e.g., Hamlyn (1968) 129–34; Nussbaum (1978) 222, 251–2; Frede (1992) 280–2 – notwithstanding some attempted to find a coherent theory there, notably Watson (1982); Wedin (1988); Caston (1996); Osborne (2000). The main problem, apart from the negative treatment in *DA* III 3, for identifying the status of *phantasia* is that Aristotle apparently does not take it to have a specific object required for being a power, as he does not use the term *phantaston*, instead appeals to *phantasmata*, cf. Wedin (1988) 59–63. So, interpreters take *phantasia* quite differently, as: 1) a distinct power, e.g., Hamlyn (1968); Everson (1997) 157–65; Bloch (2007) 61–4; but also Alexander of Aphrodisias; 2) same as the perceptual power, but different in account/activity, e.g., Modrak (1986), (1987); Frede (1992); 3) a further activity of perception, e.g., Johansen (2012) 199–220; Turnbull (1994); 4) a sub-faculty for representation, e.g., Wedin (1988); Osborne (2000); 5) representing in virtue of causal powers, Caston (1996), (1998).

<sup>3</sup> See, e.g., Caston (1996), (1998); Nussbaum (1978); and Aristotle's account of dream in Section 2.2.

quite a physical level, and so does not directly touch on issues of epistemology or the purported rationality of *phantasia*. It will turn out that Alexander’s contention about impressions is quite original, yet embedded within his conceptual framework; its analysis will illuminate Alexander’s use of Stoic notions, and his way of forming his terminology.

The Stoics identified *phantasia* with impression (*typos*) in the soul, or with the impressing process (*typōsis*). Alexander directly engages with this account at *De anima* 68.10–21, and argues against the applicability of *typos* in a theory of perception in *Mantissa* 10, especially 133.25–134.23. Alexander’s critique is not unique in the history of ideas. Close in time to him two sources are most important. Sextus Empiricus (*M* VII 372–387) identifies difficulties internal to the Stoic account of *phantasia* as *typōsis* and offers sceptical arguments against any view appealing to impressions. Plotinus, one generation after Alexander, argues in *Enn.* IV 6 that there is no explanatory role for impressions in an account of perceptual cognition or memory, so impressions can be discarded.<sup>4</sup> The Stoic account of perceptual *phantasia* was not a uniform theory within the history of the school either. As I revisit it in Section 2.1, already the first few deans disagreed in the correct interpretation: Cleanthes taking *typos* quite literally as physical impression, whereas Chrysippus moving to a more nuanced account taking *phantasia* as *heteroiōsis*, a kind of qualitative, yet physical, change. In Sections 2.2 and 2.3, I analyse Alexander’s polemics at *De anima* 68.10–21, demonstrate that it differs from Chrysippus’ criticism of Cleanthes (contrary to commentators), and, in Section 2.4, I show how it fits in the context of Alexander’s explication of *phantasia*. From this analysis it will emerge how Alexander uses Stoic ideas to form his Aristotelian account. In Section 3, I show that Alexander, by taking ‘*typos*’ metaphorically, not only prefers the term ‘*enkataleimma*’ over ‘*typos*’ in his theory of *phantasia*, but virtually drops the ‘*typos*’ terminology, using it only to remain faithful to Aristotle’s use (contrary to some commentators). Going through Alexander’s use of the ‘*typos*’ terminology, in Section 3.1, I show that he applies it mainly in two ways: in polemics against Stoics and citing Aristotle’s account of memory. Even though in some passages Alexander seems to appeal to the terminology in his own voice, I show that we need not take this as an indication of admitting the ‘*typos*’ terminology in a strong sense.

## 2 Alexander against Stoic *phantasia* as Impression

Alexander argues on Aristotelian basis that *phantasia* should be a distinct power of the soul for judging (*kritikē*)<sup>5</sup> (*De an.* 66.9–68.4; cf. *Aristot. DA* III 3.427b6–428b9), differing, most importantly for us, from perception, *aisthēsis* (*De an.* 66.24–67.9). The power for *phantasia* needs to have its own activity, Alexander argues, as we shall see, against the Stoic view. This activity might be identified as a kind of judgement (*krisis*), just like the activity of perception.

---

<sup>4</sup> Porphyry’s subtitle already indicates the thesis: τὰς αἰσθήσεις οὐ τυπώσεις (*Plot.* 5, 50), see also *Enn.* IV 3.26.29–33; IV 4.22.28–34. At *Enn.* III 6.1.1–4, 8–12; 2.35–40 (cf. *Enn.* IV 3.3.21–25; 26.1–9; IV 4.23) Plotinus is more permissive; he allows that perception involves impressions in the body, but identifies perception as such with the judging activity (*krisis*) of the soul. This view is arguably compatible with changes in the soul, though changes different from bodily changes, see Noble (2016). Plotinus seems to repeat Alexander’s account, especially of simultaneous perception, on which see below. At *Enn.* IV 6.1.15–20 Plotinus goes further by appealing to the phenomenology of seeing, viz. “directing (*prosballomen*) our sight straight to where the object of sight is situated.” This shows – Plotinus says – that if there were incoming impressions, ‘directing our sight’ would be superfluous, so either should be dropped: and we know Plotinus’ preference (cf. *Enn.* IV 6.1.32–40; for further arguments from phenomenology, see *Enn.* IV 6.1.20–29). On Plotinus on perception and impressions, see Emilsson (1988) 63–93; on memory and impression, see King (2010).

<sup>5</sup> For an analysis of *krisis* and rendering it as judgement with propositional content, see Hangai (2020) esp. 112–5. Even though in the perceptual case ‘discrimination’ might be a proper rendering of *krisis*, it does not fit well with other cases like thinking, as Emilsson (1988) 121–5 points out.

In the judging activity a residue – *enkataleimma*, a kind of impression generated in perceiving something, corresponding to Aristotle’s *phantasma* – is used; as the cause it triggers the *phantasia*-activity and determines the content for *phantasia*; though it is not an intentional object of *phantasia*. In some cases the residue is modified: internal mechanisms related to *phantasia* complete it when it is incomplete.<sup>6</sup> E.g., I saw my friend’s green bicycle a few times; this left a residue in my central sense-organ; which is probably distorted, and some mechanism amended it; and so this modified residue triggers me to recall the bicycle (in a *phantasia*-related act) as red.

In turning to his positive account of what *phantasia* is, Alexander cites Aristotle’s account of memory (*Mem.* 1.450a27–32) where Aristotle compares the memory *phantasma* to a sort of impression (*typos tis*).<sup>7</sup> This leads to the *aporia* of ‘presence in absence’, viz. how it is possible to remember something absent (being past) by having something present (*Mem.* 1.450b11–18).

For clearly one must think about that which is so generated through perception in the soul, that is, in the part of the body which contains [the soul], as a sort of picture (*hoion zōgraphēma ti*), and the state of having this we call ‘memory’; for the movement produced marks in<sup>8</sup> a sort of impression, as it were, (*hoion typon tina*) of the sense-impression (*aisthēmatos*), similar to what is done by people using their seals.<sup>9</sup> (*Aristot. Mem.* 1.450a27–32)

Alexander writes:

We must conceive [*phantasia*] as something becoming in us from the activities concerning perceptible objects as a sort of impression, as it were, (*hoion typon tina*) and a picture (*anazōgraphēma*), in the primary sense-organ [...], being a sort of residue (*enkataleimma ti*) of the movement generated by the perceptible object, which remains and is preserved even when the perceptible object is no longer present, being like a sort of image of it (*eikōn tis autou*), which, by being preserved, is also the cause of memory in us.<sup>10</sup> (*De an.* 68.4–10)

As Alexander cites Aristotle almost verbatim, it is illuminating to point out the differences. Alexander employs Aristotle’s similes with impression (*typos*) and picture (*anazōgraphēma*,<sup>11</sup> adding the prefix ‘-ana’), and connects memory to image (*eikōn*<sup>12</sup>). The divergence is the description of the impression as a “residue of the movement generated by the perceptible object”, where Aristotle has “a sort of impression, as it were, of the sense-impression”. That is, Alexander (i) replaces *aisthēma* with “movement generated by the perceptible object” (τῆς ὑπὸ τοῦ αἰσθητοῦ γινομένης κινήσεως); and (ii) clarifies ‘impression’ as ‘residue’ (*enkataleimma*) that captures the important features of *remaining* (*hypomenei*) and being *preserved* (*sōzetai*),

<sup>6</sup> Cf. *De an.* 69.5–70.22. On a more complete account of Alexander’s view on *phantasia*, and especially these aspects, see Hangai (forthcoming).

<sup>7</sup> The idea goes back at least to Plato’s *Theaetetus* – as well as the terminology, see Sorabji (1972) 5 n. 1; cf. Long (2002) 120–2; Ioppolo (1990) 438–40; and Togni (2013) for showing the dependence of the Stoic account on Plato – and is used by Aristotle to describe sense perception too (*DA* II 12.424a19–20).

<sup>8</sup> Sorabji’s (1972) rendering of ἐνσημαίνεται, instead of Bloch’s (2007) ‘stamped’.

<sup>9</sup> Translation from Bloch (2007), adapted in terminology. δῆλον γὰρ ὅτι δεῖ νοῆσαι τοιοῦτον τὸ γιγνόμενον διὰ τῆς αἰσθήσεως ἐν τῇ ψυχῇ καὶ τῷ μορίῳ τοῦ σώματος τῷ ἔχοντι αὐτήν – οἷον ζωγράφημα τι [τὸ πάθος] οὗ φαμεν τὴν ἔξιν μνήμην εἶναι· ἢ γὰρ γιγνομένη κίνησις ἐνσημαίνεται οἷον τύπον τινὰ τοῦ αἰσθήματος, καθάπερ οἱ σφραγιζόμενοι τοῖς δακτυλίοις.

<sup>10</sup> δεῖ νοεῖν γίνεσθαι ἐν ἡμῖν ἀπὸ τῶν ἐνεργειῶν τῶν περὶ τὰ αἰσθητὰ οἷον τύπον τινὰ καὶ ἀναζωγράφημα ἐν τῷ πρώτῳ αἰσθητηρίῳ [...], ἐγκατάλειμμά τι ὄν τῆς ὑπὸ τοῦ αἰσθητοῦ γινομένης κινήσεως, ὃ καὶ μηκέτι τοῦ αἰσθητοῦ παρόντος ὑπομένει τε καὶ σώζεται, ὄν ὡσπερ εικῶν τις αὐτοῦ, ὃ καὶ τῆς μνήμης ἡμῖν σωζόμενον αἴτιον γίνεσθαι. All translations from Alexander’s *De anima* are mine. I owe useful comments about the translations to István Bodnár and Péter Lautner.

<sup>11</sup> On *anazōgraphēma* and *anazōgraphēsis* (picturing) in Alexander, see *De an.* 69.25 and 70.18, and Hangai (forthcoming).

<sup>12</sup> See *infra*, n. 62.

which *phantasia* requires to represent external objects in their absence. This, however, does not mean that Alexander uses the terms ‘*typos*’ and ‘*enkataleimma*’ interchangeably, ‘*typos*’ emphasising the external cause, ‘*enkataleimma*’ the internal aspect.<sup>13</sup> Rather, as I argue, while probably ‘*typos*’ is a first approximation for the object of *phantasia* that captures the receptivity of this power, Alexander suggests already here that the proper term to capture the object is ‘*enkataleimma*’<sup>14</sup> (while ‘*anazōgraphēma*’ refers to a specific type of object, e.g., of dreams). To motivate his preference for *enkataleimma* over *typos* (and from this passage it seems that Aristotle’s *phantasma* is a non-starter, see Section 3.1), Alexander turns to arguing against accounts appealing to *typos* just after this passage:

They identify *phantasia* with this sort of residue (*enkataleimma*) and, as it were, with this sort of impression (*typon*). This is the reason why they define *phantasia* as *imprinting* (*typōsin*) in the soul and *imprinting* (*typōsin*) in the ruling faculty (*hēgemonikōi*). (A1) However, *phantasia* might be not the impression (*typos*) itself, but rather the activity of the power of *phantasia* concerned with this impression (*typon*). For, if *phantasia* were the impression (*typos*) itself, we would be in [the state of] *phantasia* only having it without being active concerning it; and at the same time we would be in as many [states of] *phantasiai* as many things there were of which we have preserved an impression (*typon*). (A2) Again, they call *phantasia* either (i) the ongoing impressing (*ginomenēn typōsin*);<sup>15</sup> or (ii) the one that has already been completed (*gegonuian*) and exists. But if (i) the ongoing, they would identify *phantasia* in activity as perception, for perception is the coming to be of the impression (*typon*). But there are *phantasiai* also in separation from perceptual activities. And if (ii) the completed and preserved, they would identify *phantasia* as memory.<sup>16</sup> (*De an.* 68.10–21)

The main point for Alexander in the passage is to show that *phantasia* must have an activity specific to it. He argues that *phantasia* can be neither the impression itself (*typos*), nor the imprinting process (*typōsis*) in which the impression comes into being. If it were the *impression* (A1), then one would be in a state of *phantasia* even without being active concerning that impression, only having it (68.14–15). Moreover, one would be in as many states of *phantasia* at once as many impressions one stores (68.15–16). Alternatively, (A2), if *phantasia* was the impressing *activity*, it would be either (i) an *ongoing* activity (imperfect tense) or (ii) one that has been *completed* (perfect tense). Alexander admits neither, for the first defines perception, the second memory (68.16–21). I discuss the argument in two turns, the first part (A1) in Section 2.2, while the second part (A2) in Section 2.3; before that I revisit the target of the critique in Section 2.1.

## 2.1 Stoic Debates on *phantasia*

Alexander does not name his opponents, but we can safely identify them as the Stoics.<sup>17</sup> Some

<sup>13</sup> As Modrak (1993) 185 interprets the passage.

<sup>14</sup> See below, and Section 3.

<sup>15</sup> Literally: coming to be, being generated.

<sup>16</sup> I inserted the labels to ease reference. τὸ <δὲ> τοιοῦτον ἐγκατάλειμμα καὶ τὸν τοιοῦτον ὡςπερ τύπον φαντασίαν καλοῦσιν. διὸ καὶ ὀρίζονται τὴν φαντασίαν τύπωσιν ἐν ψυχῇ καὶ τύπωσιν ἐν ἡγεμονικῷ. (A1) μήποτε δὲ οὐχ ὁ τύπος αὐτὸς ἢ φαντασία, ἀλλὰ ἢ περὶ τὸν τύπον τοῦτον τῆς φανταστικῆς δυνάμεως ἐνέργεια. εἰ γὰρ ἦν αὐτὸς ὁ τύπος ἢ φαντασία, ἦμεν ἂν ἐν φαντασίᾳ καὶ μὴ ἐνεργοῦντες περὶ αὐτόν, ἔχοντες δὲ αὐτόν, καὶ ἅμα ἂν ἐν πλείοσιν ἦμεν φαντασίαις καὶ τοσαύταις ὄσων τὸν τύπον σώζομεν. (A2) ἔτι ἦτοι (i) τὴν γινομένην τύπωσιν φαντασίαν λέγουσιν ἢ (ii) τὴν γεγονυῖαν ἤδη καὶ οὔσαν. ἀλλ’ εἰ μὲν (i) τὴν γινομένην, τὴν αἰσθησιν ἂν λέγοιεν τὴν κατ’ ἐνέργειαν φαντασίαν. αὕτη γὰρ ἢ γένεσις τοῦ τύπου, ἀλλὰ γίνονται φαντασίαι καὶ χωρὶς τῆς κατὰ τὰς αἰσθήσεις ἐνεργείας. εἰ δὲ (ii) τὴν γεγονυῖαν καὶ σωζομένην, τὴν μνήμην ἂν λέγοιεν φαντασίαν.

<sup>17</sup> Cf. SE *M* VII 228, 236, 380–381; *PH* II 70 = *SVF* I 484; DL VII 50 = LS 39A3; Plutarch. *Comm. not.* 1084F–1085A = LS 39F; Philo *Quod deus s. immut.* 43 = part of *SVF* II 458. Also, part of Alexander *De an.* 68.10–21 is printed as *SVF* II 59. In case of sources for Stoicism I usually cite the source and indicate its place in LS, or *SVF* in case not contained in LS.

of the arguments echo the debates within the Stoic school, viz. Chrysippus' polemic against taking impression literally (SE *M* VII 229, 373 = part of *SVF* II 56), and so commentators take Alexander as basically reciting Chrysippus' arguments.<sup>18</sup> Below, I show that despite similarities Alexander's argument differs from Chrysippus', and results in rejecting the Stoic account in favour of Alexander's version of the Aristotelian view. Before analysing the argument, it is worth summarizing the Stoic views that are attacked.

According to Zeno, *phantasia* is *typōsis* in the soul (SE *M* VII 236 = *SVF* I 58; DL VII 45 = *SVF* II 53; DL VII 50 = LS 39A3; Cic. *Luc.* 77 = LS 40D3–4) in the literal sense of *impressing* physically, just like a signet ring impresses its *shape* into a piece of wax.<sup>19</sup> Presumably, the same idea is expressed by Cleanthes in claiming that *phantasia* is impression involving depth and protrusion, *kata eisokhēn te kai exochēn* (SE *M* VII 228, 372–373, VIII 400; *PH* II 70 = *SVF* I 484). Alexander too takes these terms as the basic meaning of impression (*De an.* 72.5–13).<sup>20</sup>

This literalist theory is rejected by Chrysippus (SE *M* VII 229, 373 = part of *SVF* II 56) on at least two grounds. (1) If the *hēgemonikon* had *phantasiai* of two objects with contradictory attributes at the same time, the same body (the *hēgemonikon*<sup>21</sup>) would have two contradictory attributes simultaneously (two different shapes, as the literal account of *typos* requires), which is impossible (SE *M* VII 229). Further, (2) there could be but one impression at a time (SE *M* VII 373; cf. DL VII 50 = LS 39A3). For the literal impression of one shape would obscure the literal impression of another, if they are impressed in the very same bodily part. But since impressions are taken to be into one body, the *hēgemonikon*, this consequence indeed follows (Argument from Obscuring of Affections). Moreover, as a corollary, accumulation of *phantasiai* would be impossible on Cleanthes's theory. And since memory, according to the Stoics, presupposes many similar *phantasiai* (SE *M* VII 373; cf. Aëtius IV 11, 2 = LS 39A2), it would be impossible too. Thus, instead of the literal account, Chrysippus proposes an alternative definition according to which *phantasia* is *alteration* (*heteroiōsis*: SE *M* VII 230–231, 372 = part of *SVF* II 56; SE *M* VII 376; *alloiōsis*: DL VII 50 = LS 39A3; SE *M* VII 400) of the *pneuma* constituting the *hēgemonikon*. This is not a literal impressing, nevertheless it must be a *physical affection*,<sup>22</sup> for there is no room within Stoicism for non-physical change. Thus, Chrysippus' alteration is intended to be such as to allow for (1) simultaneous alterations

---

<sup>18</sup> Cf. Bergeron & Dufour (2008) 315; Accattino & Donini (1996) 240–1; Modrak (1993) 192; Todd (1976) 23 n. 10.

<sup>19</sup> As the signet ring analogy is exploited in other important ways – indicating the richness of the content represented by the impression (see, e.g., SE *M* VII 250–251 = LS 40E6) – perhaps Chrysippus too keeps it, though without implying that it is a model for the type of change involved, cf. DL VII 50 = LS 39A3. However, Løkke (2008) 41 argues that it is the 'noisy room' analogy where many speak simultaneously (SE *M* VII 230–231) that provides Chrysippus with a model for rich sensory content.

<sup>20</sup> On Alexander's understanding of *typos* literally, and his critique of such an account for perception, see Section 3.

<sup>21</sup> The *hēgemonikon* (the soul itself) for the Stoics is bodily, just like everything that exists (cf. LS chs. 44–45). It is *pneuma* in the heart in a certain state. For sources, see LS 45C, chs. 47 and 53, 65H; cf. *SVF* I 134–140, 484, 518; II 460, 637, 714–715, 774, 787, 836–839; Alex. *De an.* 19.6–9, 26.15–17. Soul-*pneuma* has a high level of complexity that can explain mental functions of animals, and even more complex *pneuma* explains rationality (*logos*) of humans. Cf. Annas (1992) 20–6, 37–70; Inwood (1985) 18–41; Long (1982); Todd (1976) 34–49; Hahn (1994).

<sup>22</sup> This is the feature of the change that allows Sextus Empiricus (*M* VII 383–387) to attack the theory. *Phantasia*, being a physical change, is the effect of its object, so it must be different from the object, hence cannot have the similarity required for accurate representation. That is, according to Sextus' criticism, Chrysippus' theory introduces a veil of perception (see also Plotinus *Enn.* IV 6.1.29–32). Alexander's argument at *De an.* 68.10–21 does not depend on the materiality of the change. Yet, Alexander too exploits this feature of impressions elsewhere considering the possibility of simultaneous perception of several perceptible objects, as indicated below. Plotinus reverses the argument at *Enn.* IV 7.6.44–49: if memory is possible, it cannot involve impression – as impression would be into body without allowing memory – so the soul cannot be corporeal.

by contradictory attributes and (2) consecutive alterations by multiple attributes so that the alterations are retained.

Notice that both of Chrysippus' arguments presuppose that there are not several physical parts of the *hēgemonikon* into which the (simultaneous) impressions of different or even contradictory qualities and shapes could be distributed to avoid the absurd consequences. That is, the Stoic theory apparently presupposes the Indivisibility of the Central Sense-Organ: impressions modify the central organ of perception as a whole rather than parts of it.<sup>23</sup>

This is remarkable, as Alexander seriously considers in his investigation of simultaneous perception a problem analogous to (1) Chrysippus' first argument: the Problem of Opposites (*In sens.* 143.9–26; *De an.* 61.20–30; *Quaest.* III 9, 95.20–28).<sup>24</sup> Alexander's solution is indeed partly the rejection of the Indivisibility of the Central Sense-Organ, as he avoids the physical impossibility by arguing that the opposite perceptual changes from opposite perceptible objects should affect different parts of the central organ (*In sens.* 168.2–5; *De an.* 64.4–65.1; *Quaest.* III 9, 97.22–98.15). Moreover, in course of his discussion of simultaneous perception, Alexander himself poses the same problem for the Stoic account (*In sens.* 167.4–9; cf. *Mantissa* 4, 118.6–9). Accordingly, the *hēgemonikon* could not be in opposite states at the same time, only successively, so the Stoics cannot explain the possibility of simultaneous perception.<sup>25</sup>

Thus, it seems that despite his objection to the literal account of impressing, Chrysippus' own solution is liable to the analogous Problem of Opposites (at least according to Alexander). The problem for Chrysippus follows from two premises: (i) the Indivisibility of the Central Sense-Organ; and that (ii) the conception of alteration (the kind of modification Chrysippus proposes) does not allow the same thing to be modified in different ways simultaneously. Of these, Chrysippus clearly adopts (i). Perhaps his reason is to ensure the unity and simplicity of the soul and its ruling part.<sup>26</sup> Nevertheless, he wants to deny (ii), and allow that several of his alterations (even contradictory ones) may coexist in one and the same subject. Whether or not he succeeds does not concern us here.<sup>27</sup> Alexander probably believed that the Problem of Opposites is applicable to Chrysippus' doctrine, because the alterations are nevertheless physical changes.<sup>28</sup>

## 2.2 Alexander's argument (A1)

Turning to Alexander's argument at *De anima* 68.10–21, let us start with (A1) against identifying *phantasia* with the impression. Alexander derives two unacceptable consequences: (a) we would be in a state of *phantasia without being active*, simply by having the impression; (b) moreover, we would be in *as many states of phantasia* – with various content – *as many impressions* we have. Let us see the two consequences in turn.

---

<sup>23</sup> Cf. SE PH III 188 = SVF II 96.

<sup>24</sup> For a recent analysis of Alexander on simultaneous perception, see Hangai (2020).

<sup>25</sup> Alexander's note may pick out the fact that the motion of the *pneuma* is tensional, that is supposed to be simultaneously inward and outward (cf. LS ch. 47). Alexander takes this to be successive phases, as Towey (2000) 187 n. 505 suggests. However, the argument may be construed without this reference. The crucial premise, then, is that it is impossible to do different things simultaneously with the same power (cf. Alex. *Mantissa* 4, 118.29–35).

<sup>26</sup> See, e.g., SE M VII 234–236. Annas (1992) 115–20 and Inwood (1985) 33–41 connect the requirement of unity to the Stoic theory of action that should not allow conflict with the *hēgemonikon*; yet, they also emphasise that the powers of the *hēgemonikon* are distinct.

<sup>27</sup> It is noteworthy that apparently Sextus also takes Chrysippus' second worry (Argument from Obscuring of Affections) to apply for Chrysippus' theory using alteration, cf. SE M VII 377. For an argument that Chrysippus can avoid the same objections against his own theory by appealing to the tensional motion of *pneuma*, see Ierodiakonou (2007) 50–7.

<sup>28</sup> Cf. Hangai (2020) 115–9.

First, (a) is *prima facie* question begging, as it apparently supposes Alexander's own view that *phantasia* should be an activity of ours, different from perception. But, let us see if a better argument can be reconstructed. The consequence will follow if *having an impression  $\phi$  is sufficient for being in phantasia-state  $\phi$* . Alexander does not specify what *having an impression* amounts to, but we can extract the sense from his initial account presented immediately before the argument (*De an.* 68.5–7, cited in Section 2). He claims that the impressions (or residues) are *seated in the primary sense-organ*, i.e. in the heart, as remnants of the perceptual motions that created them (cf. *De an.* 97.11–14). This suggests that the residues remain in their place in the heart, without the possibility of moving elsewhere. So we might say: *for  $s$  to have an impression  $\phi$  is for impression  $\phi$  to be present in the central organ of  $s$* . So, replacing 'having' with 'being present' in our initial formula we get: *if an impression  $\phi$  is present in the central organ of  $s$ ,  $s$  is in phantasia-state  $\phi$*  (Sufficiency of Impression's Presence).<sup>29</sup> Thus we can reduce the vague 'having' of an impression to the quite straightforward 'presence' in a local sense.

Now, it seems that the Stoics accepted that impressions are present in the central organ. For they believed that impressions are in the soul, or in the *hēgemonikon*, or more properly impressions (i.e., *phantasiai*) are the *hēgemonikon pōs echon*, the ruling faculty in a certain state, which indeed applies to every mental state.<sup>30</sup> Now, since the *hēgemonikon* is the subject of the occurrences of *phantasiai*, *phantasiai* cannot be seated but at the very same place as the *hēgemonikon*. Since the *hēgemonikon* is the *pneuma* in the heart, *phantasia*-impressions are also in the heart. In this theory it makes no sense even to say that *phantasia* is elsewhere (either on the literal interpretation or Chrysippus' alteration). Again, if one identifies *phantasia* with impression (as the Stoics), then the presence of the impression will constitute the occurrence of *phantasia* with a particular content. Further explanation how a *phantasia* may occur is not needed. So, the Sufficiency of Impression's Presence is also accepted by the Stoics.

Alexander's problem with the Sufficiency of Impression's Presence is that it leaves the subject without an activity concerning the impression, it requires only the presence of a physical item.<sup>31</sup> That is, the Stoic account implies that for a psychological state (*phantasia*) to occur it is sufficient that a bodily item is located in a certain area in the body of the living being. For Alexander this does not constitute an explanation of the psychic phenomenon.

The other consequence (b) (we are in as many *phantasia*-states as many impressions we preserve) requires a further premise. This is because a *preserved* impression does not necessarily mean an impression that we *have*, viz. that is *present* in our central organ. We may preserve impressions somewhere else – e.g., in another organ, or in the vascular system as we shall see for Aristotle on dream – or being preserved in the central organ may constitute less than being present in it (e.g., it may be present only *potentially*, to use Aristotelian terminology). To rule out such possibilities, it must be supposed that *every impression preserved by  $s$  is always present in the central-organ of  $s$*  (Constant Presence of Impressions).

As it is clear from the above description of the Stoic view, the Stoics adopted the Constant Presence of Impressions. For impressions may only be located in the *hēgemonikon*, so if an impression is preserved, it is in the *hēgemonikon*. Again, it is plausible to understand the Stoic view so as the impression is present in actuality (and not on a lower level like potentiality),

<sup>29</sup> The principle, in this context, should be understood generally to apply to Stoics, Aristotle and Alexander. Thus, 'impression' and 'central-organ' should be taken to cover any item which a theory posits to account for the relevant phenomena: for 'impression' besides the Stoic notion Alexander's *residues* or Aristotle's *phantasmata*; for 'central-organ' the Stoic *hēgemonikon* as well as Alexander's and Aristotle's *primary sense-organ*.

<sup>30</sup> It is emphasised that the impression is in the ruling faculty (qua soul) and not elsewhere in the body, e.g., at SE *M* VII 232–236. Again, any power or occurrent mental state is the *hēgemonikon pōs echon*, 'other parts of the soul' are only instruments. Cf. LS 53L–M; *SVF* I 141; II 57, 806, 858; Inwood (1985) 36–7; Annas (1992) 71–102; Menn (1999); Brunschwig (2003).

<sup>31</sup> Cf. SE *M* VII 237, 239, where Stoic *phantasia* is characterised as a passive reception rather than an activity.

since arguably *phantasia* (thus the impression) in itself involves awareness.<sup>32</sup> It is clear that this argument of Alexander's is not the same as that of Chrysippus' argument (1) in Section 2.1, against the literal interpretation of impressing, as it was identified as analogous to Alexander's Problem of Opposites concerning simultaneous perception.

Thus, Alexander's argument works against those who accept both the Sufficiency of Impression's Presence and the Constant Presence of Impressions, as the two premises together entail the unacceptable consequences. Alexander (plausibly) takes the Stoics, including Chrysippus, to accept both premises,<sup>33</sup> and continues with the assumption that the Sufficiency of Impression's Presence should be dropped and the Constant Presence of Impressions may be accepted. Indeed, as noted, Alexander has reasons to accept the Constant Presence of Impressions (cf. *De an.* 68.4–9, 97.11–14).<sup>34</sup> Before we move on to Alexander's considerations following the denial of the Sufficiency of Impression's Presence, it is instructive to see what it would look like to drop the Constant Presence of Impressions, so let us see Aristotle's account of dreaming.

First, Aristotle apparently denies the Constant Presence of Impressions, as his *phantasmata* (the items analogous to impressions) are not always in the heart or primary sense-organ (where they can appear), but they can be in potentiality somewhere in the vascular system or in the peripheral sense-organs (cf. *Insomn.* 3.461b11–21),<sup>35</sup> and they are taken (down) into the heart by the movement of the blood in sleep (*Insomn.* 3.460b32–461a8).<sup>36</sup> Aristotle also denies the Sufficiency of Impression's Presence. Having arrived into the primary sense-organ, *phantasmata* do not automatically appear, but further *physiological* conditions are necessary to be met (*Insomn.* 3.460b32–461a8): (A) absence of larger movements, (B) absence of disturbance.<sup>37</sup> That is, the presence of *phantasmata* is not a sufficient condition for appearing

---

<sup>32</sup> *Phantasia* reveals itself and its cause, see, e.g., Aëtius IV 12, 1–5 = LS 39B.

<sup>33</sup> Pace Lautner (1995) 35–6, who takes it to apply to Zeno and Cleanthes only.

<sup>34</sup> Another reason could be forged based on the *explanandum phantasia* is introduced to explain: presence in absence. That is, many mental states occur in the absence of the intentional object, and so a representation is required to make this possible. In the generation of content for these mental states sometimes we play an active role, e.g., in imagining something, or thinking about something. In other cases, the content comes about without our efforts. In the former cases we need to have *access* to the representations that we 'add into' the content of our mental state (e.g., what we imagine). In the latter cases, the mental faculty responsible for generating the content needs to have *access* to the representations it uses as sources for the generation of content. Now, since representations are *physical* items in the central organ (for Alexander: residues; for the Stoics: impressions in *pneuma*; for Aristotle: *phantasmata*) that cause the relevant mental states, this access to the representations and contents is best explained by the *physical* (or local) *presence* of the items where the soul powers are located: in the central organ.

<sup>35</sup> Even though Alexander also mentions residues in the peripheral organs, in sight, ἐν τῇ ὄψει (*De an.* 62.22–63.4), this might refer to after images rather than pick out the technical meaning of the term 'residue'.

<sup>36</sup> Even though not explicit, the account is clearly about *phantasmata*. First, a dream is identified as *phantasmata* appearing in sleep (*Insomn.* 1.459a18–20; 3.462a29–31). Second, the passage is about the *movements that come about from aisthēmata* (*Insomn.* 3.460b28–29), which cannot be but *phantasmata*. Cf. Wedin (1988) 34–9.

<sup>37</sup> (B) The absence of disturbance obviously refers to the absence of intensive motions caused by getting to sleep (*Insomn.* 3.461a5–6; cf. *Somn.* 3). If the heart was in such a disturbed state, nothing could appear what is in it, just as nothing is reflected in a rapidly rushing water-current; or what appears would be much distorted (*Insomn.* 3.461a8–25). One might argue, however, that (A) the absence of larger movements is needed for the *phantasma* to get to the heart in the first place. That is, the larger movements are impediment for smaller ones in arriving at the heart, for all movements compete with each other, and only the larger may win. This is certainly one plausible option. But, considering Aristotle's example and wording, it gains support that this condition applies also when the larger and smaller movements are in their proper place. Aristotle mentions smaller and larger fires next to each other, and also pleasures and pains (*Insomn.* 3.461a1–3). The important point is that the smaller fire may not be perceived even if it is present together with the larger (*viz.* they are *next to each other*). The reason is that the larger movement displaces (*ekkryei*) the smaller, so that the smaller is effaced (*aphanizontai*) (460b32–461a1). The same terminology is used by Aristotle in the Argument from Mixed Perceptibles (*Sens.* 7.447a14–b6), posing difficulties for the possibility of simultaneous perception of two proper objects in one sense-modality (e.g., two colours). The reason is also the same (as in the case of the dream), and it is presupposed that the two movements are co-present.



(for the dream-*phantasia*). Nonetheless, as Aristotle does not mention other factors, the physiological conditions taken together seem to constitute a *sufficient* condition. Hence, no further condition must be met for *phantasmata* to appear, in particular, no need for a specific activity of *phantasia*.<sup>38</sup> As we can see, Alexander requires precisely this: an activity of *phantasia* in the explanation why an impression appears in a mental state involving *phantasia*. In this regard, Alexander's explanation seems to be more psychological in nature than Aristotle's physiological account of dream appearance.

So far we have seen that Alexander's argument against the Stoic account of *phantasia* as impression differs from Chrysippus' polemic against Cleanthes' literal account. Indeed, the latter is analogous to Alexander's Problem of Opposites, presented in the context of simultaneous perception, which Alexander also takes to apply to any Stoic view. Again, the analysis of Alexander's argument shows that it aims at motivating to drop the Sufficiency of Impression's Presence while keeping the Constant Presence of Impressions; so it is not only against any Stoic account of impression, but implicitly at odds with Aristotle's account of dream appearance.

### 2.3 Alexander's Argument (A2)

Having denied the Sufficiency of Impression's Presence (A2 of *De an.* 68.10–21), Alexander goes on to see what other factors (activities of the soul) the Stoics could add as conditions for *phantasia*-states to occur. He considers two candidates for the *phantasia*-activity – (i) the ongoing impressing, (ii) the completed impressing – and accepts neither. Let us see the two candidates in turn, and then what Alexander proposes instead.

If the activity is (i) ongoing impressing, the generation or creation of an impression, it will be identical with perception. For, according to Alexander, the impression is the residue that comes about as an effect of perception; i.e. the process in which the residue comes to be is perception itself.<sup>39</sup> Actually, this is not far from the Stoic theory, according to which perception (*aisthēsis*) is an experience by means of a *phantasia*;<sup>40</sup> even though they did not restrict *phantasia* to the perceptual case.<sup>41</sup> Alexander cannot accept this, since he has already distinguished *phantasia* from perception (*De an.* 66.24–67.9), and *phantasia* for him is not a process or activity that

---

<sup>38</sup> It might be objected that in memory, though, an activity seems to be involved on behalf of *phantasia*: *taking something as an image (eikōn)*, *Mem.* 1.450b20–7; see King (2009) 78–80. Even if this is accepted, it is needed not merely for the *phantasia* to appear, but for it to constitute memory (see further Section 3.1).

<sup>39</sup> Although perception is not defined with reference to this effect. See also Section 3.1.

<sup>40</sup> *Aisthēsis* for the Stoics can mean the perceptual apparatus (*pneuma* constituting the sense organs and routes from them to the ruling part), the capability of this apparatus to support perceptual experience (the reception of impressions, *typōsis*), the activity or exercise of it, as well as a reaction to *phantasia* as assent to *aisthētikē phantasia* (DL VII 52 = LS 40P–Q; Aëtius IV 8, 1 = *SVF* II 850; Cic. *Acad.* I 40 = LS 40B1; for assent see also *SVF* II 72–75). See Rubarth (2004) for these meanings and further references. Alexander's identification is closest to the “exercise of the capability for receiving *phantasia*” sense. Notwithstanding there are cases when one gives assent to a perceptual *phantasia*, i.e. one endorses the content presented to one by that *phantasia*. Indeed, we usually trust our senses in our ordinary actions. However, the Stoics are keen on distinguishing a stage when one is experiencing something without giving assent to it. Thus, perception may be called assent considering the ordinary cases, but we must be aware that strictly speaking perception is experiencing a *phantasia*. See e.g., Annas (1992) 75–8.

<sup>41</sup> Apart from the perceptual ones, humans can have *phantasiai* about things that may be grasped only by reason (e.g., about incorporeals or universal concepts, DL VII 50 = LS 39A4). These *phantasiai* are not caused externally only, their formation depends on the creativity of the mind. The status of universals is complicated, for universals are supposed to be *phantasmata*, figments of the mind, without any real object corresponding to them (Stob. I 136, 21–137, 6 = LS 30A, DL VII 60 = LS 30C2).

creates residues,<sup>42</sup> rather, one that *uses* them. Moreover, he wants to explain a wide range of mental phenomena by *phantasia*, which could not be done if *phantasia* were identical to perception, for perception is restricted to cases when its object is present.

Alternatively, if the activity was (ii) a completed activity (indicated by perfect tense: *gegonuian*), it would define memory. Again, memory is only one phenomenon that *phantasia* is to explain, and the remainder cannot be explained by memory, as it is restricted to the *past*, with experiences that have been perceived. Yet, even though we possess but some notes from Alexander's account of memory (for references, see Section 3.1), from those it is clear that a completed residue (or impression) is insufficient for memory. It is also required that the residue is an image (*eikōn*) of the perception of the past event. The present remark (*De an.* 68.20–21), however, seems to pick out the Stoic conception of memory, according to which it is the storing of *phantasiai* (SE VII 373 = *SVF* I 64; II 56).<sup>43</sup> The completed impressions constitute a set of impressions that remain still and supposedly *available* to the agent. So, if the remark is taken as specifically against the Stoic account, it suffices to be said that they themselves gave a wider role to *phantasia* than to memory, and so a definition of *phantasia* that picks out memory is inadequate.

Alexander concludes from the argument that *phantasia* must be a distinct activity; not (i) the creation of an impression (= perception), nor (ii) the completed impressing (= memory), yet necessarily related to the impression. He does not specify the relationship and the activity further, only implies its analogy to perception: the object of *phantasia* is *a sort of perceptible* (*tina/hōsper aisthēta*, cf. *De an.* 69.1, 10). It is not my aim here to analyse the activity of *phantasia* as understood by Alexander;<sup>44</sup> instead, let us see how Alexander proceeds from his polemic against the Stoic account, to better assess its import.

## 2.4 Alexander's Argument in Context

Alexander supposes the existence of an activity by invoking Aristotle's tripartite scheme of power/activity/object (*De an.* 68.21–30) which he uses as a framework for his psychological investigation (cf. *De an.* 32.23–33.9, 40.15–19).<sup>45</sup> But once he has applied the scheme for *phantasia*, he needs to identify the object postulated for *phantasia*. He accomplishes this by saying it is an internal perceptible object (*De an.* 68.31–69.2). Alexander takes the object to be internal, as *phantasia* is supposed to occur when the *corresponding perceptible object is not present*, so that perception properly speaking is impossible. Since there must be an object to cause the state, the object has to be internal, present within the central organ. Thus, Alexander posits *phantasta* (objects of *phantasia*) to solve the problem of presence in absence or representation of absent objects.<sup>46</sup> Once the object of *phantasia* is identified and distinguished from the object of perception, it follows that the power of *phantasia* also differs from the power of perception, and so constitutes a distinct power of the soul. This move is noteworthy, as for Aristotle the relationship between *phantasia* and perception, and the status of *phantasia* is not that clearly specified.<sup>47</sup> Alexander concludes his argument at *De an.* 70.3–5 by opposing the Stoic view (τὸ λέγειν τύπωσιν ἐν ἡγεμονικῷ) that it fails to acknowledge the proper identity of *phantasia* as activity, for it would put *phantasia* in the residue (ἐν τῷ ἐγκαταλείμματι) instead.<sup>48</sup>

<sup>42</sup> Contrast Aristotle *DA* III 3.428a1–2: *phantasia* is that in virtue of which *phantasmata* arise for us.

<sup>43</sup> On the Stoic account of memory, and further passages, see Ierodiakonou (2007).

<sup>44</sup> For a summary, see Section 2.

<sup>45</sup> Cf. Aristotle *DA* II 4.415a14–22.

<sup>46</sup> On Alexander's account of mental representation, see Hangai (forthcoming).

<sup>47</sup> See *supra*, n. 2.

<sup>48</sup> Alexander's final say against the Stoic view is provided in his account of truth and falsity of *phantasia* (*De an.* 70.23–71.21) that can be taken as a criticism of *katalēptikē phantasia*. In this, arguably, Alexander reuses

Thus, it seems that Alexander first shows that (A1) there has to be an activity of *phantasia* related to an impression (A2) distinct from the generation of impression (perception) and the retaining of the impression to remember past events or perceptions. This he achieves through a quick polemic against a generic Stoic view, picking out only the essence of the theory; and so this passage (*De an.* 68.10–21) cannot be used as an independent source for Stoic theory (although part of it is printed as *SVF* II 59). The *phantasia* activity is, then, called for in cases when the external object about which the mental state has content is not present. In these cases, there must be an internal object (residue). Then, the power of *phantasia* is identified as the power of making such mental states as activities possible, so a power distinct from perception.

### 3 Residue and the Metaphorical Use of ‘typos’

We have seen Alexander’s problems with impression in *phantasia*, his reinterpretation of it as residue. To better understand his preference for residue, we should also consider his troubles with impression in perception, its inaccuracy to account for the wide range of perceptible objects, and its incompatibility with the physics of perception. Still, as it turns out from Section 3.1, Alexander is able to use ‘typos’ terminology where Aristotle uses it, and where it only needs to indicate a physical change with an obvious cause. In his more robust account, of representation, he uses ‘residue’ in a quite literal sense to emphasize remaining and preservation.

Alexander argues against a literal interpretation of impression in *Mantissa* 10, 133.25–134.27, in the context of his polemics with the Stoic account of sight<sup>49</sup> which implies that impression is sufficient for perception (cf. *Mantissa* 10, 130.16–17).<sup>50</sup> In the literal sense an impression – as illustrated with a signet ring pressed into melted wax that later is solidified (cf. *De an.* 72.7) – is a persisting pattern in the surface of a quite solid receptor that actually has a shape corresponding in negative to the shape of the object producing the impression. Alexander picks up these features of impression in turn, and shows the inadequacy of the concept to explain sight as the Stoics did. First, the medium of impression is most apt if it is *solid*, in contrast to air (*Mantissa* 10, 133.25–28) which is fluid and can only receive confused impressions if any (134.9–10; cf. 133.31–38).<sup>51</sup> Again, impression intrudes into the receptor only *superficially*, even in apt materials, and by no means throughout the receptor (133.38–134.6). An impression is also something *persistent* even in the absence of its impressor, in contrast to perception that requires the presence of its object (134.6–7). Again, impression is a *negative* of the shape, a convex object creating a concave impression. And it is inadequate to claim that convexity is judged by concavity, for there are exceptions: some paintings are actually flat, though produce appearances of convexity (134.11–23; cf. *De an.* 50.26–51.4). And most importantly, impression can represent only the *shape* of the object creating it (133.28–31; cf. *De an.* 72.6–

---

Carneadean arguments against the Stoics (cf. *SE M VII* 402–407), turning them to support his Aristotelian view, see Hangai (2017).

<sup>49</sup> Presumably Chrysippus’, cf. *DL VII* 157 = *LS* 53N; Aëtius *IV* 15, 3 = *SVF* II 866; Sharples (2013) 99; Hahm (1978) 65–9; although Ierodiakonou (2019) questions that the opponents were early Stoics. On the Stoic theory of vision, see Løkke (2008) 37–9, and von Staden (1978).

<sup>50</sup> It is doubted that the author of the treatises of *Mantissa* is Alexander, though it is likely that it is someone from Alexander’s circle. As the content of the treatises is for the most part consistent with what Alexander writes elsewhere, and often just the depth and the style of the discussions are reasons for the doubt, we can presume Alexander’s authorship in this paper. Cf. Sharples (2013) 4–5.

<sup>51</sup> *SE M VII* 374–375 cites the same worry for *pneuma* which is compared to other materials according to thickness and fluidity to show that it is unlikely that *pneuma* can receive or retain impressions. Also see *SE PH III* 188, Plutarch. *Comm. not.* 1084F–1085A = *SVF* II 847, cf. Ioppolo (1990) 434. Plotinus also uses this fact in arguing against the need for impressions, cf. *Enn.* *IV* 7.6.37–44.

11).

Thus, instead of taking it literally, Alexander claims that ‘impression’ can be used only metaphorically (*De an.* 72.5–13).<sup>52</sup> Since only a shape or figure can be impressed literally, in case of other perceptible features the residue (*enkataleimma*) may be called ‘impression’ only *metaphorically*. This suggests that Alexander, at the end, gives an explanatory role in his account of *phantasia* to the residue instead of the impression.

### 3.1 Occurrences of the ‘*typos*’ Terminology

This point is further justified by the fact that the terms of ‘impression’ rarely occur in Alexander outside the context of the arguments against Stoicism. Indeed, ‘*typōsis*’ never occurs in other contexts. ‘*Typos*’ is used elsewhere in its ordinary senses as ‘mould’ (e.g., *In An. Pr.* 6.16–18; *In Metaph.* 57.6<sup>53</sup>), and mostly as ‘telling something in *outline*’ (e.g., *Mantissa* 25, 186.11; *De an.* 60.3; *In Metaph.* 463.17; 464.1; 579.25, or several times in *In Top.*). In three passages, however, Alexander apparently replaces Aristotle’s term ‘*phantasma*’ by ‘*typos*’, and uses the *typos* terminology in his own voice. These are discussed in the following paragraphs.

The first occurrence, at *De an.* 83.4, comes approximately ten pages after Alexander’s caution about the metaphorical meaning of the term, which could explain its use in itself, but more can be said. The context here is concept formation, which starts with perception, goes through memory (involving *phantasia*) and experience.<sup>54</sup> Alexander claims that *in each case of perception an impression comes to be* (τυπούμενος) which is preserved in memory (*De an.* 83.2–10).<sup>55</sup> Alexander puts forward the same account of perception – as generation of impression – earlier in the treatise, and also elsewhere. (1) As we have seen in Section 2.3, in his polemic against the Stoic view he says that taking *phantasia* as the generation of impressions would actually define perception (*De an.* 68.16–20). Again, (2) in discussing *phantasia*, Alexander identified perception in activity as “possessing in itself this impression that [came to be] from perceptible objects that are external.” (*De an.* 69.4–5)<sup>56</sup> Here, perception is contrasted with *phantasia* insofar as the external object is present in perception, but absent in *phantasia*, which relies on internal objects that remain as residues (*enkataleimma*) of perception (69.2–4). The passage occurs in the context of Alexander’s argument for showing that *phantasia* always has its origin in perceptions and hence can be called ‘perception in activity’ (68.31–70.5). Thus, he aims at keeping continuity between residues and perception through the impressions that are *possessed* in perception and kept in *phantasia* as residues. By identifying ‘perception in activity’ as ‘possession of an impression’, it is applicable to *phantasia* and perception alike; whereas ‘generation of impression’ would only be applicable to perception and not to *phantasia* (cf. 68.16–20). Finally, (3) in *Quaestiones* III 7 – his commentary<sup>57</sup> on Aristotle *DA* III 2.425b12–426a2 on self-awareness of perception – Alexander, in appealing to Aristotelian physics according to which the activity of an agent and that of the corresponding patient is one and is present in the patient, writes that “the being of perception in actuality

---

<sup>52</sup> This passage is also printed as *SVF* II 58, although with the only reason that Cleanthes’ literalist account is mentioned as the ‘most proper’ sense of impression.

<sup>53</sup> References to Alexander’s commentary *In Metaph.* are to Hayduck (1891), unless otherwise stated.

<sup>54</sup> Although Todd (1976) 28 takes this to be based on Stoic ideas, this pattern of concept formation is Aristotelian in spirit, and it is likely that Aristotle’s account influenced the Stoics, cf. Aristot. *An. Post.* II 19; *Metaph.* A 1.980a21–981a7; Accattino & Donini (1996) 274.

<sup>55</sup> ὁρῶν οὖν ἐκάστοτε καὶ ἀκούων καὶ κατὰ τὰς ἄλλας αἰσθήσεις αἰσθανόμενος καὶ τυπούμενος ὑπ’ αὐτῶν πρῶτον μὲν ἐν τῇ τῶν τύπων τούτων τηρήσει μνημονεύειν ἐθίζεται. *De an.* 83.3–5.

<sup>56</sup> τὸ κατ’ ἐνέργειαν αἰσθέσθαι ἐστὶ τὸν τύπον τοῦτον σχεῖν ἐν αὐτῷ ἀπὸ τῶν αἰσθητῶν ἐκτὸς ὄντων.

<sup>57</sup> The same doubts can be raised about the authorship of *Quaestiones* that about *Mantissa* in note 50 *supra*, cf. Sharples (2014) 1–5.

consists in *possessing* the form of the thing perceived without its matter”<sup>58</sup> (*Quaest.* III 7, 92.34–35; cf. *De an.* 83.13–23). Since the perceptible form is received in perception from the object through the object *acting upon* the perceiver and so assimilating the perceiver to itself (in the relevant way),<sup>59</sup> the object’s acting upon the perceiver can be identified as the object producing an impression in the perceiver. Thus, impression is related to one aspect of perception: passive receptivity. Again, as the object assimilates the perceiver to itself so that the perceiver receives its form, the object produces an impression in the perceiver about itself and its form. The content of the impression is identical to the perceptible form received. So, since perception can be identified as the possession as well as the reception of form, it can also be described as the possession just as the generation of impression. Thus, referring to the generation of impression (τυπούμενος) in perception seems to be related to (a) the passive receptivity of perception, and (b) the continuity between perception and *phantasia* which is sustained by the remaining of the affection as a residue of perception. However, these aspects are better characterized by other terms: (a) receptivity as ‘assimilation’ or ‘reception of form’; and (b) remaining as ‘residue’. So, after all, even though Alexander uses ‘*typos*’ terminology at *De an.* 83.4, on the one hand its import is very thin, and indeed better expressed by Alexander’s preferred alternatives, and on the other hand the passage occurs ten pages after the explication that ‘*typos*’ is to be used metaphorically.

The second problematic occurrence of ‘*typos*’, at *In Metaph.* 4.12 Golitsis (= 3.17 Hayduck),<sup>60</sup> is concerned with memory, occurring in the context of distinguishing different kinds of intelligence (*In Metaph.* 3.22–4.28 G = 2.22–4.11 H). The last of the senses identified is “the natural versatility in regard to the performance of actions that is found in animals capable of remembering” (*In Metaph.* 4.9–10 G = 3.13–15 H, translation by Dooley). This calls for commenting on memory, so Alexander cites Aristotle’s definition: “memory is having a *phantasma* which is like an image of that about which the *phantasia* is” (*In Metaph.* 4.11 G = 3.15–16 H).<sup>61</sup> In Alexander’s explanation “the impression according to the *phantasia* is not sufficient for memory, but the activity concerning the impression must also be concerned as with an image,<sup>62</sup> that is, it must be as from something else that has happened” (*In Metaph.* 4.11–13 G = 3.16–18 H).<sup>63</sup> What is relevant from this now is that Alexander uses ‘impression’ (*typos*) instead of ‘*phantasma*’.<sup>64</sup> However, this should not be taken to imply that he adopted a ‘*typos*’ terminology in favor of the term ‘*enkataleimma*’. Since Aristotle himself applies the term ‘impression’ in explaining memory (cited in Section 2) perhaps in the context of a commentary on Aristotle’s account of memory it is appropriate to apply the same terms that one finds in

<sup>58</sup> Sharples’ (2014) translation adapted in terminology. Κατ’ ἐνέργειαν αἰσθήσει τὸ εἶναι ἔστιν ἐν τῷ ἔχειν τὸ εἶδος τοῦ αἰσθητοῦ χωρὶς τῆς ὕλης.

<sup>59</sup> Cf. *De an.* 38.20–40.3, 44.9–13, 50.8–11, 53.27–29, 54.18–23, 55.12–14, 55.15–17, 60.1–6; *Quaest.* III 7, 92.33–93.9.

<sup>60</sup> In this paragraph I indicate the pages and lines in Golitsis (2022) – hereby abbreviated as “G”, and Hayduck as “H” – since in line 4.13 G (= 3.18 H) he has an important change, on which see *infra*, n. 63.

<sup>61</sup> ἔστι δὲ μνήμη ἕξις φαντάσματος ὡς εἰκόνοσ οὗ ἔστι φαντασία. Translation is mine. Alexander cites Aristotle *Mem.* 1.451a14–16: τί μὲν οὖν ἔστι μνήμη καὶ τὸ μνημονεύειν, εἴρηται, ὅτι φαντάσματος, ὡς εἰκόνοσ οὗ φάντασμα, ἕξις. It is noteworthy that Alexander replaces the second ‘*phantasma*’ in the definition with ‘*phantasia*’.

<sup>62</sup> Aristotle is keen on showing that a mere *phantasma* (being possessed) is not sufficient for constituting memory (*Aristot. Mem.* 1.450a25–451a14). Alexander picks this up, and claims that the impression has to be an image as well (cf. *De an.* 68.4–10). Since memory is about past events (cf. *Mem.* 1.449b15–23), the impression has to be an image of the past event. The event induced a perception of itself, this in turn created a residue. And if this residue is an image of the past event, and the activity of *phantasia* concerning it concerns it as an image, then it is memory.

<sup>63</sup> οὐ γὰρ ἰκανὸσ πρὸσ μνήμην ὁ τύποσ ὁ κατὰ τὴν φαντασίαν, ἀλλὰ δεῖ τὴν περὶ αὐτὸν ἐνέργειαν καὶ ὡσ περὶ εἰκόνα γίγνεσθαι, τουτέστιν ὡσ ἀπ’ ἄλλου γεγονότοσ. Dooley’s translation modified. The ὡσ in italics, in line 4.13 G (= 3.18 H), is Golitsis’ addition based on manuscript O and Sepulveda’s Latin translation. This reproduces Aristotle’s wording better.

<sup>64</sup> Cf. Dooley (1989) 17 n. 24.

Aristotle. Replacing ‘*phantasma*’ with ‘*typos*’, then, need not imply that ‘*typos*’ is the most appropriate term to use in this context, only that it is more appropriate than ‘*phantasma*’ due to the fact that Aristotle used it too, and presumably because ‘*phantasma*’ acquired a deflationary meaning (related to error) in Hellenistic philosophy. Alexander indeed avoids using the term ‘*phantasma*’ in general, or replaces it with other terms. He only uses the term in citing Aristotle and reflecting on his usage; or in Hellenistic senses – meaning a figment of the mind,<sup>65</sup> or in the broad sense of appearance<sup>66</sup> – in arguing against the Stoics. Again, ‘*phantasma*’ is replaced with different terms: (1) ‘*phantaston*’, the object of *phantasia*;<sup>67</sup> (2) ‘*enkataleimma*’ (residue): at *In Metaph.* 433.4–5 *phantasmata* are said to have some existence as *enkataleimmata*;<sup>68</sup> (3) sometimes with ‘*phantasia*’; (4) ‘*typos*’, at *In Metaph.* 4.11 G (= 3.17 H), as we have just seen. In the third problematic occurrence of ‘*typos*’, at *In Metaph.* 312.3, Alexander discusses that not all perception is true, and in course of this he distinguishes perception and *phantasia* (*In Metaph.* 311.24–312.11). The differentiation starts with a recapitulation of the account of these powers:

*phantasia* is a motion of actual perception; this motion is the result of perceptible objects when impressions come (into being) inside, and it happens to take place in different ways at different times, as he has shown in *On the Soul* and *On Memory and Sleep*.<sup>69</sup> (*In Metaph.* 312.2–5)

Here again, ‘impression’ is used for the effect of the activity of perception that comes about inside, which later can be used in different ways in different mental states. This effect is the residue of *De anima*, so why is it called ‘impression’ here? Since this passage is not connected to memory or to Aristotle’s text, the previous explanation is not applicable here. But, in the context of truth and falsity in perception and in *phantasia* Alexander only wants to make a quick distinction between *phantasia* and perception, and perhaps this is appropriate without reference to residues (*enkataleimmata*). Moreover, he does refer to Aristotle’s works

<sup>65</sup> For the Stoic use see DL VII 49–51 (= LS 39A) and Aëtius IV 12, 1–5 (= LS 39B); for Epicurus, see *Letter to Herodotus* 51 (= LS 15A11), 75 (= LS 19A2).

<sup>66</sup> ‘*Phantasma*’ occurs only once in *De anima* (66.21), citing Aristot. *DA* III 3.428a1–2, and 13 times in the whole corpus of Alexander. There are 8 occurrences in the commentary *On Metaphysics*: 3.16 (citing Aristot. *Mem.* 1.451a15, the definition of memory); 81.23 (citing Aristot. *Metaph.* A 9.990b14 in the lemma); 82.4 (in the comments); 319.33 and 321.13 (in refuting those who suppose Protagorean relativism for the sake of argument; where *phantasma* is connected to the absurd case of the same thing or appearance being both true and false in every respect; thus, close to the Hellenistic meaning as fiction); 432.18, and 433.2–3 (in the commentary on Aristotle’s summary of the meaning of falsity; about *phantasmata* as dream images, as physical movements, residues, *enkataleimma*, in the body, but not the thing they represent; corresponding to Aristotle’s treatment of dreaming, cf. *Insomn.* 2.459a24–b7). The remaining occurrences are in smaller works: *Quaest.* III 12, 105.28 (arguing against the Stoics, and using the term in connection to dreaming and empty imaginings); *Quaest.* III 13, 107.14 (in the context of responsibility, stating that humans judge *phantasmata* by reason based on deliberation in addition to merely having the affection; so ‘*phantasma*’ here seems to mean ‘appearance’, in the broad Hellenistic sense, as ‘*phainomenon*’ in Aristotle); *Quaest.* III 1, 81.2 (citing Aristot. *Mem.* 2.453a14–16, the definition of recollection); *Mantissa* 15, 145.13 (citing the phenomenon of image-production, *phantasiousthai*, after images, explaining it as putting *phantasmata* before one’s eyes, *pro ommatōn tithesthai* [...] *phantasmata*, 145.13–14; which invokes Aristotle’s account in *Insomn.* 3.462a8–31; cf. *Insomn.* 2.460b2–3; *DA* III 2.425b24–25, III 3.428a15–16). On Alexander’s different conceptions of *phantasia* at different occasions, depending on the context and the immediate purpose, see Modrak (1993).

<sup>67</sup> This is also sparsely used, apart from setting out the theory (*De an.* 68.21–70.5), only twice: *De an.* 71.7 and *In Metaph.* 300.22, the latter of which is apparently used in the Hellenistic sense (in an argument against the Sceptics), referring to the intentional object besides the cause (cf. Aëtius IV 12, 1–5 (= LS 39B1–4)).

<sup>68</sup> Cf. Dooley’s notes (1993) 181–2.

<sup>69</sup> I modified Madigan’s (1993) translation (italics). He translates the clause: “as a result of sensible impressions’ coming to be present [in the soul]”. ἡ δὲ φαντασία κίνησις τῆς κατ’ ἐνέργειαν αἰσθήσεως, ἣν κίνησιν τὴν ἀπὸ τῶν αἰσθητῶν τύπων ἐγγινομένων ἄλλοτε ἄλλως γίνεσθαι συμβαίνει, ὡς ἔν τε τοῖς Περὶ ψυχῆς δέδεικται καὶ ἐν τῷ Περὶ μνήμης καὶ ὕπνου.

(especially *On Memory*) in which the term ‘*typos*’ appears in relation to *phantasia*, which explains Alexander’s use.

There is one particular compound with the term ‘*typos*’ that Alexander applies in his account at *De an.* 70.13 (occurring once in the whole Greek corpus):<sup>70</sup> *prosanatypoun*, ‘impressing further’. The fact that the term is compounded from *typoun* renders it as not a simple application of the term ‘impressing’ (*typoun*). For this reason, I only mention that it is apparently used for a mechanism of *phantasia* to complete residues that are incompletely preserved to get an appropriate residue for *phantasia* to represent its content. This fits nicely with Alexander’s account that the original generation of residues in perception can be called metaphorically as ‘impression’.<sup>71</sup>

Thus, Alexander, besides showing the inadequacy of the Stoic theory of *phantasia* appealing to impression insofar as they miss to posit a specific *phantasia* activity, replaces the terminology of ‘impression’ for ‘residue’, and uses ‘impression’ only metaphorically. Presumably he keeps the metaphor because Aristotle appealed to it too, but what remains from it is quite thin, amounting not much more than to being a physical change with an obvious cause.

**Acknowledgements:** As the paper originates from my PhD dissertation, I am grateful for the support of my advisor István Bodnár, and the comments of the examiners Frans de Haas and Victor Caston. For the final version I also incorporated the suggestions of Péter Lautner, my colleagues Attila Németh, Dániel Schmal, and Márton Dornbach, as well as the anonymous reader for *Elenchos*. All remaining errors are my responsibility.

**Research funding:** The paper has benefited from the financial support of the Hungarian National Research, Development and Innovation Office (NKFIH: project OTKA-138275).

## References

- Accattino, P., and P. L. Donini. 1996. *Alessandro di Afrodizia: L'anima*. Roma: Laterza.
- Annas, J. 1992. *Hellenistic Philosophy of Mind*. Berkeley: University of California Press.
- Bergeron, M., and R. Dufour. 2008. *Alexandre d'Aphrodise: De l'âme*. Paris: Vrin.
- Bloch, D. 2007. *Aristotle on Memory and Recollection. Text, Translation, Interpretation, and Reception in Western Scholasticism*. Leiden: Brill.
- Brunschwig, J. 2003. “Stoic Metaphysics.” In *The Cambridge Companion to the Stoics*, edited by B. Inwood, 206–32. Cambridge: Cambridge University Press.
- Caston, V. 1996. “Why Aristotle Needs Imagination.” *Phronesis* 41 (1): 20–55.
- Caston, V. 1998. “Aristotle and the Problem of Intentionality.” *Philosophy and Phenomenological Research* 58 (2): 249–98.
- Dooley, W. E. 1989. *Alexander of Aphrodisias: On Aristotle, Metaphysics 1*. London: Duckworth.
- Emilsson, E. K. 1988. *Plotinus on Sense-Perception: A Philosophical Study*. Cambridge: Cambridge University Press.
- Everson, S. 1997. *Aristotle on Perception*. Oxford: Oxford University Press.
- Frede, D. 1992. “The Cognitive Role of Phantasia in Aristotle.” In *Essays on Aristotle's De Anima*, edited by M. C. Nussbaum, and A. O. Rorty, 279–96. Oxford: Oxford University Press.
- Golitsis, P. 2022. *Commentary on Aristotle, Metaphysics (Books I-III): Critical Edition with Introduction and Notes* (Commentaria in Aristotelem Graeca et Byzantina. Series Academica 3/1). Berlin: De Gruyter.
- Hahm, D. E. 1978. “Early Hellenistic Theories of Vision and the Perception of Color.” In *Studies in Perception: Interrelations in the History of Philosophy and Science*, edited by P. K. Machamer, and R. G. Turnbull,

---

<sup>70</sup> Although at DL VII 61 (= LS 30C2) *anatypōma* is mentioned in relation to concepts and *phantasma*. But as Long & Sedley (1987) vol. 2, 182 *ad loc.* note, the connection to *phantasma* renders it not being a physical affection from an external stimulus, but rather the intentional object of a *phantasia* or *typōsis*.

<sup>71</sup> On *prosanatypoun*, see Hangai (forthcoming).

- 60–95. Columbus: Ohio State University Press.
- Hahm, D. E. 1994. "Self-Motion in Stoic Philosophy." In *Self-Motion*, edited by M. L. Gill, and J. G. Lennox, 175–226. Princeton: Princeton University Press.
- Hamlyn, D. W. 1968. *Aristotle. De Anima: Books II and III with Passages from Book I*. Oxford: Clarendon Press.
- Hangai, A. 2017. "Aphrodisiaszi Alexandrosz megjegyzései a sztoikus phantasia kataléptiké kapcsán." *Magyar Filozófiai Szemle* 61 (4): 22–47.
- Hangai, A. 2020. "Alexander of Aphrodisias on Simultaneous Perception." In *Philosophical Problems in Sense Perception: Testing the Limits of Aristotelianism*, edited by D. Bennett, and J. Toivanen, 91–124. Cham: Springer.
- Hangai, A. forthcoming. "Intentionality of Phantasia in Alexander of Aphrodisias."
- Hayduck, M. 1891. *Alexandri Aphrodisiensis in Aristotelis Metaphysica commentaria* (Commentaria in Aristotelem Graeca 1). Berlin: Georg Reimer.
- Ierodiakonou, K. 2007. "The Stoics and the Sceptics on Memory." In *Tracce della Mente. Teorie della memoria da Platone ai moderni*, edited by M. M. Sassi, 47–65. Pisa: Scuola Normale Superiore.
- Ierodiakonou, K. 2019. "Two Puzzles in Post-Aristotelian Theories of Vision." In *The Senses and the History of Philosophy*, edited by B. Glenney, and J. F. Silva, 69–80. New York: Routledge.
- Inwood, B. 1985. *Ethics and Human Action in Early Stoicism*. Oxford: Oxford University Press.
- Ioppolo, A.-M. 1990. "Presentation and Assent: A Physical and Cognitive Problem in Early Stoicism." *The Classical Quarterly* 40 (2): 433–49.
- Johansen, T. K. 2012. *The Powers of Aristotle's Soul*. Oxford: Oxford University Press.
- King, R. A. H. 2009. *Aristotle and Plotinus on Memory*. Berlin: Walter de Gruyter.
- King, R. A. H. 2010. "Aristotle's *De Memoria* and Plotinus on Memory." In *Les Parva Naturalia d'Aristote: Fortune Antique et Médiévale*, edited by C. Grellard, and P.-M. Morel, 101–20. Paris: Éditions de la Sorbonne.
- Lautner, P. 1995. "Αναζωγράφημα and Related Terms in Alexander of Aphrodisias' Notion of Phantasia." *Scripta Classica Israelica* 14: 33–41.
- Løkke, H. 2008. "The Stoics on Sense Perception." In *Theories of Perception in Medieval and Early Modern Philosophy*, edited by S. Knuuttila, and P. Kärkkäinen, 35–46. Dordrecht: Springer.
- Long, A. A. 1982. "Soul and Body in Stoicism." *Phronesis* 27 (1–2): 34–57.
- Long, A. A. 2002. "Zeno's Epistemology and Plato's *Theaetetus*." In *The Philosophy of Zeno*, edited by T. Scaltsas, and A. S. Mason, 113–32. Larnaca: The Municipality of Larnaca.
- Long, A. A., and D. N. Sedley. 1987. *The Hellenistic Philosophers*. Cambridge: Cambridge University Press.
- Madigan, A. S. J. 1993. *Alexander of Aphrodisias: On Aristotle, Metaphysics 4*. Ithaca: Cornell University Press.
- Menn, S. 1999. "The Stoic Theory of Categories." *Oxford Studies in Ancient Philosophy* 17: 215–47.
- Modrak, D. 1986. "Phantasia Reconsidered." *Archiv für Geschichte der Philosophie* 68 (1): 47–69.
- Modrak, D. 1987. *Aristotle: The Power of Perception*. Chicago: University of Chicago Press.
- Modrak, D. 1993. "Alexander on Phantasia." *Southern Journal of Philosophy* 31 (S1): 173–97.
- Noble, C. 2016. "Plotinus' Unaffected Soul." *Oxford Studies in Ancient Philosophy* 51: 231–81.
- Nussbaum, M. C. 1978. "The Role of Phantasia in Aristotle's Explanation of Motion." In Ead., *Aristotle's De Motu Animalium*, 221–69. Princeton: Princeton University Press.
- Osborne, C. 2000. "Aristotle on the Fantastic Abilities of Animals in *De Anima* 3. 3." *Oxford Studies in Ancient Philosophy* 19: 253–85.
- Rubarth, S. M. 2004. "The Meaning(s) of αἰσθησις in Ancient Stoicism." *Phoenix* 58 (3/4): 319–44.
- Sharples, R. W. 2013. *Alexander of Aphrodisias: Supplement to On the Soul*. Bloomsbury Academic.
- Sharples, R. W. 2014. *Alexander of Aphrodisias: Quaestiones 2.16-3.15*. London: Bloomsbury.
- Sorabji, R. 1972. *Aristotle on Memory*. Providence: Brown University Press.
- Staden, H. von 1978. "The Stoic Theory of Perception and its "Platonic" Critics." In *Studies in Perception: Interrelations in the History of Philosophy and Science*, edited by P. K. Machamer, and R. G. Turnbull, 96–136. Columbus: Ohio State University Press.
- Todd, R. B. 1976. *Alexander of Aphrodisias on Stoic Physics: A Study of the De Mixtione with Preliminary Essays*. Text, Translation and Commentary. Leiden: Brill.
- Togni, P. 2013. "Plato's Soul-Book Simile and Stoic Epistemology." *Méthexis* 26: 163–85.
- Towey, A. 2000. *Alexander of Aphrodisias: On Aristotle On Sense Perception*. London: Duckworth.
- Turnbull, K. 1994. "Aristotle on Imagination: *De Anima* iii 3." *Ancient Philosophy* 14 (2): 319–34.
- Watson, G. 1982. "Phantasia in Aristotle, *De Anima* 3. 3." *Classical Quarterly* 32 (1): 100–113.
- Watson, G. 1988. *Phantasia in Classical Thought*. Galway: Galway University Press.
- Wedin, M. V. 1988. *Mind and Imagination in Aristotle*. New Haven: Yale University Press.